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Motion Events in Nepali

Krishna Parajuli

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Motions Events in Nepali.

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UNIVERSITÉ LUMIÈRE LYON 2
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Laboratoire Dynamique du Langage, DDL (UMR 5596)
Sciences du langage

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Présentée et soutenue par

Krishna Prasad PARAJULI

le 5 juillet 2021

MOTION EVENTS IN NEPALI

Sous la direction d'Anetta KOPECKA et Scott DELANCEY

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This Thesis is dedicated to the memory

of my father

Dhanapati Upadhyaya Parajuli

and mother

Tulasi Upadhyaya Parajuli

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Abstract

This study investigates the expression of ‘Motion events’ in Nepali, an Indo-Aryan language spoken in Nepal by c. 12 million people, from a functional-typological approach. First, I analyze the lexical, grammatical, and constructional devices speakers of Nepali use to describe Motion events and their semantic elements (e.g., PATH, MANNER, FIGURE, and GROUND emphasizing the expression of Path and its different portions (initial, median and final), and the point of view (DEIXIS). Secondly, I investigate the relationship between the form and the meaning i.e. the lexicalization patterns (cf. Talmy, 1985, 2000) in this domain of expression. Finally, I examine how language-specific patterns influence the types of spatial information speakers of Nepali typically encode in discourse when describing Motion events. To investigate these issues, I rely on both descriptive and narrative data. Descriptive data were collected using the ‘Put and Take’ stimulus set (Bowerman *et al.*, 2004) for the caused Motion events, and the ‘Trajectoire’ stimulus set (Ishibashi *et al.*, 2006) for the spontaneous Motion events. The narrative data were extracted from the Nepali National Corpus. The data collection was conducted in Parbat and Kathmandu districts of Nepal with 18 participants (10 male and 8 female; average age: 35.2) for the ‘Put and Take’ corpus, and 17 participants (9 male and 8 female; average age: 33.4) for the ‘Trajectoire’ corpus in Spring 2016 and 2017. The total number of motion descriptions combining descriptive and narrative data amounts to 4991.

First, the analysis of descriptive data reveals the diversity of verbs used by the Nepali speakers in the expression of caused and spontaneous Motion events showing respectively 85 and 54 different verbs in the main verb slot (e.g., *raakhnu* ‘to put’, in caused Motion, and *jaanu* ‘to go’, in spontaneous Motion events are the *most* frequent verbs). In caused Motion events, there are great semantic distinctions between as well as among verbs used for depicting placement and removal events in that some of them overlap in their use whereas others differ semantically. For example, the verb *nikaalnu* ‘to take out’ depicting removal events overlaps in use with the verb *jhiknu* ‘to take out’ but, at the same time, the two verbs differ semantically because the former is not sensitive to the type of Ground (surface vs. containment) while the latter shows some sensitivity to the containment type of Ground. In the same way, in spontaneous Motion events, verbs like *chirnu* ‘to enter’ and *pasnu* ‘to enter’ overlap with each

other in use but they differ in meaning: though both of them encode the Goal-oriented events, *pasnu* ‘to enter’ also encodes the boundary crossing event while *pugnu* ‘to reach’ conveys only the boundary reaching event. Semantically, verbs found in the expression of both event types lexicalize either Path (implying event) or Manner (implying activity) or, occasionally, some other aspects of Motion, verbs encoding Path being more numerous than verbs lexicalizing Manner. The lexical devices found in the expression of these events also involve adverbs (e.g., *baahira* ‘outside’ (conveying Source and boundary crossing Path), and *bhitra* ‘inside’, showing Goal and boundary crossing Path) among others)). Both locative (*-maa* ‘LOC’ indicating Goal) and ablative (*-baaTa* ‘from’ conveying Source) case markers, and postpositions (e.g., *-maathi* ‘above’, *-bhitra* ‘inside’, *-tira* ‘toward’ depicting Goal just to mention a few of them) are the grammatical devices used in the expression of caused and spontaneous Motion events. Both lexical devices (verbs, adverbs) and grammatical devices (postpositions and case markers) are extensively used by the speakers in encoding the spatial information (see Chapter 4 and 5 for discussion).

Second, the study investigates the use of morphosyntactic loci for the expression of Path including both simplex and complex constructions found in caused and spontaneous Motion events. The data uncover different strategies displayed by the speakers in the expression of Path. Path can be expressed in one morphosyntactic locus up to five loci in caused Motion events and in one locus up to six loci in spontaneous Motion events. Nevertheless, the number of loci where Path is expressed is much higher in narrative data ranging from one morphosyntactic locus up to nine loci while taking into account both simplex and complex constructions. When Path is expressed in one locus, it is either conveyed by the verb alone or by the case marker or the postposition, and when it is expressed in two or more than two loci, it is typically distributed between the verb and some grammatical devices or by combining lexical (verb, adverb) as well as grammatical (case markers, postpositions) devices.

Third, the analysis of descriptive and narrative data shows that Nepali pervasively uses the Verb-framed pattern to encode Motion events, Path being expressed in such constructions in the main verb. Yet, the data also reveal the use of the reverse-framed pattern where Path is expressed in a conjunctive participle. Therefore, in terms of the typology of Motion events, Nepali shows characteristics of a Verb-framed language as, for example, French, Spanish, Hebrew, Turkish, and

Japanese (cf. Talmy, 1985, 2000; Slobin 1994, 2004; Rappaport Hovav, 2019 among others). Consequently, Manner of Motion tends to be either omitted or expressed explicitly in a conjunctive participle, an aspectual or an adverbial expression or in an ideophone. To a lesser extent, Manner is also lexicalized in the main verb.

Finally, I examined the distribution of Path information in descriptive and narrative data based on the ‘Distributed spatial semantics’ framework proposed by Sinha and Kuteva (1995) considering the simplex clause. I investigated how Path information is distributed across the sentence, and whether it is distributed *redundantly*, i.e. different linguistic devices depict the same portion of Path (either Source or Median or Goal or even boundary crossing) or whether it is distributed *differentially* i.e. different linguistic devices depict different portions of Path (Source-Goal, or Source-Median-Goal). The study uncovers both patterns, *redundant* and *differentiated*, and this, in both, descriptive and narrative data. However, the redundant pattern of distribution is the most frequent. Yet, the redundant distribution is the most remarkable in Source-oriented Path as it can rely on as many as four loci, combining several lexical and/or grammatical devices. In descriptive data, speakers give due attention to the Path component as they use these linguistic devices extensively and often in an elaborated way. Narrative data confirm this tendency. While they reveal some variation in the type of constructions or the number of loci used for the expression of Path, the Path encoding in narrative data relies on similar strategies to the ones found in descriptive data.

Based on both descriptive and narrative data, the investigation of lexical and grammatical devices, as well as the analysis of the form-function relation the study presented in this Thesis is the first typologically-oriented study of Motion events in Nepali. Therefore, its main contribution is to characterise Nepali typologically in this conceptual domain of expression and to show how Nepali is related to other, geographically and genealogically varied, languages previously examined in the light of the typology of Motion events. Furthermore, this study also opens new perspectives as several, interesting topics emerged during the analysis including the asymmetry between Source and Goal, the complexity of use of the conjunctive participle form, and aspects related to the lexicalization and semantic distribution of Manner.

Key words: *Nepali, Motion events, Path, Manner, Figure, Ground, elicitation data, corpus data, functional-typological, morphosyntactic loci, lexicalization patterns, distribution, redundancy, differentiation*

Abbreviations

AD	Anno Domini
Adj.	adjective
ADV	adverb
a.k.a.	also known as
approx.	approximately/approximation
APV	agent-like argument, patient-like argument, verb
BA	Bachelor of Arts
BBS	Bachelor of Business Studies
B. Ed.	Bachelor of Education
c.	circa (approximately)
C	causative
CBS	Central Bureau of Statistics
cf.	compare
CM	caused Motion events
DOM	differential object marking
e.g.	for example
<i>et al.</i>	and others
HSEB	Higher Secondary Education Board
I	intransitive
<i>ibid</i>	the same source mentioned earlier
i.e.	that is
km	kilometres
LGR	Leipzig glossing rules
lit.	literal/literally
LSI	Linguistic Survey of India
MA	Master of Arts
MBS	Master of Business Studies
M. Ed.	Master of Education
MSC	Master of Science
NNC	Nepali National Corpus
NP	noun phrase

Abbreviations

<i>op. cit.</i>	work cited earlier
p. c.	personal communication
PCLN	Proficiency Certificate Level in NursingPT PUT and TAKE
S	spontaneous
s	speaker
SAP	speech act participant
sic	written or printed like that
SLC	School Leaving Certificate
SME	spontaneous Motion events
SOV	subject-object-verb word order
T	transitive
Traj.	Trajectoire
viz.	namely
VS	Vikram Sambat (the Vikram era)
vs.	Versus

Glosses

ABL	ablative		
ABS	absolutive	INFR	inferential
ACC	accusative	IO	indirect object
ART	article	INS	instrumental
CAUS	causativization	LOC	locative
CLF	classifier	M	masculine
COM	comitative	NEG	negation
COMP	comparative	NH	non-honorific
COND	conditional	NOM	nominative
COP	copula	NPST	non-past
CP	conjunctive participle	OBJ	object
DAT	dative	OBL	oblique
DEF	definite	OPT	optative
DEM	demonstrative	PASS	passive
DIST	distal	PFV	perfective
DPRT	discourse particle	POT	potential
DO	direct object	PL	plural
DUR	durative	PROS	prospective
EMP	emphatic	PROX	proximal
ERG	ergative	PST	past
EXIST	existential	Q	question
F	feminine	REL	relative
GEN	genitive	SG	singular
GER	gerundive	SIM	simultaneous
H	honorific	SUP	superlative
HABIT	habitual	TOPIC	topicalized/topic
ILL	illative	UPST	unknown past
IMP	imperative	1	first person
INDF	indefinite	2	second person
INF	infinitive	3	third person
∅	nominative/absolutive/ accusative		

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Introduction

The expression of spatial information is central to human beings conveyed by means of language irrespective of its type: spoken or written or signed; well-documented or undocumented. However, languages differ to a large extent in the way they convey the spatial meaning (see, for example, Whorf, 1956; Choi & Bowerman, 1991; Landau & Jackendoff, 1993; Wilkins, 2004; Levinson & Wilkins, 2006; see also Clark, 2003: 20, 22) because, as pointed out by Sapir, “no two languages are ever sufficiently similar to be considered as representing the same social reality” (Sapir, 1949: 1). The issue is also concerned with what are the differences that exist between or among languages in spatial or other domains? What linguistic devices are involved in the system to convey the spatial meaning? What research tools are employed in exploring these devices? How does relevant literature deal with this domain? Several answers might come along to resolve these issues. Connecting such issues to ours, this Thesis is concerned with the expression of Motion events in Nepali. Although several studies have been conducted in this domain in languages spoken in different parts of the world, as discussed in Chapter 1, it is one of the most understudied domains in languages spoken in South Asia and not represented at all in the linguistic studies in Nepal. Therefore, this study aims to investigate the expression of Motion events in Nepali in order to uncover typological characteristics of Nepali in this domain of expression and to examine how different or similar Nepali is to the languages that have been investigated previously.

In what follows, I introduce the topic of this study, highlight its objectives and provide general information as regards the organization of this Thesis.

This Thesis is concerned with Motion events in Nepali, the official language of Nepal spoken by c. 12 million people, belonging to the Indo-Aryan branch of the Indo-European family and with its rich literature in different domains. The data for the study encompass:

(a) descriptive data of spoken corpus collected with two types of video stimulus sets:

‘Put and Take’ video stimulus set for caused Motion events (hereafter CME) and

‘Trajectoire’ video stimulus set for spontaneous Motion events (hereafter SME).

These data were gathered with 18 native speakers of Nepali (10 male and 8 female; average age: 35.2) for the ‘Put and Take’ data, and 17 native speakers (9 male and 8 female; average age: 33.4) for the ‘Trajectoire’ data in Parbat and Kathmandu districts in spring 2016 and 2017.

(b) narrative data extracted from the written corpus called the *Nepali National Corpus*.

By applying the typologically-oriented descriptive approach in this domain, I intend to accomplish the following main objectives in this Thesis:

(a) to describe the diversity of morphosyntactic devices (a.k.a. linguistic devices) speakers of Nepali use to describe Motion events;

(b) to examine the relationship between the form and the meaning i.e. the mapping between the syntactic or the surface elements - e.g., nouns, verb, adverbs, and postpositional phrases-, and the semantic elements such as Figure, Path, Manner, Motion and Ground, and to investigate patterns of lexicalization in Nepali.

(c) to investigate how language-specific patterns influence the types of information speakers typically encode in discourse.

The Thesis consists of an introductory part and eight Chapters. It proceeds as follows:

Chapter 1 presents the **theoretical background on Motion events**. It introduces the conceptual elements such as Motion, Path, Manner, Figure, and Ground, and provides an account of the development of the domain of studies on Motion events. Then, it discusses how languages are classified on the basis of their lexicalization patterns. Based on this classification, languages encoding Path in the main verb of a clause belong to the verb-framed type, and those expressing Path outside the main verb of a clause or in the form of satellites, represent the satellite-framed type. These are the two-way classification systems proposed by Talmy (1975, 1985, 2000). This Chapter also provides some counter arguments and criticism (cf. § 1.2.1 through §

1.2.3) against these two patterns and discusses some proposals put forward by other researchers (e.g., Slobin, 2004; Croft *et al.*, 2010) working in this domain arguing for a revision of the two-way classification of lexicalization patterns and their new proposals to accommodate those languages whose lexicalization patterns are different from those discussed by Talmy. Then, it discusses the consequences of language specific lexicalization patterns (§ 1.3) focusing on Motion events in narrative, semantic categorization, and translation. Finally, it presents a brief review of some typological studies in the expression of Motion events in Indo-Aryan languages in general and in Nepali in particular (§ 1.4).

Chapter 2 presents a **grammatical sketch of Nepali**. It, first, gives an overview of the historical development of Nepali and gives information regarding speakers, dialects and language use. Section 2.2 provides a grammatical sketch. After the presentation of the basic morphosyntactic characteristics of the parts of speech, the Chapter addresses the noun phrase (§ 2.2.2), its syntactic or semantic case roles in the clause, and referential status. It shows how a noun phrase can be modified by adjectives, quantifiers or even classifiers, and illustrates the different cases (e.g., ergative, instrumental, genitive, dative, locative, ablative, and comitative) it can be inflected with. Section 2.2.3 discusses non-verbal predication. It presents the copulas such as *cha* ‘is’, *ho* ‘is’, and *hunu* ‘to become’, including the types of non-verbal predicates. Then, Section 2.2.4 discusses the word order and case alignment. Furthermore, the Chapter introduces auxiliary, compound, and light verb constructions, as well as TAM systems, all of which are parts of simple clauses. It also presents the negation and question construction processes (§ 2.2.4.1 through § 2.2.4.7).

Section 2.2.5 discusses complex clauses and Section 2.2.6 addresses the clause combining strategies namely, subordinating and coordinating conjunctions. In addition to these clause combining techniques, Nepali also employs clause chaining strategies, such as the conjunctive participle construction that is discussed at the end of Chapter 2.

Chapter 3 is concerned with the **data collection procedures and methodology**. The Thesis is based on descriptive and narrative data. The ‘Put and Take’ and the ‘Trajectoire’ corpora created, thanks to video-elicitations, constitute descriptive data and the data extracted from the Nepali National Corpus (NNC) comprise narrative data.

In Sections 3.1.1 and 3.1.2, I explain the rationale of designing the ‘Put and Take’ stimulus set for eliciting caused Motion events and the ‘Trajectoire’ video stimulus set for spontaneous Motion events, their content and structure. Then, I present the participants who took part in the study (their age, academic background, and languages spoken) and who produced descriptions of Motion events, both caused and spontaneous. Data gathered with the video stimulus sets were coded using the Berkeley Coding Manual (Slobin, 2005) focusing on syntactic, and conceptual categories, as well as lexical expression (§ 3.1.3). Section 3.2 deals with the narrative data. First, I highlight the rationale and necessity of using narrative data, and then, I explain the procedure regarding the collection of verbs of motion. After explaining the initial dictionary survey I conducted, I focus on the extraction of sentences from the NNC (§ 3.2.2), and data coding (§ 3.2.3).

In Chapter 4, I discuss the results of **placement and removal events** investigated by using the ‘Put and Take’ video stimulus set. First, I explain the concept of ‘placement’, ‘removal’ and ‘removal-placement’ events, and then, I summarize the overall results of placement, removal, and removal-placement events. When speakers describe the video stimuli, some of them conceptualize the placement events as removal and vice versa. I highlight this perspective change in § 4.1.4. Section 4.1.5 analyzes the trend of whether all speakers obligatorily use the semantic component Ground while they describe the video clips or whether they omit it in their description. I discuss the types of constructions, simplex vs. complex, found in the data in § 4.2. Section 4.3 addresses lexical and grammatical devices used in placement and removal events. I investigate the verbs of motion used in the main verb slot, and examine the semantic differences between the verbs used in placement vs. removal events. I illustrate that some verbs are sensitive to the type of Ground or Figure, or Motion performed by the Agent, whereas others are not. Section 4.3.2, is concerned with other lexical (other than the verb) as well as grammatical devices found in the data.

Furthermore, Chapter 4 addresses the use of morphosyntactic devices in the expression of Path in placement, removal and removal-placement events (§ 4.4). I investigate how Path is expressed in different morphosyntactic loci and the type of linguistic devices involved in expressing simplex vs. complex Path.

Chapter 5 investigates **spontaneous Motion events** on the basis of the data collected with the ‘Trajectoire’ stimulus set. I examine different types of events

described by the speakers, including Simple Path events that include one reference point (e.g., Source, Median or Goal), and complex Path events that consist of more than one reference point (e.g., Source-Goal, or Source-Median-Goal). Moreover, I examine perspective change in the way some participants conceptualize such events (§ 5.1.3). In Section 5.2, I examine the types of constructions, simplex and complex, that speakers of Nepali use to describe spontaneous Motion events. Lexico-grammatical devices are investigated in § 5.3. First, I present the analysis of diversity of verbs found in the main verb slot; then, on the basis of the meaning they convey, Path vs. Manner, I discuss these verbs in a more *fine-grained* way to better capture the form-function relation. Hence, verbs conveying Path are further classified according to the portion of Path they convey: Source, Goal, Median, Deixis and Path, vertical Motion, boundary crossing events, and Path and Manner. Furthermore, verbs that express Manner are also classified into bigger semantic categories including WALK, RUN, and SWIM.

Section 5.3.2 addresses the use of the conjunctive participle form and the semantic element of Path or Manner it conveys in motion descriptions. Then, I discuss another lexical device, the adverb. I will show that some adverbs express Path whereas others express Manner. The two following Sections, 5.3.4 and 5.3.5, are concerned with the grammatical devices. In § 5.3.4, I focus on case markers which convey only the spatial information, Source or Goal, and in § 5.3.5, I analyze postpositions and examine the type of information they convey, Source, Median, Goal, boundary crossing or location.

In § 5.4, I examine the use of morphosyntactic loci for the Path expression. In course of analysis, I discuss how Path is distributed in different morphosyntactic loci across the sentence in Source-, Median-, and Goal-oriented events, and show that in the expression of some events, Path is distributed only in a single morphosyntactic locus whereas in others it is distributed across the sentence in different morphosyntactic loci.

Chapter 6 is concerned with the **lexicalization patterns in Nepali** based on both descriptive and narrative data. Both data show the evidence for the use of two types of lexicalization patterns: V-framed pattern where Path is expressed in the main verb and reverse V-framed pattern where Path is expressed in the conjunctive participle. These two patterns are first discussed on the basis of the descriptive data considering

both caused and spontaneous Motion events. In § 6.1.1, I show that in caused and spontaneous Motion events, the V-framed pattern is highly pervasive showing that, in Nepali, Path is typically lexicalized in the main verb of the clause. In both event types, verbs that lexicalize Path also indicate Source, Median, Goal or the Path depicting boundary crossing or the vertical Motion. Section 6.1.2 discusses the reverse V-framed pattern found in the expression of both event types, caused and spontaneous, and in which Manner is lexicalized in the main verb of the clause, while Path is conveyed by the conjunctive participle form.

Frequent use of the V-framed pattern, and the lexicalization of the Path in the main verb of the clause, has consequences on the expression of Manner. Hence, in such constructions, Manner is either omitted (the most frequent case) or it is expressed in the conjunctive participle, aspectual or adverbial forms (§ 6.1.3). Interestingly, the data reveal both similarities and differences between caused and spontaneous Motion events regarding the expression of Manner. Furthermore, there are also instances where the main verb of the clause lexicalizes Manner.

Section 6.2 explores the narrative data in order to uncover the type of the lexicalization patterns used. We show that the results confirm the use of both patterns, V-framed and reverse V-framed pattern, in the narrative data. As mentioned earlier, when Path is lexicalized in the main verb of the clause, Manner is either omitted or explicitly expressed by satellites. Notably, narrative data reveal more linguistic strategies to express Manner as compared to descriptive data, as is shown in § 6.2.3.

Chapter 7 investigates the **distributed spatial semantics in Nepali**. By applying the ‘Distributed spatial semantics’ framework proposed by Sinha and Kuteva (1995), it investigates the use of morphosyntactic loci for the expression of Path, and the semantic distribution of Path across the sentence, i.e. the types of Path components encoded in different linguistic devices and how they are expressed in a sentence. I focus on two patterns of distribution, redundant and differentiated, and investigate their use in both descriptive and narrative data. The results show that Path can be distributed redundantly as well as differentially in both caused and spontaneous Motion events.

Concerned with descriptive data, Section 7.1 shows that Path can be distributed in one morphosyntactic locus up to five morphosyntactic loci between or among different linguistic devices. Interestingly, the data show some differences in the number of

morphosyntactic loci, the linguistic devices used, and the redundant and differentiated patterns of distribution in the expression of caused vs. spontaneous Motion events.

Section 7.2 is concerned with patterns of Path distribution in narrative data. The data show that Path can be distributed between two up to four morphosyntactic loci. As in the descriptive data, the narrative data too show that different lexical and grammatical devices are involved in such expressions. Furthermore, the analysis of the data confirms similarities and differences between caused and spontaneous Motion events found in the descriptive, stimuli-based data.

Chapter 8 summarizes the Thesis and the results discussed in different Chapters, concludes the study, and provides some perspectives for future research.

Chapter 1. Theoretical background on Motion events

1.1 Motion event and its conceptual elements

Motion events refer to the movement of human and non-human beings as well as inanimate entities from one place to another. The movement per se implies a spontaneous (a.k.a. self-propelled or self-agentive) Motion (e.g., *enter*, *run*) or a caused Motion (e.g., *put*, *take*). According to Talmy,

“The basic Motion event consists of one object (the Figure) moving or located with respect to another object (the reference object or Ground)” (Talmy, 2000: 25; see also Choi & Bowerman, 1991).

However, there is no uniformity in the use of the terms such as Path, Figure, Ground. They are also used as Theme and Location (Gruber, 1965: 47; Jackendoff, 1990; DeLancey, 2001; see also DeLancey 2003); It and At (Diehl, 1975: 104); Trajector and Landmark (Langacker, 1987: 217). However, I will use Path, Figure, and Ground including other elements related to Motion events following Talmy’s typological approach (Talmy, 1972, 1975, 1985, 1991, 2000 *inter alia*) and define them accordingly. Note that, as emphasized by DeLancey (2003), these elements are not the features of the ‘physical universe’ but the patterns ‘imposed on stimulus by the process of perception’.

- **Figure:** “The Figure is a moving or conceptually movable object whose path or site is at issue” (Talmy, 2000: 26).
- **Ground:** “The Ground is a reference frame, or a reference object stationary within a reference frame, with respect to which the Figure's path or site is characterized” (Talmy, 2000: 26).
- **Path:** “The Path is the path followed or site occupied by the Figure object with respect to the Ground object” (Talmy, 2000: 25; cf. Grinevald, 2011: 53).

- **Motion:** “The component of Motion refers to the presence per se of motion or locatedness in the event” (Talmy, 2000: 25). He further specifies that “the Motion component refers to the occurrence (MOVE) or nonoccurrence (BE_{LOC}) specifically of translational motion. This is motion in which the location of the Figure changes in the time period under consideration” (Talmy, 2000: 25).

Examples which I present below from Nepali illustrate how these semantic elements are represented in the expression of Motion events. In example (1) depicting spontaneous Motion, *keTo* ‘boy’ functions as the Figure, *ghar* ‘house’ indicates the Ground, the postposition *-bhitra* expresses the Path (direction) of the human Figure, and the verb *pasnu* ‘to enter’ denotes the Motion and the Path. In example (2) depicting caused (or agentive) Motion, *keTo* ‘boy’ functions as the Agent, *kalam* ‘pen’ conveys the Figure object, *bhui* ‘floor’ functions as the Ground, the postposition *-bhitra* ‘inside’ expresses the Path, and both the Motion and the Path are encoded by the verb *raakhnu* ‘to put’. Syntactically, *keTo* ‘boy’ in both examples is the subject argument of intransitive and transitive clauses respectively, *ghar* ‘house’, *kalam* ‘pen’ and *jhola* ‘bag’ are the object arguments, and *pasnu* ‘to enter’ and *raakhnu* ‘to put’ are the intransitive and transitive predicates respectively. The verbs, adpositions (postpositions in our context), the subordinate clauses and verbal morphemes that Talmy characterizes as satellites (Talmy, 2000: 21) are the surface elements (see § 2.1 for transcription convention, see also Appendix G).

- (1) FIGURE GROUND-PATH MOTION+PATH
keTo-Ø *ghar-bhitra* *pas-yo*
 boy-NOM house-inside enter-PST.3SG.M.NH
 ‘The boy entered (into) the house.’
- (2) AGENT FIGURE GROUND-PATH MOTION+PATH
keTaa-le *kalam-Ø* *jholaa-bhitra* *raakh-yo*
 boy.OBL-ERG pen-ABS bag-inside put-PST.3SG.M.NH
 ‘The boy put the pen into the bag.’

1.1.1 Path of Motion

As was defined earlier (cf. § 1.1), the Path is the direction followed or the site occupied by the Figure object with respect to the Ground object. It is one of the core elements of Motion events (Slobin, 2004; Ibarretxe-Antuñano, 2009: 410; Grinevald, 2011: 53; Ji, Hendriks & Hickmann 2011: 1802) and contains several structurally distinct components (Talmy, 2000: 53, 103). Emphasizing the role of Path in Motion events, Slobin (2004) mentions:

“Because path is an obligatory component of motion event expressions, we can’t compare languages in terms of the accessibility of path as a category: without a path verb or path satellite or other path element, there is no motion event” (Slobin, 2004: 235).

The Path, therefore, expresses the direction of the movement (e.g., UP, DOWN, INTO, OUT OF or the location of the Figure object (e.g., IN, ON, ABOVE). Depending on the type of language, the Path can be expressed in one or two elements of the verbal sphere that is only in the main verb slot or in both the verb and a verb satellite. It can also be expressed in two or more elements between the verbal and the nominal sphere: a verb and an adnominal (e.g., preposition, postposition or case) (see Kopecka & Ishibashi, 2011; Kopecka, 2013: 5-7)). The Path consists of three different parts: Source (initial), Median (middle) and Goal (final) (see § 3.1.2). A Source-oriented Path consists of the Figure object moving away from the initial location, as in example (3) where *out of* expresses the initial Path of the Figure, the bird. A Median-oriented Path refers to the intermediary part situated between the initial and the final locations, as illustrated in (4) where *through* expresses the Median Path. Finally, the Goal-oriented Path marks the movement of the Figure to its final location, as is the case in (5) in which the movement of the Figure object, ‘oil’, is indicated by *into*. The three examples below convey the simplex Path i.e. either the initial or the middle or the final respectively.

(3) *The bird came out of the hole.*

(4) *He came through the forest.*

(5) *The farmer poured some oil into the bottle.*

A complex Path consists of the movement of the Figure object either from its initial to its final point (Source-Goal) or from the initial, via the middle to the final points (Source-Median-Goal) (see Kopecka, 2017 for further details on simplex and complex Path; see also Talmy, 2000: 53; Kopecka, 2013: 164). The complex Path can be expressed in one verb clause, as in (6) below, or in several verb clauses, as in (7) (see also § 4.4).

(6) *The log floated out of the tunnel into the main tributary of the river.*
(Gruber, 1965: 47)

(7) *The old man came out of his home walked through the forest and then went to the paddy field.*

1.1.2 Manner of Motion

The expression of the semantic component of Manner may vary depending on the lexicalization patterns of a given language. It can be expressed in the main verb in S-framed languages (e.g., English) or in a periphrastic expression such as a gerund or an adverbial expression in V-framed languages (e.g., Spanish, French). Typically, the Manner refers to how the Motion is carried out (Kopecka, 2010; Berthele, 2013). According to Ikegami (1969: 61), speed and impetus are important dimensions of Manner whereas Slobin (2006) includes a number of dimensions in Manner component such as motor pattern (e.g., *hop, jump, skip*), velocity (*run*), rate of motion (e.g., *walk, run, sprint*), force dynamics (e.g., *step, tread, tramp*), attitude (e.g., *amble, saunter, stroll*), and instrument (e.g., *sled, ski, skateboard*). If we look from Slobin's point of view (2004: 223, 2006) (see also § 5.3.1.3), the typology of Motion events can be approached from two different perspectives: (a) how Manner is expressed and (b) how Path is expressed. Some languages pay more attention to the Manner component whereas others focus more on the Path.

Talmy (1985), on the other hand, considers Manner to be the second most frequent constituent that languages encode inherently in the verbal expression of the Motion event, as illustrated by examples (8) and (9) below.

(8) *They swam across the Kali Gandaki river.*

(9) English (Ikegami, 1969: 15)

He pushed the cart up the hill.

In these examples, the verbs *swim* and *push* conflate Motion and Manner and/or Cause, as in (8) and (9) (see § 1.2 for more details on those languages which express Motion and Manner in the main verb).

1.2 Typology of Motion events: Satellite- vs. Verb-framed languages

Ever since his seminal work on *Semantic structures in English and Atsugewi* (Talmy, 1972) and the classification of languages based on lexicalization patterns, as Satellite-framed (hereafter S-framed) and Verb-framed (hereafter V-framed) languages, which was revised and extended significantly in his later works (1975, 1985, 1991, 2000, 2007 *inter alia*), research on Motion events has been expanding around the globe investigating lexicalization patterns across genetically and typologically distinct languages¹. In both V-framed and S-framed languages, the verbs and satellites are the surface elements and FIGURE, GROUND, PATH, MOTION, and MANNER are the semantic elements. These syntactico-semantic elements are important in the overall representation of the domain of Motion events. The following Section, deals, first, with these two lexicalization patterns, and then, it addresses the criticism of scholars asking for the revision and reformulation of the two types of patterns. Finally, it presents a third pattern proposed by Slobin (2004) in order to account for languages that do not fit into the S- and V-framed lexicalization patterns.

¹ As noted by Wälchli (2001), little attention has been paid to the earlier work of Lucien Tesnière (1959) and the distinction he made between *mouvement* (movement) and *déplacement* (displacement). In fact, Manner constructions correspond to what Tesnière calls *mouvement* and Path constructions what he calls *déplacement* (see Wälchli, 2001 for the discussion).

In particular, a language is Satellite-framed if it expresses the Path of Motion outside the main verb and the Manner of Motion in the main verb. Talmy (2000) defines the satellite as follows (see also Talmy, 1975: 208):

“A satellite is the **grammatical category** of any constituent other than the noun phrase or prepositional-phrase complement that is **in a sister relation to a verb root**” (Talmy, 2000: 102).²

Satellite can be either a bound affix or a free word. Talmy (2007: 139) mentions that the set of forms that can function as satellites in a language may overlap partially, but not wholly, with the set of forms in another grammatical category such as adpositions, as is the case in English where verb satellites overlap with prepositions: *together*, *apart*, *away*, *back*, and *forth*, for example, serve only as satellites, *of*, *at*, *from*, and *toward* serve only as prepositions, whereas *in(to)*, *on(to)*, and *up(on)* can function both as satellites and prepositions.

However, Filipović (2007), Croft *et al.* (2010), Grinevald (2011), Imbert, Grinevald and Sörös (2011), Goschler and Stefanowitsch (2013), and Vittrant (2015) among others differ from Talmy in the definition of satellite. Scholars such as Grinevald (2011) argue that satellites should be defined as a functional category in order to capture the cross-linguistic variation in the type of morphemes used in combination with the main verb. The author also argues that the Path satellites (‘directionals’ or ‘preverbs’) are dynamic and/or ‘multidimensional’. They have to be treated according to their morphosyntactic system, (sub)system and syntactic constructions they occur in rather than simply as a ‘grammatical category’. Research on Jakeltek Popti’ (Grinevald, 2011) reveals that the directionals in this language represent the prototypical satellites which are of verbal origin rather than frequently described satellites of adnominal origin (e.g., verbal particles of English, preverbs of German or Polish). Finally, the author claims that these satellites developed through

² Emphasis added to the original.

the grammaticalization process. As proposed by Imbert *et al.* (2011), the process of grammaticalization is referred to as 'satellization'.³

Imbert *et al.* (2011) also differ from Talmy in the way they consider the role of the satellite. Namely, they consider satellites as a functional super category⁴ and give multi-dimensional definition based on four major principles⁵ illustrated below.

- Principle 1: It requires a multi-dimensional definition taking into account simultaneously its syntactic, semantic and lexical dimensions.
- Principle 2: This category is designed as a functional super-category belonging to the verbal sphere.
- Principle 3: The heterogeneous nature of this functional super-category is considered as a result of the fact that its members evolved from diverse sources as much as adnominal, adverbial or verbal.

³ Satellisation is a more advanced degree of grammaticalisation than most serialisation processes, but before a stage of lexicalisation that erases the productive syntactic and discourse use of satellites (Grinevald, 2011: 64).

⁴ According to Grinevald (2011 § 2.2.6), the super category refers to a complex concept, made of the clustering of distinct spatial notions that have been identified in the literature but have not been necessarily closely associated or regrouped in any special way. This super category includes the notion of a line, with possible marked contour, conceived following some direction, calculated between the spatial entities of figure and ground placed at different points of the line, with the ground possibly being considered as bounded, and the whole PATH schema being calculated spatially with respect to a deictic anchoring point.

⁵ Principles mentioned above (principle 1 through 4) are literally translated into English by me from the original version in French given below (for further details, see Imbert *et al.*, 2011: 99-116).

Principe 1 : Cette catégorie requiert une définition multi-dimensionnelle, prenant en compte simultanément ses dimensions syntaxique, sémantique et lexicale;

Principe 2 : Cette catégorie est conçue comme une super-catégorie fonctionnelle appartenant à la sphère verbale;

Principe 3 : La nature hétérogène de cette super-catégorie fonctionnelle est considérée comme le résultat du fait que ses membres ont évolué à partir de sources diverses, autant adnominale qu'adverbiale ou verbale;

Principe 4 : Les S de Trajectoire forment une catégorie gradiente dans la mesure où ses éléments n'attestent pas tous un même degré d'évolution depuis leur source vers un statut de S; cette évolution découle d'un processus spécifique de grammaticalisation que l'on nommera dans cet article "processus de satellisation".

- Principle 4: The Path satellite forms a gradient category insofar as its elements do not all attest the same degree of evolution since their source is in the status of a satellite; this evolution stems from a specific grammaticalization process which the authors call ‘the process of satellisation’.

The issue then has to do with the S- vs. V-framed languages. In the S-framed languages, the Path can be expressed by verb particles (e.g., English), separable and inseparable verb prefixes (e.g., German), verb prefixes (e.g., Polish, Russian), verb complements (e.g., Chinese, cf. Slobin, 2004; Zlatev & Yangklang, 2004; Croft *et al.*, 2010; Vittrant, 2015), polysynthetic affixes around the verb roots (e.g., Atsugewi), non-head ‘versatile verbs’ (e.g., Lahu), and incorporated noun (e.g., Caddo) (Talmy, 1991: 486; 2000: 102; Slobin, 2006). Languages of this type express Manner of Motion in the main verb, as examples below illustrate. The first example (10) is from English which is a typical S-framed language (Slobin, 1994; Talmy, 2000). The verb *jump* conveys both Motion and Manner, and the satellite *out of* indicates the Path. Note that English has also in its lexical repertoire several Path verbs such as *descend*, *ascend*, *exit*, *enter*, *advance*, *proceed*, *arrive*, *depart*, *cross*, *approach*, *leave*, *separate*, and *return* among others. However, all of them are the borrowing from Latin (Talmy, 2000: 52, 53; Slobin, 2002; Levin & Rappaport Hovav, 2019).

- (10) FIGURE MOTION+MANNER PATH GROUND
he jumped out of the ditch
 ‘He jumped out of the ditch.’

In the Russian example (11), the verb *skočila* expresses the Motion and Manner components and the verb prefix *vy-*, which is a satellite, expresses the Path.

- (11) Russian (Slobin, 2004: 224)
- | GROUND | PATH-MOTION+MANNER | FIGURE |
|------------|--------------------|-------------|
| <i>Tam</i> | <i>vy-skočila</i> | <i>sova</i> |
| there | out-jumped | owl |
- ‘There out-jumped owl.’

Figure 1 shows schematically how Path and Manner are expressed in S-framed languages.

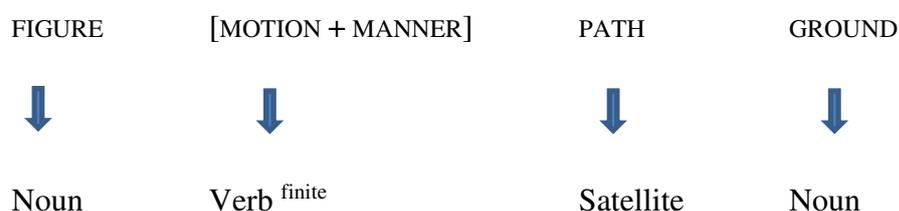


Figure 1. Expression of Manner in S-framed languages (after Chen & Guo, 2009)

In contrast to S-framed languages, a language is V-framed when speakers express the Path of Motion in the main verb itself. All the Romance languages, Japanese, Korean, Turkish, Hebrew, and Hindi among others belong to the V-framed type (Talmy, 1991: 486, 2000; Narasimhan, 1998, 2003, 2012; Chen & Guo, 2009; Hijazo-Gascon & Ibarretxe-Antuñano, 2013; see also Bernabeu & Tillman, 2019). Examples (12) and (13) below show how the Path is expressed in such languages.

(12) French (Pourcel, 2004: 507)

FIGURE	MOTION+PATH	GROUND
<i>l'oiseau</i>	<i>est sorti</i>	<i>de sa cage</i> ⁶
the bird	exited	its cage
‘The bird exited its cage.’		

In the French example (12), the main verb *sortir* ‘to go out’ expresses the Motion and Path components. This is also the case in the Italian example (13) where the main verb *esce* also expresses the two semantic components, Motion and Path. As shown in the Italian example, because the main verb conveys the Path, Manner is expressed in the gerundive form *correndo* ‘running’.

⁶ Some changes are made to the format contained in the original data and will hold for all the examples taken from the respective authors.

(13) Italian (N. De Pasquale, p.c. February 13, 2020)

FIGURE		MOTION+PATH
<i>il</i>	<i>bambino</i>	<i>esce</i>
ART.SG	child.SG.M	go.out.NPST.3SG
GROUND		MANNER
<i>daallaa</i>	<i>stanza</i>	<i>correndo</i>
from.ART.SG	room.SG.F	run.GER

'The child goes out of the room running'.

As is illustrated by (13), in V-framed languages, Manner is typically expressed in periphrastic expressions such as gerundive, converbal or adverbial constructions⁷. Figure 2 shows schematically how the Path and Manner are expressed in V-framed languages.

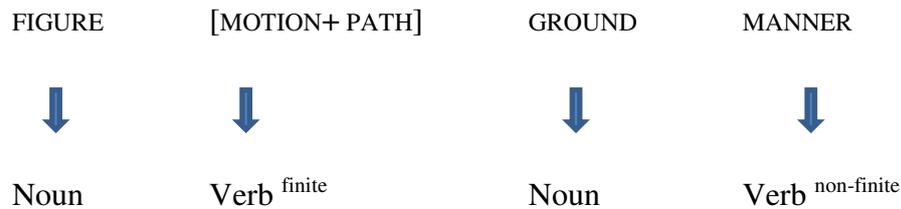


Figure 2. Expression of Path in V-framed languages (after Chen & Guo, 2009)

Yet, Talmy had pointed out the third type of languages conflating Motion with Figure. Atsugewi, the American Indian language of the Hokan family (Talmy, 1972, 2001, 57-59), is the prototypical example of such a language as presented in (14). The example includes both the literal and casual meaning.

(14) / ' -ra swal -im -a:l → [l'aswaləwá.] Atsugewi (Talmy, 1972: 432)

Literally: 'you effect limp-material to move thither by moving a linear object laterally [with one end] along a surface with it!'

Casually: 'push that dead snake away with this stick!'

⁷ As a consequence, the expression of Manner in those languages is optional. As shown by Slobin (1996: 212, 2005; see also Croft *et al.*, 2010: § 3.1; Montero-Melis *et al.*, 2017), and discussed by Iacobini (2016: 8), the expression of Manner is less frequent in V-framed languages unless it is discursively important.

However, this type of lexicalization pattern seems to be out of discussion in most of the linguistic literature (see, however, Aske, 1989: 1; Slobin, 1994: 487; Matsumoto, 2003: 405; Fortis, 2010). Matsumoto (2003: 204) mentions that this type of conflation is restricted to relatively unfamiliar languages. But I argue that the linguistic study must be conducted on any type of language based on its inherent features irrespective of whether a language is familiar or unfamiliar.

1.2.1 Criticism of Talmy's binary typology

Scholars working on different genres such as narrative discourse (Slobin, 1987, 1991, 2004, 2006; Zlatev & Yangklang, 2004; Bohnermeyer *et al.*, 2007; Chen & Guo, 2009; Vittrant, 2015; Fortis & Vittrant, 2016); language acquisition (Choi & Bowerman, 1991; see also Bowerman, *et al.*, 1995; Bowerman, 2010) spoken and sign language (Slobin & Hoiting, 1994); translation (Slobin, 2004; Kopecka, 2009, 2013), and comparative study (Aske, 1989; Narasimhan, 2003), have criticized Talmy's classification of S-framed and V-framed patterns (1975, 1985, 1991, 2000 *inter alia*) on ground that many languages (for e.g., languages with serial verb construction) do not fit well into the binary typology. Criticisms are also concerned with the approach such as top down vs. bottom up (Wälchli & Sölling, 2013). They argue that language systems have different dynamics of languages and that they might have undergone some diachronic changes in lexicalization patterns. For example, Romance languages shifted from an S-framed pattern to a V-framed pattern leaving many remnants of the ancient system in the contemporary language (Kopecka, 2006). Due to these language-internal dynamics, many languages do not fit well in Talmy's binary classification, i.e. S-framed and V-framed type. Therefore, many scholars argue for the revision of this binary framing pattern to account for those patterns and diachronic changes. Similar criticisms have been raised by scholars working on language acquisition (Choi & Bowerman, 1991; Bowerman & Choi, 2003), empirical usage-based approach (Pourcel & Kopecka, 2005), and cross-linguistic constructional analysis (Croft *et al.*, 2010) just to mention a few. Moreover, there are also arguments that within the S-framed or V-framed languages, additional patterns are available if they are investigated in detail in different discourse genres, and in different data types (Kopecka, 2013).

According to Talmy (1985, 1991, 2000) and Slobin (1994, 2004, 2006 *inter alia*), Spanish is one of the typical examples of the V-framed pattern, with a rich set of Path verbs. Yet, Aske (1989) claims that there are also a lot of cases which indicate that Spanish behaves like an S-framed language. According to the author, plenty of natural, colloquial examples show that the Manner of Motion can be expressed in the main verb, as English does (Aske, 1989: 3). One of such cases is illustrated by examples (15) and (16) where the Manner, together with Motion, is expressed by the main verbs *flotó* ‘floated’ and *deslizó* ‘slid’ respectively and the Path is conveyed by prepositional expressions *hacia* ‘towards’ and *hasta* ‘down’. Nevertheless, examples like these which encode both Manner and Path in one verb clause are not what Aske introduced as “the telic path phrase”⁸ because they do not predicate the location (“or the un-location”, such as *off the table*) of the Figure argument (Aske, 1989: 6, cf. Slobin & Hoiting, 1994: 494).

(15) Spanish (Aske, 1989: 3)

la botella flotó hacia la cueva
 ART.SG.F bottle.SG.F float.PST.3SG towards ART.SG.F cave.SG.F
 ‘The bottle floated towards the cave.’

(16) Spanish (Aske, 1989: 3)

el libro se deslizó hasta el suelo
 the book slid down the floor
 ‘The book slid down to the floor.’

Within the same language too, there are differences in the encoding of Path. One such instance can be found in Kopecka (2013: 181) based on the investigation of narrative data from Old French to Modern French translations. The author explains that Old French has more devices to express the Path than the Modern French, as is shown in (17) and (18) for Old and Modern French respectively. In (17), the verb *aller* ‘to go’ conveys the Motion and Path. In addition to the verb, the satellite *fors* ‘out

⁸ See Aske (1989: 6) for a detailed account of two types of path phrases: the ‘mere locative path phrase’ and the ‘telic path phrase’.

of /‘outside’ also conveys the Path, the Source-oriented Path but in the case of (18) only the verb *descendre* ‘to get down’ is involved in the encoding of the Path information.

(17) French (Dufournet, 1998: 144 as cited by Kopecka, 2013: 169)

mes sires est alez la fors son grant coutel aguisier (...)

‘My husband went out there to whet his big knife’ (...).

(18) French (Leclanche, 2003: 111 as cited by Kopecka, 2013: 175)

Ils descendent par un sentier (...)

‘They descend along a path’ (...).

Furthermore, the author mentions that in Old French, the Path is expressed more often in satellites but in Modern French, it is typically expressed in the verb.⁹ This is one of the consequences of the diachronic change that the French language has undergone. This change of the pattern had several consequences on restructuring spatial information one of which is less frequent expression of Manner in Modern French and a more frequent emphasis on the Goal comparing to the Old French. These indicate that there may be typological changes over the period of time within a given language, and that such diachronic changes may result in several strategies available in the contemporary language in the expression of Motion.¹⁰

Another study conducted by Pourcel and Kopecka (2005) shows interesting results based on an empirical, usage-based investigation in French of the description of human Motion. In addition to the typical V-framed pattern, French speakers use other strategies to express Motion. One of such strategies is what the authors call the ‘reverse Path-verb-framing pattern’ or ‘Path adjunct-framing pattern’. This strategy consists of expressing the Path of Motion in an adjunct alone or together with adjunct

⁹ See Kopecka (2006) for a typological shift in French from S-framed to V-framed pattern.

¹⁰ See also Nikitina (2013) for a gradual typological shift from V-framed Ancient Greek to S-framed Classical Greek.

and preposition, and to convey the Manner of Motion in the main verb (see also § 6.1.2 and § 6.2.2) as is illustrated by (19).

(19) French (Pourcel & Kopecka, 2005: 146)

FIGURE	MOTION	PATH
<i>il</i>	<i>titube</i>	<i>en allant vers</i>
3SG.M	staggers	going towards
GROUND	PATH	
<i>le banc</i>	<i>en arrière</i>	
the bench	backwards	

‘He staggers going towards the bench backwards.’

In this example, the verb *tituber* ‘to stagger’ expresses the Motion and Manner, and the Path component is encoded in two different elements: the verb *aller* ‘to go’ in a gerundive form and the preposition *arrière* ‘backwards’.

Moreover, the study reveals another type of construction that consists of a verb conflating both Manner and Path, which the authors call the ‘hybrid verb-framing pattern’. Example (20) below illustrates this type of construction: the verb *plonge* lexicalizes both the Manner and the Path of Motion.

(20) French (Pourcel & Kopecka, 2005: 146)

FIGURE	MANNER+PATH
<i>il</i>	<i>plonge</i>
3SG.M	dives in

‘He dives in.’

Examples presented above show that in addition to the V-framed pattern, other types of constructions are available in French. However, these construction types are not discussed extensively in literature devoted to Motion events.

1.2.2 Dynamics of languages and revisions of the typology

In addition to the studies discussed above, further criticism of Talmy’s S-framed and V-framed classification comes from Matsumoto (2003) who raises several

problematic issues and suggests reformulating the existing S- and V-framed patterns. These issues are discussed below.

The first is the issue of Talmy's 'lexicalization pattern' which is slightly misleading according to the author (Matsumoto, 2003: 406). The reason is that if the verb is the head of both Path (e.g., Path is encoded in verb) and Manner (e.g., Manner is encoded in verb), the role of the verb is as the head of the sentence. The author claims that,

“Talmy's typology is not so much the matter of all the lexical items as of how a sentence is semantically organized” (Matsumoto, 2003: 406).

The second issue is concerned with the definition of the satellite. The author argues that satellites are defined in terms of their syntactic position in a clause or their syntactic function but not as a syntactic category (Matsumoto, 2003: 406). Furthermore, according to the author, Talmy's 'V-framed' and 'S-framed' pattern suffers from the misleading use of the term 'verb', which is meant to be the head of a clause. The author claims that satellites can also be verbs such as *flotando* in Spanish (see Matsumoto, 2003, § 2.1 for other details on this issue) (cf. Talmy, 2000; Grinevald, 2011; Imbert *et al.*, 2011)). However, this issue addressed by the author raises a new terminological problem since *flotando* is subordinated to the main verb rather than a satellite of the verb, i.e. a grammatical morpheme in a sister relation to the verb.

The author, therefore, proposes to reformulate Talmy's classification of V- and S-framed patterns in order to account for a diversity of structures found in different languages, be flexible and embrace new data and new languages such as South and East Asian languages (e.g., Chinese, Thai (cf. Wienold, 1992)), and Bantu languages (e.g., Tswana) and to better account for diversity. According to the author's proposal (Matsumoto, 2003: 408), the languages should be categorized not as V-framed or S-framed but as Head-framed and Non-head-framed languages. He also distinguishes between satellites and non-heads in the sense that all satellites are non-heads by definition but not all non-heads are satellites. So, according to the author a construction like (21) can't be called Satellite-framed.

(21) English (Matsumoto, 2003: 408)

John walked through the building.

Another case discussed by Matsumoto (2003) concerns Finno-Ugric languages which are S-framed according to Talmy (2000: 200). The author claims that these languages belong to Non-head-framed languages because case markers on nominals are not in a sister relation to the verb, as is shown in (22) where the Path is expressed by case on a nominal argument.

(22) Finnish (Nikanne, 1990: 77 as cited by Matsumoto, 2003: 408)

<i>elina</i>	<i>käveli</i>	<i>koti-in</i>
Elina	walk.PST	home-ILL

‘Elina walked home.’

Another criticism comes from Croft *et al.* (2010) who argue that the ‘typological classification of complex event constructions’ has to be elaborated to include additional types in the existing S- and V-framed patterns. Languages like Mandarin Chinese not only express Manner and Path but also Deictic orientation, which is not taken into account in Talmy’s classification (Croft *et al.*, 2010: 207). Furthermore, the authors point out that the criteria of defining a satellite and a verb are unsatisfying because they are not cross-linguistically comparable. They claim that languages should be compared based on construction types rather than on abstract linguistic categories. They point to the fact that English, which is typically classified as an S-framed language, has also the V-framed pattern from its resultative construction as shown in example (23) whose resultative construction as of the author is *I pushed the door open* (Croft *et al.*, 2010: 212).

(23) English (Croft *et al.*, 2010: 212)

I opened the door (by pushing on it).

Another point that Croft *et al.* (2010) raise is that the S- and V-framed patterns can’t account for constructions such as (24) in which “neither manner nor path (frame) are expressed by the main verb, which is a neutral verb of motion” (Croft *et al.*, 2010: 213). So, they propose ‘verb framing/double framing’ (VFdf) for these types of constructions.

(24) Icelandic (Croft *et al.*, 2010: 213)

Ég fór dansandi yfir götuna
I.NOM went dancing across street:the.ACC
'I went dancing across the street.'

They also claim that there are several examples of double framing constructions in Russian too as in example (25). Note, however, that according to Talmy, Russian belongs to the S-framed pattern.

(25) Russian (Talmy, 1985: 105 as cited by Croft *et al.*, 2010: 208)

ja-vy bežal iz doma
I-out ran from house:GEN
'I ran out of the house.'

Based upon different types of constructions found in individual languages, the authors propose to build a typology of different construction types rather than a typology of languages, such as:

- Verb framing (VF);
- Symmetrical: (i) Coordinate (CD) (ii) Serial (iii) Compounding (CP);
- Satellite framing (SF);
- Double framing (DF).

1.2.3 Equipollently-framed languages

Further criticism of Talmy's typology is related to languages with serial verb constructions such as Thai, as was discussed in brief in the previous Section (cf. § 1.2.2). Based on the data collected from the wordless picture book *Frog where are you?* (Mayer, 1969), Zlatev and Yangklang (2004) call for 'a radical extension and/or revision' to include a third type in the S-and V-framed pattern. The reason behind this is that in languages with serial verb constructions (e.g., Thai), it is not possible to distinguish the 'main event' from a 'co-event' because Path and Manner verbs have equal status both structurally and discursively (Zlatev & Yangklang, 2004: 163, 188). Furthermore, they show that in Thai, Manner verbs can appear alone as the sole verb of the sentence or that they can be followed by the Deictic verb, as illustrated in (26).

(26) Thai (Zlatev & Yangklang, 2004: 165)

<i>chán</i>	<i>dəən</i>	<i>(paj)</i>
I	walk	go

‘I am walking (away from deictic centre, towards something).’

As shown by studies on various languages (see, for instance, Slobin, 2004), the typology based on the binary system - V-framed languages vs. S-framed languages - does have some limitations to cover the diversity of strategies found across languages (Slobin 2004: 247-248; Levinson & Wilkins, 2006: 528-529). Slobin’s argument is that the expression of Path, either by the verb alone or by the verb satellites, has certain lapses. For example, in languages with serial verb constructions, it is difficult to identify which one in the series is the main verb. In example (27) from Mandarin Chinese, *mǎi piào* and *jìn-qu* are two different verb phrases. The verbs *mǎi* ‘bought’ and *jìn* ‘entered’ have the equal status and it is, therefore, difficult to determine one of them as the main verb. According to Li and Thompson (1989), such types of structures in the serial verb constructions can be understood in four different ways: consecutive, purpose, alternating, and circumstance.

The English translation of example (27) given below conveys the consecutive (one event occurs after the other) function and the second translation conveys the purposive function (see, however, Li & Thompson, 1989: 595 for a detailed discussion of these four types of functions/meanings).

(27) Mandarin Chinese (Li & Thompson, 1981: 595)

<i>wǒ</i>	<i>mǎi</i>	<i>piào</i>	<i>jìn</i>	<i>-qu</i>
I	buy	ticket	enter	-go

‘I bought a ticket and went in.’/ ‘I bought a ticket to go in.’

Further argument on the binary typological distinction comes from Slobin (2004) based on data collected with the picture book *Frog where are you?* (Mayer, 1969). First, the author points out to the fact that Talmy’s binary classification is not able to account for discourse structures due to the fact that the use of language is determined by more than lexicalization patterns. Thus, patterns of discourse and conceptualization can’t be predicted from the S-framed and V-framed patterns (Slobin, 2004: 220, 234). The author argues for taking into consideration the Path and its salience, the Manner and its salience, and the Ground. Hence, the investigation

should account for typological, morphosyntactic, discourse, rhetorical, and cultural factors. Based on the investigation of the role of these factors in different languages, the author proposes a third type of pattern namely, the Equipollently-framed (hereafter E-framed) pattern which is to be added to the Talmy's S- and V-framed patterns. According to Slobin (2004: 228), languages belonging to E-framing pattern express Manner and Path in 'equipollent' elements i.e. elements that are equal in formal linguistic terms, and appear to be equal in significance (cf. Talmy, 2009: 389; Goschler & Stefanowitsch, 2013). In particular, the author provides the following arguments in support of this pattern:

- (a) The E-framed lexicalization pattern can account for languages with serial verb constructions in which the verbs that occur together are of equal status and in which both Path and Manner are expressed by the equivalent grammatical forms.
- (b) The E-framed lexicalization pattern can also accommodate languages which have bipartite verbs (verb consisting of two morphemes of equal status) as mentioned in Slobin (2004: 247) and described by DeLancey (1989, 1996). These languages include Klamath, Sahaptin, Maidu, and Molala among others belonging to Penutian family, and Achumawi, Shasta Washo, and Atsugewi among others belonging to Hokan family¹¹ (DeLancey, 1996) spoken in Oregon, California, along the Columbia River, Nevada or Idaho.
- (c) Languages with generic verbs (cf. Slobin, 2006) such as Jaminjung, an Australian language, have a very small verb lexicon of about 24 'function verbs'. In order to convey the Motion events, one of the verbs (e.g., *go*, *come*, *fall*, *hit*, *do*) is used, expressing a Deictic or aspectual function. Because these verbs are combined with satellite-like elements, "preverbs", that express both Path and Manner, neither Path nor Manner is unequivocally the 'main' element in a clause (Slobin, 2004: 247; Schultze-Berndt, 2000). Therefore, Slobin claims that these languages can be included within the E-framing type. Table 1 summarizes these three types of lexicalization patterns.

¹¹ See DeLancey, 1996 for a detailed discussion on 'bipartite stem' and 'bipartite stem belt.'

Lexicalization patterns	Preferred means of expression	Typical construction type	Languages
V-framed	Path is expressed by a verb, with subordinate expression of Manner	Path verb + subordinate Manner verb	Romance, Semitic, Basque, Japanese, Korean
S-framed	Path is expressed by a non-verbal element associated with a verb	Manner verb + Path satellite	Germanic, Slavic, Finno-Ugric
E-framed	Path and Manner are expressed by equivalent grammatical forms	Manner verb + Path verb (Serial-verb languages)	Niger-Congo, Hmong-Mien, Sino-Tibetan, Tai-Kadai, Mon-Khmer, Austronesian
		[Manner+Path] verb (Bipartite-verb languages)	Algonquian, Athabaskan, Hokan, Klamath-Takelman
		Manner preverb +Path preverb+ Verb	Jaminjungan languages

Table 1. Lexicalization patterns according to Slobin (2004: 249)

Yet, as research on Motion events embraces new languages and new data, Slobin's newly proposed classification (2004) has been challenged for not being completely able to account for all lexicalization patterns, as argued by Vittrant (2015). The author urges for the modification of the Talmy's S-framed and V-framed classification along with the Slobin's newly revised classification, the E-framing pattern. The author's argument is that languages with serial verbs constructions are

often grammatically complex, with a variety of constructions within a single variety of the language (Vittrant, 2015: 591). The classification of S- and V-framed patterns is mainly based on Indo-European languages and many aspects such as the voice morphemes in Tagalog, verb-less sentences of spoken Indonesian (Austronesian) as presented in (28) as well as associated motion in Burmese are neglected in the typological research on Motion events.

(28) Spoken Indonesian (Austronesian) (Hagège, 2010: 247 as cited by Vittrant, 2015: 595))

<i>mereka</i>	<i>ke</i>	<i>bioskop</i>
3PL	towards	movies

‘They are going to the movies.’

As we saw from example (28), the clausal head is neither a verb nor is it a satellite of the verb, as explained by Vittrant (2015). The main concern here is that such construction types can fit neither Talmy’s classification nor Slobin’s expanded E-framing pattern.

As evidenced by the results of the study on Burmese dialects (colloquial dialects and Arakanese) conducted by using the Trajectoire stimulus set (Ishibashi *et al.*, 2006) and the wordless picture book *Frog where are you?* (Mayer, 1969), Vittrant (2015) claims that multi-verb construction evolved from sequentialization to serialization. As a consequence, yet again, it is claimed that the typological classification should account for constructions rather than languages (Vittrant, 2015: 625; see also Fortis & Vittrant, 2016).

1.3 Consequences of language-specific lexicalization patterns

Numerous studies conducted in a cross-linguistic perspective have shown that language-specific lexicalization patterns have consequences on narrative in both children and adults (Berman & Slobin, 1987; Slobin, 1991, 2004; Brown, 2004), child language acquisition and language development (Choi & Bowerman, 1991; Bowerman & Choi, 2003), and translation (Slobin, 2004; Kopecka, 2009, 2013)

among others. The following Section briefly discusses the effects of language specific patterns found in cross-linguistic research.

1.3.1 Motion events in narrative

Studies show that depending on the lexicalization patterns available in the language system, speakers of different languages differ considerably in the attention they pay to expressing the Manner and Path of Motion (Slobin, 2006: 59). Because Manner is typically expressed in a subordinate clause in V-framed languages, its expression is optional, in contrast to S-framed languages where Manner is conveyed by the main verb and hence cannot be omitted (unless the speaker chooses a construction that uses a different strategy).

As evidenced by a cross-linguistic study conducted with children (3-, 5- and 9-years old) speaking English, German, Spanish, Turkish and Hebrew (Berman & Slobin, 1987), there is a great variation in the lexical choice and the perspective taken by children when relating Motion events in narrative. The study shows that there are several common aspects (“cross-linguistic commonalities”) at the macrostructure (e.g., plot structure, story grammar, foreground-background relations). However, at the micro-level (e.g., tense, aspect, voice, and inter-clausal relations) there are subtle cross-linguistic differences that have different consequences on language acquisition.

Results reveal that across languages, 3-year-olds tend to tell stories that are closely anchored to the sequence of pictures presented to them whereas older narrators come to integrate clauses into larger causal and temporal frameworks.

Another important age-linked pattern can best be described in terms of flexibility or optionality in perspective taken on events. For example, younger narrators tend to present events from the point of view of one protagonist, the boy who is the agent of actions (e.g., *boy climbs on deer*), while older narrators can switch perspective (e.g., *boy is taken by deer*, or *deer takes boy*) as explained by Berman and Slobin,

“...children-from the youngest ages sampled- make ample use of the options provided by their language when picking the perspective and style of narration of particular events” (Berman & Slobin, 1987: 10).

By using the same wordless picture book *Frog where are you?* (Mayer, 1969), Slobin (1991) conducted another study with different age groups (e.g., pre-schoolers, school-age children and adults). The results show that 5-year-old children in Spanish and English distinguish the aspectual marking of durativity (e.g., *the boy fell out* (Spanish) vs. ... *and the dog was being chased...* (English) but this distinction is not attested in German and Hebrew speaking 5-year-old children. However, with respect to the description of location and movement through space, differences exist between the Spanish speaking 5-year-old children and English speaking 5-year-old children. The Spanish speaking 5-year-old children do not elaborate the Path component [trajectory] (e.g., *threw the boy, slipped on top of the deer, threw **down***) but use the relative clauses to ‘depict static locative configuration’ (e.g., *a deer that was behind the boy, where there was a river*).

The Path component can be inferred from the context in Spanish. On the other hand, the English speaking 5-year-old children mention the Path component in detail (e.g., *fell out, carried over a cliff, threw over the cliff into a pond, splashed in some water*) and leave the resultant locative states to be inferred from the context. As evidenced by the results, distinctions also occur across other age ranges. Table 2 adapted from Slobin (1991: 16) shows how these distinctions based on the scene 1, i.e. *something happens to the boy*.

Language	Age group			
	Pre-School (3-5)	School (9)	Adult	Overall
Hebrew	71	100	63	78
German	54	80	78	71
English	26	22	33	27
Spanish	23	18	0	21

Table 2. Percentage of narrators using same (tense/aspect) form for *fall* and *run* clauses from the frog story scene 1

Overall, the results reveal that depending on the language they speak, children provide critically different descriptions of the Motion event and that each language trains the child to attend to a particular set of distinctions.

Moreover, as explained by Slobin,

“languages not only differ from one another in the presence or absence of a grammatical category they also differ in the ways they allocate grammatical resources to common semantic domains” (Slobin, 1991: 17).

Another study is concerned with the diversity of the use of Manner verbs in the elicited narrative and creative writing-novel (Slobin, 2002) between S- and V-framed languages. The study shows that not only in the elicited narratives but also in the creative writing (novel) the S-framed and V-framed languages differ in the way the narrators encode Manner (in Motion events described by Manner of Motion verbs). The Spanish narrators use less than 20% motion events descriptions containing Manner verbs and the Turkish narrators use about 20% in both of these types of narratives. However, narrators of English use about 40% but in the case of Russian, the frequency of Motion events descriptions that consist of the Manner verb is about 55 % in the creative writing (novel), yet, in the elicited narrative, it accounts for 75% (for further discussion, see Slobin, 2002: 7-23). These results show that the use of Manner verbs is less in V-framed languages as compared to S-framed languages. The interesting finding is that the diversity of the frequency of the use of Manner verbs is not only different cross linguistically (English vs. Russian within the same lexicalization pattern, S-framed) but also within the same language, i.e. Russian, S-framed pattern). Therefore, these broad categories contain a great deal of variability.

1.3.2 Motion events in semantic categorization

The results of a cross-linguistic study conducted by Choi and Bowerman (1991) and Bowerman and Choi (2003) on spatial categorization in English speaking and Korean speaking children (aged one–three years) show that children speaking English distinguish between containment (IN) and contact/support (ON) (e.g., *put book in case* vs. *put cup on table*) regardless of tight-fit (e.g., *put piece in puzzle*) and loose fit (e.g., *put book in bag*) relation. By contrast, children speaking Korean are sensitive to the tight-fit (e.g., interlock or fit tightly *kkita*) vs. loose fit (put loosely in or around *nehta*) relation as is shown in Figure 3 that illustrates two main differences between English and Korean:

- (a) the choice of linguistic devices to express spatial relations (satellites in English vs. verbs in Korean);
- (b) semantic categories (support vs. containment in English and support vs. tight-fit vs. loose-fit containment in Korean).

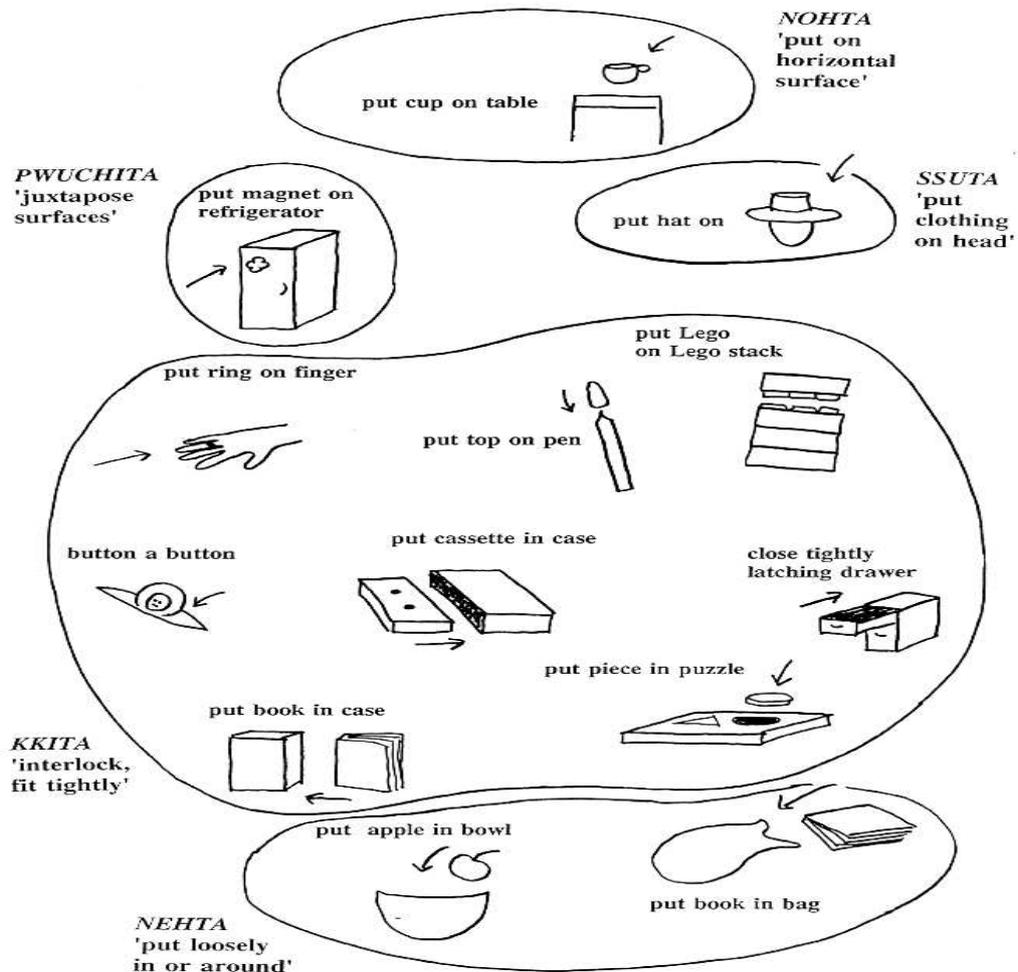


Figure 3. Categorization of spatial events in Korean and English (Source: Bowerman & Choi, 2003: 394)

Therefore, their study shows that languages differ in the way spatial relations are expressed in the linguistic structure and categorized semantically.

Another research conducted by Slobin *et al.* (2014) investigates the conceptual distinctions in the expression of Manner of Motion. The study examines five languages: English and Polish (S-framed), and French, Spanish and Basque (V-framed) by using 34 video clips (each 7-10 seconds long) showing people moving about in real environment but different (slow and rapid) Manners (e.g., a woman

wandering in a forest, a man jogging in campus lawn). In each language participants were asked to name the type of Manner of Motion with a single verb after watching the respective clip.

The results of this study revealed that native speakers of English and Polish responded with a greater diversity of verbs, respectively 72 and 38, in contrast to the speakers of French, Spanish and Basque who resorted to a less diverse lexicon of verbs, respectively to 32, 24, and 14 (see Slobin *et al.*, 2014 Table 2 for details). Furthermore, all of the five languages make two major semantic distinctions, namely ‘walking’ and ‘running’. The study also revealed that speakers of Spanish and Basque tend to categorize very fast Motion *sprint* together with “other running clips” in contrast speakers of English, Polish and French tend to distinguish lexically very fast Motion, i.e. *sprint*, and fast Motion, which is *run*. Another difference concerns the way speakers of those languages categorize the Manner expressed by *stomp* in English. In Polish, French, Spanish and Basque, this specific Manner is part of the ‘walking cluster’ whereas in English, it is associated with ‘skipping and galloping’ (for discussion, see Slobin *et al.*, 2014 Figure 2). Finally, while the five languages seem to be comparable regarding the types of ‘running’, they differ with respect to varieties of ‘walking’ displaying some similarities but also important semantic differences.

1.3.3 Motion events in translation

In a study on the translation of Motion events based on the English novel *The Hobbit* (Tolkien, 1937), Slobin (2005) shows effects of language-specific patterns on translation of Path and Manner of Motion events in typologically distinct languages (the sample includes S-framed languages such as Germanic (e.g., English, German, and Dutch) and Slavic (e.g., Russian, and Serbo-Croatian) and V-framed languages such as Romance (e.g., French, Portuguese, Italian, and Spanish), Semitic (e.g., Hebrew), and Turkic (e.g., Turkish).

As far as Manner of movement is concerned, the results show that, according to typological characteristics of their languages, narrators of V-framed languages rely on adjuncts to convey the Manner (e.g., Hebrew: *nixnas b'rica* ‘enter running’ [‘enter in

a run’] while narrators of an S-framed language like English can express the same element in the main verb slot (e.g., *run in*). Similarly, in the expression of Path, speakers of a V-framed language like Spanish express Path in the main verb slot (e.g., *sale* ‘exits’) but speakers of an S-framed language like English express it in the satellite (e.g., *goes out*). Beyond these well-expected differences, in V-framed languages, different portions of Path are expressed by different verbs in sequences (e.g., *exit the house, cross the field, enter the forest*) whereas in S-framed languages they can be expressed within a single clause (e.g., *run out of the house, across the field, into the forest*).

The original English example below depicts a scene in the novel that consists of searching for a companion when the character “Bilbo the hobbit” is lost.

*He still **wandered** on, **out** of the little high valley, **over** its edge, and **down** the slopes beyond.*

The above example consists of a single Manner verb, *wander*, and three different Path segments *out*, *over* and *down*. The question that arises is whether similar pattern is used in translation into other languages. Examples (29) through (31) from S- vs. V-framed languages show some similarities and differences between languages.

In Germanic languages, the translators maintain a similar strategy as the English (source) text, as is illustrated by (29) in Dutch.

(29) Dutch (Slobin, 2005: 120)

<i>hij</i>	<i>zwierf</i>	<i>verder</i>	<i>het</i>
3SG.M	wander .PST.3SG	further	ART
<i>kleine</i>	<i>hoge</i>	<i>dal</i>	<i>uit</i>
little	high	valley	out.of
<i>over</i>	<i>de</i>	<i>rand</i>	<i>en</i>
over	ART	edge	and
<i>daaarachter</i> [sic]	<i>gelegen</i>	<i>hellingen</i>	<i>af</i>
beyond	lying	slopes	downward .movement
‘He wandered further, out of the little high valley, down over the edge and the slopes lying beyond.’			

The target example from Dutch describes the Motion of the character in the similar way as in the source text (English) showing the Manner in the main verb *zwierf*

‘wander’, and the Path in different segments (prepositions) such as *uit*, ‘out (of)’ *over* ‘over’ and *af* ‘downward.movement’.

In Slavic languages (Russian and Serbo-Croatian), the translators use verb prefixes to convey the Path. As a consequence, unlike the Germanic languages, Slavic languages require the use of separated verbs to convey the different segments of Path, as mentioned by Slobin (2005),

“Slavic languages, like verb-framed languages, are forced to use separate verbs for Path segments. But they also have rich lexicon of Manner verbs that are freely combined with Path prefixes” (Slobin, 2005: 121).

Therefore, to describe the same scene, we see a different strategy adopted by the translators of the Slavic languages, as the example (30) from Serbo-Croatian shows. The example shows that the Manner is expressed in the verb. An interesting point has to do with the retaining of the Path segments. In spite of the fact that the Path segments are retained as in the source text, they are expressed in two different Path verbs.

(30) Serbo-Croatian (Slobin, 2005: 120)

Švrljao je dalje, izišao iz male doline, preko ivice, i spustio se niz padinu iza nje.

‘He strolled further, exited from the little valley, over the edge, and descended down the slope behind it.’

In Romance languages, such as French (V-framed), the translators use separate verbs to convey the Path and an adverbial expression to indicate the Manner, as we can see from example (31).

(31) French (Slobin, 2005: 121)

<i>il</i>	<i>continua</i>	<i>d'avancer</i>	<i>au</i>
3SG.M	continue.PST.3SG.M	to advance.INF	at
<i>hasard</i>	<i>sortit</i>	<i>du</i>	<i>haut</i>
chance	exit.PST.3SG.M	from.the.M.SG	high
<i>vallon</i>	<i>en</i>	<i>franchit</i>	<i>le</i>
small.valley	of.it	cross.PST.3SG.IND	the.M.SG
<i>bord</i>	<i>et</i>	<i>descendit</i>	<i>la</i>
edge	and	descend.PST.3SG.M	the.F.SG
<i>pente</i>	<i>au-delà</i>		
slope	beyond		

'He continued to advance aimlessly, exited from the high small valley, crossed the edge of it and descended the slope beyond.'

These examples show that in Germanic languages, the Manner and the Path segments are conveyed in the same way as in the source text i.e. they use a single verb to express the Manner. In the case of Slavic languages, Manner is retained as in the source text but certain changes occur in retaining the Path segments in complex events which are expressed in separate verbs as is mentioned in Slobin (2005: 121), "Serbo-Croatian, for example, uses one manner verb and two path verbs". Note that both Germanic and Slavic rely on the S-framed pattern. Now, when we look at the translation in French (V-framed), the Manner is expressed in an adverbial expression but the Path is expressed in separate verbs. There are slight variations in languages belonging to V-framed lexicalization pattern but I will not discuss them here (for further details, see Slobin, 2005: 115-130; cf. Cappelle, 2012). Nonetheless, I will summarize the components and the linguistic elements of the Hobbit's Path expressed in these languages in Table 3 to show what is retained from the original, what is added into the target languages, and what is lost while translating from source to target languages¹².

12 The blank space in the middle of Table separates S-framed and V-framed languages respectively.

Language	wander	exit	cross	descend
English	Manner verb	Path+Ground	Path+Ground	Path+Ground
Dutch	Manner verb	Path+Ground	Path+Ground	Path+Ground
German	Manner verb	Path+Ground	Path+Ground	Path+Ground
Russian	Verb	Path verb+Ground	Manner verb+Path+Ground	Path verb
Serbo- Croatian	Manner verb	Path verb+Ground	Path+Ground	Path verb+Ground
French	Path verb+ Manner adverb	Path verb+Ground	Path verb+Ground	Path verb+Ground
Italian	Manner verb	Path+Ground	Path verb+Ground	Path verb+Ground
Portuguese	Path verb	Path verb+Ground		Path verb+Ground
Spanish	Manner verb	Path+Ground	Path+Ground	Path verb+Ground
Hebrew	Manner verb	Path verb+Ground		Path verb+Ground
Turkish		Path verb+Ground	Manner verb+Ground	Path+Ground

Table 3. Components of the Hobbit's Path expressed in S- vs. V-framed languages (Source: Slobin, 2005: 122)

For illustration, I will take another description - *climb out of the tree* - from *The Hobbit* and show how it is translated into other languages and what changes occur in translation. In the S-framed languages, translators use the verb equivalent to *climb* and the Path satellite (separable verb particles in Germanic languages and verb prefixes in

Slavic languages (e.g., *s-lezt* ‘down-crawl’, Russian), whereas in the V-framed languages translators use the equivalent of the verb *descend* (e.g., Hebrew: *yarad legamrey min ha-‘ec* ‘descended totally from the tree’). That is, in the V-framed languages translators use a verb encoding the direction but no grasping movement oriented downward. Furthermore, it is also interesting to observe that in all 10 target languages, including both S- and V-framed languages, translators use Source prepositional phrases or a noun with ‘some kind of ablative marker’. It reveals that in the S-framed languages, the Path satellites are retained while translating, whereas in the V-framed languages, Manner verbs disappear as they are replaced by the Path verbs.

Regarding more specifically the translation of Manner in *The Hobbit*, Slobin’s study (Slobin, 2005) reveals some subtle cross-linguistic differences in the type and frequency of Manner expressions in individual languages, as Table 5 below, based on chapter 6, shows.

S-framed languages	N° of types of Manner verbs	Total n° of Manner expressions
English	26	64
Dutch	22	62
German	24	63
Russian	30	57
Serbo-Croatian	26	65
Mean value	25.6	62.2
V-framed languages		
French	17	48
Italian	22	54
Portuguese	12	46
Spanish	19	59
Hebrew	17	49
Turkish	16	56
Mean value	17.2	52

Table 4. Manner of Motion expressions in S- vs. V-framed languages (Source: Slobin, 2005)

As evidenced by Table 4, in S-framed languages, Russian surpasses English with respect to the use of motion verbs, 30 and 26 verb types respectively; the average number of Manner verbs in the S-framed languages is 25.6. In contrast, with respect to the number of Manner expressions, Serbo-Croatian surpasses English, 65 and 64 respectively; the average number of motion expressions in these languages is 62.2. On the other hand, in the V-framed languages, the maximum number of Manner verbs used is 22 i.e. in Italian, and the average number of Manner verbs used in these languages is 17.2. Moreover, in terms of the use of Manner expressions, Spanish has the highest number, 59 and the average number of these expressions is 52.

The evidence of similarities and differences also come from other crosslinguistic comparisons of translations between the S- and V-framed languages (Slobin, 2002). The results show that the attention to Manner of Motion is lower when translating from S-framed to V-framed languages. The study reveals that about 68% of Manner verbs are maintained in translation from English (S-framed) to Turkish (V-framed) and about 62% from English to Spanish (V-framed). On the other hand, the ratio is much higher in translation from V-framed to S-framed languages. That is, about 95% Manner verbs are maintained in translation from Spanish to English and about 80% from Turkish to English. What can be inferred from these results is that translators represent Motion events in translation by adjusting the perspective and the type of information to language-specific devices and discourse strategies (see Slobin, 2002: 7-23 for discussion).

The effects of language-specific lexicalization patterns in translation have been found not only in inter-linguistic studies but also in research carried out on intra-linguistic diachronic variation. In a study investigating translations from Old French to Modern French, Kopecka (2013) shows that French has undergone a structural reorganization of the system that affected the way Motion events are conveyed in narrative. Old French has different morphosyntactic devices to express the Path of Motion. These include verbs, verb prefixes, verb particles, adverbs, and prepositions: for example, in order to express the Motion oriented outside *issir* 'to go out' or the satellite *fors* 'out of'/'outside', or both of them could be used. However, in the case of Modern French, the diversity of the morphosyntactic devices has decreased and the Path is mostly expressed by verbs. Moreover, the use of satellites is considerably less

(e.g., 16 different satellites in Old French and 5 in Modern French as reported in Kopecka, 2013: 172) (see also Dufrense *et al.*, 2000; Kopecka, 2006, to appear)).

The next point has to do with the packaging of the Path components in a single verb clause or more than one verb clause. In Old French, different parts of the Path, i.e. the complex Path, can be expressed in a single verb clause whereas in Modern French, different verb clauses are necessary to express the same number of Paths, as illustrated by (32) (a) and (b) for the Old and Modern French respectively.

- (32) a. French (Leclanche, 2003: 116 as cited by Kopecka, 2013: 175)
Damoisele, se Deus m'aït, Il vo covient venir la fors
'Young lady, might God help me, you should come out there'.
b. French (Leclanche, 2003: 117 as cited by Kopecka, 2013: 176)
ma fille, que Dieu m'assiste ! il faut que vous sortiez d'ici pour venir dans la salle
'My daughter, might God help me! You must move out of here to come to the room.'

These examples show that in (32) (a), two components of Path are expressed by the verb *venir* 'to come', and the adverbial satellite *fors* 'out of' 'reinforced' by the Deictic adverb *la* 'there' in a single verb clause to convey the complex Path. However, in the case of (32) (b) which is the translated version from Old French to Modern French, two verb clauses, *sortir* 'to go out' and *venir* 'to come', are necessary in order to express the same number of Paths. There is yet another option available in Modern French i.e. to express only one component of Path and omit the other. Consequently, the expression of Path in combination with the Path verbs and the Path satellites 'allows for more detailed expression' of Path in Old French than in Modern French (Kopecka, 2013). Therefore, semantically there are differences in expressing the Path and its different components between the Old and Modern French.

1.4 Studies on Motion events in Nepali and other Indo-Aryan languages

While many Indo-European languages and some languages belonging to other language families have been the subject of numerous studies in the domain of Motion

events, the Indo-Aryan languages remain under-represented in this field of research. With the exception of some studies on Hindi (Narasimhan, 1998, 2004, 2012), Hindi and Urdu [Hindi/Urdu] (Hautli-Janisz, 2014; cf. Khan, 2009), there is little in-depth and systematic research investigating typological characteristics of the Indo-Aryan languages in this domain of expression. Furthermore, we know relatively little about how these languages structure, both morphosyntactically and semantically, spatial information. This is also the case for Nepali. Apart from the study of verbs of motion studied by Basnyat (1987, 1999) using componential analysis, Motion has not benefitted from an extensive research up till now.

This Section aims to provide an overview of the existing studies on Motion events on Indo-Aryan languages in general and Nepali in particular. It mainly deals with the following aspects investigated in the previous research: (a) studies on lexical and grammatical devices such as verbs, postpositions, and case markers (b) the sources of data or methodology used in the respective studies, and (c) theoretical and analytical approach adopted to investigate the respective domain of study.

1.4.1 Studies on verbs of motion

In a componential analysis¹³ of the Nepali verbs of movement, Basnyat (1987) investigates the differences between verbs of ‘upward’ and ‘downward’ movement (e.g., *caDhnu* ‘to climb’, *laDnu* ‘to fall’). These include the verbs of spontaneous as well as caused Motion (see Basnyat, 1987: 9-16 for a detailed list of these verbs). The main aim of this study is to examine the semantic components Nepali verbs of motion lexicalize and to bring into light the semantic differences between them. The author shows that verbs such as *caDhnu* ‘to climb’ and *uklanu* ‘to ascend’ denote the process of going from lower to higher level regardless of the type of Figure, animate or inanimate. Rather, they are sensitive to the type of Ground being ascended. The author points out that *caDhnu* ‘to climb’ is marked for the feature (+vertical and +diagonal climbing, e.g., *ghoDaa caDhnu* ‘to ride a horse’ *ukaalo caDhnu* ‘to ascend the steep

¹³ For more details on componential analysis, see Goodenough (1956: 195-216).

or ‘to ascend’) whereas *uklanu* ‘to ascend’ is marked for (+diagonal climbing or -vertical climbing, *bharyaang uklanu* ‘ascend the ladder’ but not *ghoDa uklanu* ‘to ascend the horse’). Nevertheless, in some cases (e.g., a hill, a slope, a ladder or steps), either verb can be used (see Basnyat, 1987: 11 for similar comparison of other verbs of upward movement; see also Chapter 2.1).

Verbs such as *laDnu* ‘to fall’ and *Dhalnu* ‘to fall’ denote the downward movement conveying the movement of either an animate or an inanimate Figure from a higher to a lower level. Literally both verbs refer ‘to fall’ and are used for the falling of a tree or a wall which is an inanimate being but, according to the author, only *Dhalnu* ‘to fall’ can be used for the falling of a vase. The difference between them in the case of inanimate entities is that the former has a strong foundation and can be used with either of the verbs but the latter (falling of a vase) has a weak foundation. Both *laDnu* ‘to fall’ and *Dhalnu* ‘to fall’ can be used to describe falling of a human due to weakness or intoxication but only *laDnu* ‘to fall’ is used in the context when someone causes the falling by pushing the human Figure. Hence, in the componential analysis, in the case of inanimate entities, the component [fixed with foundation] is relevant to distinguish the fall of a tree/a wall, and a vase. In the case of human beings, the component [external cause] is relevant to distinguish the use of *laDnu* ‘to fall’ and *Dhalnu* ‘to fall’ (Basnyat, 1987: 10). The results of this study bring to light the semantic complexity and sensitivity to different parameters of each verb.¹⁴

Another study conducted by Basnyat (1999) deals with different types of semantic correlations between English and Nepali verbs. Using the componential analysis approach, the author aims to find out the similarities and differences in verbs used in Nepali (Nepali speakers learning English) and English (English speakers learning Nepali). The author randomly selected 100 verbs by specially designed written test given to English and Nepali speakers. These verbs fall into several

¹⁴ In addition to the literal uses of the verbs of upward and downward movement, Basnyat (1987: 11) has also considered the metaphorical uses. Example of such uses include *uThnu* ‘to rise’ as in ‘rise in one’s social and financial status or ‘nomination of the file during election’. Nevertheless, our main concern is on the literal uses of these verbs, therefore, we will not discuss the metaphorical uses here.

semantic groups such as CUT and BREAK, EAT, MURDER, and VERBS OF MOTION. Here, our focus will be on verbs of motion. In order to investigate semantic differences between these (English and Nepali) languages, the author adopts various criteria:

- (a) One to one correlation of meaning: This correlation represents semantically equivalent verbs between these languages, for example, the verb *soar* and its Nepali translation is *aakaasinu* (literally ‘to shoot up into the sky’ ‘fly up’) (Basnyat, 1999: 584).
- (b) Semantic overlapping: This category involves English and Nepali verbs whose meaning overlaps with each other. This is, for instance, the case of the verb *taachnu* in Nepali which overlaps with the verb *peel* in English. The meaning of *peel*, on the other hand, overlaps with the Nepali verbs *taachnu* ‘to peel’ and *choDaaunu* ‘to shell’. Moreover, the Nepali verb *choDaaunu* ‘to shell’ overlaps with the English verbs *peel* and *shell* but within Nepali, the verbs *taachnu* ‘to peel’ and *choDaaunu* ‘to shell’ contrast with each other, while the former refers to the features [+loose skin], [+with hand] the latter does not (Basnyat, 1999: 586-587).
- (c) Semantic inclusion: This concerns the cases where a verb in language A has more meanings than the corresponding verb in language B. If a verb has more meanings in language A than in language B, the meaning of the verb in language B is included in the meaning of language A but not the other way around. For example, the verb *caDhnu* ‘to climb’ in Nepali covers an array of English verb *climb* but not the vice versa as Table 5 shows this.

Context	Verbs in Nepali	Verbs in English
1 go up a tree/a wall	<i>caDhnu</i>	<i>climb</i>
2 go up a ladder/steps	<i>caDhnu</i>	<i>climb</i>
3 go up a hill/a mountain	<i>caDhnu</i>	<i>climb</i>
4 ride a horse/an elephant	<i>caDhnu</i>	<i>ride</i>
5 ride a car/a taxi	<i>caDhnu</i>	<i>ride</i>
6 be flown in an aeroplane	<i>caDhnu</i>	<i>fly</i>
7 rise as water in a pipe	<i>caDhnu</i>	<i>rise</i>

Table 5. Semantic inclusion of English verbs into Nepali (Source: Basnyat, 1999: 589)

As we can see in Table 5, in the context of 1 (i.e. go up a tree/a wall) to 3 (i.e. go up a hill/a mountain both climb), the English verb *climb* and Nepali verb *caDhnu* ‘to climb’ are semantically similar or share common meanings; however, while Nepali still uses the verb *caDhnu* ‘to climb’ from context 4 (i.e. ride a horse/an elephant) to 7 (i.e. rise as water in a pipe), English uses different verbs. Therefore, the Nepali verb *caDhnu* ‘to climb’ includes all the contexts (1-7) whereas English can include only three of them (from context 1 to 3).

(d) Existence of typical or language specific verb forms: This involves those verbs which are sensitive to features to which the other language is not. This is, for example, the case of English verbs *turn on* and *open* that are distinguished by the feature [+electrical, e.g., *turn on radio/television*] and [-electrical, e.g., *open the cupboard*]. Nepali, however, does not make this distinction, as is shown in (33) (a) and (b) (Basnyat, 1999: 591-592). This reveals that the two languages conceptualize similar concepts in a different way.

- (33) a. *jhyaal khol-nu*
 window open-GER
 ‘to open the window’
 b. *reDiyo Telibhijan khol-nu*
 radio television open-GER
 ‘to switch on the radio/television’

(e) Verb+particle: This is related to the construction of verbs that underlie semantic differences between languages. English uses verb+particle such as *roll on* but Nepali does not. Rather, Nepali uses a single verb form *guDnu* ‘to roll on’ (Basnyat, 1999: 592-594), as shown in Table 6.

English	Nepali
<i>roll on</i>	<i>guDnu</i>
<i>roll up</i>	<i>bernu</i>
<i>jump</i>	<i>uphranu</i>
<i>jump up</i>	<i>uphranu</i>
<i>jump over</i>	<i>uphranu</i>

Table 6. Verb+particle forms in English vs. Nepali

The author explains that such structural and semantic differences between Nepali and English trigger difficulties in Nepali speakers learning English and English speakers learning Nepali.

(f) Divergence or convergence of meaning: No case of such correlation was found among verbs of motion¹⁵.

In a study investigating verbs of motion in Urdu and Hindi, Hautli-Janisz (2014) examines the syntactic and semantic properties of the notion of Figure, Ground, Path, and Manner of Motion in a computational lexical resource, i.e. Urdu/Hindi VerbNet (Hautli-Janisz, 2014: 271). The study is based on translations of English verbs of motion as defined by Levin (1993, classes 51.1 - 51.7) except verbs of sending and carrying, putting, pushing, and pulling. The study espouses a formal approach, namely, Lexical Conceptual Structure (cf. Jackendoff, 1990) and Lexical Functional Grammar (Bresnan & Kaplan, 1982; Dalrymple, 2001).¹⁶

In this study, verbs of motion in English are translated to Urdu and subsequently compared to Hindi found in Narasimhan (2003: 123-160). To validate the translated

¹⁵ This category consists of those verbs which fall under CUT and BREAK, and EAT verbs. Therefore, they are not the part of discussion in this Thesis.

¹⁶ As the basic purpose of this Section is to provide with an account of what particular theoretical approach was followed to conduct this work, the detailed account of these theories is beyond the scope of my research. However, a few remarks on some of them are given below in order to clarify the respective domains (for further details, see Bresnan & Kaplan, 1982; Jackendoff: 1990; Zwarts & Winter, 2000; Dalrymple 2001; Zwarts, 2003; Mani & Pustejovsky, 2012; Hautli-Janisz, 2014):

In Lexical Conceptual Structure proposed by Jackendoff (1990), the conceptual structure is formed by conceptual constituents which are considered the “semantic parts of speech” consisting of the notions of Thing, Event, State, Action, Place, and Path (see also Hautli-Janisz, 2014) (for more details on lexical conceptual structure, see Jackendoff (1990)).

In Vector Space Semantics (Zwarts & Winter, 2000) and (Zwarts, 2003), Hautli-Janisz (2014) mentions that a path is treated as a number of locations that can be defined as a sequence of vectors which have their starting point in a common origin. The vectors are traversed through the motion event in a homomorphic fashion. A phrase like *John went home* implies a set of paths whose end-points are at the position of *home*.

Dynamic Interval Temporal Logic is a formal approach for the study of encoding motion and paths/locations proposed by Mani and Pustejovsky (2012).

Lexical Functional Grammar consists of two levels of representation, the constituent structure (‘c-structure’) and the functional structure (‘f-structure’) as of Bresnan and Kaplan (1982) and Dalrymple (2001).

verbs, the author consulted two native speakers of Urdu and one native speaker of Hindi. So, in total there are 51 verbs of motion in Urdu/Hindi corresponding to English *rise*, *descend*, *fly*, *come*, and *run* among several others (see Hautli-Janisz, 2014: 10-11 for further details).

In order to investigate this domain, the author adopts a number of computational linguistic resources, for example, English VerbNet, FrameNet, Hindi-Urdu TreeBank, and Hindi-Urdu PropBank among others. English VerbNet classifies verbs according to their syntactic properties and semantic coherence, as shown in Table 7.

escape-51.1	
Frame	0.1
Description	NP V NP
Syntax	NP = Theme
	V
	NP = Destination
Semantics	motion(during(E), Theme)
	path(during(E), ?Initial Location, ?
	Trajectory, Destination)
Example	‘John entered the room.’
	‘John came into the room.’

Table 7. Frame of class escape-51.1 in English VerbNet (Source: Hautli-Janisz, 2014: 215)

As we can see in Table 7, frame 0.1 is made up of syntactic description NP, V and NP. Within syntactic description, the first NP relates to the Figure or Theme role and the second NP corresponds to Goal or Destination role. The semantic representation connects the Thematic roles. The concept of the underlying event is characterized by the semantic predicate Motion. The Path is conveyed by Initial Location, Trajectory and Destination, and the Goal is realized in the syntax, which is ‘enter’ or ‘come into’.

The FrameNet is developed by Baker *et al.* (1998) based on the cognitive approach of Frame Semantics of Fillmore (1976) for the encoding of Paths/Locations. In this conceptually-driven verb classification, concepts are allocated to prototypical events (frames), where each frame describes the basic conceptual structure of the

event and the participants involved in it (frame elements). Table 8 shows the example extracted from FrameNet.

Frame name	Definition	Example
Arrive	An object Theme moves in the direction of a Goal	come, arrive
Self-Motion	The Self_Mover, a living being, moves under its own direction along a Path	run, walk

Table 8. Frames of Motion in FrameNet (Baker *et al.*, 1998) (Source: Hautli-Janisz, 2014: 17))

The Hindi-Urdu Treebank based upon which this study is based is a multi-layered treebank for Indo-Aryan languages featuring phrase structure and dependency annotation levels. The semantic layer of the Treebank is contributed by Hindi-Urdu PropBank, a verb resource that encodes the argument structure of verbs as explained by Hautli-Janisz (for further details on The Hindi-Urdu Treebank and Hindi-Urdu PropBank, see Hautli-Janisz 2014: 19-20). Based on these theoretical models and computational linguistic resources mentioned in brief in the preceding paragraphs, the author demonstrates in her study that Urdu and Hindi [Urdu/Hindi] share common features with respect to the syntactic and semantic properties of verbs of motion.

One important point discussed in Hautli-Janisz's thesis concerns the lexicalization patterns, which is also our concern. Consider the following example (34).

(34) Hindi (Hook, 1974: 69 as cited by Hautli-Janisz, 2014: 96)

cor-Ø makaan-se baahar kud-nikl-aa
 thief-NOM house-ABL outside jump-emerge-PST.SG.M
 'The thief jumped out of the house.'

Example (34) is a monoclausal construction but consists of two different verbs *kudnaa* 'jump', and *nikalnaa* 'emerge'. Syntactically, *kudnaa* is the main verb of the clause but *nikalnaa* 'emerge' is the grammatical head conveying tense, and aspect. Semantically, *kudnaa* 'jump' encodes the Manner of Motion and *nikalnaa* 'emerge' conveys the Path of Motion. Both of these verbs are of equal status. Based on this observation, the author claims that Urdu/Hindi belongs to E-framed lexicalization pattern as opposed to Narasimhan (1998, 2003) who proposes the V-framed

lexicalization pattern based on her study on Hindi. In the meantime, however, the author, Hautli-Janisz, also presents another example (35) which is a bi-clausal construction.

(35) Hindi (Hautli-Janisz, 2014: 96)

cor-Ø makaan-se baahar kud-kar nikl-aa
 thief-NOM house-ABL outside jump-CP emerge-PST.SG.M

‘The thief jumped out of the house (emerged from the house, jumping).’

The non-finite form of the verb *kudnaa* ‘jump’ is in the conjunctive participle form and *nikalnaa* ‘emerge’ is in the finite form and functions as the main verb of the clause. Semantically, the Manner of Motion is expressed by the verb *kudnaa* ‘jump’ in the non-finite form and the Path of Motion is conveyed by the verb *nikalnaa* ‘emerge’. That is to say, in this type of construction, the Path is encoded by the main verb of the clause and Manner is conveyed by the verb in the subordinate clause which typically shows the V-framed lexicalization pattern according to Talmy (1985, 2000, Narasimhan, 1998: 155, 156, 2003: 125, 127, 157 *inter alia*).

From a typological point of view, both of these examples seem interesting because the first example in (34) i.e. *kud-nikl-aa* ‘jump-emerged’ resembles the E-framed construction contrary to (35) i.e. *kud-kar nikl-aa* ‘emerged jumping’ which appears to be the V-framed construction. Due to the difference in their construction, there may be a difference in lexicalization patterns, too. So, the issue is which one of the two constructions is more pervasive in the system: the type like (34) or (35)? In other words, what conditions the choice of each construction type?

This research is a useful resource for a cross linguistic study of verbs of motion that I will explain while analyzing the data from Nepali and show the similarities and or differences in terms of lexicalization patterns between Hindi and Nepali or Urdu and Nepali.

1.4.2 Studies on Motion events

As a part of a doctoral research, Narasimhan (1998) explores the expression of Motion events in Hindi (Indo-Aryan) and English (Germanic) in a thesis entitled *The encoding of complex concepts in Hindi and English* (Narasimhan, 1998)¹⁷.

This research is important as it is the first typological study in South Asia that discusses the domain of Motion events (see also Narasimhan, 2003). The main objective of this study is to examine the typological differences in the constructions encoding semantically complex events in Hindi and English.¹⁸ Narasimhan considers the encoding of semantically complex events within a minimal clause as complex event encoding such as (36). In other words, the complex event encoding is the inclusion of Manner or process in the main verb, and Goal or result in a complement within the minimal clause.

(36) English (Narasimhan, 1998: 1)

The boy crawled to the door.

The examination of complex constructions covers four different semantic domains: (a) Motion (e.g., *John hobbled to the door*) (b) Change of state (e.g., *The boy laughed his throat hoarse*) (c) Creation (e.g., *She poked a hole in the curtain*), and (d) Communication (e.g., *He smiles his gratitude*) (Narasimhan, 1998: 114, 159). I will, however, mainly discuss the domain of Motion.

To collect the data, Narasimhan (1998) uses the following sources: (a) data collected with the educated middle class speakers of “standard” variety of Hindi from the urban areas of Northern India in response to the questions from the author, i.e.

¹⁷ Hindi is the official language of India spoken by c. 100 million people. In general, auxiliary follows the main verb in this language. Nouns are followed by postpositions, and are marked for gender, number, and case. It is a verb final language with relatively free word order (Kachru, 2006) having complex predicate system, wide use of participles, reduplication, and echo formation

¹⁸ Narasimhan defines semantically complex events as,

“non-stative events that are modified by a secondary non-stative event (generally a process) that bears a manner or means relationship to the primary event. This definition subsumes all the cases mentioned above, including manner of motion, resultatives, verbs of creation, communication, and so on” (Narasimhan, 1998: 8).

elicitation-questionnaire (b) author's own examples which were verified with the same speaker/s as mentioned in (a) above, and (c) examples extracted from published sources¹⁹.

The main focus of this dissertation is on variation in encoding of complex event in Spanish-like languages (e.g., French, Italian, Hindi) and Germanic languages (e.g., English, German) such as *The boy crawled to the door* presented in example (36) above. In an English-like language, speakers encode the directed Motion event (Path) as well as the event of crawling (Manner/causal) that precedes or accompanies the directed Motion event in a "minimal clause" (a.k.a. simplex clause). By contrast, a Spanish-like language such as Hindi also has similar constructions as in example (37) but it does not express the complex event (verb *hobble* and the Goal phrase (into the door)) in a minimal clause as shown in (35). Instead, speakers express an activity and convey simply the locative reading rather than directed Motion event and causal/Manner event.

(37) Hindi (Narasimhan, 1998: 16)

* *laD.kaa-Ø kamre-me langaDaayaa*
boy-NOM room-LOC hobble-PST.SG.M
'The boy hobbled into the room.'

To discuss this issue further, let's consider examples (38) through (41).

(38) English (Narasimhan, 1998: 15)

Sydney hobbled into the room.

(39) English (Narasimhan, 1998: 15)

Sydney hobbled in.

¹⁹ The author also mentions that a corpus of complex event encoding constructions in English was created in the domain of Motion, creation, communication, and change of state. The speakers were then asked to construct a corresponding corpus data for Hindi. Then, the responses were recorded, elicited, and coded for the acceptability.

These examples show that the Manner of Motion is expressed by the verb ‘hobble’ whereas the Path of Motion is expressed by the prepositional phrase *into the room* (38) and *in* (39) both satellites according to Talmy (1985, 2000). On the other hand, the occurrence of complex event constructions as that of (38) and (39) is not possible in Hindi because activity verbs can’t convey the same function that the English verbs such as *hobble* do. Moreover, the postpositional phrase can’t convey the Goal when used with activity verbs. Therefore, in Hindi, there are two different strategies to express the complex event: (a) using an adjunct construction with an imperfective participial form of the verb (e.g., *langaDaanaa* ‘hobble’), followed by *hue* (‘while V-ing’) as is the case in (40) or a verb root affixed by a conjunctive participle form *-kar* (‘by/after V-ing’) as is the case in (41). In this example, the Path of Motion is expressed by the verb *aanaa* ‘come’ and the Goal is further specified by the NP *kamraa* ‘room’ which is marked with locative case *me* ‘in’.

(40) Hindi (Narasimhan, 1998: 16)

laDkaa-Ø langaDaate-hue kamre-me ghus-aa
 boy-NOM hobbling-while room-LOC enter-PST.SG.M
 ‘The boy entered the room hobbling.’

(41) Hindi (Narasimhan, 1998: 16)

laDkaa-Ø langaDaa-kar kamre-me aa-yaa
 boy-NOM hobbling-by room-LOC come-PST.SG.M
 ‘The boy came into the room hobbling.’

Note, however, that English has a similar construction to encode the same range of function as illustrated in (42), where the Path is encoded in the verb *go* together with ‘to’ and the Manner is conveyed by *crawl* in the gerundive form.

(42) English (Narasimhan, 1998: 1)

The boy went to the door crawling.

Another issue discussed by Narasimhan (1998) is the resultative construction in English and Hindi. Speakers of English encode a complex event in the same clause showing an activity event followed by a resulting state, as illustrated by (43).

(43) English (Narasimhan, 1998: 4)

Bertie pulled the door shut.

In Hindi, if speakers would like to convey the information in the way similar to English, the construction would be ill-formed or ungrammatical, as is the case in example (44).

(44) Hindi (Narasimhan, 1998: 4)

**bertie-ne darwaaaje-ko band khi~c-aa*

Bertie-ERG door-GEN shut pull-PST.SG.M

‘Bertie pulled the door shut.’

In order to convey the similar information, speakers of Hindi have to use a different construction, usually a participial construction as is illustrated by (45).

(45) Hindi (Narasimhan, 1998: 4)

bertie-ne darwaaaje-ko khi~c-kar band ki-yaa

Bertie-ERG door-GEN pull-CP shut do-PST.SG.M

‘Bertie pulled the door shut/made the door shut by pulling it.’

The author points out that semantically, an activity verb such as *pull* has the same meaning conveying the notion of applying force on an object in the direction of the agent in both English and Hindi. Yet in Hindi, the verb *khi~cnaa* ‘pull’ cannot appear in the same syntactic frame as it does in English. Native speakers of Hindi have to use some other verbs such as *make* or *bring* and express the activity event in an adjunct phrase or adjunct construction.

Let us consider some additional examples from English (46) and (48), and Hindi (47) and (49) depicting creation (46) and (47) and communication (48) and (49). Each of the English constructions, i.e. (46) and (48), conflates the Manner/means event and a “result” event using separate syntactic constituents in the same clause but the corresponding constructions in Hindi, respectively (47) and (49), need additional linguistic devices or the adjunct construction which is aspectual or in the conjunctive participle form to convey the same information, as discussed earlier. In the absence of such adjunct constructions, they seem ill-formed and ungrammatical.

(46) English (Narasimhan, 1998: 6)

Sally scraped a hole in the wall.

(47) Hindi (Narasimhan, 1998: 6)

*sally-ne divaar-me ched khurech-aa
Sally-ERG wall-LOC hole-NOM scrape-PST.SG.M
'Sally scraped a hole in the wall.'

(48) English (Narasimhan, 1998: 7)

Kafka growled his anger at the state of the world.

(49) Hindi (Narasimhan, 1998: 7)

*kaafkaa-ne duniyaa-ki sthiti-par
Kafkaa-ERG world-GEN condition-LOC
apnaa krodh gurraa-yaa
self anger growl-PST.SG.M
'Kafka growled his anger at the world.'

Furthermore, the author also discusses the constructions such as *The garden swarmed with bees* and *He rolled the thread into a ball* that encode complex meanings in English. Adding one more example, in the sentence *She shook some sugar into the tea*, the verb *shake* does not directly convey the locative meaning but occurs freely in the construction with semantic specifications different from its own. A similar construction is not possible in Hindi because of its language specific pattern, which Narasimhan refers to 'conservative' behavior regarding the range of verbs it accepts, as opposed to English, which the author refers to as having 'liberal' behavior towards verbs.

Data investigated by Narasimhan (1998, cf. 2003) show that Hindi has a number of Path verbs. These include *ghusnaa* 'enter' *nikalnaa* 'emerge', and *pahu~chnaa* 'reach'/'arrive' among others. Example (50) shows the use of one such verb which encodes Motion and Path (directed Motion) and Goal.

(50) Hindi (Narasimhan, 1998: 170)

laDkaa-Ø skul pahu~c-aa
 boy-NOM school reach-PST.SG.M
 ‘The boy reached school.’

Based on their meaning and use, these verbs can be classified as Source- (e.g., *choDnaa* ‘leave’), Median- (e.g., *paar karnaa* ‘pass’) or Goal-oriented (e.g. *ghusnaa* ‘enter’) Path verbs. There are also Path verbs encoding vertical Motion such as *uThnaa* ‘rise’ which depicts the upward movement and *utarnaa* ‘descend’ which depicts the downward movement. Deixis and Path verbs such as *aanaa* ‘come’ and *jaanaa* ‘go’ are also included in the category of the Path verbs. The Path verbs indentified by Narasimhan in Hindi together with their specific semantic components, e.g., end-point i.e. Goal (e.g., *ghusnaa* ‘enter’) or source-point i.e. Source (e.g., *nikalnaa* ‘emerge’) are presented in Table 9.

Path components	Verbs
Complex end-point	<i>ghusnaa</i> ‘enter’
Complex source-point	<i>nikalnaa</i> ‘emerge’
Simple end-point	<i>pahu~chnaa</i> ‘reach’/‘arrive’
Simple potential end-point	<i>samip aanaa/nikaT aanaa</i> ‘come near’, <i>baDhnaa</i> ‘advance’
Simple source-point	<i>choDnaa</i> ‘leave’, <i>prasthaan karnaa</i> ‘depart’, <i>piichhee haTnaa</i> ‘recede’
Mid-point	<i>paar karnaa</i> ‘pass’
Direction	<i>chaDnaa</i> ‘climb’/‘ascend’, <i>uThnaa</i> ‘rise’, <i>utarnaa</i> ‘descend’, <i>avrohaN karnaa</i> ‘descend’, <i>girnaa</i> ‘drop’, <i>parikramaa karnaa</i> ‘revolve’
Deixis	<i>aanaa</i> ‘come’ <i>jaanaa</i> ‘go’
Special features of the Path	<i>kaaTnaa</i> ‘cross’, <i>paar karnaa</i> ‘cross do’, <i>ghusnaa</i> ‘pierce’

Table 9. Path verbs in Hindi (Source: Narasimhan, 1998: 217-218)

English too has some Path verbs such as *reach*, *return*, and *move* among others which mark directed Motion, as (51) shows. These verbs have the same function which is indicating some directionality of Motion as in Hindi.

(51) English (Narasimhan, 1998: 170)

The group moved to the end of the line.

Furthermore, English also has verbs lexicalizing Path, such as *enter*, *exit*, *descend*, and *ascend*, among others that are borrowed from Latin (Talmy, 2000; Slobin, 2002; cf. § 1.2).

Based on Hindi and English data, Narasimhan provides counter-arguments to Talmy who claims that there is a correlation between the strategy used by a language to encode the Manner of Motion and the inventory of verbs conflating Motion and Manner. According to Talmy, the lexicon of a Spanish-type language is supposed not to have a rich class of verbs which conflate Manner and Motion. However, Narasimhan shows a sizeable set of verbs in the domain of Motion in Hindi, a language which is similar to Spanish in terms of lexicalization patterns. In total, the author shows 23 verbs, based upon her study, that conflate Motion and Manner, e.g. *calnaa* ‘walk’, *bhaagna* ‘run’, *langaDaanaa* ‘limp’, *laDkhaDaanaa* ‘hobble’, and *cahalnaa* ‘stroll’ among others. Moreover, these verbs have specific uses and meanings which the author categorizes according to the semantic components they lexicalize. For example, the verb *bahanaa* ‘flow’ belongs to the ‘contact’ category implying (lack of) friction between the Figure and the Ground. It is also important to note that some Manner verbs in Hindi do not exactly correspond to monomorphemic Manner verbs in English. Instead of monomorphemic Manner verbs, Hindi uses light verbs. For example, *travel*, which is a monomorphemic Manner verb in English, has its Hindi equivalent *yatraa karna* in the light verb construction, which literally means ‘travel do’. Note that a similar system is also found among Path verbs. These Manner verbs encode both Manner and non-directed Motion conveying the same Manner information as the English Manner verbs do. Some Manner of Motion verbs in Hindi discussed by Narasimhan are shown in Table 10 (for a detailed list of these verbs and their uses, see Narasimhan, 1998 Appendix II).

Components of Manner	Verbs
Mode	<i>Tahalnaa</i> ‘amble’, <i>caDhnaa</i> ‘climb’, <i>calnaa</i> ‘walk’, <i>bhaagna</i> ‘run’
Attitude	<i>sataknaa</i> ‘slip away’, <i>khisaknaa</i> ‘slink away’, <i>luknaa-chipnaa</i> ‘hide’
Velocity	<i>jhapaTnaa</i> ‘rush’, <i>dhire-dhire saraknaa</i> ‘glide/creep/move slowly’
Contact	<i>bahanaa</i> ‘flow’, <i>phisalnaa</i> ‘slither’
Medium	<i>uDnaa</i> ‘fly’, <i>tairnaa</i> ‘swim’
Vehicle	<i>saaikal chalaanaa</i> ‘cycle’, <i>khenaa</i> ‘row’
Course	<i>ghumnaa</i> ‘roam’, <i>bhramaN karnaa</i> ‘tour do’/‘travel’

Table 10. Manner verbs in Hindi (Source: Narasimhan, 1998: 211-214)

Encoding the cause/Manner of Motion with the Path within a single clause is, however, not possible in languages such as Hindi or Spanish as these languages cannot combine the two components in a minimal clause. Instead, these languages prefer a different construction in which the Path of Motion is conveyed by the main verb and the causal/Manner event is expressed separately in an adjunct. This is shown in (52) for Hindi and in (53) for Spanish.

(52) Hindi (Narasimhan, 1998: 17)

laDkaa-Ø dauD-kar skul ga-yaa
 boy-NOM run-by school go.PST.SG.M
 ‘The boy went to school, running.’

(53) Spanish (Talmy, 1991: 488)

la botella entro´ flotando a la cueva
 the bottle entered floating to the cave
 ‘The bottle entered floating to the cave.’

Hence, the study shows that crosslinguistic differences in complex events encoding are “localized” in the mapping between verbs and constructions but not necessarily also in the patterns of lexicalization of meaning in underived verb roots (see Narasimhan, 1998: 198). Given the types of constructions used in Hindi to express Path and Manner, Hindi reveals the characteristic pattern of V-framed

languages like Spanish, French or Italian (see Narasimhan, 1998, 2003 for further details concerning this issue; cf. Hautli-Janisz, 2014).

While the previous study was mainly focused on the expression of spontaneous (self-agentive) Motion, Narasimhan (2012) has also investigated the expression of caused (agentive) Motion in Hindi in comparison to Tamil, a Dravidian language. However, as we are concerned with the studies on Indo-Aryan languages, we will not discuss the results for the Tamil language. In order to investigate how the placement and removal events are expressed in Hindi, the author gathered the data with four native speakers of Hindi (2 females and 2 males) using the ‘Put and Take’ stimulus set (Bowerman *et al.*, 2004). The results show 22 different verbs used by the speakers to depict placement and removal events in Hindi, e.g., *raakh* ‘put’, *Daal* ‘put/drop’, *uThaa* ‘lift’, and *nikaal* ‘take out’. The verbs *raakh* ‘put’ and *nikaal* ‘take out’ appear to be the most frequent verbs used in the expression of placement events and removal events respectively. The extension of use of these two verbs suggests that they can be categorized as general verbs of placement vs. removal events (Narasimhan, 2012: 201-230). Other less frequent verbs are categorized as secondary general verbs. These include *Daal* ‘put’ in the placement events and *uThaa* ‘pick up’ in the removal events. The use of these verbs depends on different factors such as the configuration of the Ground (containment vs. surface), the type of Figure (solid vs. liquid), and the intentionality of the Agent (having control over the Figure vs. not having control over the Figure), among others.

Hence, in Hindi, caused Motion is encoded in the main verb which also lexicalizes Path. However, in addition to the verb (e.g., *nikaal* ‘take out’), Path can also be expressed in case markers (e.g., *-me* ‘in’) or in spatial nouns (e.g., *baahar* ‘outside’), as in the example (54) (Narasimhan, 2012: 201-230).

(54) Hindi (Narasimhan, 2012: 214)

<i>ek</i>	<i>mahilaa-ne</i>	<i>kaar-ke</i>	<i>paaip-se</i>
one	woman-ERG	car-GEN	pipe-ABL
<i>kuch</i>	<i>baahar</i>	<i>nikaal-aa</i>	
something [NOM]	outside	remove-PST.SG.M	
‘A woman took something out from (the exhaust) pipe of (the) car.’			

Case markers (e.g., *-me* ‘on’ or *-par* ‘on’ or *-se* ‘from’) and spatial nominals (e.g., *baahar* ‘outside’, *upar* ‘up’, or ‘above’, *alag* ‘separate’) play an important role in Hindi in the expression of Source and Goal (Narasimhan, 2012: 213). Placement verbs such as *Daal* ‘put’ and *raakh* ‘put’ mostly co-occur with nominals marked with the locative case *-me* ‘on’ or *-par* ‘on’ whereas removal verbs such as *uThaa* ‘pick up’ and *nikaal* ‘take out’ most often co-occur with Grounds which are marked with the ablative case such as *-se* ‘from’. Furthermore, the author notes that the placement verb *Daal* ‘put’ can co-occur with both Source and Goal within the same clause but, as revealed by the data, the verb *raakh* ‘put’ cannot. Likewise, the removal verb *nikaal* ‘take out’ can co-occur with both Source and Goal expressions within the same clause but this is not possible for the removal verb *uThaa* ‘pick up’, which is merely used for the expression of the Source (Narasimhan, 2012: 212-214).

Regarding the type of lexicalization patterns found in placement and removal events, Hindi relies on the V-framed pattern, the Path being encoded in the main verb and Manner in an adjunct, as is also the case in the expression of spontaneous Motion discussed earlier (Narasimhan, 1998, 2003). Research conducted by Narasimhan (1998, 2003, 2012) is an important contribution to the study of Motion events in Indo-Aryan languages. It brings to the light the language-specific characteristics of Hindi, allowing to situate the language in a larger typological perspective, and opening new research perspectives to the study of Indo-Aryan languages.

1.4.3 Studies on case

In a study on the *Spatial expressions and case in South Asian languages*, Khan (2009) explores the relationship between spatial expressions and case in 10 South Asian languages which include Nepali, Urdu/Hindi, Haryani, and Punjabi among others. As we are concerned with the spatial expression in Nepali, we will, however, focus on Nepali. The data investigated in this study come from two types of resources: primary and secondary. The primary resource consists of a survey in which the author administers a set of 60 sentences implying the use of case markers to the speakers of respective languages. One such sentence is illustrated in (55).

(55) Urdu/Hindi (Khan, 2009: 183)

bilal-Ø ha~s-aa
 Bilal-NOM laugh-PST.SG.M
 ‘Bilal laughed.’

Secondary sources include grammar books, novels, and newspapers of the respective languages. To investigate the use of cases in spatial expressions, the author applies theoretical models developed by Jackendoff (1990)²⁰, Kracht (2002)²¹ and Ostler (1979)²². While, a detailed discussion of these theories is beyond the scope of our study, we note that, after reviewing these models, the author proposes a new model, the feature-based model (for further details, see Khan, 2009) for the spatial representation, which includes the following features:

- (a) Every spatial marker has three primary features: PLACE, PATH and DYN(amic).
- (b) Each of the above features may have a set of features as the value.
- (c) The feature PLACE may have following values: null, ON, AT, IN, BESIDE...
- (d) The feature PATH may have following features as values.
 - i. S(ou)RC(e): the theme leaves the place.
 - ii. END: the theme enters the place.
- (e) The feature DYN(amic) shows whether an action/activity is performed or whether it is a static situation.

²⁰ Jackendoff’s model comprises three basic conceptual functions: [Event GO], [State BE] and [Stay BE]. All types of spatial and non-spatial predicates can be modeled by these Constructs. As of Khan (2009: 84-85), the conceptual structures for the sentence *The bird flew to the tree* (spatial motion) would look something like [Event [GOSpatial ([Thing bird], [Path TO [Thing tree]])]].

²¹ Kracht’s model (2002) is concerned with the spatial usages consisting of ‘configuration’ and ‘mode’ layers. Under configuration, several objects are positioned with respect to one another such as IN, ON, AT, UNDER, and BEHIND among others (e.g., *A box is on/under/in/at/behind the car* where the configuration of the box has been described with the relative position of the car (Khan, 2009: 91)).

²² Ostler’s (1979) system is about modeling case by using spatial constructs in which the physical motion (in contrast to abstract motion) is notated by the subscript “posit” for “position”. There are four roles as of Ostler (1979): “source”, “theme”, “path” and “goal” (Khan, 2009: 88). The sentence such as *The book is on the table* can be represented in the following way:

BE _{posit} Theme (stationary theme)	book
Goal (location)	table

The results of this study show that, in the South Asian languages under study, many case markers come from spatial terms. For example, *-nae*, the ergative/accusative case marker in Haryani, and *-ko*, the accusative/dative case marker in Urdu/Hindi are supposed to have been originated from spatial terms, for example, noun or adverb (see Khan, 2009 § 2.4.5 for discussion).

Based on the diachronic evidence, Khan shows that the dative/accusative case marker in Urdu/Hindi (*-ko*), Saraiki (*-kuuN*), Sindhi (*-khe*), Bengali (*-ke*), and Oriya (*-ku*) originated from Sanskrit (*kakSya* 'armpit' or 'side' whose locative use is *kakSe* 'in the armpit' or 'at the side') that became *kaakha* in the early stages of Modern Indo-Aryan. It further developed as *kaakham* undergoing a series of changes and is realized as the present-day dative/accusative case marker losing its spatial meaning. On the other hand, Bengali uses *kaache* meaning 'near' derived from the Sanskrit term *kakSe* 'in the armpit' or 'at the side' to convey the locative case marker. This shows that in the development phase the spatial meaning was lost in some cases as was discussed earlier in the case of Saraiki (*-kuuN*), Sindhi (*-khe*), and Bengali (*-ke*) among others, and that in certain cases, such as in Old Urdu/Hindi the same dative/accusative case marker *-ko*, still conveyed the spatial meaning, as the following example (56) illustrates.

(56) Old Urdu/Hindi (Dehalvi, 1804 as cited by Khan, 2009: 71)

<i>ab</i>	<i>watan-ko</i>	<i>jaa-taa</i>	<i>hu~</i>
now	home.country-to	go-NPST.SG.M	be.NPST.1SG

'Now (I) go to (my) country.'

One of the issues addressed by Khan is the use of the ablative case markers *-baaTa* 'from' referred to as 'ablative-dynamic marker', and *-dekhi* 'from' referred to as 'ablative-static marker' in Nepali. The author explains that *-dekhi* 'from' encodes the starting point of a static path, as in (57), while *-baaTa* 'from' conveys the source of the (actual) Motion, as in (58).

(57) Nepali (Khan, 2009: 94)

<i>us-le</i>	<i>dilli-dekhi</i>	<i>kaaThmaanDu-samma</i>	<i>baaTo</i>	<i>banaa-yo</i>
3SG-ERG	Delhi-ABL	Kathmandu-till	road	make-PST.3SG.M.NH

'He built a road from Delhi to Kathmandu.'

(58) Nepali (Khan, 2009: 94)

u-Ø dilli-baaTa kaaThmaanDu-samma kud-yo
 3SG-NOM Delhi-ABL Kathmandu-till run-PST.3SG.M.NH

‘He ran from Delhi to Kathmandu.’

We might note, however, that we do not find any clear distinction of this kind in the descriptive and narrative data investigated in the present Thesis. Instead, in Nepali, the two ablative case markers encode both what the author calls static path and dynamic motion. More specifically, the analysis of narrative data extracted from the NNC reveals that in the majority of examples *-dekhi* ‘from’ is used to convey the temporal Source rather than spatial Source, as illustrated in (59). In addition, it is also used to convey the dynamic motion, which I call the Path, as is the case in (60), which conveys the Source-oriented Path.

(59) *jaaDo mausam-ko suru-dekhi paat-haru*
 cold weather-GEN beginning-ABL leaf-PL
jhar-na suru garda-chan
 fall-INF start do-COP₂.NPST.3PL

‘Leaves begin to fall from the beginning of Winter.’

(Lit. ‘From the beginning of the cold weather leaves start falling.’ [NNC_E01])

(60) *bhok-ko nidaan khoj-na saaraa*
 hunger-GEN solution search-INF whole
wiswa-kai maanawa ek Thaau~dekhi
 world-GEN.EMP human one place-ABL
arko Thaau~ sar-dai hi~D-eko
 another place move-DUR walk-PFV
itihaas paa-i-ncha
 history find-PASS-COP₂.NPST.3SG.M.NH

‘It is found in history that human beings have moved walking from one place to another (place) in order to find out the solution of hunger.’

(Lit. ‘In order to find out the solution of hunger, there is found a ‘walking-history’ of human beings of the entire world moving from one place to another place.’)

[NNC_G61]

Khan (2009) discusses all the case markers available in Nepali along with their spatial and non-spatial uses applying various theoretical models (e.g., Jackendoff, 1990; Kracht, 2003; Ostler, 1979). However, the study does not provide a comprehensive account of these markers, nor of Motion events more generally. Nevertheless, it is a useful secondary resource for us to see their uses in the light of a crosslinguistic perspective and relate them to our own research.

Chapter 2. A grammatical sketch of Nepali

This chapter consists of two parts: the first part provides a brief introduction to the Nepali language and its speakers, and the second part offers a grammatical sketch of the language. The first part comprises an introduction to the language along with its genetic affiliation, dialects, and writing system. In the second part, first, I present parts of speech (§ 2.2.1), including major word classes and some minor linguistic devices available in the language. Then, in § 2.2.2, I present noun phrases including the case marking system. Section 2.2.3 deals with non-verbal predicates and their types (e.g., attributive, existential, and locative), and verbal predication and Tense-Aspect-Mood system of Nepali. In the last three Sections of this chapter, I discuss complex clauses, clause combining and clause chaining (§ 2.2.5 - § 2.2.7).

2.1 The language and its speakers

Nepali is the official language of Nepal (the constitution of Nepal, 2015). Before it was well-known as the Nepali language, it was called *khasbhaasaa* ‘the Khas language’, *parbate/parbatiyaa bhaasaa* ‘the language of the hill’, *parbati* ‘the Parbati language’, *gorkhaali bhaasaa* ‘the Gorkhali language’, *gorkhaa bhaasaa* ‘the Gorkha language’, *lokbhaasaa* ‘the language of the folk or people’, *raajbhaasaa* ‘the language of the state’ or just *bhaasaa* ‘the language’ (Turnbull, 1887: 1; Regmi, 1966: 59; Dahal, 1974: 8; Bandhu, 2052 VS (1995 AD): 2-3). However, since 1994 VS (1937 AD) people have been calling it Nepali (see also Niraula, 2072 VS (2015 AD): 2). It is also a *lingua franca* for those speakers whose native language is different (Turnbull, 1887; Dahal, 1974; Masica, 1991; Riccardi, 2003; cf. Acharya, 1991). Nepali is used as a medium of instruction in educational institutions. Since a long time, various resources are available in this language. These include literature on literary genres, historical documents, social, political and economic affairs, science and technology, and publication and broadcasting at the local, regional and national

news media (print and electronic), and scientific and technical writing among many others.

According to the report of CBS (2012), there are about 11,826,953 native speakers of Nepali. It represents 44.6% of Nepal's total population and it is the largest language in terms of the number of speakers in all the censuses (Yadava, 2014: 55). Nepali is spoken all over the country, from the east to the west, and across different ecological regions: Himalayan, Hilly, and Terai (the flat land) as shown in Table 11.

Ecological regions	N° of speakers	Percentage
Hill	72,29,381	27.29
Terai (the flat land)	34,94,710	13.19
Mountain	11,02,862	4.16
Total	1,18,26,953	44.64

Table 11. Distribution of Nepali as a mother tongue (CBS, 2012; Yadava, 2014)

Nepali is commonly divided into the Eastern, Central and Western dialects which are distinguished by vocabulary, accents and stylistics²³ (Gautam, 2049 VS (1992 AD); Pokhrel, 2055 VS (1998 AD); Acharya, 2071 VS (2014 AD) *inter alia*). It is common that the Nepali language spoken in India is also considered a dialect of Nepali, for example, Nepali spoken in Darjeeling is considered the West Bengal dialect of Nepali (Dahal, 1974; Acharya, 1991).

Nepali belongs to the Indo-Aryan branch of the Indo-European family (Grierson, 1916; Turner, 1931; Abadie, 1974; Dahal, 1974 *inter alia*). The

²³ There are changes with respect to the dialects of Nepali especially after the population census of Nepal 2011. Until the census 2001, Achhami, Baitadeli, Bajhang, Bajureli, Doteli, Dailekhi, Dadeldhuri, Darchuleli, Dolpali and Jumli were considered the Western dialects of Nepali spoken in Achham, Baitadi, Bajhang, Bajura, Doti, Dailekh, Dadeldhura, Darchula, Dolpa and Jumla districts respectively in the Mid-Western and Far-Western regions of Nepal but after 2011 (CBS, 2012), they are recognized as different languages (cf. Niraula, 2072 VS (2015 AD)).

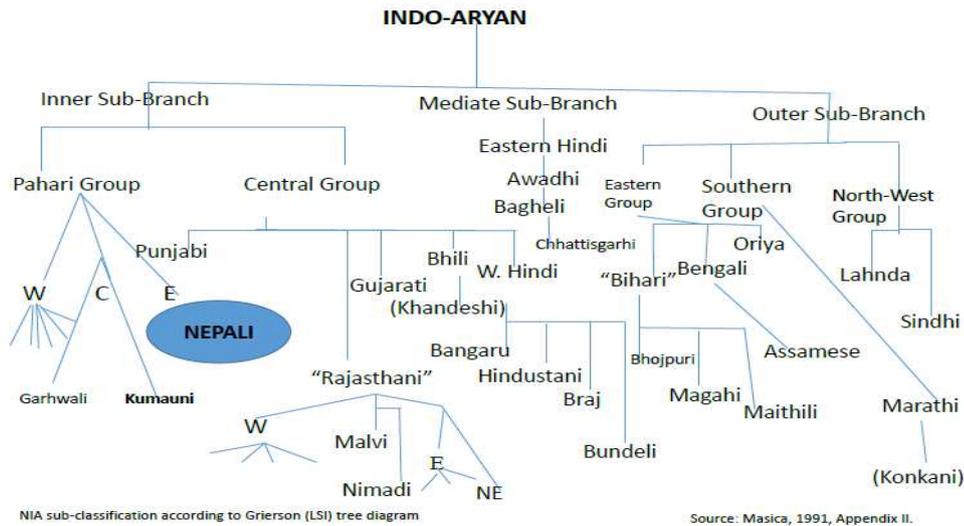


Figure 4. Genealogical relation of Nepali

genealogical relation of Nepali is presented in Figure 4 which is based on Grierson (LSI) as illustrated by Masica (1991: 449) (see also Dahal, 1974: 3; Bandhu, 2052 VS (1995 AD): 44-46; Masica, 1991: 447-459 for more details on the genealogical classification of Nepali). Its use, as explained by Dahal (1974), Masica (1991), Riccardi (2003), and Eppele *et al.* (2012), has expanded to countries of South Asian region (such as India, Burma, Bhutan), and Japan all the way to England in Europe, and to the USA.

Nepal is a country of 147181 km² and, despite its small size, a home to more than 123 languages (CBS, 2011). These languages belong to four language families: Indo-European, Tibeto-Burman, Austro-Asiatic, Dravidian, and include one language isolate, Kusunda. Figure 5 shows the geographical distribution of language families in Nepal. Given the linguistic landscape of the country and its linguistic diversity, Nepali is in contact with languages belonging to Indo-Aryan as well as to other language families.

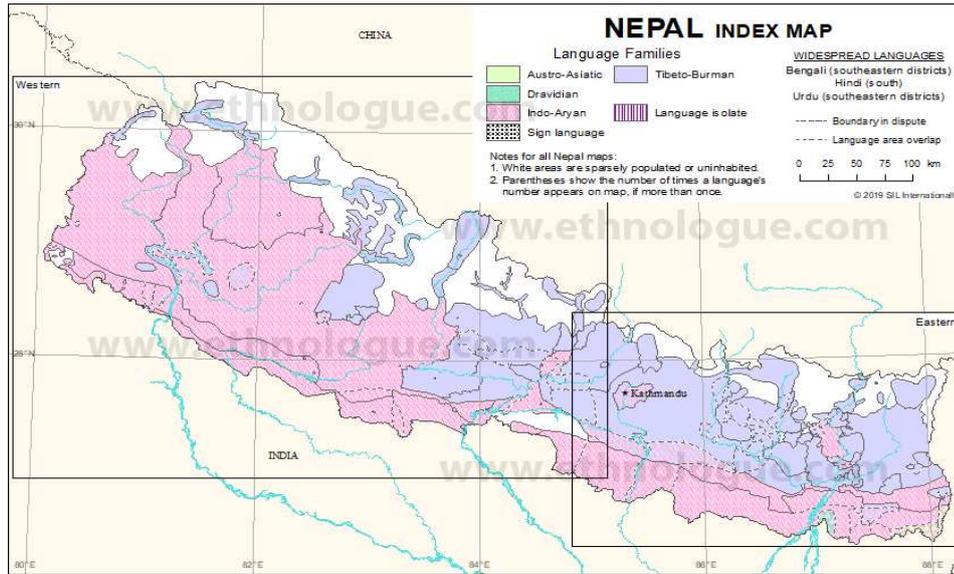


Figure 5. Language families in Nepal²⁴

Nepali is written in the Devanagari script (Ayton, 1820; Regmi, 1966: 83) which is derived from Brahmi, an ancient Indian syllabary (Kleiman, 1987/1990: 56). The Devanagari script is a combination of alphabetic and syllabic types. It is based on the phonetic principles which show both the place and manner of articulation. Different diacritics are added before, after, above or below the respective letters to correspond to the respective vowel (grapheme) or to denote the nasalized element (cf. Comrie, 2005), as in example (61).

(61) सन्	२०१५ को	गैंडा	गणनाले	६०५ वटा
<i>san</i>	<i>2015-ko</i>	<i>gai~Daa</i>	<i>gaNanaa-le</i>	<i>605-waTaa</i>
AD	2015-GEN	rhino	census-ERG	605-CLF
गैंडा	चितवनमा	भेटिएका	छन्	
<i>gai~Daa</i>	<i>citwan-maa</i>	<i>bheT-i-ekaa</i>	<i>chan</i>	
rhino	Chitwan-LOC	find-PASS-PFV	COP ₂ .NPST.3PL	

‘According to the census of rhino 2015, 605 rhinos have been found in Chitwan.’²⁵

²⁴ Source: <https://www.ethnologue.com/country/NP/maps>: accessed 14th October 2017.

²⁵ <https://gorkhapatraonline.com>: accessed 9th November 2019.

According to the existing system, Nepali consists of 36 consonants and 13 vowels (see Appendix A and B). Of 36 consonants, the last three are compound or conjunct. Based on the graphemes/alphabets, the phonological system comprises 29 consonant and six vowel phonemes illustrated by Table 12 and Table 13 denoting consonant and vowel respectively (for a detailed discussion on Nepali sound system, see Pokharel, 1989; see also Khatiwada, 2014).

Manner of articulation	Place of articulation										
	Bilabial		Dental		Alveolar		Retroflex		Palatal	Velar	Glottal
Plosive	p	b	t	t ^h			ʈ	ʈ ^h		k	k ^h
	p ^h	b ^h	d	d ^h			ɖ	ɖ ^h		g	g ^h
Affricate					c	dz					
					c ^h	dz ^h					
Nasals		m		n						ŋ	
Tap or flap						r					
Fricative					s						ɦ
Lateral						l					
Approximant		(w)							(j)		

Table 12. Consonant sounds in Nepali

	Front	Central	Back
Close	i		u
Close-mid	e		o
Open mid			ʌ
Open		a	

Table 13. Vowel sounds in Nepali

One important point has to do with the system of transcription. In this Thesis, I am mostly following the tradition of Genetti (1994) while presenting the data in examples. However, in some contexts, I have adopted my own system (see § 3.1.3 and § 3.2.3 for more information on data coding, see also Appendix G for a sample transcription).

2.2 A grammatical sketch

2.2.1 Parts of speech

The parts of speech ‘are the major classes of words that are grammatically distinguished in a language’ (Schachter & Shopen, 2007)²⁶. These include nouns, verbs, adjectives, adverbs, postpositions, and conjunctions. The aim of this section is to present the major parts of speech in Nepali and the basic morphosyntactic features which distinguish each of them. Because all nominals have inherent relation with number (singular vs. plural) and gender (masculine vs. feminine or masculine, feminine and neuter), I will discuss them all in the Section devoted to ‘Nouns’. The first and second person pronouns, which are also referred to as speech act participants (hereafter SAPs), 3rd person anaphoric and demonstrative, and some other types of pronouns will be discussed in the subsequent Sections, and then some features of adjectives and adverbs. The last part of this Section is devoted to conjunctions.

2.2.1.1 Nouns

Nouns can function as the head of the noun phrase and can be core arguments in a clause (Dixon, 2004: 8). They have different syntactic, semantic and pragmatic roles. There are two combinatorial properties of nouns based on syntactic characteristics. These are the grammatical role (case-roles) in the clause and the syntactic role (subject or object argument) in the noun phrase (Givon, 2001: 59). From a broader perspective, nouns can be animate vs. inanimate. Animate nouns consist of human vs. non-human, and inanimate noun entities contain countable vs. non-countable noun entities. In Nepali, nouns which refer to humans inflect for number, gender and case. Information on honorificity is conveyed by the verb, including person, number and gender. Examples (62) and (63) below show animate human nouns.

²⁶ For further discussion on parts of speech in general, see Schachter and Shopen (2007: 1-60).

(62) *keTo-Ø naac-yo*
 boy-NOM dance-PST.3SG.M.NH
 ‘The boy danced.’

(63) *keTi-Ø naac-i*
 girl-NOM dance-PST.3SG.F.NH
 ‘The girl danced.’

Some non-human nouns, as in (64) and (65), can also inflect for case and number, but not for gender. For example, *paaTho* ‘male baby goat’ and *paaThi* ‘female baby goat’ inflect morphologically in a similar manner to human nouns (e.g., *keTo* ‘boy’ and *keTi* ‘girl’) to indicate masculine and feminine gender respectively. However, this distinction for *paaTho* ‘male baby goat’ and *paaThi* ‘female baby goat’ exists only at the morphological level and not at the grammatical level, as non-human animate nouns and inanimate nouns are treated equally in Nepali. The non-human nouns which inflect morphologically, are presented in examples (64) and (65). The inflection used for the human noun (3rd person, non-honorific, singular and masculine gender) and the inflection used in the neuter gender appear coincidental.

(64) *paaDo goTh-tira ga-yo*
 baby.buffalo.M cowshed-toward go-PST.3SG.M.NH
 ‘The male baby buffalo went toward the cowshed.’

(65) *paaDi goTh-tira ga-yo*
 baby.buffalo.F cowshed-toward go-PST.3SG.M.NH
 ‘The female baby buffalo went toward the cowshed.’

Similarly, the verb in the plural form used in non-human animate nouns is the same as that of human nouns (third person mid-grade honorific level) as in (66). Thus, all nouns referring to inanimate entities are treated as neuter gender in Nepali (see also Masica, 1991: 221; Genetti, 1994: 13; Pokharel, 2054 VS (1997 AD): 87-95).

(66) *kitaab-haru khas-e*
 book-PL fall-PST.3PL
 ‘The books fell (down).’

One criterion to distinguish countable and non-countable noun entities is whether they use the plural marker *-haru*, as shown in (67) and (68).

(67) *us-le kitaab-haru daraaj-maa raakh-yo*
 3SG-ERG book-PL shelf-LOC put-PST.3SG.M.NH
 ‘He put the books in the shelf.’

(68) *keTaa-le bazaar-maa thaal-haru kin-yo*
 boy-ERG market-LOC plate-PL buy-PST.3SG.M.NH
 ‘The boy bought the plates in the market.’

Countable noun entities can also be used with quantifiers like *dherai* ‘many’ or *kehi* ‘some’ to derive the plural meaning. In such constructions, the plural marker is optional. In contrast to nouns referring to countable entities, those referring to uncountable entities do not inflect for plural number. However, such uncountable noun entities can also be used with quantifiers *dherai* ‘much’ or *thorai* ‘less’ as are in examples (69) and (70) below. The use of these quantifiers is meant ‘how much’ rather than ‘how many’.

(69) *us-le dherai sun kin-yo*
 3SG-ERG many gold buy-PST.3SG.M.NH
 ‘He bought a lot of gold.’

(70) *usle thorai bhaat khaa-yo*
 3SG-ERG less rice eat-PST.3SG.M.NH
 ‘He ate little rice.’

The issue of plurality is also linked to adjectives and pronouns in Nepali. There is a morphological change, *o* to *aa* in adjectives when the plural marker *-haru* is added to noun entities as in (71) and (72) to denote singular and plural respectively (Bandhu, 2052 VS (1995 AD)); Pokharel, 2054 VS (1997 AD)).

(71) *baakhro kaalo cha*
 goat black COP₂.NPST.3SG.M.NH
 ‘The goat is black.’

- (72) *baakhraa-haru kaalaa chan*
 goat-PL black COP₂.NPST.3PL
 ‘The goats are black.’

As far as the pronouns are concerned, it is obligatory to use the plural marker *-haru* with speech act participants (2nd person pronouns) like *timi* ‘you’, and the third person anaphoric pronouns *tini* ‘she’/‘he’ and *uni* ‘she’/‘he’. The reason is that if there is no plural marker *-haru*, the speech act participant (the 2nd person pronoun) *timi* ‘you’, and the anaphoric pronouns: *tini* ‘she’/‘he’ and *uni* ‘she’/‘he’ show the mid-grade honorific level in the singular number as presented in examples (73) through (76).

- (73) *timi-le jaa~c kasto gar-yau*
 2SG.H-ERG exam how do-PST.2SG.H
 ‘How was your examination?’
 (Lit. ‘How did you do your examination?’)

- (74) *timi-haru-le jaa~c kasto gar-yau*
 2-PL-ERG exam how do-PST.2PL
 ‘How was your examination?’
 (Lit. ‘How did you do your examination?’)

- (75) *uni ghar-maa chan*
 3SG.H home-LOC COP₂.NPST.3SG.M.H
 ‘He is at home.’

- (76) *uni-haru ghar-maa chan*
 3-PL home-LOC COP₂.NPST.3PL
 ‘They are at home.’

The use of plural marker depends on certain contexts whether it is a matter of countable noun entities, human vs. non-human noun entities, or adjectives or pronouns (Ayton, 1820; Dahal, 1974; Acharya, 1991; Masica, 1991; Matthews, 1992; Pokharel, 2054 VS (1997 AD): 229; Riccardi, 2003).

2.2.1.2 Verbs

In Nepali, verbs are either intransitive or transitive. Both types of verbs inflect for tense in relation to time (such as past vs. non-past or future vs. non-future), aspect in relation to completeness or incompleteness (perfective vs. imperfective), and mood in relation to attitude (such as certainty vs. uncertainty). The inflected forms of verbs show person, number, gender and honorific status of the subject. All intransitive verbs have a single S argument, the subject argument of the intransitive clause (Comrie, 1989: 110) and are mono-valent semantically. In the following examples (77) and (78), *dauDanu* 'to run' and *jaanu* 'to go' are intransitive verbs consisting of single S argument *ghoDaa* 'horse' and *keTaa-haru* 'boys' respectively.

(77) Sharma (2071 VS (2014 AD): 143))

ghoDaa-Ø dauD-yo
horse-NOM run-PST.3SG.M.NH

'The horse galloped.'

(78) *keTaa-haru-Ø widyaalaya jaan-chan*

boy-PL-NOM school go-COP2.NPST.3PL

'The boys go to school.'

Transitive verbs have minimum of two arguments which can be represented as A and P (cf. Dixon, 1994: 6). The notion of A and P is used to convey more agent-like and more patient-like arguments (Comrie, 1989: 111) rather than the subject and object in the strictest sense. An A argument is the subject of a transitive clause and P argument is an object of a transitive clause, as in (79) and (80).

(79) *bhaai-le laTThi-Ø bhaa~c-yo*
younger.brother-ERG stick-ABS break-PST.3SG.M.NH

'The younger brother broke the stick.'

(80) *bhaai-le saaikal-Ø kin-yo*
younger.brother-ERG cycle-ABS buy-PST.3SG.M.NH

'The younger brother bought the cycle.'

In these examples, *bhai* 'brother' is the subject A argument and *laTThi* 'stick' and *saaikal* 'cycle' are object P arguments of the verb *bhaa~cnu* 'to break' and *kinnu*

‘to buy’ respectively. Semantically, these verbs are bi-valent. Ditransitive verbs take three arguments: subject, direct object and indirect object arguments. Semantically, these verbs have a valence of three. Verbs like *dinu* ‘to give’, as in (81) and (82), and *paThaaunu* ‘to send’, as in (83) and (84), are ditransitive verbs.

(81) *us-le didi-laai kitaab-Ø di-yo*
 3SG-ERG sister-DAT book-ABS give-PST.3SG.M.NH
 ‘He gave the book to the elder sister.’

(82) *un-le ma-laai miThaai-Ø di-in*
 3SG-ERG 1SG-DAT sweets-ABS give-PST.3SG.F.H
 ‘She gave me the sweets.’

(83) *aamaa-le didi-laai ghara paThaaunu-bha-yo*
 mother-ERG sister-DAT home send-GER-COP₃.PST-PST.3SG.M.NH
 ‘Mother sent the elder sister to home.’

(84) *us-le keTaa-laai iskul paThaa-yo*
 3SG-ERG boy-DAT school send-PST.3SG.M.NH
 ‘He sent the boy to school.’

2.2.1.3 Adjectives

Adjectives function as a part of a distinct word class in Nepali due to their syntactic behavior, as in examples (85) through (87). The comparative or superlative form is one of the syntactic criteria for identifying adjectives functioning as a distinct word class. In order to express the comparative form, *bhandaa* ‘compared to’ (lit. while saying) is used, as in (85). It can also be expressed by using *jhan* ‘much/more’ (a qualifier), or *ajha/ajhai* (an emphatic) or an adverb before the respective adjective. In certain adjectives, the suffix *-tar* can express the comparative form (e.g., *ucca-tar* ‘higher’).

(85) *citwan bhandaa pokharaa raamro cha*
 Chitwan COMP Pokhara beautiful COP₂.NPST.3SG.M.NH
 ‘Pokhara is more beautiful than Chitwan.’

In order to express the superlative form, *sab/sabai* ‘all’ along with *bhandaa* ‘compared to’ is used followed by the respective adjective, as in (86). It can also be expressed by suffixing *-tam* in respective adjective, as in (87), but the latter is in less use than the former one (see also Dahal, 1974; Bandhu, 2052 VS (1995 AD)).

- (86) *sansaar-maa sab bhandaa aglo*
 world-LOC all COMP tall
himaal sagarmaathaa ho
 mountain Sagarmatha COP₁.NPST.3SG.NH
 ‘Sagarmatha is the highest mountain in the world.’

- (87) *yo parikchayaa-maa ucca-tam angka*
 DEM.PROX exam-LOC high-SUP number
kas-le praapta gar-yo
 who-ERG receive do-PST.3SG.M.NH
 ‘Who obtained the highest marks in this exam?’

Some adjectives also inflect for gender (in particular with human nouns), number and case (Ayton, 1820: 10-11; Masica, 1991: 250-251), and some don’t (see example (93)). Moreover, some of them have direct form, as in (88), and some of them have oblique form, as in (90) (a). According to Dahal,

“adjectives show gender and number agreement with human nouns or case agreement with any noun in the oblique in literary eastern Nepali though the case agreement is not always consistent” (Dahal, 1974: 168).

Among the adjectives which inflect for gender and number distinctions are *aglo/agli* ‘tall’, *hoco/hoci* ‘short’, denoting height, *moTo/moTi* ‘fat’, *dublo/dubli* ‘thin’ denoting physical property, *kaalo/kaali* ‘black’, *raato/raati* ‘red’ denoting colour (in the context of complexion: dark vs. fair complexion), and *raamro/raamri* ‘good/beautiful’ encoding value or inherent character. Some prototypical adjectives code inherent, concrete, relatively stable qualities of entities and the less prototypical adjectives code more temporary or less concrete states (Givon, 2001: 81).

- (88) *aglo keTo-Ø aa-yo*
 tall.M boy-NOM come-PST-3SG.M.NH
 ‘A tall boy came.’

- (89) *agli keTi-Ø aa-i*
 tall.F girl-NOM come-PST-3SG.F.NH
 ‘A tall girl came.’

The adjectives *aglo* ‘tall’ in (88) and *agli* ‘tall’ in (89) function as the modifiers of *keTo* ‘boy’ and *keTi* ‘girl’ respectively. In both cases, adjectives modify the noun phrase. In these examples, the adjective, which denotes masculine gender, is in the direct form. As explained in the preceding paragraph, there is a limited set of such adjectives, which clearly shows gender distinction. Similarly, in example (90) (b) there is a number distinction, however, such uses are comparatively less frequent than those shown in example (90) (a).

- (90) a. *aglaa keTaa-haru-Ø aa-e*
 tall boy-PL-NOM come-PST.3PL
 ‘Tall boys came.’
 b. *aglaa-haru aa-e*
 tall-PL come-PST.3PL
 ‘All the tall ones came.’

- (91) *agli/aglaa keTi-haru-Ø aa-e*
 tall girl-PL-NOM come-PST.3PL
 ‘Tall girls came.’

More particularly, *aglo* ‘tall’ changes from *-o* to *-aa* (90) in masculine gender but as we can see from example (91), both *-i* and *-aa* seem possible in the case of feminine gender. Unlike the examples (88) through (91), the adjective *asal* ‘good’, as in (92), does not inflect for gender; it is not acceptable grammatically, as shown in (93). Thus, information on gender, number and case is expressed only by the noun that follows the adjective.

- (92) *asal keTo-Ø aa-yo*
 good boy-NOM come-PST-3SG.M.NH
 ‘A good boy came.’

- (93) **asali keTi-Ø aa-i*
 good girl-NOM come-PST-3SG.F.NH
 ‘A good girl came.’

2.2.1.4 Adverbs

Adverb is said to be the least homogenous category syntactically, semantically and morphologically. It is also, perhaps not surprisingly, the least universal cross-linguistically (Givon, 2001: 87). In Nepali, adverbs occur as independent words or as the head of an adverbial phrase, and they function as modifiers of verbs (Acharya, 1991: 28; Dahal, 1974: 210-218). Semantically, they can be categorized as manner, place, time (aspectual), and epistemic adverbs (Givon, 2001: 91-92). The following example (94) shows the use of a manner adverb *wistaarai* ‘slowly’ (cf. § 5.3.3).

- (94) Bandhu (2070 VS (2013 AD):131))
raam-le wistaarai Dhokaa khol-yo
 Ram-ERG slowly door open-PST-3SG-M.NH
 ‘Ram opened the door slowly.’

Some constructions can contain more than one adverb type. This is the case in example (95), in which *hijo* ‘yesterday’ refers to time, *Tarebhir*, denotes place, and *pakkai* ‘certainly’ refers to the epistemicity (see also Acharya, 1991; Dahal, 1974).

- (95) *hijo taarebhir-maa bha-eko helikapTar*
 yesterday Tarebhir-LOC COP₃-PFV helicopter
durghaTanaa pakkai pani kharaab
 accident really also bad
mausam-ko kaaraN hu-nu-par-cha
 weather-GEN reason COP₃.NPST-GER-fall-COP₂.NPST.3SG.M.NH
 ‘The helicopter accident that occurred in Tarebhir yesterday must have happened due to bad weather.’

Some adverbs, which function as adverb of place (source, location or direction), as in (96) and (97) below, can also function as postpositions. These include *-muni* ‘under’ *-maathi* ‘above’ *-bhitra* ‘in’ *-baahira* ‘out’ that I will discuss later in more detail together with their uses and functions in descriptive and narrative data (cf. § 4.3 and § 5.3.5).

(96) *maathi-baaTa ko jhar-yo*
 above-ABL who descend-PST.3SG.M.NH
 ‘Who came down from up?’

(97) *behuli-Ø bhitra-baaTa baahira aa-in*
 bride-NOM inside-ABL outside come-PST.3SG.F.H
 ‘From inside the bride came out.’

2.2.1.5 Pronouns

Pronouns include the speech act participants (SAPs), third person, relative, interrogative, and reciprocal. Except for first person, all pronouns in Nepali have their honorific level, which ranges from low to extra high grade. In addition to honorificity, they mark person, number, gender, clusivity (inclusive vs. exclusive), and case.

a. The speech act participants (SAPs)

The speech act participants refer to 1st and 2nd person pronouns. The 1st person pronouns consist of *ma* ‘I’ and *haami(-haru)* ‘we’ to denote singular and plural respectively. The plural marker *-haru* is optional with *haami* ‘we’. One feature to notice about *haami* ‘we’ is that it can be exclusive (speech act participant ‘I’, and anaphoric 3rd person plural ‘they’) or inclusive (both speech act participants with or without 3rd person anaphoric pronoun ‘they’) (for details, see Dahal, 1974: 174). Similarly, SAPs 2nd person pronouns consist of *ta~* ‘you’, *timi* ‘you’, *tapaai~* ‘you’ and *hajur* ‘you’ as is shown in Table 14.

Singular	Honorific level	Plural	Honorific level
<i>ma</i>	Neutral	<i>haami(-haru)</i>	Neutral
<i>ta~</i>	Low-grade	<i>timi-haru</i>	Mid-grade
<i>timi</i>	Mid-grade	<i>timi-haru</i>	Mid-grade
<i>tapaai~</i>	High-grade	<i>tapaai~-haru</i>	High-grade
<i>hajur</i>	Extra high-grade	<i>hajur-haru</i>	Extra high-grade

Table 14. Speech act participants

Examples (98) and (99) are presented below to show the use of speech act participants.

- (98) *mai-le tapaai~laai bolaa-eko thi-e~*
 1SG-ERG 2SG.H-DAT call-PFV COP2.PST-PST.1SG
 ‘I had called you.’

- (99) *haami-Ø bihaana-dekhi timi-haru-laai*
 1PL-NOM morning-ABL 2-PL-DAT
parkh-i-rah-ekaa cha-u~
 wait-ABS-remain-PFV.PL COP2.NPST-1PL
 ‘We have been waiting for you since the morning.’

Note also that *aaphu* ‘self’, whose plural is *aaphu-haru* ‘selves’ is normally described as a reflexive pronoun. It can be used to denote speech act participants as well as third person pronoun. In its function of the third person pronoun, its use was also common to address one’s husband in the past (Sigdya, 2055 VS (1998 AD): 40)) but it is a matter of further research if this type of use still exists.

b. Third person pronouns

Pronouns which refer to other than speech act participants (SAPs) are third person pronouns. These include the anaphoric pronouns and demonstratives. The anaphoric pronouns are *u* ‘she’/‘he’ and *uhaa~* ‘she’/‘he’ singular with low, mid and high-grade honorific levels and *uni-haru* ‘they’/*uhaa~-haru* ‘they’ for the plural with mid and high honorific level respectively, as shown in Table 15.

Singular	Honorific level	Plural	Honorific level
<i>u</i>	Low grade	<i>uni-haru</i>	Mid grade
<i>uni</i>	Mid grade	<i>uni-haru</i>	
<i>uhaa~</i>	High grade	<i>uhaa~-haru</i>	High grade

Table 15. 3rd person anaphoric pronouns

Examples (100) and (101) below show the use of anaphoric pronouns in non-honorific and masculine gender, and honorific and feminine gender respectively.

- (100) *us-le biruwaa umaar-yo*
 2SG-ERG plant-ABS grow.CAUS-PST.3SG.M.NH
 ‘He grew plants.’

- (101) *un-le biruwaa umaar-in*
 3SG-ERG plant-ABS grow.CAUS-PST.3SG.F.H
 ‘She grew plants.’

The demonstrative pronouns can be classified into proximal and distal, as Table 16 shows.

Singular	Honorific level	Plural	Proximity
<i>yo</i>	Low-grade	<i>yini-haru</i>	Proximal
<i>yi/yini</i>	Mid-grade	<i>yini-haru</i>	Proximal
<i>tyo</i>	Low-grade	<i>tini-haru</i>	Distal
<i>ti/tini</i>	Mid-grade	<i>tini-haru</i>	Distal

Table 16. Demonstrative pronouns

The proximal (close to the speaker) is denoted by *yo* ‘this’ in singular form, as in (102), and *yi/yini-haru* ‘these’ in plural form and distal is denoted by *tyo* ‘that’ (away from the speaker) in singular, as in (103), and *tini-haru* ‘those’ in the plural form. *tyo* ‘that’ and *yo* ‘this’ are morphologically distinct from each other (see also Bandhu, 2052 VS (1995 AD): 147)). These are the demonstratives which can also function as determiners or modifiers of the noun entity.

- (102) *yo jholaa-maa ke cha*
 DEM.PROX bag-LOC what COP2.NPST.3SG.M.NH
 ‘What is in(side) this bag?’

- (103) *tyo nepaal-ko jhanDaa ho*
 DEM.DIST Nepal-GEN flag COP1.NPST.3SG.M.NH
 ‘That is the flag of Nepal.’

In Nepali, demonstratives also express honorificity. Note that constructions showing plural number do not contain additional marker to express the honorific level because these constructions are honorific by default. However, the level of honorificity is mid-grade for all. One important point has to do with *nij* ‘self’ in Nepali. It is also used as the anaphoric or demonstrative pronoun. Its plurality is marked by *-haru* and can be at the honorific or the non-honorific level.

- (108) *antarikchya-maa ko-ko pug-e*
 space-LOC who-who reach-PST.3PL
 ‘Who landed (reached) in the space?’
- (109) *timi-le kun mobaaail phon kin-yau*
 you.H-ERG which mobile phone buy-PST.2SG.H
 ‘What brand of mobile phone did you buy?’
- (110) *sarkaar-kaa aagaami kaaryakram-haru ke-ke hun*
 government-GEN next plan-PL what-what COP₁.NPST.3PL
 ‘What are the forthcoming plans of the government?’

e. Reciprocal pronoun

ek aapas ‘each other’ or ‘one another’ is a reciprocal pronoun in Nepali. It can refer to human as well as non-human entities. With respect to human entities, it can refer to SAPs or other pronouns on the basis of shared knowledge of the event, as in example (111). As for non-human entities, it may depend on context or other factors, as in (112).

- (111) *raamro natijaa-kaa laagi uni-haru*
 good result-GEN.OBL for 3-PL
ek aapas-maa sallaaha gar-chan
 one other-LOC suggestion do-COP₂.NPST-3PL
 ‘They discuss with each other for the better results.’
- (112) *gaaDi-haru ek aapas-maa*
 bus-PL one other-LOC
Thok-i~-daa durghaTanaa bha-yo
 strike-ABS-SIM accident COP₃.PST-PST.3SG.M.NH
 ‘The accident occurred as the buses collided (with each other).’

In addition to pronouns, which I discussed above, there are indefinite pronouns (such as *kohi* ‘someone’ and *kehi* ‘some’) to refer to human and non-human respectively, as examples (113) and (114) below show. It is also possible to repeat each of their respective form like *kohi-kohi* ‘someone’ and *kehi-kehi* ‘something’ to

derive the plural meaning. A particle *na* can be inserted between them. The insertion of such particle may give some additional meaning like *kohi na kohi* ‘at least someone’ or *kehi na kehi* ‘at least something’.

- (113) *dukha-ko belaa-maa saath*
 hardship-GEN time-LOC accompaniment
di-ne kohi bha-e-na
 give-PROS someone COP₃.PST-3SG.M.H-NEG
 ‘There was none to help during hardships.’

- (114) *jholaa-maa kehi cha ki*
 bag-LOC some COP₂.NPST.3SG.M.NH DPRT
 ‘Is there anything in(side) the bag?’

2.2.1.6 Postpositions

A handful of works (Dahal, 1974; Acharya, 1991; Adhikari, 2071 VS (2014 AD); Karkkainen, 1994; Riccardi, 2003; Sharma, 2071 VS (2014 AD) *inter alia*; see also Pokharel, 1989a; Hardie, 2008) have discussed various aspects of postpositions in Nepali. Dahal (1974) provides a substantial description of all types of postpositions available in the language. Yet this domain is still understudied from a functional and typological point of view. According to Dahal (1974),

“Postpositions function as relator to postpositional phrases. They occur after nouns, after pronouns, adjectives if the following noun is deleted, adverbs or non-finite verb forms or another postpositional phrase as axes” (Dahal, 1974: 218).

Several postpositions in Nepali express location, and direction. Some of them are morphologically more complex, such as *maathitira* composed of *maathi* ‘above’ and *tira* ‘toward’ as Table 17 shows them. I will discuss their uses and functions in Chapter 4 through Chapter 7 based on descriptive and narrative data. Nevertheless, in this Section, I will present some outline (cf. § 4.3 and § 5.3.5).

Postpositions	English translation	Postpositions	English translation
<i>agaaDi</i>	‘toward front’	<i>aghi</i>	‘in front of’
<i>baahira</i>	‘outside’	<i>bhitra</i>	‘inside’
<i>maaphat</i>	‘via’/ ‘through’	<i>maathi</i>	‘above’
<i>muni</i>	‘below’	<i>muntira</i>	‘downward’
<i>nera</i>	‘near’	<i>nira</i>	‘near’
<i>pachiltira</i>	‘backward’	<i>paltira</i>	‘toward that side’
<i>paTTi</i>	‘toward’	<i>samip</i>	‘close to’
<i>saamu</i>	‘near’	<i>samunne</i>	‘near’
<i>u~bho</i>	‘above’	<i>tarpha</i>	‘toward’
<i>wara</i>	‘toward this side’	<i>u~dho</i>	‘down’
<i>waaripaari</i>	‘on both sides’	<i>warapara</i>	‘around’
<i>aghiltira</i>	‘toward front’	<i>samma</i>	‘until’/ ‘upto’
<i>bic</i>	‘between’/ ‘among’	<i>tak</i>	‘till’
<i>maathitira</i> <i>/maastira</i>	‘upward’	<i>tira</i>	‘toward’
<i>najik</i>	‘near’	<i>waltira</i>	‘toward this side’
<i>pachaaDi</i>	‘backward’	<i>waari</i>	‘towards this side’
<i>paari</i>	‘the other side’		

Table 17. Postpositions

In the following examples (115) and (116), two different postpositions *-muni* ‘under’ and *-maathi* ‘above’ express the location of *kitaab* ‘book’ and *naanglo* ‘winnow’ respectively.

(115) *Tebal-muni kitaab cha*
 table-under book COP₂.NPST.3SG.M.NH
 ‘There is a book under the table.’

(116) *agenaa-maathi naanglo cha*
 hearth-above winnow COP₂.NPST.3SG.M.NH
 ‘There is a winnow above the hearth.’

Similarly, postpositions *-bhitra* ‘inside’ and *-tira* ‘toward’ in examples (117) and (118) express the direction. The first of these expresses the Goal or final location

where the agent put the object into the box, and the second one expresses the direction towards which the person headed.

- (117) Sharma (2071 VS (2014 AD): 156))
mai-le kantur-bhitra paisaa raakh-e~
 1SG-ERG box-inside money put-PST.1SG
 ‘I put money into the box.’

- (118) *u-Ø sahar-tira ga-yo*
 3SG-NOM city-toward go-PST.3SG.M.NH
 ‘He went towards the city.’

Postpositions *-samma* ‘until’, *-tira* ‘toward’, *-bhitra* ‘inside’, and *-tak* ‘till’ among few others express time, as in (119) and (120).

- (119) *u-Ø das baje-tira ghar-baaTa niskyo*
 3SG-NOM ten o'clock-toward house-ABL exit-PST.3SG.M.NH
 ‘He exited (from) home around ten o’clock.’

- (120) *mai-le yo kaam*
 1SG-ERG DEM.PROX work
dui din-bhitra sak-nu-par-cha
 two day-inside finish-GER-fall-COP₂.NPST.3SG.M.NH
 ‘I must finish this work within two days.’

In addition to their postpositional function in encoding direction or location, some postpositions, *maathi* ‘above’ and *bhitra* ‘inside’, *waari* ‘(toward) this side’ and *paari* ‘(toward) that side’ among few others, can independently function as adverbs (cf. § 2.2.1.5, § 4.3 and § 5.3.3).

There are some other postpositions which can also function as an independent grammatical category. For example, *wisaya* ‘subject’, and *samaan* ‘like’ can function as noun and adjective respectively. Postpositions like *bic* ‘centre’/‘middle’, *baapat* ‘for the sake of’ ‘for that’ and *cheu* ‘edge’ can have some nominal functions while others like *nimti/nimitta* ‘for’ can have purposive functions.

The distributional behavior of a particular postpositional entity in a particular construction type differs. Thus, whatever I presented above lacks a detailed analysis

because, as mentioned earlier, this domain still demands an extensive study on its own (for more discussion, see Dahal, 1974; Acharya, 1991; Karkkainen 1994; Riccardi, 2003; Adhikari, 2071 VS (2014 AD); Sharma, 2071 VS (2014 AD)).

2.2.1.7 Conjunctions

Conjunctions are not part of the distinct word class as are nouns and verbs but they have major function in clause combining processes. Conjunctions such as *ra* ‘and’, *tara* ‘but’, *tyaskaaraN* ‘therefore’, *na...na* ‘neither...nor’, and *ki...ki* ‘either...or’, and *ani* ‘and’, among few others, can be used as coordinating clause conjunctions, and *tyaspachi* ‘after’, *kinabhane* ‘because’, *taapani* ‘although’, and *yadi* ‘if’ *jahile* ‘when’ are the means used in the subordinating conjunctions (see § 2.2.6 for discussion).

2.2.1.8 Evidential particles *re* ‘hearsay’ and *holaa* ‘inferential’

The domain of providing the source of information is often conveyed by using the verbs of perception (P) such as ‘see’, cognition (C) like ‘know’, and utterance (U), for example, ‘say’ or ‘tell’. When speakers express the source of information by using perception and cognition verbs, they tend to have direct access to information or have witnessed it but when such information is expressed by using the utterance verb, it means that they lack the evidence and that speakers do not have access to the information. Thus, by means of affixes, clitics (Aikhenvald, 2004: 8) or grammatical marking (DeLancey, 2001: 369), languages convey the information on evidentiality (Aikhenvald, 2004; DeLancey, 2001; see also Bruil, 2014) and inferentiality.

In Nepali, the information on evidentiality is conveyed by the discourse particle *re* or *are*, a kind of ‘hearsay’. Of these two, *re* seems to be derived from *are* as there is no difference in the meaning the two forms convey. The discourse particle *re* implies that the source of knowledge is not with the speaker but he or she shares this knowledge on the basis of what he or she learnt or heard from others, as in (121) and (122).

- (121) *u-Ø eklai bas-th-yo re*
 3SG-NOM alone sit-HABIT-PST-3SG.M.NH DPRT
 ‘It is said that he used to live alone.’

- (122) *raam-ko punarjanma bha-eko thi-yo re*
 Ram-GEN re-birth COP₃-PFV COP₂-PST.3SG.M.NH DPRT
 ‘It is said that there had been a rebirth of Ram.’

Note, however, that if the same example (121) is without discourse particle *re*, there is a complete change in meaning which would mean ‘he used to live alone in the past’ but probably no longer by the time of speaking. In order to express inferentiality, a lexical device *holaa* ‘may be’ is used. The speaker does not have direct access to the information but it is based on some sort of inference that the speaker makes while talking to the hearer about an event that has already taken place or will take place sometime in future, as illustrated by (123) and (124).

- (123) *u-Ø aa~cha holaa*
 3SG-NOM come-COP₂.NPST.3SG.M.NH INFR
 ‘He will probably come.’

- (124) *us-ko bihe-maa timi naac-yau holaa*
 3SG-GEN wedding-LOC 2SG.H dance-PST.2SG.H INFR
 ‘Probably you danced in his wedding ceremony.’

2.2.2 Noun phrase

A noun phrase may consist of a noun or a pronoun alone or noun or a pronoun along with other entities. According to Givon (2001: 1), a noun phrase has two major aspects of grammar: (a) syntactic or semantic case roles in the clause and (b) referential status (anaphoric, definite or indefinite). Moreover, a noun phrase may function as subject, object, or complement of a verb, or postposition (see also Kachru, 2006: 131).

2.2.2.1 Head and modifiers

The noun or pronoun along with other entities that are in the function of noun phrase are the head of the noun phrase and can be modified. The modifiers include quantifiers (e.g., *dherai* ‘more’/*thorai* ‘less’), adjectives (e.g., *choTo* ‘short’/*laamo* ‘long’), numerals plus classifiers (e.g., *euTaa* ‘one’/*duiTaa* ‘two’), demonstratives (e.g., *yo* ‘this’/ *tyo* ‘that’), relative clauses or the combined form of any of these devices, as shown in Figure 6 and examples (125) and (126).

<i>keTo</i> ‘boy’				
<i>hoco</i> ‘short’	<i>keTo</i> ‘boy’			
<i>euTaa</i> ‘one’	<i>hoco</i> ‘short’	<i>keTo</i> ‘boy’		
<i>koT</i> ‘coat’	<i>lagaako</i> ‘one who has worn’	<i>euTaa</i> ‘one’	<i>hoco</i> ‘short’	<i>keTo</i> ‘boy’

Figure 6. Noun phrase *keTo* ‘boy’ (Head) and its modifiers

(125) *koT lagaako euTaa hoco keTo*

coat wear-PFV one short boy

‘A short boy who has put on a coat...’

(126) *koT lagaako euTaa hoco keTo-Ø aa-yo*

coat wear-PFV one short boy-NOM come-PST.3SG.M.NH

‘A short boy who has put on a coat came.’

In Nepali, the head in the noun phrase level always follows modifiers. The position of the head which is *keTo* ‘boy’ in these examples moves to the right as we keep on modifying it, which is also one of the typological features of Nepali. In example (125), at first *keTo* ‘boy’ is modified by adjective, which then follows to numeral classifier and then finally it is modified by a relative clause. Example (126) is a complex clause consisting of a relative clause and an independent clause. However, the head of both noun phrases is *keTo* ‘boy’.

2.2.2.2 Case marking

This Section presents the case marking system: ergative *-le* ‘by’/‘from’, dative *-laai* ‘to’, locative *-maa* ‘LOC’ [‘in’/ ‘at’], genitive *-ko* ‘of’, instrumental, *-le* ‘with’

comitative/sociative *-sita/-sa~ga* ‘with’, and ablative case markers *-baaTal-dekhi* ‘from’. These are the markers which are inflected in nouns, pronouns, and also in certain adjectives. Some scholars describe them as postpositional particles (Dahal, 1974: 218), while others as case markers (Bandhu, 2052 (1995 AD): 141 VS) (see also Pokharel, 2054 VS (1997 AD): 107). However, in this Thesis, I consider them as the case markers and discuss their functions accordingly. The use of terminology varies but their function remains the same.

a. Ergative

The domain of ergativity has been a focus of study for the last several years if not decades (see Dixon 1979, 1994; Comrie, 1989; Du Bois 1987b; Butt, 2006 *inter alia* for a detailed discussion on ergativity; see also DeLancey, 1981; Payne, 1997; Dryer, 2005; Hoop & Narasimhan, 2009). The prototypical characteristic of ergativity is that it marks the A argument of transitive clause in past or perfective clause. This feature of ergativity occurs in Nepali and is marked by *-le*. In (127), the anaphoric 3rd person pronoun is the subject A argument and *kawitaa* ‘poem’ is the object P argument of the transitive clause *lekhnu* ‘to write’ in the past tense with the APV word order, *-le* and absolutive (\emptyset) flagging, and *-i* indexation. We also can observe similar structure in (128).

- (127) A P V
us-le kawitaa- \emptyset lekh-i
 3SG.OBL-ERG poem-ABS write-PST.3SG.F.NH
 ‘She wrote a poem.’

- (128) Masica (1991: 346)
raam-le timi-laai ke bhan-yo
 Ram-ERG 2SG-DAT what say-PST.3SG.M.NH
 ‘What did Ram say to you?’

In addition to the prototypical occurrence discussed above, the ergative marker is also used in some other constructions with A argument in present or non-past tenses (Grierson, 1916: 26; Turner 1931: xiv; Dahal, 1974: 571; Sharma, 1980: 94; Masica, 1991: 346; Karkkainen, 1994: 81; Payne, 1997: 135; Butt & Poudel, 2007; Li, 2007; Butt *et al.*, 2008; Poudel, 2008: 1-2; Butt & Ahmed, 2010) (see also DeLancey, 1981:

630). Examples (129) and (130) below show the use of ergative marker in the non-past tense.

- (129) *jas-le maha kaaDh-cha*
 who.OBL-ERG honey take.off-COP₂.NPST.3SG.M.NH
us-le haat caaT-cha
 3SG.OBL-ERG hand lick-COP₂.NPST.3SG.M.NH
 ‘One who extracts honey licks his hands’ [Nepali proverb]

- (130) *aamaa-le kathaa bhan-nu hun-cha*
 mother-ERG story say-GER COP₃-COP₂.NPST.3SG.M.NH
 ‘Mother tells a story.’

In addition to marking the A argument of the transitive clause in the non-past or non-perfective, it also marks the S argument of the intransitive clause as is the case in (131) and (132).

- (131) Dahal (1974: 590)
mai-le jaa-nu cha
 1SG-ERG go-GER COP₂.NPST.3SG.NH
 ‘I have to go.’

- (132) Sharma (1980: 94)
mai-le ghara jaa-nu par-cha
 1SG-ERG home go-GER fall-COP₂.NPST.3SG.NH
 ‘I must go home.’

Thus, the prototypical ergative marker *-le* in the non-past tenses might be conditioned by pragmatics and discourse factors. It might also be due to the contact with other languages belonging to a different language family such as Newar (a.k.a. Nepal Bhasha), a Tibeto Burman language spoken in Nepal. Similarly, the use of *-le* with S argument of the intransitive clause in past, perfect or non-past can be due to the fact that the speaker might be under certain obligation for an unforeseen event or an inevitable situation, but these are just the possibilities, which I took into account.

b. Dative

The dative case is marked by *-laai* ‘to’. It is the same marker used in the direct object slot of the accusative case. The marker *-laai* has a wide range of uses. First, we can consider the case of the animate object R argument of a clause where the dative marker *-laai* is used regardless of any tense or aspects, as in (133) and (134).

- (133) *us-le bhaai-laai ciThi lekh-yo*
 3SG-ERG brother-DAT letter write-PST.3SG.M.NH
 ‘He wrote a letter to his younger brother.’

- (134) Adhikari (2071 VS (2014 AD): 212)
raam-laai khaajaa cha
 Ram-DAT snacks COP₂.NPST.3SG.M.NH
 ‘There is some snacks to Ram.’

Secondly, its use is very common in constructions where the argument of a clause in a subject position does not prototypically function as subject but as an experiencer or a dative subject. Such constructions are described as ‘non-nominative subject’, ‘indirect subject’, ‘dative subject’ or ‘experiencer subject’ in the literature (Masica, 1976; Verma, 1976: 279; Subbarao & Bhaskararao, 2004; Yadava, 2004). In such constructions, the dative case marker *-laai* ‘to’ expresses psychological states, as in (135), physical sensations, consciousness, sickness, as in (136) and (137), desire and needs among others (Pokharel, 2054 VS (1997 AD): 111; Subbarao & Bhaskararao, 2004: 164).

- (135) P-Experiencer Stimulus V-stimulus
ma-laai bhok laag-yo
 1SG-DAT hunger feel-PST.3SG.M.NH
 ‘I am hungry.’
 (Lit. ‘To me hunger felt.’)

- (136) *us-laai jwaro aa-yo*
 3SG-DAT fever come-PST.3SG.M.NH
 ‘He has fever.’
 (Lit. ‘To him fever came.’)

- (137) *ma-laai khuTTaa-maa cilaa-yo*
 1SG-DAT leg-LOC itch-PST.3SG.M.NH
 ‘My leg itches.’
 (Lit. ‘To me on the leg it itches.’)

Verbs such as *laagnu* ‘to feel’, *parnu* ‘to fall’, *cilaaunu* ‘to itch’, and *aaunu* ‘to come’ among others are most commonly used in such constructions. These verbs do not have indexation or agreement with the experiencer subject but with the direct object or with other entities, as in examples (135) through (137) shown above. If we look at example (135), we notice that the word order of the construction is PV (the experiencer subject or the patient followed by the verb), argument flagging is *-laai* and verbal indexation is *-yo* which indexes the stimulus *bhok* ‘hunger’ rather than *ma* ‘I’, the experiencer subject. The marking of *-laai* in subject position as dative subject or as experiencer subject is one of the characteristic features of Nepali as well as other Indo-Aryan languages of South Asia (cf. Subbarao, 2012: 32).

-laai is also used in the benefactive or a recipient construction (Ichihashi-Nakayama, 1994: 41; see also Karkkainen, 1994: 78)). In such constructions, it marks the recipient-like (R) argument of ditransitive clause. In the following examples (138) and (139), *baakhro* ‘goat’ and *buDhi* ‘old woman’ are recipient arguments of the transitive clause constructed with the ditransitive verb *dinu* ‘to give’. The indexation in this type of construction is with the prototypical subject argument A (see also Malchukov *et al.*, 2010 for a typological overview of ditransitive construction).

- (138) *u-Ø baakhraa-laai ghaa~s di-ncha*
 3SG-NOM goat.OBL-DAT grass give-COP₂.NPST.3SG.M.NH
 ‘He gives grass to the goat.’

- (139) Pokharel (2054 VS (1997 AD): 47))
mai-le buDhi-laai ciThi lekh-i-di-e~
 I-ERG old woman-DAT letter write-ABS-give-PST.1SG
 ‘I wrote a letter for an old woman.’

In addition to these uses, the dative marker *-laai* can also be used with the inanimate object argument of a transitive clause. This phenomenon is known as

differential object marking (DOM). It is found in Romance, Indo-Aryan (Hindi, Punjabi), Biblical Hebrew, Russian, and Sora among others (Bossong, 1991). In addition to Hindi and Punjabi mentioned by Bossong (*op. cit.*), the same feature exists in Nepali. There can be various reasons behind the use of the dative marker with the inanimate object argument of the transitive clause but one of them is to specify (M. Pokharel, p. c., June 2017) and make the object definite, as shown in example (140).

- (140) *ma-Ø yo kampuTar-laai ke garu~*
 1SG-NOM DEM.PROX computer-DAT what do-OPT.1SG
 ‘What shall I do with this computer?’

However, it is also one of the understudied domains in Nepali and demands a detailed analysis on its own to better understand its meanings and the limitations in the use of DOM.

c. Locative

Two different devices, *-maa* ‘LOC’ and *-maathi* ‘above’, encode location in Nepali as in examples (141) in the case of *-maa* ‘LOC’ and (142) in the case of *-maathi* ‘above’.

- (141) *gaai goTh-maa cha*
 cow shed-LOC COP₂.NPST.3SG.NH
 ‘A cow is in a shed.’

- (142) *chaanaa-maathi laukaa cha*
 roof-above bottle.gourd COP₂.NPST.3SG.NH
 ‘There is a bottle gourd on the roof.’

However, both of them can also express the direction, as is the case in examples (143) and (144) for *-maa* ‘LOC’ and *-maathi* ‘above’ respectively.

- (143) *us-le jholaa Tebal-maa raakh-yo*
 3SG-ERG bag table-LOC put-PST.3SG.M.NH
 ‘He put the bag on the table.’

- (144) *us-le jholaa tebal-maathi raakh-yo*
 3SG-ERG bag table-above put-PST.3SG.M.NH
 ‘He put the bag on the table.’

Although both *-maa* ‘LOC’ and *-maathi* ‘above’ encode either location or Goal in Nepali, they differ in a number of ways. In the linguistic literature, *-maa* ‘LOC’ is discussed more as a case marker while *-maathi* as a postposition. Furthermore, *-maa* ‘LOC’ can also express the temporal reference, as in (145), whereas *-maathi* ‘above’ does not, as is shown in (146) where it would be an ungrammatical construction.

- (145) *timi-ø yo kaam kati din-maa sak-chau*
 you-NOM DEM.PROX work how day-LOC finish-COP₂.NPST.2SG.M.H
 ‘How many days will you take to complete this task?’

- (146) * *timi-ø yo kaam*
 you-NOM DEM.PROX work
kati din-maathi sak-chau
 how day-above finish-COP₂.NPST.2SG.M.H
 ‘How many days will you take to complete this task?’

Taking these factors under consideration, I consider *-maa* ‘LOC’ as a case marker given that it can’t function on its own or independently and *-maathi* ‘above’ as postposition and its independent use *maathi* ‘above’ as an adverb (see also Bandhu, 2052 VS (1995 AD) for further details).

d. Genitive

The genitive case is marked by *-ko*, and is realized by several forms depending on the person and/or gender, as Table 18 below shows.

Pronouns	Forms		
	Masculine	Feminine	Plural
3 rd person + SAP (2 nd person plural)	<i>-ko</i>	<i>-ki</i>	<i>-kaa</i>
SAP (except 2 nd person plural)	<i>-ro</i>	<i>-ri</i>	<i>-raa</i>
<i>aaphu</i> ‘self’	<i>-no</i>	<i>-ni</i>	<i>-naa</i>

Table 18. Various forms of the genitive case marker *-ko*

Among the different forms, *-ko* marks the third person masculine, as in (147), *ki-* marks feminine as in (148), and *-kaa* marks the plural and third person singular (masculine) to indicate honorific level. Other than human, all animate and inanimate entities are marked by *-ko* to show singular and *-kaa* for plural.

- (147) *us-ko choro-ø widyaalaya ga-yo*
 3SG-GEN.M son-NOM school go-PST.2SG.M.NH
 ‘His son went to school.’

- (148) *us-ki chori-ø widyaalaya ga-i*
 3SG-GEN.F daughter-NOM school go-PST.2SG.F.NH
 ‘His daughter went to school.’

With the speech act participants, the same genitive marker is realized in the form of *-ro*, *-ri* and *-raa* for masculine, feminine and plural forms respectively, as illustrated in (149) and (150). But these forms are not applicable to the speech act participants (2nd person pronouns) in the high-grade honorific system, which is marked by *-ko* (see also Pokharel, 2054 VS (1997 AD)).

- (149) *bhui~caalaa-le haam-ro ghar bhatkaa-yo*
 earthquake-ERG 1PL-GEN house destroy-PST.3SG.M.NH
 ‘The earthquake destroyed our home.’

- (150) *haam-ri didi-Ø bazaar ga-in*
 1PL-GEN.F sister-NOM market go-PST.3SG.F.H
 ‘Our elder sister went to the market.’

Finally, when *aaphu* ‘self’ is marked with the genitive, it is realized as *-no*, *-ni* and *-naa* for masculine, feminine and plural respectively, as in (151) and (152) (see Bandhu, 2052 VS (1995 AD) for further details)).

(151) *mai-le aaph-no kaam sak-e~*
 1SG-ERG self-GEN work finish-PST.1SG
 ‘I completed my work.’

(152) *timi-le aaph-ni didi-ko gahanaa kaha~ haraa-yau*
 2SG-ERG self-GEN sister-GEN ornament where lose-PST.2SG.H
 ‘Where did you lose the ornaments of your sister?’

e. Instrumental

The instrumental case is marked by *-le*. It is syncretic with the ergative case (Genetti, 1994: 15). It functions as a means or instrument with the object argument of transitive clause regardless of any tense or aspect (cf. Masica, 1991: 346; Karkkainen, 1994: 78; Pokharel, 2054 VS (1997 AD): 110). The use of instrumental case is given in examples (153) and (154) where *bancaro* ‘axe’ (153) and *banduk* ‘gun’ (154) are the object arguments of the transitive clause marked by *-le*.

(153) *us-le bancaraa-le rukh-Ø Dhaal-yo*
 3SG-ERG axe-INS tree-ABS fell-PST.3SG.M.NH
 ‘He felled the tree with an axe.’

(154) *sikaari-le banduk-le baagh-Ø maar-yo*
 hunter-ERG gun-INS tiger-ABS kill-PST.3SG.M.NH
 ‘A hunter killed a tiger with a gun.’

f. Comitative

Comitative (a.k.a. Sociative) case is marked either by *-sita* ‘with’ or *-sa~ga* ‘with’, both of which have the same function in Nepali (see also Masica, 1991: 239). The semantic role of an associative is to show the associate of the agent, patient or dative of the event, whose role in the event is similar, but who is not as important (Givon, 2001: 107). The use of the comitative case is illustrated in (155) and (156).

2.2.3.1. The three copulas: identity, locative, and attributive/identity

Three types of copulas constitute non-verbal predicates: *ho* ‘is’, *cha* ‘is’, and *hunu* ‘lit. to become’ (hereafter respectively COP₁, COP₂, and COP₃). Among them, *cha* and *hunu* have their past form *thi-yo* ‘was’ and *bha-yo* ‘became’ respectively. Note that these copulas are also called the auxiliaries (Sharma, 1980) or the ‘be’ verbs in Nepali linguistic literature.

Non-verbal functions

The copulas *ho* ‘is’, *cha* ‘is’, and *hunu* ‘to become’ can have different functions in the non-verbal predication, including identity, proper inclusion, attributive, locative, and existential among others.

a. Identity

The identity type expresses certain property concept or image of an object to make it (the object) ‘stand out’ as mentioned by Stassen (1997: 101). The copula *ho* denotes affirmative statement, and *hoi-na* denotes negative statement, as in (159) and (160).

(159) *yo khoTaang ho*
 DEM.PROX Khotang COP₁.NPST.3SG.NH
 ‘This is Khotang.’

(160) *yo pokharaa hai-na*
 DEM.PROX Pokhara COP₁.NPST.3SG.NH-NEG
 ‘This is not Pokhara.’

As for *thiyo* ‘was’ and *bhayo* ‘became’, they are in the past form, as in (161) and (162), with the locative arguments Khotang, Pokhara, Dharhara, and Four Number Ward and Three Number Ward. The difference between *thiyo* ‘was’ and *bhayo* ‘became’ is that, the former has a locative use and further indicates that, something was there in the past but it is not now anymore, whereas the latter indicates that the state changed into something different.

- (161) *yo* *Thaa~maa* *dharharaa* *thi-yo*
 DEM.PROX place-LOC Dharhara COP₂.PST-3SG.M.NH
tara *ahile* *yasto* *bha-yo*
 but now like.this COP₃.PST-3SG.M.NH
 ‘There was a Dharhara Tower in this place but now it has been in this condition.’

- (162) *yo* *pahilaa* *caar* *nambar* *waDaa* *thi-yo*
 DEM.PROX before Four Number Ward COP₂.PST-3SG.M.NH
tara *ahile* *tin* *nambar* *waDaa* *bha-yo*
 but now Three Number Ward COP₃.PST-3SG.M.NH
 ‘Earlier, it was the Ward Number Four now it has become the Ward Number Three.’

b. Proper inclusion

Proper inclusion is concerned with the relation of membership of some entities in a category of other entities. In the following examples (163) through (165), *gaayak* ‘singer’, *widyarthi* ‘student’ and *DaakTar* ‘doctor’ are the class membership (a category of entities) of the other entities Ram, Gobinda and Suman respectively.

- (163) *raam ra syaam gaayak hun*
 Ram and Shyam singer COP₁.NPST.3PL
 ‘Ram and Shyam are singers.’

- (164) *gobinda widyarthi ho*
 Gobinda student COP₁.NPST.3SG.M.NH
 ‘Gobinda is a student.’

- (165) *suman DaakTar hai-na*
 Suman doctor COP₁.NPST.3SG.NH-NEG
 ‘Suman is not a doctor.’

Similarly, in (166) and (167), the entity *kalam* ‘pen’ (category membership) is definitized or specified in relation to the other entity Ram.

(166) *yo kalam raam-ko ho*
 DEM.PROX pen Ram-GEN COP₁.NPST.3SG.M.NH
 ‘This pen is Ram’s.’

(167) *yo kalam ram-ko hai-na*
 DEM.PROX pen Ram-GEN COP₁.NPST.3SG.M.NH-NEG
 ‘This pen is not Ram’s.’

What is important to note here is that in the examples (163) through (167), there is no change in the category membership but the category membership changes in the case of examples (168) and (169). In these examples, the two copulas *thiyo* ‘was’ and *bhayo* ‘became’ occur with *biu* ‘seed’ and *rukhi* ‘tree’, as in (168) and *baachi* ‘female calf’ and *gaai* ‘cow’ as in (169).

(168) *yo pahilaa biu thi-yo*
 DEM.PROX before seed COP₂-PST-3SG.M.NH
tara ahile rukhi bha-yo
 but now tree COP₃-PST-3SG.M.NH
 ‘It was a seed before but now it has become a tree.’

(169) *yo pahilaa baachi thi-yo*
 DEM.PROX before female.calf COP₂-PST-3SG.M.NH
tara ahile gaai bha-yo
 but now cow COP₃-PST-3SG.M.NH
 ‘It was a calf before but it has become a cow now.’

Hence, the change from *biu* ‘seed’ to *rukhi* ‘tree’ and *baachi* ‘female calf’ to *gaai* ‘cow’ is a change of the membership category due to the fact that *biu* ‘seed’ and *baachi* ‘calf’ have been changed into a tree and a cow respectively.

c. Attributive

The attributive type of non-verbal predicate concerns the property of the subject. The copulas *cha* ‘is’, *ho* ‘is’, *thiyo* ‘was’, and *bhayo* ‘became’ occur with the attributive predicate. The attributive property that is denoted by *raamro* ‘good’ in (170) shows that beauty is the permanent property of the mountain. Unlike (170), *khusi* ‘happy’ in (171) and *saphaa* ‘clean’ in (172) denote the temporary property of

the subject. The former (*khusi* ‘happy’) indicates the state of the mind at the moment of speaking and the latter (172) denotes the state of being *saphaa* ‘clean’ at some point in the past but not now. Moreover, *khusi* ‘happy’ or *raamro* ‘beautiful’ can be visualized at the present moment.

(170) *himaal raamro cha*
 mountain beautiful COP₂.NPST.3SG.M.H
 ‘The mountain is beautiful.’

(171) *aaaja ma khusi chai-na*
 today 1SG happy COP₂.NPST.1SG-NEG
 ‘I am not happy today.’

(172) *nadi saphaa thi-yo*
 river clean COP₂.PST-PST.3SG.M.NH
 ‘The river was clean.’

Examples (170) through (172) refer to the present moment and are also visible but it is not the case of *saandarbhik* ‘relevant’ in (173) and *Thik* ‘correct’ in (174) followed by the copula *ho* ‘is’ for positive (173) and (174) for negative respectively.

(173) *us-le bhan-eko kuraa saandarbhik ho*
 3SG-ERG say-PFV talk relevant COP₁.NPST.3SG.NH
 ‘The thing he said is relevant.’

(174) *us-le bhan-eko kuraa Thik hai-na*
 3SG-ERG say-PFV talk correct COP₁.NPST.3SG.NH-NEG
 ‘The thing he said is not correct.’

d. Locative

In the locative non-verbal predicate, the location of the subject is conveyed by the adverbial followed by the locative case marker *-maa* ‘LOC’. In the examples (175) and (176), *Tibhi* ‘TV’ and *gaai* ‘cow’ exemplify the referential and the definite use of the locative.

(175) *Tibhi haam-ro kachyaa-maa cha*
 television 1.PL-GEN class-LOC COP₂.NPST.3SG.M.NH
 ‘The television is in our class.’

(176) *gaai goTh-maa chai-na*
 cow cow.shed-LOC COP₂.NPST.3SG.M.NH-NEG
 The cow is not in the cow-shed.’

e. Existential

This type of non-verbal predicate introduces the existence of the member of the category. For example, the existence of the television in the classroom as in (177) or an ox in the cow-shed as in (178) show that both entities are referential as they are in the affirmative statement.

(177) *haamro kachyaa-maa Tibhi cha*
 our class-LOC television COP₂.NPST.3SG.M.NH
 ‘There is a television in our class.’

(178) *goTh-maa goru cha*
 cow.shed-LOC ox COP₂.NPST.3SG.M.NH
 ‘There is an ox in the cow-shed.’

However, this is not the case in (179) and (180) because there is no member of the category like ‘computer’ or ‘glass’.

(179) *koThaa-maa kampyuTar chai-na*
 room-LOC computer COP₂.NPST.3SG.M.NH-NEG
 ‘There is no computer in the room.’

(180) *Tebal-maa gilaas thie-na*
 table-LOC glass COP₂.PST-NEG
 ‘There was no glass on the table.’

f. Possession

There are two types of possession: physical possession and ownership. When the copula *cha* ‘is’ is used, the NP in the subject position is followed by the case marker *-sa~ga* ‘with’ between the possessor and the possessed, as in (181) and (182).

- (181) *u-sa~ga kalam cha*
 3SG-COM pen COP₂.EXIST.3SG.M.NH
 ‘He has a pen.’

- (182) *us-ko kalam hai-na*
 3SG-GEN pen COP₂.NPST-NEG
 ‘He has no pen.’

What (181) shows is that ‘He’ possesses the pen but he may not own it. In (182), maybe he owns the pen but it may not be his own. Therefore, in (181), it shows the physical possession but does not necessarily mean he owns it right now. Example (183) shows that ‘He’ had the pen but he does not have it now and does not own it. In the example (184), due to the lexical semantics of the word *sampatti* ‘property’, it denotes the ownership reading and shows that ‘He’ owns none. Finally, the situation depicted in (185) can be explained as follows: ‘He’ did not possess any property in the past but he might own some now.

- (183) *u-sa~ga kalam thi-yo*
 3SG-COM pen COP₂.PST-3SG.M.NH
 ‘He had a pen.’

- (184) *u-sa~ga sampatti chai-na*
 3SG-COM property COP₂.NPST-NEG
 ‘He has no property.’

- (185) *u-sa~ga sampatti thie-na*
 3SG-COM property COP₂.PST-NEG
 ‘He had no property.’

Table 19 is a summary of non-verbal predicates. The ones in the right correspond to their respective negatives.

Type of predicate	Corresponding structure	Corresponding structure in negative
Identity	[NP NP <i>ho</i>] [NP NP <i>thi-yo</i>] [NP NP <i>bha-yo</i>]	[NP NP <i>haina</i>] [NP NP <i>thie-na</i>] [NP NP <i>bhae-na</i>]
Proper inclusion	[NP NP <i>ho</i>] [NP NP <i>thi-yo</i>] [NP NP <i>bha-yo</i>]	[NP NP <i>hai-na</i>] [NP NP <i>thie-na</i>] [NP NP <i>bhae-na</i>]
Attributive	[NP Adj. <i>cha</i>] [NP Adj. <i>ho</i>] [NP Adj. <i>thi-yo</i>] [NP Adj. <i>bha-yo</i>]	[NP Adj. <i>chai-na</i>] [NP Adj. <i>hai-na</i>] [NP Adj. <i>thie-na</i>] [NP Adj. <i>bhae-na</i>]
Locative	[NP <i>maa=</i> LOC {ADV/PP} <i>cha</i>] [NP <i>maa=</i> LOC {ADV/PP} <i>thi-yo</i>]	[NP <i>maa=</i> LOC {ADV/PP} <i>chai-na</i>] [NP <i>maa=</i> LOC {ADV/PP} <i>thie-na</i>]
Existential	[NP <i>maa=</i> LOC {ADV/PP} <i>cha</i>] [NP <i>maa=</i> LOC {ADV/PP} <i>thi-yo</i>]	[NP <i>maa=</i> LOC {ADV/PP} <i>chai-na</i>] [NP <i>maa=</i> LOC {ADV/PP} <i>thie-na</i>]
Possession	[NP <i>sa~ga</i> NP <i>cha</i>] [NP <i>sa~ga</i> NP <i>thi-yo</i>]	[NP <i>sa~ga</i> NP <i>chai-na</i>] [NP <i>sa~ga</i> NP <i>thie-na</i>]

Table 19. Non-verbal predicate types in Nepali

2.2.4 Verbal predication: Simple clauses

This Section is devoted to simple clauses. Different constructions are possible to form such clauses in Nepali. The section begins with simple predicates along with the information on word order and the alignment patterns. As the examples presented in this section will show, these predicates inflect for tense and aspect including grammatical information on person, number, gender and honorific status of the subject argument. The second part of this section deals with the auxiliary construction. In this type of construction, copulas, which are the grammatical head, follow the main verb

that is the lexical head. Then, the third part presents the compound verb construction in which two or more than two verbs co-occur, one of which functions as the lexical head and the other as the grammatical head. It also discusses light verb construction, and the process of negation. The final part of this section addresses the process of question construction.

2.2.4.1 Word order and alignment

As in other South Asian languages, in Nepali too the subject (S) typically precedes the object (O) and the verb (V) according to the SOV word order. Examples (186) through (188) below show the word order in the intransitive, transitive and ditransitive constructions respectively with an illustration of a possible permutation of the SOV pattern.

- (186) S V
keTo-Ø *ro-yo*
 boy-NOM weep-PST.3SG.M.NH
 ‘The boy wept/cried.’

- (187) S O V
raaj-le *ciThi-Ø* *lekh-yo* (Givon, 2001: 176)
 Raj-ERG letter-ABS write-PST.3SG.M.NH
 ‘Raj wrote a letter.’

- (188) S IO DO V
daai-le *bhaai-laai* *kalam-Ø* *di-e*
 elder.brother-ERG younger.brother-DAT pen-ABS give-PST.3SG.M.H
 ‘The elder brother gave a pen to the younger brother.’

Some permutation in SOV order is possible in Nepali, as in other Indo-Aryan, Dravidian and Munda languages of South Asia (cf. Subbarao, 2012: 28), without any change in their respective grammatical function. For instance, the object NP can be in the initial position following the OSV order, as in (189) below, the position of the verb being comparatively more fixed than the position of other constituents (see also Givon, 2001: 176; Kachru, 1987/1990: 37-53).

- (189) O S V
ciThi raaj-le lekh-yo
 letter Raj-ERG write-PST.3SG.M.NH
 ‘Raj wrote a letter.’

a. Nominative-Accusative alignment

The nominative that refers to the subject of the intransitive or the transitive clause is an unmarked case. Following Masica (1991),

“The Nominative (or Direct - as contrasted with Oblique) would accordingly be the unmarked case - except for the fact that in some forms of NIA it too is marked (with an *-e*: in East Bengali dialects a legacy of Magadhi *-ake* < OIA *-akas*” (Masica, 1991: 238).

It is also called the direct case (Bandhu, 2052 VS (1995 AD); Pokharel, 2054 (1997 AD); Choudhary, 2014: 8-16). In (190) and (191), *keTo* ‘boy’ and *haami* ‘we’ are in the nominative case with intransitive and transitive constructions respectively.

- (190) *keTo-∅ naac-yo*
 boy-NOM dance-PST.3SG.M.NH
 ‘The boy danced.’

- (191) *haami-∅ kitaab-∅ paDh-chau~*
 we-NOM book-ACC read-COP₂.NPST.1PL
 ‘We read a book.’

The accusative case on the other hand refers to the construction in which the direct object gets either marked or not. In Nepali, inanimate entities in the direct object or accusative case slot are not marked (cf. § 2.2.2.2 b.), as in (192) and (193).

- (192) *timi-∅ iskul-maa bhalibal-∅ khel-cha-u*
 2SG.H-NOM school-LOC volleyball-ACC play-COP₂.NPST-2SG.H
 ‘You play volleyball in school.’

- (193) *haami-∅ kitaab-∅ paDh-cha-u~*
 we-NOM book.ACC read-COP₂.NPST.1PL
 ‘We read a/the book.’

But if the object of a clause is a pronoun, it must be marked by *-laai* as in (194).

- (194) *ma-∅ us-laai raamrari cin-chu*
 1SG-NOM 3SG-DAT well know-COP₂.NPST.1SG
 ‘I know him well.’

The use of this marker with respect to animate (human and non-human), depends on context. Note that in Nepali, the dative (*sampradaan*) and accusative (*karma*) cases are marked by the same case marker *-laai*, and sometimes even with *-kana* (see also Bandhu, 2052 VS (1995 AD)). Examples in (192) and (193) show that the indexation system of the verb is with the respective subjects. Therefore, syntactically Nepali shows the nominative-accusative alignment.

b. Ergative-Absolutive alignment

In the ergative-absolutive alignment, the S argument of the intransitive clause and the A argument of the transitive clause are treated in the same manner but P is treated differently. The notions A and P denote more agent-like and more-patient like entities respectively (Comrie, 1989; Payne, 1997; Pokharel, 2054, VS (1997 AD); Dryer, 2005: 330-331 (cf. Dixon, 1994)). Ergative-absolutive alignment can be illustrated by examples (195) and (196). In (195) *gaai* ‘cow’ is the subject or the S argument of the intransitive clause but in (196) it is the object or the P argument of the transitive clause. In both of these examples *gaai* ‘cow’ is unmarked but the subject A of the transitive clause is marked with *-le*. Based on their unmarked and marked characteristics, following grouping such as S=P≠A can be made, where S and P are in one axis and A groups differently in another axis (see also § 2.2.2.2 a). Therefore, morphologically, Nepali exhibits the ergative-absolutive type of alignment (see also Abadie, 1974; Li, 2007).

- (195) S V
gaai-∅ haraa-yo
 cow-NOM lose-PST.3SG.NH.M
 ‘The cow got lost.’

- (196) A P V
goThaalaa-le gaai-ø haraa-yo
 cowherd-ERG cow-ABS lose-PST.3SG.NH.M
 ‘The cowherd lost the cow’.

2.2.4.2 Verb and the TAM system

Nepali is an inflectional language. The portmanteau suffixes in the verb slot bear several types of grammatical information such as tense, aspect, and modality, and person, gender, number and honorific status of the subject argument.

a. Past perfective

The past perfective is used to indicate that the event is complete and that the consequence of the event has already occurred. Depending on 1st, 2nd and 3rd person anaphoric pronouns, there are different forms to express past perfective such as *-e~*, *-yau*, *-is*, and *-yo*. Table 20 shows these forms.

SAPS	1 st person	SG	<i>-e~</i>
	pronouns	PL	<i>-yau~</i>
		2 nd person	SG (Low-grade H)
	pronouns	SG (Mid-grade H)	<i>-yau</i>
High-grade H		<i>-yo</i>	
3rd person anaphoric pronouns			
SG	M/NH	<i>-yo</i>	
	F/NH	<i>-i</i>	
	F/H	<i>-in</i>	
H/PL		<i>-e</i>	

Table 20. Past perfective forms in SAPS and 3rd person anaphoric pronouns

In the anaphoric third person pronoun, past perfective is expressed by *-yo* for the singular and masculine, as in (197), and by *-i* for the singular and feminine, as in (198). As mentioned earlier, portmanteau suffixes in (197) and (198) express past tense, perfective aspect, and declarative mood. In addition, they also express the person, number, gender and honorific status of the subject argument. Note, however,

that for consistency and uniformity, I have treated them all as past tenses while glossing by morpheme in respective examples throughout this Thesis.

- (197) *saalik-le dipak-laai kathaa-ø sun-aa-yo*
 Shalik-ERG Dipak-DAT story-ABS listen-CAUS-PST.3SG.M.NH
 ‘Shalik told a story to Dipak.’
 (Lit. ‘Shalik caused Dipak to listen to a story.’)

- (198) *us-le pustak-ø paDh-i*
 3SG-ERG book-ABS read-PST.3SG.F.NH
 ‘She read a book.’

b. Past imperfective

The past imperfective is marked by *-th* followed by the tense marker as that of past perfective. It expresses a habitual event, which took place somewhere in the past and that does not occur now. Examples (199) and (200) below show two events that took place in the past and that are not any longer in the present: teaching in (199) and playing in (200).

- (199) *us-le widyaalaya-maa paDh-aa~-th-yo*
 3SG-ERG school-LOC read-CAUS-HABIT-PST.3SG.M.NH
 ‘He used to teach in a school.’

- (200) *un-le maadal-ø baj-aa~-th-e*
 3SG.H-ERG Madal-ABS play-CAUS-HABIT-PST.3SG.M.H
 ‘He used to play the Madal.’

c. Imperatives

Imperatives are used with the speech act participants (2nd person pronouns) with the basic form of the verbs. Because of the complexity in the honorific system, imperative forms also differ accordingly, as in (201) and (202).

- (201) *ta~ widyaalaya jaa*
 2SG.NH school go.IMP.NH
 ‘(You) go to school.’

In example (201), the verb *jaa* ‘go’ is in an imperative form used with the speech act participant (2nd person pronoun) *ta~* ‘you’ in low grade honorific status. It can also be constructed without the subject, as is the case in (202).

(202) *widyaalaya jaa*
 school go.IMP.NH
 ‘Go to school.’

Similarly, in examples (203) and (204), the basic form of the verb *jaa* ‘go’ is inflected to fit into the honorific hierarchy for mid grade (*jaa-u* ‘go’) and high grade (*jaa-nus/jaa-nu-hos* ‘go’) respectively.

(203) *timi widyaalaya jaa-u*
 2SG.H school go-IMP.H
 ‘(You) go to school.’

(204) *tapaai~ widyaalaya jaa-nus*
 2SG.H school go-IMP.H
 ‘(You) go to school.’

With respect to the high grade honorific, *jaa-nus* ‘go’ can also be substituted by *jaa-nu-hos* ‘go’. The substitution, however, does not bring any change in meaning and level of honorificity, as presented in (205).

(205) *tapaai~ widyaalaya jaa-nu-hos*
 2SG.H school go-GER-H
 ‘(You) go to school.’

2.2.4.3 Auxiliary constructions

Copular auxiliaries

As illustrated in non-verbal predication, there are three copulas in Nepali. The copulas *cha* ‘is’ *hunu* ‘to become’ and *ho* ‘is’ can be used in the copular auxiliary construction (see also § 2.2.3). As in other SOV languages of South Asia, in Nepali too auxiliaries in the finite form follow the main verb in the non-finite form. Some possible copular construction types are presented below.

- (210) *us-le* *dherai* *Thaau~maa* *kaaryapatra*
 3SG-ERG many place-LOC paper
prastut *gar-eko* *cha*
 presentation do-PFV COP₂.NPST.3SG.M.NH
 ‘He has presented papers in many places.’

- (211) *baakhraa-le* *baagh-laai* *euTaa*
 goat-ERG tiger-DAT one
prasna *sodh-eko* *thi-yo*
 question ask-PFV COP₂.PST-PST.3SG.M.NH
 ‘The goat had asked a question to the tiger.’ [Based on the folk literature]

d. Future

To show some events that will take place sometime after the moment of speaking or in the future, *-ne* is suffixed to the verb. It is then followed by the copula. Examples showing the use of the future marker are given below in (212) and (213).

- (212) *u-Ø* *pheri* *aa-u-ne-cha*
 3SG-NOM again come-PROS-COP₂.NPST.3SG.NH
 ‘He will come again.’

- (213) *raam-Ø* *caudha* *barsa-samma* *wan-maa* *bas-ne-chan*
 Ram-NOM fourteen year-until forest-LOC sit-PROS-COP₂.NPST.3SG.H
 ‘Ram will live in the forest for 14 years.’ [Based on the *Ramayana*]

The events expressed by *aaunu* ‘to come’ and *basnu* literally ‘to sit’ in these examples have not happened yet but they will occur at certain point in the future as indicated by *-ne*.

e. Honorific

The honorific form is expressed by copulas: *-nu-hun-cha* and *nu-bha-yo* for non-past and past respectively. These are preceded by the main verb. This is a high grade honorific used both in 3rd person anaphoric pronouns and speech act participants (2nd person pronoun), as in (214) and (215).

functions as the grammatical head. According to Subbarao and Arora (2009) South Asian languages permit compound verbs where the main verb (V_1) is followed by another verb (V_2), which imparts aspectual meaning. The second verb (V_2) loses its original meaning due to the process of grammaticalization (Subbarao and Arora, 2009). Thus, the one in the grammatical head undergoes the delexicalization process (see also Masica, 1991: 327; Bandhu, 2052 VS (1995 AD): 171; Pokharel, 2054 VS (1997 AD): 53) or undergoes semantic “bleaching” (DeLancey, 1991). Note that there can be more than two verbs in the construction but they express a single event (Pokharel, 1999: 198, 202; 2054 VS (1997 AD): 47-52).

There are certain participles marked by morphemes such as *-i*, *-dai*, *-nu*, and *-ne* which are used in the compound verb construction. In general, a verb in V_1 position is followed by any of the participles in the process of compounding, as shown in Table 21.

Type	Absolutive	Durative	Gerundive	Infinitive	Prospective
Participle	<i>-i</i>	<i>-dai</i>	<i>-nu</i>	<i>-na</i>	<i>-ne</i>

Table 21. Types of participles involved in compound verb construction
(Source: Pokharel, 1999: 190)

These participles can also occur with other verbs in the series in addition to V_1 or the main verb. It depends on the particular participle occurring with a particular verb. Among the five types of participles, the most productive is the absolutive *-i* type (Sharma, 1980: 91, 99; Pokharel, 2054 VS (1997 AD)), which is also known as an auxiliary linker (cf. Genetti, 1994; § 2.2.7). Verbs such as *aaunu* ‘to come’, *chaadnu* ‘to leave’, ‘to give up’, *dinu* ‘to give’, *haalnu* ‘to put’, *hi~Dnu* ‘to walk’, *jaanu* ‘to go’, *pugnu* ‘to reach’, *raakhnu* ‘to put’, and *laagnu* ‘lit. to stick’ or ‘to feel’ among others can independently function as main verbs, as is illustrated in (216) by the verb *pugnu* ‘to reach’.

- (216) a. *u-∅* *kaaThmaanDu* *pug-yo* As a main verb
 3SG-NOM Kathmandu **reach**-PST.3SG.M.NH
 ‘He reached Kathmandu.’
- b. *u-∅* *kaathmaanDu* *aa-i-pug-yo* As an auxiliary verb
 3SG-NOM Kathmandu come-ABS-**reach**-PST.3SG. M.NH
 ‘He came to Kathmandu.’

Moreover, when verbs (e.g., *dinu* ‘to give’) are used as main verbs, their valency also increases and they take three arguments: the subject, the direct object and the indirect object arguments. Verbs which I mentioned above can be combined along with other main verbs in the compound verb construction where they lose their lexical meaning and provide some more information (for example, certainty, volition, and completion) to the whole event that I will discuss in turn.

a. Certainty

The verb *haalnu* ‘to put’ is a verb of caused Motion when it is used independently. In the compound verb construction, it follows the main verb V_1 along with the absolutive participle *-i* and loses its primary meaning ‘to put’, as in (217) and (218).

(217) *prahari-le cor pakD-i-haal-e*
 police-ERG thief catch-ABS-put-PST.3PL
 ‘The police caught the thief.’

(218) *sannaani-le kaam sak-i-haal-in*
 Sannani-ERG work finish-ABS-put-PST.3SG.F.H
 ‘Sannani finished her work.’

As explained previously, the main verbs *pakDan* ‘to catch’ and *saknu* ‘to finish’ are in the non-finite forms followed by the verb *haalnu* ‘to put’ in the finite form. In these examples *haalnu* ‘to put’ provides some kind of certainty to the main verb *pakDanu* ‘to catch’ (217) and *saknu* ‘to finish’ (218) in addition to the grammatical information it carries.

b. Completive

Examples (219) and (220) consist of *pugnu* ‘to reach’ and *aaunu* ‘to come’, respectively. Both verbs are followed by the absolutive marker *-i* and auxiliary *-sak* ‘finish’. In these constructions *sak* ‘finish’ conveys some information of completion in addition to grammatical information.

(219) *kelam-Ø annapurna pug-i-sak-e*
 Kellum-NOM Annapurna reach-ABS-finish-PST.3SG.H
 ‘Kellum reached Mt. Annapurna.’

(220) *haami-Ø sagarmaathaa aadhaar siwir aa-i-sak-yau~*
 1PL-NOM Sagarmatha base camp come-ABS-finish-1PL
 ‘We arrived at the Sagarmatha Base Camp.’

c. Benefactive

The verb *dinu* ‘to give’ is a ditransitive verb when used independently but in the compound verb construction, it can express the benefactive/malefactive meaning, as in (221).

(221) Pokharel (2054 VS (1997 AD: 47))
mai-le buDhi-laai ciThi-Ø lekh-i-di-e~
 I-ERG old.woman-DAT letter-ABS write-ABS-give-PST.1SG
 ‘I wrote a letter for an old woman.’

As we can see in the above example, when the verb *dinu* ‘to give’ is used with *lekhnu* ‘to write’ and preceded by the absolutive marker *-i-*, *lekh-i-di-e~* ‘I wrote’, *dinu* loses its original meaning i.e. ‘to give’ and gets delexicalized to express the single event ‘writing’. Here, one who writes the letter does not benefit himself/herself but it’s the woman who gets benefit. Similarly, in (222), the younger brother gets benefit from the teaching of the elder brother.

(222) *daai-le bhaai-laai euTaa*
 elder.brother-ERG younger.brother-DAT one
paaTh-Ø paDh-aa-i-di-yo
 lesson-ABS read-CAUS-ABS-give-PST.3SG.M.NH
 ‘The elder brother taught a lesson to the younger brother.’

Unlike (221) and (222), the example (223) shows the malefactive use of the verb *dinu* ‘to give’ (For a detailed discussion on benefactive constructions in Nepali, see Pokharel, 2000: 149-179; see also Sharma, 1980).

- (223) *daai-le* *bhaai-ko*
 elder.brother-ERG younger.brother-GEN
khaanaa-Ø *khaa-i-di-yo*
 food-ABS eat-ABS-give-PST.3SG.M.NH
 ‘The elder brother ate the food of the younger brother.’

d. Volition

The verb *chaaDnu* literally means ‘to leave’ or ‘to abandon’ but in (224) and (225) below it expresses some sort of volition. In this construction, the absolutive marker *-i* is obligatory to occur with *-chaaDnu* ‘to leave’ and *jaanu* ‘to go’ in order to convey all the details of the event.

- (224) *us-le* *aaphno* *pratigyaa* *puraa* *gar-i-chaaD-yo*
 3SG-ERG self-GEN promise complete do-ABS-leave-PST.3SG.M.NH
 ‘He did what he promised.’

- (225) *u-Ø* *tyahaa~* *ga-i-chaaD-yo*
 3SG-NOM there go-ABS-leave-PST.3SG.M.NH
 ‘He did go there.’

In addition to some verbs discussed in the preceding paragraphs, there are some other verbs, which can be used in the compound verb construction. These include *aa~Tnu* ‘to dear’, *baksanu* ‘to grant’, *basnu* ‘to sit’, *garnu* ‘to do’, *khajnu* ‘to search’, *milnu* ‘to get’, to come to reconciliation’, *paaunu* ‘to get’, *parnu* ‘to fall’, *rahanu* ‘to remain’, *thaalnu* ‘to begin’ *Topalnu* ‘to pretend’. All these verbs can independently function as the main verbs except *Topalnu* ‘to pretend’ (Sharma, 1980; Pokharel, 1999).

Examples (221) through (225) illustrated above contain the absolutive *-i* marker. As remarked by Pokharel (1999), this is the most productive morphosyntactic device in the compound verb construction. Other markers such as *-dai* can be employed in compound verb construction as durative or progressive (cf. Pokharel, 1999), as in example (226) below. Similarly, the use of the gerundive type is presented in (227).

(226) *timi-ø ke gar-dai chau*
 2SG-NOM what do-DUR COP₂.NPST.2SG.H
 ‘What are you doing?’

(227) *mero daaju saahitya-maa*
 1SG.GEN elder.brother literature-LOC
ruci raakh-nu-hun-cha
 interest keep-GER-COP₃-COP₂.NPST.3SG.M.NH
 ‘My elder brother keeps interest in literature.’

The infinitive participle *-na* can be used in the compound verb construction together with other verb that can imply some kind of possibility, as in (228). Note that in complex construction the infinitive marker *-na* can express the purpose (see also § 2.2.5.2 b.). Finally, the participle marker *-ne* (which also indicates future tense marker) is used in the prospective compound verb construction, as illustrated in (229).

(228) *aaaja paani par-na-sak-cha*
 today water fall-INF-finish-COP₂.NPST.3SG.M.NH
 ‘It may rain today.’

(229) *u-Ø nepaal jaa-ne gar cha*
 3SG-NOM Nepal go-PROS do COP₂.NPST.3SG.NH
 ‘He keeps on going to Nepal’

e. Compounding with *-nu*

Compound verb can also be constructed by using *-nu*. In (230), it refers to the 3rd person anaphoric pronouns (high grade honorific) and in (231), it refers to SAP (2nd person pronoun, high grade honorific (cf. § 2.2.5.2 a)).

(230) *uhaa~-le saamaan-Ø raakh-nu-hun-cha-holaa*
 3SG.H-ERG goods-ABS put-GER-COP₃-COP₂-INFR
 ‘Probably he will keep the goods.’

- (231) *tapaai~-ko saathi-le tapaai~-laai upahaar di-nu-hun-cha-holaa*
 2SG.H-GEN friend 2SG.H-DAT gift-ABS give-GER-COP₃-COP₂-INFR
 ‘Probably your friend will give a gift to you.’

In both examples *holaa* ‘probably’/‘maybe’ expresses uncertainty. These examples also show that there can be other auxiliaries between the lexical and grammatical head.

2.2.4.5 Light verb construction

A light verb construction consists of noun+verb, adjective+verb, and indeclinable particle (such as *pachi parnu* ‘to cause to fall behind’) (cf. Bandhu 2052 VS (1995 AD): 168; see also Butt, 2003, 2010). In the following examples, (232) conveys the noun+verb construction, in which *kaam* ‘work’ occurs in the first position and the verb *garnu* ‘to do’ in the second position. In this construction, the semantic load is carried by *kaam* ‘work’ while the grammatical load is carried by *garnu* ‘to do’.

- (232) *us-le hijo dherai kaam gar-yo*
 3SG-ERG yesterday many work do-PST.3SG.M.NH
 ‘He worked a lot yesterday.’

In the same way, the meaning conveyed by (233) illustrates that the agent made the house beautiful by decorating it or by some other means but not by building it. As in (232), the semantic load is conveyed by adjective *raamro* ‘good’ while grammatical load is provided by the verb *banaaunu* ‘to make’.

- (233) *us-le ghar-Ø raamro banaa-yo*
 3SG-ERG house-ABS good make-PST.3SG.M.NH
 ‘He made the house beautiful (by decorating or by other means).’

2.2.4.6 Negatives

In the domain of negation, two systems appear to be at stake: preverbal and postverbal, the two common techniques discussed by Dryer (2007: 106). The preverbal system in Nepali occurs in the imperative and complex clauses in the non-finite verb slot and in some inferential constructions, whereas post verbal normally

occurs in the finite clauses. Examples (234) and (235) illustrate affirmative imperative and a negative imperative construction respectively.

(234) *agenaa-ko najik jaa-u*
 hearth-GEN near go-IMP.H
 ‘Go near the hearth.’

(235) *agenaa-ko najik na-jaau*
 hearth-GEN near NEG-go-IMP-H
 ‘Do not go near the hearth.’

The postverbal negation is shown in the verb slot of the finite clause in (236) for the affirmative construction and its respective negative construction in (237).

(236) *us-le pustak-Ø paDh-yo*
 3SG-ERG book-ABS read-PST.3SG.M.NH
 ‘He read a book.’

(237) *us-le pustak-Ø paDh-e-na*
 3SG.OBL-ERG book-ABS read-PST-NEG
 ‘He did not read a book.’

In addition to these, negation can also be formed on the basis of morphological, lexical and syntactic criteria. Givon (2001) discusses extensively how different languages express negation. In the context of English, one of the criteria is the depth of embedding (syntactic, morphological and lexical) (Givon, 2001: 395). Similar criteria, syntactic, morphological and lexical, are also applicable in Nepali, as examples (238) through (240) show respectively.

(238) *u-Ø khusi chai-na*
 3SG-NOM happy COP₂.NPST.3SG.M.NH-NEG
 ‘He is not happy.’

(239) *u-Ø be-khusi cha*
 3SG-NOM un-happy COP₂.NPST.3SG.M.NH
 ‘He is unhappy.’

- (240) *u-Ø dukhi cha*
 2SG-NOM sad COP2.NPST.3SG.M.NH
 ‘He is sad.’

Note, however, that syntactic negatives are more common in use than morphological and lexical negatives.

2.2.4.7 Question construction

Nepali employs a few strategies in the expression of questions. These include information, polar, and balanced question formation constructions, but information and polar question formation are more common in use. All types of information questions begin with *k* such as *ko* ‘who’, *kun* ‘which’ *kahaa~* ‘where’, *kati* ‘how much’, *ke* ‘what’, *kahile* ‘when’, and *kasari* ‘how’. They normally occur *in situ*, which is also a characteristic feature of Nepali as other South Asian languages (cf. Subbarao, 2012: 29). Moreover, they indicate which person, what thing, which place, and what time, and how. Note also that these are the same forms that function as interrogative pronouns (see also § 2.2.1.5 d). In the following examples, (241) is an affirmative sentence and (242) is the corresponding information question; it contains *ko* ‘who’ occurring *in situ* and functioning as the subject argument of the intransitive clause.

- (241) *raam-Ø haa~s-yo*
 ram-NOM laugh-PST.3SG.M.NH
 ‘Ram laughed.’

- (242) *ko-Ø haa~s-yo*
 who-NOM laugh-PST.3SG.M.NH
 ‘Who laughed?’

The same form *ko* ‘who’ can also be used in the object position, as in (243), where *ko* ‘who’ is in the oblique form and is marked by the case marker *-laai*.

- (243) *us-le kitaab-Ø kas-laai di-yo*
 2SG-ERG book-ABS who-DAT PST.3SG.M.NH
 ‘Who did he give the book?’

The second type of question is the polar ‘yes’/‘no’ question. The simplest way of constructing this question is using a rising intonation in speech and an interrogative question symbol (?) in the written domain as in (244). It can also be formed by using *ke* ‘what’ at the beginning of the respective construction, as is illustrated by (245); note, however, that examples such as (244) are more natural than (245).

(244) *timi-le kitaab-Ø paThaa-yau ?*
 2SG.H-ERG book-ABS send-PST.2SG.H Q
 ‘Did you send the book?’

(245) *ke timi-le kitaab-Ø paThaa-yau ?*
 Q 2SG.H-ERG book-ABS send Q
 ‘Did you send the book?’

A third type, also known as balanced question, can be constructed using *ki* ‘or’. Functionally, balanced question also leads to the answer ‘yes’ or ‘no’, as in the polar question. The difference, however, lies in the construction. It uses a separate form *ki*, the discourse particle conveying approximate meaning of ‘or’, in between the verb or the noun phrase along with the interrogative mark (?) at the end of the clause or phrase in the written form and the intonation in the spoken form as in (246) and (247).

(246) *timi-Ø curoT khaan-chau ki khaan-na-u ?*
 2SG.H-NOM cigarette eat-COP₂.2SG.H or eat-NEG-2SG.H Q
 ‘Do you smoke cigarette or not?’

(247) *khaan-cha-u ki khaan-na-u ?*
 eat-COP₂-2SG.H DPRT eat-NEG-2SG.H Q
 ‘Do you eat or not?’

2.2.5 Complex clauses

A complex clause may include the complement taking, adverbial, or relative clause or the non-finite verb forms as the dependent clause, and an independent clause. I will briefly discuss the types of complex clause in the following Sections.

2.2.5.1 Complement clauses

A complement clause functions as an argument of a higher clause. The argument can be the subject argument or the object argument (Givon, 2001: 150; Dryer, 2007: 93; Noonan, 2007: 53). Syntactically, complement clauses integrate clauses ('clause union') and semantically, they integrate events ('semantic bonds') (Givon, 2001: 39)). In Nepali, there are several complement taking verbs like *caahanu* 'to want', *dekhnu* 'to see', *jaannu* 'to know' and *lagaunu* 'cause to do' among others. As shown in Table 22, these are often verbs of perception, cognition and utterance (PCU).

Complement taking verbs		
Perception	<i>hernu</i> 'to look'	<i>dekhnu</i> 'to see'
Cognition	<i>jaannu</i> 'to know'	<i>thaahaa paaunu</i> 'to know'
Utterance	<i>bhannu</i> 'to say'	<i>sodhnu</i> 'to ask'
Manipulation	<i>lagaunu</i> 'to cause to do'	<i>ahraunu</i> 'to cause to do'
TAM/Modality	<i>saknu</i> 'to finish'	<i>caahanu</i> 'to want'

Table 22. Complement taking verbs in Nepali

Each of these verbs can have different syntactic behaviours, as examples (248) and (249) below show.

(248) Genetti (1994: 22)

<i>u-Ø</i>	<i>ghanTau~-samma</i>	<i>saathi-haru-sa~ga</i>
3SG-NOM	hour-until	friends-PL-COM
<i>khel-na</i>	<i>na-ga-era</i>	<i>samaya</i>
play-INF	NEG-go-CP	time
<i>bitaau-na</i>	<i>caahan-th-yo</i>	
pass-INF	want -HABIT-PST-3SG-M.NH	

'He would want to spend time by sitting all alone for hours without going to play with his friends.'

(249) *mai-le baagh karaa-eko sun-e~*

1SG-ERG tiger roar-PFV **hear**-PST-1SG

'I heard the tiger roar.'

In (248), *caahanu* ‘to want’ takes its complement *bitaunu* ‘to pass’. Likewise, in (249), *sunnu* ‘to hear’ takes its complement *karaunu* ‘to roar’.

2.2.5.2 Non-finite verb forms

This Section discusses the the non-finite verb forms comprising gerundive, and purposive clauses.

a. Gerundive *-nu*

The gerundive construction consists of a dependent and an independent clause. The morpheme *-nu* marks the gerundive. Some scholars such as Genetti (1994) treat *-nu* as an infinitizer but I am following Pokharel (1999) and glossing it as a gerundive. Examples showing the use of gerundive are illustrated in (250) and (251).

- (250) *timi-sa~ga satya kuraa bol-nu*
 2SG.H-COM true talk speak-GER
mero kartabya ho
 1SG.GEN duty COP₁.NPST.3SG.NH
 ‘It’s my duty to speak the truth with you.’

- (251) *des-ko rakshya gar-nu*
 country-GEN defense do-GER
sena-ko kartabya ho
 army duty COP₁.NPST.3SG.NH
 ‘The duty of the army is to safeguard the country.’

This construction can express some kind of obligation or external compulsion (Sharma, 1980: 122). The example (252) below too comprises the gerundive construction *garnuparcha* ‘should do’, which is then followed by the independent clause *aaeko thiyo* ‘had come’.

- (252) *sarkaar-le prastut gar-ne niti*
 government-ERG presentation do-PROS policy
tathaa kaaryakram-maa saamaajik surakchayaa-ko
 and program-LOC social security-GEN
niti pani samaawes gar-nu-par-cha
 policy also inclusion do-GER-fall-
 COP₂.NPST.3SG.M.NH
bhan-ne janataa-ko sujhaab sabai-tira-baaTa
 say-PROS people-GEN suggestion all-toward-ABL
aa-eko thi-yo
 come-PFV COP₂-PST.3SG.M.NH

‘People from every walk of life suggested that the policy and program to be presented by the government should also include the policy of social security of the people.’

Note that *-nu parcha* can also function as an independent clause in simple clause construction, as is the case in (253) below.

- (253) *adaalat-le di-eko aades haami-le maan-nu-par-cha*
 court-ERG give-PFV order 1PL-ERG obey-GER-fall-COP₂.NPST.3SG.M.NH
 ‘We should obey the order issued by the court.’

b. Purposive *-na*

Complex clause can be formed by using the purposive marker *-na*, which is added to the verb slot of the grammatically dependent clause, as in (254) and (255). As it is also an infinitizer, I gloss it as an infinitizer (INF) for maintaining consistency.

- (254) *u-Ø nuhaau-na nadi-maa ga-yo*
 3SG-NOM bathe-INF river-LOC go-PST.3SG.M.NH
 ‘He went to the river to take a bath.’

- (255) Sharma (1980: 124)
tirkhaa meTaa-na paani khaa-nu-par-cha
 thirst quench-INF water eat-GER-fall-COP₂.NPST.3SG.M.NH
 ‘One must drink water to quench thirst.’

Note also that in order to express the purpose, a different construction can also be used by means of the morpheme *-kaa laagi* ‘in order to’/‘for’. However, when *-kaa laagi* ‘in order to’/‘for’ is used, it is typically preceded by the morpheme *-na*, as is the case in (256).

- (256) *u-Ø nadi-maa nuhaau-na-kaa-laagi ga-yo*
 3SG-NOM river-LOC bathe-**INF-GEN-for** go-PST.3SG.M.NH
 ‘He went to the river to take a bath.’

2.2.5.3 Adverbial clauses

The adverbial clause includes temporal, and manner types both of which are presented below.

a. Time clauses

i. *-naasaath* ‘as soon as’

The adverbial clause of time can be formed by using two different constructions. First, it can be constructed by using *-naasaath* ‘as soon as’, as in (257). In this example, the adverbial expression *-naasaath* joins the events of ‘coming’ and ‘running away’.

- (257) *prahari aau-naasaath cor-haru bhaag-e*
 police come-**as.soon.as** thief-PL escape-PST.3PL
 ‘As soon as the police came, the thieves ran away.’

Secondly, it can also be constructed by using *-ne bittikai* ‘as soon as’ to convey a similar meaning. Hence, in (258), the adverbial expression of time *-ne bittikai* ‘as soon as’ joins the events of ‘asking’ the question and ‘responding’.

- (258) *sikchya-le prasna sodh-ne-bittikai*
 teacher-ERG question ask-**PROS-immediately**
widyarthi-le uttar di-yo
 student-ERG answer give-PST.3SG.M.NH
 ‘As soon as the teacher asked the question, the student answered (it).’

ii. *na...samma* ‘until’

Literally, this type of clause conveys the meaning of ‘while some thing has not happened’. There are two distinct forms to convey this meaning. The first one is the negative form in the function of a preverbal negation, as discussed earlier in Section 2.2.4.6 and the second form is the postposition *-samma* ‘till’ that occurs after the verb in the dependent clause slot as evidenced by (259) and (260) below.

- | | | | |
|-------|-------------------------------|--|--------------------|
| (259) | <i>jogi-laai</i> | | <i>bhikchyya</i> |
| | ascetic-DAT | | alms |
| | <i>na-die-samma</i> | | <i>ghar-agaadi</i> |
| | NEG-give- till | | house-toward.front |
| | <i>ubhi-i-rah-yo</i> | | |
| | stand-ABS-remain-PST.3SG.M.NH | | |
- ‘The ascetic kept on standing in front of the house until (one) gave him the alms.’

- | | | | | |
|-------|-------------------|-----------------------|---------------------------------|-----------------|
| (260) | <i>haami-le</i> | <i>na-bhane-samma</i> | <i>u-Ø</i> | <i>kahilyai</i> |
| | 1PL-ERG | NEG-say- till | 3SG-NOM | never |
| | <i>ghar-baata</i> | <i>baahira</i> | <i>niska-dai-na-th-yo</i> | |
| | house-ABL | outside | exit-DUR-NEG-HABIT-PST.3SG.M.NH | |
- ‘He never used to come out of home until we told (him) to.’

b. Manner clauses

The non-finite form *-era*, which functions as a conjunctive participle, can also function as an adverbial clause (Masica, 1991: 415; Kachru, 2006: 231-234). This type of construction is an adverbial clause of manner: the conjunctive participle modifies the main verb as in (261) where *hi~Dnu* ‘to walk’ in conjunctive participle form is modifying *aaunu* ‘to come’ in the main clause (see § 2.2.7 for more discussion on conjunctive participle form *-era*).

- | | | | |
|-------|-----------------|--------------|---------------------------------|
| (261) | <i>hi~D-era</i> | <i>aa-e~</i> | (Sigdyal, 2055 VS (1998) : 110) |
| | walk-CP | come-PST.1SG | |
- ‘I came on foot.’
(Lit. ‘Walking I came.’)

2.2.5.4 Relative clauses

Relative clauses are clause-size modifiers embedded in the noun phrase (Givon, 2001: 175). Semantically, a relative clause “codes a state or event, one of whose participants is co-referent with the head noun modified by the clause” (Givon, 2001: 176). In Nepali, there are several strategies displayed in the relative clause construction. These can be marked by using *-eko*, *-ne*, correlative, and headless constructions (see also Genetti, 1994). The first strategy presented here is the *-eko* type. The morpheme *-eko* is a perfective aspect marker. Thus, the modified noun in this type of construction can be either the subject argument, as in (262), or the object argument, as is in (263).

- (262) *Topi lagaa-eko maanche-le hijo*
 cap wear-PFV man-ERG yesterday
baari-maa ghaa~s kaaT-dai thi-yo
 field-LOC grass cut-DUR COP₂-PST.3SG.M.NH
 ‘The man who had put on the cap was cutting grass in the field yesterday.’

- (263) *timi-le lagaa-eko koT ma-laai de-u*
 2SG.H-RG wear-PFV coat 1SG-DAT give-IMP.H
 ‘Give me the coat which you are wearing.’

Secondly, relative clause can be constructed by using *-ne*, the prospective marker (a.k.a. the imperfective participle (Genetti, 1994: 23)). As in the case of the first construction type presented above, relative clauses formed by *-ne* can also modify the noun in the subject argument or the object argument position, as in examples (264) and (265).

- (264) *das paTak sagarmaathaa caDh-ne aangrita-laai*
 ten time Sagarmatha climb-PROS Angrita-DAT
hiu~ cituwaa pani bhan-i-ncha
 snow leopard also say-PASS-COP₂.NPST.3SG.NH
 ‘Angrita who climbed Sagarmatha for ten times is also known as the Snow Leopard.’

- (265) *us-le* *ciyaa* *kaa-na* *prayog*
 3SG.OBL-GEN tea eat-INF use
gar-ne *kap* *phuT-yo*
 do-PROS cup break-PST.3SG.N.NH
 ‘The cup which he used to drink tea broke.’

Another strategy is the relative correlative construction where the modifying clause introduced by relative pronouns such as *jo* ‘who’, *jun* ‘which’/‘who’ or *je* ‘what’, or adverbs such as *jahaa~* ‘where’, *jahile* ‘when’, or *jaba* ‘when’ (cf. Masica 1991: 411) is correlative in its role slot in the main clause. Masica (1991: 411) explains that the correlative is usually identical with the remote demonstrative in the language. This type of construction is one of the typological characteristics of Nepali as is the case in other Indo-Aryan languages (Pokharel, 2054 VS (1997 AD); see also Masica, 1991: 411). In example (266), *jun* ‘which’ refers to an inanimate object modifying *ghar* ‘house’. Note that *jun* can be used with human as well as non-human whereas *jo* ‘who’ can only be used with animate human, as in example (267).

- (266) *jun* *ghar-maa* *bijuli* *cha*
which house-LOC electricity COP₂.NPST.3SG.M.NH
tyo *ghar* *haam-ro* *ho*
 DEM.DIST house 1PL-GEN COP₁.NPST.3SG.M.NH
 ‘The house which has electricity is ours.’

- (267) *jo-sa~ga* *man* *cha*
who-COM truth COP₂.NPST.3SG.M.NH
u-sa~ga *dhan* *chai-na*
 3SG-COM wealth COP₂.NPST.3SG.M.NH-NEG
 ‘One who is kind-hearted, has no wealth/money.’

Examples (268) and (269) below are relative correlative clauses, which function as adverbials of manner and time respectively.

- (268) *timi-le jasari sik-aa-yau us-le*
 2SG-ERG **how** learn-CAUS-PST.2SG.H 3SG.OBL-ERG
tyasari nai sik-yo
like.that EMP learn-PST.3SG.M.NH
 ‘He learnt how you taught him to.’

- (269) *jahile paani par-cha tyahile*
when water fall-COP₂.NP.3SG.M.NH **that.time**
kisaan-haru khet rop-chan
 farmer-PL paddy.field plant-COP₂.NPST.3.PL
 ‘When it rains, farmers plant rice in the paddy field.’

As presented above, in these types of relative clauses, different relative pronouns and adverbs can be used. Table 23 gives the inventory of these forms together with their corresponding interrogative pronouns.

	Person	Person/ Thing	Place	Quantity	Thing	Time	Manner
Relative	<i>jo</i>	<i>jun</i>	<i>jahaa~</i>	<i>jati</i>	<i>je</i>	<i>jahile</i>	<i>jasari</i>
Interrogative	<i>ko</i>	<i>kun</i>	<i>kahaa~</i>	<i>kati</i>	<i>ke</i>	<i>kahile</i>	<i>kasari</i>

Table 23. Relative and interrogative pronouns, and other adverbials

2.2.6 Clause combining

This Section addresses two systems of clause combining processes: coordination and subordination (for further details on coordinating and subordinating conjunctions, see also Sharma, 2071 VS (2014 AD)).

2.2.6.1 Coordinating conjunctions

A wide range of constituents can be connected by coordinating conjunctions in Nepali. This feature is similar to English as explained by Schachter and Shopen (2007: 47). What I mean by wide range is that the conjunctions connect nouns and noun phrases, verbs and verb phrases, clauses and/or sentences of the same type (see also Haspelmath, 2007: 1-51). In Nepali, these conjunctions include *ra* ‘and’, *tara*, ‘but’,

tyaskaaraN ‘therefore’, *na...na* ‘neither...nor’, *ki...ki* ‘either...or’, and *ani* ‘and’ among others.

a. Conjunctive coordination

ra ‘and’ functions as a linker of the two or more entities, which provide equal informative value and show some temporal succession. In the following example (270), the coordinating conjunction *ra* ‘and’ connects two noun phrases *kitaab* ‘book’ and *kaapi* ‘exercise-book’ as well as the verb phrase *kinnu* ‘buy’ in the event of purchasing. The construction without this connector would result in two independent clauses that would read like *uniharule kitaab kine* ‘They bought the book.’ *uniharule kaapi kine* ‘They bought the exercise book’.

- (270) *uni-haru-le kitaab ra kaapi kin-e*
 3-PL-ERG book and exercise.book buy-PST.3PL
 ‘They bought books and exercise books.’

b. Adversative coordination

tara ‘but’ is the adversative coordinator. Its function is similar to the function of *ra* ‘and’ in the sense that both of them can connect nouns and noun phrases, verbs and verb phrases; semantically, however, *tara* ‘but’ functions as an adversative coordination. Moreover, this type of construction is always binary, which means it must contain two coordinands (cf. Haspelmath, 2007: 2). Example (271) below shows the use of the adversative coordination in Nepali.

- (271) *uni-haru-le kitaab kin-e tara kaapi kin-e-nan*
 3-PL-ERG book buy-PST.3PL but exercise.book buy-PST-NEG.3PL
 ‘They bought books but (they) did not buy the exercise books.’

c. Resultative coordination

The main function of this type of conjunction is to connect two events and indicate that the latter has some consequence due to the former. As in the case of conjunctive and adversative coordination, resultative coordination can also combine two noun phrases or verb phrases as in (272) where noun phrases *parisram* ‘hard work’ and *saphal* ‘success’, and verb phrases *garnu* ‘do’ and *hunu* ‘to be’ are connected by the resultative coordinator *tyaskaaraN* ‘therefore’.

- (272) *uni-haru dherai parisram gar-chan tyaskaaraN*
 3H-PL many hard.work do-COP₂.3PL **therefore**
jahile pani saphal hun-chan
 always also success COP₃-COP₂.3PL
 ‘They work very hard. Therefore, they always succeed.’

d. Negative emphatic coordination

As its name suggests, the negative marker *na...na* (lit. ‘no’ or ‘neither’) is used in negative emphatic coordination. Each clause in the construction is preceded by the negative marker as we can see in (273) where two clauses with *banaaunu* ‘to make’ and *bacaaunu* ‘to save’ are connected by this coordinating marker to show that eventually both of these events did not happen.

- (273) *us-le na ghar banaa-yo*
 3SG-ERG **neither** house make-PST.3SG.M.NH
na paisaa nai bacaa-yo
nor money-ABS EMP save-PST.3SG.M.NH
 ‘Neither he built the house nor did he save any money.’

e. Emphatic coordination *ki...ki*

To indicate some choices, alternatives or even condition, Nepali uses the emphatic coordination *ki...ki*. As is the case in the negative emphatic construction, here too the two elements of the emphatic coordination precede the verb clause, as illustrated in (274).

- (274) *ki timi-Ø aa-u ki*
either 2SG.H-NOM come-IMP.H **or**
ma-laai pani lai-jaa-u
 1SG-DAT also take-go-IMP.H
 ‘Come yourself or take me too (with you).’

2.2.6.2 Subordinating conjunctions

Connectors used in the subordinating clauses have different functions such as reason, condition, concessive, and adverbial among others. The characteristic feature

of these constructions is that one of the clauses is a dependent clause whereas the other one is independent.

a. Reason

The subordinating conjunction *kinabhane* ‘because’ expresses reason. In example (275), the reason for *manparaaunu* ‘to like’ is provided by the subordinating conjunction *kinabhane* ‘because’, and further elaborated in the independent clause *uni asal chin* ‘she is good’.

- (275) *sabai-le un-laai manparaau~-chan kinabhane*
 all-ERG 3SG.H-DAT like-COP₂.3PL **because**
uni asal chin
 3SG.H good COP₂.3SG.F.H
 ‘Everyone likes her because she is good.’

b. Time

jahile ‘when’ functions as a temporal adverbial in the relative clause construction. It is also called the indefinite headless relativizer, as in example (276).

- (276) *jahile ga-e pani jaau*
when go-PST also go-IMP.H
 ‘Go whenever you would like to.’

c. Conditional

yadi, ‘if’, *bhane* (lit. ‘said’) and some other means are employed to express condition. Such a construction typically consists of a condition and a conclusion, of which the condition normally precedes the conclusion. This is in line with what Greenberg (1966) has explained,

“The normal order everywhere is for the protasis of conditional constructions to precede the apodosis, that is, for the condition to precede the conclusion”
 (Greenberg, 1966: 83, 84).

The first conditional construction is illustrated by (277). The subordinator *bhane*, (lit. ‘said’) is postposed the verb in the dependent clause (see also Masica, 1991: 418).

(277) Matthews (1984: 107 as cited by Masica, 1991: 418)

<i>roTi</i>	<i>bhae-na</i>	bhane	<i>ma-Ø</i>
bread	COP ₃ -NEG	COND	1SG-NOM
<i>bhaat</i>	<i>nai</i>	<i>khaan-chu</i>	
rice-ACC	EMP	eat-COP ₂ .NPST.1SG	

'If there is no bread, I will just have boiled rice.'

Another possibility to express the same meaning implies preposing the negative marker *na-* with *bhae* which literally means 'did not become', as in (278) below.

(278)	<i>roTi</i>	na-bhae	<i>ma-Ø</i>	<i>bhaat</i>	<i>nai</i>	<i>khan-chu</i>
	bread	NEG-COP ₃ .PST	1SG-NOM	rice	emp	eat-COP ₂ .NPST.1SG

'If there is no bread, I will just have boiled rice.'

Nepali can also express conditional by means of *yadi* 'if,' a subordinating morpheme similar to the construction of English 'if' (Thompson, Longacre, & Hwang, 2007: 256). In this type of construction, *yadi* 'if' precedes the verb in the dependent clause slot, which may again be followed by *bhane* 'if' or by *-maa* 'LOC' as illustrated in (279) and (280) respectively. These instances show that there are different strategies in the construction of conditional clauses in Nepali.

(279)	yadi	<i>haawaa</i>	<i>paani</i>	<i>ra</i>	<i>maaTo</i>
	if	air	water	and	soil
	<i>raamro</i>	<i>bha-yo</i>	<i>bhane</i>	<i>sabai</i>	<i>kisimko</i>
	good	COP ₃ -PST.3SG.M.NH	COND	all	kind-GEN
	<i>kheti</i>	<i>gar-na</i>	<i>sajilo</i>	<i>hun-cha</i>	
	cultivation	do-INF	easy	COP ₃ -COP ₂ .NPST.3SG.M.NH	

'If the climate is favorable and the soil is good, it is easier to cultivate all kinds of crops.'

- (280) *yadi* *haawaa* *paani* *ra* *maaTo*
if air water and soil
raamro *bhae-maa* *sabai* *kisim-ko*
good COP₃.PST-LOC all kind-GEN
kheti *gar-na* *sajilo* *hun-cha*
cultivation do-INF easy COP₃-COP₂.NPST.3SG.M.NH
‘If the climate is favorable and the soil is good, it is easier to cultivate all kinds of crops.’

d. Concessive

Semantically, *taapani* ‘though’/‘although’ shows some sort of concessive function which means that the event, action or state of the past is not directly related to the present outcome or consequence. The concessive use is shown in example (281).

- (281) Pokharel (2054 VS (1997 AD): 188))
huna *ta* *ma* *ga-e~*
though DPRT 1SG go-PST.1SG
taapani *mai-le* *kasai-laai* *bheTi-na*
though 1SG.OBL-ERG who.OBL-DAT meet-NEG
‘Although I went, I did not meet anybody.’

taapani ‘though’/‘although’ can also be preceded by *-e*, which is suffixed in the verb slot of the dependent clause as in (282) and (283).

- (282) *un-le* *cunaab-maa* *dherai* *paisaa* *kharca*
3SG-ERG election-LOC many money expenditure
gar-e **taapani** *cunaab* *jit-na* *sak-e-nan*
do-PST **though** election win-INF can-PST.3SG.M.H-NEG
‘Although he spent a lot of money during the election, he was not elected’.

- (283) *us-le ma-laai katha-ko kitaab di-e*
 3SG-ERG 1SG-DAT story-GEN book-ABS give-PST
taapani mai-le paDh-eko chai-na
though 1SG.OBL-ERG read-PFV COP₂.NPST.3SG.M.NH-NEG
 ‘Although he gave me a story book, I have not read (it) yet.’

Finally, Nepali has also another construction to convey the same meaning with the suffix *-e* attached to the verb which is followed by *-pani* ‘also’), as in (284).

- (284) *us-le ma-laai katha-ko kitaab di-e*
 3SG.OBL-ERG 1SG-DAT story-GEN book-ABS give-PST
pani mai-le paDh-eko chai-na
also 1SG.OBL-ERG read-PFV COP₂.NPST.3SG.M.NH-NEG
 ‘Although he gave me a story book, I have not read (it) yet.’

2.2.7 Clause chaining

This Section deals with the conjunctive participle (CP) form *-era*. While describing this form, I will also address the suffix *-i* that is termed in the literature as an absolutive participle (Masica, 1991) or the auxiliary linker (Genetti, 1994) (cf. § 2.2.5.2)). Both of these CP forms have important syntactic and semantic functions which I will discuss later in Chapters 4 through 6 based on the descriptive and narrative data I collected for the purpose of this Thesis. The suffix *-era/-i* is one of the principal devices of clause chaining construction used in situations, where the coordinating and subordinating conjunctions cannot be used or such conjunctions cannot adequately represent the clause chaining function. As mentioned by Yadav (2001: 269-275), it is “attached to a tenseless verb of a non-finite clause in a sentence.”

The CP form *-era/-i* is also known as the past participle or past active participle which is in the function of a perfective adverbial participle (Masica, 1991: 323) or a converbal construction (Bickel, 1998: 393). According to Grierson (1916: 36), it is formed by adding *-i* to the root of the verb like *khel-i* ‘having played’. The suffixed form *-i* can ‘often’ be followed by *-kana* as in *khel-i-kana* ‘having played’. However, the use of the suffix *-kana* is not as frequent as *-era*.

Furthermore, the oblique or plural form of the past participle can also be suffixed with *ra* ‘and’ as in *khel-e+ra = khel-era* meaning ‘having played’ or *khel-yaa+ra = khel-era* ‘having played’. So, the suffixes: *-i*, *-i-kana*, and *-era* derived from *-e/-yaa* and *ra* are the conjunctive participle forms. Therefore, while talking about conjunctive participle form, I will mainly discuss the use of *-era* and *-i*, which convey the same meaning (cf. Masica, 1991: 326). First, let’s look at the use of the CP form *-i*, illustrated below.

- (285) *us-le saamaan lag-i ghar-maa raakh-yo*
 3SG-ERG goods take.away-CP house-LOC put-PST.3SG.M.NH
 ‘He took the goods away and put (them) at home.’

In example (285), the use of *-i* conjunctive participle form, as a non-finite clause linking device, is in the dependent clause slot followed by the finite clause.

The non-finite forms occur especially in a series of sequential events followed by the finite one. According to Genetti (1994),

“While clause chains linked with this suffix may indicate events with temporal overlap, it is more common for these constructions to indicate sequential actions” (Genetti, 1994: 25).

Nepali allows a minimum of two such sequential events though it is also possible to convey more than two events. Consider the following examples (286) and (287). Example (286) describes the event of putting and going. The event of ‘putting the son on shoulder’ is conveyed in the first clause and the ‘going to pilgrimage’ is conveyed in the second clause which is linked by the CP form *-era*. In example (287), the accomplishment of the program depicted in the first clause and the event of returning expressed in the second clause is linked by the same participial suffix *-era* (see also Pokharel, 1999).

- (286) *us-le choraa-Ø kaa~dh-maa raakh-era*
 3SG-ERG son.OBL-ABS shoulder-LOC put-CP
tirtha gar-na ga-yo
 pilgrimage do-INF go-PST-3SG.M.NH
 ‘Having put (his) son on the shoulder, he went to make a pilgrimage.’

Chapter 3. Methodology

In this chapter, I will present the sources of data and the methodology which I adopted in order to collect and analyze these data. Data collection was based on two different approaches: (a) the elicitation approach based on visual stimulus sets (the ‘Put and Take’ and ‘Trajectoire’ elicitation tools), and (b) the corpus-based approach. The use of the visual stimulus sets allowed me to collect descriptive data and constitute the spoken corpus (a.k.a. the experimental data), and the use of the Nepali National Corpus allowed me to extract narrative data that constitute the written corpus (a.k.a. the naturalistic data). The descriptive data consist of the descriptions (a.k.a. motion descriptions) of short video-clips showing caused Motion and spontaneous Motion respectively. In § 3.1, I will present the structure of the two stimuli sets used, the participants who took part in data collection, and the procedures I followed to collect, transcribe and code the data. In § 3.2, I will present the narrative data that consist of the sentences extracted from the Nepali National Corpus (henceforth NNC). I will also describe the process of extraction, transcription, and the coding of the corpus-based narrative data.

3.1 Stimuli-based approach

This Section deals with the description of the video stimulus sets that I used in collecting descriptive data. First, I will describe the ‘Put and Take’ stimulus set for the caused Motion events along with participants involved in describing the stimuli, and procedures I adopted. Then, I will describe the ‘Trajectoire’ stimulus set for the spontaneous Motion events. After the description of this elicitation tool, I will provide with a detailed information of participants who described these stimuli sets, and procedures which I adopted while working with these stimuli.

3.1.1 The ‘Put and Take’ stimulus set

The ‘Put and Take’ stimuli set was designed by Bowerman *et al.* (2004) at the Max Planck Institute for Psycholinguistics, Nijmegen (the Netherlands) as a part of the PUT project for the cross-linguistic investigation of the placement (i.e. caused Motion) events. The video stimulus set is organized in three versions each of which consists of 63 short clips. Each clip is about six seconds long. The same stimuli are used in each of these versions but they are presented in a different order to minimize the order effect (for further details, see Bowerman *et al.*, 2004 (field manual volume 9, 10-24)). In each of these clips, the Agent performs an activity which might consist of placing an object in a location or removing an object from a location or which might involve both removing and placing. Typically, the placement event is oriented toward the final (Goal) location, as is illustrated in (289), whereas the removal event is oriented away from an initial (Source) location, as is the case in (290). Of the 63 clips, some of them represent complex events, where the object is removed from a location (Source) and placed in a different location (Goal) as in (291) (see Appendix C through E for a detailed list of ‘Put and Take’ video stimulus set).

(289) *ekjaanaa mahilaale rukhko haa~gaamaa rasi raakhin*
ek-janaa mahilaa-le rukh-ko haa~gaa-maa rasi raakh-in
 one-CLF woman-ERG tree-GEN branch-LOC rope put-PST.3SG.M.NH
 ‘A woman hung the rope over the tree branch.’
 (Lit. ‘A woman put the rope over the tree branch.’ [s12, PT 027])

(290) *kasai-le saailensarbaaTa kapaNaa baaira nikaalyo*
kasai-le saailensar-baaTa kapaDaa baahira nikaal-yo
 someone-ERG silencer-ABL cloth outside take.out-PST.3SG.M.NH
 ‘Someone took the cloth out of the car exhaust.’
 (Lit. ‘Someone took out the cloth outside from the car exhaust.’) [s7, PT 117]

(291)	<i>ekjanaa</i>	<i>bektile</i>	<i>Tebalmaathi</i>	<i>bhaeko</i>
	<i>ek-janaa</i>	<i>bekti-le</i>	<i>Tebal-maathi</i>	<i>bha-eko</i>
	one-CLF	person-ERG	table-above	COP ₃ .PST-PFV
	<i>aaphno</i>	<i>jaakeT</i>	<i>nikaalera</i>	<i>lagaae</i>
	<i>aaphno</i>	<i>jaakeT</i>	<i>nikaal-era</i>	<i>lagaa-e</i>
	self.GEN	jacket	take.out-CP	put-PST.3SG.M.H

‘A person took the jacket out of the table and then (he) put it on.’

(Lit. ‘A person took out the jacket, which was on the table and then (he) put it on.’) [s13, PT 033]

The ‘Put and Take’ stimulus set includes a number of important semantic components which contribute to the overall structure of the material. These are the AGENT, the PATH, the FIGURE, the GROUND, the intentionality of the Agent, the Agent’s control over the Figure’s Motion, the Manner of manipulation, and the instrument used to change the location of the Figure, as shown in Table 24. Each of these components was varied in the video-clips in order to investigate which aspects of the event the participants of typologically varied languages are sensitive to when describing the video clips.

Components	Type
Agent	Human
Figure	Animate (head/hand) vs. inanimate (rope, suitcase)
	Solid (book, saucer) vs. liquid (water)
	Granular objects (rice, bean) vs. non-granular (banana, apple)
Ground	Animate (head/tree) vs. inanimate (pocket, recorder case)
	Surface (table/floor) vs. containment (bucket, cup)
	Vertical: (wall, shelf) vs. horizontal (floor, table)
	Tightly fitted Ground (car exhaust, hole in a tree) vs. open Ground: room, table)
	Two dimensional (floor, tree) vs. three dimensional (bowl, cup)
Manner of manipulation	Manual (hand, mouth) vs. with an instrument (tongs)

Agent's control	Have control until the Figure reaches the Ground vs. lose control before the Figure reaches the Ground
Agent's intentionality	Intentional (throw) vs. accidental (drop)
Path	IN, INTO, ON, ONTO, OFF, OUT, OUT OF, OVER, UP, DOWN

Table 24. Components of the 'Put and Take' video stimulus set (Source: Bowerman *et al.*: 2004)

Table 24 shows the types of semantic components displayed in the videos and how they vary in the stimulus set. Figures are animate (head, hand) vs. inanimate (book, pen); solid (cup, stone) vs. liquid (water); granular (rice, bean) vs. non-granular (apple, banana), to mention just a few of them. Grounds are animate (human body parts) vs. inanimate (table, floor), surface (floor, table) vs. containment (bowl, bucket), and vertical (wall, shelf) vs. horizontal (floor, table), among others. Depending on the relation between the Figure and the Ground, the Path is either horizontal (on, in) or vertical (up, down) and might involve a boundary-crossing (into, out of).

Pictures below illustrate the display of some parameters mentioned in Table 24. These are examples of placement (Figure 7 and Figure 8) and removal events (Figure 9 and Figure 10). As we can see on these pictures, apple, liquid, beans, and banana (Figure 7 through Figure 10) represent different types of Figures; plastic bag and pot (Figure 7 and Figure 8), flat surface and table (Figure 9 and Figure 10) represent different types of Ground (i.e. the reference object), the directionality of the Figure's Motion with respect to the Ground such as INTO (Figure 7 and Figure 8), FROM and OFF (Figure 9 and Figure 10) represent different types of Path. All of these events are performed by a human Agent (Figure 7 through Figure 10).



Figure 7. Scene
012_placement event

‘Drop apple into bag’



Figure 8. Scene
020_placement event

‘Pour liquid into container’



Figure 9. Scene
105_removal event

‘Take a handful of beans from flat surface’



Figure 10. Scene
103_removal event

‘Take banana off table with long tongs’

3.1.1.1 Participants

In total, 18 native speakers of Nepali, 10 men and 8 women participated in the description of this stimulus set. The age of the participants ranges from 23 to 54 (the average age being 35.2). Regarding the linguistic profile of speakers, seven of them are monolingual speaking only Nepali, ten of them are bilingual speaking Nepali and English or Nepali and Hindi, and one of them is multilingual speaking Nepali, Awadhi, Kumal (both Awadhi and Kumal belong to Indo-Aryan family) and English. The other participants speak, besides Nepali, one of these languages but are not fluent. The reason for speaking English is due to the fact that participants learnt it formally at school and at the higher level; as for other languages spoken by the participants,

they learnt them due to contact with Nepali or because they grew in situations where they were in contact with other language speakers (e.g., Kumal, Awadhi, Hindi). With respect to education, five of the speakers have received Master's Degree, five of them have completed their Bachelor's Degree, three of them have passed Higher Secondary (Intermediate) Level, four of them have completed the School Level education, and one of them has passed class nine. Information regarding the participants is presented in Table 25.

Speaker	Age	Language	Education
s1	24	Monolingual	BA
s2	30	Bilingual	BBS
s3	25	Bilingual	BBS
s4	48	Bilingual	MA
s5	26	Bilingual	MBS
s6	40	Monolingual	SLC
s7	36	Bilingual	MA
s8	50	Bilingual	Class IX complete
s9	32	Bilingual	MSc
s11	25	Bilingual	HSEB
s12	38	Monolingual	SLC
s13	42	Multilingual	IA
s14	54	Monolingual	SLC
s15	23	Bilingual	PCLN
s16	34	Bilingual	M. Ed.
s17	40	Monolingual	SLC
s18	28	Monolingual	B. Ed.
s19	40	Monolingual	B. Ed.

Table 25. Details of participants in 'Put and Take' corpus (Source: Field study, 2016/2017)

The data were collected in the Parbat and Kathmandu districts, Nepal in spring 2016 and 2017. The two districts where the data collection took place are shown in Figure 11 below.



Figure 11. Map of Nepal

3.1.1.2 Procedures

At the beginning of the session, I explained to each participant the purpose of the study, and gave them general information about the clips. Then, each video was shown to the speaker individually. Participants could watch each video as long as they needed to and respond to the question ‘What did he do?’ or ‘What did she do?’ While asking these questions, low-grade honorific system was used. We may note that the use of the honorific system varies from one speaker to another as we can see from the following examples (292) and (293). It may also vary depending on the event described.

(292) *unle sabji jholaabhitra haalin*
un-le sabji jholaa-bhitra haal-in
 3SG.H-ERG vegetable bag-inside put-PST.3SG.F.H
 ‘She put the vegetable into the bag.’ [s17, PT 015]

(293) *usle rukhko pwaalbaaTa kehi cij nikaalyo*
us-le rukh-ko pwaal-baaTa kehi cij nikaal-yo
 3SG-ERG tree-GEN hole-ABL some thing take.out-PST.3SG.M.NH
 ‘He took something out of the hole of the tree.’
 (Lit. ‘He took out something from the hole of the tree.’ [s4, PT 135])

When describing the video clips, some participants gave two different descriptions for the same video clip. This is shown in examples (294) and (295) produced by the same speaker in response to one video clip.

(294) *usle kyanDal isTyaanDbaaTa kyaanDal jhiki*
us-le kyaanDal isTyaanD-baaTa kyaanDal jhik-i
 3SG-ERG candle stand-ABL candle take.out-PST.3SG.F.NH
 ‘She took the candle out of the candle stand.’ [s5, PT 114]

(295) *us-le kyanDal isTyaanD-baaTa kyaanDal nikaali*
us-le kyanDal isTyaanD-baaTa kyaanDal nikaal-i
 3SG-ERG candle stand-ABL candle take.out-PST.3SG.F.NH
 ‘She took the candle out of the candle stand.’ [s5, PT 114]

I considered such responses the distinct descriptions and included both descriptions for the data analysis. Altogether, there are 24 instances of such double responses. Hence, in total, there are 1158 sentences in the ‘Put and Take’ corpus produced by 18 participants.

3.1.2 The ‘Trajectoire’ stimulus set

The ‘Trajectoire’ stimulus set was designed by Ishibashi *et al.* (2006) within a cross-linguistic project called TRAJECTOIRE (funded by the *Fédération de Typologie et Universaux Linguistiques*). The elicitation material was created to collect descriptions of spontaneous Motion events across typologically and genetically varied languages. Spontaneous Motion events refer to the movement of a Figure with respect to a reference place (GROUND) along the Path which consists of Source, Median or Goal (Ishibashi, 2015; Vuillermet & Kopecka, 2019) such as *he entered the room* (see also § 1.1.1). Like the ‘Put and Take’ materials, the ‘Trajectoire’ stimulus set is organized into three versions, each containing the same videos arranged in three different orders. Each version consists of 76 video clips, each 8 to 14 seconds long. Of these 76 video clips, 55 are target (Path) video clips showing the Motion of a Figure (a.k.a. protagonist (adult or child)) in a natural environment (e.g., field, forest, sea) (Ishibashi *et al.*, 2006: 1; Vittrant, 2015; Vuillermet & Kopecka, 2019: 105)), and 19 of them are fillers showing static scenes or some other activities such as playing football [Scene_009] or giving a banana to someone [Scene_011]. The stimulus set also includes two warm-up clips such as passing handball [Scene_010] and spreading the blanket [Scene_013] (see Appendix F for a detailed list of these video clips).

There are several parameters which were taken into consideration in the design of the ‘Trajectoire’ stimuli set: PATH, FIGURE, GROUND, DEIXIS, and, to a lesser extent, MANNER (Talmy, 1972, 1975, 1985, 2000: 25-26 *inter alia*) (cf. § 1.1). These are illustrated in (296) and discussed in turn below.

(296)	FIGURE	GROUND-PATH	
	<i>u</i>	<i>rukko</i>	<i>phedbaaNa</i>
	<i>u-Ø</i>	<i>ruk-ko</i>	<i>phed-baaTa</i>
	3SG-NOM	tree-GEN	bottom-ABL
	MANNER	PATH	MOTION+DEIXIS
	<i>dauNidai</i>	<i>agaaNi</i>	<i>gai</i>
	<i>dauDi~-dai</i>	<i>agaaDi</i>	<i>ga-i</i>
	run-DUR	toward.front	go-PST.3SG.F.NH
	‘She went to the front running from the bottom of the tree.’ [Traj_033_s19]		

The ‘Trajectoire’ stimuli set contains only human beings as Figures. The component of Path encompasses Source-oriented (initial) Path such as ‘from’ or ‘out of’, as illustrated in (297), Median-oriented (intermediate or in which the Ground is a part of the Path itself (Slobin & Hoiting, 1994)) Path such as ‘across’, ‘through’ or ‘via’, as in (298), and Goal-oriented (Final) Path such as ‘into’, ‘to’ or ‘upto’, as in (299).

(297)	<i>u</i>	<i>guphaabaaTa</i>	<i>baaira</i>	<i>niski</i>
	<i>u-Ø</i>	<i>guphaa-baaTa</i>	<i>baahira</i>	<i>nisk-i</i>
	3SG-NOM	cave-ABL	outside	exit-PST.3SG.F.NH
	‘She came out of the cave.’			
	(Lit. ‘She exited outside from the cave.’) [Traj_023_s19]			

(298)	<i>u</i>	<i>hi~Nera</i>	<i>pulmaarphat</i>	<i>kholaa</i>	<i>paar</i>	<i>garyo</i>
	<i>u-Ø</i>	<i>hi~D-era</i>	<i>pul-maarphat</i>	<i>kholaa</i>	<i>paar</i>	<i>gar-yo</i>
	3SG-NOM	walk-CP	bridge-via	stream	cross	do-PST.3SG.M.NH
	‘He crossed the stream walking.’					
	(Lit. ‘(By) walking via the bridge he crossed the stream.’) [Traj_050_s3]					

(299) *uni* *rukhmuni* *pugin*
uni-Ø *rukh-muni* *pug-in*
 3SG.H-NOM tree-under reach-PST.3SG.F.H
 ‘She arrived under the tree.’
 ‘(Lit. She reached (under) the tree.)’ [Traj_061_s9]

The video-clips, which are also called the dynamic visual tools (Vuillermet & Kopecka 2019: 102), display different types of Grounds such as field, cave, sea, woods, river, and lake among others. Given that the main focus of the ‘Trajectoire’ material is to investigate the Path, different types of Path - horizontal vs. vertical, with vs. without boundary crossing, simple (i.e. with one reference point) vs. complex (with two reference points or more (cf. § 1.1.1)) - were varied in the clips. Finally, Motion of the Figures (protagonists) is viewed from different perspectives, i.e. Deictic centers: away from the camera (centrifugal), toward the camera (centripetal), horizontally (left to right or right to left) and across with respect to the camera (transversal).

Taking into account these parameters allow to investigate how speakers of different languages describe different types of Path, to which portion they allocate specific attention when describing such events, and whether the perspective from which the event is viewed is taken into account in their descriptions. More specifically, these parameters allow us to examine whether participants pay more attention to the Goal than the Source and to investigate how this is correlated with the spatial configuration of the Path (e.g., vertical vs. horizontal, with vs. without boundary-crossing), as mentioned by Vuillermet and Kopecka (2019: 103-4). Table 26, and Figure 12 through Figure 15 will show the parameters presented above.

Figure	Human	man, woman, child or a group of people
Ground	Human	man, woman, child or a group of people
	Places	lake, cliff, field, cave, sea, woods, stairs, river
	Objects	basket, tree, trunk, rock
Path of Motion	Source-oriented	out of vs. from
	Median-oriented	across vs. past
	Goal-oriented	into vs. to(wards)
Manner	Manner of Motion	walk, run, jump
Deixis	Centripetal	come
	Centrifugal	go
	Transversal	from left to right

Table 26. Parameters taken into consideration in the design of the ‘Trajectoire’ stimuli set

Pictures below (Figure 12 through Figure 15) illustrate the different parameters displayed in the ‘Trajectoire’ stimulus set (Ishibashi *et al.*, 2006). These pictures show human Figures (child vs. adult, female vs. male, individual vs. group). They display Motion along a simple Path, i.e. either a Source-oriented (*run out of sea*), as in Figure 12, a Goal-oriented Path (*walk into field*), as in Figure 13 or Median-oriented Path (*walk across the bridge*), as in Figure 14. Figure 15 on the other hand shows a complex Path (*walk out of cave, pass, walk into cave*) which contains the Source, Median, and Goal components (see also § 4.4). The Ground component comprises places (e.g., field, sea and cave) and object (trunk), but it can also be a human (child, adult). There are mainly three types of Manner of Motion displayed in the video which are walking, running, and jumping. As far as the Deixis is concerned, it shows the centripetal (coming towards the camera as in *run out of sea*), centrifugal (going away from the camera as in *walk into field*) and transversal (from left to right or from right to left with respect to the Deictic center) orientation (Vuillermet & Kopecka, 2019: 103).



Figure 12. Source-oriented Path

‘run out of sea’



Figure 13. Goal-oriented Path

‘walk into field’



Figure 14. Median-oriented Path

‘walk across bridge’



Figure 15. Source-Median-Goal-oriented Path

‘walk out of cave, pass, walk into cave’

3.1.2.1 Participants

In total, 17 native speakers of Nepali, nine men and eight women, participated in the description of the ‘Trajectoire’ video stimulus set. Their age ranges from 20 to 50 (the average age being 33.4). Among 17 speakers, 16 of them are the same participants who described the ‘Put and Take’ video clips. Regarding the linguistic profile of speakers, seven of them are monolingual speaking only Nepali, nine of them are bilingual speaking Nepali and English or Nepali and Hindi, and one of them is multilingual speaking Nepali, Awadhi, Kumal (both Awadhi and Kumal belong to Indo-Aryan family) and English. The other participants speak, besides Nepali, one of these languages but are not fluent. With respect to education, four speakers have received Master’s Degree, five of them have completed their Bachelor’s Degree, four of them have passed Higher Secondary (Intermediate) Level, three of them have

completed the School Level education, and one of them has passed class nine. Details regarding participants are given in Table 27.

Speaker	Age	Language	Education
s1	24	Monolingual	BA
s2	30	Bilingual	BBS
s3	26	Bilingual	MBS
s4	50	Bilingual	Class IX complete
s5	48	Bilingual	MA
s6	42	Multilingual	IA
s8	23	Bilingual	PCLN
s9	25	Bilingual	BBS
s10	25	Bilingual	HSEB
s11	38	Monolingual	SLC
s14	36	Bilingual	MA
s15	20	Monolingual	HSEB
s17	40	Monolingual	SLC
s19	34	Bilingual	M. Ed.
s20	40	Monolingual	B. Ed.
s21	28	Monolingual	B. Ed.
s22	40	Monolingual	SLC

Table 27. Details of participants in ‘Trajectoire’ corpus (Source: Field study, 2016/2017)

3.1.2.2 Procedures

At the beginning of the elicitation session, each participant was informed about the purpose of the study, and some general information about the clips. During the elicitation session, each video was shown individually. Participants could watch each clip as many times as they needed to before answering to the question ‘What did he do?’, ‘What did she do?’ or ‘What did they do?’, depending on the gender and the number of the protagonists in the video. The instruction question was formulated with a low grade honorific system; yet, the participants could respond by using low or mid or high-grade honorific system, as shown in examples (300) and (301) depicting non-honorific and honorific (mid-grade honorific) system respectively. The use of

honorificity varied among speakers as well as within the speaker depending on the video clips.

- (300) *u* *oDhaarbaaTa* *bhitra* *chiri*
u-∅ *oDhaar-baaTa* *bhitra* *chir-i*
 3SG-NOM cave-ABL inside enter-PST.3SG.F.NH
 ‘She went into the cave.’
 (Lit. ‘She entered inside (from) the cave.’ [Traj_053_s14])

- (301) *uni* *guphaadekhi* *baaira* *niklin*
uni-∅ *guphaa-dekhi* *baahira* *nikl-in*
 3SG.H-NOM cave-from outside exit-PST.3SG.F.H
 ‘She came out of the cave.’
 (Lit. ‘She exited outside from the cave.’) [Traj_023_s9]

When describing the ‘Trajectoire’ video clips, some participants provided two different descriptions for the same scene, as exemplified in (302) and (303). In such case, both of their descriptions were considered as distinct descriptions and were included to the corpus.

- (302) *uni* *janggalbhitra* *gae*
uni-∅ *janggal-bhitra* *ga-e*
 3SG.H-NOM forest-inside go-PST.3SG.M.H
 ‘He went to the forest.’ [Traj_056_s6]

- (303) *uni* *janggalbhitra* *chire*
uni-∅ *janggal-bhitra* *chir-e*
 3SG.H-NOM forest-inside enter-PST.3SG.M.H
 ‘He went to the forest.’
 (Lit. ‘He entered into the forest.’) [Traj_056_s6]

Altogether, there are 14 instances of such case. Therefore, the ‘Trajectoire’ corpus consists of 949 sentences or motion descriptions produced by 17 participants.

3.1.3 Data coding

During the elicitation session, the descriptions individually given by each participant were recorded and then, transcribed in the Roman script (cf. § 2.1). A sample of one of the speakers' descriptions, transcribed in the Roman script, is presented in Appendix G. The whole corpus or elicited data, including the 'Put & Take' and 'Trajectoire' data, were then coded based on the Berkeley Coding Manual (Slobin, 2005). Following the manual, I have considered three main criteria: syntactic categories, conceptual categories, and lexical expression.

Syntactic categories cover verbs, nouns, postpositions/case markers, and adverbials. They are represented with the upper case as presented below:

- Intransitive verbs of motion (e.g., *niskanu* 'to exit') are coded as V which means verbs of spontaneous Motion, and transitive verbs of motion (e.g. *chiraaunu* 'to cause to enter') are coded as VT referring to caused Motion.
- Nouns (e.g., *kholo* 'stream') that function as Ground are coded as N.
- Postpositions and/or case markers (*-maathi* 'above'/'up' or *-baaTa* 'from') are coded as PP.
- Adverbials (e.g., *tala* 'below', *agaaDi* 'toward front') are coded as A.

Conceptual categories, on the other hand, are the types of meaning that words can express (Slobin, 2005). Verbs, for example, can express either Path (e.g., enter, exit) or Manner (e.g., walk, run). The conceptual category is written in the lower case as is illustrated below:

- Intransitive verbs expressing Path (e.g., *chirnu* 'to enter') are coded V:d where d refers to directional.
- Intransitive verbs expressing Manner (e.g., *hi~Dnu* 'to walk') are coded V:m where m refers to Manner.
- Nouns referring to Ground expressing Goal (e.g., *kholo* 'stream') are coded N:gg but if they refer to Source, they are coded as N:gs.
- Postpositions/case markers indicating Source (e.g., *-baaTa* 'from') are coded PP:ds.

- Adverbials expressing the directionality (e.g., *tala* ‘below’) are coded A:d where A indicates the adverb and d implies the directionality.
- The coding also consists of the information on subordinate adverbial clauses (imperfective durative aspectuals, and conjunctive participle forms).

Likewise, the lexical expressions are the actual tokens (Slobin, 2005: 3) that follow the equal (=) signs. For example, the verb *chirnu* ‘to enter’ is coded as V:d=*chirnu* ‘to enter’. Hence, as a lexical expression, *chirnu* ‘to enter’ is mentioned after the syntactic and conceptual categories (see Slobin, 2005 for further details on coding conventions).

The coding also contains the participants’ reference number (s1, s2, s3), scene code (031, 076, 022), and the version of the stimulus set (v1, v2, v3). Semantic information such as the type of Path (Source vs. Median vs. Goal), and the number of lexical and/or grammatical loci (1 vs. 2 vs. 3) used for the expression of Path in a given description is also coded. Finally, the coding includes information on the type of construction (simplex vs. complex), conjunctive participles, and light verbs just to mention a few among others. The coding conventions, which I adopted for the ‘Put and Take’ and ‘Trajectoire’ data are shown in Table 28.

Parameters of coding			
Version	v1	v2	v3
Speaker	s1	s2	s3
Type of description	Source	Median	Goal
Loci (Spatial information)	1	2	3
Ground	<i>kholo</i> ‘stream’	<i>guphaa</i> ‘cave’	<i>nadi</i> ‘river’
Code (Ground)	N:g	N:g	N:g
Type of construction	Simplex	Complex	
Main verb	<i>pasnu</i> ‘to enter’	<i>jaanu</i> ‘to go’	<i>niskanu</i> ‘to exit’
Code (Main verb)	V:dg	V:0	V:ds
Postpositions/ Case markers	<i>-maathi</i> ‘above’	<i>-maa</i> ‘LOC’	<i>-baaTa</i> ‘from’

Code (Postpositions/Case markers)	PP:d	PP:dg	PP:ds
Adverbials	<i>agaaDi</i> 'toward front'	<i>bhitra</i> 'inside'	<i>baahira</i> 'outside'
Code (Adverbials)	A:d	A:dg	A:ds

Table 28. Parameters reflecting the coding convention

3.2 Corpus-based approach

The main aim of the corpus-based approach was to collect narrative data. In particular, the objectives of applying this approach are as follows:

- (a) to consolidate, enrich, complement, and validate the descriptive data;
- (b) to verify the range of uses of verbs found in the descriptive data;
- (c) to investigate the semantic distinctions of verbs found in the descriptive data;
- (d) to compare and contrast the overall verb semantics between the descriptive and narrative data.

In order to fulfil these objectives, I first made a preliminary dictionary survey in search of verbs of motion. Then, I extracted sentences containing the verbs of motion from the NNC. Finally, I did a comparison between the use of individual verbs in the NNC and the verb found in the stimuli-based data.

3.2.1 Preliminary dictionary survey

The purpose of surveying the dictionary was to find out the diversity of verbs of motion available in Nepali as well as the range of meanings they convey. In order to carry out this task, I used the *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali (7th ed.))*, published by the Nepal Academy in 2067 VS (2010 AD). The extraction process was done in two phases. At the beginning, every single verb enlisted as a main entry was thoroughly scrutinized and then all the verbs of motion were extracted including the information regarding transitivity, causativity, and their respective meanings. The verbs of motion refer to those verbs, which convey the meaning of change of location in space (Miller & Johnson-Laird, 1976; Ikegami,

1969). In particular, all verbs that encode the movement of a Figure through space (Slobin & Hoiting, 1994: 487) were taken into consideration in the dictionary work. The number of verbs extracted in the first phase amounts to 449. From this initial list, 247 verbs were finally selected (see Appendix H for a detailed list of these verbs). These verbs were also verified in two other dictionaries, namely, *A Comparative and Etymological Dictionary of the Nepali Language* by R. L. Turner (1931), and *A Practical Dictionary of Modern Nepali* by Schmidt (1994). Most of the English translations I use for these verbs are also based on Turner (1931) and Schmidt (1994); some of them have been translated by myself. The final list of motion verbs also includes verbs found in the descriptive data. An example of the verb *a~ceTnu* ‘to push’ is given in Figure 16 to show how the extraction process was done. In the dictionary, *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali (2067 VS (2010 AD))*, this verb is described as a transitive verb with two different meanings, one of which is *Thehnu* ‘to push’. It was extracted for the purpose of the analysis as it met the selection criteria.

अँचेट्-नु- स० क्रि० १. कसैमाथि दबाव दिनु; वशमा ल्याउनु ।
 २. कुनै लचिलो वस्तुलाई बेसरी थिच्नु; घचेट्नु; ठेल्नु । >
 अँचेटाइ- ना० अँचेट्ने भाव, क्रिया वा प्रक्रिया । अँचेटाइनु-
 क० क्रि० अँचेट्नु लाइनु । अँचेटाउनु- प्रे० क्रि० अँचेट्नु
 लाउनु; च्यापिने पार्नु । अँचेटिनु- क० क्रि० अँचेट्ने काम गरिनु;

Figure 16. The verb *a~ceTnu* ‘to push’ and its different meanings²⁷

All the verbs which I extracted were then transcribed in the Roman script (cf. § 2.1) and provided with the literal meaning in English. Importantly, all verbs are coded for their transitivity (e.g., transitive, T or intransitive, I), and the type of Motion they express (e.g., spontaneous, S or caused, C), as shown in Table 29.

²⁷ Source: *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali)* (7th ed.)

Extraction procedures		
Verbs of motion	अँचेटनु	उक्लनु
Transcription	<i>a~ceTnu</i>	<i>uklanu</i>
Transitivity: T/I	T	I
Meaning of the verb/s	घचेटनु, ठेल्नु ।	माथितिर लाग्नु वा जानु ।
Type of Motion: C/S	C	S

Table 29. A sample outlying the extraction procedures of verbs of motion

Verbs extracted from the dictionary were then investigated for frequencies and occurrences through a corpus search. The criteria of sentence extraction and other details are discussed in the next Section 3.2.2.

The corpus is the principal resource for the investigation of narrative data. As I explained in the introduction of this Chapter, the main objective of using this approach was to corroborate the range of uses of verbs found through elicitation, find out the semantic distinctions of those verbs, and investigate their uses in more detail. As mentioned earlier, the Nepali National Corpus (NNC) was used for this purpose. The NNC is a collection of written, spoken and speech corpus (Yadava *et al.*, 2008; Hardie *et al.*, 2011)²⁸. Table 30 shows the summary of different components of NNC. For the purpose of my research, I have extracted data only from the written corpus. The data extraction and coding procedures are discussed below.

²⁸ The NNC contains written and, spoken (spoken texts) and speech corpus (audio recordings). The written corpus consists of core sample and general collection. The core corpus includes a collection of texts from literature, science, religion, philosophy, psychology, and history among others. The general collection, on the other hand, contains a wide range of books, newspapers/journals and web-texts (see Yadava *et al.*, 2008; Hardie *et al.*, 2011 for details; see also Hardie & Mudraya, 2009; and www.bhashasanchar.org:80/aboutnnc.php).

Components	Contents	Size in words (approx.)
Core sample	Written texts sampled as a Nepali match for FLOB	800,000
General collection	Written texts opportunistically collected including text from the Web	13, 000,000
Parallel data	Written texts with translations, Nepali-English and English-Nepali	4,000,000
Spoken corpus	Spoken texts	260,000
Speech corpus	Audio recordings of sentences for use in text-to-speech applications	6,000

Table 30. Components of the NNC (Source: Hardie *et al.*, 2011)

3.2.2 Data extraction

In order to extract the data from the NNC in a systematic way, following objectives were set:

- (a) To examine the number of occurrences of the verbs of motion in the NNC.

The first step was to verify in the NNC the number of occurrences of 247 verbs which were extracted from the dictionary. The number of occurrences of different verbs in the corpus varied significantly. The verbs *jaanu* ‘to go’ and *aaunu* ‘to come’ have the highest number of occurrences accounting for 70815 and 48391 occurrences respectively. Including these two verbs, there are 22 verbs which have more than 2000 occurrences each in the corpus. 26 verbs have more than 500 occurrences each, 54 verbs have more than 50 occurrences each, 87 have up to 49 occurrences each and 58 verbs have no occurrence at all in the corpus (see also Appendix H).

- (b) To investigate the range of literal (a.k.a. physical Motion of a Figure through space (Stefanowitsch & Rohde, 2004)) vs. metaphorical uses of motion verbs, including the ones used in the descriptive data.

For the purpose of the analysis, I selected those verbs of motion which have a minimum of 65 occurrences in the NNC. In particular, the goal was to extract 50 non-metaphorical sentences (tokens) of each verb. In order to meet this objective and avoid

any bias, I selected the first 50 occurrences of verbs expressing physical Motion. It is, therefore, natural that some verbs which are more frequent in the descriptive data are not used in the analysis of the narrative data because either their total number of occurrences in the NNC are not sufficient or they lack the minimum of 50 literal uses. The final sample extracted from the NNC comprises 53 different monomorphemic verbs (see Appendix: I for a detailed list of these verbs) including 50 sentences each. Nevertheless, three verbs, *uklanu* ‘to ascend’, *Dhaaknu* ‘to cover’ and *Dubaaunu* ‘to sink’, comprise only 43, 48 and 46 occurrences respectively. These numbers are slightly less than the limit set up, as explained earlier.

All the clauses were extracted from the NNC via the Corpus Query Processor (CQPweb) server (see Hardie, 2012 for details). A sample showing the results for the verb *aaunu* ‘to come’ in the CQPweb is illustrated in Figure 17.

Your query "{आउनु}" returned 48,391 matches in 1,995 different texts (in 15,133,105 words [2,177 texts]; million words) [1.659 seconds - retrieved from cache]			
< << >> >		Show Page: 1	KWIC View Show in random order
No	Text	Solution 1 to 1000	Page 1 / 49
1	A01	मूल्य '७२ अमेरिकी डलर प्रतिवर्गमिटर निर्धारण गरिए पछि निकासी मा कमी आए को छ र अहिले करीब डेढलाख वर्गमिटर ऊनी गलैँचा निकासी हुन	
2	A01	यस भन्दा पूर्व 'फ्लोर मूल्य' ६७ अमेरिकी डलर प्रतिवर्गमिटर रहि आए को थियो । परिवर्तित फ्लोर मूल्य लाई लिएर गलैँचा निकासीकर्ता हरू बीच	
3	A01	ले भन्नु भयो - गत वर्ष निजी क्षेत्र को कृयाकलाप मा हर्स आए को फलस्वरुप कर् जा प्रवाह कम भएपनि सरकार ले बढी कर् जा	
4	A01	छन् । टर्को ले त्यहाँ इराकी कुर्द हरू को उद्धार का लागि आए का बहुराष्ट्रिय सेना मानवीय र मैत्री को आधार मा आए को टिप्पणी	
5	A01	का लागि आए का बहुराष्ट्रिय सेना मानवीय र मैत्री को आधार मा आए को टिप्पणी गरे को एक हप्ता पछि सो घटना भए को हो	
6	A01	। राष्ट्रसंघ का महासचिव कोय्यार ले शरणार् थी शिविर राष्ट्रसंघीय नियन्त्रण मा आउनु केही दिन मात्र लाग्ने कुरा उल्लेख गर्नु भयो । यसै बीच फ्रान्स	
7	A01	तयार हुन नसके को ले हाल शरणार् थी आगमन क्रम मा तीव्रता नआउने अपेक्षा अधिकारी हरू ले गरे का छन् । सैनिक अधिकारी हरू ले	
8	A01	अध्यक्ष श्री अधिकारी ले आर्थिक अवस्था नसुधिए सम्म देश मा सही प्रजातन्त्र आउँदैन भन्नु भयो । धरान को सोही ठाउँ मा हालै भए को स	
9	A01	। एमाले का पोलिटव्यूरो सदस्य चन्द्रप्रकाश मैनाली ले शहीद को बलिदान बाट आए को प्रजातन्त्र र देश को गौरव को रक्षा गर्न नेपाली जनता जागे	

Figure 17. The verb *aaunu* ‘to come’ in the NNC²⁹

In total, the narrative data set comprises 2884 sentences or motion descriptions.

3.2.3 Data coding

Each sentence extracted from the NNC was annotated with a code to keep track of the source of data (e.g., NNC_A37; NNC_S36), and then transcribed in the Roman

²⁹ Source: NNC, and <https://cqpweb.lancs.ac.uk/nncv2/concordance>

script (cf. § 2.1). All sentences were coded based on the Berkeley Coding Manual (Slobin, 2005), as was the case in the coding of the descriptive data. First, each sentence was identified whether it belonged to the domain of spontaneous (S) or caused (C) Motion events. Then, it was coded for the type of construction, i.e. simplex, as in (304), or complex, as in (305) (see also § 4.2 for more details on simplex and complex constructions).

(304)	<i>usle</i>	<i>kitaabko</i>	<i>jholaabaaTa</i>
	<i>us-le</i>	<i>kitaab-ko</i>	<i>jholaa-baaTa</i>
	3SG-ERG	book-GEN	bag- <i>abl</i>
	<i>phulko</i>	<i>gucchaa</i>	<i>nikaalyo</i>
	<i>phul-ko</i>	<i>gucchaa</i>	<i>nikaal-yo</i>
	flower-GEN	bouquet	take.out-PST.3SG.M.NH
	‘He took a bouquet of flowers out of the bag.’		
	(Lit. ‘He took out the bouquet of flowers from the bag.’) [NNC_S18]		

(305)	<i>aba</i>	<i>u</i>	<i>saDak</i>	<i>naaghera</i>
	<i>aba</i>	<i>u-Ø</i>	<i>saDak</i>	<i>naagh-era</i>
	now	3SG-NOM	road	cross-CP
	<i>mahaangkaalko</i>	<i>kyaampaabhitra</i>	<i>pugcha</i>	
	<i>mahaangkaal-ko</i>	<i>lyaamp-bhitra</i>	<i>pug-cha</i>	
	Mahankal-GEN	camp-inside	reach-NPST.3SG.M.NH	
	‘Now, (by) crossing the road he reaches the Mahankal camp.’			
	(Lit. ‘Now, (by) crossing the road he reaches inside the Mahankal camp.’			
	[NNC_as1]			

Verbs are coded depending on whether they occurred as the main verb or in the conjunctive participle form, light verb or as compound verb or some other form. Besides, the data were coded according to several semantic components:

- (a) Types of Figures such as animate (e.g., human, *upakulpati* ‘Vice-Chancellor’, *prahari* ‘police’, animal, *gaai* ‘cow’, *gai~Daa* ‘rhino’), and inanimate (e.g., machine gun, musical instrument).
- (b) Types of Grounds such as human (*ma* ‘I’, *bibek* ‘proper noun’), human body parts (*kammar* ‘waist’, *ghu~Do* ‘knee’), and places (*skul*, ‘school’, *baaTo* ‘road’).

- (c) The orientation of the Path of Motion i.e. Source (initial point), Median (middle point) or Goal (final point) or both Source and Goal-oriented descriptions (cf. § 4.4).

Furthermore, the coding also comprises case markers (e.g., *-maa* ‘LOC’ *-baaTa* ‘from’) and postpositions (e.g., *-tira* ‘towards’, *-muni* ‘under’), which contribute to the expression of Source-, Median- or Goal-oriented Motion. Example (306) below shows the use of the verb *aaunu* ‘to come’, whose occurrence is in the conjunctive participle construction followed by the main verb *lagnu* ‘to take away’. Here, the verb *aaunu* ‘to come’ is used in a Goal-oriented description but the main verb *lagnu* ‘to take/’take away’ is in a Source-oriented description. In such cases, both of them are coded. The first clause is coded as a Goal-oriented description whereas the second clause is coded as a Source-oriented description.

(306)	<i>saatau~</i>	<i>dinmaa</i>	<i>maasTarni</i>	<i>aaera</i>
	<i>saatau~</i>	<i>din-maa</i>	<i>maasTarni-Ø</i>	<i>aa-era</i>
	seventh	day-LOC	master.F-NOM	come-CP
	<i>bacco</i>	<i>laanche</i>		
	<i>bacco-Ø</i>	<i>lag-che</i>		
	child-ACC	take.away-NPST-3SG.F.NH		
	‘On the 7 th day, the teacher’s wife/female teacher comes and (she) takes the child away.’ [NNC_C14]			

When a given sentence did not contain the Source or Goal-oriented description, it is coded either as Manner or as posture/vertical Motion, or as motion and purpose among others. The coding also covers the adverbs like *maathi* ‘above’ *tala* ‘down’ *baahira* ‘outside’. Finally, the narrative data also revealed the use of the ideophones such as *khururra* ‘straightway’, *bungga* ‘suddenly’ which were coded as well. Table 31 shows the parameters selected for coding the data extracted from the NNC.

Parameters			
Verbs (in PT & Traj.)	छिर्नु (<i>chirnu</i> ‘to enter’)	राख्नु (<i>raakhnu</i> ‘to put’)	
Extracted sentence from the NNC	उनीहरू एउटा होटलमा छिरे ।	मृतकको लाश पनि लुटेर राखियो ।	
NNC (Reference)	[NNC_S36]	[NNC_A37]	
Transcription (Roman script)	<i>uniharu euTaa</i> <i>hoTalmaa chire</i>	<i>mritakko laas pani</i> <i>luTera raakhiyo</i>	
Type of motion (S/C)	S	C	
Type of construction	Simplex	Complex	
Type of description	Source	Median	Goal
Form (Syntax, main verb)	Main verb	Conjunctive participle	Absolutive
Main verb (if it is inflected)	Copula	Compound	Others
Type of Figure	Human	Animal	Others
Ground (mentioned or not)	Yes	No	
Postpositions/ Case markers	<i>-maa</i> ‘LOC’	<i>-baaTa</i> ‘from’	<i>-tira</i> ‘towards’
Adverbs	<i>tala</i> ‘below’	<i>maathi</i> ‘above’	<i>baahira</i> ‘outside’

Table 31. Parameters outlying the coding convention in narrative data

In total, the size of descriptive and narrative corpora consists of 4991 sentences (or motion descriptions). The ‘Put and Take’ data set comprises 1158 descriptions, the ‘Trajectoire’ data set comprises 949 descriptions, and the data sample extracted from the Nepali National Corpus contains 2884 sentences. Table 32 summarizes the size of the dataset for each of the data sets, together with verbs of motion, which were extracted from the dictionary, *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali (2067 VS (2010 AD))*.

	Type of dataset	N° of sentences
Number	a. Corpus dataset	
1	'Put and Take' video stimulus set	1158
2	'Trajectoire' video stimulus set	949
3	Nepali National Corpus	2884
	Total descriptions/sentences	4991
4	b. Dictionary work	N° of verbs extracted
	Total n° of motion verbs	247

Table 32. Size of the corpus in descriptive and narrative data

Chapter 4. The expression of caused Motion events

Events are parts of daily life experiences ever since the origin of human beings. We express these events with our languages, which are similar to each other in many respects sharing areal and genealogical characteristics, but at the same time they have some peculiarities, which keep their linguistic characteristics distinct (Sapir, 1921: 183; Whorf, 1956: 241, 252; Miller & Johnson-Laird, 1976: 525; DeLancey, 2003: 59; Levinson & Wilkins, 2006: 2). Of several types of events investigated in various studies such as ‘The pear stories’ for the narrative production (Chafe, 1980), ‘studies on the expression of spatial relations’ (Bowerman & Pederson, 1992), ‘Put, set, lay and place’ (Pauwels, 2000), ‘Cutting and Breaking events’ (Bohnemeyer, Bowerman & Brown, 2001; Majid, & Bowerman, 2007; Majid, Boster & Bowerman, 2008), ‘Placement events in gestures’ (Gullberg, 2011), ‘Placement and Removal’ events have been the focus of study in recent years. Cross-linguistic studies (e.g., Kopecka & Narasimhan, 2012) reveal both similarities and differences among languages in the way they express these events.

In this chapter, I will investigate, from the functional and typological point of view, how ‘placement’ and ‘removal’ events are conceptualized and expressed in Nepali. First, I will explain what is understood by the placement and removal events in this study, and then investigate different phenomena related to this domain of expression. In the next Section, I will present the type of constructions, simplex and complex, used by the speakers to express placement and removal events in Nepali. I will then investigate the lexical and grammatical devices in the expression of these events (cf. § 4.3). The main aim here will be to uncover the diversity and semantic granularity of verbs, and investigate what type of semantic differences speakers make in order to distinguish between different types of events and to examine whether they make more distinctions in placement and removal expression.

Besides the analysis of verbs, this Section (§ 4.3) also addresses the use of other lexical and grammatical devices such as case markers, postpositions, and adverbials. I will investigate the diversity of these devices and show how they are used in placement and removal events. In Section 4.4, I will examine how the Path is expressed in different morphosyntactic devices, and also discuss how different portions of Path (initial or Source-oriented and final or Goal-oriented) are encoded in motion descriptions. As we will see, strategies to encode Path vary from speaker to speaker. In certain contexts, Path is expressed by the verb alone, while in others, it is expressed by the verb and other morphosyntactic devices such as case markers, postpositions, and adverbials. Under the morphosyntactic loci itself, I will also present how simplex Path (comprising Motion with respect to one reference location) and complex Path (comprising Motion with respect to two reference locations or more) are expressed. The aim is to investigate how speakers describe different parts of the Path (initial, medial or final) and on which part of the Path they tend to allocate more attention when describing caused Motion events. Finally, I will summarize the results discussed in this chapter.

4.1 Event descriptions

A placement event refers to the event in which a person puts an object to a final location (e.g., *put a mug on the table*) and a removal event refers to the event in which a person removes the object from its initial location, causing the object not to be at the initial location (e.g., *remove a mug from the table*) (see also Levin & Rappaport Hovav, 1991: 132)). Both of these events represent caused Motion events (CME) conflating Motion with ‘Cause-of-Motion’ (Zlatev & Yangklang, 2003). In the domain of placement and removal events, cross-linguistic studies (Kopecka & Narasimhan, 2012) show that languages vary in the way they express such events. In some languages there are more morphosyntactic means to express these events than in other languages. As an illustration of possible variations, languages like Yeli Dnye (Levinson & Brown, 2012: 275) have six basic verbs (apart from other morphosyntactic devices) to express these events whereas other languages such as

Spanish have more than 40 verbs (Ibarretxe-Antuñano, 2012: 128) to express similar events i.e. placement and removal events.

I will investigate how these events are expressed in Nepali. For this purpose, I used the ‘Put and Take’ video stimulus set developed by Bowerman et al. (2004) for a cross-linguistic study of placement and removal events (see also § 3.1.1). In the stimulus set, there are 63 clips: 32 represent the placement, 28 represent the removal and three of them display the complex (removal-placement) events (see Appendix C through E for a detailed list of these video clips). Events such as ‘put a hat on head’ and ‘put stone into pot of water’ among others are examples of placement events shown in Table 33.

Placement events	
put a hat on head	put head into a bucket
put stone into pot of water	pour liquid into container
put a fistful of rice on a table	stuff rag into car exhaust
put plastic cup on table with mouth	put banana on table with long tongs
give a cup to someone	put box up on shelf
drop book accidentally on floor	drop book deliberately onto floor

Table 33. Events showing the placement events

Similarly, events, for example, ‘take hand out of hole’ and ‘take orange from box’ represent removal events. Table 34 will show some of these removal events.

Removal events	
take a coke can from someone	take hand out of hole
pour water out of a tin	take armload of books off table
'unhang' rope from tree branch	take a cup off a table
take rag out of car exhaust	take off coat
take orange from box	take head out of bucket
take plastic cup off table with mouth	take banana off table with long tongs

Table 34. Events showing the removal events

Finally, events such as ‘take bag of corn from table and move to chair’ and ‘take apple from pile of books and move to shoe’ represent the removal-placement events. By using these visual stimuli, I collected the data with 18 native speakers of Nepali,

10 of whom are male and eight are female (average age being 35.2) in Kathmandu and Parbat districts, Nepal in spring 2016 and 2017 (for further details, see § 3.1.1.1). The stimulus set discussed above consists of several semantic elements: Agent, Figure (cf. Gruber, 1965; DeLancey, 2001), Ground, Path, Motion, and Manner (Talmy, 2000). These elements have already been discussed in Chapter 1 (cf. § 1.1). However, I will remind them briefly here before presenting the analysis of the placement and removal events in Nepali.

The animate human, which is syntactically a subject argument, encodes the Agent. The object arguments indicate the Figure and the Ground. Case markers, postpositions, and adverbials indicate the Path. The transitive predicates indicate either Motion and Path or Motion and Manner, as in examples (307) and (308) for placement, and (309) and (310) for removal events respectively.

- (307) AGENT FIGURE GROUND-PATH MOTION+PATH
unle *kitaab* *bha~i~maa* *raakhin*
un-le *kitaab* *bhui~-maa* *raakh-in*
 3SG.H-ERG book floor-LOC put-PST.3SG.F.H
 ‘She put the book on the floor.’ [s3, PT 008]
- (308) AGENT FIGURE GROUND-PATH MOTION+MANNER
unle *kitaab* *bhai~maa* *phaalin*
un-le *kitaab* *bhui~-maa* *phaal-in*
 3SG.H-ERG book floor-LOC throw-PST.3SG.F.H
 ‘She threw the book on the floor.’ [s17, PT 008]
- (309) AGENT GROUND-PATH FIGURE MOTION+PATH
unle *baalTinbaaTa* *Taauko* *nikaalin*
un-le *baalTin-baaTa* *Taauko* *nikaal-in*
 3SG.H-ERG bucket-ABL head take.out-PST.3SG.F.H
 ‘She took her head out of the bucket.’ [s17, PT 124]

(310)	AGENT	GROUND		FIGURE		MOTION+PATH
	<i>purusle</i>	<i>mailaako</i>	<i>haatbaaTa</i>	<i>kunai</i>	<i>bastu</i>	<i>liyo</i>
	<i>purus-le</i>	<i>mahilaa-ko</i>	<i>haat-baaTa</i>	<i>kunai</i>	<i>wastu</i>	<i>li-yo</i>
	man-ERG	woman-GEN	hand-ABL	which	object	take-PST.3SG.M.NH
	‘The man took some object from the hand of the woman.’ [s5, PT 122]					

In these examples, *kitaab* ‘book’, *Taauko* ‘head’ and *kunai bastu* ‘some object’ are the Figure objects, Ground is encoded by *bhui~* ‘floor’, *baalTin* ‘bucket’ and *mahilaako haat* ‘woman’s hand’, the Path is expressed by case markers and verbs in examples (307), (309) and (310), and the case marker in the case of example (308). The component of Motion is encoded in verbs *raakhnu* ‘to put’, *phaalnu* ‘to throw’, *nikaalnu* ‘to take out’, and *linu* ‘to take’ respectively. These examples also show that predicates are marked by the suffix (portmanteau) *-in* and *-yo*, which indicate all the grammatical information. In the events under study here, all Agents are human beings, however, the way they manipulate Figures varies. For example, sometimes the Agent has full control over the Figure until it reaches the Ground (e.g., *put a hat on head*), whereas in other contexts, the Agent loses the control before the Figure reaches the Ground (e.g., *drop book deliberately on the floor*).

Furthermore, different morphosyntactic devices are used in the expression of placement and removal events, including verbs (e.g., *raakhnu* ‘to put’ *nikaalnu* ‘to take out’ *lagnu* ‘to take away’), adverbials (e.g., *bhitra* ‘inside’, *baahira* ‘outside’, *maathi* ‘above’), nouns (*bhaa~Do* ‘pot’, *kurci* ‘chair’, *bhitto* ‘wall’), case markers (ablative *-baaTa* ‘from’/*-dekhi* ‘from’, locative *-maa* ‘LOC’, dative *-laai* ‘to’ (to some extent)), and postpositions (*-maathi* ‘above’, *-bhitra* ‘inside’) (cf. § 4.3 and § 4.4). Hence, the spatial information is often distributed across these morphosyntactic elements of the clause.

In total, the corpus gathered with the ‘Put and Take’ video stimulus set comprises 1158 sentences or motion descriptions. Among them, 565 depict placement events, 539 indicate removal events, and 54 describe removal-placement events as Table 35 below shows.

Types of events	N° of motion descriptions
Placement	565
Removal	539
Removal-placement	54
Total	1158

Table 35. Number of motion descriptions in placement and removal events

4.1.1 The expression of placement events

In Section 4.1, I briefly mentioned that, in placement events, the Agent places an object (Figure) to its final location (Goal Ground). These events are also known as Goal-oriented events (Brown, 2012: 55). Placement events consist of 565 motion descriptions that is 48.8% of the total descriptions ($N=1158$). Of the total placement descriptions, 354 consist of simplex constructions, and 204 consist of complex constructions; seven descriptions are put into ‘*not applicable*’ category because they are incomplete. Examples expressing placement events are illustrated in (311) and (312) below.

(311) AGENT GROUND-PATH FIGURE MOTION+PATH
usle Tebalmaa kap raakhi
us-le Tebal-maa kap raakh-i
 3SG-ERG table-LOC cup put-PST.3SG.F.NH
 ‘She put the cup on the table.’ [s7, PT 001]

(312) AGENT GROUND-PATH FIGURE MOTION+PATH
unle baalTimaa Taauko chiraae
un-le baalTi-maa Taauko chir-aa-e
 3SG.H-ERG bucket-LOC head enter-CAUS-PST.3SG.M.H
 ‘He put (his) head into the bucket.’
 (Lit. ‘He caused his head enter into the bucket.’ [s17, PT 024])

In example (311), *u* ‘he’ is the human Agent, and *kap* ‘cup’ conveys the Figure object. The Ground is conveyed by the *Tebal* ‘table’ and it is marked by the locative case marker *-maa* ‘LOC’. The verb *raaknhu* ‘to put’ expresses the Motion to the final

location. In example (312), the Agent, *u* ‘he’ displaces the Figure i.e. *Taauko* ‘head’ into the Ground i.e. *baalTi* ‘bucket’, which is marked by the same locative case marker *-maa* ‘LOC’. The verb *chiraaunu* ‘to cause to enter’ expresses Motion directed toward the final location. These two examples reflect several different features. First, there are two different Figures: an inanimate three-dimensional object (e.g., cup) and an animate human body part (e.g., head). Second, there are two different Grounds: a surface (e.g., table) and a container (e.g., bucket). Furthermore, at the sentence level, the two examples display two different verbs: *raakhnu* ‘to put’ represents the surface relation between the Figure and the Ground and *chiraaunu* ‘to cause to enter’ conveys the containment relation. Comparing these two types of verbs, it is possible to use *raakhnu* ‘to put’ to describe the event ‘put head into a bucket’ but the same is not true in the case of describing the event ‘put cup on table’ with the verb *chiraaunu* ‘to cause to enter’. There are many instances of such variations in the data throughout the placement events and whenever relevant these variations will be discussed.

In total, the descriptions provided by the speakers reveal 52 different verbs in descriptions of placement events. It is important to note, however, that in some cases, speakers construe some placement events as removal (cf. § 4.1.4) and some verbs can also express spontaneous Motion. As a consequence, if we account verbs conveying Motion oriented toward the final location, there are 33 different verbs in placement events (see Appendix J for a detailed list of these verbs).

4.1.2 The expression of removal events

It was pointed out in Section 4.1 that an Agent removes an object (Figure) from its initial location (Source Ground) in removal events. These events are also known as the Source-oriented events (Kopecka, 2012: 327). Out of 1158 motion descriptions in the ‘Put and Take’ corpus, 539 that is 46.5% consist of removal events. At the syntactic level, 297 of these descriptions consist of complex constructions, 234 consist of simplex constructions, and eight are placed in the ‘*not applicable*’ category because they are incomplete. Examples (313) and (314) show how removal events are conveyed in the motion descriptions.

- (313) AGENT GROUND-PATH
- | | | |
|-----------------|------------------|----------------------|
| <i>usle</i> | <i>kaagajko</i> | <i>jholaabaaTa</i> |
| <i>us-le</i> | <i>kaagaj-ko</i> | <i>jhola-baaTa</i> |
| 3SG-ERG | paper-GEN | bag-ABL |
| FIGURE | PATH | MOTION+PATH |
| <i>tarkaari</i> | <i>baaira</i> | <i>nikaali</i> |
| <i>tarkaari</i> | <i>baahira</i> | <i>nikaal-i</i> |
| vegetable | outside | take.out-PST3SG.F.NH |
- ‘She took the vegetable out of the paper bag.’
- (Lit. ‘She took the vegetable outside from the paper bag.’ [s16, pt 115])

- (314) AGENT GROUND-PATH
- | | | |
|-----------------|-------------------|-------------------|
| <i>purusle</i> | <i>mailaako</i> | <i>haatbaaTa</i> |
| <i>purus-le</i> | <i>mahilaa-ko</i> | <i>haat-baaTa</i> |
| man-ERG | woman-GEN | hand-ABL |
| FIGURE | | MOTION+PATH |
| <i>kunai</i> | <i>bastu</i> | <i>liyo</i> |
| <i>kunai</i> | <i>wastu</i> | <i>li-yo</i> |
| some | object | take-PST.3SG.M.NH |
- ‘The man took some object from the hand of the woman.’ [s5, PT 122]

The Agents who perform these removal events are human (e.g., *u* ‘he’, and *purus* ‘man’), the nature of the Figure *tarkaari* ‘vegetable’ (313) and *kunai wastu* ‘some object’ (314) is solid, and the configuration of the Ground *jhola* ‘bag’ is containment in example (313) and human body part *haat* ‘hand’ in example (314). The Motion component is conveyed by the verb *nikaalnu* ‘to take out’ and *linu* ‘to take’ respectively. In both examples, Motion away from the initial location is expressed by verbs *nikaalnu* ‘to take out’ and *linu* ‘to take’, the case marker *-baaTa* ‘from’ and the adverb *baahira* ‘outside’ (313).

53 different verbs were used by the speakers in the removal events. However, here too, some speakers construe some events as placement rather than as removal events (cf. Section 4.1.4). Therefore, the number of verbs that is specific to removal events amounts to 28 verbs. I call them the TYPICAL removal verbs (see also Appendix: J).

4.1.3 The expression of removal-placement events

The third type of events, called here removal-placement, consist of Motion oriented from a Source to a Goal location. The objective of including these events in the stimulus set was to investigate the expression of complex Path. There are three events in total displaying removal-placement events. These include: ‘push suitcase from car to tree’, ‘take apple from pile of books and move to shoe’, and ‘take bag of corn from table and move to chair’. Of the 54 motion descriptions in removal-placement events, 39 consist of the complex constructions, 12 consist of simplex constructions, and three are in the ‘*not applicable*’ category. The removal-placement events account for 4.7% of the total data. There are eight different verbs in this event type but only seven of them convey the motion description. Examples (315) and (316) will show the expression of such complex Path events.

(315)	GROUND-PATH	FIGURE		
	<i>kitaabbaaNa</i>	<i>euNaa</i>	<i>syaau</i>	<i>arke</i>
	<i>kitaab-baaTa</i>	<i>euTaa</i>	<i>syaau</i>	<i>arke</i>
	book-ABL	one	apple	another
	GROUND-BE _{LOC}		GROUND-PATH	MOTION+PATH
	<i>Tebulmaa</i>	<i>raheko</i>	<i>jutaamaathi</i>	<i>raakhyo</i>
	<i>Tebul-maa</i>	<i>rah-eko</i>	<i>jutaa-maathi</i>	<i>raakh-yo</i>
	table-LOC	remain-PFV	shoe-above	put-CPST.3SG.M.NH
	‘(From the book) (he) put an apple on (top of) shoe, which was on the other table.’			
	[s12, PT 051]			

(316)	<i>Tebulmaathiyo</i>	<i>cij</i>	<i>kurcimaathi</i>	<i>laera</i>	<i>raakhin</i>
	<i>Tebul-maathi-ko</i>	<i>cij</i>	<i>kurci-maathi</i>	<i>lag-era</i>	<i>raakh-in</i>
	table-above-GEN	thing	chair-above	take.away-CP	put-PST.3SG.F.H
	‘(By) taking away the thing, which was on the table, (she) put (it) on the chair.’				
	[s8, PT 050]				

Both examples consist of complex clauses. In example (315), the removal event is depicted by the relative clause whereas the placement event is expressed by the

main clause. In the case of (316), the removal event is encoded by the verb in the conjunctive participle form and the placement event is conveyed by the main clause.

4.1.4 Perspective change in the event encoding

As was mentioned earlier in Sections 4.1.1 and 4.1.2, not all of the events are described in a way they were initially expected to be depicted. There are cases where placement events are described as removal events and vice-versa. This tendency accounts for 5% of the total motion descriptions in the ‘Put and Take’ corpus ($N=1158$). What causes the participants to take a different view point in describing certain events? It seems that when describing some events, some speakers focus on those aspects of the events that are secondary rather than those that are emphasized in a given video clip or, conceivably, misconstrue the event due to the ambiguity of some events presented in the video clip.

The total number of such motion descriptions underlying a change of perspective is 19. These events include ‘put stone into pot of water’, ‘put hand into hole in tree’ and a few others. Table 36 shows some placement events which speakers describe as removal events. The most frequent change of perspective occurred in the motion description of the event ‘put stone into pot of water.’

put stone into pot of water
put hand into hole in tree
put head into a bucket
put flower into hair – skewer
put stone into pocket

Table 36. Placement events described as removal events

Examples (317) and (318) show the trend of the change of perspective.

- (317) *usle bhaa~Naabhitra raakheko iTTaa nikaali*
us-le bhaa~Daa-bhitra raakh-eko i~Taa nikaal-i
 3SG-ERG pot-inside put-PFV brick take.out-PST.3SG.F.NH

‘She took the brick out of the pot.’

‘(Lit. ‘She took out the brick which (someone) (hsd) kept inside the pot.’)

[s18, PT 019]

- (318) *usle phul nikaali Taaukaabaata*
us-le phul nikaal-i Taaukaa-baata
 3SG-ERG flower take.out-PST.3SG.F.NH head.OBL-ABL

‘She took the flower out of hair.’

(Lit. ‘She took out the flower from the head.’ [s19, PT 018])

These examples are responses to the events showing respectively ‘someone putting a stone into a pot’ and ‘someone inserting the flower into the hair’. However, as we can see, the participants conceptualized and described these events as removal events. Concerning the removal events, there are also cases where some participants describe removal events as placement events. Events of these kinds include ‘take hand out of hole’ and ‘take saucer off the cup’ among a few others. Altogether there are 45 motion descriptions representing removal events described as placement events. Removal events which are described as placement are illustrated in (319) and (320).

- (319) *ciso mailaale puruslaai diin*
ciso mahilaa-le purus-laai di-in
 cold woman-ERG man-DAT give-PST.3SG.F.H

‘The woman gave cold (drinks) to the man.’ [s11, PT 122]

- (320) *usle kunai bastu paainTko gojibhitra raakhi*
us-le kun-ai bastu paainT-ko goji-bhitra raakh-i
 3SG-ERG which-EMP object pants-GEN pocket-inside put-PST.3SG.F.NH

‘She put some object into the pocket of the pants.’ [s5, PT 116]

The first example (319) suggests that the event ‘take a coke can from someone’, which involves the transfer of possession, was conceptualized and described as giving ‘cold drinks’ to the man. In the case of (320), the Figure ‘stone’, which was taken out

of the pocket was described as putting the Figure (i.e. *kunai bastu* ‘some kind of object’) into the pocket. Table 37 illustrates some events, among a few others, that were described as placement events instead of the expected removal events.

take stone out of pocket	take stone out of pot of water
take saucer off cup	dump blocks out of tin
take a coke can from someone	take off hat
take hand out of hole	take a handful of beans from flat surface

Table 37. Removal events described as placement events

The data which I collected with the ‘Put and Take’ stimulus set show that in the change of perspective, removal events are described more frequently as placement events as compared to the placement events which are described as removal events. It is likely that in certain contexts (e.g., ‘take stone out of pocket’), the Figure is not visible enough for the participants. As a result, the hand which semantically functioned as Ground for the stone was conceived as the Figure and eventually described as ‘put hand into pocket’ rather than ‘put stone into pocket’. Similarly, regarding the encoding of the event ‘take a coke can from someone’, speakers who viewed this event as giving a ‘coke can’ to someone, could also be influenced by some external factors (Sapir, 1949: 90).

4.1.5 The omission of the Ground

In this Section, I investigate the tendency to elide the Ground component in placement and removal events. If the tendency shows the omission of the Ground, is it in both placement and removal events or is it a typical feature of one particular type of event? Our results show that there is a tendency to elide the Ground component in both placement and removal events (see also Narasimhan, 2012; Petersen, 2012), especially for dressing events (e.g., ‘put on coat’, and ‘put boot on foot’). Yet, these events are not merely the ones where the Ground component is not mentioned. Depending on discourse-pragmatic factors, it is common to elide the Ground component in Nepali (see Petersen, 2012: 365 for a similar feature in Kalasha; cf. Pourcel & Kopecka, 2005: 143; Kopecka, 2012: 335). Table 38 shows the omission of the Ground element in both types of events, placement as well as removal.

	Types of events		
	Placement	Removal	Total
Motion descriptions (Total N=1158)	90	114	204
Percentage	7.8	9.9	17.7

Table 38. The omission of the Ground component in placement and removal events

Table 38 shows that out of 1158 motion descriptions, there are 204 motion descriptions that is 17.7 % of the total where the Ground component is not explicitly conveyed. If this is calculated separately in placement and removal events, the Ground component is not attested in 114 descriptions in removal events and in 90 descriptions in placement events.

Examples (321) and (322) showing the omission of the Ground component are presented below.

(321) *yo keTaale euNaa jyaakeT lagaayo*
yo keTaa-le euTaa jyaakeT lagaa-yo
 DEM.PROX boy-ERG one jacket wear-PST.3SG.M.NH
 ‘This boy put on a jacket.’ [s12, PT 033]

(322) *usle kitaab phyaa~kyo*
us-le kitaab phyaa~k-yo
 3SG-ERG book throw-PST.3SG.M.NH
 ‘He threw the book.’ [s4, PT 010]

The first example (321) is concerned with the dressing event. In (321), the Agent *keTo* ‘boy’ and the Figure *jyaakeT* ‘jacket’ are mentioned, however, the Ground (animate human body part which is the final destination of the Figure *jyaakeT* ‘jacket’) is omitted. In (322) too, the Ground element, which is the destination of the Figure *kitaab* ‘book’, is not mentioned. In total, there are 18 placement events whose motion descriptions do not attest the Ground component. The highest number of Ground omission (13 out of 18) is observed in dressing events such as ‘put on coat’, ‘put boot on foot’, and ‘put a hat on head’ among a few others. In some other events, the frequency of Ground omission is very low. For instance, in descriptions of events

such as ‘stuff rag into car exhaust’, ‘put stone into pot of water’, and ‘pour liquid into container’, the Ground was omitted only once. Table 39 shows the events whose motion descriptions do not attest the Ground component.

Events	N° of Grounds omitted (n° of speakers, N=18)
put on coat	13
put boot on foot	13
put a hat on head	13
put saucer on top of cup	12
put poster on wall	8
drop book accidentally on floor	7
toss book on floor	5
spill water onto table when pick up glass	3
put flower into hair - skewer	3
put a candle into a candle stand	3
put book on floor	2
give a cup to someone	2
stuff rag into car exhaust	1
put stone into pot of water	1
put plastic cup on table with mouth	1
put celery bunch into a recorder case	1
put box up on shelf	1
pour liquid into container	1

Table 39. Placement events showing the omission of the Ground component

As for the removal events, there are as many as 20 events where the Ground is not mentioned. This might be due to the fact that the Ground can be inferred more easily from the context for such events (Aske, 1989: 3). The event ‘take off coat’ has the highest number of motion descriptions not attesting the Ground element which means 17 out of 18 speakers omitted the Ground in this event, and the lowest number is one in the events that consists of ‘take box down from shelf’, and ‘take flower out

of hair - unskewer'. Examples (323) and (324) below show the omission of the Ground element in removal events.

- (323) *usle aaphno jyaakeT phukaali*
us-le aaph-no jyaakeT phukaal-i
 3SG-ERG self-GEN jacket take.off-PST.3SG.F.NH
 'She took her (own) jacket off.' [s16, PT 133]

- (324) *usle posTar jhiki*
us-le posTar jhik-i
 3SG-ERG poster take.out-PST.3SG.F.NH
 'She took the poster out.' [s6, PT 128]

Table 40 shows the removal events in the description of which the Ground component was omitted.

Events	Nº of Grounds omitted (nº of speakers, N=18)
take off coat	17
knock over bucket so blocks spill out	10
take off sock	10
take poster off wall	9
take off hat	8
take plastic cup off table with mouth	8
take a candle out of a candle stand	6
take a cup off a table	6
take armload of books off table	6
take a coke can from someone	5
take a handful of beans from flat surface	4
take banana off table with long tongs	4
take suitcase out of elevator, going out of room	4
pour water out of a tin	3
take magazine from floor	3
take rag out of car exhaust	3
take saucer off cup	3

take a cucumber out a recorder case	2
take box down from shelf	1
take flower out of hair - unskewer	1

Table 40. Removal events showing the omission of the Ground component

The data show that the omission of the Ground is more frequent in removal events than in placement events (cf. Wälchli & Zúñiga, 2006: 291). However, this issue still requires an extensive investigation based on a larger dataset in order to determine the trend of the omission of the Ground in Source-oriented vs. Goal-oriented events. Nevertheless, based on this dataset, we can observe that the highest frequency of Ground omission occurs in the dressing events. This tendency seems to occur in Kalasha, an Indo-Aryan language (Petersen, 2012) and also in other languages of the world (see for example, Slobin, 2004: 244; Wälchli & Zúñiga, 2006; Ishibashi, 2012; Kopecka & Narasimhan, 2012; O'Connor, 2012 *inter alia*).

4.2 Construction types in placement and removal events

The data collected with the ‘Put and Take’ stimulus set show two types of constructions in placement and removal events: simplex and complex. A construction refers to the form-function relationship of different morphosyntactic devices in a given clause irrespective of a particular theory (cf. Goldberg, 1995). A construction is simplex if it consists of the following types of clause:

- (a) a finite clause (a.k.a. single clause, Talmy 1991: 481) containing a simple predicate;
- (b) a finite clause with a simple predicate followed by a copula or an auxiliary;
- (c) a finite clause with a compound predicate;
- (d) a clause that consists of a light verb construction.

Complex constructions, on the other hand, consist of at least two clauses, typically one finite clause and one subordinate clause (e.g., the purposive clause, clause with conjunctive participle form, and the relative clause). Depending on the participants’ choices, sometimes both clauses can be of coordinate types. There are

also certain constructions, which are not classifiable as simplex or complex because either they are incomplete motion descriptions or they are irrelevant. These constructions are placed in the ‘*not applicable*’ category. Table 41 shows the types of constructions identified in the ‘Put and Take’ corpus.

Types of constructions	N° of motion descriptions	Percentage
Simplex	600	51.8
Complex	540	46.6
<i>Not applicable</i>	18	1.6
Total descriptions	1158	100

Table 41. Types of constructions

Table 41 shows that out of 1158 motion descriptions, 600 (51.8% of the total) comprise simplex constructions and that complex constructions account for 540 (46.6% of the total). Eighteen motion descriptions, that is 1.6%, are considered as ‘*not applicable*’.

4.2.1 Simplex constructions

a. Simple predicates

Constructions consisting of only one predicate in the finite form together with the subject or object arguments constitute simple predicates; they comprise 556 motion descriptions ($N=1158$) that account for 48% of the total motion descriptions. These predicates function as the main verb and carry all the grammatical information. Examples (325) and (326) which depict placement and removal events respectively *Taa~snu* ‘to paste’ and *uThaaunu* ‘to pick up’ show the use of the simple predicate construction.

- (325) *unle bhittaamaa ghoNaako posTar Taa~sin*
un-le bhittaa-maa ghoDaa-ko posTar Taa~s-in
 3SG-ERG wall-LOC horse-GEN poster paste-PST.3SG.F.H
 ‘She put the poster of a horse on the wall.’
 (Lit. ‘She pasted the poster of a horse on the wall.’ [s3, PT 028])

- (326) *usle makh uThaayo*
us-le makh uThaa-yo
 3SG-ERG mug pick.up-PST.3SG.M.NH
 ‘He picked up the mug.’ [s15, PT 101]

b. Compound predicates

Compound predicates consist of at least two verbal elements (V+V) of which the first one functions as the lexical head (the main verb) and the second one functions as the grammatical head (cf. Butt, 2010; see also § 2.2.4.4). In compound predicate constructions, verbs like *raakhnu* ‘to put’, *nikaalnu* ‘to take out’, *siuranu* ‘to insert’, *phya~knu* ‘to throw’ and *haTaaunu* ‘to remove’ among others are compounded with the verb *dinu* ‘to give’ signifying a benefactive construction. In our ‘Put and ‘Take’ dataset, they comprise 39 motion descriptions, which is 3.4% of the total of motion descriptions. Verbs followed by *dinu* ‘to give’ in the compound predicate construction are shown in Table 42.

Verbs	English translation	Verbs	English translation
<i>chopnu</i>	‘to cover’	<i>lagaunu</i>	‘to put on’
<i>Dubaaunu</i>	‘to dip’	<i>nikaalnu</i>	‘to take out’
<i>haTaaunu</i>	‘to remove’	<i>phaalnu</i>	‘to throw’
<i>jhiknu</i>	‘to take out’	<i>raakhnu</i>	‘to put’
<i>jhunDyaaunu</i>	‘to hang’	<i>siurinu</i>	‘to insert’
<i>kocnu</i>	‘to put’	<i>Taa~snu</i>	‘to paste’
<i>nikaalnu</i>	‘to take out’	<i>phaalnu</i>	‘to throw’

Table 42. Verbs followed by *dinu* ‘to give’ in compound predicate constructions

The verb *dinu* ‘to give’ can be used independently as a main verb but when it is used as a compound predicate, it loses its basic meaning, as in examples (327) and (328).

- (327) *usle sirmaa phul siuridiyo*
us-le sir-maa phul siur-i-di-yo
 3SG-ERG head-LOC flower insert-ABS-give-PST.3SG.M.NH
 ‘He inserted the flower into the hair.’

(Lit. ‘He inserted the flower in the head.’) [s4, PT 018]

- (328) *kapaalko phul jhikidii*
kapaal-ko phul jhik-i-di-i
 head-GEN flower take.out-ABS-give-PST.3SG.F.NH
 ‘(She) took the flower out of the head.’ [s8, PT 118]

The verb *siuranu* ‘to put’ and *dinu* ‘to give’ in (327), and *jhiknu* ‘to take out’ and *dinu* ‘to give’ in (328) do not express two distinct lexical meanings ‘to insert’ and ‘to give’ or ‘to take out’ and ‘to give’ but convey the meaning ‘to insert’ in (327) and ‘to take out’ in (328). Therefore, in these examples, *dinu* ‘to give’ occurs in the compound verb construction in its benefactive function and carries along all the grammatical information. However, I will not discuss the issue of the benefactive function here as it requires an extensive study on its own (see, Pokharel, 2000 for further details on benefactive constructions in Nepali; see also § 2.2.4.4). Verbs such as *parnu* ‘to fall’, *saknu* ‘to finish’, and *haalnu* ‘to put’ among a few others can also be used in the compound predicate construction but there are no occurrences of these verbs in the ‘Put and Take’ corpus. It is important to explain the use of *-i* in the compound predicate constructions. It occurs regularly between the lexical and the grammatical head as the absolutive participle (cf. Masica, 1991: 327; Peterson, 1999: 345) as in examples (327) and (328). It is one of the most productive morphological devices in the compound verb formation (see § 2.2.4.4). Besides, the suffix *-i* is also used to mark the conjunctive participle (see § 2.2.7, see also Sharma, 1980: 99; Pokharel, 1999: 190).

c. Copular constructions

In total, the copular constructions comprise three motion descriptions out of 1158. The copular constructions contain a predicate followed by the copulas such as *cha* ‘is’, *hunu* (‘lit. to become’), or *ho* ‘is’ (see also § 2.2.3). In these constructions, the predicate functions as the main verb while the copula conveys the grammatical information. Of the three types of copulas, only the copula₂ (*cha* ‘is’) is used in the motion descriptions, as in examples (329) and (330) that convey placement and removal event respectively.

- (329) *kasaiile pleTmaa caamal raakhdaicha*
kasai-le pleT-maa caamal raakh-dai-cha
 someone-ERG plate-LOC rice put-DUR-COP₂.NPST.3SG.M.NH
 ‘Someone is putting rice on the plate.’ [s7, PT 005]

- (330) *kohi maanchele peTibaaTa*
kohi maanche-le peTi-baaTa
 some man-ERG carton-ABL
phalphul baahira nikaaldaicha
phalphul baahira nikaal-dai-cha
 fruits outside take.out-DUR-COP₂.NPST.3SG.M.NH
 ‘A man is taking the fruits out of the carton.’
 ‘A man is taking out the fruits outside from the carton.’ [s7, PT 111]

The main verbs in these examples are respectively *raakhnu* ‘to put’ and *nikaalnu* ‘to take out’ in the progressive aspect but the grammatical head is the copula *cha* ‘is’.

4.2.2 Complex constructions

a. Relative clause constructions

Relative clause constructions are the most frequent types among complex constructions found in motion descriptions in both placement and removal events, with a higher frequency in placement than in removal events. In total, they comprise 221 motion descriptions which correspond to 19.1% of the total data. These constructions are sort of adjectival relative clauses rather than what are typically called the canonical relative clauses joined in Nepali by a relative pronoun such as *jo* ‘who’, *jun* ‘which’/‘who’, *jas* ‘whom’ *jahaa~* ‘where’ (cf. § 2.2.5.4). From the functional point of view, they modify the nouns or the noun phrases (the Figure and the Ground objects) as the canonical relative clauses do. The modification is marked by the perfective suffix *-eko* which follows the verb or the copula₃ (*hunu* ‘to become’), as in (331) and (332), or by the prospective suffix *-ne*, as in (333).

- (331) *usle* *Tebulmaathi* *bhaeko* *kacauraamaa*
us-le *Tebul-maathi* *bha-eko* *kacauraa-maa*
3SG-ERG table-above COP₃.PST-PFV bowl-LOC
euTaa *syaau* *raakhi*
euTaa *syaau* *raakh-i*
one apple put-PST.3SG.F.NH
‘She put an apple in the bowl, which was on the table.’ [s16, PT 011]

- (332) *usle* *khuTTaamaa* *lagaeko* *mojaa* *phukaalyo*
us-le *khuTTaa-maa* *laga-eko* *mojaa* *phukaal-yo*
3SG-ERG leg-LOC wear-PFV socks take.off-PST.3SG.M.NH
‘He took off the socks, which he had worn (in his legs).’ [s5, PT 126]

- (333) *pustak* *raakhne* *ryaakma* *unle* *euNaa*
pustak *raakh-ne* *ryaak-maa* *un-le* *euTaa*
book put-PROS rack-LOC 3SG.H-ERG one
saano *baakas* *lagera* *raakh-e*
saano *baakas* *lag-era* *raakh-e*
small box take.away-CP put-PST.3SG.M.H
‘He took a small box away and put (it) in the shelf, where books are kept.’
[s3, PT 006]

In the examples above, (331) expresses the placement, (332) indicates the removal, and (333) conveys the removal-placement event. Note that the suffix *-ne* can also mark the future.

b. Conjunctive participle constructions

Conjunctive participle (CP) constructions are the second most frequent type in complex constructions; they comprise 158 motion descriptions, which is 13.7% of the total dataset. Table 43 shows the number of motion descriptions and their percentage.

	Events			
	Placement	Removal	Removal-Placement	Total
N° of motion descriptions (Total N=1158)	73	75	10	518
Percentage	6.3	6.5	0.9	13.7

Table 43. Use of the CP form in placement and removal events

The conjunctive participle (CP) forms are also the major morphological devices in the clause chaining processes. They link the sequences of events (see also § 2.2.7, cf. § 5.2.2) in the dependent clause slot and then are followed by the independent clause, as in (334) and (335) for the placement and removal events respectively.

- (334) *usle pustak laera Tebulmaa raakhi*
us-le pustak lag-era Tebul-maa raakh-i
 3SG-ERG book take.away-CP table-LOC put-PST.3SG.F.NH
 ‘Having taken the book away she put (it) on the table.’ [s6, PT 004]

- (335) *unile baalTima Taauko Dubaaera jhikin*
uni-le baalTi-maa Taauko Dubaa-era jhik-in
 3SG.H-ERG bucket-LOC head dip-CP take.out-PST.3SG.F.H
 ‘She put her head into the bucket and (then) took it (head) out of it (bucket).’
 [s9, PT 124]

In example (334), the Agent takes away the Figure object *pustak* ‘book’ and then puts it on the table. Here, the taking away of the Figure object is indicated by the verb *lagnu* ‘to take away’ in the CP form and the event of putting is expressed by the verb *raakhnu* ‘to put’ which is in the finite form. In the case of (335), dipping the head into the bucket, i.e. a placement event, is encoded by the verb *Dubaaunu* ‘to dip into’ in the CP form and taking the head out of the bucket, i.e. a removal event, is conveyed by the verb *jhiknu* ‘to take out’ in the independent clause.

Verbs such as *nikaalnu* ‘to take out’, *lagnu* ‘to take away’, *lyaaunu* ‘to bring’, *linu* ‘to take’, *uThaaunu* ‘to pick up’, and *boknu* ‘to carry’ among others are the most frequent verbs used in the CP construction. It is interesting to note that *nikaalnu* ‘to take out’, is not only the most frequent verb in the expression of removal events but also the most frequent one in the conjunctive participle construction. It represents

3.6% of the conjunctive participle constructions. Consequently, the analysis of the data reveals that, in Nepali, the expression of the removal events seems more complex at the syntactic level than the expression of placement events (see Petersen, 2012 for similar phenomenon in Kalasha; see also § 4.2.3).

c. Mixed constructions

The dataset we gathered with the ‘Put and Take’ stimulus set also reveals that speakers use more complex constructions to depict placement and removal events that I will call here ‘mixed constructions’. These constructions are also relatively frequent accounting for 8.5% of motion descriptions ($N=1158$). This category of ‘mixed constructions’ includes two types:

i. The first type consists of relative clauses, which are followed by a conjunctive participle and by a finite clause, as in (336) and (337).

(336)	<i>Tebalmaathi</i>	<i>raheko</i>	<i>kacauraamaa</i>	<i>ekjaanaa</i>	<i>bektile</i>
	<i>Tebal-maathi</i>	<i>rah-eko</i>	<i>kacauraa-maa</i>	<i>ek-janaa</i>	<i>bekti-le</i>
	table-on	remain-PFV	bowl-LOC	one-CLF	person-ERG
	<i>kehi</i>	<i>saamaan</i>	<i>lyaaera</i>	<i>khanyaae</i>	
	<i>kehi</i>	<i>saamaan</i>	<i>lyaa-era</i>	<i>khanyaa-e</i>	
	some	goods	bring-CP	pour-PST.3SG.M.H	

‘A person brought some goods and then poured into the bowl which was on the table.’

(Lit. ‘Into the bowl which was on the table, a person, having brought some goods, poured (them).’ [s13, PT 013])

(337)	<i>usle</i>	<i>pustakharu</i>	<i>raakhne</i>	<i>ryaakbaaTa</i>
	<i>us-le</i>	<i>pustak-haru</i>	<i>raakh-ne</i>	<i>ryaak-baaTa</i>
	3SG-ERG	book-PL	put-PROS	shelf-ABL
	<i>baakas</i>	<i>nikaalera</i>	<i>liera</i>	<i>hi~Nyo</i>
	<i>baakas</i>	<i>nikaal-era</i>	<i>li-era</i>	<i>hi~D-yo</i>
	box	take.out-CP	take-CP	walk-PST.3SG.M.NH

‘He took the box out of the shelf, (where the books are kept), and walked away.’

(Lit. ‘He, from the shelf, where books are kept, having taken out the box, having taken (it), walked away.’ [s3, PT 106])

In these examples, the verbs in the CP forms convey the movement of the Figure *baakas* ‘box’ and *kehi saamaan* ‘some goods’. The verb *khanyaaunu* ‘to pour’ in (336) in the finite clause expresses the movement of the Figure object *kehi saamaan* ‘some goods’; however, in (337) the verb *hi~Dnu* ‘to walk’ in the finite clause does not express the Motion of the Figure but denotes the spontaneous Motion of the human Agent *u* ‘he’.

ii. The second type of mixed constructions consist of the CP forms followed by relative clauses and then the finite clause, as in examples (338) and (339).

(338)	<i>aa~laamaa</i>	<i>raakhera</i>	<i>lageko</i>	<i>kitaab</i>
	<i>a~galo-maa</i>	<i>raakh-era</i>	<i>lag-eko</i>	<i>kitaab</i>
	arm-LOC	put-CP	take.away-PFV	book
	<i>pheri</i>	<i>caa~i~</i>	<i>aa~laamai</i>	<i>laera</i>
	<i>pheri</i>	<i>caahi~</i>	<i>a~gaalo-mai</i>	<i>lag-era</i>
	again	DPRT	arm-LOC.EMP	take.away-CP
	<i>Thyaakka</i>	<i>milaaera</i>	<i>raakhyo</i>	<i>Tebalmaathi</i>
	<i>Thyaakka</i>	<i>milaa-era</i>	<i>raakh-yo</i>	<i>Tebal-maathi</i>
	exactly	arrange-CP	put-PST.3SG.M.NH	table-above

‘(He) put an armful of books, which he had taken away, on the table (by) arranging them well.’

(Lit. ‘The books, which he had taken away by putting them in his arm, having taken (them) away in his arm itself having arranged them well, (he) put them on the table.’) [s14, PT 004]

(339)	<i>usle</i>	<i>euTaa</i>	<i>baksaa</i>	<i>liera</i>
	<i>us-le</i>	<i>euTaa</i>	<i>baksaa</i>	<i>li-era</i>
	3SG-ERG	one	box	take-CP
	<i>kitaab</i>	<i>bhaeko</i>	<i>ryaakmaa</i>	<i>raakhidiyo</i>
	<i>kitaab</i>	<i>bha-eko</i>	<i>ryaak-maa</i>	<i>raakh-i-di-yo</i>
	book	COP ₃ .PST-PFV	shelf-LOC	put-ABS-give-PSTT.3SG.M.H

‘He took a box and then put (it) on the shelf which contained the books.’

(Lit. ‘He, having taken one box, on the shelf, where books are (located), he put (it)).’ [s16, PT 006]

In (338), the first conjunctive participle form precedes the relative clause, the second one introduces the sub-event of the caused Motion, and finally the third conjunctive participle modifies the main verb of the clause that expresses the placement event. In the case of (339), the verb in the CP form precedes the relative clause and also introduces the sub-event of the caused Motion. In both examples, verbs in the conjunctive participle form and the main verb in the finite clause depict the Motion of the Figure object *kitaab* ‘book’.

d. Adverbial subordinate constructions

In this type of construction, the dependent clause has some kind of adverbial function and is followed by the independent clause. This is the case in (340) and (341) which express placement and removal events respectively.

(340) *usle mag ucaal-daa paani pokhaayo*
us-le mag ucaal-daa paani pokh-aa-yo
 3SG-ERG mug lift-SIM water spill-CAUS-PST.3SG.M.NH
 ‘While he was lifting the mug, he spilled the water.’ [s15, PT 021]

(341) *usle TebulbaaTa bhaa~No jhiktaa*
us-le Tebul-baaTa bhaa~Do jhik-daa
 3SG-ERG table-ABL pot take.out-SIM
kei cij pokhhyo
kehi cij pokh-i-yo
 some thing spill-PASS-PST.3SG.M.NH
 ‘While he was taking the pot out of the table, something got spilled.’ [s6, PT 021]

These examples convey two simultaneous sub-events. The lifting of the *mag* ‘mug’ (340), taking out the *bhaa~Do* ‘pot’ (341), ‘the spilling of *paani* ‘water’ (340), and *kehi cij* ‘something’ (341) occur simultaneously. The inflection *-daa*, which follows the verb in the dependent clause slot, marks simultaneity.

e. Coordinating constructions

Conjunctive coordination and adversative coordination constructions are both complex constructions because they contain two independent clauses joined by two clause combining devices, *ra* ‘and’, as in (342), and *tara* ‘but’, as in (343), showing removal and placement events respectively (see also § 2.2.6, cf. § 5.2).

- (342) *mukhle glaas Toki ra uThaai*
mukh-le glaas Tok-i ra uThaa-i
 mouth-INS glass bite-PST.3SG.F.NH and pick.up-PST.3SG.F.NH
 ‘(She) held the glass with mouth and picked (it) up.’ [s4, PT 102]

- (343) *usle kitaab liera hi~Niraheko*
us-le kitaab li-era hi~D-i-rah-eko
 3SG-ERG book take-CP walk-ABS-remain-PFV
thiyo tara kitaab khasyo
thi-yo tara kitaab khas-yo
 COP₂-PST.3SG.M.NH but book fall-PST.3SG.M.NH
 ‘He had been walking (by) holding the book but it (the book) fell down.’
 [s4, PT 009]

These devices connect two noun phrases or two verb phrases which are syntactically equal. In coordinating constructions, *ra* ‘and’ (342) joins two different verb phrases, *Toknu* ‘to bite’ and *uThaauu* ‘to pick up’. In the adversative construction too, *tara* ‘but’ (343) joins two verb phrases *linu* ‘to take’ and *khasnu* ‘to fall’. In total, this construction type was found in 25 motion descriptions.

4.2.3 Choice of constructions depending on the event type

There are differences in the choice of the construction types the participants make to describe some events. Some events are preferentially described by simplex constructions, others by complex constructions. The trend of preference is attested in placement as well as removal events. However, in the dataset under the study, there is a tendency to use complex constructions more frequently in removal events than in

placement events (cf. Ishibashi, 2012: 269; Petersen, 2012). I will shortly discuss this trend by taking into account the placement and removal events respectively.

a. Simplex and complex constructions in placement events

The ‘Put and Take’ dataset attests 565 motion descriptions (out of 1158) in placement events of which 62.7% of the total (N=565) consists of simplex constructions, 36.1% complex constructions and 1.2% falls into the ‘*not applicable*’ category. Table 44 gives the number of occurrences and percentage of simplex and complex constructions in placement events.

Types of constructions	N° of motion descriptions	Percentage
Simplex	354	62.7
Complex	204	36.1
<i>Not applicable</i>	7	1.2
Total	565	100

Table 44. Simplex and complex constructions in placement events

Table 45 below shows 10 scenes in the description of which the use of the simplex construction is the most frequent. The two first scenes - ‘put a hat on head’, and ‘put celery bunch into a recorder case’ among others - are among the events depicted by the simplex construction.

Event types	N° of motion descriptions
put a hat on head	17
put celery bunch into a recorder case	17
put boot on foot	16
give a cup to someone	16
put stone into pocket	15
drop apple into bag	15
hang rope over tree branch	15
put cup on table	14
drop book deliberately onto floor	14
put head into a bucket	14

Table 45. The 10 most described placement events in simplex construction

The following examples (344) and (345) show the use of the simplex construction in the description of these placement events .

(344) *usle Topi lagaayo*
us-le Topi lagaa-yo
3SG-ERG cap put.on-PST.3SG.M.NH
'He put the cap on (head).' [s1, PT 025]

(345) *usle pyaakeTbhitra biruwaa raakhi*
us-le pyaakeT-bhitra biruwaa raakh-i
3SG-ERG packet-inside plant put-PST.3SG.F.NH
'She put the plant into the packet.' [s7, PT 015]

As shown by the Table 45 above, events such as 'put a hat on head' and 'put celery bunch into a recorder case' account for the highest number of motion descriptions by means of a simplex construction. The question that arises is why some events are more frequently expressed by means of the simplex construction than others. Is it simply that the Figure is a more familiar object to the participants (e.g., 'put a hat on head') or is it that the relation between some types of Figures (e.g. hat) and some types of Grounds (e.g. head) are easily identifiable as they are parts of their everyday culture? On the other hand, events depicted by complex constructions in placement events comprise 'drop book accidentally on floor', 'put plastic cup on table with mouth', and 'put armload of books on table' among others. Table 46 shows the 10 most placement events described by means of complex construction.

Events	N° of motion descriptions
drop book accidentally on floor	16
put plastic cup on table with mouth	13
put armload of books on table	12
spill water onto table when pick up glass	12
put apple in bowl	11
put suitcase out of room, while staying in room	11
put box up on shelf	10
put stone into pot of water	9
stuff rag into car exhaust	9
put banana on table with long tongs	8

Table 46. The 10 most described placement events in complex construction

The number of motion descriptions that consists of the complex construction varies from one to 16 depending on the event. Events like ‘drop book accidentally on floor’ are among the most frequently described by means of the complex construction. Seven events consist of more than 10 motion descriptions. 15 events comprise between five and nine motion descriptions, and finally nine events consist of 1 to 4 motion descriptions. Examples (346) and (347) show the descriptions of placement events through the use of complex constructions.

(346) *usle bokera lyaaeko kitaab bhai~maa khasaalyo*
us-le bok-era lyaa-eko kitaab bhai~-maa khasaal-yo
 3SG-ERG carry-CP bring-PFV book floor-LOC drop-PST.3SG.M.NH
 ‘He dropped the books, which he was carrying.’

(Lit. ‘He dropped the books, which he had brought (by) carrying.’ [s18, PT 009])

(347) *usle mukhle cyaapera Tebulmaathi gilaas raakhyo*
us-le mukh-le cyaap-era Tebul-maathi gilaas raakh-yo
 3SG-ERG mouth-INS press-CP table-above glass put-PST.3SG.M.NH
 ‘He put the glass on the table (by) pressing (it) with his mouth.’ [s6, PT 002]

We can see that example (346) consists of the conjunctive participle and an adjectival type of relative clause in the dependent clause slot and the main verb, and

in (347), the conjunctive participle is in the dependent clause slot and the main verb *raaknu* ‘to put’ is in the independent clause slot.

b. Simplex and complex constructions in removal events

The ‘Put and Take’ dataset comprises 539 motion descriptions of removal events (out of 1158). 55.1% of the total ($N=539$) consist of complex constructions, 43.4% of simplex constructions, and 1.5%, fall into the ‘*not applicable*’ categories, as shown in Table 47.

Types of constructions	N° of motion descriptions	Percentage
Complex	297	55.1
Simplex	234	43.4
<i>Not applicable</i>	8	1.5
Total descriptions	539	100

Table 47. Complex and simplex constructions in removal events

Table 48 gives the 10 removal events most frequently described by means of the complex construction.

Events	N° of motion descriptions
take armload of books off table	18
take suitcase out of elevator, going out of room	18
knock over bucket so blocks spill out	16
take magazine from floor	16
take box down from shelf	15
take a handful of beans from flat surface	14
unhang rope from tree branch	14
take saucer off cup	13
take head out of bucket	12
take plastic cup off table with mouth	12

Table 48. The 10 most described removal events in complex construction

The number of motion descriptions consisting of the complex construction varies from three to 18 depending on the removal event. Events that have been the most frequently depicted by means of a complex construction are ‘take armload of

books off table’ and ‘take suitcase out of elevator, going out of room’ (N=18). Examples of removal events expressed with the help of complex constructions are illustrated in (348) and (349).

(348) *pustak bokera lagin*
pustak bok-era lag-in
 book carry-CP take.away-PST.3SG.F.H
 ‘Carrying the books , (she) took (them) away.’ [s11, PT 104]

(349) *baalTi khuTTaale haanera palTaaain*
baalTi khuTTaa-le haan-era palTaa-in
 bucket leg-INS kick-CP fall.CAUS-PST.3SG.F.H
 ‘(She) knocked over the bucket (by) (kicking it).’ [s8, PT 113]

The conjunctive participle forms in both examples illustrate an instance of the use of complex constructions. The 10 removal events that are most frequently described by means of the simplex construction are shown in Table 49.

Events	N° of motion descriptions
take a cucumber out a recorder case	15
dump blocks out of tin	14
take orange from box	14
take a coke can from someone	13
take a candle out of a candle stand	13
take pen out a hole	12
flip block off notepad into bowl	11
take off hat	11
take rag out of car exhaust	11
take stone out of pocket	11

Table 49. The 10 most described removal events in simplex construction

The number of motion descriptions of the removal events which are expressed through the simplex construction varies from two to 15 depending on the event, with the highest number attested in the description of the event ‘take a cucumber out a recorder case’. Examples (350) and (351) below show the use of simplex constructions in removal events.

(350) *usle kaa~kro nikaali*
us-le kaa~kro nikaal-i
 3SG-ERG cucumber take.out-PST.3SG.F.NH
 ‘She took the cucumber out.’ [s18, PT 115]

(351) *usle kaarTun-baaTa euTaa phal jhik-yo*
us-le kaarTun-baaTa euTaa phal jhik-yo
 3SG-ERG carton-ABL one fruit take.out-PST.3SG.M.NH
 ‘He took a fruit out of the carton.’ [s6, PT 111]

We may note that the use of simplex constructions is higher in placement events (i.e. 62.7% of the total ($N=565$)) but the use of complex constructions is higher in removal events (i.e. 55.1% of the total, $N=539$).

c. Simplex and complex constructions in removal–placement events

In removal-placement events, there are 54 motion descriptions (out of 1158). Such events are expressed in 72.2% of the total ($N=54$) by complex constructions, 22.2% cases by simplex constructions, and 5.6% the ‘*not applicable*’ category. Table 50 shows the types of constructions used for the three removal-placement events.

Construction types 	Simplex	Complex	‘ <i>Not-applicable</i> ’
Events 			
push suitcase from car to tree	4	13	1
take apple from pile of books and move to shoe	4	13	1
take bag of corn from table and move to chair	4	13	1
Total	12	39	3
Percentage	22.2	72.2	5.6

Table 50. Simplex and complex constructions in removal-placement events

Table 50 shows that the proportion of complex constructions is much higher than the proportion of simplex constructions. Examples (352) and (353) show the expression of removal-placement events by means of complex and simplex constructions respectively.

(352)	<i>usle</i>	<i>kitaabmaathi</i>	<i>bhaeko</i>	<i>syaaulaai</i>
	<i>us-le</i>	<i>kitaab-maathi</i>	<i>bha-eko</i>	<i>syaau-laai</i>
	3SG-ERG	book-above	COP ₃ .PST-PFV-GEN	apple-DAT
	<i>juttaamaathi</i>	<i>lyaaera</i>	<i>raakhidii</i>	
	<i>juttaa-maathi</i>	<i>lyaa-era</i>	<i>raakh-i-di-i</i>	
	shoes-above	bring-CP	put-ABS-give-PST.3SG.F.NH	

‘She brought the apple, which was located on (top of) book and then put (it) on the (top of) shoes.’ [s16, PT 051]

(353)	<i>unle</i>	<i>ek</i>	<i>Thaa~u~ko</i>	<i>byaag</i>
	<i>un-le</i>	<i>ek</i>	<i>Thaa~u~-ko</i>	<i>byaag</i>
	3SG.H-ERG	one	place-GEN	bag
	<i>arke</i>	<i>Thaa~u~maa</i>	<i>saarin</i>	
	<i>arke</i>	<i>Thaa~u~-maa</i>	<i>saar-in</i>	
	another	place-LOC	move-PST.3SG.F.H	

‘She put the bag from one place to another place.’
 (Lit. ‘She moved the bag of one place to another place.’) [s2, PT 129]

Note that in some complex constructions such as (352), some speakers use the dative marker *-laai* ‘to’, with the inanimate Figure object (e.g., *syaau* ‘apple’). Normally, it (i.e. *-laai* ‘to’) is used with the animate, human or non-human. The reason of its use with the inanimate objects might be that speakers want to specify such Figure objects (Bossong, 1991; M. Pokharel, p. c., March, 2017; see also § 2.2.2.2). This phenomenon has not been examined in literature on Nepali, and needs a detailed investigation in order to better understand its function and the extent of its uses.

4.3 Lexico-grammatical devices in caused Motion events

In this Section, I will investigate the use of lexical (verbs and adverbs) and grammatical (case markers and postpositions) devices in the expression of placement and removal events. First, I investigate the diversity of verbs found in the ‘Put and Take’ corpus and the semantic distinctions they make in placement vs. removal events. Then, I discuss the use of adverbs, case markers, and postpositions.

4.3.1 Motion verbs

4.3.1.1 Lexical diversity of verbs

This Section aims to address the following research questions:

- (a) What is the lexical diversity of verbs used by the speakers to express placement and removal events?
- (b) What kinds of distinctions are speakers of Nepali sensitive to when encoding placement and removal events?
- (c) Is there any dialectal variation among participants in regard to the use of different morphosyntactic devices and the patterns of distribution of Path information?

The corpus data gathered with the ‘Put and Take’ stimulus set reveal a great lexical diversity in placement and removal events. Altogether 85 different verbs were used in caused Motion descriptions in the main verb slot (see Appendix J for a detailed list of these verbs). Table 51 below shows 20 most frequent verbs found in the motion description.

Verbs	English translation	N° of occurrences (N=1158)	Percentage
<i>raakhnu</i>	'to put'	357	30.8
<i>nikaalnu</i>	'to take out'	199	17.2
<i>lagaauunu</i>	'to wear'	58	5.0
<i>lagnu</i>	'to take away'	39	3.4
<i>jhiknu</i>	'to take out'	37	3.2
<i>khanyaauunu</i>	'to pour into/on'	31	2.7
<i>uThaaunu</i>	'to pick up'	31	2.7
<i>jaanu</i>	'to go'	29	2.5
<i>dinu</i>	'to give'	27	2.3
<i>phyaa~knu</i>	'to throw'	21	1.8
<i>linu</i>	'to take'	19	1.6
<i>hi~Dnu</i>	'to walk'	18	1.6
<i>phaalnu</i>	'to throw'	18	1.6
<i>kholnu</i>	'to open'	16	1.4
<i>khasaalnu</i>	'to drop'	14	1.2
<i>Taa~snu</i>	'to stick'	14	1.2
<i>haalnu</i>	'to put'	12	1.0
<i>saarnu</i>	'to move'/'to plant'	11	0.9
<i>chiraaunu</i>	'to cause to enter'	10	0.9
<i>Dubaaunu</i>	'to dip into'	10	0.9

Table 51. The 20 most frequent verbs used in the expression of placement and removal events

The most frequent are the verb *raakhnu* 'to put' accounting for 30.8% of the data (N=1158) and the verb *nikaalnu* 'to take out' accounting for 17.2% of the data. As for the other verbs found in the dataset, eight of them occur more than 20 times, 11 of them occur between 10 and 19 times, and the number of occurrences of 13 of them ranges between four to nine. Besides, eight verbs are used three times, and 17 verbs are used two times each only. Finally, there are 26 verbs that are used only once. These differences in the use of individual verbs suggest that some verbs (the most

frequent) are semantically more general whereas others (the least frequent) are semantically more specific. As regards the semantic category of these verbs, 39 verbs convey the Path of Motion (e.g., *chiraaunu* ‘to cause to enter’, and *phukaalnu* ‘to take off’ among many others) and 27 convey the Manner of Motion (e.g., *taannu* ‘to pull’, and *dhakelnu* ‘to push’ among several others) (see § 5.3.1.2 and § 5.3.1.3 for a detailed account of Path and Manner criteria, see also Appendix J).

4.3.1.2 Main semantic distinctions in placement events

The dataset reveals 52 different verbs in placement events. The verb *raakhnu* ‘to put’ is the most frequent (63.2% of the total motion descriptions in placement events ($N=565$)) in placement events. Besides, there are five other verbs which have more than 15 occurrences, five verbs occur between 10 and 14 times, and 29 verbs occur less than five times in placement events. Given its high frequency and the diversity of placement events it covers, the verb *raakhnu* ‘to put’ seems to be particularly neutral to the configuration of the Ground such as surface (on the table) vs. containment (into pocket), and to the orientation of the Figure with respect to the Ground i.e. vertical vs. horizontal, as shown in Table 52.

<i>raakhnu</i> ‘to put’	N° of motion descriptions
put banana on table with long tongs	19
put cup on table	19
put a fistful of rice on a table	18
put armload of books on table	18
put box up on shelf	18
put plastic cup on table with mouth	18
put apple in bowl	17
take apple from pile of books and move to shoe	17
put pen in a hole	17
put celery bunch into a recorder case	16
put stone into pocket	16
take bag of corn from table and move to chair	15
put book on floor	15

put suitcase out of room, while staying in room	14
put a candle into a candle stand	13
drop apple into bag	12
hang rope over tree branch	8
put stone into pot of water	8
put hand into hole in tree	7
push suitcase from car to tree	5
stuff rag into car exhaust	4
drop book deliberately onto floor	3
pour liquid into container	3
put saucer on top of cup	3
put flower into hair - skewer	1
put head into a bucket	1
toss book on floor	1

Table 52. Semantic extensions of the verb *raakhnu* ‘to put’

We can see in Table 52 that there is a total agreement among the participants as to the use of the verb *raakhnu* ‘to put’ to describe certain events such as ‘put cup on table’, and ‘put box up on shelf’. The question arises: does *raakhnu* ‘to put’ overlap with other verbs? The analysis reveals that there are several verbs (e.g., *jhunDyaaunu* ‘to hang’, *haalnu* ‘to put’, and *chiraaunu* ‘to cause to enter’) which overlap with *raakhnu* ‘to put’. However, verbs that cooccur in some contexts with *raakhnu* ‘to put’ are not frequent in the data. Let us discuss some of them to better understand in which contexts speakers tend to be more fine-grained in their descriptions.

a. Semantic overlap between *raakhnu* ‘to put’ and other verbs

i. *raakhnu* ‘to put’ vs. *lagaanu* ‘to wear’

A closer analysis of these two verbs reveals a systematic difference in meaning in the sense that *raakhnu* ‘to put’ is not specifically sensitive to any type of Ground and Figure whereas *lagaanu* ‘to wear’ is. There is no difference between ‘put pen in a hole’ or ‘put armload of books on table’. These events are typically encoded by the verb *raakhnu* ‘to put’. On the other hand, speakers use the verb *lagaanu* ‘to wear’, to depict the events such as ‘put a hat on head’, and ‘put on coat’. Hence, there is a clear distinction in the use of these two verbs between putting a clothing on a body part vs. putting other objects in other places, as Table 53 shows.

<i>raakhnu</i> ‘to put’	<i>lagaanu</i> ‘to wear’
put a fistful of rice on a table	put a hat on head
put armload of books on table	put boot on foot
put box up on shelf	put on coat
put cup on table	
put apple in bowl	
put pen in a hole	

Table 53. The semantic distinction between *raakhnu* ‘to put’ vs. *lagaanu* ‘to wear’

The distinction we find here is that of putting an object on/into some places versus putting a clothing on a body part, the latter being particularly sensitive to animacy (animate human Ground and animate human Agent), as illustrated in (354) for *raakhnu* ‘to put’ and in (355) for *lagaanu* ‘to wear’ respectively. As we will see later, this distinction is specific to placement events but not to the removal events.

- (354) *usle rukhko dulomaa kalam raakhi*
us-le rukh-ko dulo-maa kalam raakh-i
 3SG-ERG tree-GEN hole-LOC pen put-PST.3SG.F.NH
 ‘She put the pen into the hole of the tree.’ [s18, PT 035]

- (355) *usle jyaakeT lagaayo*
us-le jyaakeT lagaa-yo
 3SG-ERG jacket wear-PST.3SG.M.NH
 ‘He put on a jacket.’ [s4, PT 033]

The data also show that some participants use *laaunu* ‘to wear’ rather *lagaanu* ‘to wear’ to express such events. However, the instances of *laaunu* ‘to wear’ are very few (so far only three occurrences). It appears that this is due to the individual variation and, in particular, to the dialectal variation as the verb *laaunu* ‘to wear’ is used by only two speakers from the Parbat district.

In addition to its use for putting a clothing on a body part, the verb *lagaanu* also occurs in the description of some scenes where an object is inserted into a part of the body, e.g., ‘put flower into hair - skewer’, as illustrated by (356). The difference between ‘put clothing on body part’ and ‘put flower into hair – skewer’ lies in the type of the Figure, the Ground (that is human body part) remaining the same. We may note, however, that some participants use a different verb, *siuranu* ‘to insert’, when describing this event, as in example (357).

- (356) *usle kapaalmaa phul lagaaidiyo*
us-le kapaal-maa phul lagaa-i-di-yo
 3SG-ERG head-LOC flower wear-ABS-give-PST.3SG.M.NH
 ‘He put the flower into the hair (other than himself).’
 (Lit. ‘He did the favor of putting flower in(to) the hair (head) (other than himself.’)) [s6, PT 018]

- (357) *usle sirmaa phul siuridiyo*
us-le sir-maa phul siur-i-di-yo
 3SG-ERG head-LOC flower insert-ABS-give-PST.3SG.M.NH
 ‘He inserted the flower into the hair (other than himself).’
 (Lit. ‘He did the favor of inserting the flower in the head.’) [s4, PT 018]

Hence, the use of the verb *siuranu* ‘to insert’ can overlap with the use of the verb *lagaanu* ‘to wear’.

ii. *raakhnu* ‘to put’ vs. *phyaa~knu* ‘to throw’ and *phaalnu* ‘to throw’

The verb *raakhnu* ‘to put’ differs from verbs such as *phyaa~knu* ‘to throw’ and *phaalnu* ‘to throw’. The semantic specificity of these verbs is that the Figure object is in the ‘unaccompanied motion’ (Levin, 1993: 146), which means that the Agent does not have a total control over the Figure, as examples (358) and (359) show.

(358) *usle pustak bha~i~maa phyaa~kyo*
us-le pustak bhui~-maa phyaa~k-yo
 3SG-ERG book floor-LOC throw-PST.3SG.M.NH
 ‘He threw the book/s on the floor.’ [s3, PT 010]

(359) *usle kitaab bhui~-maa phaali*
us-le kitaab bhui~-maa phaal-i
 3SG-ERG book floor-LOC throw-PST.3SG.F.NH
 ‘She threw the book/s on the floor.’ [s19, PT 008]

In both examples, the Figures, *pustak* ‘book’ and *kitaab* ‘book’, are in the unaccompanied Motion and the direction of Motion is indicated by the locative case *-maa* ‘LOC’ marked on the Ground object *bhui~* ‘floor’. Another specificity of these verbs is related to the intentionality of the Agent; if the action was not intentional, speakers would use some other verbs (e.g., *khasaalnu* ‘to drop’) but if the event was unintentional and non-agentive, they would probably use *khasnu*, ‘to fall’. Following Levin (1993: 146), verbs of this type (i.e. *phyaa~knu* ‘to throw’ and *phaalnu* ‘to throw’) can be classified as ‘throw’ verbs in Nepali. Table 54 shows similarities and differences in the extension of use of *phaalnu* ‘to throw’ and *phyaa~knu* ‘to throw’.

<i>phaalnu</i> 'to throw'	<i>phyaa~knu</i> 'to throw'
drop book deliberately onto floor	drop book deliberately onto floor
toss book on floor	toss book on floor
drop apple into bag	
put suitcase out of room, while staying in room	

Table 54. Semantic distinction between *phaalnu* ‘to throw’ and *phyaa~knu* ‘to throw’

We may also note here that in the description of the event ‘throw a book on the floor’, some participants use the verb *hu~i~kyaunu* ‘to throw’. This verb is more

specific than other verbs because not only it indicates that the Figure object is in Motion but it also conveys some kind of sound related to Motion. Furthermore, in contrast to other verbs, *hu~i~kyaunu* ‘to throw’ also implies some exerting force and speed (Berman & Slobin, 1987) and/or force dynamics (Talmy, 2000; Ibarretxe-Antuñano, Cadierno, & Hijazo-Gascon, 2018). Its use is illustrated in example (360).

- (360) *ekjaanaa keTaale kitaab bhui~maa hu~i~kyaayo*
ek-janaa keTaa-le kitaab bhui~-maa hui~kyaay-o
 one-CLF boy.OBL-ERG book floor-LOC throw-PST.3SG.NH
 ‘A boy threw (in a specific way) the book on the floor.’ [s19, PT 010]

iii. *raakhnu* ‘to put’ vs. *khanyaaunu* ‘to pour’

The analyses of the dataset reveals that, in some contexts, the verb *raakhnu* ‘to put’ overlaps with the verb *khanyaaunu* ‘to pour’ (e.g., ‘pour liquid into container’), as shown in Table 55.

<i>khanyaaunu</i> ‘to pour’
pour liquid into container
pour water out of a tin
flip block off notepad into bowl
dump blocks out of tin

Table 55. Events depicting the use of *khanyaaunu* ‘to pour’

According to Petersen (2012), based on the study of Kalasha, verbs like *khanyaaunu* ‘to pour’ are neutral to the configuration of the Ground, the type of Figure, and even to the type of event i.e. placement vs. removal. Our Nepali data show that the verb is not sensitive to the type of Figure because it can express the Motion of granular as well as liquid Figures. Moreover, there is also the occurrence of the Ground object in a given motion description as in (361) and (362) marked by the locative case marker *-maa* ‘LOC’.

- (361) *ekjaanaa mailaale paani lyaaera Dekcimaa khanyaaain*
ek-janaa mahilaa-le paani lyaa-era Dekci-maa khanyaa-in
 one-CLF woman-ERG water bring-CP pot-LOC pour-PST.3SG.F.H
 ‘(By) bringing the water a woman poured (it) into the pot.’ [s12, PT 020]

- (362) *usle euNaa bhaa~NobaaNa paani bhai~i~maa khanyaai*
us-le euTaa bhaa~Do-baaTa paani bhui~-maa khanyaa-i
 3SG-ERG one pot-ABL water floor-LOC pour-PST.3SG.F.NH
 ‘She poured water out of a pot.’
 (Lit. ‘She poured water on the floor from a pot.’) [s15, PT 120]

However, in some motion descriptions where there is no Ground object and/or no locative case *-maa* ‘LOC’, as in (363), some kind of ambiguity exists whether it is a placement or a removal event. The interpretation of the sentence relies in such cases on the context (cf. Grice, 1975, 1989) and overcome the ambiguity.

- (363) *usle paani khanyaayo*
us-le paani khanyaa-yo
 3SG-ERG water pour-PST.3SG.M.NH
 ‘He poured water.’ [s4, PT 120]

iv. *raakhnu* ‘to put’ vs. *Taa~snu* ‘to stick’/‘to paste’

Taa~snu ‘to stick’/‘to paste’ is another verb which overlaps with *raakhnu* ‘to put’ in the descriptions of events (e.g., ‘put poster on wall’). Typically, the Agent holds full control over the Figure object until it reaches the Ground, as in examples (364) and (365).

- (364) *unle bhittaamaa gho~Naako posTar Taa~sin*
un-le bhittaa-maa gho~Daa-ko posTar Taa~s-in
 3SG.H-ERG wall-LOC horse-GEN poster paste-PST.3SG.F.H
 ‘She put the poster of the horse on the wall.’ [s3, PT 028]

- (365) *usle posTar Taa~syo*
us-le posTar Taa~s-yo
 3SG-ERG wall-LOC paste-PST.3SG.M.NH
 ‘(He) put the poster on the wall.’
 (Lit. ‘(He) pasted/glued the poster on the wall.’) [s4, PT 028]

Verbs like *Taa~snu* ‘to stick’ may be ‘lexically specific’ (cf. Berman & Slobin, 1987) and ‘incorporate the instrument’ with which the Figure is ‘attached to the reference object’ (cf. Jackendoff, 1990). Some participants also use verbs such as

lagaanu ‘to wear’ and *Taalnu* ‘to mend or repair by patching’ in place of *Taa~snu* ‘to paste’. Note that the use of the verb *lagaanu* ‘to wear’ is discussed earlier as a typical verb of ‘putting clothing on body part’ although we found its use in the description of the event ‘put poster on wall’. With respect to *Taalnu* ‘to mend or repair by patching’, there are not enough uses in our dataset to examine its semantic extension; so, a larger corpus is needed to analyse its semantics.

v. *raakhnu* ‘to put’ vs. *haalnu* ‘to put’

Among various verbs that overlap with *raakhnu* ‘to put’, there is also the verb *haalnu* ‘to put’. Table 56 below shows the extension of use of the two verbs.

<i>raakhnu</i> ‘to put’	<i>haalnu</i> ‘to put’
put stone into pot of water	put stone into pot of water
put celery bunch into a recorder case	put celery bunch into a recorder case
stuff rag into car exhaust	stuff rag into car exhaust
stuff rag into car exhaust	drop apple into bag
put stone into pocket	put stone into pocket
put hand into hole in tree	put hand into hole in tree
put head into a bucket	put head into a bucket
pour liquid into container	pour liquid into container
put book on floor	
put a candle into a candle stand	
put armload of books on table	
put stone into pot of water	
pour liquid into container	
put head into a bucket	
put a fistful of rice on a table	
put apple in bowl	
put pen in a hole	

Table 56. Semantic distinction between *raakhnu* ‘to put’ vs. *haalnu* ‘to put’

The table above reveals that *haalnu* ‘to put’ is semantically more specific than *raakhnu* ‘to put’. Wherever the Ground is a containment, the speakers tend to use *haalnu* ‘to put’. Hence, the extension of its use shows that, in contrast to *raakhnu* ‘to

put’, the verb *haalnu* ‘to put’ is sensitive to the type of Ground. Examples (366) and (367) below show the use of the two verbs.

(366) *usle* *plaasTikmaa* *syaau* *raakhyo*
us-le *plaasTik-maa* *syaau* *raakh-yo*
 3SG-ERG plastic-LOC apple put-PST.3SG.M.NH
 ‘He put an apple into a plastic.’ [s18, PT 012]

(367) *ule* *kaalo* *plaasTikko* *jholaamaa*
u-le *kaalo* *plaasTik-ko* *jholaa-maa*
 3SG-ERG black plastic-GEN bag-LOC
euNaa *syaau* *haalyo*
euTaa *syaau* *haal-yo*
 one apple put-PST.3SG.M.NH
 ‘He put an apple into a black plastic bag.’ [s15, PT 012]

vi. *raakhnu* ‘to put’ vs. *chiraaunu* ‘to cause to enter’

There is another verb i.e. *chiraaunu* ‘to cause to enter’ that overlaps with the verb *raakhnu* ‘to put’ in certain events, as in the description of the scene ‘put hand into hole in tree’ illustrated in the following examples (368) and (369).

(368) *rukko* *pwaalmaa* *haat* *raakhin*
ruk-ko *pwaal-maa* *haat* *raakh-in*
 tree-GEN hole-LOC hand put-PST.3SG.F.H
 ‘(She) put (her) hand into the hole of the tree.’ [s11, PT 023]

(369) *usle* *rukko* *pwaalmaa* *haat* *chiraai*
us-le *ruk-ko* *pwaal-maa* *haat* *chir-aa-i*
 3SG-ERG tree-GEN hole-LOC hand enter-CAUS-PST.3SG.F.NH
 ‘She put (her) hand into the hole of the tree.’ [s16, PT 023]

The use of *raakhnu* ‘to put’ is more frequent than *chiraaunu* ‘to cause to enter’. There is, however, a distinction between these verbs in that *raakhnu* ‘to put’ is not sensitive to the configuration of the Ground while *chiraaunu* ‘to cause to enter’ is. The data show that *chiraaunu* ‘to cause to enter’ is mostly used with the Ground object that is containment (e.g., ‘stuff rag into car exhaust’, ‘put head into a bucket’, and ‘put

hand into hole in tree’). Other verbs like *aDyaaunu* ‘to put for a while’, *aDkaaunu* ‘to cause to stick’, and *lukaanu* ‘to hide’ can also overlap with *raakhnu* ‘to put’ in similar motion descriptions.

vii. *raakhnu* ‘to put’ vs. *Dubaaunu* ‘to dip’ vs. *cobnu/cobalnu* ‘to dip’ vs. *ghusaarnu* ‘to insert’

Verbs such as *Dubaaunu* ‘to dip’, along with *cobnu/cobalnu* ‘to dip’ and *ghusaarnu* ‘to put’ or ‘to insert’ also overlap with the verb *raakhnu* ‘to put’. I present them together here because the use of these verbs is triggered by the configuration of the Ground whereas the use of *raakhnu* ‘to put’ is not. Table 57 gives the scenes in the descriptions of which *Dubaaunu* ‘to dip into’, *ghusaarnu* ‘to insert’, and *cobnu/cobalnu* ‘to dip’ from *raakhnu* ‘to put’ are used by the speakers.

<i>Dubaaunu</i> ‘to dip into’	<i>ghusaarnu</i> ‘to insert’	<i>cobnu/cobalnu</i> ‘to dip’
put head into a bucket	put head into a bucket	put head into a bucket
put stone into pot of water	put hand into hole in tree	

Table 57. Semantic distinction between *Dubaaunu* ‘to dip into’, *ghusaarnu* ‘to insert’, and *cobnu/cobalnu* ‘to dip’

As far as *cobnu* ‘to dip’ and *cobalnu* ‘to dip’ are concerned, these are two different forms conveying the same meaning. The choice of one form or the other depends on speaker. Example (370) shows the use of the verb *cobnu* ‘to dip’.

- (370) *usle baalTibhitrako paanima Taauko cobalyo*
us-le baalTi-bhitra-ko paani-maa Taauko cobal-yo
 3SG-ERG bucket-inside-GEN water-LOC head dip-PST.3SG.M.NH
 ‘He dipped (his) head into the water of the bucket.’ [s18, PT 024]

The verb *Dubaaunu* ‘to dip into’, as explained earlier, is sensitive to the configuration of the Ground, as in examples (371) and (372). Its use also shows that it overlaps with *cobnu* ‘to dip’ and *cobalnu* ‘to dip’, and that it is more frequent in the motion description than the latter.

- (371) *usle seto baalTima aaphno Taauko Dubaayo*
us-le seto baalTi-maa aaph-no Taauko Dubaa-yo
 3SG-ERG white bucket-LOC self-GEN head dip-PST.3SG.M.NH
 ‘He dipped his (own) head into the white bucket.’ [s15, PT 024]

- (372) *baalTiko paanimaa pheri Dubaae munTo*
baalTi-ko paani-maa pheri Dubaa-e munTo
 bucket-GEN water-LOC again dip-PST.3SG.M.H head
 ‘(He) dipped (his) head again into the water of the bucket.’ [s8, PT 024]

Another alternative choice concerns *ghusaarnu* ‘to insert’, which also overlaps with *raakhnu* ‘to put’. In general, the ‘Put and Take’ data show that its use is closely related to a tight-fit relation between the Figure and the Ground object, the latter being marked either by the locative case marker *-maa* ‘LOC’ or the postposition *-bhitra* ‘inside’, as are illustrated by (373) and (374).

- (373) *usle baalTima aaphno Taauko ghusaaryo*
us-le baalTi-maa aaph-no Taauko ghusaar-yo
 3SG-ERG bucket-LOC self-GEN head put-PST.3SG.M.NH
 ‘He put his (own) head into the bucket.’ [s16, PT 024]

- (374) *usle rukhko pwaalbhitra haat ghusaari*
us-le rukh-ko pwaal-bhitra haat ghusaar-i
 3SG-ERG tree-GEN hole-inside hand put-PST.3SG.F.NH
 ‘She put her hand into the hole of the tree.’ [s4, PT 023]

The use of the verb *ghusaarnu* ‘to insert’, which is used with the Ground objects *pwaal* ‘hole’ and *baalTi* ‘bucket’ in these examples, also shows some sort of boundary crossing as explained in Slobin and Hoiting (1994; cf. Aske, 1989). It also shows the indefinite change of location with the definite Path that the Path phrase specifies further (cf. Narasimhan, 1998). As we saw from different examples, for the same placement event i.e. ‘put head into bucket’, speakers use different set of verbs (such as *cobnu/cobalnu* ‘to dip’, *Dubaaunu* ‘to dip’ *ghusaarnu* ‘to put’). These multiple uses imply that there are options in the system and speakers use them on their own and that there are differences at the individual level.

viii. *raakhnu* ‘to put’ vs. *khasaalnu* ‘to cause to fall’/‘to drop’ vs. *khasnu* ‘fall down’

Closer analysis of *khasaalnu* ‘to cause to fall’/‘to drop’ and *khasnu* ‘fall down’ shows that they convey the vertical movement of the Figure, and these verbs can be classified as verbs of directed Motion. Of these, the former is a transitive verb

depicting caused Motion domain whereas the latter is an intransitive typically depicting spontaneous Motion. In the expression of placement events, the choice of *khasnu* ‘to fall’ and *khasaalnu* ‘to drop/‘to cause to fall’ triggers a semantic difference based on the Agent’s intentionality (see Pourcel, 2004: 510 for more information on intentionality): intentional *khasaalnu* ‘to drop’ vs. unintentional *khasnu* ‘to fall’ as in (375) and (376) below. Moreover, the use of *khasnu* ‘to fall’ may also attest the inherent punctual aspect (cf. Berman & Slobin, 1987: 8). The dataset, however, does not attest the occurrence of these verbs with the Figure object that is liquid.

(375) *usle* *bokeko* *kitaab* *bhui~maa* *khasyo*
us-le *bok-eko* *kitaab* *bhui~-maa* *khas-yo*
 3SG-ERG carry-PFV book floor-LOC fall-PST.3SG.M.NH
 ‘The book which he had carried fell on the floor.’ [s19, PT 009]

(376) *usle* *kitaab* *bokdaa* *euNaa*
us-le *kitaab* *bok-daa* *euTaa*
 3SG-ERG book carry-SIM one
kitaab *bha~i~maa* *khasaalyo*
kitaab *bhui~-maa* *khasaal-yo*
 book floor-LOC drop-PST.3SG.M.NH
 ‘While he was carrying books, he dropped one of them on the floor.’
 (Lit. ‘While he was carrying books, he dropped one book on the floor.’
 [s15, PT 009])

ix. *raakhnu* ‘to put’ vs. *jhunDyaaunu* ‘to hang’

The ‘Put and Take’ corpus shows yet another overlapping, that is between the verb *jhunDyaaunu* ‘to hang’ and the verb *raakhnu* ‘to put’ in the event ‘hang rope over tree branch’. Of the total motion descriptions of this event, 50% of the participants use *raakhnu* ‘to put’ and 50% use *jhunDyaaunu* ‘to hang’. In general, the semantics of these two verbs differs in the sense that *raakhnu* ‘to put’ can be used regardless of the configuration of the Ground whereas *jhunDyaaunu* ‘to hang’ is typically used with the vertical Ground (e.g., tree branch), as illustrated in (377) and (378).

- (377) *usle rukhko haa~gaamaa Dori raakhi*
us-le rukh-ko haa~gaa-maa Dori raakh-i
 3SG-ERG tree-GEN branch-LOC rope put-PST.3SG.F.NH
 ‘She put the rope over the tree branch.’ [s5, PT 027]

- (378) *usle rukhko haa~gaamaa Dori jhunnyaayo*
us-le rukh-ko haa~gaa-maa Dori jhunDyaa-yo
 3SG-ERG tree-GEN branch-LOC rope hang-PST.3SG.M.NH
 ‘He hung the rope over the tree branch.’ [s7, PT 027]

The data show that *raakhnu* ‘to put’ can replace *jhunDyaaunu* ‘to hang’ but the opposite is not possible.

x. *raakhnu* ‘to put vs. *pokhinu* ‘to get spilled’ vs. *pokhnu* ‘to spill’/ *pokhaaunu* ‘to spill’

The data show that *pokhnu* ‘to spill’ and *pokhaaunu* ‘to spill’ are used interchangeably, and their use differs from the verb *raakhnu* ‘to put’. Some speakers tend to use *pokhnu* ‘to spill’ while others use *pokhaaunu* ‘to spill’ though both of them express the same meaning as in examples (379) and (380).

- (379) *usle kapko paani Tebulmaa pokhyo*
us-le kap-ko paani Tebul-maa pokh-yo
 3SG-ERG cup-GEN water table-LOC spill-PST.3SG.M.NH
 ‘He spilled water on the table.’
 (Lit. ‘He spilled the cup’s water on the table.’) [s18, PT 021]

- (380) *usle mag ucaaldae paani pokhaayo*
us-le mag ucaal-daa paani pokhaa-yo
 3SG-ERG mug lift-SIM water spill-PST.3SG.M.NH
 ‘He spilled water while he was picking up the mug.’ [s15, PT 021]

There is yet another verb that is *pokhinu*, ‘to get spilled’ which also differs from the verbs *pokhnu* ‘to spill’ and *pokhaaunu* ‘to spill’ as presented in (381).

(381)	<i>usle</i>	<i>Tebalmaathi</i>	<i>raheko</i>	<i>euNaa</i>
	<i>us-le</i>	<i>Tebal-maathi</i>	<i>rah-eko</i>	<i>euTaa</i>
	3SG-ERG	table-above	remain-PFV	one
	<i>kap</i>	<i>uThaayo</i>	<i>uThaau~daakheri</i>	
	<i>kap</i>	<i>uThaa-yo</i>	<i>uThaau~-daa-kheri</i>	
	cup	pick.up-PST.3SG.M.NH	pick.up-SIM-moment	
	<i>taral</i>	<i>padaartha</i>	<i>pokhiyo</i>	
	<i>taral</i>	<i>padaartha</i>	<i>pokh-i-yo</i>	
	liquid	matter	spill-PASS-PST.3SG.M.NH	

‘He picked up a cup, which was on the table. While (he was) picking (it) up, some liquid got spilled.’ [s5, PT 021]

When the action is conveyed by the verb *pokhinu*, ‘to get spilled’, the Figure functions as both the Agent and the Figure whereas in the case of *pokhnu/pokhaaunu* ‘to spill’, the Agent and Figures are distinct entities. The difference can also be due to the Agent’s intentionality: intentional *pokhnu/pokhaaunu* ‘to spill’ vs. unintentional *pokhinu* ‘to get spilled’. Another important point is that these verbs are sensitive to the configuration of the Ground (used only with surface relation) but not to the type of Figure. Verbs like *pokhinu* ‘to get spilled’ are also considered autonomous causation according to Talmy (Talmy, 2000: 475).

xi. *raakhnu* ‘to put’ vs. *kocnu* ‘to put’ and *kocaarnu* ‘to put’

Among verbs that overlap with the verb *raakhnu* ‘to put’ are *kocnu* ‘to put’ and *kocaarnu* ‘to put’. Both verbs have the same function in placement events, and the choice of one or the other depends on the speaker. The data also indicate that the use of these verbs is constrained by the configuration of the Ground (e.g., Ground object with the containment relation). Furthermore, the Agent uses some force to cause the Figure into the final location because the Ground object may be too tight for the Figure object to get into as in examples (382) and (383). Moreover, our data show that these verbs are sensitive to the type of Figure as they are used only with the solid Figure.

- (382) *usle tyo gaaNiko paaipmaa*
us-le tyo gaaDi-ko paaip-maa
 3SG-ERG DEM.DIST vehicle-GEN pipe-LOC
tyo Taalo kocidiyo
tyo Taalo koc-i-di-yo
 DEM.DIST rag put-ABS-give-PST.3SG.M.NH
 ‘He stuffed rag into car exhaust.’
 (Lit. ‘He put that rag into the pipe of that vehicle.’) [s9, PT 017]

- (383) *usle pwaalmaa kaagaj kocaaryo*
us-le pwaal-maa kaagaj kocaar-yo
 3SG-ERG hole-LOC paper put-PST.3SG.M.NH
 ‘He put paper into the hole.’ [s4, PT 017]

b. Transfer of possession and semantics of *dinu* ‘to give’

Syntactically the verb *dinu* ‘to give’ is a three-argument verb. A verb such as *give* has a “single lexical semantic representation but allows alternate syntactic realization of its arguments” (Levin & Rappaport Hovav, 1991). During the transfer process, the Figure object moves from one human Ground (Source) to another human Ground (Goal), i.e. the possessor and the receiver, and the Agent successfully causes recipient to receive the Figure (Goldberg, 1995). Therefore, the verb *dinu* ‘to give’ along with the dative case marker *-laai* ‘to’ denotes the transfer of possession of the Figure (e.g., ‘give a cup to someone’), as illustrated in examples (384) through (386). We may note that there is 100% agreement across the speakers in the use of this verb though some variations exist in the use of the dative case marker *-laai* ‘to’ for the Ground (the recipient argument), as in example (386) or even the Agent (the subject argument).

- (384) *unile unlaai kap diin*
uni-le un-laai kap di-in
 3SG.H-ERG 3SG.H-DAT cup give-PST.3SG.F.H
 ‘She gave a cup to her.’ [s9, PT 022]

(385) *euTi mahilaale arki mahilaalaai kap dii*
euTi mahilaa-le arki mahilaa-laai kap di-i
 one woman-ERG another woman-DAT cup give-PST.3SG.F.NH
 ‘A woman gave a cup to another woman.’ [s7, PT 022]

(386) *usle ciyaa dii*
us-le ciyaa di-i
 3SG-ERG tea give-PST.3SG.F.NH
 ‘She gave tea.’ [s18, PT 022]

Examples (384) and (385) consist of the Agent (*uni* ‘she/he’), the dative case marker *-laai* ‘to’ and the Ground object (the recipient argument: *uni* ‘she/he’, and *mahilaa* ‘woman’), but example (386) neither has the dative case marker *-laai* ‘to’ nor the recipient argument. Therefore, in the example (386) the Agent and Figure are highlighted.

4.3.1.3 Main semantic distinctions in removal events

The ‘Put and Take’ dataset shows that speakers used 53 different verbs in the expression of the removal events. Besides *nikaalnu* ‘to take out’, which is the most frequent among verbs, six verbs are found in more than 20 motion descriptions, four verbs occur between 15 to 19 times each, and eight verbs comprise five to nine occurrences. There are 34 other verbs that account for one up to four occurrences in the data. We may note, however, that some of these verbs were also used in the expression of placement events (cf. § 4.1.4), and that some of them typically express spontaneous Motion events. In addition, we also found verbs (e.g., *saknu* ‘to finish’) that do not express Motion and that are included into the ‘Other’ category in the analysis. Therefore, the number of verbs which expresses the typical removal events is 28 (see also Appendix J). These include *nikaalnu* ‘to take out’, *jhiknu* ‘to take out’, *uThaaunu* ‘to pick up’, and *choDaaunu* ‘to take off’ among others.

As stated in the preceding paragraph, the most frequent verb in the expression of removal events is *nikaalnu* ‘to take out’. It accounts for 34.3% of the total motion descriptions in removal events ($N=539$). The analysis of this verb shows that *nikaalnu* ‘to take out’ is neutral with respect to the configuration of the Ground (support vs.

containment, horizontal vs. vertical) as well as to the type of Figure (solid vs. liquid, animate vs. inanimate). The extension of the use of *nikaalnu* ‘to take out’ is presented in Table 58.

<i>nikaalnu</i> 'to take out'	N° of motion descriptions
take a cucumber out a recorder case	14
take flower out of hair - unskewer	14
take head out of bucket	14
take orange from box	14
take pen out a hole	14
take rag out of car exhaust	14
unhang' rope from tree branch	13
take a candle out of a candle stand	12
take hand out of hole	11
take off hat	11
take poster off wall	10
take stone out of pot of water	9
take box down from shelf	7
take stone out of pocket	7
take saucer off cup	6
take plastic cup off table with mouth	5
take a handful of beans from flat surface	3
take off coat	3
take off sock	3
take a cup off a table	1

Table 58. Semantic extension of *nikaalnu* ‘to take out’

Table 58 shows the agreement or the lack of it amongst the speakers, ranging from 14 responses to one depending on the event. Based on these results, and given its frequency and diversity of removal events it covers, it appears clear that *nikaalnu* ‘to take out’ is the general verb of removal events in Nepali (cf. Narasimhan, 2012: 219).

As I pointed out earlier, there are other verbs (e.g., *kholnu* ‘to take off’, *haTaaunu* ‘to remove’, and *lagnu* ‘to take away’) in removal events. However, verbs that cooccur with *nikaalnu* ‘to take out’ are not frequent in the data. Some of them will be discussed below in order to better understand in which context speakers tend to provide more fine-grained descriptions.

a. Semantic overlap between *nikaalnu* ‘to take out’ and other verbs

i. *nikaalnu* ‘to take out’ vs. *jhiknu* ‘to take out’ vs. *lagnu* ‘to take away’

Different verbs such as *nikaalnu* ‘to take out’, *jhiknu* ‘to take out’, and *lagnu* ‘to take away’ were used by the speakers to describe similar removal events e.g., ‘take pen out a hole’, and ‘take a cucumber out a case’ to mention just a few of them. The use of these verbs to depict the individual events depends on the choice of participants rather than on specific events. Nevertheless, there are certain events (e.g., ‘take armload of books off table’ and ‘take magazine from floor’) in which the verb *lagnu* ‘to take away’ is preferentially used. Table 59 will show the semantic extension of the verbs *nikaalnu/jhiknu* ‘to take out’ and *lagnu* ‘to take away’.

<i>nikaalnu/jhiknu</i> 'to take out'	<i>lagnu</i> 'to take away'
take a candle out of a candle stand	take magazine from floor
take a cucumber out a recorder case	take armload of books off table
take box down from shelf	take banana off table with long tongs
take flower out of hair - unskewer	
take hand out of hole	
take head out of bucket	
take off coat	
take off hat	
take orange from box	
take pen out a hole	
take stone out of pocket	
take saucer off cup	
take poster off wall	
take rag out of car exhaust	

take stone out of pot of water	
unhang' rope from tree branch	

Table 59. Semantic extension of *nikaalnu/jhiknu* 'to take out' and the distinction with the verb *lagnu* 'to take away'

The analysis reveals that with *nikaalnu* or *jhiknu* 'to take out', the Agent removes the Figure from the Ground and it is unknown if the Agent took the Figure object with him/her. But in the case of the verb *lagnu* 'to take away', the Agent not only removes the Figure from the Ground but also carries it away with him/her. Moreover, it is also possible that the verb *lagnu* 'to take away' has some Deictic function but more analysis would be necessary to determine its uses and this specific function. The analysis further shows that there are also some differences between *nikaalnu* and *jhiknu* in the sense that the former is neutral to the configuration of the Ground whereas the latter is not. Examples (387) through (389) show the use of these verbs.

(387) *usle Topi nikaali*
us-le Topi nikaal-i
 3SG-ERG cap take.out-PST.3SG.F.NH
 'She took off the cap.' [s18, PT 125]

(388) *usle sirko Topi jhiki*
us-le sir-ko Topi jhik-i
 3SG-ERG head-GEN cap take.out-PST.3SG.F.NH
 'She took off the cap.' [s5, PT 125]

(389) *usle TebalmaathibaaTa kap uThaaera lagyo*
us-le Tebal-maathi-baaTa kap uThaa-era lag-yo
 3SG-ERG table-above-ABL cup pick.up-CP take.away-pst-3SG.M.NH
 'He picked up the cup from the table and then took (it) away.' [s5, PT 101]

These examples show that two different verbs, *nikaalnu* 'to take out' and *jhiknu* 'to take out', can describe the same event 'take off hat' and that a different verb, *lagnu* 'to take away', is used for the event 'take a cup off a table'.

ii. *nikaalnu* ‘to take out’ vs. *kholnu* ‘to open’ vs. *phukaalnu* ‘to take off’

The data also show that the verb *kholnu* ‘to open’ or *phukaalnu* ‘to take off’ overlaps with the verb *nikaalnu* ‘to take out’ in descriptions of some events, as is shown in Table 60.

<i>kholnu</i> 'to open'	<i>phukaalnu</i> 'to take off'
take off coat	take off coat
take off sock	take off sock
take off hat	take off hat
	take rag out of car exhaust

Table 60. Semantic extension and distinctions between *kholnu* ‘to open’ and *phukaalnu* ‘to take off’

From Table 60, we see that the verb *phukaalnu* ‘to take off’ encodes a greater range of removal events than the verb *kholnu* ‘to open’.

Examples (390) and (391) further show the use of these verbs.

- (390) *usle aaphno mojaa kholi*
us-le aaph-no mojaa khol-i
 3SG-ERG self-GEN socks open-PST.3SG.F.NH
 ‘She took off her socks.’ [s15, PT 126]

- (391) *mojaa phukaalin*
mojaa phukaal-in
 socks take.off-PST.3SG.F.H
 ‘(She) took off her socks.’ [s17, PT 126]

Some participants describe the same events by using the verbs *choDaaunu* ‘to take off’, *utaarnu* ‘to take off’ and *kaaDhnu* ‘to take off’. It is quite interesting to find the use of these verbs because on one hand, there are verbs such as *nikaalnu* ‘to take out’, which have a wide range of uses in the domain of caused Motion events and, on the other hand, there are multiple verbs to describe the same events.

iii. *nikaalnu* ‘to take out’ vs. *linu* ‘to take’

The data reveal that the verb *linu* ‘to take’ covers two distinct uses in the motion description. On one hand, it shows the transfer of possession for the event (e.g., take

a coke can from someone’) from one human Ground to another. On the other hand, there are a number of motion descriptions displaying this verb for the events (e.g., ‘take orange from box’, and ‘take stone out of pocket’) in the description of which *linu* ‘to take’ overlaps with *nikaalnu* ‘to take out’, as is shown in Table 61.

<i>linu</i> 'to take'	N° of motion descriptions
take a coke can from someone	8
take a handful of beans from flat surface	4
take orange from box	2
take a cucumber out a recorder case	1
take a cup off a table	1
take banana off table with long tongs	1
take stone out of pocket	1
unhang’ rope from tree branch	1

Table 61. Semantic extension of *linu* ‘to take’

Examples (392) and (393) show the use of the verb *linu* ‘to take’.

- (392) *purusle mahilaako haatbaaTa kehi cij liyo*
purus-le mahilaa-ko haat-baaTa kehi cij li-yo
 man-ERG woman-GEN hand-ABL some thing take-PST.3SG.M.NH
 ‘The man took something from the hand of the woman.’ [s5, PT 122]

- (393) *unle kaju haatmaa liin*
un-le kaju haat-maa li-in
 3SG.H-ERG cashew.nuts hand-LOC take-PST.3SG.F.H
 ‘She took the cashew nuts in her hand.’ [s17, PT 105]

In these examples, the first one (392) depicts the transfer of possession and the second one (393) shows the event in which *linu* ‘to take’ overlaps with *nikaalnu* ‘to take out’.

iv. *nikaalnu* ‘to take out’ vs. *uThaaunu* ‘to pick up’

In the description of some events, the verb *uThaaunu* ‘to pick up’ overlaps with the verb *nikaalnu* ‘to take out’. However, *nikaalnu* ‘to take out’, is not sensitive to the type of Ground whether it is a surface or a containment but *uThaaunu* ‘to pick up’ is

triggered by the surface type of Ground (e.g., take plastic cup off table with mouth). Moreover, it expresses the vertical orientation depicting the upward directionality of the Figure object. In our dataset, the verb *uThaaunu* ‘to pick up’ occurs in 30 motion descriptions (5.6% of the total motion descriptions in removal events, $N=539$). Table 62 shows the semantic extension of the verb *uThaaunu* ‘to pick up’, and example (394) below the Table illustrates its use.

take a cup off a table	8
take plastic cup off table with mouth	8
take a handful of beans from flat surface	4
take banana off table with long tongs	4
take magazine from floor	4
take armload of books off table	1
take suitcase out of elevator, going out of room	1

Table 62. Semantic extension of *uThaaunu* ‘to pick up’

- (394) *usle* *geNaaguNi* *uThaai*
us-le *geDaaguDi* *uThaa-i*
 3SG-ERG grains pick.up-PST.3SG.F.NH
 ‘She picked up the grains.’ [s6, PT 105]

In addition to *nikaalnu* ‘to take out’ with which several verbs can overlap, we may also note the verb *uThaaunu* ‘to pick up’ which overlaps with some other verbs such as *Tipnu* ‘to pick up’ and *ucaalnu* ‘to lift’, as illustrated by (395) and (396).

- (395) *usle* *bhui~ko* *kitaab* *uThaai*
us-le *bhui~ko* *kitaab* *uThaa-i*
 3(395)SG-ERG floor-LOC book pick.up-PST.3SG.F.NH
 ‘She picked up the book of the floor.’ [s18, PT 107]

- (396) *kap* *ucaali*
kap *ucaal-i*
 cup lift-PST.3SG.F.NH
 ‘(She) lifted the cup.’ [s17, PT 101]

As per our analysis, *ucaalnu* ‘to lift’ and *Tipnu* ‘to pick up’ also denote the upward movement. Moreover, a common feature of these verbs, as shown by the analysis of the data, is that their use is limited to the surface type of Ground.

v. *nikaalnu* ‘to take out’ vs. *taannu* ‘to pull’

The verb like *taannu* ‘to pull’, overlaps with *nikaalnu* ‘to take out’ and, at the same time, it differs in the use. One of the differences found during the analysis is that the verb *taannu* ‘to pull’ implies the use of some kind of ‘force’ (cf. Talmy, 2000: 461) and does not imply any direction of Motion (cf. Levin, 1993: 136-137), the directionality being expressed by other linguistic devices such as case markers or postpositions. Similarly, this verb is sensitive to the type of Figure (but not to the type of Ground) and, moreover, the animate Agent accompanies the Figure in its Motion, as in the example (397). In Nepali, this verb (*taannu* ‘to pull’) can be categorized as the ‘pull’ verb.

- (397) *kunai* *paaipmaa* *ghusaareko* *rumaal*
kunai *paaip-maa* *ghusaar-eko* *rumaal*
 some pipe-LOC insert-PFV handkerchief
caa~i~ *baaira* *taane*
caahi~ *baahira* *taan-e*
 DPRT outside pull-PST.3SG.M.H
 ‘(He) pulled the handkerchief out of the pipe.’
 (Lit. ‘(He) pulled the handkerchief out which was inserted into the pipe.’
 [s3, PT 117])

The analysis also reveals that the verb *taannu* ‘to pull’ overlaps with *thutnu* ‘to pull’ and *ukkaaunu* ‘to pull’/‘to uproot’, which also imply the use of some kind of force such as *taannu* ‘to pull’, as can be seen in examples (398) and (399) for *ukkaaunu* ‘to pull’/‘to uproot’ and *thutnu* ‘to pull’ respectively.

- (398) *usle* *postar* *ukkaai*
us-le *postar* *ukkaa-i*
 3SG-ERG poster uproot-PST.3SG.F.NH
 ‘She took the poster out.’
 (Lit. ‘She uprooted the poster.’ [s4, PT 128])

- (399) *mailaale* *gaaNiko* *saailensarbaaNa* *kei*
mahilaa-le *gaaDi-ko* *saailensar-baaTa* *kehi*
 woman-ERG vehicle-GEN silencer-ABL some
cij *baaira* *thutin*
cij *baahira* *thut-in*
 thing outside pull.off-PST.3SG.F.H
 ‘The woman took something out of car exhaust.’
 (Lit. ‘The woman pulled off something outside from the exhaust pipe of the
 vehicle.’ [s12, PT 117])

In these examples, the Agent must use some force to take the Figure object out and has to accompany it. In (398), there is no morphosyntactic device to show the direction of the Figure but in the case of (399), the directionality is encoded by the adverb *baahira* ‘outside’.

b. Semantic distinctions in removal events and the use of verbs of falling

The analysis of the data shows some interesting results in the expression of removal events. Speakers use seven different verbs (e.g., *Dhalaanu* ‘to cause to fall’, *Dhaalnu* ‘lit. to fell’, *haannu*, ‘to hit’, *laDaaunu* ‘to cause to fall’, *laDnu* ‘to fall’, *palTaaunu* ‘to cause to fall’, *palTanu* ‘to fall’) in the motion description of a single event ‘knock over bucket so blocks spill out’. Of these, *Dhalaanu* ‘to cause to fall’ and *Dhaalnu* ‘to cause to fall’ as in example (400), are two different forms of the same verb with the same meaning and function. The difference seems to be due to the choice of speakers because there are ample options given by the language. Moreover, we also did not find any indication of the dialectal variation in the use of these verbs during the analysis. Note also that both *Dhalaanu* ‘to cause to fall’ and *Dhaalnu* ‘to cause to fall’ also express the ‘CUT and BREAK’ events which I will not discuss in this Thesis.

- (400) *baalTin* *Dhaalin*
baalTin *Dhaal-in*
 bucket fall.CAUS-PST.3SG.F.H
 ‘She knocked over the bucket.’ [s17, PT 113]

Likewise, motion descriptions also include the verbs such as *laDnu* ‘to fall’ and *laDaaunu* ‘to cause to fall’ for the same event ‘knock over bucket so blocks spill out’, as in the examples (401) and (402).

(401)	<i>ekjaanaa</i>	<i>mailaa</i>	<i>euTaa</i>	<i>koThaabaata</i>
	<i>ek-janaa</i>	<i>mahilaa</i>	<i>euTaa</i>	<i>koThaa-baaTa</i>
	one-CLF	woman	one	room-ABL
	<i>arke</i>	<i>koThaamaa</i>	<i>jaa~daa</i>	<i>bakeTmaa</i>
	<i>arke</i>	<i>koThaa-maa</i>	<i>jaa~-daa</i>	<i>bakeT-maa</i>
	another	room-LOC	go-SIM	bucket-LOC
	<i>bhaeko</i>	<i>phohor</i>	<i>Dhalera</i>	<i>laDyo</i>
	<i>bha-eko</i>	<i>phohar</i>	<i>Dhal-era</i>	<i>laD-yo</i>
	COP ₃ -PST-PFV	dirt	fall-CP	fall-PST.3SG.F.NH

‘While a woman was going from one room to another, the thing (which was) in the bucket fell.’ [s13, PT 113]

(402)	<i>usle</i>	<i>bhui~maa</i>	<i>raheko</i>
	<i>us-le</i>	<i>bhui~-maa</i>	<i>bha-eko</i>
	3SG-ERG	floor-LOC	COP ₃ -PST-PFV
	<i>baalTin</i>	<i>hi~Ndaakheri</i>	<i>laNaai</i>
	<i>baalTi-laai</i>	<i>hi~D-daa-kheri</i>	<i>laD-aa-i</i>
	bucket	walk-SIM-while	fall-CAUS-PST.3SG.F.NH

‘While she was walking, she knocked over the bucket which was on the floor.’

(Lit. ‘While she was walking, she caused the bucket to fall which was on the floor.’ [s5, PT 113])

In the case of *laDnu* ‘to fall’, there is no overt involvement of the Agent to cause the Figure object to fall, although the Agent’s involvement can be inferred. Therefore, the Agent and the Figure in Motion is the same in (401), but in (402) the role of the Agent is overtly mentioned as the cause of the fall of the Figure along with the Agent’s own Motion with some aspectual information in it. Furthermore, the event ‘knock over bucket so blocks spill out’ is also depicted by verbs such as *palTinu* ‘lit. to lie down’ / ‘to fall’ and *palTaaunu* ‘to cause to fall’ conveying the Motion of the Figure *baalTi* ‘bucket’, as in examples (403) and (404).

- (403) *hi~Ndaa* *hi~Ndai* *baalTima* *Thes*
hi~D-daa *hi~D-dai* *baalTi-maa* *Thes*
 walk-SIM walk-DUR bucket-LOC stumble
laagyo *ra* *palTyo*
laag-yo *ra* *palT-yo*
 feel-PST.3SG.M.NH and fall-PST.3SG.M.NH
 ‘While she was walking, she stumbled over the bucket and it (the bucket) fell.’ [s4, PT 113]

- (404) *usle* *hindaa* *baalTi* *palTaa*
us-le *hi~D-daa* *baalTi* *palTaa-i*
 3SG-ERG walk-SIM bucket fall.CAUS-PST.3SG.F.NH
 ‘She knocked over the bucket while she was walking.’ [s6, PT 113]

We can see in (403) that there are two events indicated by the use of the coordinating conjunction *ra* ‘and’. The first event is stumbling over the bucket as the Agent was walking and then the falling of the bucket due to the fact of someone stumbling over it. The falling of the bucket in example (403), therefore, is covertly expressed but in the case of (404) it is overtly expressed because the verb *palTaaunu* ‘to cause to fall’ in the main verb slot expresses the caused Motion; the verb found in the dependent clause slot expresses the spontaneous Motion event or the movement of the Agent rather than the Figure.

The use of *haannu* ‘to hit’ shows that the Agent hit the Figure object (i.e. ‘bucket’) but we do not have any other evidence whether the Figure object is in Motion or if it changed its location after hitting, as in (405). In Nepali, this verb can be classified as a typical ‘hit’ verb following Levin (1993).

- (405) *bhui~maa* *bhaeko* *baalTilaai* *khuTTaale* *haani*
bhui~-maa *bha-eko* *baalTi-laai* *khuTTaa-le* *haan-i*
 floor-LOC COP₃.PST-PFV bucket-DAT leg-INS hit-PST.3SG.F.NH
 ‘She kicked the bucket which was on the floor.’
 (Lit. ‘She hit the bucket which was on the floor with her leg.’ [s19, PT 113])

The uses of these verbs in motion descriptions show that they belong to the set of verbs expressing the Manner of Motion (cf. § 5.3.1.3), as they do not specify the direction of Motion.

As was explained at the beginning of this Section, there are certain verbs which describe the spontaneous Motion (e.g., *jaanu* ‘to go’ and *hi~Dnu* ‘to walk’). Verb like *jaanu* ‘to go’ expresses Motion and Deixis whereas *hi~Dnu* ‘to walk’ expresses Motion and Manner. What is interesting here is that these verbs always follow (as attested by our data) a set of verbs of caused Motion (such as *linu* ‘to take’ *uThaaunu* ‘to pick up’, *nikaalnu* ‘to take out’) in the conjunctive participle form. Thus, the information regarding the movement of the Figure object is conveyed by those verbs in the conjunctive participle form whereas the movement of the Agent is conveyed by verbs of spontaneous Motion (e.g., *jaanu* ‘to go’ or *hi~Dnu* ‘to walk’), as in examples (406) and (407) (see § 5.3.1.2 and § 5.3.1.3 for further details about these verbs). In total, there are 49 motion descriptions depicting the caused Motion in the subordinated form and the spontaneous Motion in the main verb. The use of these multiple verbs can imply the diversity of perspective and lexical choices among the participants.

- | | | | | | |
|-------|--------------|---------------|------------------|---------------|-----------------|
| (406) | <i>usle</i> | <i>kitaab</i> | <i>uThaaera</i> | <i>liera</i> | <i>gayo</i> |
| | <i>us-le</i> | <i>kitaab</i> | <i>uThaa-era</i> | <i>li-era</i> | <i>ga-yo</i> |
| | 3SG-ERG | book | pick.up-CP | take-CP | go-PST.3SG.M.NH |
- ‘He picked up the book/s and (then) went (away) (by) taking them.’ [s4, PT 104]

- | | | | |
|-------|----------------|-------------------|---------------------------|
| (407) | <i>usle</i> | <i>daraajmaa</i> | <i>bhaeko</i> |
| | <i>us-le</i> | <i>daraaj-maa</i> | <i>bha-eko</i> |
| | 3SG-ERG | wardrobe-LOC | COP ₃ .PST-PFV |
| | <i>saamaan</i> | <i>liera</i> | <i>gayo</i> |
| | <i>saamaan</i> | <i>li-era</i> | <i>ga-yo</i> |
| | goods | take-CP | go-PST.3SG.M.NH |
- ‘He went (away) (by) taking the goods that were in the wardrobe.’/‘He took the things that were in the wardrobe and then went away.’ [s4, PT 106]

4.3.2 Other lexico-grammatical devices

The main objective of this Section is to investigate the lexico-grammatical devices used by the speakers in the expression of placement and removal events in the data gathered by using the ‘Put and Take’ video stimulus set. In particular, I examine the following research questions:

- (a) What type of lexico-grammatical devices other than verbs are preferentially used by speakers in the expression of placement vs. removal events? Are there differences in the expression of the two types of events?
- (b) What are the semantic distinctions conveyed by various lexico-grammatical devices used in placement vs. removal events?

The analysis of the dataset shows that there is also some diversity in lexico-grammatical devices in placement and removal events though, compared to the diversity of verbs, this diversity is less. Nouns that syntactically function as direct/indirect objects of the clause semantically encode the Ground elements and are used obligatorily in any given motion descriptions except those where there is the omission of the Ground element, but they do not encode the directionality. Therefore, those nouns (direct/indirect objects) or the Ground elements are not parts of the discussion under lexico-grammatical devices. The other lexical devices are adverbials like *maathi* ‘above’, *tala* ‘below’ or *bhitra* ‘inside’. The grammatical devices include case markers (e.g., *-maa* ‘LOC’, *-baaTa* ‘from’), and postpositions (e.g., *-maathi* ‘above’ *-tira* ‘toward’, *-bhitra* ‘inside’). Some of the most frequently used lexico-grammatical devices are shown in Table 63.

Event types	Lexical devices	Grammatical devices	
		Case markers	Postpositions
Placement	<i>bhitra</i> ‘inside’ <i>maathi</i> ‘above’ <i>tala</i> ‘below’	<i>-maa</i> ‘LOC’	<i>-maathi</i> , ‘above’ <i>-bhitra</i> ‘inside’ <i>-tira</i> ‘toward’ <i>-samma</i> ‘until’
Removal	<i>baahira</i> ‘outside’	<i>-baaTa</i> , ‘from’ <i>-dekhi</i> ‘from’	

Table 63. Lexico-grammatical devices used in the expression of placement and removal events

We saw in Table 63 that there are distinct lexical and grammatical devices to express placement and removal events. Examples (408) and (409) show the use of adverbials, *baahira* ‘outside’, *bhitra* ‘inside’ and *tala* ‘below’ respectively.

- (408) *baairako* *byaag* *uThaaera* *bhitra* *raakhi*
baahira-ko *byaag* *uThaa-era* *bhitra* *raakh-i*
 outside-GEN bag pick.up-CP inside put-PST.3SG.F.NH
 ‘Having picked up the bag that was outside she put (it) inside.’ [s6, PT 129]

- (409) *kapko* *Dhakan* *nikaalera* *tala* *raakhyo*
kap-ko *Dhakan* *nikaal-era* *tala* *raakh-yo*
 cup-GEN cover take.out-CP down put-PST-3SG.M.NH
 ‘Having picked up the cover of the cup (he) put it down.’ [s14, PT 131]

Speakers explicitly mention two Grounds *baahira* ‘outside’ and *bhitra* ‘inside’ in (408): while *baahira* ‘outside’ encodes the locatedness of the Figure, *bhitra* ‘inside’ conveys the directionality as well as the Goal Ground. Thus, caused by the Agent, the Figure *byaag* ‘bag’ not only changes its location from outside to inside but also crosses the boundary. In the case of (409), the adverb *tala* ‘below’ conveys the vertical orientation implying downward direction and Goal Ground that the Figure is moving to from the *kap* ‘cup’. In both examples, the adverbs *bhitra* ‘inside’ and *tala* ‘below’ depict the placement event along with the verb *raakhnu* ‘to put’.

The grammatical devices used are case markers (e.g., the locative *-maa* ‘LOC’ and the dative case *-laai* ‘to’ the use of which is limited to the expression of the transfer of possession) and postpositions (e.g., *-maathi* ‘above’, *-bhitra* ‘inside’ *-tira* ‘toward’) in placement events. For example, the placement of the cup ‘on the table’ in (410), and the pen ‘into the hole of a tree’ in (411) triggers the use of the locative case marker *-maa* ‘LOC’.

- (410) *usle* *Tebalmaa* *kap* *raakhi*
us-le *Tebal-maa* *kap* *raakh-i*
 3SG-ERG table-LOC cup put-PST-3SG.F.NH
 ‘She put the cup on the table.’ [s7, PT 001]

- (411) *usle rukhko dulomaa kalam raakhi*
us-le rukh-ko dulo-maa kalam raakh-i
 3SG-ERG tree-GEN hole-LOC pen put-PST-3SG.F.NH
 ‘She put the pen into the hole of the tree.’ [s18, PT 035]

Regarding the use of postpositions, unlike *-maa* ‘LOC’, the postpositions *-bhitra* ‘inside’ and *-maathi* ‘above’ are constrained by the configuration of the Ground. The postposition *-bhitra* ‘inside’ is typically used for containment relation indicating the crossing of the boundary (Slobin & Hoiting, 1994; cf. Aske, 1989), as is illustrated in examples (412) and (413) in which *goji* ‘pocket’ and *baalTi* ‘bucket’ function as containers.

- (412) *mailaale kei cij gojibhitra raakhin*
mahilaa-le kehi cij goji-bhitra raakh-in
 woman-ERG some thing pocket-inside put-PST-3SG.F.H
 ‘The woman put something into the pocket.’ [s12, PT 016]

- (413) *baalTibhitra Taauko Dubaayo*
baalTi-bhitra Taauko Dubaa-yo
 bucket-inside head sink-PST-3SG.M.NH
 ‘(He) put his head into the bucket.’
 (Lit. ‘(He) sank his head into the bucket.’) [s2, PT 024]

The postposition *-maathi* is used only with the surface relation, as in examples (414) and (415) in which the Ground objects, *kap* ‘cup’ and *Tebal* ‘table’, represent the surface on which the Figure is placed.

- (414) *usle kapmaathi pleT raakhidiyo*
us-le kap-maathi pleT raakh-i-di-yo
 3SG-ERG cup-above plate put-ABS-give-PST.3SG.M.NH
 ‘He put plate on top of cup.’ [s9, PT 031]

- (415) *cimTaale keraa Tebulmaathi raakhin*
cimTaa-le keraa Tebul-maathi raakh-in
 tongs-INS banana table-above put-PST.3SG.F.H
 ‘(She) put the banana on the table with tongs.’ [s11, PT 003]

As we can see in Table 64 below, the different uses of the three postpositions in placement events reveal that there is a semantic distinction between these devices.

<i>-maa</i> 'LOC'	<i>-bhitra</i> 'inside'	<i>-maathi</i> 'above'
drop apple into bag	drop apple into bag	put cup on table
put apple in bowl	put apple in bowl	put armload of books on table
put celery bunch into a recorder case	put celery bunch into a recorder case	take bag of corn from table and move to chair
put head into a bucket	put head into a bucket	put saucer on top of cup
put pen in a hole	put pen in a hole	put plastic cup on table with mouth
put stone into pocket	put stone into pocket	put banana on table with long tongs
put stone into pot of water	put stone into pot of water	
put cup on table		
put poster on wall		
put plastic cup on table with mouth		
put box up on shelf		
hang rope over tree branch		

Table 64. Semantic distinctions between *-maa* 'LOC', *-bhitra* 'inside' and *-maathi* 'above'

In our dataset, the use of the case marker *-maa* 'LOC' is the most frequent in the expression of placement events: it constitutes 60.9% of the total in placement events ($N=565$) including the contribution to the expression of Goal (56.1%) and the expression of the locative use (4.8%).

As for the removal events, there are lexical as well as grammatical devices too. The former comprises one adverb *baahira* 'outside', the use of which is shown in examples (416) and (417). There are 23 motion descriptions where the adverb *baahira* 'outside' occurs in the motion descriptions corresponding to 4.3% of the total data in removal events ($N=539$).

- (416) *usle byaagbaaTa tarkaari baahira nikaali*
us-le byaag-baaTa tarkaari baahira nikaal-i
 3SG-ERG bag-ABL vegetables outside take.out-PST.3SG.F.NH
 ‘She took the vegetables out of the bag.’
 (Lit. ‘She took out the vegetables outside from the bag.’ [s7, PT 115])

- (417) *usle baalTibaaTa Taauko baahira nikaali*
us-le baalTi-baaTa Taauko baahira nikaal-i
 3SG-ERG bucket-ABL head outside take.out-PST.3SG.F.NH
 ‘She took the head out of the bucket.’
 (Lit. ‘She took out the head outside from the bucket.’ [s19, PT 124])

In these examples, the Agent removes the Figure objects, *tarkaari* ‘vegetables’ (416) and *Taauko* ‘head’ (417), out of the Ground. Hence, the adverb *baahira* ‘outside’ functions as the Source Ground and, at the same time, it expresses the directionality of Motion together with the ablative case marker and the verb. By doing so, it also expresses the boundary crossing.

Grammatical devices consist of the case markers and the postpositions. Our data show the use of the ablative case markers *-baaTa* ‘from’ and *-dekhi* ‘from’ which are used in removal events regardless of the type of Ground, as in (418) and (419).

- (418) *unle baakasbaaTa syaau nikaale*
un-le baakas-baaTa syaau nikaal-e
 3SG.H-ERG box-ABL apple take.out-PST.3SG.M.H
 ‘He took apples out of the bag.’ [s17, PT 111]

- (419) *euTaa mahilaako haatdekhi kap purusle liyo*
euTaa mahilaa-ko haat-dekhi kap purus-le li-yo
 one woman-GEN hand-ABL cup man-ERG take-PST-3SG.M.NH
 ‘The man took the cup from the hand of of a woman.’ [s3, PT 122]

The frequency of *-baaTa* is significantly higher i.e. 29.9% of the total data in removal events ($N=539$) than the frequency of *-dekhi* ‘from’ (which has only five motion descriptions in total). Note that in addition to these grammatical devices (e.g., ablative case markers), the removal event can also be expressed by means of some

grammatical devices such as *-maathi* ‘above’ *-bhitra* ‘inside’ which are typically used in the expression of the placement events; however, they tend to occur in the complex constructions (e.g., relative clause construction) or carry with them the ablative case marker *-baaTa* ‘from’ where *-maathi* ‘above’ (9.6% of the total data in removal events, $N=539$) or *-bhitra* ‘inside’ conveys the configuration of the Ground and the ablative case marker encodes the directionality, as is the case in the following examples (420) and (421).

(420) *usle TebalmaathibaaTa kap jhikera lagyo*
us-le Tebal-maathi-baaTa kap jhik-era lag-yo
 3SG-ERG table-above-ABL cup take.out-CP take.away-PST.3SG.M.NH
 ‘Having taken out the cup from above the table he took it away.’ [s5, PT 101]

(421) *ekjaanaa mailaale Taauko baalTibhitrabaaTa nikaalin*
ek-janaa mahilaa-le Taauko baalTi-bhitra-baaTa nikaal-in
 one-CLF woman-ERG head bucket-inside-ABL take.out-PST.3SG.F.H
 ‘A woman took the head out of the bucket.’

(Lit. ‘A woman took the head out from inside of the bucket.’ [s13, PT 124])

As explained in the preceding paragraph, *-maathi* ‘above’ and *-bhitra* ‘inside’ are the grammatical devices expressing the Goal-oriented events. However, in these examples, they are triggered by the Source-oriented function because they indicate the configuration of the Ground *Tebal* ‘table’ (420) and *baalTi* ‘bucket’ (421) and are combined with the ablative case marker *-baaTa* ‘from’.

Overall, the data attest that there are lexico-grammatical devices to encode placement and removal events but in comparison to removal events, there are more lexico-grammatical devices in placement events. Note, however, that removal events involve two different ablative case markers *-baaTa* ‘from’ and *-dekhi* ‘from’ while placement events involve just one locative case marker *-maa* ‘LOC’. Of the lexico-grammatical devices discussed so far, the locative case marker *-maa* ‘LOC’ occurs the most i.e. 60.9% of the total data in placement events ($N=565$), and the proportion of the ablative case marker *-baaTa* ‘from’ is higher that is 29.5% of the total in removal events ($N=539$). These two grammatical devices (*-maa*, the locative case marker and *-baaTa*, the ablative case marker) can, therefore, be considered ‘general grammatical

devices' in Nepali as evidenced by their use in placement and removal events respectively.

In conclusion, it is important to note that the uses of various lexico-grammatical devices in placement and removal events differ significantly. These differences are as follows:

- (a) There are more lexico-grammatical devices to express placement events than removal events.
- (b) In placement events, there are lexical (adverbials *maathi* 'above', *tala*, 'below', *bhitra* 'inside') as well as grammatical devices (postpositions - *maathi* 'above' and -*bhitra* 'inside', and case marker: -*maa* 'LOC') whereas in removal events there is only one adverb (*baahira* 'outside') and two ablative case markers (-*baaTa* 'from' and -*dekhi* 'from').

4.4 Distribution of Path in morphosyntactic loci

This Section deals with Path, one of the main elements of Motion events, and it discusses how it is distributed in placement, removal, and removal-placement events across the sentence. If the Path contains one component: initial or medial or final, it indicates the simple Path. An initial portion refers to the Source-oriented event and a final portion refers to the Goal-oriented event. Similarly, if the Path consists of two (Source-Goal) or more than two components (Source-Median-Goal) (cf. Bohnemeyer *et al.*, 2007: 508), it refers to the complex Path (see Kopecka, 2017: 305-328; cf. Ibarretxe-Antuñano, 2009). In this Section, I will investigate the following research questions.

- (a) How is the Path distributed across the sentence? Is it distributed in one morphosyntactic locus or multiple loci?
- (b) Is the Path distributed in the same way in placement and removal events or does its distribution differ depending on the type of the event?
- (c) Do speakers encode both the initial (Source) and the final (Goal) portions of the Path equally frequently or do they tend to focus only one component?

Table 65 summarizes the patterns of Path distribution in different morphosyntactic loci in placement and removal events. It shows that Path can be

distributed in one morphosyntactic locus up to five morphosyntactic ‘loci’ (Wälchli & Zúñiga, 2006). To express the Path, speakers of Nepali employ different linguistic devices: verbs, adverbs, and different case markers and postpositions.

Morphosyntactic loci	Total n° of motion descriptions	Percentage
1	339	29.3
2	573	49.5
3	157	13.6
4	17	1.5
5	3	0.3
<i>No Path</i>	69	6.0
Total	1158	100

Table 65. Distribution of Path in various morphosyntactic loci

As Table 65 above shows, in 339 motion descriptions (29.3% of the total data, $N=1158$) Path is expressed in one morphosyntactic locus, in 573 descriptions (49.5%), it is conveyed in two morphosyntactic loci (hereafter loci), in 157 descriptions (13.6%) it is distributed in three loci, 17 motion descriptions consist of four loci, and only three motion descriptions constitute five loci. Hence, the most frequent is the pattern where Path is distributed in two morphosyntactic loci accounting for 49.5% of the total motion descriptions.

We may note that some motion descriptions do not have any morphosyntactic locus. These are parts of the ‘*No Path*’ category. Motion descriptions showing the location of the Figure but not expressing the change of location in space, as in example (422) are not considered here.

(422)	<i>usle</i>	<i>Tebalmaa</i>	<i>bhaeko</i>	<i>euNaa</i>	<i>baaskeTmaa</i>
	<i>us-le</i>	<i>Tebal-maa</i>	<i>bha-eko</i>	<i>euTaa</i>	<i>baaskeT-maa</i>
	3SG-ERG	table-LOC	COP ₃ .PST-PFV	one	basket-LOC
	<i>euTaa</i>	<i>syaau</i>	<i>lyaaera</i>	<i>raakhyo</i>	
	<i>euTaa</i>	<i>syaau</i>	<i>lyaa-era</i>	<i>raakh-yo</i>	
	one	apple	bring-CP	put-PST.3SG.M.NH	

‘He brought an apple and then put it into the basket which was on the table.’

[s15, PT 011]

The example consists of the locative case marker *-maa* ‘LOC’ marked on the Ground object *Tebal* ‘table’ and followed by the copula₃. Here, the case marker *-maa* does not express the direction of the Figure object *syaau* ‘apple’ but the location of the Ground object *baaskeT* ‘basket’. However, the same case marker *-maa* ‘LOC’ which follows the Figure *syaau* ‘apple’ expresses the Path of the Figure *syaau* ‘apple’.

4.4.1 Path encoding in placement events

Path is encoded in a variety of patterns in placement events that convey the Goal-oriented Path. In total, there are 565 motion descriptions of placement events that corresponds to 48.8% of the total ($N=1158$), as shown in Table 66.

Morphosyntactic loci	Nº of motion descriptions	Percentage
1	146	25.8
2	323	57.2
3	64	11.3
4	3	0.5
5	2	0.4
<i>No Path</i>	27	4.8
Total	565	100

Table 66. Morphosyntactic loci for Path expression in placement events

As we can see in Table above, the ‘Put and Take’ data reveal that, in placement events, Path can be distributed in one morphosyntactic locus up to five loci. It can be expressed either by the verb alone or by the verb in combination with other morphosyntactic devices.

a. Pattern 1. Path in one morphosyntactic locus

Path is expressed in one morphosyntactic locus either by the verb or by the case marker in 146 motion descriptions, which account for 25.8% of the total ($N=565$). Examples (423) and (424) illustrate the pattern 1.

- (423) AGENT FIGURE MOTION+PATH
usle *Topi* *lagaayo*
us-le *Topi* ***laga***-yo
 3SG-ERG cap **put**-PST.3SG.M.NH
 ‘He put on a cap.’ [s5, PT 025]

- (424) AGENT FIGURE GROUND MOTION+MANNER
usle *pustak* *bha~i~maa* *phyaa~kyo*
us-le *pustak* *bhui~-maa* *phyaa~k-yo*
 3SG-ERG book floor-LOC throw-PST.3SG.M.NH
 ‘He threw the books on the floor.’ [s6, PT 010]

In example (423), the verb *lagaunu* ‘to put on’ conveys the Motion and the Goal-oriented Path depicting the placement of Figure (*Topi* ‘cap’), but in (424), the Goal-oriented Path is expressed by the locative case marker *-maa* ‘LOC’ alone but not the verb.

b. Pattern 2. Path in two morphosyntactic loci

In 323 motion descriptions that is 57.2% of the total ($N=565$), Path is distributed in two morphosyntactic loci. It can be distributed between the verb and the case marker or the verb and the postposition. However, the use of the locative case marker *-maa* ‘LOC’ is much more frequent (222 motion descriptions out of 323) than the postposition. Examples (425) and (426) show the use of pattern 2.

- (425) AGENT FIGURE GROUND-PATH MOTION+PATH
keTaale *euNaa* *syaau* *jholaamaa* *haalyo*
keTaa-le *euTaa* *syaau* *jhola*-***maa*** ***haal***-yo
 boy-ERG one apple bag-LOC **put**-PST.3SG.M.NH
 ‘The boy put an apple into the bag.’ [s12, PT 012]

- (426) *kunai* *bastu* *jholaabhitra* *raakhe*
kunai *wastu* *jhola*-***bhitra*** ***raakh***-e
 some object bag-**inside** **put**-PST.3SG.M.H
 ‘(He) put some object into the bag.’ [s3 PT 012]

In (425) the Path is expressed by the verb *haalnu* ‘to put’ and the locative case marker *-maa* ‘LOC’. Although the configuration of the Ground is the same in both examples, some speakers have a different strategy to express the Path (426) that is, they use the postposition *-bhitra* ‘inside’ instead of the case marker, and the verb *raakhnu* ‘to put’ for the same event ‘drop apple into bag’.

- (427) *usle Tebalmaathi kap raakhi*
*us-le Tebal-**maathi** kap **raakh-i***
 3SG-ERG table-**above** cup **put**-PST.3SG.F.NH
 ‘(She) put the cup on the table.’ [s5, PT 001]

- (428) *glaas Tebalmaa raakhi*
*glaas Tebal-**maa** **raakh-i***
 glass table-**LOC** **put**-PST.3SG.F.NH
 ‘She put the glass on the table.’ [s4, pt 001]

Similarly, examples (427) and (428) show two strategies to express the Path for the same event (‘put cup on table’): by the postposition *-maathi* ‘above’ or the locative case marker *-maa* ‘LOC’, besides the verb *raakhnu* ‘to put’, though the configuration of the Ground is the same. Our analysis also reveals that there is yet another strategy to express the final portion of the Path. It involves the verb *dinu* ‘to give’ for the event ‘give a cup to someone’, as in examples (429) and (430).

- (429) *euTi mahilaale arki mahilaalaai kap dii*
*euTi mahilaa-le arki mahilaa-**laai** kap **di-i***
 one woman-ERG another woman-**DAT** cup **give**-PST.3SG.F.NH
 ‘A woman gave a cup to another woman.’ [s7, PT 022]

- (430) *usle ciyaa dii*
*us-le ciyaa **di-i***
 3SG-ERG tea **give**-PST.3SG.F.NH
 ‘She gave tea.’ [s18, PT 022]

The verb *dinu* ‘to give’ involves the transfer of possession that takes place between human Grounds (Source-Goal respectively). While expressing the transfer of possession, the prototypical dative marker *-laai* ‘to’ is used together with that verb.

Syntactically, verbs like *dinu* ‘to give’ are ditransitive and show ‘who did what to whom’; and semantically they may be more constrained than some other verbs. The first example (429) displays the dative marker *-laai* ‘to’ along with the verb *dinu* ‘to give’ whereas in the second example (430), the Path is expressed only by the verb *dinu* ‘to give’; the human Ground which is typically marked by the case marker is not expressed. It may be the case that, in this specific context, the Ground is part of the covert complexity, and the meaning can be easily recovered from the context (Bisang, 2009, 2014a).

c. Pattern 3. Path in three morphosyntactic loci

The ‘Put and Take’ data reveal that in 64 motion descriptions (11.3% of the total, $N=565$), Path is distributed in three loci, between the verb and the adverb, and/or the postposition, and/or the case marker. Examples (431) and (432) show the use of this pattern where Path is expressed in three loci.

- (431) *kap lyaaera Tebulmaathi raakhi*
kap lyaa-era Tebul-maathi raakh-i
 cup bring-CP table-above put-PST.3SG.F.NH
 ‘Having brought the cup (she) put (it) on the table.’ [s8, PT 001]

- (432) *ryaakmaa euNaa baks lyaaera raakhe*
ryaak-maa euTaa baks lyaa-era raakh-e
 shelf-LOC one box bring-cp put-PST.3SG.M.H
 ‘Having brought a box (he) put (it) in the shelf.’ [s3, PT 005]

In these examples, three morphosyntactic loci are used to convey the meaning of Path: in both examples, we observe the use of the verb *lyaaunu* ‘to bring’ in the CP form, and the main verb *raakhnu* ‘to put’; besides, to encode the Path, there is the postposition *-maathi* ‘above’ in (431), and the locative case marker *-maa* ‘LOC’ in (432).

d. Pattern 4. Path in four morphosyntactic loci

There are three motion descriptions in placement events where Path is distributed in four morphosyntactic loci. Examples of these types are illustrated in (433).

(433)	<i>byaag</i>	<i>ek</i>	<i>Thaa~u~baaNa</i>	<i>nikaalera</i>
	<i>byaag</i>	<i>ek</i>	<i>Thaa~u~baaTa</i>	<i>nikaal-era</i>
	bag	one	place-ABL	take.out-CP
	<i>aarko</i>	<i>Thaa~u~maa</i>	<i>raakhe</i>	
	<i>arko</i>	<i>Thaa~u~maa</i>	<i>raakh-e</i>	
	another	place-LOC	put-PST.3SG.M.H	

‘He took out the bag from one place and (then) put (it) in another place.’

[s14, PT 129]

As we can see from this example, the Path is conveyed by the ablative case marker *-baaTa* ‘from’, the locative case marker *-maa* ‘LOC’, the verb *nikaalnu* ‘to take out’ in the conjunctive participle form, and the main verb *raakhnu* ‘to put’. The verb in conjunctive participle form encodes the removal event and the main verb expresses the placement event, together they express the complex Path.

e. Pattern 5. Path in five morphosyntactic loci

Finally, there are two motion descriptions where Path is distributed in five morphosyntactic loci, as illustrated by (434) and (435).

(434)	<i>agi</i>	<i>TebalbaaTa</i>	<i>uThaaera</i>	<i>lageko</i>	<i>keraalaai</i>
	<i>aghi</i>	<i>Tebal-baaTa</i>	<i>uThaa-era</i>	<i>lag-eko</i>	<i>keraa-laai</i>
	before	table-ABL	pick.up-CP	take.away-PFV	banana-DAT
	<i>puna</i>	<i>tehi</i>	<i>Thaa~u~mai</i>	<i>lyaaera</i>	<i>raakhin</i>
	<i>puna</i>	<i>tehi</i>	<i>Thaa~u~mai</i>	<i>lyaa-era</i>	<i>raakh-in</i>
	again	DEM.DIST	place-LOC.EMP	bring-CP	put-PST.3SG.F.H

‘She brought the banana and put it on the same table from where she had picked it up (previously) and taken away.’ [s13, PT 003]

(435)	<i>ekjaanaa</i>	<i>mahilaale</i>	<i>ek</i>	<i>Thaa~u~baaTa</i>	<i>kitaab</i>
	<i>ek-janaa</i>	<i>mahilaa-le</i>	<i>ek</i>	<i>Thaa~u~-baaTa</i>	<i>kitaab</i>
	one-CLF	woman-ERG	one	place-ABL	book
	<i>lyaaera</i>	<i>arko</i>	<i>Thaa~ma</i>	<i>Tebalmaathi</i>	<i>raakhin</i>
	<i>lyaa-era</i>	<i>arko</i>	<i>Thaa~-maa</i>	<i>Tebal-maathi</i>	<i>raakh-in</i>
	bring -CP	another	place-LOC	table- above	put -PST.3SG.F.H

‘A woman brought the books from one place and then put (them) on the table in another place.’ [s13, PT 004]

In example (434), Path is distributed in five different loci: verbs *uThaaunu* ‘to pick up’ and *lyaaunu* ‘to bring’ in the conjunctive participle form, and the main verb *raakhnu* ‘to put’, the ablative case marker *-baaTa* ‘from’ and the locative case marker *-maa* ‘LOC’. We may note that example (435) depicts complex Path that implies two Ground objects. The initial portion of the Path is expressed by the case marker *-baaTa* ‘from’ and the final portion of the Path is expressed by the locative case marker *-maa* ‘LOC’, postposition *-maathi* ‘above’, and the verb *raakhnu* ‘to put’.

4.4.2 Path encoding in removal events

Removal events constitute a total of 539 motion descriptions that is 46.5% of the total data ($N=1158$). In the expression of this type of events, Path is distributed in one morphosyntactic locus up to four loci, as shown in Table 67. It can be expressed in verb alone or verb together with other morphosyntactic devices that I will discuss in turn. There are also motion descriptions which do not attest any Path encoding devices. In removal events also, the highest number of Path is expressed in two loci.

Morphosyntactic loci	N° of motion descriptions	Percentage
1	185	34.3
2	233	43.2
3	74	13.7
4	10	1.9
<i>No Path</i>	37	6.9
Total	539	100

Table 67. Morphosyntactic loci for Path expression in removal events

a. Pattern 1. Path in one morphosyntactic locus

Of the total 539 motion descriptions in removal events, Path expressed in one morphosyntactic locus accounts for 185 motion descriptions, i.e. 34.3% of the dataset ($N=539$). Examples (436) and (437) show the expression of Path in one locus.

(436) AGENT FIGURE MOTION+PATH
usle *kaa~kro* *nikaali*
us-le *kaa~kro* ***nikaal-i***
 3SG-ERG cucumber **take.out**-PST.3SG.F.NH
 ‘She took the cucumber out.’ [s18, PT 115]

(437) AGENT FIGURE MOTION+PATH
usle *jakeT* *kaaNi*
us-le *jakeT* ***kaaDh-i***
 3SG-ERG jacket **take.off**-PST.3SG.F.NH
 ‘She took off the jacket.’ [s14, PT 133]

These examples display the verbs *nikaalnu* ‘to take out’ and *kaaDhnu* ‘to take off’ respectively that depict the Source-oriented Path (i.e. the simplex Path oriented with respect to one Ground object). As attested by our data, except the verb, there is no other morphosyntactic device involved in encoding the Path in one morphosyntactic locus.

b. Pattern 2. Path in two morphosyntactic loci

Our data show that in 233 motion descriptions that account for 43.2% of the total ($N=539$), Path is distributed in two morphosyntactic loci, between the verb and the ablative case markers *-baaTa* ‘from’ or *-dekhi* ‘from’ (very few cases so far in the case of *-dekhi* ‘from’). Examples (438) and (439) show the use of this pattern.

- (438) *usle kaarTunbaaTa phal jhikyo*
us-le kaarTun-baaTa phal jhik-yo
 3SG-ERG carton-ABL fruit **take.out**-PST.3SG.M.NH
 ‘He took the fruits out of the carton.’ [s6, PT 111]

- (439) *kasaille TebulbaaTa kap uThaayo*
kas-ai-le Tebul-baaTa kap uThaa-yo
 who.OBL-EMP-ERG table-ABL cup **pick.up**-PST.3SG.M.NH
 ‘Someone picked up the cup from the table.’ [s7, PT 101]

In these examples, Path is expressed in two loci between the verbs *jhiknu* ‘to take out’ in (438) and *uThaunu* ‘to pick up’ in (439) and the ablative case marker *-baaTa* ‘from’.

c. Pattern 3. Path in three morphosyntactic loci

Compared to patterns one and two, there are fewer examples of Path expressed in three loci. There are 74 motion descriptions i.e. 13.7% of the ‘Put and Take’ dataset in removal events ($N=539$) where Path is distributed in three loci. Examples (440) and (441) show how Path is expressed in these loci.

- (440) *ekjaanaa mailaale Taauko baalTibhitraabaata nikaalin*
ek-janaa mahilaa-le Taauko baalTi-bhitra-baaTa nikaal-in
 one-CLF woman-ERG head bucket-**inside**-ABL **take.out**-PST.3SG.F.H
 ‘A woman took the head out of the bucket.’
 (Lit. ‘A woman took out the head from inside the bucket.’
 [s13, PT 124]

(441)	<i>unile</i>	<i>euTaa</i>	<i>kaarTun</i>	<i>tyo</i>
	<i>uni-le</i>	<i>euTaa</i>	<i>kaarTun</i>	<i>tyo</i>
	3SG.H-ERG	one	carton	DEM.DIST
	<i>daraajbaaTa</i>	<i>baaira</i>	<i>nikaalin</i>	
	<i>daraaj-baaTa</i>	<i>baahira</i>	<i>nikaal-in</i>	
	shelf-ABL	outside	take.out -PST.3SG.F.H	

‘She took a carton out of that shelf.’

(Lit. ‘She took out a carton outside from that shelf.’ [s9, PT 106])

In example (440), the postposition *-bhitra* ‘inside’ is used in the expression of the initial Path but, morphologically, it is more complex (cf. Bourdin, 1997). Thus, the postposition *-bhitra* ‘inside’ encodes the configuration of the Ground, but it is also combined with the ablative case marker *-baaTa* ‘from’ that indicates the Source-oriented Path. Hence, the use of *-bhitra* specifies the relation of the Figure object *Taauko* ‘head’ with the containment type of Ground, thereby implying the boundary crossing. In the case of (441) too, the Path is distributed in three morphosyntactic loci, among verb *nikaalnu* ‘to take out’, the ablative case marker *-baaTa* ‘from’, and the adverb *baahira* ‘outside’.

d. Pattern 4. Path in four morphosyntactic loci

The data reveal that in 10 motion descriptions, Path is distributed in four morphosyntactic loci. In the following examples (442) and (443), we can observe this type of distribution of Path.

(442)	<i>usle</i>	<i>TebalmaathibaaTa</i>	<i>kap</i>	<i>jhikera</i>	<i>lagyo</i>
	<i>us-le</i>	<i>Tebal-maathi-baaTa</i>	<i>kap</i>	<i>jhik-era</i>	<i>lag-yo</i>
	3SG-ERG	table- above -ABL	cup	take.out -CP	take.away -PST.3SG.M.NH

‘He took the cup away from the table.’

(Lit. ‘Having taken out the cup from above the table he took it away.’)

[s5, PT 101]

(443)	<i>gojima</i>	<i>haat</i>	<i>haalera</i>	<i>gojima</i>
	<i>goji-maa</i>	<i>haat</i>	<i>haal-era</i>	<i>goji-maa</i>
	pocket-LOC	hand	put-CP	pocket-LOC
	<i>bhako</i>	<i>cij</i>	<i>baaira</i>	<i>nikaali</i>
	<i>bha-eko</i>	<i>cij</i>	<i>baahira</i>	<i>nikaal-i</i>
	COP ₃ .PST-PFV	thing	outside	take.out-PST.3SG.F.NH

‘Having put the hand into the pocket (she) took the thing out of it (pocket).’
(Lit. ‘Having put the hand into the pocket (she) took out the thing that was in the pocket.’ [s4, PT 116])

In both examples, Path is distributed across four morphosyntactic loci. It is encoded by the main verb *lagnu* ‘to take away’ and the verbs *nikaalnu* ‘to take out’ and *haalnu* ‘to put’ in the conjunctive participle form, the case marker *-baaTa* ‘from’, the postposition *-maathi* ‘above’ (442), and finally the case marker (*-maa* ‘LOC’) and the adverb *baahira* ‘outside’. Moreover, the Source-oriented Path in (442) is conveyed by *jhiknu* ‘to take out’ in the conjunctive participle form and the main verb *lagnu* ‘to take away’, the ablative case marker *-baaTa* ‘from’, and the postposition *maathi* ‘above’ showing the configuration of the Ground. We may note, however, that example (443) expresses the Goal-Source Path, which is an instance of the complex Path expressed by the means of a complex construction.

4.4.3 Path encoding in removal-placement events

The last type of events to be discussed here concerns the removal-placement events that involve 4.7% of the total motion descriptions ($N=1158$). In the expression of this event type, Path is distributed in one morphosyntactic locus up to five loci, the distribution in three loci being the most frequent (19 motion descriptions out of 54). In principle, the removal-placement events represent the complex Path that includes Source-Median-Goal or Source-Goal but due to the perspective change in the event encoding, some motion descriptions consist of only one portion of Path; and even when they consist of more than one morphosyntactic locus they do not convey the complex Path as expected in the stimulus set. In such cases, either the speakers express only the Goal-oriented Path (placement) or they convey only the Source-oriented Path (removal), thereby focusing on one portion of Path. We will see this trend later

through the examples. Table 68 further shows the proportion of the use of different distribution patterns of Path in removal-placement events.

Morphosyntactic loci	N° of motion descriptions	Percentage
1	8	14.8
2	17	31.4
3	19	35.2
4	4	7.4
5	1	1.9
<i>No Path</i>	5	9.3
Total	54	100

Table 68. Morphosyntactic loci for Path expression in removal-placement events

a. Pattern 1. Path in one morphosyntactic locus

In the data, there are eight motion descriptions where Path is expressed in one locus, as in example (444) and (445).

- (444) *byaaglaai* *alikota* *para* *saaryo*
byaag-laai *alikota* *para* *saar-yo*
 bag-DAT little that.side **move**-PST.3SG.M.NH
 '(He) moved the bag a little further.' [s2, PT 052]

- (445) *gaaNi* *pachaaNi* *raheko* *byaaglaai*
gaaDi *pachaaDi* *rah-eko* *byaaglaai*
 vehicle back remain-PFV bag-DAT
kehi *para* *saare*
kehi *para* *saar-e*
 some that.side **move**-PST.3SG.M.H
 '(He) moved the bag a little further that was behind the car.' [s11, PT 052]

In both examples, Path is expressed in one morphosyntactic locus by the verb *saarnu* 'to move'. We may note, however, that in (444) the event is expressed in simplex clause but in (445) it is encoded in complex clause.

b. Pattern 2. Path in two morphosyntactic loci

Path is expressed in two loci in 17 motion descriptions that account for 31.4% of the dataset ($N=54$). Example (446) shows this pattern of Path distribution.

(446)	<i>usle</i>	<i>aTai~ci</i>	<i>utaa</i>	<i>lagera</i>	<i>raakhi</i>
	<i>us-le</i>	<i>aTai~ci</i>	<i>utaa</i>	lag-era	raakh-i
	3SG-ERG	suitcase	that.side	take.away-CP	put-PST.3SG.F.NH
	'(By) taking away the suitcase she put it there (that side).' [s19, PT 050]				

In the example above, Path is distributed in two morphosyntactic loci, in two verbs. The verb *lagnu* 'to take away' in the CP form encodes the Source-oriented Path whereas the main verb *raakhnu* 'to put' conveys the Goal-oriented Path; hence, together the two verbs express the complex Path (Source-Goal) in the complex clause.

c. Pattern 3. Path in three morphosyntactic loci

The expression of Path in three morphosyntactic loci represents 19 motion descriptions that account for 35.2% ($N=54$) of the dataset. Example (447) below illustrates this pattern of distribution.

(447)	<i>usle</i>	<i>euNaa</i>	<i>bhaa~NobaaNa</i>
	<i>us-le</i>	<i>euTaa</i>	<i>bhaa~Daa-baaTa</i>
	3SG-ERG	one	pot-ABL
	<i>paani</i>	<i>bha~i~maa</i>	<i>khanyaa-i</i>
	<i>paani</i>	<i>bhui~-maa</i>	khanyaa-i
	water	floor-LOC	pour-PST.3SG.F.NH
	'She poured the water on the floor from a pot.' [s15 PT 120]		

In this example, Path is expressed in three loci between two types of linguistic devices, two case markers and one verb. The ablative case marker *-baaTa* 'from' indicates the Source-oriented Path, while the verb *khanyaaunu* 'to pour' and the locative case marker *-maa* 'LOC' depict the Goal-oriented Path. Note that this example illustrates the expression of the complex (Source-Goal) Path in a simplex clause.

d. Pattern 4. Path in four morphosyntactic loci

Our data attest four motion descriptions where Path is distributed in four morphosyntactic loci. Examples (448) and (449) show how different linguistic devices are involved in Path expression.

- (448) *TebulbaaNa kei cij nikaalera kurcimaa raakhi*
Tebul-baaTa kehi cij nikaal-era kurci-maa raakh-i
 above-ABL some thing **take.out**-CP chair-LOC **put**-PST.3SG.F.NH
 ‘She took something from the table and then put (it) on the chair.’
 [s2, PT 050]

- (449) *gaaNibaaNa orlera aaphno byaag alikita*
gaaDi-baaTa orl-era aaphno byaag alikati
 vehicle-ABL **descend**-CP self.GEN bag chair-LOC
utaa saarera raakhyo
utaa saar-era raakh-yo
 that.side **move**-CP **put**-PST.3SG.M.NH
 ‘He got off the vehicle and then he put his bag by moving it a little further.’
 [s14, PT 052]

In (448), Path is encoded between verbs and case markers. The verb *nikaalnu* ‘to take out’ in the CP form along with the ablative case marker *-baaTa* ‘from’ express the Source, and the main verb *raakhnu* ‘to put’ together with the locative case marker *-maa* ‘LOC’ encode the Goal. This is the case of the complex Path expressed in the complex clause. We may note further that, in (449), Path is distributed between verbs and the case marker and that there are three verbs of which two (*orlanu* ‘to descend’ and *saarnu* ‘to move’) are in the CP form, and one (*raakhnu* ‘to put’) is the main verb: furthermore, there is the ablative case marker *-baaTa* ‘from’. The verb *orlanu* ‘to descend’ in the CP form, and the ablative case marker *-baaTa* ‘from’ convey the Path of the Agent whereas the verb *saarnu* ‘to move’ in the CP form and the main verb *raakhnu* ‘to put’ convey the Motion of the Figure; in fact, the CP form *saarnu* ‘to move’ seems to elaborate motion conveyed by the main verb *raakhnu* ‘to put’.

e. Pattern 5. Path in five morphosyntactic loci

There is only one motion description in the data where Path is distributed across five morphosyntactic loci. This is the case in example (450).

- (450) *TebulmaathibaaTa nikaalera kurcimaathi raakhi*
Tebul-maathi-baaTa nikaal-era kurci-maathi raakh-i
 table-above-ABL take.out-CP chair-above put-PST.3SG.F.NH
 ‘She took (?) out of the table and then put (?) on the chair.’ [s4, PT 050]

Path is distributed here among different types of morphosyntactic devices: the verb, the case marker, and the postposition. The verb *nikaalnu* ‘to take out’ in the CP form and the ablative case marker *-baaTa* ‘from’ express the Source-oriented Path, the main verb *raakhnu* ‘to put’ and the postposition *-maathi* ‘above’ convey the Goal-oriented Path, and another postposition *-maathi* ‘above’ that occurs with the Ground object *Tebul* ‘table’ conveys the configuration of the Source Ground as well as the Source Path. Combined together these linguistic devices convey the complex (Source-Goal) Path. It is an interesting point that the Path is given a due attention and profiled in its totality in the linguistic expression, the Figure object and the Agent are missing in the motion description. In fact, the role of the Agent is conveyed by the inflected form (-i) of the main verb *raakhnu* ‘to put’ marking the tense, person, gender, and number but the Figure object is not covered. Does the grammar encode this or is it a part of the hidden complexity (Bisang, 2009), and/or should the meaning be recovered from the context? I argue that the meaning can be recovered from the discourse-pragmatic factors rather than the grammar (cf. Grinevald, 2006: 44).

Overall, the ‘Put and Take’ data show that Path tends to be expressed in two morphosyntactic loci; thus, this pattern is the most frequent in motion descriptions. However, the results also reveal that the use of different patterns varies between placement vs. removal events and that the distribution of the Path in two morphosyntactic loci is more frequent in placement events as compared to removal events and, consequently the other patterns are slightly more often used in removal events. This tendency is shown in Table 69.

Morphosyntactic loci	Type of events			Total	Percentage
	Placement	Removal	Removal-Placement		
1	146	185	8	339	29.2
2	323	233	17	573	49.5
3	64	74	19	157	13.5
4	3	10	4	17	1.5
5	2		1	3	0.3
<i>No Path</i>	27	37	5	69	6.0
Total	565	539	54	1158	
Percentage	48.8	46.5	4.7		

Table 69. Morphosyntactic loci for the Path expression in placement and removal events

While the distribution of Path in two loci is more frequent in placement (57.2% of the total data, $N=565$) and removal events (43.2% of the total data, $N=565$), in the case of removal-placement events, which are conceptually more complex, Path tends to be expressed more often in three loci (35.2% of the total data, $N=54$). The reason why the speakers prefer to use two loci in placement events is intriguing. Most of the motion descriptions in which the Path is expressed in two loci comprise simplex constructions. This may be one of the reasons for opting two morphosyntactic loci. Our analysis also shows that different morphosyntactic devices (e.g., verbs, case markers, adverbials, and postpositions) are used in both placement as well as removal events. Furthermore, it is also worth mentioning that semantically the conjunctive participles have a major role in expressing complex Path whether the motion description is Source-Goal oriented, as in (451), or Goal-Source oriented, as in (452), or only Source/Goal that we discussed earlier.

- (451) *ekjaanaa bektile Tebalmaathi bhaeko*
ek-janaa wyakti-le Tebal-maathi bha-eko
 one-CLF person-ERG table-above COP₃.PST-PFV
aaphno ज्याकेT nikaalera lagaae
aaph-no ज्याकेT nikaal-era lagaa-e
 self-GEN jacket **take.out**-CP **put.on**-PST.3SG.M.H
 ‘A person took the jacket out (that was on the table) and then put it on.’
 [s13, PT 033]

- (452) *rukko pwaalmaa haat chiraaera baahira nikaalin*
ruk-koh pwaal-maa haat chiraa-era baahira nikaal-in
 tree-GEN hole-LOC hand **insert**-CP **outside take.out**-PST.3SG.F.H
 ‘(She) put (her) hand into the hole of the tree and then took it out.’
 [s19, PT 123]

Moreover, in the expression of final portion of Path, there are more grammatical devices (e.g., verbs, postpositions, case markers, adverbials) than in the expression of the initial portion of Path (e.g., verbs, case markers, adverbials). Finally, another point of interest in the expression of final portion of Path is that dressing events (Narasimhan, 2012) as expressed by *lagaauunu* ‘to put on’ do not necessarily imply the overt expression of the Ground/s (e.g., *Topi lagaayo* ‘he put on a cap’) which are typically marked by postpositions or case markers but in the case of other types of events, the Ground is expressed and, hence, marked by the case markers or postpositions.

4.5 Summary

In this chapter, the overall results of the ‘Put and Take’ corpus were discussed. We saw the type of events depicted in the video clips, namely, placement, removal and removal-placement events. The ‘Put and Take’ corpus comprises 1158 motion descriptions in total accounting for 48.8% placement events, 46.5% removal events, and 4.7% removal-placement events (cf. § 4.1.1 through § 4.1.3). The results also show that when describing those video clips, some speakers tend to change their

perspective in the context of some events i.e. not all the placement or removal or removal-placement events were described as they were expected to. This tendency accounts for 5% of the total motion descriptions ($N=1158$) (cf. § 4.1.4)).

Closer analysis of the data indicates that in 17.7% of the cases the Ground component is not mentioned in motion descriptions. In particular, the analysis indicates that the omission of the Ground is more frequent (9.9% of the total, $N=1158$) in removal events than in placement events (7.8% of the total data), the same tendency being observed in other Indo-Aryan languages (cf. Narasimhan, 2012; Petersen, 2012). Furthermore, we saw that the ‘Put and Take’ corpus attests both simplex and complex constructions, which account for 51.8% and 46.6% respectively.

In particular, simplex constructions are more frequent (i.e. 30.6%) in placement events than in removal events; consequently, complex constructions are more frequent in removal events (i.e. 25.6% of the total) than in placement events.

One of the interesting points which I found in the data is that there is a great lexical diversity in the expression of placement and removal events. 85 different verbs were used in the expression of these two types of events in the main verb slot. Typically, some verbs are more frequent in the motion descriptions than others: *raakhnu* ‘to put’ is the most frequent verb in placement events and *nikaalnu* ‘to take out’ is the most frequent verb in removal events. A fine-grained analysis shows that these verbs can be categorized as general verbs of caused Motion events. Data also show that in placement as well as removal events, some verbs overlap and that some are semantically more specific. For example, in the case of placement events, the verb *raakhnu* ‘to put’ overlaps with the verb *chiraaunu* ‘to insert’/‘cause to enter’. Nevertheless, the verb *chiraaunu* ‘to insert’ is semantically more specific because it is sensitive to the type of Ground. In the data, there was not any evidence of dialectal variation.

If we look at the semantic specificity of verbs, 39 verbs (out of 85) express Path, 27 express Manner, two convey spontaneous Motion events and the rest of them belong to other than Path/Manner verb category. The data also show that, besides the verbs, there is also a diversity among other lexico-grammatical devices used in the expression of the two types of events. These include case markers, postpositions, and adverbials. Two case markers *-maa* ‘LOC’, and *-baaTa* ‘from’ are the general

grammatical devices used in the expression of placement and removal events. The locative case marker *-maa* 'LOC' is used mainly in placement events and the ablative case marker *-baaTa* 'from' is mainly used in removal events.

Moreover, the data confirm that Path is distributed in different morphosyntactic loci. It can be distributed in one locus up to five morphosyntactic loci in the case of placement and removal-placement events but in the case of removal events, it is usually distributed in one up to four loci. The distribution of Path in two morphosyntactic loci is the most frequent pattern in the dataset under the study here (49.5% of the total, $N=1158$). When comparing the two types of events, we found, however, that this pattern is more frequent in placement events (that is 57.2% of the total, $N=565$) than in removal events (that is 43.2% of the total, $N=539$). Overall, the data show that, in Nepali, Path is expressed in a compositional way i.e. with an interplay of verbs, case markers, postpositions and adverbials across the sentence. In certain cases, the complex Path is expressed in the simplex construction but in others, it is expressed in complex construction involving mostly the conjunctive participle form.

The data discussed in this chapter show some similarities with other languages irrespective of their genealogical similarities or differences. Studies on languages such as Hindi and Tamil (Narasimhan, 2012), Mandarin (Chen, 2012), Tzeltal (Brown, 2012) *inter alia* (cf. Levinson & Brown, 2012) show that there are semantically general verbs to encode placement and removal events, as is the case of Nepali and that the semantic component Ground tends to be left implicit more frequently in removal events as compared to placement events.

Chapter 5. The expression of spontaneous Motion events

In this chapter, I will investigate how speakers of Nepali express spontaneous Motion events that refer to the movement of an animate being or an inanimate entity from one location to another (e.g., *She ran into the room, the stone rolled down the cliff*) (cf. § 1.1, see also § 3.1.2)). Such events typically imply a change of location of the Figure.

The outline of this chapter is as follows. In Section 5.1, I will present different types of events which are represented in the 'Trajectoire' video stimulus set and which involve simple Path events in which the Figure changes location with respect to one Ground (e.g., Source or Goal) and complex Path events in which the Figure changes location with respect to two Grounds or more (e.g., Source, and Goal). I will examine how speakers express such events and whether they maintain or change the perspective when describing the event shown in the video. I then investigate the types of constructions, simplex and complex, used by speakers in motion descriptions (§ 5.2) and discuss the types of linguistic devices, both lexical and grammatical, they use in the expression of spontaneous Motion events (§ 5.3). In Section 5.3.1, I analyse verbs of motion, their diversity, and form-function mappings. A specific attention will be given to the diversity of Path verbs (§ 5.3.1.2), Manner verbs (§ 5.3.1.3), and the role of conjunctive participles (CP) expressing Path and Manner (§ 5.3.2). Section 5.3.3 presents different types of adverbials found in the data showing that they can express either Path or Manner. I provide the analysis of the grammatical devices found in descriptions of spontaneous Motion, namely, case markers (§ 5.3.4), and postpositions (§ 5.3.5). Finally, Section 5.4 is concerned with the distribution of Path in different morphosyntactic loci across the sentence. I will show how different components of Path are distributed in different linguistic devices and show that Path can be expressed in one locus such as a verb, an adverb, a postposition or a case marker or be distributed in several loci (one locus up to six loci) by an interplay of different

types of morphosyntactic devices. A summary of the results will conclude this Chapter.

5.1 Event descriptions

In order to investigate the expression of various types of spontaneous Motion events in Nepali, I used the ‘Trajectoire’ video stimulus set (Ishibashi *et al.*, 2006; see § 3.1.2 for further details). These events convey different Path information: Source, Median, or Goal (simple Path) or Source-Goal, Source-Median-Goal (complex Path) or horizontal vs. vertical Path or with vs. without boundary crossing Path. The expression of these components varies across languages and in the way speakers encode them. Note that the dataset does not attest the Source-Median, and Source-Median-Goal-oriented motion descriptions as expected in the video stimuli (cf. § 5.1.3). Before presenting the analysis of the data, examples (453) and (454) show how these types of spontaneous Motion events are expressed in Nepali.

(453)	FIGURE	GROUND-PATH	MOTION-PATH
	<i>u</i>	<i>guphaabhitra</i>	<i>pasi</i>
	<i>u-Ø</i>	<i>guphaa-bhitra</i>	<i>pas-i</i>
	3SG-NOM	cave-inside	enter-PST.3SG.F.NH
	‘She went into the cave.’		
	(Lit. ‘She entered into the cave.’) [Traj_053_s22]		

(454)	FIGURE	GROUND-PATH	PATH	MOTION+PATH
	<i>uni</i>	<i>guphphaadekhi</i>	<i>baaira</i>	<i>niklin</i>
	<i>uni-Ø</i>	<i>guphphaa-dekhi</i>	<i>baahira</i>	<i>nikl-in</i>
	3SG.H-NOM	cave-ABL	outside	exit-PST.3SG.F.H
	‘She came out of the cave.’			
	(Lit. ‘She exited outside from the cave.’) [Traj_023_s9]			

In (453) and (454), *u* ‘she/he’ and *uni* ‘she/he’, whose syntactic role is subjects, semantically function as Figure and Agent of the spontaneous Motion (a.k.a. physical motion or self-propelled motion in our context). The object NP i.e. *guphaa* ‘cave’ is in the function of the Ground and the intransitive predicates *pasnu* ‘to enter’ and

niskanu ‘to exit’ convey Motion as well as the Path component. Moreover, the postposition *-bhitra* ‘inside’, the ablative case marker *-dekhi* ‘from’ and the adverb *baahira* ‘outside’ contribute to the expression of the Path in both examples.

5.1.1 Simple Path events

In simple Path events, the Figure’s Motion is performed with respect to one Ground, either the Source or the Median or the Goal. I will discuss each of these types of Path below (for further information on these events, see Appendix: F).

a. Source-oriented events

The Source-oriented events consist of Motion with respect to a Source Ground, i.e. the Figure moves (away) from the initial location (Ground) as in Figure 18, and as shown in examples (455) and (456). In total, there are 10 Source-oriented events in the ‘Trajectoire’ video clips.



Figure 18. Source-oriented event (‘coming out of the cave’ (Source: Ishibashi, et al., 2006))

- (455) *u guphaabaata baahira aayo*
u-∅ guphaa-baata baahira aa-yo
 3SG-NOM cave-ABL outside come-PST.3SG.M.NH
 ‘He came out of the cave.’ [Traj_028_s22]

- (456) *u jhaaNi panchaau~dai baaira niskiyo*
u-Ø jhaaDi panchaau~-dai baahira nisk-yo
 3SG-NOM bush remove-DUR outside exit-PST-3SG-M-NH
 ‘He came out removing the bush.’
 (Lit. ‘He exited outside (by) removing the bush.’) [Traj_055_s22]

Coming out of *guphaa* ‘cave’ in (455), and *jhaaDhi* ‘bush’ in (456) denotes the movement of the human Figure *u* ‘he’ from the initial location and, therefore, both examples convey the Source-oriented events.

b. Median-oriented events

In the Median-oriented Path events, the Figure passes via the Ground showing the Median point (between the Source and the Goal) as in examples (457) and (458). Out of 55 video clips, 21 of them constitute the Median-oriented events.

- (457) *usle pulko maadhdhembaaTa kholaa taryo*
us-le pul-ko maadhyam-baaTa kholaa tar-yo
 3SG-ERG bridge-GEN medium-ABL stream cross-PST-3SG-M-NH
 ‘He crossed the stream via the bridge.’
 (Lit ‘He crossed the stream by means of the bridge.’) [Traj_050_s9]

- (458) *uniharu pul waaribaaTa paari tare*
uni-haru-Ø pul waari-baaTa paari tar-e
 3-PL-NOM bridge this.side-ABL that.side cross-PST.3PL
 ‘They crossed the bridge.’
 (Lit. ‘From this side of the bridge, they crossed the other side.’) [Traj_045_s17]

In both examples, the event is crossing the *kholaa* ‘stream’ (457) and going to *paari* ‘that side’ from *waari* ‘this side’ (nouns with Deictic function) (458). By means of *pul* ‘bridge’ the Median Ground, the Figure’s Motion expressed by the verb *tarnu* ‘to cross’ conveys the Median Path event. The Median-oriented event can be represented in Figure 19.



Figure 19. Median-oriented event ('crossing the bridge') (Source: Ishibashi, et al., 2006))

c. Goal-oriented events

The Goal-oriented events refer to the movement of the Figure to the final place as illustrated in examples (459) and (460), and Figure 20. In the 'Trajectoire' stimulus set, there are 11 different events that express the Goal.



Figure 20. Goal-oriented event ('going to the lake') (Source: Ishibashi et al., 2006))

- (459) *u janggalbhitra gayo*
u-Ø janggal-bhitra ga-yo
3SG-NOM forest-inside go-PST-3SG.M.NH
'He went to the forest.' [Traj_056_s8]

- (460) *uni hiNdai rukhmuni aain*
uni-∅ hi~D-dai rukh-muni aa-in
 3SG.H-NOM walk-DUR tree-under come-PST-3SG.F.H
 ‘She came under the tree walking.’ [Traj_061_s10]

In the examples above, *janggal* ‘forest’ (459) and *ruk h muni* ‘under the tree’ (460) are the final location of the Figures. The Goal is conveyed by the Deixis and Path verbs *jaanu* ‘to go’ in (459) and *aaunu* in (460).

5.1.2 Complex Path events

In complex Path events, the Figure changes the location with respect to two or three Grounds that include Source-Goal, and Median-Goal events which will be discussed in turn.

a. Source-Goal-oriented events

Events showing the movement of the Figure from the initial to the final location refer to the Source-Goal-oriented events, as in (461) and (462). In total, there are four Source-Goal-oriented events in the ‘Trajectoire’ stimulus set (cf. § 4.3.1.3).

- (461) *u euTaa DhunggobaaTa*
u-∅ euTaa Dhunggaa-baaTa
 3SG-NOM one stone-ABL
arko Dhungngomaa uphriyo
arko Dhunggaa-maa uphri-yo
 another stone-LOC jump-PST-3SG.M.NH
 ‘He jumped from one stone to another (stone).’ [Traj_075_s14]

- | | | | |
|-------|----------------|---------------------|-----------------|
| (462) | <i>keTaa</i> | <i>oNaarbaaNa</i> | <i>niklera</i> |
| | <i>keTo-Ø</i> | <i>oDhaar-baaTa</i> | <i>nikl-era</i> |
| | boy-NOM | cave-ABL | exit-CP |
| | <i>nadiko</i> | <i>cheutira</i> | <i>gayo</i> |
| | <i>nadi-ko</i> | <i>cheu-tira</i> | <i>ga-yo</i> |
| | river-GEN | side-toward | go-PST-3SG.M.NH |
- ‘Coming out of the cave, the boy went toward the bank of the river.’
 (Lit. ‘The boy went toward the bank of the river exiting from the cave.’
 [Traj_028_s11])

Jumping from one stone to another in (461), and going from the cave to the side of the river in (462) are both Source-Goal-oriented events. However, there is a difference in the way they are encoded in the examples above. In the case of (461), the event is expressed in a simple clause which shows that Nepali can include Source and Goal, i.e. the complex Path, in the same clause by means of the verb and other linguistic devices; but in example (462), it is conveyed in a complex construction. Thus, in (462), the Source-oriented sub-event is indicated by the verb *niklanu* ‘to exit’ in the CP form and the Goal-oriented sub-event is encoded by the main verb *jaanu* ‘to go’ including the postposition *-tira* ‘toward’.

b. Median-Goal-oriented events

Events that involve the intermediate Path, and the Goal Path are referred to Median-Goal-oriented events, as in (463). The ‘Trajectoire’ stimulus set comprises four Median-Goal-oriented events.

- | | | | | | |
|-------|-------------------|--------------|-----------------|---------------------|---------------|
| (463) | <i>uniharu</i> | <i>baaTo</i> | <i>kaaTera</i> | <i>pokharitira</i> | <i>laage</i> |
| | <i>uni-haru-Ø</i> | <i>baaTo</i> | <i>kaaT-era</i> | <i>pokhari-tira</i> | <i>laag-e</i> |
| | 3-PL-NOM | road | cross-CP | pond-toward | go-PST.3PL |
- ‘They crossed the road and went toward the pond.’/
 ‘They went toward the pond crossing the road.’ [Traj_066_s19]

The light verb *baaTo kaaTnu* ‘to cross the road’ indicates the Median-oriented event and *pokharitira laagnu* ‘to go toward the pond’ conveys the Goal-oriented event.

In addition to the five types of events discussed above, the ‘Trajectoire’ material also comprises the Source-Median-oriented events, and Source-Median-Goal-oriented events. However, there are no motion descriptions conveying all the Path portions of these events in my dataset because speakers tend to construe them differently in their descriptions (cf. § 5.4.6). For example, although the ‘Trajectoire’ material comprises 10 Source-oriented events, participants do not represent these events as Source-oriented. Rather, they describe them as Goal-oriented events or as purposive or as the Manner clauses. The events where speakers change their perspective on the scene are discussed in Section 5.1.3.

5.1.3 Perspective change in the event encoding

I mentioned in Section 5.1 that some participants differ individually in the way they describe some ‘Trajectoire’ video clips and that they give descriptions different from what is expected from those clips. This is the result of the participants’ change of perspective in describing the events. In the paragraphs below, I will illustrate the types of events in the description of which such change of perspective occur.

a. Median-oriented events

Participants produced 359 descriptions that convey Median-oriented events. This is 37.8% of the ‘Trajectoire corpus ($N=949$). Examples in (464) and (465) below show the expression of these events.

(464) *unle pul paar gare*
un-le pul paar gar-e
 3SG.H-ERG bridge cross do-PST.3SG.M.H
 ‘He crossed the bridge.’ [Traj_050_s10]

(465) *usle bistaarai hi~Nera baaTo paar garyo*
us-le wistaarai hi~D-era baaTo paar gar-yo
 3SG-ERG slowly walk-CP road cross do-PST-3SG.M.NH
 ‘He crossed the road (by) walking slowly.’ [Traj_049_s3]

In these examples, Median-oriented events are encoded by the light verb *paar garnu* ‘to cross’; however, in (464), the event is expressed in a simplex clause whereas in (465), it is conveyed in a complex clause. These events seem to trigger changes in perspective. Participants either add Path information in their descriptions or describe some of these clips as Source-oriented events, as in (466), as Goal-oriented events, as in (467), or as Source-Goal-oriented events, as in (468). In descriptions of other types of events, such changes of perspective are much less frequent.

(466) *jhaaNibhitraBaaNa iniharu nikle*
jhaaDi-bhitra-baaTa yini-haru ninkl-e
 bush-inside-ABL DEM.PROX-PL exit-PST.3PL
 ‘They exited from inside the bush.’ [Traj_041_s11]

(467) *u pultira ga-yo*
u-Ø pul-tira ga-yo
 3SG-NOM bridge-toward go-PST.3SG.M.NH
 ‘He went toward the bridge.’ [Traj_046_s21]

(468) *u caurbaaTa janggaltira jaa~daiche*
u-Ø caur-baaTa janggal-tira jaa~-dai-che
 3SG-NOM meadow-ABL forest-toward go-DUR-COP₂.NPST.3SG.F.NH
 ‘From the meadow, she is going toward the forest.’ [Traj_052_s14]

In some cases, we note that participants add Path information, this is the case in (469) where the speaker, in addition to the Median Path, adds information about the Goal.

(469) *unle baaTo paar garera jangngaltarpha laage*
un-le baaTo paar gar-era janggal-tarpha laag-e
 3SG.H-ERG road cross do-CP forest-toward go-PST.3SG.M.H
 ‘(By) crossing the road he went toward the forest.’ [Traj_049_s10]

Moreover, in many cases, speakers describe Manner of Motion, as in example (470), thereby focusing on the activity rather than on the change of location. Such motion descriptions do not convey any Path information.

- (470) *u* *baaTomaa* *hi~Niraheko* *cha*
u-Ø *baaTo-maa* *hi~D-i-rah-eko* *cha*
 3SG-NOM road-LOC walk-ABS-remain-PFV.M COP2.NPST.3SG.M.NH
 ‘He has been walking on the road.’ [Traj_049_s5]

b. Goal-oriented events

Goal-oriented events comprise 194 motion descriptions that account for 20.4% of motion descriptions in the ‘Trajectoire’ corpus. Examples (471) and (472) show the expression of such events.

- (471) *uni* *janggalbhitra* *chire*
uni-Ø *janggal-bhitra* *chir-e*
 3SG.H-NOM forest-inside enter-PST.3SG.M.H
 ‘He went into the forest.’
 (Lit. ‘He entered into the forest.’ [Traj_026_s10])

- (472) *u* *bagai~caabhitra* *pasyo*
u-Ø *bagai~caa-bhitra* *pas-yo*
 3SG-NOM garden-inside enter-PST.3SG.M.NH
 ‘He went to the garden.’
 (Lit. ‘He entered into the garden.’ [Traj_026_s4])

In the examples above, *chirnu* ‘to enter’, and *pasnu* ‘to enter’ express the Goal-oriented Motion. Moreover, the Ground objects, *janggal* ‘forest’ in (471) and *bagai~caa* ‘garden’ in (472) convey the Figure’s final location. In the case of Goal-oriented events, too, some speakers focus on a different type of information from the one shown in the video clip. Such a change of perspective results in a Source-, Median- and/or Source-Goal-oriented events, as in (473), (474), and (475) respectively.

- (473) *u* *oNaarbaaTa* *baaira* *niski*
u-Ø *oDhaar-baaTa* *baahira* *nisk-i*
 3SG-NOM cave-ABL outside exit-PST.3SG.F.NH
 ‘She came out of the cave.’
 (Lit. ‘She exited outside from the cave.’ [Traj_056_s2])

- (474) *unle baalTi haatmaa liera haaiwe paar garin*
un-le baalTi haat-maa li-era haaiwe paar gar-in
 3SG.H-ERG bucket hand-LOC take-CP highway cross do-PST.3SG.F.H
 ‘(By) taking the bucket in her hand she crossed the highway.’/
 ‘Having taken the bucket in her hand she crossed the highway.’ [Traj_069_s10]

- (475) *u caurbaaTa jhaaNitarpha prabes gari*
u-Ø caur-baaTa jhaaDi-tarpha prawes gar-i
 3SG-NOM forest-ABL bush-toward entrance do-PST.3SG.F.NH
 ‘From the meadow she went toward the bush.’
 (Lit. ‘From the meadow she entered toward the bush.’ [Traj_057_s5])

In some motion descriptions, speakers pay more attention to Manner rather than Path as is the case in (476) that does not imply any change of location but only an activity.

- (476) *hi~Niraacha jhaaNimaa*
hi~D-i-rah-eko-cha jhaaDi-maa
 walk-ABS-remain-PFV.M-COP₂.NPST.3SG.M.NH bush-LOC
 ‘(He) has been walking in the bush.’ [Traj_056_s2]

c. Source-oriented events

Source-oriented events consist of 170 motion descriptions which correspond to 17.9% of motion descriptions in our dataset ($N=949$). Examples showing the expression of Source-oriented events are presented in (477) and (478).

- (477) *u jangngalbaaTa baaira niskyo*
u-Ø janggal-baaTa baahira nisk-yo
 3SG-NOM forest-ABL outside exit-PST.3SG.M.NH
 ‘He came out of the forest.’
 (Lit. ‘He exited outside from the forest.’ [Traj_055_s17])

- (478) *u* *guphaabaaNa* *baaira* *niskidai-cha*
u-Ø *guphaa-baaTa* *baahira* *niski-dai-cha*
 3SG-NOM cave-ABL outside exit-DUR-COP₂.NPST.3SG.NH
 ‘He is coming out of the cave.’
 (Lit. ‘He is exiting outside from the cave.’) [Traj_025_s8]

In these examples, the Source-oriented event is conveyed by the verb *niskanu* ‘to exit’. In addition to the verb, the Source information is also conveyed by the case marker *-baaTa* ‘from’ and the adverb *baahira* ‘outside.’ Nevertheless, such Source-oriented motion is sometimes linguistically represented by speakers as Goal- or Source-Goal-oriented motion, following the change of perspective. This is the case in examples (479) and (480) in which speakers focus on a different kind of information in their descriptions.

- (479) *uni* *bhitra* *pasin*
uni-Ø *bhitra* *pas-in*
 3SG.H-NOM inside enter-PST.3SG.F.H
 ‘She entered inside.’ [Traj_025_s20]

- (480) *u* *jhaaNibhitraBaaTa* *bistaarai*
u-Ø *jhaaDi-bhitra-baaTa* *wistaarai*
 3SG-NOM bush-inside-ABL slowly
caurtarpha *aai*
caur-tarpha *aa-i*
 meadow-toward come-PST.3SG.M.NH
 ‘She slowly came out of the bush toward the meadow.’
 (Lit. ‘From inside the bush she slowly came toward the meadow.’) [Traj_027_s3]

Finally, there are some instances, as in (481), that show that speakers focus on the activity rather than on the change of location of the Figure.

- (481) *u* *bistaarai* *hi~Ndai* *cha* *caurmaa*
u-Ø *wistaarai* *hi~D-dai* *cha* *caur-maa*
 3SG-NOM slowly walk-DUR COP₂.NPST.3SG.NH meadow-LOC
 ‘She/he is walking slowly in the meadow.’ [Traj_032_s5]

d. Median-Goal-oriented events

The Median-Goal events comprise 71 motion descriptions corresponding to 7.5% of motion descriptions in the dataset ($N=949$). Such Median-Goal-oriented events are expressed in the complex clauses. For example, in the examples below, *baaTo kaaTnu* ‘to cross the road’ (482) in the CP form, and *baaTo paar garnu* ‘to cross the road’ (483) in aspectual encode the Median-oriented events, whereas *laagnu* ‘to go’ (482), and *jaanu* ‘to go’ (483) in the main clause express the Goal-oriented event.

- (482) *uniharu baaTo kaaTera pokharitira laage*
uni-haru-Ø baaTo kaaT-era pokhari-tira laag-e
 3-PL-NOM road cross-CP pond-toward go-PST.3PL
 ‘They went toward the pond crossing the road.’/
 ‘(By) crossing the road they went toward the pond.’ [Traj_066_s19]

- (483) *ekjanaa bekti baaTo paar gardai gae*
ek-janaa bekti-Ø baaTo paar gar-dai ga-e
 one-CLF person-NOM road cross do-DUR go-PST.3SG.M.H
 ‘A person went (away) (by) crossing the road.’ [Traj_068_s10]

In the encoding of such events too, we observe changes in speaker’s perspective. Some speakers describe Median-Goal-oriented events as Source-oriented, as in (484), while some others conceptualize them as Source-Goal-oriented, as in (485).

- (484) *guphaabaaTa baahira niski*
guphaa-baaTa baahira nisk-i
 cave-ABL outside exit-PST.3SG.F.NH
 ‘(She) came out of the cave.’
 (Lit. (She) exited outside from the cave.’) [Traj_022_s20]

- (485) *u maathibaaTa paaniko najik gai*
u-Ø maathi-baaTa paani-ko najik ga-i
 3SG-NOM above-ABL water-GEN near go-PST.3SG.F.NH
 ‘From up she went near the water.’ [Traj_073_s17]

Finally, as we can see in (486), in some cases speakers tend to focus on the Figure's activity rather than on the change of location.

- (486) *u* *naherikana* *saraasar* *hiNo*
u-∅ *naher-ikana* *saraasar* *hi~D-yo*
 3SG-NOM NEG-look-CP straightway walk-PST.3SG.M.NH
 'He walked straightway without looking.' [Traj_068_s4]

e. Source-Goal-oriented events

Our data show 68 motion descriptions expressing Source-Goal events. It represents 7.2% of motion descriptions in our 'Trajectoire' corpus. The following examples (487) and (488) show the expression of Source-Goal-oriented events.

- (487) *keTaa* *oNaarbaaNa* *niklera*
keTaa-∅ *oDhaar-baaTa* *nikl-era*
 boy.OBL-NOM cave-ABL exit-CP
nadiko *cheutira* *gayo*
nadi-ko *cheu-tira* *ga-yo*
 river-GEN side-toward go-PST.3SG.M.NH
 'Having come out of the cave the boy went toward the bank of the river.'
 [Traj_028_s11]

- (488) *u* *baairabaaTa* *bistaarai*
u-∅ *baahira-baaTa* *wistaarai*
 3SG-NOM cave-ABL outside
oNaarbhitra *prawes* *garyo*
oDhaar-bhitra *prawes* *gar-yo*
 cave-inside entrance do-PST.3SG.M.NH
 'From outside he went into the cave slowly.'
 (Lit. 'From outside he slowly entered into the cave.' [Traj_058_s3])

In example (487), the verb *niklanu* 'to exit' is used in the conjunctive participle form and it expresses the Source-oriented event whereas, the main verb *jaanu* 'to go', which encodes Deixis and Path, conveys the Goal-oriented event. Moreover, the case marker *-baaTa* 'from' and the postposition *-tira* 'toward' respectively convey the

5.2 Construction types in spontaneous Motion events

The ‘Trajectoire’ corpus reveals the use of two types of constructions in the spontaneous Motion expression: simplex constructions which account for 60% and complex constructions which account for 39.6% of the dataset. It is important to note, however, that some examples do not denote any Motion or that others are incomplete such as *u pheri...* ‘S/he again’... [Traj_044_s8] (cf. § 5.3.1.1). These are included in the ‘None’ category (cf. Table 70). The criteria for the analysis of simplex and complex constructions are the same as were discussed in Chapter 4 (cf. 4.2).

Type of constructions	N° of motion descriptions	Percentage
Simplex	569	60
Complex	376	39.6
None	4	0.4
Total	949	100

Table 70. Types of constructions

5.2.1 Simplex construction

Simplex constructions are the most frequent in the ‘Trajectoire’ dataset and account for 60% of motion descriptions ($N=949$) as we also saw in Table 70 above. Different types of simplex constructions are discussed below.

a. Simple predicate construction

A simple predicate consists of a single finite predicate together with the subject and object arguments and it describes the Motion of the Agent which is expressed by the subject argument (cf. § 4.2.1). The simple predicate construction comprises 550 motion descriptions which correspond to 58% of the data. Examples (492) and (493) below illustrate this type of construction.

- (492) *baccaa* *oNaarbaaNa* *baaira* *niskyo*
baccaa-∅ *oDhaar-baaTa* *baahira* *nisk-yo*
 child-NOM cave-ABL outside exit-PST.3SG.M.NH
 ‘The child came out of the cave.’
 (Lit. ‘The child exited outside from the cave.’) [Traj_030_s14]

- (493) *uni* *jangngalbhitra* *chirin*
uni-∅ *janggal-bhitra* *chir-in*
 3SG.H-NOM forest-inside enter-PST.3SG.F.H
 ‘She went into the forest.’
 (Lit. ‘She entered into the forest.’) [Traj_057_s6]

In examples (492) and (493), the verbs *niskanu* ‘to exit’ and *chirnu* ‘to enter’ are simple predicates; they are inflected (-yo, and -in) and convey tense, number, person, gender, agreement, and honorific system. The subject arguments *baccaa* ‘child’ and *uni* ‘she/he’ are the human Figures, and the Ground is represented by *oDhaar* ‘cave’ and *janggal* ‘forest’ respectively.

The simple predicate construction also involves copular construction as a sub-type. Such copular constructions consist of the main predicate followed by a copula. Out of three different copulas, the use of copula₂ is the most frequent in the dataset (cf. § 2.2.3). Examples (494) and (495) below show this type of simple predicate construction.

- (494) *yi* *mailaa* *hariyo*
yi *mahilaa* *hariyo*
 DEM.PROX woman green
jangngalko *bicmaa* *hi~Diraichan*
janggal-ko *bic-maa* *hi~D-i-rah-eki-chan*
 forest-GEN middle-LOC walk-ABS-remain-PFV.F-COP₂.NPST.3SG.F.H
 ‘This woman has been walking in the middle of the green forest.’ [Traj_023_s1]

- (495) *u caa~i~ guphaabaaTa baaira niska~dai cha*
u-∅ caahi~ guphaa-baaTa baahira niska~-dai-cha
 3SG-NOM DPRT cave-ABL outside exit-DUR-COP₂.NPST.3SG.M.NH
 ‘He is coming out of the cave.’

(Lit. ‘He is exiting outside from the cave.’ [Traj_023_s15])

As was pointed out earlier, *hi~Dnu* ‘to walk’ and *niskanu* ‘to exit’ are the main predicates in both clauses, and the lexical heads followed by the copula₂, which functions as the grammatical head.

b. Light verb construction

The analysis of the ‘Trajectoire’ data reveals that 19 motion descriptions comprise the light verb construction. Among different types of light verbs existing in Nepali, only noun + verb constructions are attested in my dataset (cf. Bandhu, 2052 VS (1995 AD)): 168; for further information on light verbs, see also § 2.2.4.6). Sentences in (496) and (497) illustrate the light verb construction.

- (496) *u baaira DhungngaabaaTa bistaarai*
u-∅ baahira Dhunggaa-baaTa wistaarai
 3SG-NOM outside stone-ABL slowly
oNaarbhitra parbes garyo
oDhaar-bhitra prawes gar-yo
 cave-inside entrance do-PST.3SG.M.NH
 ‘From outside, he came slowly into the cave.’
 (Lit. ‘From outside of the stone, he entered into the cave slowly.’) [Traj_058_s3]

- (497) *unle pul paar gare*
un-le pul paar gar-e
 3SG-ERG bridge cross do-PST.3SG.M.H
 ‘He crossed the bridge.’ [Traj_050_s10]

In both examples, *garnu* ‘to do’ is a light verb combined with a noun, *prawes* ‘entrance’ in (496) and *paar* ‘cross’ in (497). While the light verb carries all the grammatical information, the noun carries the lexical meaning in such constructions (see, for example, Kibre, 1994 for further discussion on the verb *garnu* ‘to do’).

5.2.2 Complex construction

The second type of constructions found in the ‘Trajectoire’ corpus are complex constructions comprising clauses with the CP form, relative clauses, purposive clauses, and clauses with the coordinating conjunctions. Except the coordinating conjunction, all other types of constructions consist of one or more than one non-finite clause preceding the finite clause. The complex constructions account for 39.6% of motion descriptions ($N=949$) in the ‘Trajectoire’ dataset.

a. Conjunctive participle construction

The CP construction is the most frequent type of complex construction in my dataset comprising 5.4% of the total occurrences ($N=949$). Typically, the CP form *-era* is used in different sequential events (Masica, 1991; Genetti, 1994), as illustrated by (498) and (499).

- (498) *Tokri lera makaibaaribhitra pasi*
Tokari li-era makai-baari-bhitra pas-i
 basket take-CP corn-field-inside enter-PST.3SG.F.NH
 ‘Having taken/(by) taking the basket (she) went to the corn field.’
 (Lit. Having taken/(by) taking the basket (she) entered into the corn field.)
 [Traj_069_s4]

- (499) *uni rukhko phe~dsamma*
uni-∅ rukh-ko phed-samma
 3SG.H-NOM tree-GEN bottom-until
pugera tyaa~baaTa pharkin
pug-era tyahaa~-baaTa phark-in
 reach-CP there-ABL return-PST.3SG.F.H
 ‘She reached the tree and then returned.’
 (Lit. ‘Having reached until the bottom of the tree, from there, she returned.’)
 [Traj_061_s6]

In the examples above, the verb *linu* ‘to take’ and *pugnu* ‘to reach’ are in the CP form and are parts of the dependent or the non-finite clause slot while *pasnu* ‘to enter’

and *pharkanu* ‘to return’ are parts of the independent or the finite clause indicating all grammatical information (e.g., tense, person, and number). So, the CP form *-era* links two different events: *linu* ‘to take’ and *pasnu* ‘to enter’ in (498), and *pugnu* ‘to reach’ and *pharkanu* ‘to return’ in (499). Note, however, that the verb *linu* ‘to take’ in the non-finite form in (498) denotes the caused Motion event, the Motion of the Figure object *Tokari* ‘basket’, rather than spontaneous Motion of the human Agent, and the taking of basket must have taken place before entering (S. DeLancey, p.c. March, 2018).

I introduced the CP form *-era* along with its sequential and adverbial functions in Chapter 2. The use of the CP form in the expression of such sequential events is well known and largely described in literature by several authors (Grierson, 1916; Kachru, 1987/1990; Masica, 1991; Genetti 1994; Bickel, 1998 *inter alia*; (cf. § 2.2.7 § 4.2.2). Yet, our data also reveal the use of the CP form in the expression of simultaneous events that, to our knowledge, previous research did not account for. Examples (500) and (501) extracted from my ‘Trajectoire’ corpus clearly show the use of the CP form *-era* to express a simultaneous event.

(500) *ekjaanaa keTaa dauNera nadiko kinaartira gayo*
ek-janaa keTo-∅ dauD-era nadi-ko kinaar-tira ga-yo
 one-CLF boy-NOM run-CP river-GEN side-toward go-PST.3SG.M.NH
 ‘A boy went toward the bank of the river running.’ [Traj_059_s11]

(501) *u caurmaa dauNiera yetaa aai*
u-∅ caur-maa dauD-era yataa aa-i
 3SG-NOM meadow-LOC run-CP this.side come-PST.3SG.F.NH
 ‘(By) running on the meadow she came here (this side).’ [Traj_043_s17]

Motion expressed by *dauDanu* ‘to run’ and *jaanu* ‘to go’ in (500) and by *dauDanu* ‘to run’ and *aaunu* ‘to come’ in (501) happen simultaneously. What is important to note here is that, in the dataset under the study here, the simultaneous function of the CP form *-era* is often found marking Manner verbs like *dauDanu* ‘to run’, which accompany Deixis and Path verbs *jaanu* ‘to go’ and *aaunu* ‘to come’. However, in addition to these verbs, the data also show the simultaneous function of

the CP form *-era* with some other verbs, as is illustrated by (502) for the event *hi~Dnu* ‘to walk’ and *paar garnu* ‘to cross’, both of which happen simultaneously.

- (502) *usle bistaarai hi~Nera baaTo paar gari*
us-le wistaarai hi~D-era baaTo paar gar-i
 3SG-ERG slowly walk-CP road cross do-PST.3SG.F.NH
 ‘(By) walking slowly she crossed the road.’/
 ‘She crossed the road walking slowly.’ [Traj_048_s3]

b. Purposive construction

The grammatically dependent purposive clause which is followed by the independent clause is one of the types of complex constructions and comprises 22 motion descriptions in the ‘Trajectoire’ corpus. In order to convey the purposive function, the suffix *-na* is attached to the verb in the non-finite clause, as illustrated by the verb *pauDanu* ‘to swim’ in examples (503) and (504) (see also § 2.2.5).

- (503) *baccaa paanimaa pauNina jaa~dai cha*
baccaa-ø paani-maa pauDi-na jaa~-dai-cha
 child.OBL.SG-NOM water-LOC swim-INF go-DUR-COP₂.NPST.3SG.M.NH
 ‘The child is going to swim in water.’ [Traj_059_s3]

- (504) *gannakyya~ nwaauuna athavaa paurana gao*
ganDaki-maa nuhaau-na athawaa pauDi-na ga-yo
 river-LOC take.bath-INF or swim-INF go-PST.3SG.M.NH
 ‘(He) went to the river to take a bath or swim.’ [Traj_059_s4]

In these examples, the purposive function is conveyed by two different verbs *pauDanu* ‘to swim’ (503) and (504) and *nuhaaunu* ‘to take a bath’ (504) in the non-finite clause; in both examples, the main verb in the finite clause comprises the Deictic and Path verb *jaanu* ‘to go’.

c. Relative clause construction

Relative clauses modify nouns or noun phrases, and verbs or verb phrases, as in examples (505) and (506). In our dataset, 2.6% of total motion descriptions is composed of relative clause constructions.

(505)	<i>u</i>	<i>caurmaa</i>	<i>bhaeko</i>	<i>buTaako</i>
	<i>u-∅</i>	<i>caur-maa</i>	<i>bha-eko</i>	<i>buTaa-ko</i>
	3SG-NOM	meadow-LOC	COP ₂ -PFV	tree-GEN
	<i>najikbaaTa</i>	<i>yetaa</i>	<i>aai</i>	
	<i>najik-baaTa</i>	<i>yataa</i>	<i>aa-i</i>	
	close-ABL	here	come-PST.3SG.F.NH	

‘She came toward this side from near the tree, which was in the meadow.’

[Traj_040_s17]

(506)	<i>u</i>	<i>samunra</i>	<i>cheumaa</i>	<i>raheko</i>
	<i>u-∅</i>	<i>samudra</i>	<i>cheu-maa</i>	<i>rah-eko</i>
	3SG-NOM	sea	side-LOC	remain-PFV
	<i>euNaa</i>	<i>DhungngaabaaTa</i>	<i>arko</i>	<i>Dhungngaamaa</i>
	<i>euTaa</i>	<i>Dhunggaa-baaTa</i>	<i>arko</i>	<i>Dhunggaa-maa</i>
	one	stone-ABL	another	stone-LOC
	<i>uphrera</i>	<i>gayo</i>		
	<i>uphr-era</i>	<i>ga-yo</i>		
	jump-CP	go-PST.3SG.M.NH		

‘He jumped from one stone to another stone, which was at the sea shore.’

[Traj_075_s3]

I will call this type of construction ‘adjectival relative clause’. In the examples above, they modify noun phrases (the Ground objects) *buTo* ‘tree’ and *Dhunggo* ‘stone’ which are located in a larger reference space *caur* ‘meadow’ and *samundra* ‘sea’ (cf. § 2.2.5.4, see also § 4.2.2).

d. Coordinating construction

The conjunctive coordination *ra* ‘and’ is used in coordinating constructions to join two verb phrases or noun phrases, both of which are the independent clauses.

Example involving the coordinating construction is presented in (507) (cf. § 2.2.6, see also § 4.2.2).

(507)	<i>u</i>	<i>ekaatirako</i>	<i>guphaabaaTa</i>	<i>niskyo</i>
	<i>u-∅</i>	<i>ek-tira-ko</i>	<i>guphaa-baaTa</i>	<i>nisk-yo</i>
	3SG-NOM	one-toward-GEN	cave-ABL	exit-PST.3SG.M.NH
	<i>ra</i>	<i>arko</i>	<i>guphaatira</i>	<i>ga-yo</i>
	<i>ra</i>	<i>arko</i>	<i>guphaa-tira</i>	<i>ga-yo</i>
	and	another	cave-toward	go-PST.3SG.M.NH

‘He came out of one cave and then went toward the other cave.’
 (Lit. ‘He exited from one cave and then went toward the other cave.’
 [Traj_060_s22])

We can see from this example that the conjunctive coordination *ra* ‘and’ combines two verb phrases *niskanu* ‘to exit’ and *jaanu* ‘to go’.

5.3 Lexico-grammatical devices in spontaneous Motion events

The analysis of the ‘Trajectoire’ corpus reveals that participants use diverse lexical and grammatical devices in the spontaneous motion description. Syntactically, nouns such as *guphaa* ‘cave’ *nadi* ‘river’, and human body parts are the direct or the indirect objects but semantically, they function as Ground elements. In the description of spontaneous Motion events also, they are integral part of Motion description as they are obligatorily used. However, they do not indicate the Path or the direction of the Figure but only the location. Therefore, as in the ‘Put and Take’ data, I have not discussed them separately as the lexical devices. Table 71 shows some of the types of lexical and grammatical devices used in spontaneous Motion events.

Lexical devices		Grammatical devices	
Verbs	Adverbials	Case markers	Postpositions
<i>dauDanu</i> ‘to run’	<i>bhitra</i> ‘inside’	<i>-maa</i> ‘LOC’	<i>-bhitra</i> ‘inside’
<i>niskanu</i> ‘to exit’	<i>baahira</i> ‘outside’	<i>-baaTa</i> ‘form’	<i>-paTTi</i> ‘toward’
<i>chirnu</i> ‘to enter’	<i>maathi</i> ‘above’	<i>-dekhi</i> ‘form’	<i>-maathi</i> ‘above’ <i>-samma</i> ‘until’,
<i>hi~Dnu</i> ‘to walk’	<i>muni</i> ‘under’		<i>-tira</i> ‘toward’
<i>aaunu</i> ‘to come’	<i>agaaDi</i> ‘toward front’		<i>-muni</i> ‘under’
<i>tarnu</i> ‘to cross’	<i>tala</i> ‘below’		<i>-najik</i> ‘near’

Table 71. Lexico-grammatical devices in SME

As shown in Table 71, the lexical devices comprise verbs (e.g., *aaunu* ‘to come’, *jaanu* ‘to go’) and adverbials (e.g., *bhitra* ‘inside’, *khurukhuru* ‘straightway’), while the grammatical devices involve case markers (e.g., *-maa* ‘LOC’ *-baaTa* ‘from’) and postpositions (e.g., *-samma* ‘until’, *-paTTi* ‘toward’) (cf. § 2.2.1.6 and § 2.2.2.2). Within the case category, the ablative marker *-baaTa* ‘from’ is the most frequent of all, accounting for 34.2% of the total data ($N=949$), and in the postposition category, *-bhitra* ‘inside’ is the most frequent one, accounting for 12.7% (cf. § 4.3.2; for further information on the use of these grammatical devices; see also Dahal, 1974).

The analysis also takes into account the morphosyntactic behavior of each device (e.g., verbs, case markers, postpositions, and adverbials), the semantic information (e.g., Path, Manner) conveyed by each linguistic device, and the semantic subcategories for each category (i.e. Source-oriented Path, Goal-oriented Path or basic Manner verb), as shown in Table 72.³⁰

³⁰ This classification is based on De Pasquale, 2017: 60.

Morphosyntactic category	Semantic information	Semantic subcategories
Verbs	Path	Source-oriented Path verbs
		Median-oriented Path verbs
		Goal-oriented Path verbs
	Manner	Basic Manner verbs
	Path and Manner	
Case markers	Path	Source-oriented Path
		Goal-oriented Path
Postpositions	Path	Source-oriented Path
		Median-oriented Path
		Goal-oriented Path
		Vertical (downward vs. upward) Path
Adverbials	Path	Source-oriented Path
		Goal-oriented Path
		Vertical (downward vs. upward) Path
	Manner	

Table 72. Morphosyntactic devices and semantic information on Path and Manner

As can be seen from Table 72, the first column refers to the morphosyntactic information. As for the type of verbs, they can respectively convey Path or Manner. The semantic information is further specified by semantic subcategories. For example, a given Path verb can be Source-, Median- or Goal-oriented.

In general, in order to investigate the semantics and/or the use of individual devices, both lexical and grammatical, I take into account the following information:

- (a) the orientation: vertical vs. horizontal;
- (b) with vs. without boundary crossing;
- (c) function with respect to spatial information (source vs. location vs. destination (direction));
- (d) the percentage of these lexico-grammatical devices in the ‘Trajectoire’ corpus.

In what follows, I first investigate the verbs of Motion found in the ‘Trajectoire’ corpus.

5.3.1 Motion verbs

5.3.1.1 Lexical diversity of verbs

The objectives of this Section are: (a) to show the lexical diversity of verbs found in ‘Trajectoire’ dataset, and (b) to examine the types of meanings the verbs of Motion convey. Taking into account the main verb slot, the participants use 54 different verbs in order to describe spontaneous Motion events. These include monomorphemic i.e. morphologically simplex verbs that include *chirnu* ‘to enter’ or *pharkanu* ‘to return’ as well as light verbs that are morphologically complex such as *prawes garnu* ‘to enter’ or *baaTo kaaTnu* ‘to cross the road. It is important to note, however, that 15 out of these 54 verbs do not belong to the category of verbs of motion per se, as shown in Table 73.

Verbs	N° of verbs	N° of occurrences	Percentage
Verbs of motion	38	883	93.1
Non-motion verbs	15	42	4.4
Main verb/s in English	1	24	2.5
Total	54	949	100

Table 73. Motion verbs in ‘Trajectoire’ corpus

Thus, when describing spontaneous Motion events, besides verbs of motion, speakers also use verbs belonging to other semantic classes such as verbs of talking (e.g., *gaph garnu* ‘lit. talk do’), verbs of perception (Levin, 1993) (e.g., *hernu* ‘to look’)) or amuse verbs (e.g., *ramaaunu* ‘to enjoy’). Furthermore, some participants also use English verbs in the light verb construction, e.g., *waaking garnu* ‘lit. walking do’, *jamp garnu* ‘lit. jump do’.

Table 74 shows the 10 most frequent verbs found in the main verb slot in the ‘Trajectoire’ dataset. Among them, the most frequent is the verb *jaanu* ‘to go’, which accounts for 21.1% of the total motion descriptions (200 occurrences out of 949). The

second most frequent verb is *hi~Dnu* ‘to walk’ accounting for 20.8% of the dataset (197 occurrences).

Main verb category	English translation	N° of occurrences	Percentage
<i>jaanu</i>	‘to go’	200	21.1
<i>hi~Dnu</i>	‘to walk’	197	20.8
<i>aaunu</i>	‘to come’	78	8.2
<i>niskanu</i>	‘to exit’	56	5.9
<i>dauDanu</i>	‘to run’	51	5.4
<i>pasnu</i>	‘to enter’	45	4.7
<i>chirnu</i>	‘to enter’	40	4.2
<i>paar garnu</i>	‘to cross’	27	2.8
<i>caDhnu</i>	‘to ascend’	22	2.3
<i>hernu</i>	‘to look’	19	2.0

Table 74. The 10 most frequent verbs in the ‘Trajectoire’ corpus

Besides, there are seven verbs whose number of occurrences ranges from 20 to 200, seven verbs occur between 10 to 19 times, 18 verbs occur two to eight times, and 16 verbs with one occurrence each (cf. § 4.4, see Appendix K for a detailed list of these verbs). Therefore, the use of individual motion verbs found in the ‘Trajectoire’ corpus varies importantly, ranging from one (the lowest) up to 200 (the highest) occurrences.

We may note, however, that not all the verbs found in the ‘Trajectoire’ corpus express spontaneous Motion events. In fact, while describing the ‘Trajectoire’ video clips, some participants use verbs such as *khelnu* ‘to play’, *naapnu* ‘to measure’, *khøjnu* ‘search’, and *awalokan garnu* ‘to observe’ among others. These verbs, which form ‘non-motion verbs’ category, account for 3.6% of the dataset ($N=949$). Likewise, there are some descriptions involving posture verbs (e.g., *basnu* ‘to sit’ and *ubhinu* ‘to stand up’). Moreover, some participants also use English verbs as pointed out earlier; they account for 2.5% of the total occurrences. Finally, some motion descriptions also involve a verb of caused Motion, for instance, *uThaaunu* ‘to pick up’, used in the main verb category. Therefore, the total number of verbs which express spontaneous Motion is 37.

If we now look at the type of meaning conveyed by individual Motion verbs, we observe some diversity here too. As Table 75 shows, there are different semantic categories of verbs found in the data, involving Path, Deixis and Path, Manner, and Path and Manner.

Semantic category	N° of verbs	N° of occurrences	Percentage
Manner	15	308	32.5
Path and Deixis	2	278	29.3
Path	19	273	28.8
Non-motion verbs	13	34	3.6
Main verbs in English	1	24	2.5
Path and Manner	1	22	2.3
Posture	2	8	0.8
Caused Motion	1	2	0.2
Total	54	949	100

Table 75. Diversity of verbs in the ‘Trajectoire’ corpus

We can see in Table 75 that verbs expressing Path, and Deixis and Path account together for 58% out of 949. Manner verbs account for 32.5% in total. One verb *caDhnu* ‘to climb’ expresses both Path and Manner, accounting for 2.3%. Verbs that convey Path or Deixis and Path or both Path and Manner are the inherently directed verbs of motion (cf. Levin, 1993: 263). These verbs will be further investigated in the following sub-sections. The following types of verbs found in the data will not be part of the semantic analysis in this Thesis:

- (a) verbs which are categorized as ‘Non-motion verbs’ (e.g., *bheTnu* ‘to meet’, *hernu* ‘to look’);
- (b) English verbs of motion (e.g., *jamp garnu* ‘lit. jump do’ *waaking garnu* ‘lit. walking do’);
- (c) verbs expressing ‘posture’ (e.g., *basnu* ‘to sit down’, *ubhinu* ‘to stand up’);
- (d) verb of ‘caused motion’ (e.g., *uThaaunu* ‘to pick up’).

5.3.1.2 Path verbs

Before I discuss the semantic distinctions within Path and Manner verbs, I will first present the principal criteria upon which the analysis of Path and Manner verbs is based. For this purpose, I take into consideration both language-specific features, and typological literature devoted to Path and Manner distinctions.

As was discussed in Chapter 3 (cf. § 3.2.1), the extraction of verbs of motion from the *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali)* and their verification in Turner's *A Comparative and Etymological Dictionary of the Nepali language* as well as Schmidt's *A Practical Dictionary of Modern Nepali*, allowed me to gain practical knowledge about the characteristics of verbs of motion in Nepali. Secondly, the analysis of uses of verbs in the descriptive data (stimuli-based 'Put and Take' and 'Trajectoire' corpora), and the corpus (NNC)-based narrative data was one of the principal sources to distinguish Path and Manner verbs. Thus, combined together, the dictionary work, the descriptive data, and the narrative data constitute the main source for understanding language-specific features in this verbal domain. In addition to empirical work on the data, various typologically-oriented studies on spatial domain dealing with Path and Manner provided some theoretical knowledge and/or to some extent theoretical foundation for the comparison of Path and Manner verbs in Nepali (for example, Ikegami, 1969: 76, 705; Miller & Johnson-Laird, 1976; Talmy, 1985, 2000; Berman & Slobin, 1987; Aske, 1989; Jackendoff, 1990: § 5.2; Levin & Rappaport Hovav, 1991, 2014; Levin, 1993; Slobin & Hoiting, 1994; Slobin, 1997; Zlatev & Yangklang, 2003; Narasimhan, 1998; Pourcel, 2004; Slobin, 2004, 2006; Pourcel & Kopecka, 2005; Beavers, Levin & Tham, 2010; Slobin, Ibarretxe-Antuñano, Kopecka & Majid, 2014; Verkerk, 2015; Ibarretxe-Antuñano, Hijazo-Gascon & Moret-Oliver, 2017 *inter alia*).

Thus, Path refers to the direction of the movement of the Figure object (e.g., INTO, ON TO, UP, UPTO, DOWN, and TOWARD) (see also § 1.1). Path verbs indicate a change of state (Slobin, 2006: 67), where an entity comes to be in the resultant state (Levin & Rappaport Hovav, 1991), as it is lexicalized by the Nepali verbs such as *pugnu* 'to reach' (cf. Berman & Slobin, 1987) where 'reaching' has no duration and, is terminative (Slobin & Hoiting, 1994). Because Path implies a change of location (cf. Pourcel & Kopecka, 2005), Path verbs express events. Furthermore, some Path

verbs, e.g., *chirnu* ‘to enter’ *niskanu* ‘to exit’ express the boundary crossing features (cf. Slobin & Hoiting, 1994: 487-505; Alonso-Alonso, 2016, 2018). Based on previous cross-linguistic and theoretical research, Path verbs can be identified based on the following features:

- (a) Path verbs are directional;
- (b) they are terminative;
- (c) they often imply boundary-crossing;
- (d) they indicate events (rather than activities);
- (e) they tend to be telic;
- (f) they are ‘Ground-focus’ because some Path verbs typically mark the boundary (cf. Slobin & Hoiting, 1994). Based on the individual motion descriptions in the ‘Trajectoire’ corpus, Path verbs have more Grounds than the Manner verbs).

As mentioned earlier, the ‘Trajectoire’ corpus reveals the use of 54 verbs (cf. 5.3.1.1). Out of them, 19 verbs belong to the Path verb category and comprise 28.8% ($N=949$) of the data. Depending on the orientation of Motion they express, we may further distinguish between Source-, Median-, Goal-oriented Path verbs, and verbs expressing the vertical Motion (see for example, Narasimhan, 1998, 2003 for further discussion on Path-encoding motion verbs in Hindi).

5.3.1.2.1 Goal-oriented Path verbs

The ‘Trajectoire’ corpus attests four Goal-oriented Path verbs which are shown together with their number of occurrences in Table 76.

Verbs	English translation	N° of occurrences
<i>pasnu</i>	‘to enter’	45
<i>chirnu</i>	‘to enter’	40
<i>prawes garnu</i>	‘to enter’	12
<i>pugnu</i>	‘to reach’	4
Total		101

Table 76. Goal-oriented Path verbs

Of these verbs, *pasnu* ‘to enter’ is the most frequent in the dataset as can be seen from the Table above. Examples (508) and (509) show the use of *pasnu* ‘to enter’.

- (508) *u* *guphaabhitra* *pasyo*
u-Ø *guphaa-bhitra* *pas-yo*
 3SG-NOM cave-inside enter-PST.3SG.M.NH
 ‘He went into the cave.’
 (Lit. ‘He entered into the cave.’) [Traj_058_s19]

- (509) *u* *janggalbhitra* *pasyo*
u-Ø *janggal-bhitra* *pas-yo*
 3SG-NOM forest-inside enter-PST.3SG.M.NH
 ‘He went into the forest.’
 (Lit. ‘He entered into the forest.’) [Traj_056_s17]

In these examples, the Ground objects, *guphaa* ‘cave’ and *janggal* ‘forest’, are the final locations of the Figure’s Motion conveyed by the Path verb *pasnu* ‘to enter’. Note, however, that the Path of the Figure *u* ‘he’ with respect to the Goal Ground is specified by both the verb *pasnu* ‘to enter’ as well as the postposition *-bhitra* ‘inside’. We may also note that Motion from outside to inside can be expressed by the verb *chirnu* ‘to enter’, as shown in examples (510) and (511) below.

- (510) *uni* *baaribhitra* *chirin*
uni-Ø *baari³¹-bhitra* *chir-in*
 3SG.H-NOM field-inside enter-PST.3SG.F.H
 ‘She went to the field.’
 (Lit. ‘She entered into the field.’) [Traj_057_s9]

³¹ A terraced/sloppy field in the hilly/mountainous region (more particularly in the hilly region) of Nepal where maize, millet like crop known as *kodo* i.e. (*eleusine indica/paspalum scrobiculatum* (Turner, 1931)), *junelo*, a kind of large millet i.e. (*panicum crus galli* (Turner, 1931)), buckwheat, mustard, and some other crops are grown. No rice is grown in this type of land as water does not stand on it.

- (511) *uni guphaabhitra chirin*
uni-Ø guphaa-bhitra chir-in
 3SG.H-NOM cave-inside enter-PST.3SG.F.H
 ‘She went into the field.’
 (Lit. ‘She entered into the cave.’ [Traj_054_s10])

Of the four Goal-oriented Path verbs shown in Table 76, 3 of them are monomorphemic verbs whereas one of them occurs in the light verb construction, as illustrated by (512) and (513).

- (512) *u caurbaaTa jhaaNitarpha prawes gari*
u-Ø caur-baaTa jhaaDi-tarpha prawes gar-i
 3SG-NOM meadow-ABL bush-toward entrance do-PST.3SG.F.NH
 ‘She went toward the bush from the meadow.’
 (Lit. ‘She entered toward the bush from the meadow.’) [Traj_057_s5]

- (513) *u bistaarai hi~Ndai oNaarbhitra prabes gari*
u-Ø wistaarai hi~D-dai oDhaar-bhitra prawes gar-i
 3SG-NOM slowly walk-DUR cave-inside entrance do-PST.3SG.F.NH
 ‘She went into the cave walking slowly.’
 (Lit. ‘(By) walking slowly she entered into the cave.’) [Traj_053_s3]

In addition to the three verbs shown above, the verb *pugnu* ‘to reach’ can also express the change of location, as illustrated in (514).

- (514) *uni kholaako kinaarmaa pugin*
uni-Ø kholaa-ko kinaar-maa pug-in
 3SG.H-NOM stream-GEN side-LOC reach-PST.3SG.F.H
 ‘She reached the bank of the stream.’ [Traj_073_s9]

5.3.1.2.2 Source-oriented Path verbs

The Source-oriented Path verbs which indicate the movement of the Figure from the initial location account for 81 of the total occurrences ($N=949$) in the ‘Trajectoire’ dataset shown in Table 77.

Verbs	English translation	N° of occurrences
<i>niskanu</i>	‘to exit’	56
<i>pharkanu</i>	‘to return’	13
<i>niklanu</i>	‘to exit’	10
<i>bhaagnu</i>	‘to escape’	2
Total		81

Table 77. Source-oriented Path verbs

Among Source-oriented Path verbs, the most frequent is the verb *niskanu* ‘to exit’ that makes up 56 of the total occurrences. The following examples (515) and (516) show the use of this verb.

- (515) *u caai~ jhaaNibaaNa bharkhar baaira niski*
u-∅ caahi~ jhaaDi-baaTa bharkhar baahira nisk-i
 3SG-NOM DPRT bush-ABL just outside exit-PST.3SG.F.NH
 ‘She has just come out of the bush.’
 (Lit. ‘She has just exited outside from the bush.’) [Traj_027_s15]

- (516) *u paanibaaTa baaira niski*
u-∅ paani-baaTa baahira nisk-i
 3SG-NOM water-ABL outside exit-PST.3SG.F.NH
 ‘She came out of water.’
 (Lit. ‘She exited outside from water.’) [Traj_031_s17]

The Figure’s exit from the *jhaaDi* ‘bush’ (515) and *paani* ‘water’ (516) is conveyed by the Source-oriented Path verb *niskanu* ‘to exit’. It is important to note that Nepali also offers another verb *niklanu* ‘to exit’ to express the same concept (implying change of location), as illustrated in (517) and (518).

- (517) *janggalbaaNa baaira niklin*
janggal-baaTa baahira niki-in
 forest-ABL outside exit-PST.3SG.F.H
 ‘(She) came out of the forest.’
 (Lit. (She) exited outside from the forest.’) [Traj_027_s10]

- (518) *uni* *guphphaadekhi* *baaira* *niklin*
uni-Ø *guphphaa-dekhi* *baahira* *nikl-in*
 3SG.H-NOM cave-ABL outside exit-PST.3SG.F.H
 ‘She came out of the cave.’
 (Lit. ‘She exited outside from the cave.’) [Traj_025_s9]

In fact, these are two different forms of the same verb with the same function but in the ‘Trajectoire’ corpus, the form *niskanu* ‘to exit’ is more frequent than *niklanu* ‘to exit’. The analysis shows that *niskanu* ‘to exit’ is used by the participants from the Parbat as well as Kathmandu districts and that *niklanu* ‘to exit’ is used only by participants from the Parbat district. Therefore, there is a dialectal difference in the use of these Source-oriented Path verbs³².

The 2nd most frequent Source-oriented Path verb in the ‘Trajectoire’ stimuli corpus is *pharkanu* ‘to return’ that has 13 occurrences in the dataset ($N=949$). Examples (519) and (520) show the use of this verb.

- (519) *uni* *makaibaaribaaTa* *pharkin*
uni-Ø *makai-baari-baaTa* *phark-in*
 3SG.H-NOM corn-field-ABL return-PST.3SG.F.H
 ‘She returned from the cornfield.’ [Traj_038_s6]

- (520) *u* *makaibaaribaaTa* *kei*
u-Ø *makaibaari-baaTa* *kehi*
 3SG-NOM corn.field-ABL some
naliikana *pharki* *ta*
na-li-ikana *phark-i* *ta*
 NEG-take-CP return-PST.3SG.F.NH DPRT
 ‘She returned from the cornfield without taking anything.’ [Traj_038_s15]

³² Note also that both of these verbs are enlisted as head words in *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali)* (2067 VS (2010 AD): 685, 702).

Both examples display the same verb, *pharkanu* ‘to return’, however, in the first example, the verb occurs in a simplex construction while in (520), we see that it occurs in a negative construction in which the verb *linu* ‘to take’ is used. In the ‘Trajectoire’ corpus, it is the first instance that the speaker construes the motion description in the negative construction with the CP form *-ikana* (see § 2.2.7 for further information on this morphosyntactic device *-ikana*).

5.3.1.2.3 Median-oriented Path verbs

The Median-oriented Path verbs are the least frequent in the ‘Trajectoire’ corpus accounting for 44 of the total dataset ($N=949$) as shown in Table 78.

Verbs	English translation	N° of occurrences
<i>paar garnu</i>	‘to cross’	27
<i>tarnu</i>	‘to cross’	8
<i>naaghnu</i>	‘to traverse’	6
<i>baaTo kaaTnu</i>	‘to cross the road’	2
<i>kholaa kaaTnu</i>	‘to cross the stream’	1
Total		44

Table 78. Median-oriented Path verbs

In this category of verbs, the occurrence of the light verb *paar garnu* ‘to cross’ appears to be the most frequent, which is 27 out of the total ($N=949$). It is interesting to note that the Median-oriented Path category comprises the higher number of occurrences of light verbs as compared to other categories of Path verbs. Examples (521) and (522) show the use of this verb.

- (521) *usle* *bistaarai* *hi~Ndai* *kaaThko*
us-le *wistaarai* *hi~D-dai* *kaaTh-ko*
 3SG-ERG slowly walk-DUR wood-GEN
pul *paar* *gari*
pul *paar* *gar-i*
 bridge cross do-PST.3SG.F.NH
 ‘She crossed the wooden bridge walking slowly.’/
 (By) walking slowly she crossed the wooden bridge.’ [Traj_047_s3]

- (522) *jangngalko* *baaTo* *hu~dai* *caubaaTo* *paar* *garin*
janggal-ko *baaTo* *hu~Ddai* *caubaaTo* *paar* *gar-in*
 forest-GEN road via crossroad cross do-PST.3SG.F.H
 ‘(She) crossed the road via/through the forest.’
 (Lit. ‘(She) crossed the crossroad via/through the forest.’)) [Traj_048_s9]

What is also important to note here is that *hu~-dai* in example (522), which can be translated as ‘via’, is composed of the copular auxiliary *hunu* ‘to be’ and the aspectual marker *-dai*, and seems to mark the Median-oriented Path. However, it is the least frequent form in our dataset. The Median-oriented Path can also be expressed by the verb *tarnu* ‘to cross’, as in examples (523) and (524).

- (523) *usle* *pul* *taryo*
us-le *pul* *tar-yo*
 3SG-ERG bridge cross-PST.3SG.M.NH
 ‘He crossed the bridge.’ [Traj_046_s20]

- (524) *usle* *pul* *taryo*
us-le *pul* *tar-yo*
 3SG-ERG bridge cross-PST.3SG.M.NH
 ‘He crossed the bridge.’ [Traj_050_s19]

The ‘Trajectoire’ corpus also reveals the use of the verb *naaghnu* ‘to cross’ that conveys the meaning of the Median-oriented Path and is used to indicate the crossing of the bridge or passing over the Ground. Examples (525) and (526) further illustrate the use of the verb *naaghnu* ‘to cross’.

(525)	<i>usle</i>	<i>pulbaaTa</i>	<i>paanima</i>	<i>herera</i>
	<i>us-le</i>	<i>pulbaaTa</i>	<i>paanima</i>	<i>her-era</i>
	3SG-ERG	bridge-ABL	water-LOC	look-CP
	<i>ubbiekko</i>	<i>logne</i>	<i>maancheke</i>	<i>cheubaaTa</i>
	<i>ubhi-eko</i>	<i>logne</i>	<i>maanche-ko</i>	<i>cheu-baaTa</i>
	stand-PFV.M	male	man-GEN	side-ABL
	<i>a~~</i>	<i>pul</i>	<i>naaghi</i>	
	<i>a~~</i>	<i>pul</i>	<i>naagh-i</i>	
	DPRT	bridge	cross-PST.3SG.F.NH	

‘She crossed the bridge from the side of the man who was standing looking at the water.’ [Traj_047_s14]

(526)	<i>keTaale</i>	<i>Dhunggaa</i>	<i>phaNkera</i>	<i>naaghyo</i>
	<i>keTaa-le</i>	<i>Dhunggaa</i>	<i>phaDk-era</i>	<i>naagh-yo</i>
	boy-ERG	stone	jump-CP	pass.over-PST.3SG.NH
	‘The boy passed over the stone jumping.’ [Traj_063_s11]			

The data also show the use of other Median-oriented light verbs such as *baaTo* *kaaTnu* ‘to cross the road’ and *khoolaa kaaTnu* ‘to cross the stream’. However, the number of occurrences of these verbs is very low in our dataset.

5.3.1.2.4 Path verbs depicting vertical Motion

The ‘Trajectoire’ corpus contains three verbs conveying vertical Motion, and account for 20 occurrences of the total ($N=949$). Two of these verbs express the downward movement and one of them expresses the upward movement. Out of them, *jharnu* ‘to descend’ is the most frequent, as shown in Table 79.

Verbs	English translation	N° of occurrences
<i>jharnu</i>	‘to descend’	13
<i>uklanu</i>	‘to ascend’	5
<i>orlanu</i>	‘to descend’	2
Total		20

Table 79. Vertical Motion verbs

The verb *jharnu* ‘to descend’ encodes the vertical orientation with the downward movement, as in examples (527) and (528).

- (527) *u talaautira jhari*
u-∅ talaau-tira jhar-i
 3SG-NOM lake-toward descend-PST.3SG.F.NH
 ‘She descended toward the lake.’ [Traj_073_s22]

- (528) *kholaako kinaarmaa jharyo*
kholaa-ko kinaar-maa jhar-yo
 stream-GEN side-LOC descend-PST.3SG.F.NH
 ‘(He) descended to the side of the stream.’ [Traj_028_s9]

The data also attest the verb *orlanu* ‘to descend’, expressing the vertical orientation with the downward movement, as in example (529).

- (529) *uni si~DibaaTa orlirahekichin*
uni-∅ si~Dhi-baaTa orli-rah-eki-chin
 3SG.H-NOM stairs-ABL descend-remain-PFV.F-COP₂.NPST.3SG.F.H
 ‘She has been descending the stairs.’
 (Lit. ‘She has been descending from the stairs.’ [Traj_022_s6])

5.3.1.2.5 Path verbs implying boundary crossing

The concept of ‘boundary crossing’ was first proposed by Slobin and Hoiting (1994) to refer to the crossing of an ‘enclosure’ or a ‘boundary’ or a ‘dividing line’ (see also Aske, 1989; Pourcel, 2004; Filipović, 2007; Kopecka, 2013; Alonso-Alonso, 2016, 2018; Huber, 2017: 181 e.g., 6; Ibarretxe-Antuñano, 2017; Talmy, 2017 *inter alia*). As stated by Slobin,

“boundaries are important in human society - buildings, rooms, streets, fences, walls – and crossing from one space into another is often something worth talking about” (Slobin, 2017: 425).

Since then it has been a part of discussion in spatial domain in general and the study of Path encoding across language in particular, i.e. Path in verb vs. Path in non-verb (Slobin, 2017) languages or the Path vs. the Manner salient languages. The ‘Trajectoire’ data reveal 10 verbs that express the boundary crossing corresponding

to 207 occurrences of the total ($N=949$). These include verbs such as *niskanu* ‘to exit’, *chirnu* ‘to enter’ *tarnu* ‘to cross’ and some light verbs such as *prawes garnu* ‘to enter’ and *baaTo kaaTnu* ‘to cross the road’, as we can see in Table 80.

Verbs	English translation	Nº of occurrences
<i>niskanu</i>	‘to exit’	56
<i>pasnu</i>	‘to enter’	45
<i>chirnu</i>	‘to enter’	40
<i>paar garnu</i>	‘to cross’	27
<i>prawes garnu</i>	‘to enter’	12
<i>niklanu</i> ‘to exit’	‘to exit’	10
<i>tarnu</i> ‘to cross’	‘to cross’	8
<i>naaghnu</i>	‘to cross’/ ‘to traverse’	6
<i>baaTo kaaTnu</i>	‘to cross the road’	2
<i>kholaa kaaTnu</i>	‘to cross the road’	1
Total		207

Table 80. Boundary crossing verbs

Out of these verbs, *niskanu* ‘to exit’ is the most frequent that makes up 56 occurrences of the total ($N=949$). In addition to *niskanu* ‘to exit’, the data comprise nine other verbs expressing boundary crossing. Six of them have a minimum of 10 occurrences, one verb consists of eight occurrences, one verb has six occurrences, one verb two occurrences, and one has just one occurrence. Schematically, I further classify these 10 verbs into three more specific categories: EXIT, ENTER, and CROSS and discuss them below.

a. EXIT

There are two verbs in this semantic category: *niskanu* ‘to exit’ and *niklanu* ‘to exit’. I mentioned in the previous paragraph that *niskanu* ‘to exit’ is the most frequent verb among verbs expressing boundary crossing. Therefore, it is also the most frequent verb in the EXIT category. Examples (530) and (531) below show the use of *niskanu* ‘to exit’ in the expression of the boundary crossing event.

- (530) *u* *oNaarbhitrabaaTa* *baaira* *niski*
u-Ø *oDhaar-bhitra-baaTa* *baahira* *nisk-i*
 3SG-NOM cave-inside-ABL outside exit-PST-3SG-F.NH
 ‘She came out of the cave.’
 (Lit. ‘She exited outside from inside the cave.’) [Traj_025_s17]

- (531) *u* *makaibaaribaaTa* *baaira* *niski*
u-Ø *makai-baari-baaTa* *baahira* *nisk-i*
 3SG-NOM corn-field-ABL outside exit-PST-3SG-F.NH
 ‘She came out of the cornfield.’
 (Lit. ‘She exited outside from the cornfield.’) [Traj_038_s22]

In these examples, *oDhaar* ‘cave’ and *makaibaari* ‘cornfield’ are both conceived as Grounds with boundaries and the crossing of these boundaries is encoded by the verb *niskanu* ‘to exit’ indicating Motion from inside to outside. Yet, we may also note the use of the postposition *-bhitra* ‘inside’ in example (530); this postposition also plays a role in specifying the borderline of the Ground *oDhaar* ‘cave’. Moreover, in both examples, the case marker *-baaTa* ‘from’ and the adverbial *baahira* ‘outside’ are also important morphosyntactic devices in expressing the crossing of the boundary. Therefore, in these examples, boundary crossing is overtly expressed by the verb, the case marker, the adverb, and, in some cases, the postposition. As in the case of *niskanu* ‘to exit’, the verb *niklanu* ‘to exit’ too encodes the boundary crossing event, as the example (532) below shows.

- (532) *uni* *guphphaadekhi* *baaira* *niklin*
uni-Ø *guphphaa-dekhi* *baahira* *nikl-in*
 3SG.H-NOM cave-ABL outside exit-PST.3SG.F.H
 ‘She came out of the cave.’
 (Lit. ‘She exited outside from the cave.’) [Traj_025_s9]

The ‘Trajectoire’ corpus also reveals the use of the Deictic Path verb *aaunu* ‘to come’. Its use is illustrated by the following examples (533) and (534). Note, however, that this verb does not convey the meaning of boundary crossing that is rather expressed by the adverb *baahira* ‘outside’.

(533) *u guphphaabaaTa baaira aai*
u-Ø guphphaa-baaTa baahira aa-i
 3SG-NOM cave-ABL outside come-PST.3SG.F.NH
 ‘She came out of the cave.’ [Traj_023_s21]

(534) *u jangngalbaaTa baahira aayo*
u-Ø janggal-baaTa baahira aa-yo
 3SG-NOM forest-ABL outside come-PST.3SG.M.NH
 ‘He came out of the forest.’ [Traj_055_s22]

b. ENTER

Three verbs, *pasnu* ‘to enter’ and *chirnu* ‘to enter’, and *prawes garnu* ‘to enter’ are in the ENTER category indicating the boundary crossing. Of the three verbs, *pasnu* ‘to enter’ is the most frequent i.e. 45 occurrences in the ‘Trajectoire’ corpus. The use of the verb *pasnu* ‘to enter’ is illustrated in (535) and (536).

(535) *uni jangngalbhitra pase*
uni-Ø janggal-bhitra pas-e
 3SG.H-NOM forest-inside enter-PST.3SG.M.H
 ‘He went to the forest.’
 (Lit. ‘He entered into the forest.’ [Traj_025_s9])

(536) *u guphaabhitra pasi*
u-Ø guphaa-bhitra pas-i
 3SG-NOM cave-inside enter-PST.3SG.F.NH
 ‘She went into the cave.’
 (Lit. ‘She entered into the cave.’ [Traj_054_s22])

In both examples, the verb *pasnu* ‘to enter’ expresses the boundary crossing event. In addition to verbs, the boundary crossing is also expressed by the postposition *-bhitra* ‘inside’. If there is no boundary crossing event, some other postpositions such as *-tira* ‘toward’ or *-paTTi* ‘toward’ are used implying Goal-oriented events, as we can see in the example (537).

- (537) *u* *baaTobaaNa* *guphaatira* *laagi*
u-Ø *baaTo-baaTa* *guphaa-tira* *laag-i*
 3SG-NOM road-ABL cave-toward go-PST.3SG.F.NH
 ‘She went toward the cave from the road.’ [Traj_053_s8]

Boundary crossing events can also be encoded by the verb *chirnu* ‘to enter’ as in examples (538) and (539). We did not find particular distinction between *pasnu* ‘to enter’ and *chirnu* ‘to enter’ based on the ‘Trajectoire’ dataset; the only difference we observe is in the frequency of their use, the verb *chirnu* ‘to enter’ being less frequent in the data than the verb *pasnu* ‘to enter’ discussed earlier.

- (538) *uni* *oNaarbhitra* *chirin*
uni-Ø *oDhaar-bhitra* *chir-in*
 3SG.H-NOM cave-inside enter-PST.3SG.F.H
 ‘She went into the cave.’
 (Lit. ‘She entered into the cave.’ [Traj_053_s9])

- (539) *uni* *jangngalbhitra* *chire*
uni-Ø *janggal-bhitra* *chir-e*
 3SG.H-NOM forest-inside enter-PST.3SG.M.H
 ‘He went into the forest.’
 (Lit. ‘He entered into the the forest.’ [Traj_056_s6])

Finally, the data show the use of the light verb *prawes garnu* ‘to enter’ in the expression of boundary crossing. Note, however, that the use of this verb is less frequent than the use of *pasnu* ‘to enter’ and *chirnu* ‘to enter’. The main meaning is conveyed by the nominal *prawes* ‘entrance’ whereas the light verb *garnu* ‘to do’ expresses grammatical information including the tense, as is illustrated by (540) (see also Kibre, 1994: 116-131).

- (540) *u* *baaira* *Dhungngaabaata* *bistaarai*
u-Ø *baahira* *Dhunggaa-baata* *wistaarai*
 3SG-NOM outside stone-ABL slowly
oNaarbhitra *prabes* *garyo*
oDhaar-bhitra *prawes* *gar-yo*
 cave-inside entrance do-PST.3SG.M.NH
 ‘From outside he went slowly into the cave.’
 (Lit. ‘From outside of the stone he entered slowly into the cave.’ [Traj_058_s3])

As in the EXIT category, verbs belonging to the ENTER category express the boundary crossing feature, however, as we could see through different examples, the use of the postposition *-bhitra* ‘inside’ is required in the expression of the Goal Ground such as *oDhaar* ‘cave’. Note also that in addition to the verbs discussed above, the data also attest the use of the Deictic and Path verb *jaanu* ‘to go’ in the expression of the boundary crossing events, as illustrated by (541) and (542).

- (541) *uni* *janggalbhitra* *gain*
uni-Ø *janggal-bhitra* *ga-in*
 3SG.H-NOM forest-inside go-PST.3SG.F.H
 ‘She went into the forest.’ [Traj_057_s20]

- (542) *u* *guphaabhitra* *gayo*
u-Ø *guphaa-bhitra* *ga-yo*
 3SG-NOM cave-inside go-PST.3SG.M.NH
 ‘He went into the cave.’ [Traj_058_s21]

However, as in the case of *aaunu* ‘to come’ discussed earlier, the verb *jaanu* ‘to go’ does not lexicalize boundary crossing which is expressed in the postposition *-bhitra* ‘inside’.

c. CROSS

The investigation of the ‘Trajectoire’ data reveals that the CROSS category involving the boundary crossing consists of 44 occurrences in the dataset. These include *paar garnu* ‘to cross’ (27 occurrences), *tarnu* ‘to cross’ (8 occurrences), *naaghnu* ‘to traverse’ (6 occurrences), *baaTo kaaTnu* ‘to cross the road’ (2

occurrences), and *kholaa kaaTnu* ‘to cross the stream’ (1 occurrence). Examples (543) and (544) show the use of two most frequent verbs in this category.

- (543) *usle bistaarai hi~Nera baaTo paar gari*
us-le wistaarai hi~D-era baaTo paar gar-i
 3SG-ERG slowly walk-CP road cross do-PST.3SG.F.NH
 ‘She crossed the road walking slowly.’ [Traj_048_s3]

- (544) *pul taryo*
pul tar-yo
 bridge cross-PST.3SG.M.NH
 ‘(He) crossed the bridge.’ [Traj_050_s20]

The verb *baar garnu* ‘to cross’, used in the light verb construction (543), implies crossing of the physical boundary *baaTo* ‘road’. In (544), however, the boundary crossing is indicated by the verb itself i.e. *tarnu* ‘to cross’ where the nominal Ground *pul* ‘bridge’ constitutes the boundary. Both examples suggest that once the Figure crossed the respective boundary, he or she is not there anymore. Another verb expressing the boundary crossing event is *naaghnu* ‘to cross’ or ‘to pass over’, as in example (545).

- (545) *usle kaaThko muNaa uphriera naagyo*
us-le kaaTh-ko muDho uphr-era naagh-yo
 3SG-ERG wood-GEN log jump-CP pass.over-PST.3SG.M.NH
 ‘He passed over the wooden log jumping.’ [Traj_072_s19]

Other light verbs such as *baaTo kaaTnu* ‘to cross the road’ and *kholaa kaaTnu* ‘to cross the stream’ also convey the meaning of boundary crossing.

5.3.1.2.6 Verbs with Deixis and Path function

Two motion verbs ‘come’ and ‘go’ have long been the subject of linguistic analysis in English (Fillmore, 1966, 1971), Hindi (Sinha, 1972); Korafe (Farr, 1976), Mparntwe Arrernte (Pama-Nyungan, Australian) and Longgu (Oceanic, Austronesian (Wilkins & Hill, 1995), Greek (Antonopoulou & Nikiforidou, 2002) and many other languages (see among others DeLancey, 1985; Goddard, 1997; Levinson, 2004/2006; Oshima, 2006; Bohnemeyer, *et al.*, 2007: 523; Wälchli & Cysouw, 2012; Vittrant,

2015; Matsumoto, Akita, & Takahashi, 2017; Creissels, 2019; Post, 2019; see also DeLancey, 2018; Matsuso, 2018). Probably it is Fillmore who carried out the first systematic study of ‘come’ and ‘go’ in English and their Deictic uses. However, studies such as Wilkins and Hill (1995), Goddard (1997) also suggest that the ‘come’/‘go’ distinction is not universal:

“In Longgu the expression that unambiguously corresponds to COME is the phrasally complex *la mal* ‘come’, consisting of the verb *la* ‘go, travel, move along a path’ and a directional particle *mal* ‘hither, direction towards Speaker or deictic center” (Wilkins & Hill, 1995: 231).

Unlike Longgu, Nepali clearly exhibits two different lexicalized verbs *aaunu* ‘to come’ and *jaanu* ‘to go’ where *aaunu* ‘to come’ refers to the movement toward the speaker or toward the Deictic center whereas *jaanu* ‘to go’ refers to the movement away from the Deictic centre. In the context of the ‘Trajectoire’ corpus, *aaunu* ‘to come’ refers to the movement toward the camera, while *jaanu* ‘to go’ refers to the movement away from the camera or the movement directed elsewhere than toward the speakers or addressee. Now, the issue arises whether these two verbs encode Deixis and Path components or only one of these components (cf. Matsumoto, Akita, & Takahashi, 2017). Thus, the following research questions arise:

1. Are *aaunu* ‘to come’ and *jaanu* ‘to go’ unidirectional (conveying only one component of Path) or bidirectional (encoding more than one component of Path)?
2. What other linguistic factors can determine the Deictic or Path function of these verbs?

Closer examination of the ‘Trajectoire’ corpus reveals that these verbs are used in the expression of different types of Path i.e. Source-, Median- and Goal-oriented Path. This suggests that they do not lexicalize a specific Path component but that they tend to encode both the Deictic and Path components (cf. Talmy, 2000: 53).

Moreover, the data also show that spatial Deictic expressions such as *yataa* ‘toward this side’ and *utaa* ‘toward that side’ also follow the verb *aaunu* ‘to come’ and *jaanu* ‘to go’. The use of these types of expressions enhances their Deictic reading. Hence, based on their uses, I argue that these verbs express Deictic as well

as Path components. Table 81, which is based on Wälchli (2001), shows the characteristics of these verbs.

Use	<i>jaanu</i> ‘to go’	<i>aaunu</i> ‘to come’
Deictic	Not toward the camera (Centrifugal) Move from 1 st (2 nd) person	Toward the camera (Centripetal) Move to 1 st (2 nd) person
Path	Move to/(from)/(via) local reference point	Move from/(to) local reference point

Table 81. Deictic and Path function of *jaanu* ‘to go’ and *aaunu* ‘to come’

I will briefly discuss these verbs below and illustrate their use.

a. *jaanu* ‘to go’

As discussed earlier (cf. 5.3.1.1), the verb *jaanu* ‘to go’ is the most frequent verb in the expression of spontaneous Motion events accounting for 21.1% of the total occurrences ($N=949$). Furthermore, out of 17 participants, 16 of them use this verb to construe 200 motion descriptions. Examples showing the Source-oriented use of the verb *jaanu* ‘to go’ are given below in (546) and (547).

- (546) *u guphaabaaTa niskera baahira gai*
u-Ø guphaa-baaTa nisk-era baahira ga-i
 3SG-NOM cave-ABL exit-CP outside go-PST.3SG.F.NH
 ‘She went outside exiting the cave.’/
 ‘(By) exiting the cave she went outside.’ [Traj_025_s19]

- (547) *u guphaabaaTa baahira gai*
u-Ø guphaa-baaTa baahira ga-i
 3SG-NOM cave-ABL outside go-PST.3SG.F.NH
 ‘She went outside from the cave.’ [Traj_025_s22]

In both examples, *guphaa* ‘cave’ is the Ground component. Logically, the human Figure is coming out of the cave, and her movement is oriented toward the Deictic centre, however, the participants seem to have conceptualized it as a *going* event rather than *coming* (‘She went away from the cave’). Similarly, *jaanu* ‘to go’ is often used together with the expression of Median-oriented events, as in (548) and (549), as well as in the expression of Goal-oriented events, as in (550) and (551).

- (548) *tinjaanaa keTi kaaThko pul kaaTera gae*
tin-janaa keTi kaaTh-ko pul kaaT-era ga-e
 three-CLF girl wood-GEN bridge cross-CP go-PST.3PL
 ‘Three girls went crossing the wooden bridge.’ [Traj_045_s11]
- (549) *usle euTaa kaaThko pul paar garera gayo*
us-le euTaa kaaTh-ko pul paar gar-era ga-yo
 3SG-ERG one wood-GEN bridge cross do-CP go-PST.3SG.M.NH
 ‘He went (away) crossing a wooden bridge.’/
 ‘(By) crossing a wooden bridge he went (away).’ [Traj_046_s19]
- (550) *u Thulo rukhnera gai*
u-Ø Thulo rukh-nera ga-i
 3SG-NOM big tree-near go-PST.3SG.F.NH
 ‘She went near the big tree.’ [Traj_061_s5]
- (551) *u guphaabhitra gayo*
u-Ø guphaa-bhitra ga-yo
 3SG-NOM cave-inside go-PST.3SG.M.NH
 ‘He went into the cave.’ [Traj_058_s21]

Unlike the examples (546) and (547), examples (548) through (551) imply that the Figure moves away from the Deictic centre (away from the camera), where “the speaker is not located at coding time” (Fillmore, 1971: 50). This supports our argument that the verb *jaanu* ‘to go’ is Deictic. On the other hand, crossing the bridge and going away (548) and (549) imply the Median-oriented event, and going near the tree and into the cave (550) and (551) encode the Goal-oriented Path. These examples support our argument that the verb *jaanu* ‘to go’ also encodes the component of Path.

b. *aaunu* ‘to come’

In the ‘Trajectoire’ corpus, the verb *aaunu* is the 3rd most frequent verb accounting for 8.2% of the total occurrences ($N=949$). Like the verb *jaanu* ‘to go’, the verb *aaunu* ‘to come’ also conveys Deixis and Path components. Examples (552) through (555) show these uses.

(552) *uni guphaabaaNa aain*
uni-Ø guphaa-baaTa aa-in
 3SG.H-NOM cave-ABL come-PST.3SG.F.H
 ‘She came from the cave.’ [Traj_023_s10]

(553) *u nadibaaTa aai*
u-Ø nadi-baaTa aa-i
 3SG-NOM river-ABL come-PST.3SG.F.NH
 ‘She came from the river.’ [Traj_074_s21]

The exiting of the human Figure *uni* ‘she/he’ and *u* ‘she/he’ from two different types of Grounds *guphaa* ‘cave’ and *nadi* ‘river’ in (552) and (553) suggests that the verb *aaunu* ‘to come’ expresses the Source-oriented Path but these examples do not overtly specify the final destination. Therefore, as explained in Fillmore (1971),

“the destination associated with expressions containing the verb “come” requires somewhat more complicated understandings” (Fillmore, 1971: 50).

In examples (554) and (555), *aaunu* ‘to come’ is used in the Goal-oriented Path together with the Deictic function because the Ground components *nadi* ‘river’ and *kholo* ‘stream’ are the final destination of the Figure and also carry the case marker *-maa* ‘LOC’ (554) and postposition *-tira* ‘toward’ (555) that convey the Goal. However, there is no evidence showing the use of this verb in Median-oriented Path.

(554) *u nadimaa aayo*
u-Ø nadi-maa aa-yo
 3SG-NOM river-LOC come-PST.3SG.M.NH
 ‘He came to the river.’ [Traj_073_s8]

(555) *u kholalatira aayo*
u-Ø kholaa-tira aa-yo
 3SG-NOM stream-toward come-PST.3SG.M.NH
 ‘He came toward the stream.’ [Traj_028_s21]

The uses of these verbs, *jaanu* ‘to go’ and *aaunu* ‘to come’, show that they are not sensitive to a specific orientation of the Figure’s Motion with respect to the

Ground but are rather sensitive to the perspective from which the Figure's Motion is seen.

5.3.1.2.7 General motion verbs

The analysis of the 'Trajectoire' corpus shows the use of three verbs belonging to the neutral verb category: *laagnu* 'to go', *agaaDi baDhnu* 'to go ahead' and *moDinu* 'to be turned'. Their use accounts for 13 of the total number of occurrences in the dataset ($N=949$).

Verbs such as *laagnu*, which literally means 'to feel' or 'to stick', has multiple uses. It can indicate the internal state such as *tirkhaa laagnu* 'to get thirsty', *maat laagnu* 'to get intoxicated' in the form of the light verb construction where *tirkhaa* 'thirst' and *maat* 'intoxication' are the lexical heads and the grammatical head is *laagnu* 'to feel'. It can also mark the beginning of an event such as *jaana laagnu* 'getting ready to go' or *suru garna laagnu* 'going to start'. However, in the 'Trajectoire' data, its use appears to be neutral or comparatively oriented to the Deictic function like the verb *jaanu* 'to go', as in examples (556) and (557).

- (556) *u* *pheri* *guphaatira* *laagi*
u-Ø *pheri* *guphaa-tira* *laag-i*
 3SG-NOM again cave-toward go-PST.3SG.F.NH
 'She went toward the cave again.' [Traj_022_s8]

- (557) *janggaltira* *laagin*
janggal-tira *laag-in*
 forest-toward go-PST.3SG.F.NH
 '(She) went toward the forest,' [Traj_052_s10]

As explained earlier, in these examples, the verb *laagnu* conveys a meaning similar to the verb *jaanu* 'to go'.

It is quite difficult to determine the category of the light verb *agaaDi baDhnu* 'to go ahead'/'to move further' that has 12 occurrences in the 'Trajectoire' corpus. Its co-occurrence with the postposition *-tarpha* 'toward' shows the Goal-oriented function, as illustrated by (558), however, in the example (559), it does not clearly indicate the Goal Path; rather, it expresses the directionality (see also § 5.4.3).

Considering these facts, I classify this verb in the category of neutral motion verb rather than Goal-oriented verbs.

- (558) *uni* *janggaltarpha* *a~gaaNi*
uni-Ø *janggal-tarpha* *agaaDi*
 3SG.H-NOM forest-toward toward.the.front
baNiraheki *chin*
baDh-i-rah-eki *chin*
 grow-ABS-remain-PFV.F COP₂.NPST.3SG.F.H
 ‘She is going toward the forest.’ [Traj_052_s6]

- (559) *u* *rukho* *phe~dbaaTa* *dauNiera*
u-Ø *ruk-kh* *phed-baaTa* *dauD-era*
 3SG-NOM tree-GEN bottom-ABL run-CP
agaaNi *baNdai* *che*
agaaDi *baDh-dai* *che*
 toward.the.front grow-DUR COP₂.NPST.3SG.F.NH
 ‘She is going ahead running from the bottom of the tree.’ [Traj_033_s14]

5.3.1.2.8 Path and Manner verb

Based on the descriptive data from the ‘Trajectoire’ corpus, and the narrative data, the verb *caDhnu* ‘to climb’ clearly expresses both the Path and Manner showing an inherent direction (the vertical orientation depicting upward movement) and a specific Manner involving hands and legs (for example, climbing up the tree) or instrument (e.g., riding the boat or other means of transport) (cf. Levin, 1993; Levin & Rappaport Hovav, 2013)). This is the only verb in the corpus belonging to this category, and it consists of 22 occurrences in the dataset. The use of the verb *caDhnu* ‘to climb’ is given below in examples (560) and (561).

- (560) *u* *ukaalo* *caDhi*
u-Ø *ukaalo* *caDh-i*
 3SG-NOM upward ascend-PST.3SG.F.NH
 ‘She went up.’
 (Lit. ‘She ascended upward.’ [Traj_071_s22])

- (561) *u si~NibaaTa ukaalo caNdai che*
u-Ø si~Dhi-baaTa ukaalo caDh-dai che
 3SG-NOM stairs-ABL upward ascend-DUR COP2.NPST.3SG.F.NH
 ‘She is going up from/via the stairs.’
 (Lit. ‘She is ascending upward from the stairs.’ [Traj_071_s14])

5.3.1.3 Manner verbs

In this Section, I will first outline the criteria which define Manner verbs and then carry the analysis of different types of Manner verbs. Manner verbs describe the way the Figure moves without the indication of specific direction (Levin & Rappaport Hovav, 1991: 147; see also, Levin, 2010) and are “generally activity verbs” (Slobin, 2004: 225; Pourcel & Kopecka, 2005) indicating how a particular action is performed. According to Slobin,

“Manner verbs are supposed to have the concrete images, motor pattern (hop, jump, skip), rate of motion (walk, run, sprint), force dynamics (step), instrument (ski, skateboard)” (Slobin, 2006: 60).

Talmy considers Manner as the

“subsidiary action or state that a patient manifests concurrently with its main action or state” (Talmy, 1985: 128).

I am also following Talmy (1985, 2000), Levin and Rappaport Hovav (1991: 147), Slobin (1997, 2004³³, 2006), and Kopecka (2010) in their approach regarding the lexicalization of Manner. I pointed out in Section 5.3.1.3 that change of state is one of the factors to distinguish Path and Manner. However, Berman and Slobin (1987) argue that Manner verbs can also be involved in change of state:

“change of state occurs (from) verbs of running, throwing, falling, and landing (protraction of the event of time, the dynamic intensity of the event, the suddenness of onset or termination of the event) such as ran into; lands on; slips onto; perfective/imperfective and progressive/non-progressive distinction” (Berman & Slobin, 1987: 8, 18).

³³ “Manner” covers an ill-defined set of dimensions that modulate motion, including motor pattern, rate, rhythm, posture, affect, and evaluative factors (Slobin, 2004: 223, footnote 5).

Manner verbs can also be used to describe non-boundary crossing situations (Slobin & Hoiting, 1994; Zlatev & Yangklang, 2005: 186; cf. Slobin, 2017). As pointed out by Wienold (1992) and Slobin (1997), basic Manner verbs such as walk, run, fly, swim, exist in most languages (see also Pourcel, 2004). Data from the ‘Trajectoire’ corpus attest these verbs but, because of the type of stimulus set and the kinds of motion performed by the protagonists in individual video clips, there is no occurrence of the verb ‘fly’. I consider the following features to be the principal indicators of Manner verbs.

- (a) Manner verbs do not indicate direction;
- (b) they are durative;
- (c) they are triggered by non-boundary crossing situation;
- (d) they express activity;
- (e) under certain context, they also indicate the change of state (e.g., *He kicked the door shut* (Slobin, 1997: 441));
- (f) they express the inner state;
- (g) Manner verbs are supposed to have concrete images, and motor patterns (e.g., hop, jump, skip) as explained by Slobin (Slobin, 2006: 60);
- (h) they can convey some kind of force dynamics.

The ‘Trajectoire’ corpus shows a relatively high use of Manner verbs; they account for 32.5% of the total occurrences ($N=949$). The total number of these verbs is 15. These include main verbs (e.g., *hi~Dnu* ‘to walk’, *dauDanu* ‘to run’) as well as some light verbs (e.g., *pauDi khelnu* ‘to swim’, *haam phaalnu* ‘to jump’). Table 82 shows the diversity of Manner verbs found in the ‘Trajectoire’ corpus.

Manner verbs	N° of occurrences	Percentage
<i>hi~Dnu</i> ‘to walk’	197	20.8
<i>dauDanu</i> ‘to run’	51	5.4
<i>haam phaalnu</i> ‘to jump’	12	1.3
<i>dagurnu</i> ‘to run’	11	1.2
<i>phaDkanu</i> ‘to jump’	10	1.1
<i>uphranu</i> ‘to jump’	6	0.6
<i>kudnu</i> ‘to rush’	5	0.5

<i>pauDi khelnu</i> ‘to swim’	5	0.5
<i>pauDanu</i> ‘to swim’	3	0.3
<i>ghumnu</i> ‘to roam’	2	0.2
<i>yataautaa garnu</i> ‘to do here and there’	2	0.2
<i>Dubulki maarnu</i> ‘to plunge’	1	0.1
<i>Dulnu</i> ‘to roam’	1	0.1
<i>phaal haalnu</i> ‘to jump’	1	0.1
<i>yaatraa garnu</i> ‘to travel’	1	0.1
Total	308	32.5

Table 82. Use of Manner verbs in the ‘Trajectoire’ corpus

Based on their occurrences in the ‘Trajectoire’ corpus, and following Slobin (1997), Chen and Guo (2009), Verkerk (2015), and Ibarretxe-Antuñano, Hijazo-Gascon and Moret-Oliver (2017) (see also De Pasquale, 2017)), I schematically categorize Manner verbs into first and second tier verbs. The first tier verbs are the verbs of everyday use (a.k.a. general verbs) which include walk, run, swim, and fly among others whereas the second tier verbs are more specific and expressive (e.g., dash, swoop, scramble, sneak, trot (Slobin, 1997: 459; Verkerk, 2015: 74)). I broadly classify the first tier verbs into: WALK, RUN, JUMP, SWIM, WANDER, and TRAVEL categories to discuss each of them more succinctly and systematically, as shown in Table 83.

Schematic category	Manner verbs			
JUMP	<i>haam phaalnu</i> 'lit. jump throw'	<i>phaDkanu</i> 'to jump'	<i>uphranu</i> 'to jump'	<i>phaal haalnu</i> 'lit. to throw oneself'
RUN	<i>dauDanu</i> 'to run'	<i>dagurnu</i> 'to run'	<i>kudnu</i> 'to rush'	
SWIM	<i>pauDi khelnu</i> 'to swim'	<i>pauDanu</i> 'to swim'	<i>Dubulki maarnu</i> 'to plunge'	
WANDER	<i>ghumnu</i> 'to wander'	<i>yataa utaa garnu</i> 'to do here and there'	<i>Dulnu</i> 'to wander'	
WALK	<i>hi~Dnu</i> 'to walk'			
TRAVEL	<i>yaatra garnu</i> 'to travel'			

Table 83. Schematic category of Manner verbs

These verbs (e.g., *hi~Dnu* 'to walk', *dauDanu* 'to run') encode different dimensions or aspects of Manner of Motion (Kopecka, 2010), and are more or less general or neutral (Slobin, 1997; Verkerk, 2015; Ibarretxe-Antuñano, Hijazo-Gascon & Moret-Oliver, 2017). I consider them all the TYPICAL MANNER verbs in Nepali. Note, however, that there are not any specific or expressive (second tier) verbs (e.g., *ghisranu* 'to crawl') in our dataset.

a. WALK

We saw in Table 82 that *hi~Dnu* 'to walk' is the most frequent verb in the Manner verb category; it accounts for 64% of the total occurrences of the Manner verbs in the dataset ($N=308$). Based on its use in the 'Trajectoire' corpus, I consider this verb to be the basic Manner verb, which also indicates the rate of motion (cf. Slobin, 2006; Wälchli, 2001). Examples (562) and (563) and the Figure following them show the use of the verb *hi~Dnu* 'to walk'.

(562) *yi mailaa jangngalko*
yi mahilaa-Ø janggal-ko
 DEM.PROX.H woman-NOM forest-GEN
bicmaa hi~Diraichan
bic-maa hi~D-i-rah-eki-chan
 middle-LOC walk-ABS-remain-PFV.F.H-COP₂.NPST.3SG.F.H
 ‘This woman has been walking in the middle of the forest.’ [Traj_033_s1]

(563) *uni caurmaa hi~Dirahekichin*
uni-Ø caur-maa hi~D-i-rah-eki-chin
 3SG.H-NOM meadow-LOC walk-ABS-remain-PFV.F-COP₂.NPST.3SG.F.H
 ‘She has been walking in the meadow.’ [Traj_058_s6]

These examples show that the Manner of Motion of two different Figures, *mahilaa* ‘woman’ (562) and *uni* ‘she’ (563), is specified by the verb *hi~Dnu* ‘to walk’ implying an activity; the Ground (or the location) where the Figure’s Motion is taking place is *janggal* ‘forest’ and *caur* ‘meadow’ respectively. Figure 21 further demonstrates the use of the verb *hi~Dnu* ‘to walk’ and schematic representation of WALK.



Figure 21. Image schema of the verb *hi~Dnu* ‘to walk’ encoding the Manner of Motion³⁴

³⁴ <https://www.google.com/search?q=clip+art,+walking+image> accessed on 11th November 2020.

b. RUN

This category consists of 3 verbs accounting for 21.8% of the total occurrences within the Manner verbs ($N=308$) as shown in Table 84. Of these verbs, *dauDanu* ‘to run’ is the most frequent, representing 16.6%.

Verbs	English translation	N° of motion descriptions
<i>dauDanu</i>	‘to run’	51
<i>dagurnu</i>	‘to run’	11
<i>kudnu</i>	‘to rush	5
Total		67

Table 84. RUN verbs

Note also that *Daudanu* ‘to run’ is the second most frequent verb in the Manner verbs category. As WALK verb *hi~Dnu* ‘to walk’, *dauDanu* ‘to run’ also indicates the rate of motion (cf. Slobin, 2006). In order to show the use of this verb, two examples (564) and (565), in addition to the Figure 22, are presented below.

(564) *u dauNadai cha*
u-Ø dauDa~-dai cha
 3SG-NOM run-DUR COP2.NPST.3SG.M.NH
 ‘He is running.’ [Traj_033_s5]

(565) *u baaTomaa dauNirahekocho*
u-Ø baaTo-maa dauD-i-rah-eko-cha
 3SG.-NOM road-LOC run-ABS-remain-PFV.M.NH-COP2.NPST.3SG.M.NH
 ‘He has been running on the road.’ [Traj_042_s8]



Figure 22. Image schema of the verb *dauDanu* ‘to run’ encoding the Manner of Motion³⁵

While describing the video clips, some participants also use *dagurnu* ‘to run’, as shown in examples (566) and (567).

- (566) *uni dagurin*
uni-Ø dagur-in
 3SG-NOM run-PST.3SG.F.H
 ‘She ran.’ [Traj_043_s10]

- (567) *jangngalko baaTo dagurdai cha*
janggal-ko baaTo dagur-dai cha
 forest-GEN road run-DUR COP₂.NPST.3SG.M.NH
 ‘S/he is running through the forest.’
 (Lit. ‘She/he is running on the road of the forest.’ [Traj_043_s10])

The verb *kudnu* ‘to rush’, which belongs to the category RUN, expresses the Manner of Motion implying ‘hurry’. Note, however, that it is less frequent (5 occurrences in total) than *dauDanu* ‘to run’ and *dagurnu* ‘to run’. What may be noted here is that among 17 participants, only one participant uses this verb, thereby showing the individual choice. Example (568) below shows the use of the verb *kudnu* ‘to run’.

³⁵ <http://www.clker.com/clipart-24861.html> accessed on 11th November 2020.

(568)	<i>yi</i>	<i>mailaa</i>	<i>jangngalko</i>
	<i>yi</i>	<i>mahilaa-Ø</i>	<i>jangngal-ko</i>
	DEM.PROX.H	woman-NOM	forest-GEN
	<i>bicmaa</i>	<i>kudirachin</i>	
	<i>bic-maa</i>	<i>kud-i-rah-eki-chin</i>	
	middle-LOC	run-ABS-remain-PFV.F.H-COP ₂ .NPST.3SG.F.H	
	‘This woman has been running in the middle of the forest.’ [Traj_044_s1]		

c. JUMP

In the JUMP category, there are 4 verbs in total, two main verbs and two in the light verb construction; they account for 9.4 % of the total occurrences ($N=308$) within Manner verbs, as shown in Table 85.

Verbs	English translation	N° of motion descriptions
<i>haam phaalnu</i>	‘lit. jump throw’	12
<i>phaDkanu</i>	‘to jump’	10
<i>uphranu</i>	‘to jump’	6
<i>phaal haalnu</i>	‘lit. to throw oneself’	1
Total		29

Table 85. JUMP verbs

The light verb *haam phaalnu* ‘to jump’/(lit. ‘jump throw’) accounts for 12 occurrences in the ‘Trajectoire’ corpus. It is a Manner verb which implies the ‘motor pattern’ (Slobin, 2006). The data also show that this verb is mostly used in the description of the scene showing the Figure *jumping from cliff into water*, as in (569) and (570). In addition to this specific context, we also found its use in descriptions of some other scenes such as *run into sea*.

(569)	<i>keTaa</i>	<i>maathibaaNa</i>	<i>haam phaalyo</i>	<i>nadimaa</i>
	<i>keTo-Ø</i>	<i>maathi-baaTa</i>	<i>haam phaal-yo</i>	<i>nadi-maa</i>
	boy-NOM	above-ABL	jump throw-PST.3SG.M.NH	river-LOC
	‘From above/up the boy jumped into the river.’ [Traj_064_s11]			

- (570) *paahaaNdekhi kholaamaa haam phaalyo*
pahaaD-dekhi kholaa-maa haam phaal-yo
 hill-ABL stream-LOC jump throw-PST.3SG.M.NH
 ‘(He) jumped into the stream from the hill.’/
 ‘From the hill (he) jumped into the stream.’ [Traj_064_s9]

However, one of the participants also construed the same clip i.e. *jump from cliff into water* with a different light verb *phaal haalnu* ‘jump throw’. The JUMP category also comprises *phaDkanu* ‘to jump’ and *uphranu* ‘to jump’ as illustrated by (571) for *phaDkanu* ‘to jump’, and (572) for *uphranu* ‘to jump’ respectively.

- (571) *ekjaanaa keTaale dauNera kaaThko muNaa phaNkyo*
ek-janaa keTaa-le dauD-era kaaTh-ko muDho phaDk-yo
 one-CLF boy-ERG run-CP wood-GEN log jump-PST.3SG.M.NH
 ‘A boy jumped over the wooden log running.’ [Traj_072_s11]

- (572) *u nadimaa uphiraako cha*
u-Ø nadi-maa uphr-i-rah-eko cha
 3SG-NOM river-LOC jump-ABS-remain-PFV.M.NH COP₂.NPST.3SG.M.NH
 ‘He has been jumping in the river.’ [Traj_075_s21]

d. SWIM

The ‘Trajectoire’ corpus also comprises the verbs representing the SWIM category. There are three verbs: two light verbs, and one main verb that account for a total of 9 occurrences in the dataset as shown in Table 86.

Verbs	English translation	N ^o of occurrences
<i>pauDi khelnu</i>	‘to swim’	5
<i>pauDanu</i>	‘to swim’	3
<i>Dubulki maarnu</i>	‘to dive’/ ‘to plunge’	1
Total		9

Table 86. SWIM verbs

As Table 86 shows, *pauDi khelnu* ‘to swim’ is the most frequent among these verbs, even though the number of its occurrences is rather low in the dataset. Examples (573) and (574) show the use of this verb expressing Manner of Motion.

(573)	<i>yi</i>	<i>yubak</i>	<i>dherai</i>	<i>maathibaaTa</i>	<i>paanimaa</i>
	<i>yi</i>	<i>yubak</i>	<i>dherai</i>	<i>maathi-baaTa</i>	<i>paani-maa</i>
	DEM.PROX.H	boy	many	above-ABL	water-LOC
	<i>haam</i>	<i>phaalera</i>	<i>pauDi</i>	<i>kheliraachan</i>	
	<i>haam</i>	<i>phaal-era</i>	<i>pauDi</i>	<i>khel-i-rah-ekaa-chan</i>	
	jump	throw-CP	swimming	play-ABS-remain-PFV.M.H.COP ₂	
				NPST. 3SG.H	

‘(By) jumping into the water from very high this boy has been swimming.’
[Traj_064_s1]

(574)	<i>u</i>	<i>samunrako</i>	<i>kinaarmaa</i>	<i>pauDi</i>	<i>khelyo</i>
	<i>u-Ø</i>	<i>samundra-ko</i>	<i>kinaar-maa</i>	<i>pauDi</i>	<i>khel-yo</i>
	3SG-NOM	sea-GEN	shore-LOC	swimming	play-PST.3SG.M.NH

‘He swam in the seashore.’ [Traj_059_s19]

In fact, the ‘Trajectoire’ video clips do not contain the scenes implying ‘swimming’, however, some participants conceptualize and describe the protagonists’ Motion of jumping into the sea as ‘swimming’. Note that the use of the verb *pauDanu* ‘to swim’ expresses a similar meaning to the light verb *pauDi khelnu* ‘to swim’, as is the case in (575).

(575)	<i>u</i>	<i>nadimaa</i>	<i>pauDyo</i>
	<i>u-Ø</i>	<i>nadi-maa</i>	<i>pauD-yo</i>
	3SG-NOM	river-LOC	swim-PST.3SG.M.NH

‘He swam in the river.’ [Traj_059_s21]

Nevertheless, the light verb *Dubulki maarnu* ‘lit. dive kill’/ ‘to dive’ or ‘to plunge into water’ is comparatively different from the former two verbs because to perform this activity, the Figure has to dip his/her head into water, take it out of water and repeat the same activity. Example (576) below shows the use of this verb.

(576)	<i>u</i>	<i>nadimaa</i>	<i>caaini</i>
	<i>u-Ø</i>	<i>nadi-maa</i>	<i>caahini</i>
	3SG-NOM	river-LOC	DPRT
	<i>Dubulki</i>	<i>maariraheko</i>	<i>cha</i>
	<i>Dubulki</i>	<i>maar-i-rah-eko</i>	<i>cha</i>
	plunge	kill-ABS-remain-PFV.M.NH	COP ₂ .NPST.3SG.NH
	'He has been plunging into the river.' [Traj_064_s5]		

e. WANDER

When describing 'Trajectoire' video clips, some participants conceptualize the Figures' (protagonists') movement as an activity rather than as a change of location using verbs such as *ghumnu* 'to wander'/'to move here and there'. I classify such verbs in the WANDER category; it consists of the main verbs *ghumnu* 'to wander' and *Dulnu* 'to wander', and the light verb *yata utaa garnu* 'to do here and there'. Their use accounts for a total of 5 occurrences in the dataset. Examples of *ghumnu* 'to wander' and *yata utaa garnu* 'to move here and there' are presented below in (577) and (578).

(577)	<i>u</i>	<i>caai~</i>	<i>tei</i>
	<i>u-Ø</i>	<i>caahi~</i>	<i>tyahi</i>
	3SG-NOM	DPRT	DEM.DIST.EMP
	<i>janggalmaa</i>	<i>ghumiraakicha</i>	
	<i>janggal-maa</i>	<i>ghum-i-raakh-eki-cha</i>	
	forest-LOC	wander-ABS-put-PFV.F.NH-COP ₂ .NPST.3SG.NH	
	'She has been wandering in that forest itself.' [Traj_048_s15]		

(578)	<i>u</i>	<i>janggalmaa</i>	<i>yataautaa</i>
	<i>u-Ø</i>	<i>janggal-maa</i>	<i>yataautaa</i>
	3SG-NOM	forest-LOC	here.there
	<i>gariraheki</i>	<i>cha</i>	
	<i>gar-i-rah-eki</i>	<i>cha</i>	
	do-ABS-remain-PFV.F.NH	COP ₂ .NPST.3SG.NH	
	'She has been moving here and there in the forest.' [Traj_048_s19]		

f. TRAVEL

The 'Trajectoire' data attest only one verb that can be put in the TRAVEL category, the verb *yaatra garnu* 'to travel' which represents a light verb construction, as in example (579).³⁶

(579)	<i>uniharu</i>	<i>jangngalko</i>	<i>baaTo</i>
	<i>uni-haru-Ø</i>	<i>janggal-ko</i>	<i>baaTo</i>
	3SG-PL-NOM	forest-GEN	road
	<i>yatraa</i>	<i>garirahekaa</i>	<i>chan</i>
	<i>yatraa</i>	<i>gar-i-rah-ekaa</i>	<i>chan</i>
	travel	do-ABS-remain-PFV.PL	COP ₂ .NPST.3PL
	'They have been travelling through the forest.' [Traj_041_s9]		

5.3.2 Conjunctive participle form *-era* in Path vs. Manner

I have discussed different functions of the conjunctive participle (CP) form in Section 5.2.2 (cf. § 2.2.7 and § 4.2). The main idea here is to investigate the use of CP forms further in order to find out if there is equal distribution of its occurrence in Path and Manner verbs in the 'Trajectoire' corpus. The conjunctive participle form accounts for 25.4% of the total in the 'Trajectoire' corpus ($N=949$). Its use is diverse and covers 52 different verbs belonging to different semantic categories, as shown in Table 87.

³⁶ See Miller and Jhonson-Laird (1976: 534) for more information on the means of TRAVEL.

Semantic category	Occurrences	Percentage
Path	85	9
Manner	80	8.4
Caused Motion	32	3.4
Others	25	2.6
Deixis and Path	16	1.7
Posture	3	0.3
Total	241	25.4

Table 87. Semantic category of verbs in the CP form

Table 87 shows that verbs in conjunctive participle forms are semantically varied and express Path, Manner, Deixis and Path, and posture. Some of them do not express Motion and are hence classified as ‘Others’. I will discuss each semantic category in turn.

5.3.2.1 Path encoding conjunctive participles

In the ‘Trajectoire’ data, the Path category is the most frequent to have the non-finite CP forms. It accounts for 40.7% of the total in CP category ($N=241$). Verbs that are in the CP forms encoding Path include the general verbs (e.g., *niskanu* ‘to exit’, *jharnu* ‘to descend’), light verbs (e.g., *paar garnu* ‘to cross’ *baaTo kaaTtnu* ‘to cross the road’), and the Deixis and Path verbs (e.g., *jaanu* ‘to go’ and *aaunu* ‘to come’) as we can see below in Table 88.

Verbs	N° of occurrences
<i>niskanu</i> ‘to exit’	19
<i>niklanu</i> ‘to exit’	9
<i>jaanu</i> ‘to go’	9
<i>caDhnu</i> ‘to climb’	8
<i>kras garnu</i> ‘to cross’	8
<i>naaghnu</i> ‘to cross’	7
<i>paar garnu</i> ‘to cross’	7
<i>aaunu</i> ‘to come’	7
<i>pharkanu</i> ‘to return’	7

<i>baaTo kaaTnu</i> 'to cross the road'	4
<i>tarnu</i> 'to cross'	4
<i>jharnu</i> 'to descend'	2
<i>kaaTnu</i> 'to cross'	2
<i>orlanu</i> 'to descend'	2
<i>pugnu</i> 'to reach'	2
<i>uklanu</i> 'to ascend'	1
Total	98

Table 88. Path verbs in the CP form

Of the total verbs in the Path category, *niskanu* 'to exit', encoding the Source-oriented Motion, is the most frequent to occur in the CP form. Furthermore, we may note that Median-oriented Path verbs (e.g., *paar garnu* 'to cross', *tarnu* 'to cross') occur in the CP form more often than Goal-oriented verbs (e.g., *pugnu* 'to reach') or verbs expressing the vertical Motion (e.g., *jharnu* 'to descend', *uklanu* 'to ascend'). The following examples, (580) and (581) illustrate the use of those verbs in the CP forms.

- (580) *u* *euTo* *oNaarbaaTa* *niskera*
u-Ø *euTaa* *oDhaar-baaTa* *nisk-era*
3SG-NOM one cave-ABL exit-CP
arke *oNaarbhitra* *chiri*
arke *oDhaar-bhitra* *chir-i*
another cave-inside enter-PST.3SG.F.NH
'She came out of one cave and went into another cave.'
(Lit. 'She exited from one cave and entered into another cave.')

- (581) *usle* *kaaThko* *pul* *paar* *garera* *gai*
us-le *kaaTh-ko* *pul* *paar* *gar-era* *ga-i*
3SG-ERG wood-GEN bridge cross do-CP go-PST.3SG.F.NH
'She went (by) crossing the wooden bridge.'
'Crossing the wooden bridge, she went.'

Both *niskanu* ‘to exit’ and *paar garnu* ‘to cross’ in the above examples are the Path verbs occurring in the CP (subordinate non-finite) forms and expressing Source-oriented and Median-oriented function respectively.

5.3.2.2 Manner encoding conjunctive participles

In total, there are 77 motion descriptions in ‘Trajectoire’ corpus where verbs occurring in conjunctive participle forms express Manner, which is 32% of the total in the CP category as we see in Table 89.

Verbs	N° of occurrences
<i>hi~Dnu</i> ‘to walk’	21
<i>dauDanu</i> ‘to run’	18
<i>haam phaalnu</i> ‘to jump’	11
<i>uphranu</i> ‘to jump’	10
<i>pauDi khelnu</i> ‘to swim’	4
<i>kudnu</i> ‘to run’	3
<i>dagurnu</i> ‘to run’	2
<i>jamp garnu</i> ‘to jump’	2
<i>pauDanu</i> ‘to swim’	2
<i>phaal haalnu</i> ‘to jump’	2
<i>ghumnu</i> ‘to wander’	1
<i>phaDknu</i> ‘to jump’	1
Total	77

Table 89. Manner verbs in the CP form

There are 12 types of Manner verbs in the CP forms. These verbs include *hi~Dnu* ‘to walk’, *dauDanu* ‘to run’, and *pauDanu* ‘to swim’ among others. The verb *hi~Dnu* ‘to walk’ is the most frequent of all comprising 21 occurrences in the dataset. The second most frequent verb in the Manner category is *dauDanu* ‘to run’ and it makes up 18 occurrences. The data show that the JUMP category has more types of verbs to occur in the CP forms than others. Two examples (582) and (583) are given below to show how the CP form is used with the Manner verbs.

- (582) *uniharu bistaarai hi~Nera pul paar gare*
uni-haru-Ø wistaarai hi~D-era pul paar gar-e
 3-PL-NOM slowly walk-CP bridge cross do-PST.3PL
 ‘They crossed the bridge walking slowly.’/
 ‘(By) walking slowly they crossed the bridge.’ [Traj_045_s3]

- (583) *u dauNera talaamaa gayo*
u-Ø dauD-era talaau-maa ga-yo
 3SG-NOM run-CP lake-LOC go-PST.3SG.M.NH
 ‘He went to the lake running.’ [Traj_059_s22]

The use of CP forms with *hi~Dnu* ‘to walk’ or *dauDanu* ‘to run’ implies that Nepali needs additional morphology to encode Manner when the main verb is a Path verb. In other word, Nepali has to use the CP *hi~Dera pul paar garnu* ‘cross the bridge walking’ (582) and *dauDera jaanu* ‘go running’ (583) to give what Aske (1989: 10) calls ‘new information’ (see § 6.1 for a detailed discussion).

5.3.3 Adverbs

There are two types of adverbs found in the ‘Trajectoire’ data: adverbs expressing Path and adverbs expressing Manner. I will discuss both of them in turn.

5.3.3.1 Path adverbs

Adverbs which express Path account for 18.9% of the total ($N=949$) in the ‘Trajectoire’ data. Semantically, these adverbs convey the directionality of Motion. However, they differ from each other in terms of orientation (vertical vs. horizontal) or the presence vs. absence of boundary crossing as well as other semantic nuances. I briefly discuss these differences below (for further information on adverbs, see also Dahal, 1974: 211; Sharma, 2071 VS (2014 AD)).

a. *baahira* ‘outside’

The use of *baahira* ‘outside’ accounts for a total of 71 occurrences in the ‘Trajectoire’ corpus and is more frequent than any other adverbial devices such as *tala*

‘below’ or *maathi* ‘above’. The data further attest its indifference with respect to the vertical or horizontal orientation. Rather, its use is found in the description of Source-oriented events, as *baahira* ‘outside’ clearly demonstrates the direction of the Figure away from a particular reference point, such as *guphaa* ‘cave’ in (584) and *nadi* ‘river’ in (585).

(584)	<i>u</i>	<i>guphaabaaNa</i>	<i>baaira</i>
	<i>u-Ø</i>	<i>guphaa-baaTa</i>	<i>baahira</i>
	3SG-NOM	cave-ABL	outside
	<i>niskiraheko</i>	<i>cha</i>	
	<i>nisk-i-rah-eko</i>	<i>cha</i>	
	exit-ABS-remain-PFV	COP ₂ .NPST.3SG.M.NH	
	‘He is coming out of the cave.’		
	(Lit. ‘He has been exiting outside from the cave.’) [Traj_029_s8]		

(585)	<i>nadibaaNa</i>	<i>baaira</i>	<i>niklera</i>	<i>dagure</i>
	<i>nadi-baaTa</i>	<i>baahira</i>	<i>nikl-era</i>	<i>dagur-e</i>
	river-ABL	outside	exit-CP	run-PST.3SG.M.H
	‘(He) came out of the river and then ran.’			
	(Lit. ‘(He) exited outside the river and then ran.’) [Traj_031_s10]			

As shown in example (584), the specificity of this adverb is to convey the meaning of boundary crossing, coming out of the cave indicating not being inside of it (cf. Slobin & Hoiting, 1994).

b. *maathi* ‘above’

The use of *maathi* ‘above’ indicates the vertical orientation, that of the upward direction, as illustrated in (586) and (587). The use of this adverb consists of 24 occurrences in the dataset.

(586)	<i>u</i>	<i>talaabaaTa</i>	<i>maathi</i>	<i>aai</i>
	<i>u-Ø</i>	<i>talaau-baaTa</i>	<i>maathi</i>	<i>aa-i</i>
	3SG-NOM	lake-ABL	above	come-PST.3SG.F.NH
	‘She came up from the lake.’ [Traj_074_s22]			

- (587) *u* *maathibaaTa* *gangngaajimaa* *haam* *phaalyo*
u-Ø ***maathi-baaTa*** *ganggaaji-maa* *haam* *phaal-yo*
 3SG-NOM **above-ABL** river-LOC jump throw-PST.3SG.M.NH
 ‘From up/above he jumped into the river.’ [Traj_064_s17]

In (586) *maathi* ‘above’ indicates the movement of the Figure to the upward direction as well as the final destination from the reference Ground *talaau* ‘lake’, whereas in (587) it indicates the initial reference point from where the Figure jumps.

c. *agaDi* ‘toward front’

The adverb *agaDi* ‘toward front’ indicates the directionality but, depending on the type of construction it occurs in and the lexico-grammatical devices it combines with, it is sometimes used in the description of Goal-oriented Motion and sometimes the encoding of Source/Goal has to be recovered from the context. It has a total of nine occurrences in the dataset. Examples (588) and (589) will further show its use.

- (588) *u* *Thulo* *rukko* *agaDi* *gai*
u-Ø *Thulo* *ruk-ko* ***agaDi*** *ga-i*
 3SG-NOM big tree-GEN **toward.front** go-PST.3SG.F.NH
 ‘She went toward the front of a big tree.’ [Traj_061_s22]

- (589) *u* *rukko* *phedbaaNa*
u-Ø *ruk-ko* *phed-baaTa*
 3SG-NOM tree-GEN bottom-ABL
dauNidai *agaNi* *gai*
dauDi~-dai ***agaDi*** *ga-i*
 run-DUR **toward.front** go-PST.3SG.F.NH
 ‘She went toward the front running from the lower part (bottom) of the tree.’ [Traj_033_s19]

The reference point in both examples is *ruk* ‘tree’ from where the Figure is moving toward the front. However, in (588), *ruk* ‘tree’ is the final destination whereas in (589) the Figure moved toward the front from the *ruk* ‘tree’ (Ground) but the destination is not mentioned and has to be recovered from the context.

d. *bhitra* ‘inside’

The use of *bhitra* ‘inside’ is comparatively less frequent (i.e. 16 occurrences in the dataset) than other adverbs discussed so far. In certain contexts, as is the case in examples (590) and (591) below, it has dual semantic functions: the Ground and the direction depicting Goal.

- (590) *oNaarbaaNa* *niklera* *Daali* *liera* *bhitra* *gai*
oDhaar-baaTa *nikl-era* *Daali* *li-era* ***bhitra*** *gai*
cave-ABL exit-CP basket take-CP **inside** go-PST.3SG.F.NH
‘(She) exited the cave, took a basket and then went inside.’ [Traj_024_s11]

- (591) *uni* *bhitra* *pasin*
uni-Ø ***bhitra*** *pas-in*
3SG.H-NOM **inside** enter-PST.3SG.F.H
‘She went inside.’
(Lit. ‘She entered inside.’) [Traj_025_s20]

In (590) speakers mention one reference point, *oDhaar* ‘cave’, but the other reference point appears to be *bhitra* ‘inside’ itself, whereas in (591) speakers probably considered *bhitra* both as the Ground (reference point) and the Goal. Hence, it seems that the Ground is part of the covert expression (Sinha & Kuteva, 1995; Bisang, 2009; cf. Jackendoff, 1983: 162). Note also that the use of *bhitra* ‘inside’ instantiates the boundary crossing (see also § 5.3.1.2.5).

e. *tala* ‘below’

The adverb *tala* ‘below’ depicts the vertical orientation conveying the downward direction, as illustrated by (592) and (593). Its use in the ‘Trajectoire’ corpus occurs in 8 motion descriptions. The dataset also shows that *tala* ‘below’ is used in the expression of both Goal-oriented motion descriptions as in (592), and Source-oriented motion description as in (593).

- (592) *keTi* *oNaarjasto* *baaTobaaNa*
keTi-Ø *oDhaar-jasto* *baaTo-baaTa*
 girl-NOM cave-like road-ABL
bistaarai *tala* *jhari*
wistaarai ***tala*** *jhar-i*
 slowly **down** descend-PST.3SG.F.NH
 ‘The girl came down slowly from the road which is like a cave’ [Traj_022_s11]

- (593) *keTaa* *talabaaNa* *dauNera* *maathi* *gayo*
keTo-Ø ***tala-baaNa*** *dauD-era* *maathi* *ga-yo*
 boy-NOM **below-ABL** run-CP above go-PST.3SG.M.NH
 The boy went up running from downstairs [Traj_062_s11]

As mentioned earlier, the movement of the Figure is oriented downward (Goal-oriented description) from the reference point *baaTo* ‘road’ in (592) but the same adverb is also found in the expression of Source-oriented Ground and Path in (593) where it co-occurs with the ablative case marker.

f. *najik* ‘near’

The least frequent (i.e. 5 occurrences in total in the ‘Trajectoire’ corpus) adverb used in the expression of spontaneous Motion is *najik* ‘near’. It is indifferent to the orientation as well as to the boundary crossing but is almost always preceded by the Ground object as we can see in example (594).

- (594) *u* *buTaako* *najik* *gai*
u-Ø *buTaa-ko* ***najik*** *ga-i*
 3SG-NOM tree.OBL-GEN **near** go-PST.3SG.F.NH
 ‘She went near the tree.’ [Traj_061_s17]

It also appears that, depending on the verb and the case marker used, *najik* might be found in the expression of Source-oriented or Goal-oriented events. In this example, *najik* is used in the description of Goal-oriented event.

- (596) *bhirko baaTomaa saraasar hinyaacha*
bhir-ko baaTo-maa saraasar hi~D-eko-cha
 cliff-GEN road-LOC **straightway** walk-PFV.M-COP₂.NPST.3SG.NH
 ‘He is walking straightway on the precipitous road.’
 ‘He has walked straightway on the road of the cliff.’ [Traj_065_s4]

Although the use of these adverbs is low in our dataset, they occur with both Path and Manner verbs, as the examples above show. What is also of interest to us is that their frequency of use is higher in the context of Path verbs, as in (595) than in the context of Manner verbs, as in (596). In examples (595), the main verbs express Path of Motion (*pasnu* ‘to enter’). In (595) (a), the Manner is expressed additionally by the verb *hi~Dnu* ‘to walk’ in its aspectual form, and it is further modified by the Manner adverb *wistaarai* ‘slowly’, but in (595) (b), the adverbial expression *saraasar* ‘straightway’ is compensating for the absence of Manner (for further information on compensation and elaboration, see Kopecka, 2010: 238).

In conclusion, compared to Manner encoding adverbials, the Path encoding adverbials are more diverse indicating Source, Goal, boundary crossing and even the orientation, the upward or downward directionality.

5.3.4 Case markers

The data collected with ‘Trajectoire’ video stimulus set show the use of three case markers conveying spatial information. These are *-maa* ‘LOC’, *-baaTa* ‘from’ and *-dekhi* ‘from’. Their use in the expression of spontaneous Motion accounts for 62.9% of the total ($N=949$). However, as we will see it later, two of them, *-maa* ‘LOC’, and *-baaTa* ‘from’, are general grammatical devices in Nepali.

5.3.4.1 The ablative case marker *-baaTa* ‘from’

This is the most frequently used grammatical morpheme (34.2% of the total occurrences) in the ‘Trajectoire’ corpus. It encodes the Source-oriented spatial information, as examples (597) and (598) below show.

- (597) *u jhaaNibaaTa niskera hindai cha*
u-Ø jhaaDi-baaTa nisk-era hi~D-dai cha
 3SG-NOM bush-ABL exit-CP walk-DUR COP₂.NPST.3SG.NH
 ‘Coming out of the bush he is walking.’
 (Lit. ‘Exiting outside from the bush he is walking.’ [Traj_027_s5])

- (598) *u jannngalbaaTa aai*
u-Ø janggal-baaTa aa-i
 3SG-NOM forest-ABL come-PST.3SG.F.NH
 ‘She came from the forest.’ [Traj_027_s21]

The nominals *jhaaDi* ‘bush’ and *janggal* ‘forest’ in these examples are reference locations for exiting and coming events and the Source of these events is conveyed by the ablative case marker *-baaTa* ‘from’. In some cases, as in examples (599) and (600), this grammatical morpheme seems to encode location in addition to its typical ablative use (cf. § 2.2.2.2).

- (599) *uniharu pulbaaTa hi~Dirahekaa chan*
uni-haru-Ø pul-baaTa hi~D-i-rah-ekaa chan
 3-PL-NOM forest-ABL walk-ABS-remain-PFV.PL COP₂.NPST.3PL
 ‘They are walking on the bridge.’
 (Lit. ‘They have been walking from the bridge.’ [Traj_045_s8])

- (600) *yi purus jangngalko*
yi purus janggal-ko
 DEM.PROX.H man forest-GEN
bicbaaTa kudiraachan
bic-baaTa kud-i-rah-ekaa-chan
 middle-ABL rush-ABS-remain-PFV-COP₂.NPST.3SG.H
 ‘This man is running in the middle of the forest.’
 (Lit. ‘This man has been running from the middle of the forest.’ [Traj_060_s1])

We would expect the use of the locative case marker *-maa* ‘LOC’ in these examples; yet, some speakers construed these events using the ablative case marker *-baaTa* ‘from’. Although the use of the ablative case marker in these examples is interesting and intriguing, I will not discuss this issue further as it needs a detailed

investigation based on a larger set of data in order to understand the extent of use of this marker and its functions.

In Chapter 4 (§ 4.3.2), I have shown that there are two different morphemes encoding the ablative function: *-baaTa* ‘from’ and *-dekhi* ‘from’. However, in the ‘Trajectoire’ corpus, the use of *-baaTa* ‘from’ is more frequent (34.2%) than the use of *-dekhi* ‘from’ (only 10 occurrences in the dataset). Examples (601) and (602) show the use of *-dekhi* ‘from’.

- (601) *makaibaaridekhi Tokari liera baaira niskin*
makaibaari-dekhi Tokari liera baahira nisk-in
 corn.field-ABL basket take-CP outside exit-PST.3SG.F.H
 ‘She took a basket and came out of the cornfield.’
 (Lit. ‘She took a basket and then exited outside from the cornfield.’
 [Traj_038_s9])

- (602) *pahaaNdekhi kholaamaa haam phaal-yo*
pahaad-dekhi kholaa-maa haam phaal-yo
 hill-ABL stream-LOC jump throw-PST.3SG.M.NH
 ‘He jumped into the stream from the hill.’
 (Lit. ‘He threw himself into the stream from the hill.’) [Traj_064_s9]

In these examples, two different Grounds *makaibaari* ‘cornfield’ and *pahaad* ‘hill’ are marked by *-dekhi* ‘from’ indicating the Source of Motion events (e.g., *linu* ‘to take’, *niskanu* ‘to exit’, and *haam phaalnu* ‘lit. to jump throw’).

5.3.4.2 The locative case marker *-maa* ‘LOC’

In the ‘Trajectoire’ corpus, the use of the locative case marker *-maa* ‘LOC’ accounts for 27.6% of the total dataset ($N=949$). However, in addition to its typical locative function, the data also show that *-maa* ‘LOC’ can also mark the Goal. Therefore, its single form triggers dual function: location, as is shown in examples (603) and (604), as well as Goal, as is shown in (605) and (606) (cf. § 2.2.2.2, see also § 4.3).

- (603) *yi* *purus* *jangngalko*
yi *purus* *janggal-ko*
 DEM.PROX man forest-GEN
bicmaa *kudiraachan*
bic-maa *kud-i-rah-eka-chan*
 middle-LOC rush-ABS-remain-PFV.H-COP₂.NPST.3SG.H
 ‘This man has been running in the middle of the forest.’ [Traj._042_s1]

- (604) *caurmaa* *hi~Diraheki* *cha*
caur-maa *hi~D-i-rah-eki* *cha*
 meadow-LOC walk-ABS-remain-PFV.F COP₂.NPST.3SG.NH
 ‘(She) has been walking in the meadow.’ [Traj_040_s2]

In the examples above, *janggal* ‘forest’ and *caur* ‘meadow’ are marked by the locative case marker *-maa* ‘LOC’ indicating where the Figure’s activity *kudnu* ‘to run’ and *hi~Dnu* ‘to walk’ is taking place. Unlike these two examples, the same marker *-maa* ‘LOC’ conveys the Goal (direction of Motion) where the Figures are moving to, i.e. *khola* ‘stream’ and *ganDaki* ‘river’ respectively in examples (605) and (606).

- (605) *uni* *kholaamaa* *gain*
uni-Ø *khola-maa* *ga-in*
 3SG.H-NOM stream-LOC go-PST.3SG.F.H
 ‘She went to the stream.’ [Traj_073_s6]
- (606) *maathibaaNa* *gannakya~* *phangngaalyo*
maathi-baaTa *ganDaki-maa* *phaal* *haal-yo*
 above-ABL river-LOC throw put-PST.3SG.M.NH
 ‘From above/up, he jumped into the river.’ [Traj_064_s4]

It is also worth mentioning here that in the ‘Put and Take’ corpus, we noticed the use of the locative case marker in some Source-oriented descriptions but such uses were mainly triggered by complex constructions. The ‘Trajectoire’ corpus does not attest any uses of *-maa* ‘LOC’ in Source-oriented descriptions.

5.3.5 Postpositions

A variety of postpositions occur in the ‘Trajectoire’ corpus including *-bhitra* ‘inside’, *-tira* ‘toward’, *-maathi* ‘above’, and *-muni* ‘below’ among many others (for more information on these grammatical devices, see Adhikari, 2071 VS (2014 AD): 65)). They have primarily a locative function and, hence, can be used alone in the expression of Goal-oriented events and to be used in the expression of Source-oriented events, they have to combine with the ablative case marker which conveys directionality. In the corpus, postpositions account for 29.8% of spontaneous Motion descriptions. The criteria for the analysis are the same viz. whether they express orientation, boundary crossing, and Source or Goal as discussed in Section 5.3.1.1.

a. *-bhitra* ‘inside’

Of different types of postpositions found in the data, *-bhitra* ‘inside’ is the most frequent, (12.7% of the total, $N=949$). Its uses in the dataset show that it is indifferent to the horizontal vs. vertical orientation. The ‘Trajectoire’ corpus clearly shows that *-bhitra* is the typical device used in the expression of boundary crossing along with its Goal-oriented function. Examples (607) and (608) below will show its uses.

(607) *u* *guphaabhitra* *chiryo*
u-Ø *guphaa-bhitra* *chir-yo*
 3SG-NOM cave-**inside** enter-PST.3SG.M.NH
 ‘He went into the cave.’
 (Lit. ‘He entered into the cave.’) [Traj_060_s21]

(608) *u* *guphaabhitra* *pasyo*
u-Ø *guphaa-bhitra* *pas-yo*
 3SG-NOM cave-**inside** enter-PST.3SG.M.NH
 ‘He went into the cave.’
 (Lit. ‘He entered into the cave.’) [Traj_058_s22]

What might particularly draw our attention in these examples is that *-bhitra* ‘inside’ clearly indicates the Goal of the Figure *u* ‘she/he’ and the boundary crossing. However, though to a lesser extent, the data also reveal that *-bhitra* is used to indicate

location and that it is used in the expression of Source-oriented events. Examples (609) and (610) show its use in the expression of Source, and (611) shows its locative function.

- (609) *u* *guphaabhitrabaaTa* *aayo*
u-∅ *guphaa-bhitra-baaTa* *aa-yo*
 3SG-NOM cave-**inside**-ABL come-PST.3SG.M.NH
 ‘He came out of the cave.’
 (Lit. ‘He came from inside the cave.’) [Traj_030_s21]

- (610) *u* *oNaarbhitrabaaTa* *baaira* *aayo*
u-∅ *oDhaar-bhitra-baaTa* *baahira* *aa-yo*
 3SG-NOM cave-**inside**-ABL outside come-PST.3SG.M.NH
 ‘He came out of the cave.’
 (Lit. ‘He came out from inside the cave.’) [Traj_030_s3]

Note that in the expression of the Source, *-bhitra* ‘inside’ is combined with the ablative case marker. Hence, this example shows that *-bhitra* ‘inside’ conveys the configuration of the Ground, while the ablative marker *-baaTa* ‘from’ indicates the directionality, and that together they indicate boundary crossing. Nevertheless, the use of *-bhitra* ‘inside’ is neither triggered by the boundary crossing constraint nor the directionality when it is used in the locative function as in (611).

- (611) *u* *janggalbhitra* *hi~Ndai* *cha*
u-∅ *janggal-bhitra* *hi~D-dai* *cha*
 3SG-NOM forest-inside walk-DUR COP₂.NPST.3SG.NH
 ‘He is walking inside the forest.’ [Traj._026_s5]

b. *-tira* ‘toward’

The ‘Trajectoire’ dataset confirms that *-tira* ‘toward’ normally marks the Goal-oriented event with the concept of nearness rather than final arrival. However, we did not find any use implying the orientation, vertical vs. horizontal, and its use in the data does not show any boundary crossing. In the spontaneous Motion description, the postposition *-tira* ‘toward’ is the second most frequent postposition occurring in 79 motion descriptions. Examples (612) and (613) below show the use of *-tira* ‘toward’.

- (612) *u janggaltira chirdai cha*
u-Ø janggal-tira chir-dai cha
 3SG-NOM forest-**toward** enter-DUR COP₂.NPST.3SG.NH
 ‘He is going toward the forest.’ [Traj_026_s14]

- (613) *uniharu paanitira gae*
uni-haru-Ø paani-tira ga-e
 3-PL-NOM water-**toward** go-PST.3PL
 ‘They went toward the water.’ [Traj_066_s20]

In these examples, the Ground components *janggal* ‘forest’ and *paani* ‘water’ are marked by *-tira* ‘toward’ indicating the direction of the Figure’s Motion. We may also note that *-tarpha* ‘toward’ and *-paTTi* ‘toward’ have a similar function to that of *-tira* ‘toward’. However, these pospositions are less frequent in the ‘Trajectoire’ corpus than *-tira* ‘toward’. Examples (614) and (615) show the use of *-tarpha* ‘toward’, and (616) shows the use of *-paTTi* ‘toward’.

- (614) *uni janggaltarpha agaaDi*
uni-Ø janggal-tarpha agaaDi
 3H-NOM forest-**toward** toward.front
baNhiraheki chin
baDh-i-rah-eki chin
 grow-ABS-remain-PFV.F COP₂.NPST.3SG.F.H
 ‘She has been going toward the forest.’ [Traj_052_s6]

- (615) *u caurbaaTa jhaaNitarpha prabes gari*
u-Ø caur-baaTa jhaaDi-tarpha prawes gar-i
 3-NOM meadow-ABL bush-**toward** entrance do-PST.3SG.F.NH
 ‘She went toward the bush from the meadow.’
 (Lit. ‘She entered toward the bush from the meadow.’) [Traj_057_s5]

- (616) *bagai~caabaaNa yetaapaTTi aako cha*
bagai~caabaaTa yetaa-paTTi aa-eko cha
 garden-ABL here-**toward** come-PFV.M COP2.NPST.3SG.NH
 ‘From the garden he has come toward this side.’ [Traj_055_s4]

c. *-maathi* ‘above’

Depending on the type of motion descriptions in the ‘Trajectoire’ corpus, *-maathi* ‘above’ expresses the vertical orientation (the upward directionality) as well as the location. Example (617) shows that it expresses the direction (vertical orientation) whereas examples (618) and (619) encode the locative function.

- (617) *uphriera Dhunggaamaathi caNe*
uphri-era Dhunggaa-maathi caDh-e
 jump-CP stone.OBL-**above** climb-PST.3SG.H
 ‘He went up the stone jumping.’
 (Lit. ‘He ascended the stone jumping.’ [Traj_062_s10])

- (618) *dubaamaathi dauNiraicha*
dubaa-maathi dauD-i-rah-eki-cha
 green.grass.OBL-**above** run-ABS-remain-PFV.F- COP2.NPST.3SG.NH
 ‘(She) has been running on the green grass.’ [Traj_044_s4]

- (619) *u Dhunggaamaathi hi~Nirahekocho*
u-∅ Dhunggaa-maathi hi~D-i-rah-eko-cha
 3SG-NOM stone.OBL-**above** walk-ABS-remain-PFV.M-COP2.NPST.3SG.NH
 ‘He has been walking on the stone.’ [Traj_076_s5]

We would normally expect the use of the locative case marker *-maa* ‘LOC’ in examples (618) and (619). Instead participants use *-maathi* ‘above’ that encodes the locative function, where the Ground components *dubo* ‘green grass’ and *Dhunggo* ‘stone’ are marked by this morpheme. Compared to other grammatical devices discussed earlier in this Section, *-maathi* ‘above’ is less frequent in the ‘Trajectoire’ dataset (which means 37 occurrences in total).

- (623) *u rukhnajikaibaaTa dauDi~dai yetaa aai*
u-∅ rukh-najik-ai-baaTa dauDi~-dai yataa aa-i
 3SG-NOM tree-**near**-EMP-ABL run-DUR here come-PST.3SG.F.NH
 ‘She came here running from near the tree.’ [Traj_033_s17]

However, here again, in the expression of a Source-oriented event, *-najik* is combined with the ablative case marker *-baaTa* ‘from’. Note also that *-nera* ‘near’ conveys a meaning similar to *-najik* ‘near’, as illustrated in (624) below.

- (624) *u Thulo rukhnera gai*
u-∅ Thulo rukh-nera ga-i
 3SG-NOM big tree-**near** go-PST.3SG.F.NH
 ‘She went near the big tree.’ [Traj_061_s5]

f. *-samma* ‘until’

This is the least frequently used postposition in the spontaneous Motion description encoding only the Goal irrespective of its orientation (vertical vs. horizontal), as in example (625).

- | | | | |
|-------|---------------|----------------------|----------------------|
| (625) | <i>uni</i> | <i>rukho</i> | <i>phedsamma</i> |
| | <i>uni-∅</i> | <i>ruk-ko</i> | <i>phed-samma</i> |
| | 3SG-NOM | tree-GEN | bottom- until |
| | <i>pugera</i> | <i>tyaa~baaTa</i> | <i>pharkin</i> |
| | <i>pugera</i> | <i>tyahaa~-baaTa</i> | <i>phark-in</i> |
| | reach-CP | there-ABL | return-PST.3SG.F.H |
- ‘She went until the bottom (lower part) of the tree and then returned from there.’
 [Traj._061_s9]

g *-thiu~* ‘closer’/‘near’

The last postposition to be introduced here is *-thiu~* ‘near’. It encodes the Goal, as illustrated below in (626). Some speakers tend to use this linguistic device *-thiu~* ‘closer’ instead of *najik* ‘near’ or *nera* ‘near’ which shows that their use overlaps from each other.

(626)	<i>jangngalko</i>	<i>cheumaa</i>	<i>sutiraako</i>	<i>keTithim</i>
	<i>janggal-ko</i>	<i>cheu-maa</i>	<i>sut-i-rah-eki</i>	<i>keTi-thiu~</i>
	forest-GEN	side-LOC	sleep-ABS-remain-PFV.F	girl- near
	<i>ekjaanaa</i>	<i>keTaa</i>	<i>pugyo</i>	
	<i>ek-janaa</i>	<i>keTaa-Ø</i>	<i>pug-yo</i>	
	one-CLF	boy.OBL.NOM	reach-PST.3SG.M.NH	

‘A boy went near the girl who has been sleeping by the side of the forest.’
[Traj_036_s11]

5.4 Distribution of Path in morphosyntactic loci

This Section is mainly concerned with the following research questions:

1. How is Path distributed in different morphosyntactic loci across the clause in spontaneous Motion descriptions?
2. Is there any dialectal variation among participants in regard to the use of different morphosyntactic devices and the patterns of distribution of Path information?

The ‘Trajectoire’ dataset reveals that the Path can be distributed in different morphosyntactic loci. It can be distributed in one locus up to six morphosyntactic loci, as Table 91 shows.

Morphosyntactic loci	N° of occurrences	Percentage
1	121	12.8
2	300	31.6
3	171	18
4	45	4.7
5	14	1.5
6	2	0.2
<i>No Path</i>	296	31.2
Total	949	100

Table 91. Morphosyntactic loci in the Path expression

As shown in Table 91, there is a variability in the number of morphosyntactic loci used in the expression of Path. Before we turn to the discussion of these patterns, it is important to present the rationale behind this analysis. When describing video clips, some speakers focused on description of the Manner of Motion without expressing the Path, as is the case in examples (627) and (628).

(627) *u* *dauDyo*
u-Ø *dauD-yo*
 3SG-NOM **run**-PST.3SG.M.NH
 ‘He ran.’ [Traj_063_s21]

(628) *uniharu* *janggalmaa* *hindai* *chan*
uni-haru-Ø *janggal-maa* *hi~D-dai* *chan*
 3-PL-NOM forest-LOC walk-DUR COP₂.NPST.3PL
 ‘They are walking in the forest.’ [Traj_041_s15]

In (627), there is no reference to the spatial location of Motion, and in (628), we observe the use of the locative marker *-maa* ‘LOC’ which indicates the location where the event is taking place rather than the direction of the Figure’s movement. These types of examples are not included in the analysis of patterns of Path distribution. Furthermore, in some descriptions, speakers use the verbs of caused Motion such as *uThaaunu* ‘to pick up’ and *linu* ‘to take’, as in (629). Neither are such examples included in the analysis.

(629) *usle* *Tokari* *liera* *gai*
us-le *Tokari* *li-era* *ga-i*
 3SG-ERG basket **take**-CP go-PST.3SG.F.NH
 ‘She took a basket and went.’ [Traj_024_s5]

Furthermore, I did not include into the analysis examples where motion descriptions consist of English verbs such as *jamp garnu* ‘lit. jump do’, *kras garnu* ‘lit. cross do’ nor did I include descriptions containing verbs such as *bheT hunu* ‘to meet’, which do not describe the Motion of the Figure. All the above examples, describing mainly Manner of Motion are categorized as ‘No Path’ category; they account for 31.2 % of motion descriptions.

In what follows I will investigate the distribution of Path information in various morphosyntactic loci considering the expression of Source-, Median-, and Goal-oriented events that involve simplex as well as complex clauses/constructions.

5.4.1 Path encoding in Source-oriented events

Of the total data in the ‘Trajectoire’ corpus ($N=949$), descriptions conveying the Source-oriented events amount to 104 corresponding to 11% of the dataset. Path is distributed in a minimum of one morphosyntactic locus up to as many as four loci. However, it is the pattern consisting of three morphosyntactic loci that is the most frequent in Source-oriented events comprising 54 motion descriptions, accounting for 51.9% of the total ($N=104$) as Table 92 shows this. I will discuss each of these patterns in the subsequent paragraphs.

Morphosyntactic loci	N° of motion descriptions	Percentage
1	9	8.7
2	33	31.7
3	54	51.9
4	7	6.7
<i>No Path</i>	1	1
	104	100

Table 92. Path encoding in Source-oriented events

a. Pattern 1. Path in one morphosyntactic locus

The analysis reveals that in nine motion descriptions (8.7% of the total data in Source-oriented events), the Path is expressed in one morphosyntactic locus in the verb alone, as in (630).

- (630) *u* *paanimaa* *pauNi*
u-Ø *paani-maa* *pauDi*
 3SG-NOM water-LOC swimming
khelera *pharkekocha*
khel-era ***phark-eko-cha***
 play-CP **return-PFV.M-COP2.NPST.3SG.M.NH**
 ‘He has returned (by) swimming in water.’
 (Lit. ‘He has returned (by) playing swimming in water.’) [Traj_022_s1]

Example (630) shows that Path is encoded only by the verb *pharkanu* ‘to return’ in a single morphosyntactic locus and that no other devices are used to convey the concept of Path.

b. Pattern 2. Path in two morphosyntactic loci

In the ‘Trajectoire’ corpus, there are 33 motion descriptions that is 31.7% of the total ($N=104$) where Path is distributed in two morphosyntactic loci depicting the Source-oriented events, as in the following examples (631) and (632).

- (631) *u* *jhaaNibaaTa* *niski~daicha*
u-Ø *jhaaDi-baaTa* ***niski~-dai-cha***
 3SG-NOM bush-ABL **exit-DUR-COP2.NPST.3SG.M.NH**
 ‘He is coming out of the bush.’
 (Lit. ‘He is exiting from the bush.’) [Traj_055_s15]

- (632) *pauNi* *khelera* *baaira* *niski~daicha*
pauDi *khel-era* ***baahira*** ***niski~-dai-cha***
 swimming play-CP **outside** **exit-DUR-COP2.NPST.3SG.M.NH**
 ‘Having swum/ (by) swimming (he) is coming outside.’
 (Lit. ‘Having swum/ (by) swimming (he) is exiting outside.’) [Traj_031_s2]

In both examples, Path is distributed in two morphosyntactic loci, between the verb *niskanu* ‘to exit’ and the ablative case marker *baaTa* ‘from’ in (631), and the verb *niskanu* ‘to exit’ and the adverb *baahira* ‘outside’ in (632). Note, however, that in the case of (632), the adverb conveys both the Source Ground and the Source Path.

c. Pattern 3. Path in three morphosyntactic loci

The ‘Trajectoire’ corpus shows 54 motion descriptions that correspond to 51.9% of the total ($N=104$) in the Source-oriented events where Path is distributed in three loci, as illustrated in (633) and (634). As mentioned earlier, this is the most frequent pattern found in the expression of the Source-oriented events.

(633) *u caai~ bhakkhar guphaabaaTa baaira niski*
u-∅ caahi~ bharkhar guphaa-baaTa baahira nisk-i
 3SG-NOM DPRT just cave-ABL **outside** **exit**-PST.3SG.F.NH
 ‘She just came out of the cave.’

(Lit. ‘She just exited outside from the cave.’ [Traj_029_s15])

(634) *uni makaibaaribaaTa baaira niskin*
uni-∅ makai-baari-baaTa baahira nisk-in
 3SG.H-NOM corn-field-ABL **outside** **exit**-PST.3SG.F.H
 ‘She came out of the corn field.’

‘She exited outside from the corn field.’ [Traj_038_s20]

In both examples, Path is distributed among three different linguistic devices, the verb *niskanu* ‘to exit’, the ablative case marker *-baaTa* ‘from’ and the adverb *baahira* ‘outside’ which occur together in a simplex construction. In the case of the adverb *baahira* ‘outside’, the single form expresses simultaneously two semantic elements, the Source Path and the Source Ground.

d. Pattern 4. Path in four morphosyntactic loci

In seven motion descriptions, which is 6.7% of the total data ($N=104$), Path is distributed in four morphosyntactic loci, as in examples (635) and (636).

(635) *u oNaarbhitrabaaTa baaira niski*
u-∅ oDhaar-bhitra-baaTa baahira nisk-i
 3SG-NOM cave-**inside**-ABL **outside** **exit**-PST.3SG.F.NH
 ‘She came out of the cave.’

(Lit. ‘She exited outside from inside the cave.’) [Traj_029_s17]

- (636) *u* *bistaarai* *oNaarbhitrabaaTa* *baaira* *niski*
u-Ø *wistaarai* *oDhaar-bhitra-baaTa* *baahira* *nisk-i*
 3SG-NOM slowly cave-**inside**-ABL **outside** **exit**-PST.3SG.F.NH
 ‘From inside the cave she came out slowly.’
 (Lit. ‘From inside the cave she exited outside slowly.’) [Traj_025_s3]

Examples (635) and (636) show the use of the same morphosyntactic devices, namely the postposition *-bhitra* ‘inside’, the ablative case marker *-baaTa* ‘from’, the adverb *baahira* ‘outside’, and the verb *niskanu* ‘to exit’ that interplay in the encoding of Path meaning in Source-oriented events. Although the postposition *-bhitra* ‘inside’ typically encodes the Goal Path, in the examples above, it is used in its Source function due to the fact that it is combined with the ablative case marker *-baaTa* ‘from’ and indicates the configuration of the Ground. In the case of *baahira* ‘outside’, it conveys the Source Path as well as the Source Ground. Although the distribution of Path in four morphosyntactic loci is the least frequent in the corpus, these examples are interesting because all these linguistic devices are involved in encoding the Path in a single independent clause.

5.4.2 Path encoding in Median-oriented events

Median-oriented events are represented by 43 motion descriptions in the ‘Trajectoire’ corpus as shown in Table 93.

Morphosyntactic loci	N° of motion descriptions	Percentage
1	33	76.7
2	8	18.6
3	2	4.7
Total	43	100

Table 93. Path encoding in Median-oriented events

In Median-oriented events, Path is distributed in one locus up to three morphosyntactic loci and Path distributed in one locus is the most frequent pattern of all. In what follows, I will discuss these patterns.

a. Pattern 1. Path in one morphosyntactic locus

There are 33 motion descriptions corresponding to 76.7% of the total ($N=43$) where Path is distributed in one locus in the description of the Median-oriented Path, as in examples (637) and (638).

(637) *usle pul taryo*
us-le pul tar-yo
 3SG-ERG bridge **cross**-PST.3SG.M.NH
 ‘He crossed the bridge.’ [Traj_050_s19]

(638) *uniharule kaaThko saano pul paar gare*
uni-haru-le kaaTh-ko saano pul paar gar-e
 3-PL-ERG wood-GEN small bridge **cross do**-PST.3PL
 ‘He crossed the bridge.’ [Traj_045_s19]

In both examples, Path is encoded merely in the verb. Note, however, that in example (637), Path is conveyed by the monomorphemic verb *tarnu* ‘to cross’ but in the case of (638), it is expressed in the light verb construction *paar garnu* ‘lit. cross do’.

b. Pattern 2. Path in two morphosyntactic loci

In the ‘Trajectoire’ corpus, there are eight motion descriptions (i.e. 18.6% of the total data, $N=43$) where Path is distributed in two morphosyntactic loci. Example (639) which displays this type of distribution shows the encoding of Median Path between the light verb *paar garnu* ‘lit. cross do’ and the postposition *maaphat* ‘via’.

(639) *u hi~Nera pulmaaphat kholaa paar garyo*
u-∅ hi~D-era pul-maaphat kholaa paar gar-yo
 3SG-NOM walk-CP bridge-**via** stream **cross do**-PST.3SG.M.NH
 ‘(By) walking via the bridge he crossed the stream.’ [Traj_050_s3]

c. Pattern 3. Path in three morphosyntactic loci

In two motion descriptions of Median oriented events, Path is distributed in three morphosyntactic loci as illustrated in (640).

- (640) *u janggalbaaTa niskera baaTo kaaTi*
u-Ø janggal-baaTa nisk-era baaTo kaaT-i
 3SG-NOM forest-ABL exit-CP road cross-PST.3SG.F.NH
 ‘Having come out of the forest she crossed the road.’
 (Lit. Having exited from the forest she crossed the road.’ [Traj_048_s14]

In the example above, Path is distributed in three morphosyntactic loci between the verb *baaTo kaaTnu* ‘to cross the road’ in the light verb construction, the case marker *-baaTa* ‘from’, and the non-finite conjunctive participle form *niskanu* ‘to exit’. Note, however, that only the light verb encodes the Median-oriented event.

5.4.3 Path encoding in Goal-oriented events

In total, 313 motion descriptions that account for 33% of the total data ($N=949$) represent the Goal-oriented events in which Path is distributed in one morphosyntactic locus up to four loci, as shown in Table 94 below.

Morphosyntactic loci	N° of motion descriptions	Percentage
1	49	15.7
2	213	68.1
3	42	13.4
4	7	2.2
<i>No Path</i>	2	0.6
Total	313	100

Table 94. Path encoding in Goal-oriented events

Path distributed in two morphosyntactic loci is the most frequent pattern in Goal-oriented events which means 68.1% of the total data ($N=313$) in Goal-oriented events. Note also that Goal-oriented events are the most frequent event type in the ‘Trajectoire’ corpus in general. I will discuss each pattern in turn.

a. Pattern 1. Path in one morphosyntactic locus

Our data reveal that in the Goal-oriented events, Path is distributed in one morphosyntactic locus in 49 motion descriptions that correspond to 15.7% of the total ($N=313$). Examples (641) and (642) illustrate this pattern.

(641) *u nadimaa haam phaalyo*
u-∅ nadi-maa haam phaal-yo
 3SG-NOM river-LOC jump throw-PST.3SG.M.NH
 ‘He jumped into the river.’ [Traj_064_s21]

(642) *u caurmaa hindai gai utaa*
u-∅ caur-maa hi~D-dai ga-i utaa
 3SG-NOM meadow-LOC walk-DUR go-PST.3SG.F.NH that.side
 ‘Walking on the meadow she went that side (there).’ [Traj_039_s17]

In both examples, Path is distributed only in one morphosyntactic locus. In (641), it is encoded in the locative case marker *-maa* ‘LOC’ which it indicates the Goal while in (642), it is encoded in the Deixis and Path verb *jaanu* ‘to go’ which also expresses the Goal. The data also show that there are instances where Path can also be expressed by a postposition such as *u nadi-tira dauDyo* ‘he ran toward the river’, however, expressing Path in the postposition alone is a rare strategy, at least in this dataset.

b. Pattern 2. Path in two morphosyntactic loci

The ‘Trajectoire’ corpus shows 213 motion descriptions of the Goal-oriented Path in which Path is distributed in two morphosyntactic loci; it accounts for 68.1% of the total ($N=313$) occurrences. It is the most frequent pattern within the Goal-oriented events as well as in the whole ‘Trajectoire’ dataset. Examples (643) through (645) below show the expression of Path in two morphosyntactic loci.

(643) *u jhaaNibhitra pasyo*
u-∅ jhaaDi-bhitra pas-yo
 3SG-NOM bush-**inside** **enter**-PST.3SG.M.NH
 ‘He entered the bush.’ [Traj_056_s5]

- (644) *uni kholamaa gain*
uni-Ø kholaa-maa ga-in
 3SG.H-NOM stream-LOC go-PST.3SG.F.H
 ‘She went to the stream.’ [Traj_073_s6]

In (643), Path is distributed between the postposition *-bhitra* ‘inside’ and the verb *pasnu* ‘to enter’, and in (644) it is distributed between the case marker *-maa* ‘LOC’ and the verb *jaanu* ‘to go’ (along with its Deictic function). Path can also be distributed between the adverb *bhitra* ‘inside’ and the verb *pasnu* ‘to enter’, as in (645) but, in this example, the adverb encodes both direction (Goal) and the Ground that the Figure reaches.

- (645) *uni bhitra pasin*
uni-Ø bhitra pas-in
 3SG.H-NOM inside enter-PST.3SG.M.H
 ‘She went inside.’
 (Lit. ‘She entered inside.’) [Traj_025_s20]

c. Pattern 3. Path in three morphosyntactic loci

The third pattern consists of 3 morphosyntactic loci that convey the Path. There are 42 motion descriptions of this pattern which account for 13.4% of the total in Goal-oriented events. The following examples (646) and (647) show this type of distribution.

- (646) *u bharyaang orli~dai guphaabhitra pasi*
u-Ø bharyaang orli~-dai guphaa-bhitra pas-i
 3SG-NOM stairs descend-DUR cave-inside enter-PST.3SG.M.NH
 ‘She went to the cave descending the stairs.’
 (Lit. ‘She entered into the cave descending the stairs.’) [Traj_033_s19]

- (647) *pharkera pherai utai bagaicaatira gai*
phark-era pherai utai bagai~caa-tira ga-i
 return-CP stairs that.side.EMP garden-toward go-PST.3SG.F.NH
 ‘Having returned (she) went again toward the garden.’ [Traj_057_s4]

In both examples, Path is encoded in three morphosyntactic loci between verbal elements and the postposition. Note, however, that both examples consist of the complex construction conveyed by the verb *orlanu* ‘to descend’ in the aspectual in (646), and the verb *pharkanu* ‘to return’ in the non-finite conjunctive participle form in (647).

d. Pattern 4. Path in four morphosyntactic loci

Path distributed in four morphosyntactic loci consists of seven motion descriptions in the ‘Trajectoire’ corpus. This pattern is illustrated in (648).

(648) <i>u</i>	<i>bistaarai</i>	<i>hi~Ndai</i>	<i>tala</i>
<i>u-Ø</i>	<i>wistaarai</i>	<i>hi~D-dai</i>	<i>tala</i>
3SG-NOM	slowly	walk-DUR	below
<i>jhardai</i>	<i>taalko</i>	<i>cheumaa</i>	<i>gai</i>
<i>jhar-dai</i>	<i>taal-ko</i>	<i>cheu-maa</i>	<i>ga-i</i>
descend-DUR	lake-GEN	side-LOC	go-PST.3SG.F.NH

‘(By) walking slowly (she) went down to the side of the lake.’

(Lit. ‘(By) walking slowly descending down (she) went to the side of the lake.’[Traj_073_s3])

The example above shows the use of four different morphosyntactic devices conveying Path: the adverb *tala* ‘below’ denotes the vertical Path depicting the downward direction, the verb *jharnu* ‘to descend’ also expresses the vertical Path and the downward movement, the locative case marker *-maa* ‘LOC’ indicates the Goal, and finally the main verb with Deixis and Path meaning also indicates the Goal Path. Although, the example is in complex construction, all lexico-grammatical devices interplay in encoding the Path in the Goal-oriented event.

5.4.4 Path encoding in Source-Goal-oriented events

Source-Goal-oriented events reveal the greatest number of patterns and morphosyntactic loci used to convey the meaning of Path. As a matter of fact, in this type of event, Path is distributed in two up to six morphosyntactic loci, as we can see in Table 95.

Morphosyntactic loci	N° of motion descriptions	Percentage
2	24	18.6
3	61	47.3
4	28	21.7
5	14	10.9
6	2	1.5
Total	129	100

Table 95. Path encoding in Source-Goal-oriented events

The diversity of patterns may be related to the fact that, among complex Path events, Source-Goal-oriented event descriptions are more numerous than Source-, Median-, and Median-Goal-oriented events. Thus, the dataset attests 129 motion descriptions which convey the Source-Goal events. The following paragraphs illustrate the different patterns of distribution found in the encoding of this event type.

a. Pattern 2. Path in two morphosyntactic loci

Data from the ‘Trajectoire’ corpus reveal 24 motion descriptions corresponding to 18.6% of the total in this event type ($N=129$) where Path is distributed in two morphosyntactic loci, as shown in examples (649) and (650).

- (649) *u paahaaNbaaTa kholaamaa haam phaalyo*
u-∅ pahaaD-baaTa kholaa-maa haam phaal-yo
 3SG-NOM hill-ABL stream-LOC jump throw-PST.3SG.M.NH
 ‘He jumped from the hill into the stream.’
 (Lit. ‘He threw himself from the hill into the stream.’ [Traj_064_s19])

- (650) *paahaaNdekhi kholamaa haam phaalyo*
pahaaD-dekhi kholaa-maa haam phaal-yo
 hill-ABL stream-LOC jump throw-PST.3SG.M.NH
 ‘From the hill (he) jumped into the stream.’
 (Lit. ‘From the hill (he) threw himself into the stream.’ [Traj_064_s9])

In both examples, Path is distributed in two case markers. The Source Path is conveyed by the ablative case marker respectively *-baaTa* ‘from’ (649) and *-dekhi* ‘from’ (650) and the Goal is encoded by the locative case marker *-maa* ‘LOC’ in (649) as well as (650). Here, we see the complex Path (Source-Goal) expressed in the simplex clause, yet both examples consist of the same verb *haamphaalnu* ‘lit. jump throw’ that conveys Manner.

b. Pattern 3. Path in three morphosyntactic loci

The ‘Trajectoire’ data reveal 61 motion descriptions in which Path is expressed in three morphosyntactic loci. It represents 47.3% of the total motion descriptions ($N=129$) within the Source-Goal events. This is also the most frequent pattern in this event type. The Path conveyed in three morphosyntactic loci is illustrated in (651) and (652).

- (651) *u maathibaaTa gangngaajimaa haam phaalyo*
u-Ø maathi-baaTa ganggaaji-maa haam phaal-yo
 3SG-NOM above-ABL river-LOC jump throw-PST.3SG.M.NH
 ‘From above he jumped into the river.’ [Traj_064_s17]

- (652) *caurbaaTa janggalbhitra pasdai-cha*
caur-baaTa janggal-bhitra pas-dai-cha
 meadow-ABL forest-inside enter-DUR-COP2.NPST.3SG.M.NH
 ‘From te meadow he is going to the forest.’
 (Lit. ‘From the meadow (he) is entering into the forest.’) [Traj_057_s2]

As illustrated by these examples, morphosyntactic devices conveying Path are distinct i.e. the adverb and case markers in (651) and the case marker, the postposition, and the verb in (652). In (651), the adverb *maathi* ‘above’ conveys both Source

Ground and the vertical orientation depicting upward direction, the ablative case marker *-baaTa* ‘from’ depicts the Source Path, and the locative case marker *-maa* ‘LOC’ conveys the Goal Path. In the case of (652), the ablative case marker *-baaTa* ‘from’ encodes the Source Path and the Goal is conveyed by the postposition *-bhitra* ‘inside’ as well as the verb *pasnu* ‘to enter’. As in the case of pattern 2, in this pattern also, the complex Path is conveyed in the simplex clause.

c. Pattern 4. Path in four morphosyntactic loci

Path that is distributed in four morphosyntactic loci comprises 28 motion descriptions accounting for 21.7% of the total ($N=129$). Examples (653), (654) and (655) illustrate this pattern.

- (653) *uni janggalbaairabaaNa bhitra chire*
uni-Ø janggal-baahira-baaTa bhitra chir-e
 3SG-NOM forest-**outside**-ABL **inside** enter-PST.3SG.M.H
 ‘From outside the forest he went inside.’
 (Lit. ‘From outside the forest he entered inside.’ [Traj_056_s10])

In example (653) Path is expressed in four morphosyntactic loci among all possible types of lexical and grammatical devices: the postposition, the case marker, the adverb and the verb, which combined together, convey the complex Source-Goal Path. Examples below provide some further illustration of this specific pattern of distribution.

- (654) *u euTaa oNaarbaaTa niskera*
u-Ø euTaa oDhaar-baaTa nisk-era
 3SG-NOM one cave-ABL **exit**-CP
arko oNaarmaa chirdaicha
arko oDhaar-maa chir-dai-cha
 another cave-LOC **enter**-DUR-COP₂.NPST.3SG.M.NH
 ‘Having exited from one cave, he is entering the other cave.’ [Traj_060_s10]

(655)	<i>keTaa</i>	<i>oNaarbaaNa</i>	<i>niklera</i>
	<i>keTo-Ø</i>	<i>oDhaar-baaTa</i>	<i>nikl-era</i>
	boy-NOM	cave-ABL	exit -CP
	<i>nadiko</i>	<i>cheutira</i>	<i>gayo</i>
	<i>nadi-ko</i>	<i>cheu-tira</i>	ga-yo
	river-GEN	side- toward	go -PST-3.SG.M.NH
	‘The boy exited the cave and then went toward the bank of the river.’		
	[Traj._028_s11]		

In (654), Path is distributed between two case markers and two verbs and in (655) among the case marker, postposition, and two verbs. In (654), the ablative case marker *-baaTa* ‘from’ and the verb *niskanu* ‘to exit’ in the conjunctive participle form convey the Source Path, and the locative case marker *-maa* ‘LOC’ and the main verb *chirnu* ‘to enter’ encode the Goal Path. In example (655), the ablative case marker *-baaTa* ‘from’, the verb *niskanu* ‘to exit’ in the CP form encode the Source, the postposition *-tira* ‘toward’, and the main verb *jaanu* ‘to go’ (along with the Deictic function) convey the Goal. In both examples we see the complex Path expressed in the complex construction. It appears that some speakers tend to use simple clause with multiple morphosyntactic devices to express the complex Path whereas some others use complex clauses with comparatively less morphosyntactic devices to express the complex Path.

d. Pattern 5. Path in five morphosyntactic loci

Based on the analysis of ‘Trajectoire’ corpus, we could also identify examples where Path is distributed in five different loci although this pattern is less frequent than any of the other patterns discussed earlier; it accounts for 10.9% of the total ($N=129$). Examples that consist of five morphosyntactic loci are given in (656) and (657).

- (656) *u* *makaibaaribhitrabaaTa* *baahiratira* *gai*
u-Ø *makai-baari-bhitra-baaTa* *baahira-tira* *ga-i*
 3SG-NOM corn-field-**inside**-ABL **outside-toward** go-PST.3SG.F.NH
 ‘She went out of the cornfield.’
 (Lit. ‘From inside the cornfield she went toward outside.’) [Traj_038_s19]

- (657) *baahirabaaTa* *bhitra* *oNaarjasto* *Thaau~maa* *gayo*
baahira-baaTa *bhitra* *oDhaar-jasto* *Thaau~ -maa* *ga-yo*
outside-ABL **inside** cave-like place-LOC go-PST.3SG.M.NH
 ‘From outside, (he) went into a place, which is like a cave.’
 (Lit. ‘From outside (he) went inside a cave-like place.’) [Traj_058_s2]

As we can see, in (656), five loci - two postpositions, *-bhitra* ‘inside’ and *-tira* ‘toward’, the case marker *-baaTa* ‘from’, the adverb *baahira* ‘outside’, and the verb *jaanu* ‘to go’ - are involved in a compositional way in conveying the Path in a simple clause. In a similar way, in example (657), Path is distributed in five morphosyntactic loci, although their diversity is less; it involves two adverbials, *baahira* ‘outside’ and *bhitra* ‘inside’, the ablative case marker *-baaTa* ‘from’, the locative case marker *-maa* ‘LOC’, and the verb *jaanu* ‘to go’. These types of constructions seem quite interesting from the typological point of view as they show that Nepali offers several slots to encode Path of Motion, thereby showing a great elaboration of spatial information. In both examples, the complex Path is expressed in a simplex clause.

e. Pattern 6. Path in six morphosyntactic loci

Finally, the last pattern consists of six morphosyntactic loci for Path expression. Note, however, that motion descriptions where the Path is expressed in six loci is the least frequent (2 motion descriptions) in the ‘Trajectoire’ corpus. Examples (658) and (659) show this pattern.

- (658) *uni* *si~Ni* *caNera* *talabaaTa*
uni-Ø *si~Dhi* *caDh-era* *tala-baaTa*
 3SG.H-NOM stairs **ascend-CP** **below-ABL**
maathitira *gairaheki* *chin*
maathi-tira *ga-i-rah-eki* *chin*
above-toward **go-ABS-remain-PFV.F** COP₂.NPST.3SG.F.H
 ‘She is going up from below.’
 (Lit. ‘She has been going toward up from below ascending the stairs.’)
 [Traj_029_s6]

- (659) *u* *maathibaaTa* *khuDkilaa* *tala*
u-Ø **maathi-baaTa** *khuDkilaa* **tala**
 3SG-NOM **above-ABL** stairs **below**
jhardai *guphaabhitra* *prabes* *gari*
jhar-dai *guphaa-bhitra* **prawes** **gar-i**
descend-DUR **cave-inside** **entrance** **do-PST.3SG.F.NH**
 ‘She went into the cave descending the stairs.’
 (Lit. ‘From above/up she entered into the cave descending down the stairs.’)
 [Traj_022_s3]

In example (658), Path is distributed in the verb *jaanu* ‘to go’, the verb *caDhnu* ‘to ascend’ in the CP form, adverbials *tala* ‘below’ and *maathi* ‘above’, the ablative case marker *-baaTa* ‘from’, and the postposition *-tira* ‘toward’. In (659) the Path is also distributed in six morphosyntactic loci: the main verb slot consists of a light verb construction *prawes garnu* ‘entrance do’; besides, we find the verb *jharnu* ‘to descend’ in the progressive aspect showing simultaneity, the ablative case marker *-baaTa* ‘from’, the adverbial *tala* ‘below’, and the postposition *-bhitra* ‘inside’. Despite the fact that Path distributed in six morphosyntactic loci is less frequent in our dataset, it is interesting to see that six different patterns are available in Nepali to encode the spatial information and that speakers use different morphosyntactic devices (verbs, case markers, postpositions and adverbials) available in the language to convey the Path information in varied and often elaborated way.

5.4.5 Path encoding in Median-Goal-oriented events

Of the five different events, Median-Goal-oriented events are the least frequent in our data. In total there are 23 motion descriptions where Path is distributed in two morphosyntactic loci up to three morphosyntactic loci. In this event, Path distributed in two morphosyntactic loci is the most frequent as we can see from Table 96. Each pattern will be discussed below.

Morphosyntactic loci	Nº of motion descriptions	Percentage
2	10	50
3	9	45
No Path	1	5
Total	20	100

Table 96. Path encoding in Median-Goal-oriented events

a. Pattern 2. Path in two morphosyntactic loci

Pattern two, which is illustrated in the following examples (660) and (661), consists of 10 motion descriptions which account for 50% of the total in this event type.

(660) *pul paar garera paari gairaacha*
pul paar gar-era paari ga-i-rah-eko-cha
 bridge cross do-CP that.side go-ABS-remain-PFV.COP2.NPST.3SG.M.NH
 ‘(By) crossing the bridge (he) has been going to the other side/there.’
 [Traj_066_s19]

(661)	<i>u</i>	<i>caai~</i>	<i>kholaako</i>	<i>saa~gu</i>
	<i>u-∅</i>	<i>caahi~</i>	<i>kholaa-ko</i>	<i>saa~ghu</i>
	3SG-NOM	DPRT	stream-GEN	culvert
	<i>naagera</i>	<i>paari</i>	<i>gayo</i>	
	<i>naagh-era</i>	<i>paari</i>	<i>ga-yo</i>	
	cross-CP	that.side	go-PST.3SG.M.NH	
	'(By) crossing the wooden culvert he went there/the other side.'			
	[Traj_050_s14]			

In each example, Path is distributed in two morphosyntactic loci within verbs themselves. The light verb *paar garnu* 'to cross' (660) and *naaghnu* 'to cross' (661) in the non-finite conjunctive participle forms encode the Median-oriented Path, and the main verb together with the Deictic function conveys the Goal Path. Semantically *paari* 'that side' indicates the Ground element in both examples. It (*paari* 'that side') always conveys a sense of away from the Deictic centre or the other side from the speaker normally divided by some geographical boundaries: rivers, streams or hills or even mountains. In both examples, *paari* 'that side' conveys the Goal Ground that the Figures are moving to.

b. Pattern 3. Path in three morphosyntactic loci

In the 'Trajectoire' corpus, there are nine motion descriptions that convey the Median-Goal oriented events where Path is distributed in three morphosyntactic loci. Examples (662) and (663) illustrate this pattern.

(662)	<i>uniharu</i>	<i>baaTo</i>	<i>kaaTera</i>	<i>pokharitira</i>	<i>laage</i>
	<i>uni-haru-∅</i>	<i>baaTo</i>	<i>kaaT-era</i>	<i>pokhari-tira</i>	<i>laag-e</i>
	3-PL-NOM	road	cross-CP	pond- toward	go-PST.3PL
	'(By) crossing the road they went toward the pond.' [Traj_022_s3]				

- (663) *u pulbaaTa kholaa*
u-Ø pul-baaTa kholaa
 3SG-NOM bridge-ABL stream
tardai utaa gayo
tar-dai utaa ga-yo
 cross-DUR that.side go-PST.3SG.M.NH
 ‘(By) crossing the stream via the bridge he went to the other side/there.’
 (Lit. ‘(By) crossing the stream from the bridge he went to the other side./there.’ [Traj_050_s17])

As we see in these examples, Path is distributed between the verb and the postposition in (662), and between the case marker and the verb in (663). The light verb *baaTo kaaTnu* ‘to cross the road’ in the non-finite conjunctive participle form expresses the Median Path, and the postposition *-tira* ‘toward’ and the main verb *laagnu* ‘to go’ convey the Goal Path (662). In the case of (663), the ablative case - *baaTa* ‘from’ and the verb *tarnu* ‘to cross’ convey the Median Path, and the main verb *jaanu* ‘to go’ indicates the Goal Path. Only in few cases though, such as (663), we find the use of the ablative case marker *-baaTa* ‘from’ conveying the Median Path (cf. § 2.2.2.2).

5.4.6 Path encoding in Source-Median-Goal-oriented events

The ‘Trajectoire’ corpus also shows the Source-Median-Goal oriented events where Path is distributed in three up to four morphosyntactic loci. There are three such motion descriptions in the corpus representing this event type. Note that the Source-Median-Goal oriented events are also the least frequent in the ‘Trajectoire’ corpus.

a. Pattern 3. Path in three morphosyntactic loci

There is only one motion description where Path is distributed in three morphosyntactic loci covering all the three portions of Path, Source-Median-Goal, as in example (664). The representation of Path is distributed between the case marker and the verb. The ablative case marker *-baaTa* ‘from’, the verb *tarnu* ‘to cross’ in the

conjunctive participle form, and the main verb *jaanu* ‘to go’ each convey respectively the Source, Median, and the Goal Path, encoding the complex Path in a complex construction.

- (664) *waaribaaTa paari pul tarera gae*
waari-baaTa paari pul tar-era ga-e
 this.side-ABL that.side bridge **cross-CP** **go-PST.3SG.M.H**
 ‘From here/this side (he) went there/that side (by) crossing the
 bridge.’ [Traj_050_s4]

b. Pattern 4. Path in four morphosyntactic loci

Finally, our data show two motion descriptions where Path is distributed in four morphosyntactic loci depicting Source-Median-Goal-oriented Path, as in examples (665) and (666).

- (665) *waaribaaNa kalbaN tarera paaripaTTi gae*
waari-baaTa kalbharT tar-era paari-paTTi ga-e
 this.side-ABL culvert **cross-CP** that.side-**toward** **go-PST.3SG.M.H**
 ‘From this side/here (he) went toward the other side/there (by) crossing the
 culvert.’ [Traj_045_s4]

- (666) *gannakiyo tirdekhi si~Ni kaaTera maathi aain*
ganDaki-ko tir-dekhi si~Dhi kaaT-era maathi aa-in
 river-GEN side-ABL stairs **cross-CP** **above** **come-PST.3SG.F.H**
 ‘From the bank of the river she came up via the stairs.’

(Lit. ‘From the bank of the river she came up crossing the stairs.’) [Traj_074_s4]

In (665), the ablative case marker conveys the Source Path, the verb in the conjunctive participle form indicates the Median, and the postposition and the main verb encode the Goal Path. In the case of (666), the Source is encoded by another ablative case marker *-dekhi* ‘from’, the Median Path is conveyed by the verb *kaaTnu* ‘to cross’, and the Goal is indicated by the adverb *maathi* ‘above’ (indicating the vertical orientation depicting upward direction and Goal Ground) and the main verb *jaanu* ‘to go’. In both examples, the complex Path is expressed in complex clauses.

5.5 Summary

The focus of this chapter was to investigate two issues: (i) the diversity of lexico-grammatical devices used in the expression of spontaneous Motion events, and (ii) the distribution patterns of Path. However, I introduced the Chapter with the types of events, based on the ‘Trajectoire’ video stimuli, and the descriptions provided by the participants, which include simple Path events such as Source-oriented events and Goal-oriented events, and complex Path events that include Source-Goal, Source-Median-Goal, and Median-Goal events (see § 5.1.1 - § 5.1.2). Two main types of constructions were found in the data, simplex and complex constructions, of which the simplex constructions are more frequent (60%) than the complex constructions (39.6 %) (see § 5.2), 0.4% of the data comprise the residue of some incomplete descriptions. As pointed out earlier, one of the main objectives was to investigate the diversity of lexical and grammatical devices in the expression of spontaneous Motion events. Regarding first the diversity of verbs in the ‘Trajectoire’ corpus, 54 different verbs were found in the main verb slot of which only 38 express spontaneous Motion, accounting for 93.1% of the total ($N=949$). Semantically, they convey Path, Manner, Deixis and Path, and Path and Manner. Path verbs, including the Deixis and Path verbs ($N=21$), constitute 58% of the dataset. More fine-grained analysis reveals that Path verbs express Goal-, Source-, and Median-oriented Paths. Some Path verbs also express vertical Motion, oriented upward or downward. Verbs such as *niskanu* ‘to exit’, *pasnu* ‘to enter’, *tarnu* ‘to cross’, and *chirnu* ‘to enter’ indicate the boundary-crossing (see, for e.g., § 5.3.1.2.5) Table 97 illustrates Motion verbs in Nepali encoding the Path component³⁷.

³⁷ This schematic summary is based on Pourcel and Kopecka (2005).

Grammatical devices	Verbs	
<i>bhitra</i> ‘into’	<i>pasnu</i> ‘to enter’	<i>chirnu</i> ‘to enter’
<i>baahira</i> ‘out’	<i>niskanu</i> ‘to exit’	<i>niklanu</i> ‘to exit’
<i>tala</i> ‘down’	<i>jharnu</i> ‘to descend’	<i>orlanu</i> ‘to descend’
<i>maathi</i> ‘up’	<i>uklanu</i> ‘to ascend’	
<i>hu~dai/</i> <i>maarphat</i> ‘via’	<i>tarnu</i> ‘to cross’	

Table 97. Schematic summary of the Path verbs in Nepali

Manner verbs constitute 32.5% of the ‘Trajectoire’ dataset ($N=949$). As pointed out in Section 5.3.1.3, there are 15 verbs in total that express Manner. Based on their individual features, they are further categorized into WALK, RUN, JUMP, WANDER, and TRAVEL categories all of which express activity rather than the events. Verbs in the conjunctive participle (CP) form represent 25.4% of the dataset. The data reveal that the CP forms are mostly used to convey the Path accounting for 10.7% of the data, including Deixis and Path verbs. On the other hand, 12 verbs are involved in the expression of Manner in CP forms corresponding to 8.2% of the dataset (cf. § 5.3.2.1 - § 5.3.2.2).

Among the lexical devices, we find the adverbials. The ‘Trajectoire’ data show two types of adverbials: Path and Manner adverbials. The Path adverbials include, among others, *maathi* ‘above’ indicating the vertical orientation, *baahira* ‘outside’ implying boundary crossing and Source, and *bhitra* ‘inside’ expressing Goal and boundary-crossing. All of these account for 18.9% of the total ($N=949$). Our analysis also shows four adverbials which encode Manner, for e.g., *saraasar* ‘straight way’, *khurukhuru* ‘continuously’ or ‘non-stop’ (see § 5.3.3.1 and 5.3.3.2 for further details).

The grammatical devices consist of case markers and postpositions that account for 92.70% of the dataset ($N=949$). Two ablative case markers, *-baaTa* ‘from’ and *-dekhi* ‘from’, and one locative case marker *-maa* ‘LOC’ are used to encode the spatial information. The ablative case marker *-baaTa* ‘from’ conveying the Source-oriented meaning is the most frequent, accounting for 34.2% of the dataset. The locative case marker *-maa* ‘LOC’ encodes the static location as well as the direction, thereby implying the Goal Path; overall, it accounts for 27.6% (cf. 5.3.4). As for postpositions, they account for 29.8% in the dataset. These include *-bhitra* ‘inside’, *-tira* ‘toward’, -

samma ‘until’, and *-nera* ‘near’, among others. Typically, in the locative function, all of them express Goal-oriented events but when they are used in the expression of the Source, they are combined with the ablative case marker *-baaTa* ‘from’. In such situations, the postpositions convey the configuration of the Ground, while the ablative marker *-baaTa* ‘from’ indicates the directionality. Out of these grammatical resources, *-bhitra* ‘inside’ is the most frequent in the dataset conveying boundary crossing event in addition to indicating the Goal-oriented event (cf. § 5.3.5).

The second objective of this Chapter was to examine how Path is distributed in different morphosyntactic loci (see also § 5.4). We showed that Path can be distributed in one up to six morphosyntactic loci. It can be expressed by a single morphosyntactic device such as verb, case marker, postposition or adverb alone or by a combination of different devices, i.e. both lexical such as verb and adverbial, and grammatical such as case marker and postposition (cf. Wälchli & Solling, 2013).

It is notable that six different patterns for Path expression are available in Nepali to encode the spatial meaning in a varied, and often a fine-grained way. Overall, the expression of Path in two morphosyntactic loci depicting Goal is the most frequent pattern in the ‘Trajectoire’ data.

Chapter 6. Lexicalization patterns in Nepali

In this Chapter, I investigate the types of lexicalization patterns found in Nepali. The term lexicalization, as used in this dissertation, refers to the direct association of certain semantic components with a particular morpheme (Talmy, 1985, 2000: 23, 2007: 69; see also Slobin, 2006; Kopecka, 2010). First, I will analyze and show how the semantic element Path, the core element of Motion event (Talmy, 1991), is lexicalized in Nepali, in the main verb or in a satellite (i.e. grammatical morpheme in a close relation to the verb), based on descriptive (§ 6.1.1) and narrative (§ 6.1.2) data. Following the analyses of descriptive data in Chapter 4 and 5, we saw that Path is lexicalized in the main verb in Nepali, and that this has consequences on the expression of Manner. These consequences are addressed in § 6.1.3 and § 6.2.3. While not very pervasive in the descriptive data, we also found the reverse V-framed pattern that will be discussed in Section 6.1.2 (cf. § 6.2.2). Then, I will scrutinize how descriptive data gathered with the video stimulus sets relate to narrative data extracted from the Nepali National Corpus (§ 6.2). In many respects, narrative data consolidate descriptive data. However, wherever relevant, I will examine the similarities and differences between the two types of data (see, for example § 6.2.3.1.4 and § 6.2.3.2.4). Finally, the summary of the results concludes this Chapter.

6.1 Lexicalization patterns in descriptive (stimuli-based) data

The whole Section (§ 6.1) is devoted to the discussion of descriptive data with particular reference to lexicalization patterns (V-framed, and reverse V-framed patterns), and lexicalization of Manner. These are discussed separately taking into account the caused and spontaneous Motion events.

6.1.1 Verb-framed pattern

The descriptive data show that the V-framed pattern is predominant in regard to the typology of Motion events. It is evidenced by the pervasiveness of motion descriptions, and the number of main verbs lexicalizing the Path. In what follows is the analysis of this pattern in caused and spontaneous events.

6.1.1.1 Caused Motion events

Of the total data in caused Motion events ($N=1158$), the V-framed pattern accounts for 81.5% where 39 different main verbs encode the Path in the clause. Table 98 gives the inventory of the Path verbs found in the data.

Type of Path	Main verbs	English translation
Goal	<i>aDyaaunu</i>	'to put for a while'
	<i>chopnu</i>	'to cover'
	<i>Dhaaknu</i>	'to cover'
	<i>dinu</i>	'to give'
	<i>Dubaaunu</i>	'to dip'
	<i>hasaaunu</i>	'to drop'
	<i>kocaarnu</i>	'to put'
	<i>kocnu</i>	'to put'
	<i>laaunu</i>	'to wear'
	<i>lagaunu</i>	'to wear'
	<i>lukaunu</i>	'to hide'
	<i>puryaunu</i>	'to cause to reach'
	<i>raakhnu</i>	'to put'
	<i>saarnu</i>	'to move further'
<i>siuranu</i>	'to insert'	
Goal with boundary crossing	<i>chiraunu</i>	'to insert'
	<i>ghusaarnu</i>	'to insert'
	<i>haalnu</i>	'to put'
Goal with vertical Motion, downward movement	<i>khanyaunu</i>	'to pour'
	<i>hasaalnu</i>	'to drop'

Goal with Deictic function	<i>lyaaunu</i>	'to bring'
Source	<i>chaaDnu</i>	'to release'
	<i>chaannu</i>	'to take out'
	<i>choDaaunu</i>	'to take off'
	<i>choDnu</i>	'to release'
	<i>chuTTYaaunu</i>	'to separate'
	<i>haTaaunu</i>	'to remove'
	<i>kaaDhnu</i>	'to take off'
	<i>kholnu</i>	'to take off'
	<i>lagnu</i>	'to take away'
	<i>linu</i>	'to take'
	<i>phukaalnu</i>	'to take off'
	<i>Tipnu</i>	'to pick up'
	<i>ughaarnu</i>	'to take out'
	<i>utaarnu</i>	'to take off'
Source with boundary crossing	<i>jhiknu</i>	'to take out'
	<i>nikaalnu</i>	'to take out'
Source with vertical Motion, upward movement	<i>uThaaunu</i>	'to pick up'
	<i>ucaalnu</i>	'to lift'

Table 98. Main verbs lexicalizing different portions of Path in CME in descriptive data

Of the total Path verbs, 21 are monomorphemic (cf. Berman & Slobin, 1987; Talmy, 1991) (cf. § 4.4.2 and § 4.4.3) (e.g., *lagnu* 'to take away', *jhiknu* 'to take out') and 17 of them contain the causative suffix *-aa* (e.g., *chiraaunu* 'to cause to enter', *hasaaunu* 'to drop'). Note that motion descriptions where Path is lexicalized in the main verb of the clause shows the lexicalization of Source-oriented, Goal-oriented, and boundary crossing Paths but there is no evidence of verbs lexicalizing the Median Path in this dataset. Note also that Path verbs that express spontaneous Motion events including Deixis and Path (e.g., *chirnu* 'to enter', *niklanu* 'to exit', *jaanu* 'to go', *aaunu* 'to come') which were used by the speakers in descriptions of caused Motion events are not included in the analysis here.

a. Goal-oriented Path

The analysis reveals that there are 21 different verbs lexicalizing Goal-oriented Path as presented in Table 99 and examples following the Table (cf. § 4.4.2).

Verbs	English translation	Verbs	English translation
<i>aDyaaunu</i>	'to put for a while'	<i>lukaunu</i>	'to hide'
<i>chopnu</i>	'to cover'	<i>puryaunu</i>	'to cause to reach'
<i>Dhaaknu</i>	'to cover'	<i>raakhnu</i>	'to put'
<i>dinu</i>	'to give'	<i>saarnu</i>	'to move further'
<i>Dubaaunu</i>	'to dip'	<i>siuranu</i>	'to insert'
<i>haalnu</i>	'to put'	<i>chiraaunu</i>	'to cause to enter'
<i>khasaunu</i>	'to drop'	<i>ghusaarnu</i>	'to insert'
<i>kocaarnu</i>	'to put'	<i>khanyaaunu</i>	'to pour'
<i>kocnu</i>	'to put'	<i>khasaalnu</i>	'to drop'
<i>laaunu</i>	'to wear'	<i>lyaaunu</i>	'to bring'
<i>lagaunu</i>	'to wear'		

Table 99. Verbs lexicalizing the Goal Path

Examples (667) and (668) below further show the lexicalization of the Goal Path in the main verb.

- (667) AGENT FIGURE GROUND-PATH MOTION+PATH
usle *pustakharu* *Tebalmaathi* *raakhi*
us-le *pustak-haru* *Tebal-maathi* **raakh-i**
 3SG-ERG book-PL table-above **put-PST.3SG.F.NH**
 'She put the books on the table.' [s5, PT 004]

- (668) AGENT GROUND-PATH FIGURE MOTION+PATH
usle *pwaa~lmaa* *kei* *cij* *chiraayo*
us-le *pwaal-maa* *kehi* *cij* **chir-aa-yo**
 3SG-ERG hole-LOC some thing **enter-CAUS-PST.3SG.M.NH**
 'He inserted something into the hole.' [s6, PT 016]

In both examples, verbs *raakhnu* 'to put' in (667) and *chiraaunu* 'to cause to enter' in (668) lexicalize the semantic elements of Path and Motion indicating the Goal. These verbs also express the change of state thereby consolidating the V-framed

pattern. Moreover, the Path is also conveyed by the postposition *-maathi* ‘above’ in (667) and the case marker *-maa* ‘LOC’ (668).

b. Source-oriented Path

In caused Motion events, 18 different verbs lexicalize the Source Path, as presented in Table 100.

Verbs	English translation	Verbs	English translation
<i>chaaDnu</i>	‘to release’	<i>linu</i>	‘to take’
<i>chaannu</i>	‘to take out one by one’	<i>phukaalnu</i>	‘to take off’
<i>choDaaunu</i>	‘to take off’	<i>Tipnu</i>	‘to pick up’
<i>choDnu</i>	‘to release’	<i>ughaarnu</i>	‘to take out’
<i>chuTTyaaunu</i>	‘to separate from one another’	<i>utaarnu</i>	‘to take off’
<i>haTaaunu</i>	‘to remove’	<i>jhiknu</i>	‘to take out’
<i>kaaDhnu</i>	‘to take off’	<i>nikaalnu</i>	‘to take out’
<i>kholnu</i>	‘to take off’	<i>uThaaunu</i>	‘to pick up’
<i>lagnu</i>	‘to take away’	<i>ucaalnu</i>	‘to lift’

Table 100. Verbs lexicalizing the Source Path

Examples (669) and (670) below further show the lexicalization of the Source Path in the main verb.

- (669) AGENT GROUND-PATH FIGURE MOTION+PATH
usle *kaarTunbaaTa* *euTaa* *phal* *nikaalyo*
us-le *kaarTun-baaTa* *euTaa* *phal* ***nikaal***-yo
 3SG-ERG carton-ABL one fruit **take.out**-PST.3SG.M.NH
 ‘He took a fruit out of the carton.’ [s9, PT 127]

- (670) *usle* *rukko* *haa~gaabaaTa* *Dori* *jhikyo*
us-le *rukko* *haa~gaa-baaTa* *Dori* ***jhik***-yo
 3SG-ERG tree-GEN branch-ABL rope **take.out**-PST.3SG.M.NH
 ‘He took the rope out of the branch of the tree.’ [s9, PT 127]

The semantic elements of Path and Motion are lexicalized in verbs *nikaalnu* ‘to take out’ (669) and *jhiknu* ‘to take out’ (670) which occur in simplex clauses depicting

respectively in the verbs *chiraaunu* ‘to cause to enter’ and *nikaalnu* ‘to take out’. In the specific context of these examples, speakers could simply express *he put his head into/inside the pot* (671) or *she took the vegetables out of the bag* (672) to convey the required information (cf. Grice, 1975) but as the language offers alternative choices, some speakers use those options available in the language. Therefore, the same motion descriptions illustrated above read like *he caused his head to **enter into** the pot* (671) or *she took the vegetables **out outside from** the bag* (672). This is due to the occurrence of the postposition *-bhitra* ‘inside’ (671) and the adverb *baahira* ‘outside’ (672) both of which also convey the boundary crossing Path, thereby making this Path more fine-grained and salient.

6.1.1.2 Spontaneous Motion events

As in caused Motion events, the V-framed pattern is highly codable and profiled in spontaneous Motion events. Of the total data ($N=949$), 58% account for occurrences of the V-framed pattern where 21 different verbs lexicalize the Path (cf. § 5.3.1.2). They encode all three portions of Path: the Source, the Median, and the Goal (cf. § 6.1.1.1), as well as Path depicting the vertical Motion, Deixis and Path, and boundary crossing. Table 101 gives the inventory of them all.

Type of Path	Main verbs	English translation
Source	<i>niskanu</i>	‘to exit’
	<i>niklanu</i>	‘to exit’
	<i>pharkanu</i>	‘to return’
	<i>bhaagnu</i>	‘to escape’
Median	<i>tarnu</i>	‘to cross’
	<i>paar garnu</i>	‘to cross’
	<i>baaTo kaaTnu</i>	‘to cross the road’
	<i>naaghnu</i>	‘to pass’/‘to cross’
	<i>khoolaa kaaTnu</i>	‘to cross the stream’
Goal	<i>chirnu</i>	‘to enter’
	<i>pasnu</i>	‘to enter’

	<i>agaaDi baDhnu</i>	‘to advance’
	<i>prawes garnu</i>	‘to enter’
	<i>pugnu</i>	‘to reach’
Deixis and Path	<i>jaanu</i>	‘to go’
	<i>aaunu</i>	‘to come’
General Path verb with Deictic function	<i>laagnu</i>	‘to go’
Vertical Motion, upward movement	<i>uklanu</i>	‘to ascend’
Vertical Motion, downward movement	<i>orlanu</i>	‘to ascend’
Vertical Motion, downward movement	<i>jharnu</i>	‘to descend’
General Path verb	<i>moDinu</i>	‘to change the direction’

Table 101. Main verbs lexicalizing Path in SME in descriptive data

Out of 21 verbs, 17 are monomorphemic, for example, *pugnu* ‘to reach’, *tarnu* ‘to cross’ and *orlanu* ‘to descend’ among many others, and five occur in the light verb construction such as *prawes garnu* ‘to enter’ and *baaTo kaaTnu* ‘to cross the road’.

a. Goal-oriented Path

Spontaneous Motion events (‘Trajectoire’ corpus) show five different verbs lexicalizing the Goal Path, including *chirnu* ‘to enter’, *pasnu* ‘to enter’, *agaaDi baDhnu* ‘to advance’, *prawes garnu* ‘to enter’ and *pugnu* ‘to reach’. Examples (673) and (674) illustrate the lexicalization of the Goal Path.

- (673) FIGURE GROUND-PATH MOTION+PATH
uni *janggalbhitra* *pase*
uni-Ø *janggal-bhitra* *pas-e*
3SG.H-NOM forest-inside **enter**-PST.3SG.M.H
‘He entered the forest.’
(Lit. ‘He entered into the forest.’) [Traj_056_s20]

(674)	FIGURE	GROUND-PATH	MOTION+PATH
	<i>uni</i>	<i>kholaako</i>	<i>kinaarmaa</i> <i>pugin</i>
	<i>uni-Ø</i>	<i>kholaako</i>	<i>kinaar-maa</i> <i>pug-in</i>
	3SG.H-NOM	stream-GEN	side-LOC reach-PST.3SG.F.H
	'She reached the bank of the stream.' [Traj_073_s9]		

As we see in the examples above, Path is lexicalized in the main verbs *pasnu* 'to enter' (673) and *pugnu* 'to reach' (674) within a minimal clause implying the Goal Path, i.e. the movement of the Figure to the final location. Furthermore, the postposition *-bhitra* 'inside' in (673) and the case marker *-maa* 'LOC' in (674) also encode the Goal Path and add some saliency to this part of the Path.

b. Source-oriented Path

In the 'Trajectoire' corpus, there are four verbs, *niskanu* 'to exit', *niklanu* 'to exit', *pharkanu* 'to return', and *bhaagnu* 'to escape', that lexicalize the Source Path as in examples (675) and (676).

(675)	FIGURE	GROUND-PATH	MOTION+PATH
	<i>u</i>	<i>janggalbaaTa</i>	<i>niski</i>
	<i>u-Ø</i>	<i>janggal-baaTa</i>	<i>nisk-i</i>
	3SG-NOM	forest-ABL	exit-PST.3SG.F.NH
	'She came out of the forest.'		
	(Lit. 'She exited from the forest.') [Traj_048_s22]		

(676)	FIGURE	GROUND-PATH	MOTION+PATH
	<i>uni</i>	<i>makaibaaribaaTa</i>	<i>pharkin</i>
	<i>uni-Ø</i>	<i>makai-baari-baaTa</i>	<i>phark-in</i>
	3SG.H-NOM	corn-field-ABL	return-PST.3SG.F.H
	'She returned from the cornfield.' [Traj_038_s6]		

niskanu 'to exit' and *pharkanu* 'to return' are the main verbs that lexicalize the Source Path in the simplex clause thereby showing the V-framed lexicalization pattern. Furthermore, the Source Path information is also indicated by the case marker *-baaTa* 'from'.

c. Median-oriented Path

The part of the Path situated between the Source and Goal is a Median-oriented Path. There are five different verbs lexicalizing the Median Path which include *tarnu* ‘to cross’, *baaTo kaaTnu* ‘to cross the road’, *paar garnu* ‘to cross’, *naaghnu* ‘to pass’/‘to cross’, and *kholaa kaaTnu* ‘to cross the stream’. Examples showing the use of Median-oriented verbs are illustrated in (677) and (678).

(677) FIGURE GROUND MOTION+PATH
usle pul tari
*us-le pul **tar-i***
 3SG-ERG bridge **cross**-PST.3SG.F.NH
 ‘She crossed the bridge.’ [Traj_047_s20]

(678) FIGURE GROUND MOTION+PATH
uniharule baaTo paar gare
*uni-haru-le baaTo **paar** **gar-e***
 3-PL-ERG road **cross** **do**-PST.3PL
 ‘They crossed the road.’ [Traj_066_s10]

In example (677), the Median Path is lexicalized in the monomorphemic verb *tarnu* ‘to cross’ but, in the case of example (678), it is lexicalized in the light verb *paar garnu* ‘lit. cross do’ construction. However, both of them lexicalize this Path within a minimal clause conveying the end state thereby showing the V-framed pattern.

d. Path with vertical Motion

Some verbs that lexicalize the Path in the main verb of a clause also encode the vertical Motion either indicating the upward or the downward movement, as examples (679) and (680) below show.

(679) GROUND.PATH MOTION+PATH

maathi *ukliyo****maathi*** ***ukli-yo*****above** **ascend-PST.3SG.M.NH**

'(He) went up.'

(Lit. '(He) ascended up.')

[Traj_062_s8]

(680) FIGURE

GROUND

u *khaali* *khuTTaa**Dhunggaako**u-∅* *khaali* *khuTTaa**Dhunggaako*

3SG-NOM empty leg

stone-GEN

GROUND GROUND+PATH MOTION+PATH

baaTo *oraalo* *jharyo**baaTo* ***oraalo*** ***jhar-yo***road **downward** **descend-PST.3SG.M.NH**

'He came down bare-footed through the stony road.'

(Lit. 'He descended downward bare-footed through the stony road.')

[Traj_067_s19]

Path is lexicalized in the main verbs *uklanu* 'to ascend' (679) and *jharnu* 'to descend' (680) oriented to upward and downward movement respectively. The adverb *maathi* 'above' (679) and the nominal *oraalo* 'downward' (680) also encode the upward and downward direction respectively. Hence, the encoding of the vertical Path in both verbs and other morphosyntactic devices add to its salience (cf. Kopecka, 2013: 178), meaning something like 'ascended upward' (679) and 'descended downward' (680). This type of construction where the same Path information is conveyed by two items is regular and productive in Nepali.

e. Boundary crossing Path

The results show that the boundary crossing Path is highly lexicalized, and widely codable in Nepali. 21.8% of the spontaneous Motion events descriptions ($N=949$) comprise the verbs lexicalizing the boundary crossing Path. As shown in Table 102, there are 10 verbs lexicalizing this feature. This corresponds to 50% of the Path

verbs used by the speakers to describe the spontaneous Motion events, $N=21$ (cf. § 5.3.1.2.5).

Boundary crossing Path	
Source	<i>niklanu</i> ‘to exit’, <i>niskanu</i> ‘to exit’
Median	<i>tarnu</i> ‘to cross’, <i>paar garnu</i> ‘to cross’ <i>naaghnu</i> ‘to pass’ ‘to cross’ <i>kholaa kaaTnu</i> ‘to cross the stream’ <i>baaTo kaaTnu</i> ‘to cross the road’
Goal	<i>chirnu</i> ‘to enter’, <i>pasnu</i> ‘to enter’, <i>prawes garnu</i> ‘to enter’

Table 102. Verbs lexicalizing the boundary crossing Path

Out of these verbs, six are monomorphemic and four of them are in the light verb construction. What is also a matter of interest regarding these verbs is that not only they lexicalize the boundary crossing Path but also, depending on the verb, the three portions of Path (Source, Median, and Goal), as shown in examples (681) through (683).

- (681) GROUND-PATH GROUND+PATH MOTION+PATH
guphaabaaTa *baahira* *niski*
guphaa-baaTa *baahira* **nisk-i**
cave-ABL outside **exit-PST.3SG.F.NH**
‘She came out of the cave.’
(Lit. ‘She exited outside from the cave.’) [Traj_022_s20]

- (682) FIGURE GROUND MOTION+PATH
tiniharu *saano kholaa tare*
tini-haru-Ø *saano kholaa tar-e*
DEM.DIST-PL-NOM small stream **cross-PST.3PL**
‘They crossed a small stream.’ [Traj_045_s9]

- (683) FIGURE GROUND-PATH MOTION+PATH
uni *oNaarbhitra* *chirin*
uni-Ø *oDhaar-bhitra* **chir-in**
 3SG.H-NOM cave-inside **enter**-PST.3SG.F.H
 ‘She entered the cave.’
 (Lit. ‘She entered into the cave.’) [Traj_053_s9]

The verbs *niskanu* ‘to exit’ (681), *tarnu* ‘to cross’ (682), and *chirnu* ‘to enter’ (683) convey the crossing of three dimensional physical boundaries *oDhaar* ‘cave’ (681) and (682), and *kholaa* ‘stream’ (683), thereby indicating the change of state (Slobin, 2004, 2006: 67). Moreover, the adverb *baahira* ‘outside’ (681), and the postposition *-bhitra* ‘inside’ (683) emphasise the boundary crossing Path.

f. Deixis and Path

Two verbs *jaanu* ‘to go’ and *aaunu* ‘to come’ lexicalize Deixis and Path. I have discussed the criteria for considering them Deixis and Path in Chapter 5 (cf. § 5.3.1.2.6) with special reference to centrifugal vs. centripetal perspective. By virtue of their features, they are more focused on the Deictic centre (i.e. toward the camera in our context) than on the Ground. Nevertheless, in addition to the Deictic component, they also lexicalize the Path component, as examples (684) and (685) illustrate.

- (684) FIGURE GROUND-PATH DEIXIS+PATH
u *janggaltira* *gai*
u-Ø *janggal-tira* **ga-i**
 3SG-NOM forest-toward **go**-PST.3SG.F.NH
 ‘She went toward the forest.’ [Traj_057_s8]

- (685) FIGURE GROUND-PATH DEIXIS+PATH
u *guphaabhitrabaaTa* *aa-i*
u-Ø *guphaa-bhitra-baaTa* **aa-i**
 3SG-NOM cave-inside-ABL **come**-PST.3SG.F.NH
 ‘She came out of the cave.’
 (Lit. ‘She came from inside the cave.’ [Traj_054_s21])

These examples convey the following information: first, if we take the perspective of Deictic centre or the camera (centrifugal vs. centripetal), the first example (684) shows the movement of the Figure away from the Deictic centre viz. centrifugal whereas the second one (685) conveys the movement toward the camera viz. centripetal. Secondly, from the perspective of the Path, the former indicates the Goal (toward the forest) whereas the latter conveys the Source (from the cave). Therefore, both Deixis and Path are lexicalized in the main verb of the clause i.e. *jaanu* ‘to go’ in (684) and *aaunu* ‘to come’ (685)³⁸.

To conclude both Sections 6.1.1.1 and 6.1.1.2, the results confirm that to describe spontaneous Motion events, speakers of Nepali resort to the Verb-framed pattern like some other languages (e.g., French, Spanish), in which the Path of Motion is encoded in the main verb of a clause and Manner is conveyed in the non-finite verb forms (cf. Slobin & Hoiting, 1994: 495). It is the V-framed pattern which asserts results implying actions (Berman & Slobin, 1987). However, we are yet to investigate the narrative data that will further confirm this specific characteristic of Nepali.

6.1.2 Reverse verb-framed pattern

In the literature dedicated to the typology of Motion events, we find the distinction of the V-framed pattern where Path is expressed in the main verb of a clause and Manner in a subordinate construction vs. the Satellite-framed pattern where Manner is expressed in the main verb and Path in a satellite or in any other forms; furthermore, there is the third pattern, called E-framed, where Manner and Path are expressed in equipollent grammatical forms (Slobin, 2004). As was pointed out earlier, the V-framed pattern is frequently used by the speakers in Nepali. However, the stimuli-based descriptive data (the ‘Put and Take’ and ‘Trajectoire’ corpora) also show evidence of the use of a different pattern (cf. § 1.2.1) where the semantic element of Manner is lexicalized in the main verb of the clause and Path is encoded in the non-

³⁸ Note that the Deixis and Path verbs are the most frequent verbs in terms of the number of motion descriptions in the entire ‘Trajectoire’ corpus (cf. § 5.3.1.2.6).

finite CP form. This type of pattern is also discussed by Pourcel (2004b), and Pourcel and Kopecka (2005) in French which is a typical V-framed language. They call this ‘the reverse Path-verb-framing’ (Pourcel & Kopecka, 2005) or ‘verb framed reverse’ pattern (Pourcel, 2004b: 354) where the main verb of a clause encodes the Manner, and Path is conveyed by an adjunct (e.g., *gerund*), as illustrated by (686).

(686) French (Pourcel, 2004 b: 354)

FIGURE		MOTION+MANNER
<i>un</i>	<i>homme</i>	<i>court</i>
ART.INDF	man	run.NPST.3SG
MOTION+PATH	GROUND	
<i>en traversant</i>	<i>la</i>	<i>rue</i>
CROSS.GER	ART.DEF.SG.F	street
‘A man is running across the road.’		

Nevertheless, patterns like this are not discussed extensively in the literature devoted to Motion events. I call this pattern ‘the reverse V-framed pattern’ following Pourcel (2004b), and Pourcel and Kopecka (2005), and argue that speakers use a variety of patterns offered by their language (Slobin, 2004: 220) depending on cultural, discourse, and pragmatic factors. In the following Sections, I discuss this pattern separately in caused and spontaneous Motion events showing the type of Path verbs (Source vs. Median vs. Goal) that speakers use in the conjunctive participle form, and the type of Manner verbs in the main verb slot.

6.1.2.1 Caused Motion events

In caused Motion events (the ‘Put and Take’ corpus), the data show that the reverse V-framed pattern is attested in 0.6% of the total ($N=1158$). In particular, five different speakers (N° of speakers=18) use this pattern, as in examples (687) and (688).

(687)

AGENT	GROUND BE _{LOC}		
<i>usle</i>	<i>bhu~i~maa</i>	<i>raheko</i>	<i>euNaa</i>
<i>us-le</i>	<i>bhui~-maa</i>	<i>rah-eko</i>	<i>euTaa</i>
3SG-ERG	floor-LOC	remain-PFV	one
FIGURE	MOTION+PATH	GROUND-PATH	MOTION+MANNER
<i>jholaa</i>	<i>Tipera</i>	<i>Dhokaa-baaira</i>	<i>phaali</i>
<i>jholaa</i>	<i>Tip-era</i>	<i>Dhokaa-baahira</i>	<i>phaal-i</i>
bag	pick.up-CP	door-outside	throw-PST.3SG.F.NH

‘Having picked up a bag that was on the floor she threw (it) out of the door.’
‘Having picked up a bag that was on the floor she threw (it) outside the door.’
[s5, PT 129]

(688)

FIGURE			
<i>gho~Naa</i>	<i>ra</i>	<i>kukurko</i>	<i>posTar</i>
<i>ghoDaa</i>	<i>ra</i>	<i>kukurko</i>	<i>posTar</i>
horse	and	dog-GEN	poster
		MOTION+PATH	MOTION+MANNER
<i>pepar</i>	<i>pheri</i>	<i>lyaaera</i>	<i>Taa~sin</i>
<i>pepar</i>	<i>pheri</i>	<i>lyaa-era</i>	<i>Taa~s-in</i>
paper	again	bring-CP	paste-PST.3SG.F.H

‘Having brought again the poster of the horse and the dog, she pasted it.’
[s12, PT 028]

These examples show verbs *phaalnu* ‘to throw’ (687) and *Taa~snu* ‘to glue’ (688) which are used in the main clause and lexicalize Manner and Motion and verbs *Tipnu* ‘to pick up’ (687) and *lyaaunu* ‘to bring’ (688) which are used in CP forms and encode Path, thereby showing the reverse V-framed pattern. One important point has to do with the type of Path verbs speakers use in conjunctive participle forms, and the type of Manner verbs they use in the main clause. This is illustrated in Table 103.

Type of Path	Path verbs in the CP form	Type of Manner	Manner verbs in the main clause
Source with boundary crossing	<i>nikaalnu</i> 'to take out'	Force	<i>taannu</i> 'to pull'
Source with vertical Motion, upward movement	<i>Tipnu</i> 'to pick up'	Force	<i>phaalnu</i> 'to throw'
Source with Deictic orientation	<i>lagnu</i> 'to take away'	Force	<i>phyaa~knu</i> 'to throw'
Goal with Deictic orientation	<i>lyaaunu</i> 'to bring'	Adhesion	<i>Taa~snu</i> 'to glue'
		Adhesion	<i>joDnu</i> 'to connect'

Table 103. Types of verbs used in the reverse V-framed pattern

As the Table 103 shows, speakers tend to use in the conjunctive participle form those verbs that lexicalize the Source and Goal Path. These include *lyaaunu* 'to bring', *lagnu* 'to take away', and *nikaalnu* 'to take out'. By semantic category, *lyaaunu* 'to bring' and *lagnu* 'to take away' convey some kind of Deictic meaning showing respectively the Goal and Source Path. The verb *Tipnu* 'to pick up' depicts the orientation, the upward movement conveying the Source Path, and *nikaalnu* 'to take out' expresses the Source Path and the boundary crossing. The data do not show any evidence of Median-oriented Path verbs. As for the main verb slot, speakers use those verbs that semantically imply some force (such as *taannu* 'to pull', *phaalnu* 'to throw', and *phyaa~knu* 'to throw') and adhesion (such as *Taa~snu* 'to paste'/'to glue'). Hence, based on these observations, we can predict that not all types of Path verbs can fit in the conjunctive participle form and, also that not all types of Manner verbs can fit in the main verb slot in the reverse-Path constructions. Yet, it will be interesting to investigate more data to uncover this issue in a comprehensive way. However, what is worth mentioning is that there exist different patterns in the system and that speakers bring them to the fore.

6.1.2.2 Spontaneous Motion events

The reverse V-framed pattern constitutes the second most frequent lexicalization pattern that we found in the spontaneous Motion events, accounting for 1.4% of the total data ($N=949$). Out of 17 speakers, nine of them (both from Parbat and Kathmandu districts) use this pattern, as in examples (689) and (690).

(689)	GROUND-PATH	GROUND+PATH	MOTION- PATH	MOTION+MANNER
	<i>nadibaaNa</i>	<i>baaira</i>	<i>niklera</i>	<i>dagure</i>
	<i>nadi-baaTa</i>	<i>baahira</i>	<i>nikl-era</i>	<i>dagur-e</i>
	<i>river-ABL</i>	<i>outside</i>	exit-CP	run-PST.3SG.M.H

‘Coming out of the river (he) ran (away).’

(Lit. ‘(By) exiting outside from the river (he) ran.’/ ‘He ran (while) coming out of the river.’) [Traj_031_s10]

(690)	FIGURE	GROUND	MOTION+PATH	MOTION+MANNER
	<i>uniharule</i>	<i>pul</i>	<i>tarera</i>	<i>hine</i>
	<i>uni-haru-le</i>	<i>pul</i>	<i>tar-era</i>	<i>hi~D-e</i>
	<i>3SG-PL-ERG</i>	<i>bridge</i>	cross-CP	walk-PST.3PL

‘They walked away crossing the bridge.’/

‘Crossing the bridge they walked away.’ [Traj_045_s20]

The verbs *dagurnu* ‘to run’ (689) and *hi~Dnu* ‘to walk’ (690) which occur in the main clause lexicalize Manner and Motion whereas *niklanu* ‘to exit’ (689) and *tarnu* ‘to cross’ (690) used in the CP form encode the Path. As we further verified the type of Path verbs speakers use in the conjunctive participle form and Manner verb in the main clause, we found the following results.

Type of Path	Path verbs in the CP form
Source with boundary crossing	<i>niskanu</i> 'to exit'
	<i>niklanu</i> 'to exit'
Source	<i>pharkanu</i> 'to return'
Median with boundary crossing	<i>tarnu</i> 'to cross'
	<i>naaghnu</i> 'to cross'
Vertical Motion, upward movement	<i>uklanu</i> 'to ascend'

Table 104. Types of Path verbs in the CP form used in the reverse V-framed pattern

Table 104 shows that speakers mostly use the Source- and Median-oriented Path verbs in the conjunctive participle forms. Some verbs that lexicalize the Source Path (e.g., *niskanu* ‘to exit’, and *niklanu* ‘to exit’) and Median Path (e.g., *tarnu* ‘to cross’ *naaghnu* ‘to cross’) also lexicalize the boundary crossing. There is only one verb that indicates vertical Motion, namely upward movement. Note that there is no Goal-oriented Path verb in the conjunctive participle form in the ‘Trajectoire’ data. As for the main verb slot, speakers use only two verbs *dauDanu* ‘to run’ and *hi~Dnu* ‘to walk’ both of which semantically convey the motor pattern.

6.1.3 Lexicalization of Manner

As was discussed in Section 6.1.1, V-framed pattern is highly consistent in descriptive data. This Section will show that the lexicalization of Path in the main verb has consequences on the expression of Manner. Thus, in the V-framed construction, Manner can be conveyed explicitly, or it can be omitted. This may depend upon the speakers’ ‘communicative intentions’ (A. Kopecka, p. c., December 2020). There are three strategies found in descriptive data to convey the meaning of Manner: a CP form, an imperfective durative aspectual form or an adverbial which typically precedes the Path verb as in some other languages like Japanese or Turkish (cf. Slobin 2004: 15).

6.1.3.1 Caused Motion events

In the expression of caused Motion events, speakers tend to omit Manner very often. This is evidenced by the data: in 45.3% of motion descriptions ($N=1158$) speakers do not use any Manner encoding morphosyntactic devices that is, they typically convey the Path, either Source- or Goal-oriented, in the main verb in the simplex clause. Nevertheless, when Manner is expressed, speakers use several linguistic strategies.

6.1.3.1.1 Manner in the CP form

The conjunctive participle form is one of the most regular strategies that speakers use to express Manner in the context of the main verb lexicalizing the Path. In caused Motion events in descriptive data, Manner is expressed in 15 different verbs in the CP form. Table 105 gives the inventory of these verbs.

Verbs	English translation	Verbs	English translation
<i>aDkaaunu</i>	'to cause to stick'	<i>jhunDyaaunu</i>	'to hang'
<i>boknu</i>	'to carry'	<i>laDaaunu</i>	'to cause to fall'
<i>cyaapnu</i>	'to press'	<i>milaaunu</i>	'to arrange'
<i>dhakelnu</i>	'to push'	<i>phoDnu</i>	'to break'
<i>Dhalaanu</i>	'to cause to fall'	<i>pokhnu</i>	'to spill'
<i>ghuceTnu</i>	'to push'	<i>Taa~snu</i>	'to glue'
<i>haannu</i>	'to hit'	<i>upkaaunu</i>	'to uproot'
<i>hirkaaunu</i>	'to hit'		

Table 105. Verbs in the CP form expressing Manner

Note that Manner verbs occurring in the CP form and modifying verbs of spontaneous Motion such as *hi~Dnu* 'to walk' *jaanu* 'to go' are not taken into account here. Furthermore, the verb *haannu* 'to hit' is taken into account for the investigation because it expresses Manner in the subordinate clause where the main verb of the independent clause lexicalizes Path although it is a typical 'HIT' verb. Examples expressing Manner in the CP form are given in (691) and (692).

(691)	AGENT	GROUND	FIGURE
	<i>usle</i>	<i>gaaNinajikaiko</i>	<i>byaag</i>
	<i>us-le</i>	<i>gaaDi-najik-ai-ko</i>	<i>byaag</i>
	3SG-ERG	vehicle-near-EMP-GEN	bag
	GROUND	MOTION+MANNER	MOTION+PATH
	<i>para</i>	<i>ghaceTera</i>	<i>saaryo</i>
	<i>para</i>	<i>ghuceT-era</i>	<i>saar-yo</i>
	that.side	push-CP	move-PST.3SG.M.NH
	‘He moved the bag farther (that side) by pushing (it).’		
	(Lit. ‘He moved the bag to that side which was near the vehicle		
	(by) pushing (it).’ [s4, PT 052]		

(692)	FIGURE	MOTION+MANNER	MOTION+PATH
	<i>baaksaa</i>	<i>milaaera</i>	<i>raakhe</i>
	<i>baaksaa</i>	<i>milaa-era</i>	<i>raakh-e</i>
	box	arrange-CP	put-PST.3SG.M.H
	‘(He) put the box (by) arranging (it).’ [s17, PT 006]		

In these examples, motion verbs *saarnu* ‘to move’ (691) and *raakhnu* ‘to put’ in (692) are used in the main verb slot. In order to convey Manner, speakers use *ghuceTnu* ‘to push’ (691) (which semantically expresses effort) and *milaaunu* ‘to arrange’ in (692) in the CP form. As mentioned in Talmy (1985) and Slobin (2002, 2004: 253), using the subordinate form to express the Manner functions like an additional morphology.

6.1.3.1.2 Manner in the aspectual form

In certain instances, speakers adopt a different linguistic strategy to express Manner and resort to aspectual (i.e. the imperfective durative aspectual form) morphology, as shown in examples (693) and (694). Verbs in the aspectual form expressing Manner are much less common (so far only four examples) in the dataset under study here.

(693)	AGENT	FIGURE	
	<i>keTaale</i>	<i>euNaa</i>	<i>byaag</i>
	<i>keTaa-le</i>	<i>euTaa</i>	<i>byaag</i>
	boy-ERG	one	bag
	MOTION+MANNER	GROUND	MOTION+PATH
	<i>ghisaardai</i>	<i>utaa</i>	<i>lagyo</i>
	<i>ghisaar-dai</i>	<i>utaa</i>	<i>lag-yo</i>
	drag-DUR	that.side	take.away-PST.3SG.M.NH

‘The boy took one bag (away) to that side (by) dragging (it).’
 (Lit. ‘The boy, dragging one bag, took (it) that way.’) [s12, PT 052]

(694)	AGENT	FIGURE	
	<i>usle</i>	<i>kapmaa</i>	<i>bhaeko</i> <i>paani</i>
	<i>us-le</i>	<i>kap-maa</i>	<i>bha-eko</i> <i>paani</i>
	3SG-ERG	cup-LOC	COP ₃ .PST-PFV water
	MOTION+MANNER		MOTION+PATH
	<i>pokkhyaau~dai</i>	<i>haatmaa</i>	<i>ucaali</i>
	<i>pokhaau~-dai</i>	<i>haat-maa</i>	<i>ucaal-i</i>
	spill-DUR	hand-LOC	lift-PST.3SG.F.NH

‘She lifted the cup in her hand (by) spilling the water that was in it (the cup).’
 (Lit. ‘She spilling the water that was in the cup, lifted (it) in (her) hand.’)
 [s16, PT 021]

Verbs *lagnu* ‘to take away’ (693) and *ucaalnu* ‘to lift’ (694) occur in the main verb slot and are parts of the main event; the subevent is expressed by the Manner verbs *ghisaarnu* ‘to drag’ in (693) (which semantically expresses effort) and *pokhaaunu* ‘to spill’ (694); these occur in the aspectual form and compensate for the absence of Manner in the main verb.

6.1.3.1.3 Manner in adverbials

Besides subordinate constructions and aspectual forms, speakers tend to use the adverbs such as *wistaarai* ‘slowly’ to express Manner, as illustrated in (695) and (696).

(695)	AGENT	FIGURE	MANNER
	<i>unile</i>	<i>pustak</i>	<i>bistaarai</i>
	<i>uni-le</i>	<i>pustak</i>	wistaarai
	3SG.H-ERG	book	slowly
	GROUND-PATH	MOTION+PATH	
	<i>bha~i~maa</i>	<i>raakhidiin</i>	
	<i>bhui~maa</i>	<i>raakh-i-di-in</i>	
	floor-LOC	put-ABS-give-PST.3SG.F.H	
	‘She put the book slowly on the floor.’ [s9, PT 007]		

(696)	GROUND _{BE LOC}	FIGURE	
	<i>haa~gaamaa</i>	<i>raakheko</i>	<i>Dori caai~</i>
	<i>haa~gaa-maa</i>	<i>raakh-eko</i>	<i>Dori caahi~</i>
	branch-LOC	put-PFV	rope DPRT
	MANNER	MOTION+PATH	
	<i>bistaarai</i>	<i>nikaalyo</i>	
	wistaarai	<i>nikaal-yo</i>	
	slowly	take.out- PST.3SG.M.NH	
	(He) took out the rope slowly that (somebody) had put on the branch.’		
	[s14, PT 127]		

The use of adverbs to convey the meaning of Manner also compensates for the absence of Manner in the main clause. By doing so, they provide some additional information about the Figure’s Motion expressed in the main verb. In this dataset, adverbs are often used to convey the semantic component of ‘slowness’. Moreover, the use of such adverbs also suggests that they can replace the syntactically more complex and cognitively much heavier subordinate constructions (cf. Slobin, 2004: 232, 2005: 118; Kopecka, 2010: 238-239).

6.1.3.1.4 Manner in the main verb

We saw in the preceding Sections that verbs in the dependent clause slots lexicalize Manner either in the form of conjunctive participle or in the aspectual form. In such constructions, their function is to compensate for the absence of Manner in the main verb. Moreover, caused Motion events (‘Put and Take’ corpus) show that in

In both examples, the main verbs *hu~i~kyaaunu* ‘to throw’ and *phyyaa~knu* ‘to throw’ lexicalize Manner in a simplex clause which convey the semantic element ‘force’.

6.1.3.2 Spontaneous Motion events

As far as the expression of Manner is concerned, we found similar strategies in caused and spontaneous Motion events. Speakers use the adverbial subordinate clauses (cf. Talmy, 1991: 518) (consisting of either the CP forms or aspectuals) or adverbials to convey the Manner (cf. Slobin & Hoiting, 1994: 495; Slobin, 2005, 2006: 67). However, there are certain differences in the way they are used. They will be addressed at the end of this Section.

6.1.3.2.1 Manner in the CP form

As in the caused Motion events, the first and most frequent strategy that the speakers adopt to express Manner optionally is the use of conjunctive participle form. They use the ‘first tier’ (cf. Slobin, 1997, 2006: 73; Slobin *et al.*, 2014) verbs like *hi~Dnu* ‘to walk’, *dauDnu* ‘to run’, *uphranu* ‘to jump’, and *kudnu* ‘to rush’ among others, as illustrated in (699) and (700).

(699)	FIGURE	MANNER	MOTION+ MANNER	GROUND	MOTION+PATH
	<i>usle</i>	<i>bistaarai</i>	<i>hi~Nera</i>	<i>baaTo</i>	<i>paar gari</i>
	<i>us-le</i>	<i>wistaarai</i>	<i>hi~D-era</i>	<i>baaTo</i>	<i>paar gar-i</i>
	3SG-ERG	slowly	walk-CP	road	cross do-PST.3SG.F.NH
					‘She crossed the road walking slowly.’/ ‘(By) walking slowly she crossed the road.’ [Traj_048_s3]

(700)	FIGURE	GROUND	MOTION+MANNER
	<i>u</i>	<i>kholaamaa</i>	<i>pauNi khelera</i>
	<i>u-Ø</i>	<i>khola-a-maa</i>	<i>pauDi khel-era</i>
	3SG-NOM	stream-LOC	swimming play-CP
	GROUND+PATH	MOTION+PATH	
	<i>baaira</i>	<i>niskyu</i>	

<i>baahira</i>	<i>nisk-yo</i>
outside	exit-PST.3SG.M.NH

‘(By) swimming in the stream, he came out of it.’

(Lit. ‘(By) swimming in the stream, he exited outside.’) [Traj_031_s9]

Two of these examples involve the verbs *paar garnu* ‘to cross’ (699) (in the light verb construction) and *niskanu* ‘to exit’ (700) both of which lexicalize Path. Manner is expressed as a subevent by *hi~Dnu* ‘to walk’ (699) and the light verb *pauDi khelnu* ‘to swim’ (700) in the non-finite CP forms or the subordinate construction (cf. Slobin, 2005). Therefore, the main event in (699) and (700) is respectively ‘crossing the road’ and ‘exiting the stream’ but how crossing and exiting take place are additionally described by verbs in the non-finite CP forms (cf. Talmy, 2000: 45). Moreover, in the case of (699), the adverb *wistaarai* ‘slowly’ further modifies the verb *hi~Dnu* ‘to walk’ and elaborates the Figure’s Motion expressed by the main verb *hi~Dnu* ‘to walk’.

6.1.3.2.2 Manner in the aspectual form

Speakers also use the aspectual (durative) form as their strategy to express Manner in a situation where Path is lexicalized in the main verb of the clause. This type of construction is triggered by the simultaneous event expressed in the main as well as dependent clause slots. Examples (701) and (702) below show the use of Manner in the aspectual forms.

(701) FIGURE	MANNER	MOTION+MANNER
<i>u</i>	<i>bistaarai</i>	<i>hi~Ndai</i>
<i>u-Ø</i>	<i>wistaarai</i>	<i>hi~D-dai</i>
3SG-NOM	slowly	walk-DUR
GROUND-PATH	MOTION+PATH	
<i>oNaarbhitra</i>	<i>pasyo</i>	
<i>oDhaar-bhitra</i>	<i>pas-yo</i>	
cave-inside	enter-PST.3SG.M.NH	

‘He entered the cave walking slowly.’

(Lit. ‘He, walking slowly, entered into the cave.’) [Traj_068_s3]

(702)	AGENT	GROUND-PATH	MOTION+MANNER
	<i>u</i>	<i>kinaarbaaTa</i>	<i>dagurdai</i>
	<i>u-Ø</i>	<i>kinaar-baaTa</i>	<i>dagur-dai</i>
	3SG-NOM	shore-ABL	run-DUR
	GROUND-PATH	MOTION+PATH	
	<i>samunramaa</i>	<i>prawes</i>	<i>garyo</i>
	<i>samundra-maa</i>	<i>prawes</i>	<i>gar-yo</i>
	sea-LOC	entrance	do-PST.3SG.M.NH

‘He went to the sea running from the shore.’

(Lit. ‘He, running from the shore, entered into the sea.’) [Traj_059_s3]

The main verb *pasnu* ‘to enter’ (701) and the light verb *prawes garnu* ‘to enter’ in (702) lexicalize the Path. To compensate for the absence of Manner verb in the main clause, speakers use *hi~Dnu* ‘to walk’ (701) and *dagurnu* ‘to run’ (702) in the aspectual forms. The use of such Manner expression is “an additional activity that the Figure of a Motion event exhibits” (Talmy, 2000: 45; see also Slobin, 2004). Furthermore, in (701), the adverb *wistaarai* ‘slowly’ that semantically conveys slowness also modifies the verb *hi~Dnu* ‘to walk’ thereby augmenting the saliency of Manner.

6.1.3.2.3 Manner in adverbials

The 3rd or the last strategy that speakers adopt is the use of adverbial modifiers that tend to compensate for the “lack of lexical means for distinguishing manners of motion” (Slobin *et al.*, 2014). The data show the use of four different types of adverbials, as Table 107 shows. Of them, the first one expresses the semantic component of slowness and the rest of them express velocity (cf. Slobin, *et al.*, 2014).

Semantic components	Adverbials
Slowness	<i>wistaarai</i> ‘slowly’
Velocity	<i>saraasar</i> ‘straightway’
Velocity	<i>khurukhuru</i> ‘without stopping’
Velocity	<i>chiTo-chiTo</i> ‘lit. fast-fast’

Table 107. Use of adverbials in Manner expression in SME in descriptive data

The data also show that their frequency of occurrence is higher with the Manner verbs in the dependent clause slot than with the Path verbs in the main clause, and in particular in the simplex clause. Moreover, it is important to note that the number of occurrences of adverbials in ‘Trajectoire’ corpus is significantly higher ($N=57$) than their number of occurrences (only two) in caused Motion events (‘Put and Take’ corpus). The following examples (703) and (704) illustrate the use of these adverbial modifiers.

(703)	FIGURE	MODIFIER	GROUND-PATH-PATH	
	<i>u</i>	<i>bistaarai</i>	<i>oNaarbhitrabaaTa</i>	
	<i>u-Ø</i>	<i>wistaarai</i>	<i>oDhaar-bhitra-baaTa</i>	
	3SG-NOM	slowly	cave-inside-ABL	
	GROUND-PATH	MOTION+PATH		
	<i>baaira</i>	<i>niski</i>		
	<i>baahira</i>	<i>nisk-i</i>		
	outside	exit-PST.3SG.F.NH		
	‘From inside the cave she came out slowly.’			
	(Lit. ‘From inside the cave she exited outside slowly.’) [Traj_025_s3]			

(704)	FIGURE	MODIFIER	GROUND-PATH	MOTION+PATH
	<i>u</i>	<i>saraasar</i>	<i>phulbaaribhitra</i>	<i>pasyo</i>
	<i>u-Ø</i>	<i>saraasar</i>	<i>phulbaari-bhitra</i>	<i>pas-yo</i>
	3SG-NOM	straightway	garden-inside	enter-PST.3SG.M.NH
	‘He went to the garden straightway.’			
	(Lit. ‘He entered into the garden straightway.’) [Traj_056_s4]			

Adverbials *wistaarai* ‘slowly’ (703) and *saraasar* ‘straightway’ (704) modify the Path verbs *niskanu* ‘to exit’ (703) and *pasnu* ‘to enter’ (704) by conveying the semantic components of slowness and velocity (cf. Kopecka, 2010; Slobin *et. al.*, 2014) respectively. In this way, they compensate for the absence of Manner verbs in the main clause and provide further information about the Figure’s Motion expressed in the main verb. The use of these adverbials also suggests that, syntactically, they are less complex and cognitively less heavy i.e. the processing (production and comprehension) load is less than the processing of the subordinate constructions (cf. Slobin, 2004: 226). There is also evidence that speakers express Manner in a more

fine-grained and complex way in spontaneous Motion events by combining a Manner verb with an adverbial, as in (705) and (706). Note that this type of construction is absent in the caused Motion events.

(705)	FIGURE	MODIFIER	MOTION+MANNER	
	<i>u</i>	<i>bistaarai</i>	<i>hi~Ndai</i>	
	<i>u-∅</i>	<i>wistaarai</i>	<i>hi~D-dai</i>	
	3SG-NOM	slowly	walk-DUR	
	GROUND-PATH	MOTION+PATH		
	<i>oNaarbhitra</i>	<i>prabes</i>	<i>gari</i>	
	<i>oDhaar-bhitra</i>	<i>prawes</i>	<i>gar-i</i>	
	cave-inside	entrance	do-PST.3SG.M.NH	
	‘She went to the cave walking slowly.’			
	(Lit. ‘She, walking slowly, entered into the cave.’) [Traj_053_s3]			

(706)	FIGURE	MODIFIER	MOTION+MANNER	GROUND	MOTION+PATH
	<i>uniharu</i>	<i>bistaarai</i>	<i>hi~Nera</i>	<i>pul</i>	<i>paar gare</i>
	<i>uni-haru-∅</i>	<i>wistaarai</i>	<i>hi~D-era</i>	<i>pul</i>	<i>paar gar-e</i>
	3-PL-NOM	slowly	walk-CP	bridge	cross do-PST.3PL
	‘They crossed the bridge walking slowly.’ [Traj_045_s3]				

In both examples, the non-finite form of the verb *hi~Dnu* ‘to walk’ in the aspectual form (705) and in the CP form (706) compensate for the absence of Manner in the main verb slot. Note that each Manner verb is further modified by the adverbial *wistaarai* ‘slowly’, thereby giving further information about Figure’s inner state and condition, also augmenting attention to Manner (cf. Slobin, 2004).

6.1.3.2.4 Manner in the main verb

We saw in the preceding Sections how Manner is lexicalized in the conjunctive participle or the aspectual form. In this section, I investigate the lexicalization of Manner only in the main verb slot. As confirmed by the ‘Trajectoire’ corpus, Manner is lexicalized in 15 different verbs, as Table 108, representing 32.3 % of the total data ($N=949$).

Verbs	English translation	Verbs	English translation
<i>hi~Dnu</i>	'to walk'	<i>pauDi khelnu</i>	'to swim'
<i>dauDanu</i>	'to run'	<i>yataautaa garnu</i>	'lit. to do here and there'
<i>haam phaalnu</i>	'lit. jump throw'	<i>Dubulki maarnu</i>	'to dive'
<i>dagurnu</i>	'to run'	<i>Dulnu</i>	'to roam'
<i>phaDkanu</i>	'to jump'	<i>pauDanu</i>	'to swim'
<i>uphranu</i>	'to jump'	<i>phaal haalnu</i>	'to jump'
<i>kudnu</i>	'to rush'	<i>yaatraa garnu</i>	'to travel'
<i>ghumnu</i>	'to wander'		

Table 108. Main verbs lexicalizing Manner

Out of 15 verbs, nine of them are monomorphemic (e.g., *hi~Dnu* 'to walk', *pauDanu* 'to swim'), and six of them are in the light verb construction (e.g., *pauDi khelnu* 'to swim', *haam phaalnu* 'to jump'). The verb *hi~Dnu* 'to walk' is the most frequent of all (N^o of occurrences = 197 out of 949). Examples (707) and (708) show the lexicalization of Manner in the main verb of the clause.

(707) FIGURE GROUND MOTION+MANNER
u *baaToma* *hinyo*
u-∅ *baaTo-maa* **hi~D**-yo
 3SG-NOM road-LOC **walk**-PST.3SG.M.NH
 'He walked on the road.' [Traj_065_s17]

(708) FIGURE GROUND MOTION+MANNER
u *midaanmaa* *dauNyo*
u-∅ *midaan-maa* **dauD**-yo
 3SG-NOM meadow-LOC **run**-PST.3SG.M.NH
 'He ran on the meadow.' [Traj_034_s21]

The semantic element of Manner is lexicalized in a minimal clause in the first tier verbs (cf. Slobin, 2006: 73) *hi~Dnu* 'to walk' (707) and *dauDanu* 'to run' (708). These verbs also provide the concrete graphic visual details, and Figure's inner states and conditions depicting the nuances of Manner (cf. Slobin, 2004).

We also found that speakers use adverbials such as *chiTochiTo* (lit. 'fast fast'), *saraasar* 'straightway', *khurukhuru* 'straight way', and *wistaarai* 'slowly'. They lexicalize Manner and modify the main verb, as shown in examples (709) and (710) below.

(709)	FIGURE	MODIFIER	MODIFIER	MOTION+MANNER
	<i>u</i>	<i>chiTo</i>	<i>chiTo</i>	<i>hi~Ndai cha</i>
	<i>u-∅</i>	<i>chiTo</i>	<i>chiTo</i>	<i>hi~D-dai cha</i>
	3SG-NOM	fast	fast	walk-DUR COP ₂ .NPST.3SG.M.NH
	'He is walking fast.' [Traj._070_s5]			

(710)	FIGURE	GROUND	MODIFIER	MOTION+MANNER
	<i>u</i>	<i>dubaamaathi</i>	<i>saraasar</i>	<i>hini</i>
	<i>u-∅</i>	<i>dubaa-maathi</i>	<i>saraasar</i>	<i>hi~D-i</i>
	3SG-NOM	green.grass-above	straightway	walk-PST.3SG.F.NH
	'She walked straightway on the green grass.' [Traj_040_s4]			

The adverbial *chiTochiTo* 'fast' in (709) and *saraasar* 'straightway' (710) modify the main verbs of the clause and elaborate them semantically. By doing so, they make the Manner more fine-grained and provide further information about the Figure's Motion.

6.1.3.2.5 Manner and Path in the main verb

Lastly, the results of the 'Trajectoire' corpus also reveal that speakers use the verb *caDhnu* 'to climb' that lexicalizes both Manner and Path in the main verb of the clause. This verb expresses only the upward movement showing the grasping Manner (e.g., climbing a tree) or going up the stairs or even riding on the back of an animal or one of the means of transport but not the downward movement such as *climb down the tree* (cf. Slobin, 2004: 230). In the corpus, the use of this verb accounts for 2.3% of the total data. Illustrated in (711) and (712) are the uses of this verb.

(711)	FIGURE	GROUND+PATH	MANNER+PATH
	<i>uni</i>	<i>ukaalo</i>	<i>caDhin</i>
	<i>uni-Ø</i>	<i>ukaalo</i>	<i>caDh-in</i>
	3SG.H-NOM	upward	ascend-PST.3SG.F.H
	‘She went up.’		
	(Lit. ‘She ascended upward.’ [Traj_071_s20])		

(712)	FIGURE	GROUND	MANNER+PATH
	<i>u</i>	<i>bharyaang</i>	<i>caNi</i>
	<i>u-Ø</i>	<i>bharyaang</i>	<i>caDh-i</i>
	3SG-NOM	stairs	ascend-PST.3SG.F.NH
	‘She climbed up the stairs.’ [Traj_029_s21]		

In example (711), the upward direction is conveyed by both *ukaalo* ‘ascent’ and *caDhin* ‘to climb’ but in the case of (712) it is encoded only by the verb *caDhin* ‘to climb’.

As was pointed out at the beginning of this Section (§ 6.1.3.2), there are some interesting differences between caused vs. spontaneous Motion events regarding the expression of Manner. First, Manner is more frequently expressed in spontaneous Motion events as compared to caused Motion. Secondly, it is also expressed in a more fine-grained and complex way in spontaneous Motion events by, for example, the combination of the Manner verb and the adverbial (e.g., *wistaarai hi~Dera* ‘slowly walking’) which means ‘(by) walking slowly’. Such constructions are absent in caused Motion events. Finally, spontaneous Motion expressions contain verbs such as *caDhin* ‘to climb’ that lexicalizes two different semantic elements, Manner and Path; such verbs are absent in caused Motion events. Thus, Manner in spontaneous Motion events is more frequent, more complex, and more diverse.

6.2 Lexicalization patterns in narrative (corpus-based) data

In the last two Sections of this chapter, I presented the analysis of the ‘Put and Take’ data for the caused Motion events, and ‘Trajectoire’ data for the spontaneous Motion events and addressed the lexicalization patterns, and the lexicalization of

Manner. The analysis reveals that speakers use the V-framed lexicalization pattern almost exclusively. Most frequent in use, this is preferred to other patterns such as the reverse V-framed pattern. As far as the lexicalization of Manner is concerned, it can be expressed in the main verb of the clause as well as in the form of an adverbial subordinate clause; nevertheless, the frequency of the expression of Manner is not high in the data. In this Section, I investigate the lexicalization of Path and Manner in the corpus-based narrative data in order to examine the types of lexicalization patterns used in the narrative genre. As the analysis will show, the narrative data confirm the tendencies observed in the descriptive data regarding the use of both V-framed and reverse V-framed patterns, and the lexicalization strategies used for Manner. Yet, I will also point out to some differences between the two types of data.

6.2.1 Verb-framed pattern

The V-framed pattern is well-attested in narrative data, including both caused and spontaneous Motion events. Overall, 52.4% of the total data ($N=2884$) show that Path is lexicalized in the main verb of the clause. In order to express Manner, the data reveal are strategies, i.e. the use of the adverbial subordinate clauses and adverbials, that we found in the descriptive data. However, in addition to these devices, narrative data also show the use of ideophones (cf. § 6.2.3) that express Manner. In what follows, I will discuss the V-framed pattern considering first the caused Motion events and then spontaneous Motion events.

6.2.1.1 Caused Motion events

In caused Motion events in narrative data, the V-framed pattern is used consistently, as it was the case in descriptive data. In total, 29 different verbs lexicalizing Path are found in the main clause accounting for 46.9% of the total data ($N=1860$)³⁹. Moreover, these verbs also lexicalize different portions of Path such as

³⁹ Because the total motion descriptions in caused Motion events in narrative data are 1860, percentage is calculated based on 1860 itself.

Source and Goal Path, as well as boundary crossing; however, there is no evidence of verbs lexicalizing the Median-oriented Path as Table 109 shows this.

Type of Path	Verbs	English translation
Goal	<i>dinu</i>	'to give'
	<i>khasaalnu</i>	'to drop'
	<i>kocnu</i>	'to put'
	<i>lagaaidinu</i>	'to do favour in wearing'
	<i>lagaunu</i>	'to wear'
	<i>lukaunu</i>	'to hide'
	<i>pahiryaunu</i>	'to favour in causing to wear'
	<i>paThaunu</i>	'to send'
	<i>puryaunu</i>	'to cause to reach'
	<i>raakhnu</i>	'to put'
	<i>saarnu</i>	'to move'
Goal, with boundary crossing	<i>chiraunu</i>	'to insert'
	<i>ghusaarnu</i>	'to insert'
Goal, with Deictic function	<i>lyaanu</i>	'to bring'
Source	<i>chuTTyaunu</i>	'to separate from each other'
	<i>haTaanu</i>	'to remove'
	<i>kholnu</i>	'to uncover'
	<i>linu</i>	'to take'
	<i>pharkaanu</i>	'to cause to return'
	<i>phukaalnu</i>	'to take off'
	<i>Tipnu</i>	'to pick up'
	<i>ughaarnu</i>	'to open'
	<i>utaarnu</i>	'to take off'
Source with vertical Motion, upward movement	<i>ucaalnu</i>	'to lift'
Source with vertical Motion, upward movement	<i>uThaanu</i>	'to pick up'

Source with boundary crossing	<i>jhiknu</i>	'to take out'
	<i>nikaalnu</i>	'to take out'
Source with Deictic function	<i>laijaanu</i>	'to take away'
	<i>lagnu</i>	'to take away'

Table 109. Main verbs lexicalizing Path in CME in narrative data

a. Goal-oriented Path

The narrative data show that, in caused Motion events, the Goal Path is expressed in the main verb of the clause in 21.8% of the total data ($N=1860$), Verbs that lexicalize the Goal are shown in Table 110.

Verbs	English translation	Verbs	English translation
<i>dinu</i>	'to give'	<i>pahiryaaunu</i>	'to favour in wearing the garment/ornament'
<i>ghusaarnu</i>	'to insert'	<i>paThaaunu</i>	'to send'
<i>khasaalnu</i>	'to drop'	<i>puryaaunu</i>	'to cause to reach'
<i>kocnu</i>	'to put'	<i>raakhnu</i>	'to put'
<i>lagaaidinu</i>	'to do favour in wearing'	<i>saarnu</i>	'to move'
<i>lagaunu</i>	'to wear'	<i>lyaaunu</i>	'to bring'
<i>lukaunu</i>	'to hide'	<i>chiraaunu</i>	'to insert'

Table 110. Main verbs lexicalizing the Goal Path in CME in narrative data

Illustrated below are examples (713) and (714) showing the lexicalization of the Goal Path (see also Appendix I) in caused Motion events in narrative data.

(713)	GROUND	FIGURE		GROUND
	<i>khaltiko</i>	<i>bis</i>	<i>rupaiyaa~</i>	<i>usko</i>
	<i>khalti-ko</i>	<i>bis</i>	<i>rupaiyaa~</i>	<i>us-ko</i>
	pocket-GEN	twenty	rupees	3SG-GEN
	GROUND-PATH		MOTION+PATH	
	<i>dahro</i>	<i>gharraamaa</i>	<i>kocyo</i>	
	<i>dahro</i>	<i>gharraa-maa</i>	koc -yo	
	strong	drawer-LOC	put -PST.3SG.M.NH	

‘(He) put twenty rupees into his strong drawer (out of his pocket).’ [NNC_jjf]

(714)	AGENT		FIGURE (HUMAN)	GOAL (HUMAN)
	<i>ti</i>	<i>manule</i>	<i>prasuti</i>	<i>prajaapati</i>
	<i>ti</i>	<i>manu-le</i>	<i>prasuti</i>	<i>prajaapati</i>
	DEM.DIST	man-ERG	Prasuti	Prajapati
			FIGURE (HUMAN)	
	<i>dakshyalaai</i>	<i>ra</i>	<i>aakuti</i>	
	<i>dakshyalaai</i>	<i>ra</i>	<i>aakuti</i>	
	Dakshya-DAT	and	Akuti	
		GOAL (HUMAN)	MOTION+PATH	
	<i>prajaapati</i>	<i>rucilaai</i>	<i>diekaathie</i>	
	<i>prajaapati</i>	<i>rucil-aai</i>	di-ekaa-thi-e	
	Prajapati	Ruchi-DAT	give -PFV-COP ₂ -PST.3SG.M.H	

‘That man had given (his daughters) Prasuti to Prajapati Dakshya and Akuti to Prajapati Ruchi.’ [NNC_D01]

Syntactically, *u* ‘he’ (713) and *Manu* (714) are the subject arguments, *bis rupaiyaa~* ‘twenty rupees’ (713) and *Prasuti* and *Akuti* (714) are the object arguments (direct objects), *gharraa* ‘drawer’ (713), and *Prajapati Dakshya* and *Prajapati Ruchi* (714) are also the object arguments (indirect objects), and *kocnu* ‘to put’ (713), and *dinu* ‘to give’ (714) are the transitive verbs. Semantically, *u* ‘he’ (713) is the Agent, *Prasuti* and *Akuti* (714) indicate the human Figures. The main verbs *kocnu* ‘to put’

(713) and *dinu* ‘to give’ (714) lexicalize the Goal-oriented Path within a simplex clause that provides further evidence of the V-framed lexicalization pattern. In addition to the verb, the locative case marker *-maa* ‘LOC’ (714) also conveys the Goal Path.

The data also confirm that there are several instances where both the main verb and the verb in the dependent clause lexicalize Path, as shown in example (715). However, the verb *kholnu* ‘to open’ in the dependent clause slot lexicalizes the Source Path and *raakhnu* ‘to put’ that lexicalizes the Path in the main clause indicates the Goal Path. Therefore, the complex Path (Source-Goal Path) is encoded in a complex construction here.

(715)	AGENT	FIGURE	
	<i>maile</i>	<i>aaphno</i>	<i>Topi</i>
	<i>mai-le</i>	<i>aaphno</i>	<i>Topi</i>
	1SG-ERG	self.GEN	cap
	MOTION+PATH	GROUND-PATH	MOTION+PATH
	<i>kholera</i>	<i>jholaamaa</i>	<i>raakh-e~</i>
	<i>khol-era</i>	<i>jhola-maa</i>	<i>raakh-e~</i>
	take.off-CP	bag-LOC	put -PST.3SG.M.H
	‘I took off my cap and then put into the bag.’ [NNC_S65]		

b. Source-oriented Path

There are 14 different main verbs that lexicalize the Source Path. They account for 18% of the total in the corpus-based narrative data ($N=1860$). Verbs that lexicalize the Source Path are given in Table 111 and their use is illustrated in examples following the Table.

Verbs	English translation	Verbs	English translation
<i>chuTTyaaunu</i>	'to separate from each other'	<i>utaarnu</i>	'to take off'
<i>kholnu</i>	'to uncover'	<i>ucaalnu</i>	'to lift'
<i>linu</i>	'to take'	<i>uThaaunu</i>	'to pick up'
<i>pharkaaunu</i>	'to return'	<i>lagnu</i>	'to take away'
<i>phukaalnu</i>	'to take off'	<i>laijaanu</i>	'to take away'
<i>Tipnu</i>	'to pick up'	<i>jhiknu</i>	'to take out'
<i>ughaarnu</i>	'to open'	<i>nikaalnu</i>	'to take out'
<i>haTaaunu</i>	'to remove'		

Table 111. Main verbs lexicalizing the Source Path in CME in narrative data

Examples (716) and (717) below show the lexicalization of the Source Path.

(716)	FIGURE	AGENT	GROUND+	MOTION+
			PATH	PATH
<i>tyaspachi</i>	<i>uslaai</i>	<i>hajuriyaaharule</i>	<i>baahira</i>	<i>nikaale</i>
<i>tyas-pachi</i>	<i>us-laai</i>	<i>hajuriyaa-haru-le</i>	<i>baahira</i>	<i>nikaal-e</i>
then-after	3SG-DAT	bodyguard-PL-ERG	outside	take.out-PST.PL
'Then after, the authorized people took him out.'				
(Lit. 'Then after, the authorized people took out him outside.') [NNC_S19]				

(717)		AGENT	
<i>yati</i>	<i>bhani</i>	<i>dhanwirle</i>	
<i>yati</i>	<i>bhan-i</i>	<i>dhanwir-le</i>	
this.much	say-CP	Dhanwir-ERG	
FIGURE		MOTION+PATH	
<i>duiTaa</i>	<i>dhup</i>	<i>jhikyo</i>	
<i>duiTaa</i>	<i>dhup</i>	<i>jhik-yo</i>	
two	insense	take.out-PST.3SG.M.NH	

'Having said this much, Dhanwir took two incenses out.' [NNC_S59]

The main verbs *nikaalnu* 'to take out' in (716) and *jhiknu* 'to take out' in (717) lexicalize the Source-oriented Path following the V-framed pattern. The Source Path is also conveyed by the adverb *baahira* 'outside' along with its Ground function.

c. Boundary crossing Path

The narrative data reveal only four verbs lexicalizing the boundary crossing Path. The use accounts for 6.5% of caused Motion events in narrative data ($N=1860$). They include *ghusaarnu* ‘to insert’, *nikaalnu* ‘to take out’, *jhiknu* ‘to take out’, and *chiraaunu* ‘to cause to enter’, as in examples (718) and (719).

(718)	AGENT	GROUND-PATH	
	<i>usle</i>	<i>kitaabko</i>	<i>jholaabaaTa</i>
	<i>us-le</i>	<i>kitaab-ko</i>	<i>jholaabaaTa</i>
	3SG-ERG	book-GEN	bag-ABL
	FIGURE		MOTION+PATH
	<i>phulko</i>	<i>gucchaa</i>	<i>nikaalyo</i>
	<i>phul-ko</i>	<i>gucchaa</i>	nikaal-yo
	flower-GEN	bouquet	take.out -PST.3SG.M.NH
	‘He took the bouquet of flowers out of the bag.’		
	(Lit. ‘He took out the bouquet of flowers from the book-bag.’ [NNC_S18])		

(719)		AGENT	FIGURE
	<i>saa~jha</i>	<i>pakha</i>	<i>jantile</i>
	<i>saa~jha</i>	<i>pakha</i>	<i>janti-le</i>
	evening	time	bridegroom’s.
			bride-DAT
			friends-ERG
	GROUND	GROUND+PATH	MOTION+PATH
	<i>maaitighar-baaTa</i>	<i>baahira</i>	<i>nikaal-chan</i>
	<i>maaitighar-baaTa</i>	<i>baahira</i>	nikaal-chan
	mother’s.home-ABL	outside	take.out -COP ₂ .NPST.3PL
	‘The people who accompany the bridegroom’s marriage ceremony take the bride out of her mother’s home during the evening time.’ [NNC_G56]		

Nominals *jholaabaa* ‘bag’ (718) and *maaitighar* ‘mother’s home’ (719) have the physical boundaries or the dividing lines (Slobin & Hoiting, 1994; Slobin, 2006; Filipović, 2007; Hijazo-Gascon, & Ibarretxe-Antuñano, 2013). The Agents *u* ‘he’ in (718) and *janti* ‘people accompanying the bridegroom during his marriage ceremony’ in (719) cause the Figures, *phulko gucchaa* ‘bouquet of flowers’ (718) and *behuli* ‘bride’ (719), to cross the boundaries of the three dimensional objects. So, the

boundary crossing Path is lexicalized in the verb *nikaalnu* ‘to take out’ in both examples conveying the change of state which also confirms the V-framed pattern. In addition to the verb *nikaalnu* ‘to take out’, the adverb *baahira* ‘outside’ (719) also shows the boundary crossing Path (cf. § 5.3.1.2.5). Consequently, the verb and the adverb make the boundary crossing Path more salient (cf. Kopecka, 2013).

6.2.1.2 Spontaneous Motion events

There is a great diversity of verbs lexicalizing different components of Path in spontaneous Motion events: Source, Median, and Goal Path, Deixis and Path, Path depicting the boundary crossing, and the vertical Motion conveyed, as Table 112 shows. There are 1024 spontaneous Motion events in the narrative data i.e. 35.5% of the total narrative data ($N=2884$). Moreover, motion descriptions expressing the Path in the main clause account for 53.7% of the total ($N=1024$) in the dataset.

Type of Path	Verbs	English translation
Goal	<i>Tuplukinu</i>	‘to come’
	<i>prasthaan garnu</i>	‘to set off’
	<i>luknu</i>	‘to hide’
	<i>pugnu</i>	‘to reach’
	<i>bhitrinu</i>	‘to enter’
	<i>chirnu</i>	‘to enter’
	<i>pasnu</i>	‘to enter’
Source	<i>niskanu</i>	‘to exit’
	<i>pharkanu</i>	‘to return’
Median	<i>tarnu</i>	‘to cross’
	<i>naaghnu</i>	‘to cross’
Deictic and Path	<i>aaunu</i>	‘to come’
	<i>jaanu</i>	‘to go’
Vertical Motion, Downward movement	<i>khasnu</i>	‘to fall down’
	<i>jharnu</i>	‘to descend’
	<i>orlanu</i>	‘to descend’
Vertical Motion,	<i>uklanu</i>	‘to ascend’

(721)	FIGURE	FIGURE	FIGURE	GROUND-PATH	MOTION-PATH
	<i>hemanta</i>	<i> jyoti</i>	<i> ra</i>	<i> sikhaa</i>	<i> mahalbhitra</i>
	<i>hemanta</i>	<i> jyoti</i>	<i> ra</i>	<i> sikhaa</i>	<i> mahal-bhitra</i>
	Hemanta	Joyti	and	Shikha	building-inside
					enter -PST.3PL
	'Hemanta, Jyoti and Shikha entered the building.'				

(Lit. 'Hemanta, Jyoti and Shikha entered into the building.' [NNC_F18])

In the examples above, Path is lexicalized in the main verbs *chirnu* 'to enter' in (720) and *pasnu* 'to enter' in (721) within a simplex clause conveying the change of location or the end state, representing the V-framed pattern. In addition to verbs, information regarding the Goal Path is also conveyed by the case marker *-maa* 'LOC' in (720) and the postposition *-bhitra* 'inside' in (721). Although the geometrical configuration of the Ground is similar in both examples, some speakers use the locative case marker to convey the Goal Path whereas others use the postposition *-bhitra* 'inside'.

b. Source-oriented Path

The Source-oriented Path is expressed in the main verb of the clause, as in (722) and (723), in 8.3% of spontaneous Motion descriptions ($N=1024$).

(722)	FIGURE	GROUND-PATH	GROUND+PATH	MOTION+PATH
	<i>sabaijanaa</i>	<i>aspataalbaaTa</i>	<i>baahira</i>	<i>niskyau~</i>
	<i>sabai-janaa</i>	<i>aspataal-baaTa</i>	<i>baahira</i>	nisk -yau~
	all-CLF	hospital-ABL	outside	exit -PST.1PL
	'All of us came out of hospital.'			

(Lit. 'All of us exited outside from hospital.' [NNC_bbj])

(723)			FIGURE	
<i>saat</i>	<i>saal</i>	<i>pachi</i>	<i>raajaa</i>	<i>tribhuvan</i>
<i>saat</i>	<i>saal</i>	<i>pachi</i>	<i>raajaa</i>	<i>tribhuvan</i>
seven	year	after	King	Tribhuvan
GROUND-PATH	MOTION+PATH			
<i>bhaaratbaaTa</i>	<i>pharke</i>			
<i>bhaarat-baaTa</i>	phark-e			
India-ABL	return-PST.3SG.H			
'After 2007 VS (1950 AD), the King Tribhuvan returned from India.'				
[NNC_G13a]				

The verbs *niskanu* 'to exit' in (722) and *pharkanu* 'to return' (723) are the only two verbs that lexicalize the Source Path. Moreover, in the case of example (722), the adverb *baahira* 'outside' also expresses the Source Path and the Ground.

c. Median-oriented Path

The analysis of spontaneous Motion events in narrative data reveals two verbs, *tarnu* 'to cross' and *naaghnu* 'to cross'/'to pass by' that lexicalize the Median Path, as illustrated in (724) and (725). Such motion descriptions account for 3.2% of the total data ($N=1024$).

(724)		FIGURE	
<i>bicaraa</i>	<i>wisaakhaale</i>		<i>pahilopalTa</i>
<i>bicaraa</i>	<i>wisaakhaa-le</i>		<i>pahilo-palTa</i>
poor	Wishakha-ERG		first-time
GROUND	MOTION+PATH		
<i>yamunaa</i>	<i>tarekithii</i>		
<i>yamunaa</i>	tar-eki-thi-i		
Yamuna	cross-PFV.F-COP₂.PST.3SG.F.NH		
'Poor Wishakha! She had crossed the Yamuna for the first time.'			
(Lit. 'Poor Wishakha had crossed the Yamuna for the first time.')			
[NNC_awk]			

(725)

			FIGURE	
<i>pakkai</i>	<i>pani</i>	<i>haamile</i>	<i>dakshiNtirako</i>	<i>hoco</i>
<i>pakkai</i>	<i>pani</i>	<i>haami-le</i>	<i>dakshiN-tira-ko</i>	<i>hoco</i>
really	also	1PL-ERG	south-toward-GEN	short
	GROUND	MOTION+PATH		
<i>hoco</i>	<i>pahaaD</i>	<i>naagh-nu-parcha</i>		
<i>hoco</i>	<i>pahaaD</i>	<i>naagh-nu-par-cha</i>		
short	hill	cross-GER-fall-COP₂.NPST.3SG.M.NH		

‘In fact we have to cross the small hill that is toward the southern side.’
[NNC_bbj]

d. Boundary crossing Path

The boundary-crossing component is lexicalized in six different verbs that are presented in Table 114. Of the total descriptions of spontaneous Motion events in narrative data, 7.9% account for this type of expressions. Because these verbs typically mark the boundary, they are also the Ground-focus Path verbs (cf. Slobin & Hoiting, 1994; Aske, 1989).

Source	<i>niskanu</i>	‘to exit’
Median	<i>naaghnu</i>	‘to cross’
	<i>tarnu</i>	‘to cross’
Goal	<i>pasnu</i>	‘to enter’
	<i>chirnu</i>	‘to enter’
	<i>bhitrinu</i>	‘to get into’

Table 114. Main verbs lexicalizing the boundary crossing Path

Table above also shows that all three portions of the Path - Source, Median, and Goal - occur in the expression of the boundary crossing Path, as was also the case in descriptive data (cf. 6.1.1.2). This is one of the important assertions of the analysis: the results of the stimuli-based descriptive (spoken corpus) data and the results of the NNC-based narrative (written corpus) data are consistent; hence, narrative data validate descriptive data and provide further support for the claim that Nepali preferentially resorts to the V-framed pattern. Examples (726) through (728) further show the use of verbs lexicalizing the boundary crossing Path.

(726)		GROUND-BE _{LOC}		FIGURE	
	<i>ghaamle</i>	<i>gardaa</i>	<i>dulomaa</i>	<i>lukekaa</i>	<i>bhyaagutaa</i>
	<i>ghaam-le</i>	<i>gar-daa</i>	<i>dulo-maa</i>	<i>luk-ekaa</i>	<i>bhyaagutaa</i>
	sun-ERG	do-SIM	hole-LOC	hide-PFV	frog
			GROUND+PATH	MOTION+PATH	
	<i>warsaa</i>	<i>kaalmaa</i>	<i>baahira</i>	<i>niskanchan</i>	
	<i>warsaa</i>	<i>kaal-maa</i>	<i>baahira</i>	niskan -chan	
	rain	time-LOC	outside	exit -COP.2NPST.3PL	

‘Frogs that hide in the hole because of heat come out (of the hole) during the rainy season.’
 (Lit. Due to the sun, frogs that hide in the hole exit outside in the rain time.)
 [NNC_ark]

(727)	<i>jhanDai</i>	<i>tin</i>	<i>mahinaako</i>	<i>yaatraapachi</i>
	<i>jhanDai</i>	<i>tin</i>	<i>mahinaa-ko</i>	<i>yaatraa-pachi</i>
	almost	three	month-GEN	travel-after
	FIGURE	GROUND		MOTION+PATH
	<i>haamile</i>	<i>kosi</i>	<i>nadi</i>	<i>tar-ekaa-thi-yau~</i>
	<i>haami-le</i>	<i>kosi</i>	<i>nadi</i>	tar -ekaa-thi-yau~
	1PL-ERG	Koshi	river	cross -PFV-COP2.PST.1PL

‘We had crossed the Koshi River almost after three months of (our) travel.’
 [NNC_awk]

(728)	FIGURE	GROUND-PATH	GROUND+	MOTION+	
			PATH	PATH	
	<i>uni</i>	<i>mul</i>	<i>dwaarbaaTa</i>	<i>bhitra</i>	<i>chirin</i>
	<i>uni-Ø</i>	<i>mul</i>	<i>dwaar-baaTa</i>	<i>bhitra</i>	chir -in
	3SG.H-NOM	main	door-ABL	inside	enter -PST.3SG.F.H

‘She came inside through the main door.’
 (Lit. ‘She entered inside from the main door.’ [NNC_emn])

In all these examples, verbs lexicalizing Path, *niskanu* ‘to exit’ (726), *tarnu* ‘to cross’ (727), and *chirnu* ‘to enter’ (728), occur in the main verb slot of the clause. They express the crossing of three-dimensional spatial entities (Griensvald, 2011: 56);

(732)	<i>sepTembar</i>	<i>ekmaa</i>	<i>nepaalko</i>	<i>sacibstariya</i>
	<i>sepTembar</i>	<i>ek-maa</i>	<i>nepaal-ko</i>	<i>sacib-stariya</i>
	September	one-LOC	Nepal-GEN	secretary-level
	FIGURE		GROUND	DEIXIS+PATH
	<i>euTaa</i>	<i>Toli</i>	<i>bhaarat</i>	<i>jaa~daicha</i>
	<i>euTaa</i>	<i>Toli</i>	<i>bhaarat</i>	jaa~-dai-cha
	one	team	India	go-DUR-COP2.NPST.3SG.M.NH

‘A team consisting of the Secretary level officials from Nepal is going to India on 1st September.’ [NNC_B04]

The semantic elements of Deixis and Path are lexicalized in the main verb *jaanu* ‘to go’ conveying the Goal Path. Likewise, the Deictic centre and Ground are respectively *muni* ‘Saint’ (731) and *bhaarat* ‘India’ (732) where the Figures, the King and Samadhi (731) and the officials (732), move implying the Goal-oriented Deictic Path.

(733)	FIGURE		FIGURE	
	<i>inspekTar</i>	<i>ra</i>	<i>eghaarajanaa</i>	<i>prahari</i>
	<i>inspekTar</i>	<i>ra</i>	<i>eghaara-janaa</i>	<i>prahari</i>
	inspector	and	eleven-CLF	police
	FIGURE	GROUND-PATH		DEIXIS+PATH
	<i>jawaan</i>	<i>muslim</i>	<i>wastimaa</i>	<i>aaipuge</i>
	<i>jawaan</i>	<i>muslim</i>	<i>wasti-maa</i>	aa-i-pug-e
	youths	Muslim	human.settlement-LOC	come-ABS-reach-PST.3PL

‘The inspector and eleven police came to the Muslim village.’ [NNC_A27]

(734)	FIGURE	GROUND-PATH	DEIXIS+PATH
	<i>baabuharu</i>	<i>kahaa~baaTa</i>	<i>aayau</i>
	<i>baabuharu</i>	<i>kahaa~-baaTa</i>	aa-yau
	gentlemen	where-ABL	come-PST.2PL

‘Gentlemen, where did you come from?’ [NNC_F17]

In the case of example (733), the Deictic centre corresponds to *Muslim basti* ‘Muslim village/settlement’ where the Figures, *inspekTar* ‘inspector’ and *prahari* ‘police’, go and that depicts the Goal-oriented Path. In (734), the Deictic centre is not

mentioned and has to be recovered from the context. However, it implies the Source-oriented use of the Deictic and Path verb *aaunu* ‘to come’.

6.2.2 Reverse verb-framed pattern

We saw that the reverse V-framed pattern was attested in descriptive data in caused as well as in spontaneous Motion events (cf. § 6.1.2.1 and § 6.1.2.2). We investigated if there is the same trend in the case of narrative data. Our analyses reveal that this pattern exists only in caused Motion events but not in spontaneous Motion events. In total, there are 20 motion descriptions corresponding to 1.1% of the data, $N=1860$) showing this pattern, as illustrated in (735) and (736).

(735)	FIGURE		MOTION+	MOTION+	AGENT	
			PATH	MANNER		
	<i>jammaa</i>	<i>paa~cwaTaa</i>	<i>posTar</i>	<i>lyaaera</i>	<i>Taa~se~</i>	<i>maile</i>
	<i>jammaa</i>	<i>paa~c-waTaa</i>	<i>posTar</i>	<i>lyaa-era</i>	<i>Taa~s-e~</i>	<i>mai-le</i>
	total	five-CLF	poster	bring-CP	paste-PST.1SG	ISG-ERG
	‘(By) bringing five posters in total I pasted them.’ [NNC_S113]					

(736)		AGENT		FIGURE	
	<i>tyaspachi</i>	<i>janataa</i>	<i>swayamle</i>	<i>ta~laai</i>	<i>yas</i>
	<i>tyas-pachi</i>	<i>janataa</i>	<i>swayam-le</i>	<i>ta~-laai</i>	<i>yas</i>
	then-after	people	self-ERG	2SG.NH-DAT	DEM.PROX
	GROUND-	MOTION+	GROUND	MOTION+MANNER	
	PATH	PATH	PATH		
	<i>kursibaaTa</i>	<i>ucaalera</i>	<i>baahira</i>	<i>phaalchan</i>	
	<i>kursi-baaTa</i>	<i>ucaal-era</i>	<i>baahira</i>	<i>phaal-chan</i>	
	chair-ABL	pick.up-CP	outside	throw-COP₂.NPST.3PL	
	‘Then, the people themselves (will) kick you out of this chair.’/				
	‘Then after the people themselves (will) throw you outside (by) picking you up from this chair.’ [NNC_aoo]				

In these examples, Manner is lexicalized in the main verbs *Taa~snu* ‘to paste’ (735) and *phaalnu* ‘to throw’ (736) whereas the verbs *lyaaunu* ‘to bring’ in (735) and *ucaalnu* ‘to lift’ in (736) express the Path in the non-finite CP forms which confirm

the reverse-V-framed pattern. We also examined the types of Path verbs (Source vs. Median vs. Goal) used in the conjunctive participle forms. Verbs such as *jhiknu* ‘to take out’ convey the Source Path, and to some extent, boundary crossing, some verbs such as *raakhnu* ‘to put’ convey the Goal Path. There are also verbs that convey the vertical Motion depicting the upward movement such as *ucaalnu* ‘to lift’, and one verb *lyaaunu* ‘to bring’ conveys Goal along with Deixis. The main reason for examining the type of Path verbs used in the CP forms is to find out which specific Path verbs are used in the CP form and what is their semantic specificity. As we saw, verbs conveying Source, Goal, vertical Motion and Deictic function are common in narrative data but there is no evidence of any Median-oriented Path verb. Note that in descriptive data too, there was not any Median-oriented Path verb.

In total, 10 different Manner verbs are found in the data, conveying different semantic dimensions, for example, force. Table 115 gives the details.

Type of Path	Path verbs in the CP forms	Manner verbs in the main clause	Type of Manner
Source	<i>haTaaunu</i> 'to remove'	<i>phaalnu</i> 'to throw'	Force
	<i>phukaalnu</i> 'to take off'	<i>joDnu</i> 'to connect'	Adhesion
Source with vertical Motion, upward movement	<i>ucaalnu</i> 'to lift'	<i>pokhinu</i> 'to get spilled'	Other
	<i>uThaaunu</i> 'to pick up'	<i>su~ikyaaunu</i> 'to throw'	Force
Source with boundary crossing	<i>jhiknu</i> 'to take out'	<i>cyaapnu</i> 'to press'	Force
Goal	<i>raakhnu</i> 'to put'	<i>milkyaaunu</i> 'to throw'	Force
	<i>chopnu</i> 'to cover'	<i>phyaa~knu</i> 'to throw'	Force
Goal, spontaneous Motion, downward movement	<i>khasnu</i> 'to fall'	<i>Taa~snu</i> 'to glue'	Adhesion

Goal with Deictic function	<i>lyaaunu</i> 'to bring'	<i>phaalnu</i> 'to throw'	Force
		<i>dhakelnu</i> 'to push'	Accompaniment

Table 115. Type of Path and Manner verbs depicting the reverse V-framed pattern in narrative data

6.2.3 Lexicalization of Manner

Having presented the V-framed and reverse V-framed patterns, this Section discusses how Manner is expressed in the context of the main verb lexicalizing the Path, in both caused and spontaneous Motion events found in narrative data. Moreover, I will also discuss the similarities and differences between descriptive (the experimental i.e. the spoken corpus) data, and narrative (the naturalistic i.e. the written corpus) data in regard to how Manner is expressed. The analysis reveals that to express Manner, various linguistic devices are used, including the CP forms, aspectuals, adverbials, and ideophones.

6.2.3.1 Caused Motion events

6.2.3.1.1 Manner in the CP form

The first strategy consists of expressing Manner in the CP forms. In total, 11 different verbs lexicalizing Manner were found in the dependent clause slot where the main verb lexicalizes Path, as shown in Table 116.

Verbs	English translation
<i>phyaa~knu</i>	'to throw'
<i>khiyaaunu</i>	'to row'
<i>taannu</i>	'to pull'
<i>cyaapnu</i>	'to press'
<i>Taa~snu</i>	'to glue'
<i>luTnu</i>	'to loot'
<i>jhunDyaaunu</i>	'to hang'
<i>khosnu</i>	'to grab'

<i>palTaaunu</i>	‘to cause to fall’
<i>guTmuTyaanu</i>	‘to fold’
<i>boknu</i>	‘to carry’

Table 116. Verbs in the CP form expressing Manner

Examples showing the expression of Manner in the CP form are given in (737) and (738).

(737)	FIGURE	MOTION+MANNER
<i>belcaale</i>	<i>hilo</i>	<i>phyaa~kera</i>
<i>belcaa-le</i>	<i>hilo</i>	<i>phyaa~k-era</i>
shovel-INS	mud	throw-CP
FIGURE		MOTION+PATH
<i>haaruko</i>	<i>laas</i>	<i>nikaaliyo</i>
<i>haaru-ko</i>	<i>laas</i>	<i>nikaal-i-yo</i>
Haru-GEN	corpse	take.out-PASS-PST.3SG.M.NH
‘Haru’s corpse was taken out by throwing mud with the shovel.’ [NNC_S41]		

(738)	GROUND	MOTION+MANNER
<i>mero</i>	<i>kaakhbaaTa</i>	<i>khosera</i>
<i>mero</i>	<i>kaakh-baaTa</i>	<i>khos-era</i>
1SG.GEN	lap-ABL	grab-CP
FIGURE	GROUND+PATH	MOTION+PATH
<i>timilaai</i>	<i>tala</i>	<i>lagchan</i>
<i>timi-laai</i>	<i>tala</i>	<i>lag-chan</i>
2SG.H-DAT	below	take.away-COP ₂ .NPST.3PL
‘(They) take you downstairs grabbing from my lap.’ [NNC_G47]		

Path is lexicalized in the main verbs *nikaalnu* ‘to take out’ (737) and *lagnu* ‘to take away’ (738) that are parts of the independent clause. In both examples, Manner verbs *phyaa~knu* ‘to throw’ (737) and *khosnu* ‘to grab’ (738) occur in the dependent clause compensating for the absence of Manner verb in the main clause. By doing so, they provide additional information to the main event (cf. Slobin, 2005, 2006: 61).

6.2.3.1.2 Manner in the aspectual form

Several verbs lexicalizing Manner occur in the subordinated (durative) aspectual constructions where Path is lexicalized in the main clause. They include *hataarinu* 'to hurry', *ghiccyaunu* 'to push', *lakheTnu* 'to chase', and *Dhunmunaunu* 'to stagger', and some others, as illustrated below in (739) and (740).

(739) FIGURE

<i>ghaaite</i>	<i>keTaaharulaai</i>	<i>samaatera</i>
<i>ghaaite</i>	<i>keTaa-haru-laai</i>	<i>samaat-era</i>
wounded	boy-PL-DAT	catch-CP
MOTION+MANNER	GROUND-PATH	MOTION-PATH
<i>ghiccyaau~dai</i>	<i>moTarmaa</i>	<i>koce</i>
<i>ghiccyaau~-dai</i>	<i>moTar-maa</i>	<i>koc-e</i>
push-DUR	vehicle-LOC	put-PST.3PL

'Having held the wounded boys (they) put them (boys) into the vehicle (by) pushing.' [NNC_G78]

(740) GROUND-PATH

DEIXIS+PATH

FIGURE

<i>Tebaltira</i>	<i>gaera</i>	<i>gharraa</i>
<i>Tebal-tira</i>	<i>ga-era</i>	<i>gharraa</i>
table-toward	go-CP	drawer
MOTION+MANNER	FIGURE	MOTION+PATH
<i>Taandai</i>	<i>kaapi</i>	<i>jhikcha</i>
<i>taan-dai</i>	<i>kaapi</i>	<i>jhik-cha</i>
pull-DUR	exercise.book	take.out-COP2.NPST.3SG.M.NH

'Going toward the table, he takes the exercise book out (by) pulling the drawer.' [NNC_ant]

As we can see from these examples, *ghiccyaunu* 'to push' (739) and *taannu* 'to pull' (740) in the dependent clause slot lexicalize Manner and compensate for the absence of Manner in the main clause. By doing so, they provide some additional information to the main event expressed by the main verbs *kocnu* 'to put' (739) and *jhiknu* 'to take out' (740).

6.2.3.1.3 Manner in adverbials

Adverbials denoting different Manner components occur in constructions where Path is lexicalized in the main verb of the clause. These include *hataar hataar* ‘hurriedly’ and *yatnapurwak* ‘with effort’ among others, which are presented in Table 117 and examples following the Table (see also Appendix L for a detailed list of adverbials used in narrative data).

Manner component	Adverbs	English translation
Attitude	<i>sajilari</i>	‘easily’
	<i>jatansaath</i>	‘safely’
	<i>phurtisaath</i>	‘in a smart way’
Effort	<i>yatnapurwak</i>	‘with effort’
	<i>kaThinaaisa~ga</i>	‘with difficulty’
Hurry	<i>hattapatta</i>	‘hurriedly’
	<i>hataar hataar</i>	‘hurriedly’
Noise/Lack of noise	<i>suTukka</i>	‘silently’
Slowness	<i>wistaarai</i>	‘slowly’
	<i>turunta</i>	‘immediately’
	<i>ekaipaTak</i>	‘at once’
	<i>dhamaadham</i>	‘non-stop’
Velocity	<i>khwaarra</i>	‘fast’

Table 117. Adverbials expressing different components of Manner

Examples (741) and (742) further show the use of the adverbs expressing Manner.

(741)	MODIFIER	MODIFIER	FIGURE	
	<i>hataar</i>	<i>hataar</i>	<i>saat</i>	<i>muThi</i>
	<i>hataar</i>	<i>hataar</i>	<i>saat</i>	<i>muThi</i>
	hurry	hurry	seven	fist
		GROUND-PATH	MOTION+PATH	
	<i>baaluwaa</i>	<i>jholaamaa</i>	<i>uThaayo</i>	
	<i>baaluwaa</i>	<i>jhola-maa</i>	<i>uThaa-yo</i>	
	sand	bag-LOC	pick.up-PST.3SG.M.NH	
	‘In a hurry he put seven handful of sand in his bag.’ [NNC_S56]			

(742)	AGENT	GROUND-PATH	MODIFIER	
	<i>diwyaale</i>	<i>jholaabaaTa</i>	<i>yatnapurwak</i>	
	<i>diwya-le</i>	<i>jhola-baaTa</i>	<i>yatna-purwak</i>	
	Diwya-ERG	bag-ABL	effort-with	
	FIGURE		MOTION+PATH	
	<i>phulko</i>	<i>guchhaa</i>	<i>nikaali</i>	
	<i>phul-ko</i>	<i>guchhaa</i>	<i>nikaal-i</i>	
	flower-GEN	bouquet	take.out-PST.3SG.F.NH	
	‘With effort Diwya took the bouquet of flowers out of the bag.’			
	(Lit. ‘With effort Diwya took out the bouquet of flowers from the bag.’			
	[NNC_S18]			

Adverbs like *hataar hataar* ‘hurriedly’ (741) and *yatnapurwak* ‘with effort’ (742) semantically convey haste and effort (cf. Kopecka, 2010; Slobin *et al.*, 2014). They modify the Path verbs *uThaauunu* ‘to pick up’ (741) and *nikaalnu* ‘to take out’ (742) in the main clause and compensate for the absence of Manner in the main verb, adding some further information to the main event i.e. the Figure’s Motion expressed in the main verb.

6.2.3.1.4 Manner in ideophones

Ideophones convey the specific Manner of movement the same way as the typical Manner verbs do (Kita, 1997; Voletz & Kilian-Hatz, 2001; Brown, 2004: 54; Slobin, 2006: 75). They can also express the acoustic dimensions, inner states that can serve to suggest Manner of Motion (Slobin, 2004: 233-234). As discussed by Slobin

(2004: 234), verb final languages (e.g., Basque, Japanese, Turkish) seem to have richer resources of ideophones. The narrative data show this evidence in the case of Nepali, which is also a verb final language. Furthermore, because the use of ideophones is quite frequent, they show that there are more strategies to express Manner in narrative data than in descriptive data which we discussed in § 6.1.3.1 and § 6.1.3.2. There are eight different ideophones expressing Manner in caused Motion events in narrative data that I show in Table 118 (see also Appendix L for a detailed list of ideophones used in narrative data).

Manner component	Ideophones	English translation
Appearance	<i>jhamlangnga</i>	'in a way one spreads hair all around'
Effort	<i>Tapakka</i>	'in a way one picks up something'
Noise/Lack of noise	<i>suTukka</i>	'silently'
Posture	<i>jurukka</i>	'in a way one gets up'
Suddenness	<i>phyaatta</i>	'at once'
Suddenness	<i>Tapakka</i>	'at once'
Suddenness	<i>phutta</i>	'at once'

Table 118. Use of ideophones in CME in narrative data

The following examples (743) and (744) show the use of ideophones in the expression of Motion events.

- (743) FIGURE MODIFIER MOTIN+PATH
tyo mani suTukka lukaae
tyo mani suTukka lukaa-e
 DEM.DIST gem IDP hide-PST.3SG.M.H
 '(He) (Trukar)) hid that gem secretly'. [NNC_apb]

(744) FIGURE		AGENT
<i>duiTai</i>	<i>paatharulaai</i>	<i>usle</i>
<i>dui-waTaa-nai</i>	<i>paat-haru-laai</i>	<i>usle</i>
two-CLF.EMP	leaf-PL-DAT	3SG-ERG
MODIFIER	MOTION+PATH	
<i>Tapakkai</i>	<i>Tipyo</i>	
<i>Tapakkai</i>	<i>Tip-yo</i>	
IDP	pick.up-PST.3SG.M.NH	
	'He picked up both the leaves in a specific way.' [NNC_aty]	

In examples (743) and (744) Path is lexicalized in the main verb *lukaunu* 'to hide' or 'to put secretly', and *Tipnu* 'to pick up'. The ideophone *suTukka* 'secretly' or 'in a manner that nobody knows', conveying semantically 'noise'/'lack of noise' (743), and *Tapakkai* 'to pick up something in a specific way', expressing suddenness (744), compensate for the lexical absence of Manner, thereby providing information regarding how the Agent manipulated the Figures.

6.2.3.1.5 Manner in the main verb

The idea in the preceding Sections was to show the lexicalization of Manner in the adverbial subordinate clauses, adverbials, and ideophones. Like the descriptive data, the narrative data confirm that Manner is also lexicalized in the main verb of the clause accounting for 13.2% of the total data in caused Motion events ($N=1860$). Overall, six different verbs are involved in expressing Manner as Table 119 shows.

Manner component	Verbs	English translation
Adhesion	<i>Taa~snu</i>	'to glue'/'to paste'
Adhesion	<i>joDnu</i>	'to connect'
Force	<i>phaalnu</i>	'to throw'
Force	<i>taannu</i>	'to pull'
Force	<i>palTaaunu</i>	'to turn upside down'
Force	<i>phyaa~knu</i>	'to throw'

Table 119. Main verbs lexicalizing Manner in CME in narrative data

Examples (745) and (746) below show how Manner is lexicalized in a clause.

- (745) FIGURE MOTION+MANNER
jhyaalko pardaa alikati taanin
jhyaal-ko pardaa alikati taan-in
 window-GEN curtain little **pull**-PST.3SG.F.H
 ‘She pulled the curtain of the window a little.’ [NNC_S87]

- (746) FIGURE MOTION+MANNER
biskutkaa pokai phaale
biskut-kaa pokaa nai phaal-e
 biscuits-GEN packets EMP **throw**-PST.PL
 ‘They threw the packets of biscuits.’ [NNC_G76]

In these examples, the semantic component of Manner is lexicalized in the main verbs *taannu* ‘to pull’ in (745) and *phaalnu* ‘to throw’ in (746). Semantically, both of them imply force.

6.2.3.2 Spontaneous Motion events

Regarding the lexicalization of Manner, the narrative data are consistent with the descriptive data. When the main verb of a given clause lexicalizes Path, Manner is expressed in an adverbial subordinate clause, an adverbial or an ideophone. Furthermore, there are examples where Manner is also lexicalized in the main verb of the clause. I will discuss each of them subsequently.

6.2.3.2.1 Manner in the CP form

The analysis reveals that Manner is expressed by 12 different verbs in the form of the conjunctive participle where Path is lexicalized in the main verb of the clause. Table 120 will show them all.

Manner component	Verbs	English translation
Velocity	<i>dauDanu</i>	'to run'
Aimlessness/Travel	<i>Dulnu</i>	'to wander'
Contact	<i>ghisranu</i>	'to crawl'
Aimlessness	<i>ghumnu</i>	'to wander'
Hurry	<i>hataar garnu</i>	'to hurry'
Motor pattern	<i>hi~Dnu</i>	'to walk'
Motor pattern	<i>paailaa caaldai garnu</i>	'to step' 'to walk'
Contact	<i>phutkanu</i>	'to slip'
Medium	<i>pyaaDal maarnu</i>	'to pedal'
Motor pattern	<i>uchinnu</i>	'to overtake in running/walking'
Medium	<i>uDnu</i>	'to fly'
Motor pattern	<i>uphranu</i>	'to jump'

Table 120. Verbs in the CP forms expressing Manner in SME in narrative data

Of the total verbs, 10 are monomorphemic and two are in the light verb construction. Note also that due to the use of complex clauses, some motion descriptions also contain the verbs of caused Motion in the CP forms which I have not taken into account for the analysis here. The following examples (747) and (748) convey further evidence the use of the non-finite CP forms expressing Manner.

- (747) FIGURE MOTION+MANNER MOTION+PATH
maanīs dauDera ritto pharkiyo
maanīs dauD-era ritto pharki-yo
man run-CP empty return-PST.3SG.M.NH
'(By) running, the man returned (without anything)'/
'Without anything the man returned running.' [NNC_asb]

(748)	GROUND-PATH	MOTION+MANNER		
	<i>tyahaa~baaTa</i>	<i>hi~Dera</i>	<i>thorai</i>	<i>samayama</i>
	<i>tyahaa~baaTa</i>	hi~D-era	<i>thorai</i>	<i>samayamaa</i>
	there-ABL	walk-CP	little	time-LOC
	GROUND-PATH		MOTION+PATH	
	<i>madhyaarjun</i>	<i>dhaammaa</i>	<i>pugnubhayo</i>	
	<i>madhyaarjun</i>	<i>dhaam-maa</i>	<i>pug-nu-bha-yo</i>	
	Madhyaarjun	shrine-LOC	reach-GER-COP ₃ .PST-PST.3SG.M. NH	
	‘Walking from there (he) reached the Madhyarjun shrine (<i>dhaam</i>) within a short time.’ [NNC_F38]			

In both examples, Path is lexicalized in the main verbs, *pharkinu* ‘to return’ in (747) and *pugnu* ‘to reach’ in (748); verbs *dauDanu* ‘to run’ in (747) and *hi~Dnu* ‘to walk’ in (748) occurring in the subordinate CP forms lexicalize Manner to compensate for the absence of Manner verbs in the main clause.

6.2.3.2.2 Manner in the aspectual form

Seven verbs encode Manner in the non-finite aspectual forms where Path is lexicalized in the main verb in a given clause, as presented in Table 121.

Manner component	Verbs	English translation
Velocity	<i>dagurnu</i>	‘to run’
Suddenness	<i>laDnu</i>	‘to fall’
Aimlessness	<i>Dulnu</i>	‘to roam’
Hurry	<i>hataarinu</i>	‘to hurry’
Velocity	<i>kudnu</i>	‘to rush’
Unsteadiness	<i>larkharaaunu</i>	‘to stagger’
Crawl	<i>lataarnu</i>	‘to drag’

Table 121. Verbs lexicalizing Manner in aspectual in spontaneous Motion events in narrative data

The Table also shows that verbs lexicalizing Manner express different semantic components. For example, the verb *dauDanu* ‘to run’ conveys ‘velocity’, and *hataarinu* ‘to hurry’ indicates ‘hurry’. Examples (749) and (750) below show the use of these aspectuals.

(749)	MOTION+MANNER		MODIFIER
<i>adhyaaromaa</i>	<i>laDdai</i>	<i>baDo</i>	<i>muskille</i>
<i>a~dhyaro-maa</i>	laD-dai	<i>baDo</i>	<i>muskille</i>
dark-LOC	fall-DUR	great	with.difficulty
<i>kariwa</i>	<i>dui</i>	<i>baje</i>	<i>haamile</i>
<i>kariwa</i>	<i>dui</i>	<i>baje</i>	<i>haami-le</i>
about	two	o'clock	1PL-ERG
		ground-path	motion+path
<i>moTar</i>	<i>rokeko</i>	<i>Thaau~maa</i>	<i>pugyau~</i>
<i>moTar</i>	<i>rok-eko</i>	<i>Thaau~-maa</i>	<i>pug-yau~</i>
vehicle	stop-PFV	place-LOC	reach-PST.1PL

‘Falling in the dark, (and) with great difficulty, we reached the place, where we stopped our vehicle, approximately at two o’clock.’ [NNC_S79]

(750)	MOTION+MANNER		
<i>dagurdai</i>	<i>aghi</i>	<i>manjusa~ga</i>	<i>waartaa</i>
dagur-dai	<i>aghi</i>	<i>manju-sa~ga</i>	<i>waartaa</i>
run-DUR	before	Manju-COM	conversation
	GROUND-PATH	MOTION+PATH	
<i>gareko</i>	<i>Thaau~maa</i>	<i>puge</i>	
<i>gar-eko</i>	<i>Thaau~maa</i>	<i>pug-e</i>	
do-PFV	place-LOC	reach-PST.3PL	

‘(By) running they reached the place where they had conversation with Manju.’ [NNC_F06]

Verbs *laDnu* ‘to fall’ (749) and *dagurnu* ‘to run’ (750) occurring in the non-finite aspectual form lexicalize Manner. They have the same function as discussed earlier that is, they compensate for the absence of Manner verbs in the main clause and convey additional information regarding the Figure’s Motion expressed by the main verb *pugnu* ‘to reach’ in (749) and in (750). Furthermore, semantically, they also express ‘force’ (749) and ‘motor pattern’ (750) respectively.

6.2.3.2.3 Manner in adverbials

A total of 10 different adverbials are used to modify the Path verbs. They are presented below in Table 122 together with the semantic component they lexicalize (see also Appendix L for further details).

Manner component	Modifiers	English translation
Slowness	<i>wistaarai</i>	‘slowly’
Effort	<i>ballatalla</i>	‘with difficulty’
Velocity	<i>caa~Dai</i>	‘fast’
Suddenness	<i>ekkaasi</i>	‘suddenly’
Effort	<i>ballaballa</i>	‘with effort’
Hurry	<i>hataar hataar</i>	‘in a hurry’
Hurry	<i>hattapatta</i>	‘in a great hurry’
Slowness	<i>sustasa~ga</i>	‘slowly’
Suddenness	<i>turunta</i>	‘immediately’

Table 122. Adverbials used in SME in narrative data

All the adverbials shown in Table 122 compensate for the absence of Manner in the main clause. Semantically, they differ because some adverbs such as *wistaarai* ‘slowly’ convey ‘slowness’ whereas others such as *turunta* ‘immediately’ express suddenness, as evidenced by examples (751) and (752).

- (751) FIGURE MODIFIER GROUND+PATH MOTION+PATH
nakul hattapatta tala orlan-chan
*nakul **hattapatta** tala orlan-chan*
 Nakul **in.haste** below descend-COP₂.NPST.3SG.H
 ‘Nakul comes down in a hurry.’
 (Lit. ‘Nakul descends down in a hurry.’ [NNC_aow])

- (752) FIGURE MODIFIER MODIFIER MOTION+PATH
tara sawitaa caa~Dai caa~Dai nai uklanchin
*tara sawitaa **caa~Dai** **caa~Dai** nai uklan-chin*
 but Sawita **fast** **fast** EMP ascend-COP₂.NPST.3SG.F.H
 ‘But Sawita goes up quite fast.’

(Lit. ‘But Sawita ascends quite fast.’ [NNC_aow])

The main verbs *orlanu* ‘to descend’ (751) and *uklanu* ‘to ascend’ (752) lexicalize the Path. The adverbials *hattapatta* ‘in a hurry’ (751) and *caa~Dai-caa~Dai* ‘fast’ (752) that convey the semantic component ‘hurry’ and ‘velocity’ respectively modify these Path verbs, compensating for the absence of Manner in the main verb. Note that both examples consist of simplex constructions. Hence, the expression of Manner in adverbials is less heavy than its expression in subordinate clauses.

6.2.3.2.4 Manner in ideophones

In spontaneous Motion events in the narrative data, 11 different ideophones were found expressing Manner and compensating for the absence of Manner in the main clause. Table 123 shows the Manner components lexicalized by these ideophones (for more information, see also Appendix L).

Manner component	Ideophones	English translation
Noise/Lack of noise	<i>lusukka</i>	‘secretly’
Noise/Lack of noise/Posture	<i>thapakka</i>	‘put something’ or ‘sit in a specific way’
Noise/Lack of noise	<i>suTukka</i>	‘silently’
Suddenness	<i>ghuplukka</i>	‘at once’
Suddenness	<i>dhaDaamma</i>	‘all of sudden’
Suddenness	<i>Dangga</i>	‘suddenly’
Suddenness	<i>bhuklukka</i>	‘suddenly’
Velocity	<i>khururra</i>	‘in a way one runs’
Velocity	<i>phirra</i>	‘in a moving way’
Velocity	<i>saTaasaT</i>	‘straightway’
Velocity	<i>phanphani</i>	‘in a moving way’

Table 123. Use of ideophones in SME in narrative data

Examples (753) and (754) below further show the use of these ideophones in spontaneous Motion events.

- (753) FIGURE MANNER
- | | | | |
|--------------|--------------------|---------------------|------------------------|
| <i>dui</i> | <i>janaa</i> | <i>prahariharu</i> | <i>saTaasaT</i> |
| <i>dui</i> | <i>janaa</i> | <i>prahari-haru</i> | <i>saTaasaT</i> |
| two | CLF | police-PL | IDP |
| GROUND-PATH | | MOTION+PATH | |
| <i>meraa</i> | <i>gharbhitra</i> | <i>pase</i> | |
| <i>meraa</i> | <i>ghar-bhitra</i> | <i>pas-e</i> | |
| 1SG.GEN | house-inside | enter-PST.3PL | |
- ‘Two policemen entered my home straightway.’
 (Lit. ‘Two policemen entered into my home straightway.’ [NNC_G07])

- (754) GROUND-PATH FIGURE
- | | | |
|-----------------------|----------------------------------|------------------------|
| <i>yas</i> | <i>gheraabhitra</i> | <i>jantiharuru</i> |
| <i>yas</i> | <i>gheraa-bhitra</i> | <i>janti-haru</i> |
| DEM.PROX | line-inside | bridegroom’s.friend-PL |
| MANNER | MOTION+PATH | |
| <i>lusukka</i> | <i>paschan</i> | |
| <i>lusukka</i> | <i>pas-chan</i> | |
| IDP | enter-COP ₂ .NPST.3PL | |
- ‘People accompanying the bridegroom enter this line secretly.’
 (Lit. ‘People accompanying the bridegroom enter into this line secretly.’)

In both examples, ideophones such as *saTaasaT* ‘straightway’ (753) and *lusukka* ‘secretly’ (754) modify the Path verbs *pasnu* ‘to enter’ and compensate for the absence of Manner verbs in the main clause. By doing so, they provide further information to the movement of human Figures *prahari* ‘police’ (753) and *janti* ‘people accompanying bridegroom’ (754). Moreover, *saTaasaT* ‘straightway’ and *lusukka* ‘secretly’ also respectively convey the semantic components of velocity and noise/lack of noise (cf. Kopecka, 2013). As in the case of some adverbials that express Manner where Path is lexicalized in the main verb, ideophones too have a similar function. Like adverbials, their use seems to represent a lower cognitive cost as compared to subordinate clauses expressing the Manner.

6.2.3.2.5 Manner in the main verb

Although the use of Manner verbs in the main clause is less frequent than the use of Path verb, the narrative data reveal that Manner is conveyed in the main verb of a clause in 16.3% of motion descriptions ($N=1024$). The following examples (755) and (756) further show how Manner is lexicalized.

(755)			FIGURE	MOTION+MANNER
	<i>sabai</i>	<i>bhandaa</i>	<i>pahilaa</i>	<i>draupadi laDin</i>
	<i>sab-ai</i>	<i>bhandaa</i>	<i>pahilaa</i>	<i>draupadi laD-in</i>
	all-EMP	COMP	first	Draupadi fall -PST.3SG.F.H
	'First of all Draupadi fell.' [NNC_asa]			

(756)	FIGURE	MOTION+MANNER
	<i>ghoDaa</i>	<i>dauDancha</i>
	<i>ghoDaa</i>	<i>dauDan</i> - <i>cha</i>
	horse	run -COP ₂ .3SG.M.NH
	'The horse runs.' [NNC_ayt]	

The semantic elements of Motion and Manner are lexicalized in the main verbs *laDnu* 'to fall' in (755) and *dauDanu* 'to run' in (756) within a simple clause. Semantically, the former expresses the force and the latter expresses the velocity.

Therefore, spontaneous Motion events in descriptive data and spontaneous Motion events in narrative data clearly show the same tendency that is, Path is lexicalized in the main verb of a clause, and consequently, Manner is additionally expressed in periphrastic expressions in subordinate constructions, adverbials, and ideophones (only in narrative data). These analyses of descriptive (experimental) as well as narrative (naturalistic) data confirm, therefore, that Nepali behaves typologically like the V-framed languages.

6.2.3.2.6 Manner and Path in the main verb

In spontaneous Motion events in narrative data, results also show evidence of the use of the verb *caDnu* 'to climb' lexicalizing both Manner and Path. It is used either with the means of transport (e.g., cycle, bus, *ghoDaa* 'horse') or it refers to the grasping Manner such as climbing a tree; yet, when triggered by Path, it is used with

the Grounds such as *ukaalo baaTo* 'upward road' or 'ascent' or simply *ukaalo* 'ascent'. This supports what we argued in Chapter 5 (cf. § 5.3.1.2.8), namely that *caDhnu* 'to climb' conflates two semantic components, Manner and Path. Note, however, the majority of clauses extracted from the NNC conveys the means of transport, such as (757) and (758).

(757)	FIGURE	GROUND-PATH	MANNER+PATH
	<i>uniharu</i>	<i>gaaDimaa</i>	<i>caDhe</i>
	<i>uni-haru</i>	<i>gaaDi-maa</i>	<i>caDh-e</i>
	3-PL	vehicle-LOC	climb-PST.3PL
	'They rode on a vehicle (bus/car).' [NNC_S81]		

(758)	FIGURE	GROUND-PATH	MANNER+PATH
	<i>dubai</i>	<i>riksaamaa</i>	<i>caDhe</i>
	<i>dubai</i>	<i>riksaa-maa</i>	<i>caDh-e</i>
	both	auto.rickshaw-LOC	climb-PST.3PL
	'Both of them rode on the autorickshaw.' [NNC_S57]		

6.3 Summary

The main focus of this Chapter was to investigate the lexicalization patterns in Nepali based on descriptive (stimuli-based), and narrative (corpus-based) data. The research question to investigate here was whether Path is lexicalized in the main verb or in the form of satellites. First, we investigated this issue in caused Motion events in the 'Put and Take' corpus. We found that speakers use the V-framed constructions where Path is almost exclusively lexicalized in the main verb of the clause accounting for 81.5% of the total data ($N=1158$). The results also reveal that there are 39 different verbs that lexicalize the Source (e.g., *haTaaunu* 'to remove') and the Goal (e.g., *siuranu* 'to insert') Path, and the Path indicating the boundary crossing (e.g., *nikaalnu* 'to take out') (cf. § 6.1.1.1). However, there are not any verbs that lexicalize the Median Path. So, these results show that Nepali belongs to the V-framed type of language as regards to the typology of Motion events. Secondly, the same research question was investigated in spontaneous Motion events in the 'Trajectoire' corpus. As revealed by the data, speakers preferably use those constructions where the main

verb of the clause lexicalizes Path i.e. 58 % of the total data ($N=949$) and that comprise as many as 21 different verbs. Unlike the caused Motion events, all three portions of Path, namely Source- (e.g., *niskanu* ‘to exit’), Median- (e.g., *tarnu* ‘to cross’), and Goal- (e.g., *pugnu* ‘to reach’) oriented Path are lexicalized in the main verb of the clause. Main verbs that lexicalize Path also encode the boundary crossing Path (e.g., *chirnu* ‘to enter’), vertical Motion implying both upward (e.g., *uklanu* ‘to ascend’) and downward (e.g., *jharnu* ‘to descend’) movement, and verbs lexicalizing Deixis and Path (e.g., *jaanu* ‘to go’) (cf. § 6.1.1.2)). Therefore, data from spontaneous Motion events further confirm Nepali as belonging to the V-framed type.

In addition to the V-framed pattern in motion descriptions, data also attest the reverse V-framed pattern accounting respectively for 0.6% in caused Motion events and 1.3% in spontaneous Motion events in which the main verb of a clause lexicalizes Manner and Path is expressed in the conjunctive participle form (cf. § 6.1.2.1 and § 6.1.2.2).

Section 6.2.3 explored the lexicalization of Manner in descriptive data. It discussed the ways Manner is expressed when the Path is lexicalized in the main verb of the clause. Speakers can omit the Manner component or express it explicitly outside the main verb in the CP form or in the aspectual form or in the form of adverbials, in both caused and spontaneous Motion events to compensate for the absence of Manner in the main verb. In some cases, there are only adverbials modifying the main verb lexicalizing the Path. Syntactically such types of constructions are less complex and have low cognitive cost. When comparing the expression of Manner in caused and spontaneous Motion events, we found that Manner is more frequent, more complex, more fine-grained, and more diverse in spontaneous Motion events because it can be expressed in a combined way by the use of Manner verb as well as a Manner adverbial. Moreover, there are verbs that lexicalize Manner and Path in spontaneous Motion events; this strategy is absent in caused Motion events. The Section also discussed those constructions where the main verb of the clause lexicalizes Manner respectively in caused (11.7% of the total data) and spontaneous Motion events (32.3% of the total data).

In Section 6.2 of this Chapter, I investigated the lexicalization patterns in narrative data, which comprise caused as well as spontaneous Motion events, in order to compare and contrast the lexicalization patterns in the descriptive and narrative

data. Narrative data validate descriptive data, that is to say, V-framed pattern is highly pervasive both in caused and spontaneous Motion events in narrative data. In the case of caused Motion events, V-framed pattern accounts for 46.9% of the total ($N=1860$) where 29 different verbs lexicalize either the Goal Path (e.g., *raakhnu* ‘to put’) or the Source Path (e.g., *jhiknu* ‘to take out’) or the Path with boundary crossing (e.g., *nikaalnu* ‘to take out’). As in descriptive data, there are not any verbs that lexicalize the Median-oriented Path in caused Motion events in narrative data. However, in the case of spontaneous Motion events, the main verbs lexicalize all three portions of Path: either the Source (e.g., *niskanu* ‘to exit’) or the Goal (e.g., *chirnu* ‘to enter’) or the Median (e.g., *tarnu* ‘to cross’) Path accounting for 53.7% of the total data ($N=1024$). Moreover, narrative data also show the verbs which lexicalize the Deixis and Path (e.g., *jaanu* ‘to go’), vertical Motion (e.g., upward, *uklanu* ‘to ascend’ or downward, *jharnu* ‘to descend’), and the boundary crossing Path (e.g. *chirnu* ‘to enter’).

The analysis also showed the use of the reverse V-framed pattern in narrative data; it accounts for 1.1% of the total data ($N=1860$). It is important to note, however, that the reverse V-framed pattern is attested only in caused Motion events but not in spontaneous Motion events.

As most of the motion descriptions are conveyed by the V-framed constructions, Manner is expressed optionally either by the CP form or the aspectual form or the adverbial in order to compensate for the absence of Manner in the main verb. In addition to these forms, the ideophones expressing Manner were also found in narrative data; interestingly, they are absent in descriptive data.

In narrative data, in both caused and spontaneous Motion events accounting respectively 13.2 and 16.3% of the total data, Manner is also lexicalized in the main verb. Finally, the narrative data also reveal the use of the verb *caDhnu* ‘to climb’ lexicalizing Manner and Path and used merely in spontaneous Motion events.

Relating our results to crosslinguistic studies on lexicalization patterns, Nepali shows a clear typological tendency relying extensively on the V-framed pattern. As a consequence, since Path is lexicalized in the main verb of a clause in Nepali, Manner is either omitted or expressed explicitly in conjunctive participle forms, aspectuals, adverbials, and ideophones. In that respect, Nepali is a V-framed language like

Spanish, French, Italian, and Hebrew originally discussed by Talmy (1975, 1985, 1991, 2000 *inter alia*) and crosslinguistically expanded by Berman and Slobin (1987, 1994, 1997, 2002, 2003, 2004, 2005, 2006, *inter alia*), Aske (1989), Choi and Bowerman (1991), Slobin and Hoiting (1994), Bowerman, De Leon and Choi (1995), Narasimhan (1998, 2012), Kopecka (2003, 2004, 2006, 2009, 2010 *inter alia*), Filipović (2007), Ibarretxe-Antuñano (2009, 2012, 2017 *inter alia*), Vittrant (2015), and Rappaport Hovav (2019) among many others.

The roadmap that Talmy's typological classification brought is a valuable contribution in the domain of Motion events because it has opened a broad avenue for further research in several languages. As a result, several studies have already been conducted following this framework, however, these studies suggest that "typologies leak in general and languages do not always afford a tight fit into typological classifications" (Pourcel & Kopecka, 2005). Moreover, as discussed by Berman and Slobin (1994: 118) "as a general caveat, it should be remembered that typological characterisations often reflect tendencies rather than absolute differences between languages."

Our study also suggests that some additional patterns exist in the system but it is also important to know which pattern is more natural and pervasive in the system and that there are also constructional, and discourse-pragmatic factors that have to be taken into account.

Chapter 7. Distributed spatial semantics in Nepali

The main objective of this Chapter is to investigate the Motion events expressions in Nepali within the Distributed spatial semantic framework proposed by Sinha and Kuteva (1995). In particular, our aim is twofold: first, we examine the use of morphosyntactic loci for expressing the Path, and second, we investigate the semantic distribution of Path across the clause, i.e. the types of Path components encoded in different linguistic devices and how they are expressed within the simplex clause⁴² (cf. § 4.3 and § 5.4).

The main principle of the ‘Distributed spatial semantics’ approach proposed by Sinha and Kuteva (1995) is that spatial semantics is not conflated in just one morpheme within a clause but is distributed across the clause and the meaning of spatial morphemes is “conditioned by distributed spatial semantics” (Sinha & Kuteva, 1995: 181). The authors postulate that:

- (a) all languages exhibit a distributed spatial semantics;
- (b) the “weighting” of different form classes for the expression of spatial relational meaning varies across languages;
- (c) languages also vary in terms of the extent to which the underlying distributed semantics of space is *manifest* or *overt*. The authors discuss two dimensions of spatial expressions (i) the explicit or the overtly distributed spatial semantics and (ii) the non-explicit or the covertly distributed spatial semantics. By virtue of their linguistic characteristics, some languages, such as Japanese, express the spatial meaning *overtly* while others, such as

⁴² The main objective of this Chapter is to analyse semantic/morphosyntactic distribution of Path, applying the “Distributed spatial semantics” framework within simplex clauses. Hence, Path expressed in one morphosyntactic locus in simplex clause, and Path expressed in complex clauses are not parts of the analysis in this Chapter because they are discussed separately in Chapter 4 and 5 (cf. § 4.4, § 5.4).

English, express it *covertly*; some, such as Ewe, might even express in both ways.

Following Sinha and Kuteva (1995), I will show through examples from Japanese, and English representing respectively the overtly vs. covertly distributed spatial semantics. Then, I will investigate the Nepali data in order to examine which one of the two patterns is more pervasive in Nepali.

As illustrated in the Japanese example (759), the Path information is expressed by a simultaneous selection of the verb *ireru* ‘to insert’, the noun *naka* ‘inside’, and the postposition *-ni*. This is a typical example of an overtly distributed spatial semantics where three different linguistic devices explicitly encode the meaning of Path. Furthermore, this example also shows that Path can be distributed redundantly across the sentence. However, according to Sinha and Kuteva (1995), both the noun *naka* ‘inside’ and the postposition *-ni* can optionally be omitted.

(759) Japanese (Sinha & Kuteva, 1995: 186)

sensei-wa hon-o hako(no-naka) ni ireru

professor-TOPIC book-OBJ box-(GEN-**inside**) LOC-insert.NPST

‘The professor puts the book in the box.’

The English example (760), on the other hand, shows a covertly distributed spatial semantics, that is, the expression of spatial relational information is not explicitly encoded in a devoted morpheme but can be recovered from the “linguistic” context (Sinha & Kuteva, 1995: 181). More specifically, the spatial information is not encoded by the verb of motion *jump* but it is covertly distributed across the verb *jump* and the Ground object *fence*. Therefore, the profiling of Path information can be recovered from the linguistic context or in a combined way i.e. by the combination of the verb and the Ground object (Sinha & Kuteva, 1995: 182).

(760) English (Sinha & Kuteva, 1995: 181)

The boy jumped the fence.

According to Sinha and Kuteva (1995), the Path can be distributed either *redundantly* or *differentially*. As pointed out earlier in the Japanese example, if the same spatial information is encoded by “simultaneous overt selections from different form classes”, it is considered to be the *redundant distribution pattern*; and if different type of spatial information is distributed in different form classes, it is considered to

be a *differentiated distribution pattern*. Following Sinha and Kuteva’s approach, we define *redundancy* and *differentiation* as follows:

- (a) **Redundancy:** a pattern of expression wherein different morphosyntactic devices used within a clause express the same portion (a.k.a. segment) of Path, e.g., either Source or Median or Goal).
- (b) **Differentiation:** a pattern of expression wherein different morphosyntactic devices within a clause express different portions of Path, e.g., Source-Goal, Median-Goal, Source-Median-Goal.

The Figure below shows in a schematic fashion the two patterns of the distributed spatial semantics.

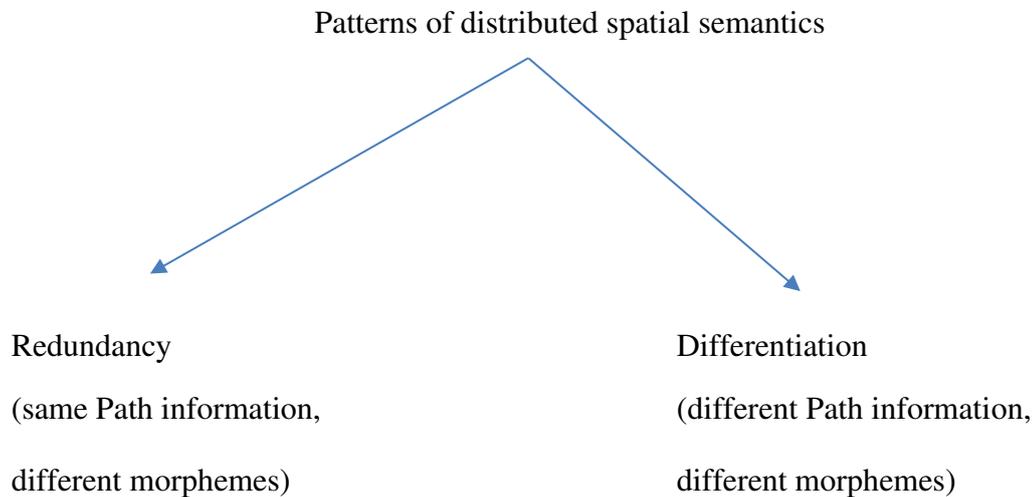


Figure 23. Distributed spatial semantics⁴³

7.1 Distributed spatial semantics in descriptive (stimuli-based) data

In presenting the analysis of descriptive data, first, I will show the overall distribution patterns in caused (‘Put and Take’ corpus) Motion events, and then in spontaneous (‘Trajectoire’ corpus) Motion events, as Table 124 and Table 125 show them.

⁴³ After Sinha and Kuteva (1995); DePasquale (2017).

Patterns	Morphosyntactic loci			Total	Percentage
	2	3	4		
Redundancy	343	17	1	361	31.2
Differentiation	11	18	1	30	2.6
Total	354	35	2	391	33.8
Percentage	30.6	3.0	0.2	33.8	

Table 124. Patterns of distribution in CME in descriptive data

Patterns	Morphosyntactic loci				Total	Percentage
	2	3	4	5		
Redundancy	141	35	3		179	18.9
Differentiation	32	54	14	4	104	11.0
Total	173	89	17	4	283	29.8
Percentage	18.2	9.4	1.8	0.4	29.8	

Table 125. Patterns of distribution in SME in descriptive data

In both events, the data show the redundant as well as differentiated patterns of distribution of Path. In caused Motion events, Path is distributed in two loci up to four morphosyntactic loci; in spontaneous Motion events, however, it is distributed in two up to five morphosyntactic loci⁴⁴. Yet, note that the redundant distribution pattern is the most frequent in caused Motion events (31.2 % of the total data, $N=1158$) as well as spontaneous Motion events (18.9 % of the total $N=949$). The two Tables above also show that the differentiated distribution pattern is less frequent in the data: it accounts for 2.6% of caused Motion events and 11% of spontaneous Motion events.

⁴⁴ For consistency and uniformity, percentage is calculated out of the total number of motion descriptions in the 'Put and Take' corpus ($N=1158$) and 'Trajectoire' corpus ($N=949$).

7.1.1 Redundant distribution pattern of Path

As defined in the preceding paragraph, the redundant distribution is a pattern of expression wherein different morphosyntactic devices used within a clause express the same portion of Path, either Source or Median or Goal. We can see the data representing this type of distribution across different morphosyntactic loci in the following Table 126 and Table 127, respectively in caused and spontaneous Motion events.

Path portions	Morphosyntactic loci			Total	Percentage
	2	3	4		
Goal	243	4		247	21.3
Source	100	13	1	114	9.8
Total	343	17	1	361	31.2

Table 126. Redundant distribution of Path in CME in descriptive data

Path portions	Morphosyntactic loci			Total	Percentage
	2	3	4		
Goal	116			116	12.2
Source	14	35	3	52	5.5
Vertical Motion	9			9	0.9
Median	2			2	0.2
Total	141	35	3	179	18.9

Table 127. Redundant distribution of Path in SME in descriptive data

As we see in Tables above, the redundant distribution of the Path can imply two up to four morphosyntactic loci, two loci being the most frequent strategy: accounting for 29.6% of the total ($N=1158$) in caused Motion events and 14.9% of the total ($N=949$) in spontaneous Motion events. However, there is a noticeable difference between the two event types: the data reveal that in caused Motion events only two Path portions i.e. Source and Goal are redundantly distributed, whereas in spontaneous Motion events all the three portions of Path i.e. Source, Median, and Goal can be conveyed in a redundant way. Besides, the analysis also shows that Path is distributed redundantly in vertical Motion too. Finally, we may note that Path distributed in four morphosyntactic loci is the most redundant.

In what follows, I will discuss the different components of Path where they are distributed redundantly.

7.1.1.1 Goal of Motion

Out of 361 motion descriptions, the Goal Path is distributed in a redundant fashion in 247 motion descriptions in caused Motion events that is in 21.3% of the data ($N=1158$) and in 116 (12.2% of the total data, $N=949$) motion descriptions in spontaneous Motion events. Examples below show such distribution of Goal of Motion.

- (761) *usle* *pustak* *bhai~i~maa* *raakhi*
us-le *pustak* *bhui~-maa* ***raakh-i***
 3SG-ERG book floor-LOC **put-PST.3SG.F.NH**
 ‘She put the book on the floor.’ [s6, PT 007]

In the example (761), the Goal Path is indicated by the locative case marker *-maa* and the verb *raakhnu* ‘to put’. The locative case marker *-maa* ‘LOC’ expresses the final component of Path indicating the geometrical configuration i.e. the surface of the Ground, and the verb *raakhnu* ‘to put’ conveys Motion of the Figure directed toward this Goal.

Example (762) illustrates the redundant pattern where Path is conveyed in three loci.

- (762) *ekjaanaa* *mailaale* *byaag*
ek-janaa *mahilaa-le* *byaag*
 one-CLF woman-ERG bag
rumko *bhitrapaTTi* *raakhin*
rum-ko ***bhitra-paTTi*** ***raakh-in***
 room-GEN **inside-toward** **put-PST.3SG.F.H**
 ‘A woman put the bag inside the room.’

(Lit. ‘A woman put the bag toward the inside of the room.’ [s13, PT 129])

In the example (762), Path is distributed redundantly in three morphosyntactic loci between the verb (*raakhnu* ‘to put’), the adverb (*bhitra* ‘inside’), and the postposition (*-paTTi* ‘toward’). The verb expresses both Motion and Goal Path of the Figure object, *byaag* ‘bag’. The adverb *bhitra* ‘inside’ conveys the final direction

(Path), and the postposition *-paTTi* adds spatial information in a more fine-grained way and further specifies the adverb *bhitra* ‘inside’ in the sense that the Figure is not only inside of the room but also invisible from outside. So, speakers use the available devices offered by the language that explicitly encode the spatial meaning and make the Goal Path more fine-grained and more explicit.

In spontaneous Motion events, the Goal Path can be distributed redundantly only in two morphosyntactic loci either between the verb and the postposition or between the verb and the case marker or between the verb and the adverb that will be illustrated with examples below.

- (763) *u* *guphaabhitra* *pasi*
u-Ø *guphaa-bhitra* *pas-i*
 3SG-NOM cave-**inside** **enter**-PST.3SG.F.NH
 ‘She entered the cave.’
 (Lit. ‘She entered into the cave.’) [Traj_053_s19]

- (764) *uni* *jangngalbhitra* *chirin*
uni-Ø *jangngal-bhitra* *chir-in*
 3SG.H-NOM cave-**inside** **enter**-PST.3SG.F.H
 ‘She entered the forest.’
 (Lit. ‘She entered into the forest.’) [Traj_057_s10]

The spatial meaning is distributed between verbs *pasnu* ‘to enter’ (763) and *chirnu* ‘to enter’ (764), and the postposition *-bhitra* ‘inside’. By virtue of their characteristic features, the verbs *pasnu* ‘to enter’ and *chirnu* ‘to enter’ express ‘go into’ but the postposition *-bhitra* ‘inside’ also expresses the same Path information in both examples. Such simultaneous expression of the same Path information is an instance of the overtly redundant pattern, and speakers use such constructions very productively. Note, however, that similar type of redundant distribution pattern (as we saw in (764)) above is a matter of question in English as is illustrated in (765) below due to “Directed Path Constraint” as pointed out by Sinha and Kuteva (1995: 186).

(765) ?*John entered into the room.* (Sinha & Kuteva, 1994: 182)

The analysis of the spontaneous Motion events further shows that different morphosyntactic devices are involved in the redundant distribution of the Goal Path mostly between the categories as summarized below and presented in Table 128 following the summary.

- the verb and the case marker
- the verb and the postposition
- the verb and the adverb
- the verb, the adverb and the postposition

Morphosyntactic devices	CME	SME
Case marker	<i>-maa</i> ‘LOC’	<i>-maa</i> ‘LOC’
Postposition	<i>-bhitra</i> ‘inside’	<i>-bhitra</i> ‘inside’
	<i>-maathi</i> ‘above’	<i>-tira</i> ‘toward’
	<i>-nira</i> ‘near’	<i>-muni</i> ‘under’
		<i>-tarpha</i> ‘toward’
		<i>-najik</i> ‘near’
		<i>-nera</i> ‘near’
Adverb	<i>bhitra</i> ‘inside’	<i>bhitra</i> ‘inside’
		<i>najik</i> ‘near’
		<i>agaaDi</i> ‘toward front’

Table 128. Morphosyntactic devices expressing Goal in CME and SME in descriptive data

The Table 128 also confirms that redundancy occurs between different linguistic devices: either between the verb and the case marker or between the verb and the postposition or between the verb and the adverb. There are a few cases where the Path is distributed among all the linguistic devices. The most frequent linguistic devices to share the labour (Lestrade *et al.*, 2011) in expressing the Goal Path together are the verb and the locative case marker *-maa* ‘LOC’ (194 motion descriptions that is 16.8% of the total data, $N=1158$) in caused Motion events and the postposition *-bhitra* ‘inside’ (69 motion descriptions, 7.3% of the total, $N=949$) in spontaneous Motion

events. It is also worth mentioning here that there are some differences in the distribution of the Goal Path between caused and spontaneous Motion events.

a. Morphosyntactic devices

In the expression of the Goal Path, verbs, case markers, postpositions, and adverbials are used both in caused and spontaneous Motion events. However, the number of lexical (adverbials) and grammatical (postpositions) devices is more diverse in spontaneous Motion events which means that the inventory of devices is larger, and therefore, that there are more choices available to the speakers.

b. Morphosyntactic loci

In caused Motion events, the Goal Path is redundantly distributed in two up to three morphosyntactic loci by simultaneous selections of a verb, a postposition, a case marker, and/or an adverb; in spontaneous Motion events, however, it is redundantly distributed only in two morphosyntactic loci.

7.1.1.2 Source of Motion

The Source Path can also be distributed redundantly in two up to four morphosyntactic loci in descriptive data both in caused and spontaneous Motion events. In the former, there are 114 motion descriptions accounting for 9.8% of the total ($N=1158$) and in the latter Source Path is redundantly distributed in 52 motion descriptions corresponding to 5.5% of the total ($N=949$).

In caused Motion events, the redundant distribution pattern of the Source Path in two morphosyntactic loci is the most frequent; by contrast, in spontaneous Motion events, the distribution of the Source Path in three morphosyntactic loci is the most frequent pattern. Examples (766) through (771) showing the redundant pattern in both events are given below.

- (766) *unile jholaabaaTa euNaa kaa~kro jhikin*
un-le jholaa-baaTa euTaa kaa~kro jhik-in
 3SG.H-ERG bag-ABL one cucumber **take.out**-PST.3SG.F.H
 ‘She took a cucumber out of the bag.’
 (Lit. ‘She took out a cucumber from the bag.’ [s9, PT 115])

In example (766), Path is distributed in the verb and the case marker. The verb *jhiknu* ‘to take out’ expresses the Motion as well as the Path of the Figure *kaa~kro* ‘cucumber’, and the ablative case marker *-baaTa* ‘from’ conveys the same Path component marking the indirect object *jhola* ‘bag’ whose geometric configuration is containment and semantically indicating the Ground element from which the movement of the Figure begins.

(767)	<i>unile</i>	<i>rukko</i>	<i>pwaalbaaTa</i>
	<i>un-le</i>	<i>ruk-k-o</i>	<i>pwaal-baaTa</i>
	3SG.H-ERG	tree-GEN	hole-ABL
	<i>haat</i>	<i>baaira</i>	<i>nikaalin</i>
	<i>haat</i>	<i>baahira</i>	<i>nikaal-in</i>
	hand	outside	take.out -PST.3SG.F.H

‘She took her hand out of the hole of the tree.’

(Lit. ‘She took out her hand outside from the hole of the tree.’ [s9, PT 123])

In the case of (767), however, the Path is distributed in three morphosyntactic loci. Three different linguistic devices are used to express the same component of Path overtly: the verb, the case marker, and the adverb. The verb *nikaalnu* ‘to take out’ expresses the Motion and the Source Path of the human Figure, *haat* ‘hand’, the case marker *-baaTa* ‘from’ conveys the Source Path and marks the Ground object *pwaal* ‘hole’. Speakers also use the adverb *baahira* ‘outside’ to convey the same Path component, adding to its salience. In fact, the adverb expresses two semantic elements, the Path as well as the Ground. When expressing the Path, the adverb *baahira* ‘outside’ makes the Source Path more redundant, therefore, more fine-grained, too.

(768)	<i>usle</i>	<i>baalTinbhitrabaaTa</i>	<i>aaphno</i>
	<i>us-le</i>	<i>baalTi-bhitra-baaTa</i>	<i>aaphno</i>
	3SG-ERG	bucket- inside -ABL	self.GEN
	<i>Taauko</i>	<i>baahira</i>	<i>nikaali</i>
	<i>Taauko</i>	<i>baahira</i>	<i>nikaal-i</i>
	head	outside	take.out -PST.3SG.F.NH

‘She took her head out of the bucket.’

(Lit. ‘From inside the bucket she took out her own head outside.’ [s16, PT 124])

In caused Motion events, not only can the Path be distributed in four morphosyntactic loci but also relies on four different morphosyntactic devices, e.g., a verb, a case marker, a postposition and an adverb, involved in expressing the same Source Path as we saw in the example (768). In addition to the verb *nikaalnu* ‘to take out’, the ablative case marker *-baaTa* ‘from’, and adverb *baahira* ‘outside’, speakers also use the postposition *-bhitra* ‘inside’ that expresses the Goal Path. Nevertheless, when the postposition (*-bhitra* ‘inside’) occurs with the Ground object and also is combined with the ablative case marker *-baaTa* ‘from’, its local role is distributed. So, in this case, it expresses the Source Path from where the Figure object moves rather than the Goal Path.

Now, I will show how Source Path is distributed in spontaneous Motion events.

- (769) *u caa~i~ oNaarbaaTa niskyo*
u-∅ caahi~ oDhaar-baaTa nisk-yo
 3SG-NOM DPRT cave-ABL **exit**-PST.3SG.M.NH
 ‘He came out of the cave.’
 (Lit. ‘He exited outside from the cave.’) [Traj_028_s15]

The example (769) shows that the Source Path is distributed between two different morphosyntactic devices, the verb *niskanu* ‘to exit’ and the ablative case marker *-baaTa* ‘from’. The verb *niskanu* expresses ‘to exit’ or ‘to come out’ as was the case with the verbs *chirnu* ‘to enter’ or *pasnu* ‘to enter’ with respect to Goal-oriented Path. Moreover, the case marker *-baaTa* ‘from’ further profiles the Source Path, reinforcing the meaning of that specific Path component.

- (770) *u guphaabaaTa baahira niski*
u-∅ guphaa-baaTa baahira nisk-i
 3SG-NOM cave-ABL **outside** **exit**-PST.3SG.F.NH
 ‘She exited the cave.’
 (Lit. ‘She exited outside from the cave.’) [Traj_023_s19]

In the example (770), the spatial information conveyed by the verb and the ablative case marker is similar to what we saw in (769), and the adverb *baahira* ‘outside’ conveys two semantic elements, Source Path and Ground carrying the ablative case marker *-baaTa* ‘from’. So, three different syntactic devices are dedicated in expressing the same segment of Path which evidence the overt distribution of three morphosyntactic devices across a clause.

The example below makes the expression of the Path even more explicit than any of the above examples because it has the highest number of morphosyntactic loci, i.e. four, that the Path is distributed across.

- (771) *uni janggalbhitrabaaTa baaira niskie*
uni-Ø janggal-bhitra-baaTa baahira niski-e
 3SG.H-NOM forest-**inside**-ABL **outside** exit-PST.3SG.M.H
 ‘He exited the forest.’
 (Lit. ‘He exited outside from inside the forest.’) [Traj_055_s10]

This example involves all the four morphosyntactic devices, namely, the verb, the case marker, the adverb, and the postposition that express the same spatial information in a clause. The postposition *-bhitra* ‘inside, which indicates Goal, is triggered by the Source function in this example as it indicates the geometric configuration of the Ground object, *janggal* ‘forest’ and is combined with the ablative case marker *-baaTa* ‘from’ which indicates Motion away from the Source. It can be argued that the Figure comes out from inside of the cave that is probably invisible.

The major difference we found between the caused and spontaneous Motion events concerns the number of morphosyntactic loci preferentially used to express the Source Path redundantly: two morphosyntactic loci in caused Motion events, and three morphosyntactic loci in spontaneous Motion events. Hence, the Source Path is distributed in a more complex and fine-grained way in spontaneous Motion events as compared to caused Motion events. In both event types, the semantic information of Path is encoded redundantly between different linguistic devices (inter-categories), as summarized below.

- the verb, the case marker and the adverb
- the verb and the case marker
- the verb, the case marker, the postposition, and the adverb
- the verb, the postposition, and the case marker

7.1.1.3 Median, and vertical Motion

There are only two motion descriptions where Median Path is redundantly distributed in a clause, as is illustrated in (772), and nine motion descriptions in

vertical Motion, as in examples (773) and (774). Note that the data do not show any redundant pattern implying Median and vertical Motion in caused Motion events in the descriptive data.

- (772) *jangngalko baaTo hu~dai caubaaTo paar garin*
jangngal-ko baaTo hu~dai caubaaTo paar gar-in
 forest-GEN road **via** cross.road **cross do**-PST.3SG.F.H
 ‘She crossed the road via the forest.’
 ‘She crossed the cross-road via the forest.’ [Traj_048_s9]

As we can see in (772), Path is distributed between the verb *baar garnu* ‘to cross’ and the Median marker *hu~dai* which is most possibly derived from the copula₃ *hunu* ‘to become’ in combination with the durative marker *-dai*. Therefore, the main verb *baar garnu* ‘to cross’ in the light verb construction and the Median marker *hu~dai* ‘via’ express the same spatial meaning i.e. the Median Path.

- (773) *u khaali khuTTaa Dhunggaako*
u-Ø khaali khuTTaa Dhungga-ko
 3SG-NOM empty leg stone-GEN
baaTo oraalo jharyo
baaTo oraalo jhar-yo
 road **downward descend**-PST.3SG.M.NH
 ‘He came down the stony road bare-footed.’
 (Lit. ‘He descended downward the stony road with empty legs.’ [Traj_067_s19])

- (774) *u saraasar ukaalo caNekiche*
u-Ø saraasar ukaalo caDh-eki-che
 3SG-NOM straightway **upward climb**-PFV.F-COP₂.NPST.3SG.F.NH
 ‘She has gone up straightway.’
 (Lit. ‘She has ascended upward straightway.’ [Traj_067_s19])

The same spatial information related to the vertical Motion is distributed in two syntactic elements across the clause in the examples above between the verb *jharnu* ‘to descend’ and the nominal *oraalo* ‘downward slope’ or ‘downward’ (773) and the verb *caDhnu* ‘to climb’ and the nominal *ukaalo* ‘the upward slope’ (774). In the example (773), the Motion is oriented to downward direction whereas in the case of (774) it is oriented to the upward direction.

7.1.2 Differentiated distribution pattern of Path

Differentiation pattern refers to a pattern of expression wherein different morphosyntactic devices within a clause express different portions of Path, e.g., Source-Goal, Median-Goal, Source-Median-Goal. In descriptive data, the type of Path expressed through the differentiated pattern accounts for 2.6% ($N=1158$) of caused Motion events, and 11% ($N=949$) of spontaneous Motion events, as shown in Table 129 and Table 130.

Path portions	Morphosyntactic loci			Total	Percentage
	2	3	4		
Source-Goal	5	16	1	22	1.9
Source	5	1	1	7	0.6
Goal	1	1		1	0.1
Total	11	18	1	30	2.6

Table 129. Differentiation patterns in CME in descriptive data

Path portions	Morphosyntactic loci				Total	Percentage
	2	3	4	5		
Source-Goal	17	33	12	4	66	7
Source	8	13	2		23	2.4
Vertical Motion	4	7			11	1.2
Median	2				2	0.2
Median-Goal	1	1			2	0.2
Total	32	54	14	4	104	11

Table 130. Differentiation patterns in SME in descriptive data

Tables above show that the spatial semantic information related to Path is distributed differentially in two up to five morphosyntactic loci and that Path distributed in three loci is the most frequent pattern for Source-Goal Motion in both caused and spontaneous Motion events. The data also show the use of the differentiated pattern in the expression of Source and Goal Motion in both (caused and spontaneous Motion) events, and in the expression of vertical Motion, Median,

and Median-Goal Motion only in spontaneous Motion events; nevertheless, the ratio of this pattern is very low in all types of Path. We will discuss each of these cases below.

7.1.2.1 Source-Goal of Motion

In descriptive data, the Source-Goal Path is the most differentially distributed pattern by using two up to four morphosyntactic loci across the clause in caused Motion events and two up to five loci in spontaneous Motion events. In both event types, the distribution of Path in three loci is the most frequent pattern, accounting for respectively 1.9% ($N=1158$) of caused Motion events and 6.8% ($N=949$) of spontaneous Motion events. Examples (775) through (781) depicting the Source-Goal Motion are illustrated below.

- (775) *TebulbaaTa* *mecmaa* *saamaan* *raakhin*
Tebul-baaTa *mec-maa* *saamaan* ***raakh-in***
 table-ABL chair-LOC goods **put-PST.3SG.F.H**
 ‘From the table (she) she put the goods on the chair.’ [s17, PT 050]

This example shows that Path is distributed across three different morphosyntactic loci between the verb and the case marker. The ablative case marker *-baaTa* ‘from’ expresses the Source Path and the Goal Path is conveyed by the verb *raakhnu* ‘to put’ as well as the locative case marker *-maa* ‘LOC’. So, the Source Path marker *-baaTa* ‘from’ is differentiated from the Goal Path markers *-maa* ‘LOC’ and *raakhnu* ‘to put’. Note that the example consists of two different Grounds one of which expresses the Source (e.g., *Tebul* ‘table’) and the other one indicates the Goal (e.g., *mec* ‘chair’). One important factor for the differentiation pattern is also due to the presence of two different Ground elements in the motion descriptions.

- (776) *unle* *euNaa* *syaaulaai* *kitaabko* *maathibaaTa*
un-le *euTaa* *syaau-laai* *kitaab-ko* ***maathi-baaTa***
 3SG.H-ERG one apple-DAT book-GEN **above-ABL**
arke *jutaako* *maathi* *raakhidie*
arke *jutaa-ko* ***maathi*** ***raakh-i-di-e***
 another shoe-GEN **above** **put-ABS-give-PST.3SG.M.H**
 ‘From the top of the book he put an apple on top of the shoe.’ [s9, PT 051]

In the example (776), Path is distributed across four morphosyntactic loci and three different linguistic devices: the verb, the case marker and the adverb. The ablative case marker *-baaTa* that expresses the Source Path is distributed differentially from the rest of the linguistic devices respectively the verb *raakhnu* ‘to put’ and the adverb *maathi* ‘above’ both of which encode the Goal Path. It is also important to note that both examples express the complex, Source-Goal, Path within a clause where in (775), it is encoded in three morphosyntactic loci whereas in (776), the same complex Path is expressed in four loci. The Source-Goal Motion attests inter- as well as intra-categories profiling differentiation pattern. The intra-categories refer to the occurrence of the same (lexical or grammatical) linguistic device, for instance, verbs or case markers or postpositions or adverbs within a given sentence or the motion description.

Now let’s consider examples from spontaneous Motion events.

- (777) *uni rukhbaaTa utaa gain*
uni-Ø rukh-baaTa utaa ga-in
 3SG.H-NOM tree-ABL that.side go-PST.3SG.F.H
 ‘From the tree she went to that side (there).’ [Traj_033_s20]

In the example (777), Path is distributed in two loci between two linguistic devices, the Deixis and Path verb and the case marker. Thus, the ablative case marker *-baaTa* ‘from’ conveying the Source Path is differentially distributed from the Goal Path that is expressed by the deictic verb *jaanu* ‘to go’. However, note also that there are some motion descriptions where the main verb expresses only Manner while the Path is conveyed by other devices than verbs. This is the case in (778).

- (778) *u paahaaNbaaTa kholaamaa haam phaalyo*
u-Ø pahaaD-baaTa kholaa-maa haam phaal-yo
 3SG.NOM hill-ABL stream-LOC jump throw-PST.3SG.M.H
 ‘From the hill he jumped into the stream.’ [Traj_064_s19]

In this example, the motion verb *phaalnu* ‘to throw’ does not express the Path. So, the Source and Goal Paths are respectively expressed by the ablative case marker *-baaTa* ‘from’ and the locative case marker *-maa* ‘LOC’ showing the differentiated distribution of the Source Path and the Goal Path.

- (779) *u caurbaaTa jhaaNitarpha prawes gari*
u-Ø caur-baaTa jhaaDi-tarpha prawes gar-i
 3SG.NOM meadow-ABL bush-toward entrance do-PST.3SG.F.NH
 ‘From the meadow she entered (toward) the bush.’ [Traj_057_s5]

In the example (779), Path is distributed in three morphosyntactic loci in a clause between the verb, the case marker, and the postposition. The ablative case marker *-baaTa* ‘from’ expresses the Source Path whereas the postposition *-tarpha* ‘toward’ and the verb *prawes garnu* ‘entrance do’ in the light verb construction convey the Goal Path. Therefore, the Path encoded by the ablative case marker *-baaTa* ‘from’ is distributed differentially from the Goal Path expressed by the postposition *tarpha* ‘toward’ and the the light verb *prawes garnu* ‘entrance do’.

- (780) *baairabaaNa guphaabhitra chirin*
baahira-baaTa guphaa-bhitra chir-in
 outside-ABL cave-inside enter-PST.3SG.F.H
 ‘From outside she entered the cave.’

‘From outside she entered into the the cave.’ [Traj_053_s10]

Example (780) is different from (777), (778) and (779) presented earlier in terms of the number of morphosyntactic loci and the linguistic devices involved in them. Path is distributed in four loci relying on the four morphosyntactic devices: the verb, the case marker, the postposition, and the adverb. So, the Source Path encoded by the adverb *baahira* ‘outside’ and *-baaTa* ‘from’ and the Goal Path encoded by the verb *chirnu* ‘to enter’ and the postposition *-bhitra* ‘inside’ are distributed differently. It is also interesting to note that the division of labour (Lestrade *et al.*, 2011) with reference to the distribution of Path is quite fine-grained because two morphosyntactic devices are dedicated to encode the Source Path and two other morphosyntactic devices are devoted to indicate the Goal Path.

(781) <i>baahirabaaTa</i>	<i>bhitra</i>	<i>oNaarjasto</i>
<i>baahira-baaTa</i>	<i>bhitra</i>	<i>oDhaar-jasto</i>
outside-ABL	inside	cave-like
<i>Thaau~maa</i>	<i>pasyo</i>	
<i>Thaau~-maa</i>	<i>pas-yo</i>	
place-LOC	enter-PST.3SG.M.NH	
‘From outside (he) went to the place like a cave.’		
(Lit. ‘From outside he entered into a place like a cave.’ [Traj_058_s2])		

In the example (781), Path is distributed in five morphosyntactic loci where the adverb *baahira* 'outside' and the ablative case marker *-baaTa* 'from' express the Source Path, and the verb *pasnu* 'to enter' and the locative case marker *-maa* 'LOC' express the Goal Path. Therefore, the Source encoding morphosyntactic devices are distributed differently from the Goal-encoding morphosyntactic devices. In spite the fact that motion descriptions expressed in five morphosyntactic loci are comparatively less frequent (so far only four), the system of expressing Path across so many morphosyntactic loci within the simplex clause itself, as in example (781), is a matter of interest, as it allows the speakers to convey the Path information in a varied and much elaborated way.

In both caused and spontaneous Motion events, we also examined whether the labour, in the context of distribution of Path information, is shared within the same or different morphosyntactic devices across the sentence. Our data reveal that the differentiation pattern of Path is distributed in inter- as well as intra-categories, as summarized below and in Table 131.

- Inter- and intra- categories (the verb, the case marker and the case marker)
- Inter-categories (the verb and the case marker)
- Inter-categories (the verb, the case marker, and the adverb)
- Inter-categories (the verb and the adverb)
- Inter- and intra- categories (the verb, the case marker, the case marker, and the postposition)

Morphosyntactic devices	CME	SME
Case marker	<i>-baaTa</i> ‘from’	<i>-baaTa</i> ‘from’
	<i>-maa</i> ‘LOC’	<i>-maa</i> ‘LOC’
	<i>-dekhi</i> ‘from’	<i>-dekhi</i> ‘from’
Postposition	<i>-maathi</i> ‘above’	<i>-tira</i> ‘toward’
		<i>-bhitra</i> ‘inside’
		<i>-paTTi</i> ‘toward’
		<i>-tarpha</i> ‘toward’
Adverb	<i>baahira</i> ‘outside’	<i>baahira</i> ‘outside’
	<i>tala</i> ‘down’	<i>tala</i> ‘down’
		<i>bhitra</i> ‘inside’
		<i>maathi</i> ‘above’
		<i>najik</i> ‘near’
		<i>agaaDi</i> ‘toward the front’

Table 131. Morphosyntactic devices in differentiation patterns in CME and SME in descriptive data

There are some similarities and differences between caused and spontaneous Motion events regarding the differentiated distribution pattern of Path in the Source-Goal Motion events. The similarity is that in both event types, the distribution of Path in three morphosyntactic loci is the most frequent pattern. As for the differences, they are explained below.

a. Morphosyntactic loci

The first difference is concerned with the number of morphosyntactic loci. In caused Motion events, Path is distributed across two up to four morphosyntactic loci, while in spontaneous Motion events, it is distributed in two up to five morphosyntactic loci. So, in spontaneous Motion events, the distribution of Path information is more elaborated and expressed in a very fine-grained way.

b. Variation in the type of Path

Secondly, in caused Motion events, the differentiated pattern is attested in Source-Goal, and Source-oriented events whereas in spontaneous Motion events, besides these two event types, we find this pattern in the vertical Motion, Median and Median-Goal events. Hence, here again, the distribution of Path in spontaneous Motion events is more diverse than in caused Motion events.

c. Morphosyntactic devices

In caused and spontaneous Motion events, the same grammatical device, namely the case markers are used; yet, as we saw in Table 131 above, in spontaneous Motion events the lexical (adverbial) and grammatical (postpositions) devices are more diverse depicting different portions of Path, and Path indicating the orientation. These confirm that more inventories exist in the system so that the same Path can be conveyed using the different morphemes.

7.1.2.2 Source of Motion

In the descriptive data, the Path information distributed differentially in Source of Motion ranges in two up to four morphosyntactic loci between or among the linguistic devices across the sentence, as are illustrated by examples (782) through (785).

(782)	<i>usle</i>	<i>euTaa</i>	<i>kaagajko</i>	<i>baakasbaaTa</i>
	<i>us-le</i>	<i>euTaa</i>	<i>kaagaj-ko</i>	<i>baakas-baaTa</i>
	3SG-ERG	one	paper-GEN	box-ABL
	<i>suntaalaa</i>	<i>haatmaa</i>	<i>liyo</i>	
	<i>suntaalaa</i>	<i>haat-maa</i>	<i>li-yo</i>	
	orange	hand-LOC	take -PST.3SG.M.H	

‘He took the orange in his hand out of the carton (a paper box) [s16, PT 111]

In example (782) where the meaning of Path is shared in three loci between the verb *linu* ‘to take’ and the case markers, *-baaTa* ‘from’ and *-maa* ‘LOC’. Here, the locative case marker *-maa* ‘LOC’ is distributed differently conveying Goal whereas the verb *linu* ‘to take’ and the ablative case marker *-baaTa* ‘from’ express the Source Path.

- (783) *uni* *guphaabaaNa* *aa-in*
uni-Ø *guphaa-baaTa* *aa-in*
 3SG.H-NOM cave-ABL **come**-PST-3SG.F.H
 ‘She came from the cave.’ [Traj_023_s10]

Example (783) shows the distribution of Path in two morphosyntactic loci between the Deixis and Path verb and the case marker. The ablative case marker -*baaTa* ‘from’ that conveys the Source Path, conveys a different Path component from the verb *aaunu* ‘to come’ which implies the movement of the Figure not oriented to the Ground as such but toward the Deictic centre.

- (784) *u* *guphaabaaTa* *baahira* *gayo*
u-Ø *guphaa-baaTa* *baahira* *ga-yo*
 3SG-NOM cave-ABL **outside** **go**-PST-3SG.M.NH
 ‘He went out of the cave.’ [Traj_030_s22]

Example (784) comprises three morphosyntactic loci: the ablative case marker -*baaTa* ‘from’, and the adverb *baahira* ‘outside’ convey a different Path component from the verb *jaanu* ‘to go’. Because three different morphosyntactic devices express Path in a combined way, the differentiation pattern occurs among categories: the verb, the case marker, and the adverb.

- (785) *u* *oNaarbhitrabaaTa* *baahira* *aayo*
u-Ø *oDhaar-bhitra-baaTa* *baahira* *aa-yo*
 3SG-NOM cave-**inside**-ABL **outside** **come**-PST-3SG.M.NH
 ‘He came out of the cave.’ [Traj_030_s3]

Mostly, the Source Path that is distributed differentially consists of the Deixis and Path verbs *jaanu* ‘to go’ and *aaunu* ‘to come’. In the context of example (785) also, the main verb conveys the Deixis and Path. Including this verbal means, the Path is distributed in four morphosyntactic loci. The other morphosyntactic devices include the postposition -*bhitra* ‘inside’, the adverb *baahira* ‘outside’, and the ablative case marker -*baaTa* ‘from’. Therefore, the main verb *aaunu* ‘to come’ conveys a different meaning from the rest of the morphosyntactic devices. Our data attest only two motion descriptions showing the Source Path that is distributed in four morphosyntactic loci which is the case in example (785).

We further investigated the trend of the distribution of morphosyntactic loci in regard to inter- vs. intra-categories. In caused Motion events, only the ablative case

marker and the verbs are used to convey the Path but in spontaneous Motion events, postpositions as well as adverbials including the case marker and the verbs are used. Hence, here again, the data show that descriptions of spontaneous Motion events rely on richer linguistic inventories as compared to caused Motion events.

7.1.2.3 Goal of Motion

In our data, in the expression of Goal-oriented events, the Path is distributed differently only in caused Motion events, as in example (786). However, there is only one motion description showing this type of Path.

- (786) *usle byaag baahira raakhi*
us-le byaag baahira raakh-i
 3SG-ERG bag outside put-PST.3SG.F.NH
 ‘She kept the bag outside.’ [s18, PT 129]

In the example (786), the spatial information is distributed between the verb *raakhnu* ‘to put’ and the adverb *baahira* ‘outside’. It is a differentially distributed semantics because the adverbial *baahira* ‘outside’ expresses the Source-oriented Path as well as the Ground while the verb *raakhnu* ‘to put’ conveys the Goal.

7.1.2.4 Vertical Motion

Path depicting the vertical Motion can be distributed in two up to three morphosyntactic loci illustrated respectively by the following examples (787) and (788). Note, however, that Path distributed differentially in vertical Motion is attested only in spontaneous Motion events.

- (787) *Dhunggaako baaTo*
Dhunggaa-ko baaTo
 stone-GEN road
hu~dai jharirahekocho
hu~dai jhar-i-rah-eko-cha
via descend-ABS-remain-PFV.M-COP₂.NPST.3SG.M.NH
 ‘(He) has been coming down via the stony road.’
 (Lit. ‘(He) has been descending via the stony road.’ [Traj_076_s9])

- (788) *maathidekhi si~Niko baaTo jharin*
maathi-dekhi si~Dhi-ko baaTo jhar-in
above-ABL stairs-GEN road descend-PST.3SG.M.NH
 ‘From above she came down the stairs.’
 ‘From above she descended the road of stairs.’ [Traj_022_s9]

In this (787) example, Path is distributed between the verb *jharnu* ‘to descend’ which conveys the vertical Motion and the Median marker *hu~dai* ‘by being’ which conveys a different meaning from the verb itself. In the case of (788), Path is distributed between the verb *jharnu* ‘to descend’, the case marker *-dekhi* ‘from’, and the adverb *maathi* ‘above’. The adverb *maathi* ‘above’ expresses the Path as well as the Source Ground, and the ablative case marker *-dekhi* ‘from’ expresses the Source Path. Hence, the verb *jharnu* ‘to descend’ conveys a different Path component from the other two morphosyntactic devices.

7.1.2.5 Median and Median-Goal of Motion

In addition to the results we discussed above in the Source-Goal, and Source Path where the respective Paths are differentially distributed, our data also show that the Median Path is also differentially distributed, as in (789).

- (789) *u rukhko che~u~baaTa*
u-∅ rukh-ko cheu-baaTa
 3SG-NOM tree-GEN side-ABL
baaTo kaaTtaicha
baaTo kaaT-dai-cha
road cross-DUR-COP2.NPST.3SG.M. NH
 ‘From the side of the tree he is crossing the road.’ [Traj_049_s14]

- (790) *u pulbaaTa paari gai*
u-∅ pul-baaTa paari ga-i
 3SG-NOM bridge-ABL that.side go-PST.3SG.F.NH
 ‘She went to the other side via the bridge.’
 (Lit. ‘She went to the other side from the bridge.’ [Traj_047_s22])

Besides, the Median-Goal Path is also distributed differentially as in (790). In both examples, Path is distributed in two morphosyntactic loci between the verb and the case marker. However, in (789) the ablative case marker *-baaTa* ‘from’ which conveys the Source of Motion is differentially distributed from the main verb expressing the Median Path, whereas in (790), the ablative case marker *-baaTa* ‘from’ expresses the Median Path in the context of the Deictic verb *jaanu* ‘to go’ expressing Deixis and Path and the adverbial *paari* ‘to that side’.

Overall, in both caused and spontaneous Motion events, Path is distributed differentially in two morphosyntactic loci up to four morphosyntactic loci. In both event types, there are Source-Goal, and Source of Motion where Path is distributed differentially. However, in caused Motion events, the Path is also distributed differentially in Goal of Motion which is absent in spontaneous Motion events. On the other hand, in spontaneous events, Path is distributed differentially in vertical Motion, Median, and Median-Goal Motion but these are absent in caused Motion events.

7.2 Distributed spatial semantics in narrative (corpus-based) data

In narrative data, the distribution of spatial meaning is similar to descriptive data viz. Path is distributed redundantly as well as differentially in both caused and spontaneous Motion events. Table 132 and Table 133 below present the results of the analysis⁴⁵.

⁴⁵ The narrative (corpus-based) data consist of 2884 sentences or motion descriptions in total (1860 in caused Motion events, and 1024 in spontaneous Motion events), of which the complex constructions consist of 2,670 sentences, which is 92.6% of the total, and simplex constructions comprise 214 sentences corresponding to 7.4% of the total. In descriptive (stimuli-based) data, the

Patterns	Morphosyntactic loci		Total	Percentage
	2	3		
Redundancy	28	1	29	1.6
Differentiation	2	2	4	0.2
Total	30	3	33	1.8

Table 132. Distribution patterns of Path in CME in narrative data

Patterns	Morphosyntactic loci			Total	Percentage
	2	3	4		
Redundancy	30	1	1	32	3.1
Differentiation	11	5	1	17	1.7
Total	41	6	2	49	4.8

Table 133. Distribution patterns of Path in SME in narrative data

The Table 132 and Table 133 show that Path can be distributed in two up to three morphosyntactic loci in caused Motion events accounting for 1.8% of the data ($N=1860$)⁴⁶ and in two up to four morphosyntactic loci in spontaneous Motion events

majority of sentences consists of the simplex constructions but in narrative (corpus-based) data, the majority of them consists of the complex constructions. Therefore, because the Path is calculated taking into account the simplex constructions that consist of minimum of two or more than two morphosyntactic loci, the percentage of redundant and differentiated patterns in narrative data is less frequent compared to descriptive data. Note also that when taking into account both the simplex and complex constructions, Path is distributed in one locus up to six morphosyntactic loci in descriptive data (see Chapter 4 and 5 for discussion) and in one morphosyntactic locus upto nine loci in narrative data.

⁴⁶ In narrative data, caused Motion events consist of 1860 motion descriptions. Therefore, for consistency and uniformity, I have taken into account the total number i.e. 1860 while calculating the percentage.

corresponding to 4.8% of the data ($N=1024$)⁴⁷. Furthermore, the data show that the distribution of Path in two morphosyntactic loci is the most frequent pattern in both event types. In what follows I will discuss both of these patterns.

7.2.1 Redundant distribution pattern of Path

The narrative data reveal that Path is distributed redundantly within a clause in 1.6% of the dataset ($N=1860$) in caused Motion events and 3.1% of the dataset ($N=1024$) in spontaneous Motion events. It is distributed in two, and three morphosyntactic loci in the former and in two up to four morphosyntactic loci in the latter. The data also show that in caused Motion events, only the Source and Goal Paths are redundantly distributed but in the latter all the three portions of the Path, Source, Median, and Goal, are distributed redundantly. Table 134 and Table 135 below give the number of occurrences and the percentage of this pattern of distribution.

Path portions	Morphosyntactic loci		Total	Percentage
	2	3		
Goal	18		18	1.0
Source	9	1	10	0.5
Total	27	1	28	1.5

Table 134. Redundant distribution of Path in CME in narrative data

⁴⁷ In narrative data, spontaneous Motion events consist of 1024 motion descriptions. So, for the analysis of the distribution of redundant and differentiated patterns, I have taken into account the total number i.e. 1024 while calculating the percentage.

Path portions	Morphosyntactic loci			Total	Percentage
	2	3	4		
Goal	28			28	2.7
Source	1	1	1	3	0.3
Median	1			1	0.1
Total	30	1	1	32	3.1

Table 135. Redundant distribution of Path in SME in narrative data

7.2.1.1 Goal of Motion

In both caused and spontaneous Motion events, the final segment of Path i.e. the Goal Path is typically distributed in two morphosyntactic loci. There are 18 and 28 motion descriptions respectively in caused and spontaneous Motion events showing the redundant pattern, as illustrated in examples (791) through (794).

(791) *u euTaa Tinmaa haat ghusaarcha*
u-Ø euTaa Tin-maa haat ghusaar-cha
 3SG-NOM one can-LOC hand insert-COP₂.NPST.3SG.M.NH
 ‘He inserts his hands into a big can.’ [NNC_aut]

(792) *juttaa baaTaimaa khasaale*
juttaa baaTo-maa-nai khasaal-e
 shoes road.EMP-LOC-DPRT drop-PST.3SG.M.H
 ‘(He) dropped the shoes on the road itself.’ [NNC_hye]

In these examples, Path is distributed between the verb and the case marker. The verb *ghusaarnu* ‘insert’ (791) and *khasaalnu* ‘to drop’ (792), and the locative case marker *-maa* ‘LOC’ (791) and (792) express the same segment of Path i.e. the Goal thereby showing the redundant distribution of Path. Let us consider examples depicting spontaneous Motion events.

(793) *uniharu euTaa hoTalmaa chire*
uni-haru euTaa hoTal-maa chir-e
 3-PL one hotel-LOC enter-PST.3PL
 ‘They entered a hotel.’
 (Lit. ‘They entered into a hotel.’ [NNC_S36])

- (794) *hemanta jyoti ra sikhaa mahalbhitra pase*
hemanta jyoti ra sikhaa mahal-bhitra pas-e
 Hemanta Jyoti and Shikha building-**inside** **enter**-PST.3PL
 ‘Hemanta, Joyti and Shikha went into the building.’
 (Lit. ‘Hemanta, Joyti and Shikha entered into the building.’) [NNC_F18]

In both examples, the Goal Path is expressed in two types of morphosyntactic devices: the verbs *chirnu* ‘to enter’ (793) and *pasnu* ‘to enter’ in (794), and the locative case marker *-maa* ‘LOC’ (793), and the verb and the postposition *-bhitra* ‘inside’ (794).

The redundant distribution pattern can occur between two different lexical or grammatical devices viz. inter-categories where the combination of the verb and the the locative case marker is the most frequent summarized below and the Table 136 following the summary.

- The verb and the locative case marker
- The verb and the adverb
- The verb and the postposition

Morphosyntactic devices	CME	SME
Case marker	<i>-maa</i> ‘LOC’	<i>-maa</i> ‘LOC’
Postposition	<i>-bhitra</i> ‘inside’	<i>-bhitra</i> ‘inside’
	<i>-tira</i> ‘toward’	<i>-tira</i> ‘toward’
		<i>-maathi</i> ‘above’
Adverb	<i>-bhitra</i> ‘inside’	<i>tala</i> ‘below’
		<i>agaaDi</i> ‘toward front’

Table 136. Use of morphosyntactic devices in Goal of Motion in narrative data

In both event types, the same linguistic devices are employed to convey the Goal Path. However, as was the case in descriptive data, in narrative data too, the linguistic inventories used in spontaneous Motion events are more diverse forms than those used in caused Motion events.

7.2.1.2 Source of Motion

The Source Path shows two strategies, it can be distributed redundantly in two up to three morphosyntactic loci, as shown in (795) through (797), and both strategies are found in caused and spontaneous Motion events in narrative data. Note, however, that there are 10 motion descriptions in caused Motion events and three in spontaneous Motion events.

(795)	<i>usle</i>	<i>aaphno</i>	<i>cakku</i>	<i>tyo</i>
	<i>us-le</i>	<i>aaphno</i>	<i>cakku</i>	<i>tyo</i>
	3SG-ERG	self.GEN	knife	DEM.DIST
	<i>maanisko</i>	<i>gardanbaaTa</i>	<i>haTaaekothiena</i>	
	<i>maanisk-o</i>	<i>gardan-baaTa</i>	<i>haTaa-eko-thie-na</i>	
	man-GEN	neck-ABL	remove -PFV-COP ₂ .PST-NEG	

‘He had not removed his own knife from the neck of that man.’ [NNC_S119]

(796)	<i>saa~jha</i>	<i>pakha</i>	<i>jantile</i>
	<i>saa~jha</i>	<i>pakha</i>	<i>janti-le</i>
	evening	time	bridegroom’s.friends-ERG
	FIGURE	GROUND	GROUND+PATH
	<i>dulahilaai</i>	<i>maaitighar-baaTa</i>	<i>baahira</i>
	<i>dulahi-laai</i>	<i>maaitighar-baaTa</i>	<i>baahira</i>
	bride-DAT	mother’s.home-ABL	outside
	MOTION+PATH		
	<i>nikaalchan</i>		
	<i>nikaal-chan</i>		
	take.out -COP ₂ .NPST.3PL		

‘The people who accompany the bridegroom’s marriage ceremony take the bride out of her mother’s home during the evening time.’ [NNC_G56]

Example (795) shows that the Source Path is conveyed by the verb *haTaaunu* ‘to remove’ and the ablative case marker *-baaTa* ‘from’. Since both linguistic devices

express the same segment of Path in a clause, they present the redundant distribution of Path. In the case of example (796), the Source Path is distributed in three morphosyntactic loci: the verb (*nikaalnu*, ‘to take out’), the case marker (*-baaTa* ‘from’), and the adverb (*baahira* ‘outside’). Each locus profiles the same portion of Path distributed among different form classes which confirm the inter-categories redundancy.

Now, let us consider an example of a spontaneous Motion event.

(797) *sabaijanaa aspataalbaaTa baahira niskyau~*
sabai-janaa aspataal-baaTa baahira nisk-yau~
 all-CLF hospital-ABL outside exit-1PL
 ‘All of us came out of the hospital.’

(Lit. ‘All of us exited outside from the hospital.’) [NNC_bbj]

In the example (797), Path is expressed by the verb *niskanu* ‘to exit’, the ablative case marker *-baaTa* ‘from’, and the adverbial *baahira* ‘outside’ i.e. three different morphosyntactic loci depicting the same Source Path. The details of the linguistic devices used in the Source of Motion are given below in Table 137.

Morphosyntactic devices	CME	SME
Case marker	<i>-baaTa</i> ‘from’	<i>-baaTa</i> ‘from’
Postposition		<i>-tira</i> ‘toward’
Adverb	<i>baahira</i> ‘outside’	<i>baahira</i> ‘outside’ <i>aghi</i> ‘toward front’ <i>pachi</i> ‘toward back’

Table 137. Use of morphosyntactic devices in Source of Motion in narrative data

In both event types, caused and spontaneous, the ablative case marker *-baaTa* ‘from’ and the adverb *baahira* ‘outside’ indicate the Source of Motion. In addition, the postposition *-tira* ‘toward’ and other adverbials such as *aghi* ‘toward front’ are also found in the expression of spontaneous Motion events. Therefore, in Source-oriented Motion also, there is a richer linguistic inventory in spontaneous Motion events as compared to caused Motion events.

7.2.1.3 Median of Motion

Compared to Source and Goal, the profiling of the Median Path is not well attested in narrative data, as was also the case in descriptive data. Only one motion description shows the Median Path distributed redundantly between the verb *tarnu* ‘to cross’ and the ablative case marker *-baaTa* ‘from’ expressing the means.⁴⁸ Hence, the local (Sinha & Kuteva, 1995) semantics of *-baaTa* is distributed as illustrated in (798).

- (798) *naaubaaTa haami paari tarekaathiyau~*
naau-baaTa haami-Ø paari tar-ekaa-thi-yau~
 boat-ABL 1PL-NOM that.side cross-PFV.COP₂.PST-1PL
 ‘We had crossed that side by means of the boat.’ [NNC_awk]

Here, both the case marker and the verb express the same Median Path.

7.2.2 Differentiated distribution pattern of Path

In the comparison of the redundant distribution of Path, the differentiated distribution is less frequent in narrative data. Therefore, the same system holds on in narrative data as the one found in descriptive data. Path is distributed differentially in Source-Goal Path in both caused and spontaneous Motion events in two up to four morphosyntactic loci. However, in Goal Path in the case of caused Motion events, and in Source Path in the case of spontaneous Motion events, Path is also distributed differentially. In both types of events, the data do not show the differentiated distribution pattern of the Median Path.

7.2.2.1 Source-Goal of Motion

As was the case in descriptive data, the differentiated distribution of Path is well-attested in Source-Goal Path in narrative data too. Path is distributed

⁴⁸ In certain constructions such as this, there are some motion descriptions where the ablative case marker *-baaTa* ‘from’ expresses the means or medium. However, such uses are limited. Therefore, we still need more data for a detailed investigation to know more about this kind of spatial meaning of this linguistic device (cf. § 2.2.2.2).

differentially in two up to three morphosyntactic loci in caused Motion events and in two up to four morphosyntactic loci in spontaneous Motion events, as illustrated in examples (799) through (802).

(799)	<i>sainik</i>	<i>helikapTarle</i>	<i>maathibaaTa</i>
	<i>sainik</i>	<i>helikapTar-le</i>	<i>maathi-baaTa</i>
	army	helicopter-ERG	above-ABL
	<i>bam</i>	<i>khasaalekothiyo</i>	
	<i>bam</i>	<i>khasaal-eko-thi-yo</i>	
	bomb	drop .PFV.COP ₂ .PST.3SG.M.NH	

‘The helicopter of the army had dropped the bombs.’

(Lit. ‘From above the army helicopter had dropped the bomb.’) [NNC_igb]

The example (799) comprises three morphosyntactic loci: the verb, the adverb, and the case marker. Although the adverb *maathi* ‘above’ expresses vertical Motion, it conveys the Source Path in the context of this example due to the fact that it functions both as Source Path and Ground; besides, it also carries the ablative case marker *-baaTa* ‘from’. Therefore, the verb *khasaalnu* ‘to drop’ that conveys the Goal Path shows a differentially distributed semantics with respect to the adverb *maathi* ‘above’ and the ablative case marker *baaTa* ‘from’.

(800)	<i>nepaalbaaTa</i>	<i>ek</i>	<i>pratinidhimanDal</i>
	<i>nepaal-baaTa</i>	<i>ek</i>	<i>pratinidhi-manDal</i>
	Nepal-ABL	one	representative-team
	<i>tyahaa~</i>	<i>pugekocha</i>	
	<i>tyahaa~</i>	<i>pug-eko-cha</i>	
	there	reach -PFV-COP ₂ .NPST.3SG.M.NH	

‘A team of representatives has reached there.’ [NNC_B02]

In (800), the spatial information related to Path is distributed in two morphosyntactic loci between the verb and the case marker across the clause. The ablative case marker *-baaTa* ‘from’ that profiles the Source Path shows a different type of distribution from the verb *pugnu* ‘to reach’ that encodes the Goal Path.

(801)	<i>aaryaharu</i>	<i>madhya</i>	<i>esiyabaaTa</i>
	<i>aarya-haru</i>	<i>madhya</i>	<i>esiyaa-baaTa</i>
	Arya-PL	Middle	Asia-ABL
	<i>bhaاراتiya</i>	<i>upamahaadwipmaa</i>	<i>chire</i>
	<i>bhaاراتiya</i>	<i>upa-mahaadwip-maa</i>	<i>chir-e</i>
	Indian	sub-continent-LOC	enter-PST.3PL
	‘From the Middle Asia the Aryas came to the Indian Sub-Continent.’		
	‘(From the Middle Asia the Aryas entered into the Indian Sub-Continent.’		
	[NNC_apb]		

The example (801) shows that Path is distributed between two types of linguistic devices, the verb and the case markers. So, the ablative case marker *-baaTa* ‘from’ conveying the Source Path shows a different distribution from the locative case marker *-maa* ‘LOC’ and the verb *chirnu* ‘to enter’ both of which profile the Goal Path.

(802)	<i>uniharu</i>	<i>maathibaaTa</i>	<i>tala</i>	<i>jhare</i>
	<i>uni-haru-Ø</i>	<i>maathi-baaTa</i>	<i>tala</i>	<i>jhar-e</i>
	3PL-NOM	above-ABL	below	descend-PST.3PL
	‘From above they came down.’			
	‘(Lit. From above they descended down.’ [NNC_ajm]			

In the case of example (802), Path is distributed in four morphosyntactic loci implying the three morphosyntactic devices: the verb, the adverb, and the case marker. The adverb *maathi* ‘above’ expresses direction and vertical Motion as well as the Source Ground because it also carries the ablative case marker *-baaTa* ‘from’ which conveys the Source Path. The adverb *tala* ‘below’ expresses at the same time the vertical orientation implying Goal Path and Goal Ground, and the verb *jharnu* ‘to descend’ expresses the vertical Motion as well as Goal. So, both *maathi* ‘above’ and *-baaTa* ‘from’ conveying the Source show a different distribution from *tala* ‘below’ and *jharnu* ‘to descend’ that convey the Goal.

7.2.2.2 Goal of Motion

In narrative data, it is only in caused Motion events that the Goal Path shows the differentiated distribution pattern. The spatial information related to Path is

distributed in two morphosyntactic loci between lexical and grammatical devices, as is illustrated by (803).

- (803) *yiniharu* *darbaarskwaayartira* *lagie*
yini-haru *darbaarskwaayar-tira* *lag-i-e*
 DEM.PROX-PL Durbar.Square-**toward** **take.away**-PASS-PST.3PL
 ‘These (demonstrators) were taken away to Durbar Square.’ [NNC_G22]

The verb *lagnu* ‘to take away’ expresses the Source-oriented Path, and the postposition *-tira* ‘toward’ conveys the Goal. The overall construction refers to the Goal-oriented event. In terms of the distribution of the Path, because the verb *lagnu* ‘to take away’ profiles the Source Path, it is differentially distributed from the postposition *-tira* ‘toward’ that conveys the Goal.

7.2.2.3 Source of Motion

In spontaneous Motion events, the data attest the differentiated distribution pattern in the Source Path that is absent in caused Motion events. Examples (804) and (805) show the use of this pattern.

- (804) *kahaa~baaTa* *aa~dai-chau*
kahaa~baaTa *aa~dai-chau*
 where-ABL **come**-DUR-COP₂.NPST.2SG.H
 ‘Where are you coming from?’ [NNC_D09]

- (805) *sabaijaso* *karmacaariharu* *kaammaa* *pharkekaachan*
sabaijaso *karmacaari-haru* *kaam-maa* *phark-ekaa-chan*
 most.of staff-PL work-LOC **return**-PFV-COP₂.NPST.2PL
 ‘Most of the employees have returned to their work.’ [NNC_A30]

In both examples, Path is distributed in two morphosyntactic loci between the Deixis and Path verb and the ablative case marker (804), and the verb and the locative case marker (805). In the case of (804), the Deixis and Path verb *aaunu* ‘to come’ expresses the Goal by virtue of its feature oriented toward the Deictic centre. On the other hand, the ablative case marker *-baaTa* ‘from’ expresses the Source Path. So, the ablative case marker *-baaTa* ‘from’ conveys a different semantic component of Path from the Deixis and Path verb *aaunu* ‘to come’. In the example (805), the verb

pharkanu ‘to return’ expresses the Source Path whereas the locative case marker *-maa* ‘in’ expresses the Goal. Due to the semantic difference of each of these morphosyntactic devices, the locative case marker *-maa* ‘LOC’ and the verb *pharkanu* ‘to return’ show a differentiated distribution.

We also investigated the narrative data in order to examine the overall differentiated distribution patterns. The results are reported in Table 138 below.

Morphosyntactic devices	CME	SME
Case marker	<i>-baaTa</i> ‘from’ <i>-dekhi</i> ‘from’ <i>-maa</i> ‘LOC’	<i>-baaTa</i> ‘from’ <i>-maa</i> ‘LOC’
Postposition	<i>-samma</i> ‘till’ <i>-tira</i> ‘above’	
Adverb	<i>maathi</i> ‘above’	<i>maathi</i> ‘above’ <i>bhitra</i> ‘inside’ <i>tala</i> ‘below’

Table 138. Use of morphosyntactic devices in differentiated distribution of Path in narrative data

In addition to the verbal devices, the ablative case marker *-baaTa* ‘from’, the locative case marker *-maa* ‘LOC’, and the adverb *-maathi* ‘above’ indicating the vertical orientation, are used in caused and spontaneous Motion events. Adverbial devices such as *-bhitra* ‘inside’, and *-tala* ‘below’ are absent in caused Motion events. The Table also shows that postpositions such as *-tira* ‘toward’ and *-samma* ‘till’ are available in caused Motion events but absent in spontaneous Motion events. In narrative data, it is only in the differentiation pattern where the postposition is absent in spontaneous Motion events.

7.3 Summary

In this Chapter, I examined the expression of Motion events in Nepali within the Distributed spatial semantic framework proposed by Sinha and Kuteva (1995), and I investigated the use of morphosyntactic loci in the expression of the Path, and the semantic distribution of Path in a clause. First, I investigated this issue in descriptive data that comprise caused and spontaneous Motion events. In both types of events, Path is distributed redundantly as well as differentially but the redundant

distribution of Path is more frequent than the differentiated distribution of Path. Within the redundant distribution pattern, the distribution of Path in two morphosyntactic loci is the most frequent pattern. Interestingly, the distribution of Path in two morphosyntactic loci representing the Goal Path is the most frequent of all in both event types. The data show that the redundant distribution of Path is more pervasive in spontaneous Motion events: in caused Motion events, Path is distributed redundantly only in Source and Goal Paths but in spontaneous Motion events, besides the Source and Goal Paths, it is also distributed redundantly in Median Path and in the vertical Motion.

In differentiated distribution pattern, Path is distributed in two morphosyntactic loci up to four loci in caused Motion events and in two loci up to five morphosyntactic loci in spontaneous Motion events. Yet, the data showed that the Path distributed in three morphosyntactic loci is the most frequent pattern in both types of events. The type of Path where differentiated distribution occurs the most is the Source-Goal Path in both event types; in other types of events, the Source, Goal, Median and Path with vertical Motion, the differentiated distribution is less frequent.

Concerning the semantic distribution, Path information is regularly expressed by simultaneous selection of different linguistic devices irrespective of the type of events and distribution patterns. The linguistic devices involve the lexical (verbs and adverbials) and grammatical (case markers and postpositions) tools. In both types of events, the verb, the ablative case marker *-baaTa* ‘from’ *-dekhi* ‘from’, and the adverb *baahira* ‘outside’ encode the Source Path, and the verb, the locative case marker *-maa* ‘LOC’, the adverb *bhitra* ‘inside’, and the postpositions express the Goal. Some postpositions such as *-bhitra* ‘inside’ and *-tira* ‘toward’ also encode the Source Path but they must combine with the ablative case marker *-baaTa* ‘from’. Except verbs, some linguistic devices are used more often than others regarding inter- and intra-categories summarized as: **inter-categories distribution: verb+case marker > verb+postpositions > verb+adverb.**

Table 139 precisely shows the use of inter and intra-categories devices found in descriptive data.

Inter-categories	Verb+case markers Verb+postpositions Verb+adverb Verb+case marker+adverb Verb+case marker+postposition Verb+case marker+postposition+adverb
Inter- and intra-categories	Verb+case marker+case marker+postpositon Verb+ case marker+case marker

Table 139. Use of linguistic devices in descriptive data

Comparatively, the inventory of postpositional and adverbial devices used by the speakers is richer and more diverse in spontaneous Motion events than in caused Motion events. In both event types, the semantic distribution found in Source-Goal Path is more fine-grained and complex than in the expression of the other portions of Path, even if it is less frequent in the data.

Concerning narrative data, Path is distributed redundantly as well as differentially in both caused and spontaneous Motion events, the redundant distribution pattern being more frequent. In both patterns, Path is distributed in two up to three morphosyntactic loci in caused Motion events and in two upto four morphosyntactic loci in spontaneous Motion events. In both event types, Path is distributed more often redundantly in Goal and Source Paths; nevertheless, this type of distribution is also found in Median and vertical Paths in spontaneous Motion events.

Interestingly, the differentiated distribution of Path in three morphosyntactic loci is the most frequent pattern for the Source-Goal Path and this is in both, caused and spontaneous Motion events.

In narrative data too, Path is distributed between or among different linguistic devices, the verb, the case marker, the postposition, and the adverb.

To summarize, in both descriptive and narrative data, the redundant and the differentiated distribution of Path is well attested in the dataset; yet, the redundant distribution pattern is the most ubiquitous in Nepali. As far as the redundant pattern is concerned, it is frequently found in the Goal and preferentially involves two morphosyntactic loci. As for differentiated distribution, this is the most diverse pattern

as it can rely on three up to five morphosyntactic loci, the use of three morphosyntactic loci being the most frequent pattern.

Distribution of Path: Redundant > Differentiated; Redundant: Goal > Source > Median, and the use of morphosyntactic loci: 2 > 3 > 4 > 5.

In both types of data, Path is expressed by the simultaneous selection of different linguistic devices involving the lexical (verbal, and adverbial) and grammatical (case markers and postpositions) devices. Comparatively, the expression of spontaneous Motion events relies on richer inventories or more diverse forms in spontaneous Motion events as compared to caused Motion events in descriptive and narrative data. The Source-Goal Path representing the most differentiated distribution pattern is more complex and fine-grained; thus, the system of the language makes available different types of strategies to convey the Path and speakers rely on them extensively and often in an elaborated way. These all show us that in Nepali the spatial meaning is explicitly distributed across the clause. As pointed out in the introductory part of this Chapter, spatial semantics is not conflated in just one morpheme within a clause but is distributed across the clause and the meaning of spatial morphemes is “conditioned by distributed spatial semantics” (Sinha & Kuteva, 1995: 181).

Although some differences exist between descriptive and narrative data with reference to the type of construction, and the distribution of Path in terms of the number of loci involved in the expression, the basic frame is consistent between the two genres. Therefore, narrative data validate descriptive data according to our objectives mentioned in Chapter 3 (cf. § 3.2).

Chapter 8. Conclusions and perspectives

In this Chapter, I summarize the findings of my research, conclude them, highlight some aspects that this research contributes to the domain of Motion events and provide the outlook of the future research.

8.1 Summary of the study

After introducing the topic of my research domain, I discussed the theoretical background on Motion events and the relationship between the syntactic elements such as subject/object argument and the verb, and the semantic elements, for example, Path, Manner, Motion, Figure, and Ground. Then, I explained the concept of Path that is the site occupied by the Figure object with reference to the Ground object and outlined how it is expressed in V-framed and S-framed languages. Another concept that I addressed is the Manner that indicates the way the Figure changes the location, showing that languages can express Manner either in the main verb or outside the main verb in a periphrastic expression, depending on the type of construction, V-framed vs. S-framed used.

First, the domain of Motion events was linked with Talmy's seminal work on *Semantic structures in English and Atsugewi* (Talmy, 1972). Then, I focused on Talmy's classification of languages that are distinct regarding the lexicalization patterns i.e. V-framed, and S-framed patterns, and pointed out to the criticism on this two-way classification system. In V-framed languages, speakers express Path in the main verb and Manner is expressed in a subordinate construction while in S-framed languages, Manner is expressed in the main verb and Path is expressed in a satellite that can be a bound affix or a free word such as verb particles (e.g., English), separable and inseparable verb prefixes (e.g., German), and verb prefixes (e.g., Polish, Russian) (Talmy, 2000). Though Talmy's proposal of classifying languages in V-framed and S-framed lexicalization patterns has been widely applied across languages to

investigate the spatial domain and has gained broader popularity, his proposal has also been the centre of criticism because each language has its specific features and this two-way classification cannot account, neither for all the languages nor for the diversity of constructions some languages have. Several scholars argue for the revision of the two-way classification and propose some other types so that languages with serial verbs constructions, bipartite verbs, and generic verbs could be accommodated to the new type such as the equipollently-framing pattern as proposed by Slobin (2004) (see also Zlatev & Yangklang, 2004; see, however, Matsumoto, 2003; Croft *et al.*, 2010; Vittrant, 2015 *inter alia* for different ideas regarding this issue)). Language-specific lexicalization patterns have consequences on language acquisition, Motion events, and translation. These consequences are also discussed in the first Chapter of the Thesis. The first Chapter concludes with a review of studies on Motion events in some Indo-Aryan languages.

Chapter 2 is an outline of a grammatical sketch of Nepali. Nouns, verbs, pronouns, adjectives, and adverbs, postpositions and conjunctions are basic parts of speech. Nouns which refer to humans inflect for number, gender and case. Some non-human inanimate nouns also inflect for gender. Nepali has a dual number (singular vs. plural) and three gender system (masculine, feminine, and neuter). The inflected forms in the noun show ergative, genitive, dative, locative, and ablative cases. Verbs are intransitive or transitive. They inflect for tense, aspect, and mood.

Based on their syntactic behavior, adjectives in Nepali function as a distinct word class. Some of them also inflect for gender and number. Like nouns, verbs and even some adjectives, adverbs do not inflect for person, number and gender but occur as the head of the adverbial phrases and modify verbs. In spatial expressions they have an important role as they contribute to the expression of the Path (see § Chapter 4 through Chapter 7). Pronouns include the speech act participants (1st and 2nd person pronouns), third person anaphoric pronouns and demonstratives.

The tense system in Nepali has to do with the past or non-past. Aspect includes perfective and imperfective. The language marks declarative, imperative, optative, and potential mood. The inflected portmanteau suffix marks person, number, gender and the honorific status of the subject argument. The auxiliary copulas include *ho*, 'is' *cha* 'is' and *hunu* 'to become' and follow the main verb. Nepali is a head marking

language with SOV word order. With respect to the alignment pattern, syntactically, Nepali shows nominative-accusative alignment, and morphologically ergative-absolutive alignment. As regards to clause types, there are simplex and complex clauses. The simplex clauses are composed of a single verb or a compound verb or a light verb. The compound verb construction is very productive in Nepali. It is composed of minimum of two verbs or more than two verbs. The first verb in the series is the lexical head and the second one is a grammatical head. Complex clauses include the complement, purposive, relative and adverbial clauses. In Nepali, clause combining strategies include the use of coordinating and/or subordinating conjunctions. Nepali also uses the clause chaining process relying on the conjunctive participle form.

Chapter 3 is a comprehensive account of the sources of data, field visits, number of participants involved during the field work, data collection, transcription, coding, and data treatment procedures. I followed the elicitation and corpus-based approach in collecting the data. The elicitation approach is based on two types of video stimuli: the ‘Put and Take’ video stimulus set for the caused Motion events and ‘Trajectoire’ video stimulus set for the spontaneous Motion events that together constitute descriptive data. The corpus-based approach includes the extraction of sentences from the Nepali National Corpus which are the parts of narrative data. In total, there are 4991 motion descriptions in descriptive and narrative data analyzed in the framework of this Thesis.

In the elicitation study, 18 participants (10 male and 8 female; average age: 35.2) took part in describing the ‘Put and Take’ video stimuli, and 17 participants (9 male and 8 female; average age: 33.4) described the ‘Trajectoire’ video stimuli. Their education level varies from school education up to university level; they are either monolingual speaking only Nepali or bilingual or multilingual. Data gathered during the elicitation sessions were transcribed and coded following the Berkeley Coding Manual (Slobin, 2005) focusing on syntactic categories, conceptual categories and lexical expression.

In the corpus-based study, the Nepali National Corpus (NNC) was the only source used. The main purpose of using the Corpus was to consolidate and validate the results obtained with descriptive data. Through the dictionary survey, all verbs of

motion were extracted from *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali (7th ed.))*, their ranges of uses were also verified, and finally 53 verbs were chosen to be extracted in the context of 50 sentences each from the NNC showing only the literal use. Like descriptive data, all narrative data were coded following the Berkeley Coding Manual (Slobin, 2005), and were glossed following ‘The Leipzig Glossing Rules’ (LGR).

The aim of Chapter 4 was to examine the ‘Put and Take’ corpus. The dataset consists of placement, removal and removal-placement events and amount to 1158 sentences. Out of these, there are 565 (48.8% of the total) sentences depicting placement events, 539 (46.5% of the total) depicting removal events, and 54 sentences (4.7% of the total) depicting removal-placement events. The results show that some participants change the perspective and describe placement events as removal events or as some other type of activity; such changes in perspective account for 5% of the ‘Put and Take’ dataset ($N=1158$). In description of certain events such as putting a garment on a body part and removing a garment from a body part, speakers tend to omit the semantic element of Ground. From a crosslinguistic perspective too, such omissions are found in Hindi and Kalasha (see, for example, Narasimhan, 2012; Petersen, 2012). The analysis also addressed the types of constructions found in the corpus. The data show the use of simplex and complex constructions. In simplex construction, the simple predicate construction is the most frequent (48% of the total) while in complex construction, the relative clause construction is the most frequent strategy used by the participants (19.1% of the total). When looking at the use of different construction types in different event types, we found that, while in placement events, simplex construction is the most frequent (30.6% of the total), in removal events, complex construction is preferred (25.6% of the total). This indicates that at the constructional level, removal events are comparatively more complex than placement events though detailed analysis is still required based on a larger dataset.

There is a diversity of lexical and grammatical devices both in placement and removal events. Speakers used 85 different main verbs. Among them the verb *raakhnu* ‘to put’ expressing placement events is the most frequent corresponding to 30.8% of the dataset ($N=1158$). Semantically, 39 verbs encode Path and 27 of them express Manner, showing that there are more Path verbs than Manner verbs in ‘Put and Take’

corpus. Note also that there are some verbs which belong to other than Path or Manner verbs.

While separately analyzing the semantic distinctions among verbs in placement and removal events and the distinctions speakers of Nepali make when expressing these events, I found that some verbs overlap with each other and that some verbs are sensitive to the type of Ground, surface vs. containment, and even to the type of Figure, granular vs. non-granular, whereas others are semantically more general. Verb like *raakhnu* ‘to put’ is not sensitive to the type of Ground whether it is a surface such as ‘put cup on table’ or a containment as in ‘put hand into hole in tree’. On the other hand, verbs such as *chiraaunu* ‘to cause to enter’ or *ghusaarnu* ‘to insert’ are sensitive to the geometrical characteristics of the Ground such as ‘put hand into hole in tree’ but not with ‘put book on floor’. Some verbs, such as *jhunDyaaunu* ‘to hang’, are also sensitive to the vertical Ground as in ‘hang rope over tree branch’; others, such as *dinu* ‘to give’, which are also used in placement events, express the transfer of possession revealing a strong agreement among speakers.

In removal events, the most frequent verb is *nikaalnu* ‘to take out’ accounting for 17.2% of the dataset ($N=1158$). It is also not sensitive to the type of Ground, namely surface (e.g., ‘take stone out of pocket’) vs. containment (e.g., take saucer off cup) or to the type of Figure such as granular vs. non-granular. In certain contexts, the verb *nikaalnu* ‘to take out’ overlaps with other verbs such as *jhiknu* ‘to take out’ but in other contexts, it clearly differs from other verbs, for example, *kholnu* ‘to take off’, and *phukaalnu* ‘to take off’. In certain contexts, such as ‘take a cucumber out a recorder case’, there is an agreement among 14 speakers in their use of the verb *nikaalnu* ‘to take out’ whereas in some other, such as ‘knock over bucket so blocks spill out’, speakers use different verbs such as *Dhalaunu* ‘to cause to fall’ *Dhaalnu* ‘lit. to fell’, *haannu*, ‘to hit’, and *laDaaunu* ‘to cause to fall’. This shows that the agreement across speakers as to the use of specific verbs varies depending on the event type (for other details, see § 4.3.1.3).

Besides the verbs, the analysis also addressed the diversity of other lexicogrammatical devices that speakers preferentially use in the expression of placement and removal events. Speakers use both lexical and grammatical devices for both types of event. Lexical devices involve adverbs *bhitra* ‘inside’, *tala* ‘below’, and *maathi* ‘above’ in placement events, and *baahira* ‘outside’ in removal events. Both *tala*

‘below’ and *maathi* ‘above’ encode the vertical orientation showing respectively downward and upward directionality whereas *baahira* ‘outside’ and *bhitra* ‘inside’ indicate respectively the Source and the Goal. In addition to Source and Goal, they also express the boundary crossing. Data also show that there are more adverbial devices in placement events than in removal events. The grammatical devices include case markers and postpositions. In placement events, the locative case marker *-maa* ‘LOC’ is used though there are some uses of the dative case marker *-laai* ‘to’ in the event of giving that shows the transfer of possession. The locative case marker *-maa* ‘LOC’ is found to encode Goal (27.5% of the total) and location (15.4% of the total) irrespective of the type of Ground, surface vs. containment. In the case of removal events, only the ablative case marker *-baaTa* ‘from’ is used. It encodes the Source-oriented spatial information. However, there are two different ablative case markers, *-baaTa* ‘from’ and *-dekhi* ‘from’, of which the former is the most frequent, 29.9% of the total data in removal events ($N=539$) whereas the latter is used only in five motion descriptions. Therefore, the locative case marker *-maa* ‘LOC’ and the ablative case marker *-baaTa* ‘from’ are two general grammatical devices used respectively in placement and removal events.

The grammatical devices also include postpositions such as *-maathi* ‘above’, *-bhitra* ‘inside’, and *-tira* ‘toward’ of which *-maathi* ‘above’ is the most frequent (12.9% of the dataset, $N=1158$). *-maathi* ‘above’ indicates Goal and is sensitive to surface type of Ground. It also encodes the vertical orientation, namely the upward directionality. *-bhitra* ‘inside’ also encodes the Goal (3.7% of the dataset, $N=1158$) as well as boundary crossing and is used only with the containment type of Ground. There are no postpositions that directly convey the removal events but when the Goal-encoding postpositions mentioned earlier take the ablative case marker *-baaTa* ‘from’, they convey the geometric configuration of the Ground and the ablative case marker conveys the direction of the Figure object to convey the Source-oriented event (see also § 4.3.2 for discussion).

Finally, I investigated the use of morphosyntactic loci for the expression of Path in placement, removal, and removal-placement events, and discussed: the number of morphosyntactic loci used, whether the Path is distributed equally in these events, and whether speakers use the Source-oriented Path and Goal-oriented Path equally or if they tend to focus only on Source or Goal (for further discussion, see § 4.4).

In placement events, Path is expressed in one up to five morphosyntactic loci and Path expressed in two morphosyntactic loci is the most frequent pattern, accounting for 57.2% of the dataset ($N=565$). Different lexical and grammatical devices are involved in expressing the Path. When Path is expressed in one morphosyntactic locus, it is expressed either by the verb alone or by the case marker *-maa* ‘LOC’ alone or by one of the postpositions indicating Goal (e.g., *-maathi* ‘above’ *-tira* ‘toward’). Furthermore, when Path is expressed in two or more than two morphosyntactic loci, it is expressed between the verb and the case marker, or the verb and the postposition, or the verb and the adverb or the postposition, or between the case marker and the postposition when the main verb of the clause is other than the Path verb. In some cases, Path is expressed in a combined way involving all the morphosyntactic devices.

In the case of removal events, Path is expressed in one up to four morphosyntactic loci; Path expressed in two morphosyntactic loci is the most frequent (43.2% of the dataset, $N=539$). As in placement events, both lexical as well as grammatical devices are involved in expressing the Path. It is mostly the verb that expresses the Path in one morphosyntactic locus but if Path is expressed in more than two morphosyntactic loci, it is expressed by a combination of the verb and the ablative case marker *-baaTa* ‘from’ or by the combination of the verb, the case marker, the adverb and the postposition. The data also show the boundary crossing Path expressed by the verb and the postposition *-bhitra* ‘inside’ that takes the ablative case marker *-baaTa* ‘from’ indicating the directionality.

In removal-placement events, Path is expressed in one locus up to five morphosyntactic loci; Path expressed in three morphosyntactic loci is the most frequent strategy (35.2% of the dataset, $N=54$). This is also the event type where complex Path expressions were found. As confirmed by the data, the complex Path can be expressed by both simplex and complex clauses (cf. § 4.4.3).

Overall, both lexical and grammatical devices are involved in expressing Path in placement, removal, and removal-placement events. The distribution of Path differs in each event type discussed above. First, Path expressed in two morphosyntactic loci is more frequent in placement and removal events. In contrast to this, Path expressed in three loci is more frequent in removal-placement events. Second, regarding the number of morphosyntactic loci, Path is expressed in one up to five morphosyntactic

loci in placement and removal-placement events whereas it is expressed in one up to four morphosyntactic loci in removal events. Finally, there is also a difference in the number of lexical and grammatical devices involved in expressing these events. There are more morphosyntactic devices to express Path in placement events than in removal events. Concerning the Source and Goal Path, data also reveal that speakers pay more attention to Goal Path than the Source Path. However, the asymmetry between Source vs. Goal is a domain on its own and a fine-grained analysis based on a larger sample of data is still necessary.

Chapter 5 addressed the expression of spontaneous Motion events based on the ‘Trajectoire’ video stimulus set that consists of simple Path events (Source-, Median-, or Goal-oriented events) and complex Path events (Source-Goal- or Source-Median-Goal-oriented events). Here again, some speakers changed their perspective while describing Motion events. As a result, the event which implies a simple Path event was described as a complex Path event (e.g. Source-Goal-oriented event) or a complex Path event was described as a simple Path event (e.g. either a Source-oriented or a Goal-oriented event). In order to depict spontaneous Motion events, speakers used both simplex and complex constructions, nevertheless simplex constructions are more frequently used (60% of the dataset, $N=949$) as compared to complex constructions (39.6% of the dataset). The analysis of lexical devices showed that speakers used 54 different verbs in the main verb slot in Motion descriptions, both monomorphemic (e.g., *pasnu* ‘to enter’) as well light verbs (e.g., *paar garnu* ‘to cross’). The number of occurrences of individual motion verbs found in the ‘Trajectoire’ corpus varies. It ranges from one (the lowest) to 200 (the highest). Regarding the semantic category of verbs, they are divided into Path, Deixis and Path, Path and Manner, and Manner verbs. Verbs expressing Path, and Deixis and Path account for 58% of the dataset. Among Path verbs, some encode Source (e.g., *niskanu* ‘to exit’), others express Median (e.g., *tarnu* ‘to cross’), while some others convey Goal (e.g., *pasnu* ‘to enter’). From the point of view of orientation, some verbs express vertical Motion (e.g., *orlanu* ‘to descend’). Irrespective of the Source and the Goal, some Path verbs also indicate the crossing of a physical boundary; schematically, this includes ENTER (e.g., *chirnu* ‘to enter’), EXIT (e.g., *niskanu* ‘to exit’) or CROSS (e.g., *tarnu* ‘to cross’). Two verbs, *jaanu* ‘to go’ and *aaunu* ‘to come’, express Deixis and Path, respectively centrifugal and centripetal, and one verb *caDhnu* ‘to climb’ encodes

two semantic elements Path and Manner. Overall, the Deixis and Path verb *jaanu* ‘to go’ is the most frequent of all the verbs found in the spontaneous Motion descriptions (21.1% of dataset).

The second set of verbs consist of Manner verbs which express an activity rather than an event. In total, 15 verbs expressing Manner were found in the data (e.g., *hi~Dnu* ‘to walk’, and *pauDi khelnu* ‘swimming play’). All of them belong to first tier verbs which are the verbs of everyday use. Among various Manner verbs, *hi~Dnu* ‘to walk’ is the most frequent (20.8% of the dataset). There are no verbs in the data that belong to the second tier or more expressive type of verbs (cf. § 5.3.1.3). Schematically, the first tier verbs are categorized in WALK, RUN, JUMP, SWIM, WANDER, and TRAVEL. Categories such as WALK include only one verb (*hi~Dnu* ‘to walk’) that semantically indicates motor pattern and rate of motion but some categories such as RUN include a set of verbs (e.g., *dagurnu* ‘to run’, and *kudnu* ‘to rush’) encoding the motor pattern.

As was the case in the main verb slot, there is a great diversity of verbs used in the non-finite conjunctive participle forms accounting for 25.4% of the data ($N=949$). 52 verbs were found in the dataset depicting Path and Manner; but there are also other verbs that express neither Path nor Manner. The Path encoding verbs account for 9% of the dataset and include Source-, Median-, and Goal-oriented Path verbs. Besides, they also include the Deixis and Path verbs and verbs depicting vertical Motion. Depending on the types of constructions, they either introduce the sub-event of spontaneous/caused Motion events or elaborate the Path depicted in the main verb of the clause. The Manner encoding verbs in the conjunctive participle forms account for 8.1% of the dataset ($N=949$). These verbs include *hi~Dnu* ‘to walk’, *pauDanu* ‘to swim’, and *uphranu* ‘to jump’. Schematically, they also belong to WALK, SWIM, JUMP, RUN and TRAVEL categories; yet, the JUMP category has a greater diversity of verbs occurring in the CP forms. These verbs also either introduce the sub-event of caused/spontaneous Motion events or elaborate the Manner expressed in the main verb of the clause or they compensate for the absence of Manner in the main clause (cf. § 5.3.2.2).

Semantically, all adverbials found in the ‘Trajectoire’ corpus express either Path or Manner. Adverbs such as *baahira* ‘outside’ encode Source, *bhitra* ‘inside’ express Goal, and *tala* ‘below’/*maathi* ‘above’ indicate vertical orientation. Some Path

adverbs, such as *baahira* ‘outside’ and *bhitra* ‘inside’ also express boundary crossing. Among the diversity of Path adverbs, *baahira* ‘outside’ is the most frequent accounting for 7.5% of the data. Adverbs that express Manner include *wistaarai* ‘slowly’ and *saraasar* ‘straightway’ among others. Their function depends on the type of the verb with which they occur. If the main verb of the clause is a Path verb, these adverbs compensate for the absence of Manner verb in the main clause but if it is a Manner verb, they elaborate the Manner expressed in the main verb.

The locative case marker *-maa* ‘LOC’ and the ablative case marker *-baaTa* ‘from’ are general grammatical devices used in the expression of spontaneous Motion events. Overall, they occur in 62.9% of the dataset ($N=949$). *-maa* ‘LOC’ conveys the Goal Path and the latter expresses the Source Path. There are a few instances where the ablative case marker has a locative function. Several postpositions (e.g., *-bhitra* ‘inside’, *-muni* ‘below’, and *-maathi* ‘above’) are also parts of grammatical devices which are attested in the data accounting for 29.8% of the dataset ($N=949$). All postpositions used in the ‘Trajectoire’ corpus express the Goal-oriented Path but when they are used in the expression of Source-oriented Path, they are combined with the ablative case marker *-baaTa* ‘from’ which encodes the directionality; in such a context, the postpositions express the configuration of the Ground object. Moreover, some postpositions have a more complex semantics; for example, *-bhitra* ‘inside’ conveys Goal as well as boundary crossing Path, and *-maathi* ‘above’ expresses vertical orientation indicating upward direction (cf. § 5.3.5).

Finally, I investigated the use of morphosyntactic loci for the expression of Path in order to investigate two main research questions, namely how is the Path distributed in different morphosyntactic loci across the clause? And is there any dialectal variation in the types and number of morphosyntactic loci used by the participants to express the Path of Motion?

Overall, the data confirm that Path is expressed in one up to six morphosyntactic loci of which Path expressed in two morphosyntactic loci is the most frequent pattern (31.6% of the dataset, $N=949$). However, while examining individual events (e.g., Source-, Median- or Goal-oriented), we found that there are differences in the number of morphosyntactic loci and the number of lexical and grammatical devices involved in the expression of the Path. For example, in Source-oriented events, Path is distributed in one morphosyntactic locus up to four loci, three morphosyntactic loci

being the most frequent pattern (51.9% of the dataset, $N=104$) (cf. § 5.4.1). In Median-oriented events, Path is distributed in one up to three morphosyntactic loci of which the use of one locus is the most frequent pattern (76.7% of the dataset, $N=43$) (cf. § 5.4.2). Furthermore, with respect to the number of motion descriptions, the distribution of Path in two morphosyntactic loci is the most frequent pattern found in the Goal-oriented events (68.1% of the total, $N=313$) but, in terms of the number of morphosyntactic loci, it is the Source-Goal-oriented events where we found the greater diversity of patterns, Path being distributed in two up to six morphosyntactic loci (cf. § 5.4.4). As in the case of ‘Put and Take’ corpus, in the ‘Trajectoire’ corpus too, various linguistic devices, lexical (verb, and adverb) and grammatical (case markers and postpositions), are involved in the expression of Path. In some motion descriptions, Path is expressed in one locus by the verb alone or only by the case marker or the postposition. In some cases, Path is expressed between the verb and some other linguistic devices such as the case marker or the postposition or the adverb, and in some other cases all the four lexical and grammatical devices are combined to convey the Path.

In the expression of some events there are more morphosyntactic loci used to depict Path than in other events, nevertheless irrespective of the type of events, Path appears to be highly profiled in Nepali. Speakers use a wide range of morphosyntactic devices to express Path and depict it in an elaborated and extended way. Although there are some minute differences in the data with respect to the dialectal variation in the expression of Path, there are no noticeable distinctions among speakers whether they are from Parbat or Kathmandu in spite the fact that the landscape of both of these places varies to some extent.

By using the stimuli-based descriptive data and corpus-based narrative data, I investigated the lexicalization patterns in Nepali in Chapter 6 considering caused and spontaneous Motion events separately. The analysis of both types of data confirms the general tendency of Nepali to rely on V-framed and reverse V-framed patterns in motion descriptions.

In descriptive data, 81.5% of caused Motion events ($N=1158$) show the V-framed pattern where 39 different verbs lexicalizing Path were found in the main verb slot of the clause. These verbs mainly lexicalize the Source Path (e.g., *kaaDhnu* ‘to take off’) and the Goal Path (e.g., *puryaunu* ‘to cause to reach’). Some verbs also

lexicalize the boundary crossing Path (e.g., *nikaalnu* ‘to take out’) and Path depicting the vertical Motion (e.g., *uThaaunu* ‘to pick up’). Moreover, verbs that lexicalize the Goal Path are more frequent (i.e. 49.4% of the total data) than those verbs that lexicalize the Source Path or some others. However, there is not any verb which lexicalizes the Median-oriented Path in caused Motion events.

In spontaneous Motion events too, the V-framed construction is ubiquitous. Of the total data ($N=949$), 58% lexicalize Path in the main verb comprising 21 different verbs. Compared to caused Motion events, verbs that lexicalize Path in the main clause in spontaneous Motion events are less numerous but unlike the caused Motion events, verbs in spontaneous Motion events lexicalize all three portions of Path: the Source Path (e.g., *niskanu* ‘to exit’), the Median Path (e.g., *naaghnu* ‘to pass’/‘to cross’) and the Goal Path (e.g., *pasnu* ‘to enter’). Furthermore, the boundary crossing Path is highly lexicalized (e.g., *chirnu* ‘to enter’) and, therefore, verbs lexicalizing the boundary crossing are more frequent (i.e. 21.8% of the total) than those lexicalizing Source, Median or Goal Path. Two verbs *jaanu* ‘to go’ and *aaunu* ‘to come’ lexicalize Deixis and Path, and some verbs express the vertical Motion (e.g., *uklanu* ‘to ascend’). Hence, verbs that lexicalize Path in the main clause are more diverse in spontaneous Motion events than those in caused Motion events.

Consequently, the analysis of descriptive data robustly confirm that Nepali relies on the V-framed lexicalization pattern.

In narrative data also, the results are consistent regarding the lexicalization pattern: the V-framed pattern is extensively used in both caused and spontaneous Motion events. In caused Motion events, Path is lexicalized in 46.9% of the total data ($N=1860$). There are 33 verbs that lexicalize either the Source Path (e.g., *linu* ‘to take’) or the Goal Path (e.g., *kocnu* ‘to put’), as in descriptive data, no verbs lexicalizing the Median Path were found in caused Motion. Some verbs also lexicalize the boundary crossing Path (e.g., *chiraaunu* ‘to cause to enter’), and the vertical orientation (e.g., *ucaalnu* ‘to lift’). In spontaneous Motion events too, the V-framed pattern is pervasive. Path is lexicalized in the main verb of the clause in 53.7% of the total data ($N=1024$) where 18 different verbs lexicalize the Source (e.g., *pharkanu* ‘to return’) Median (e.g., *tarnu* ‘to cross’) and Goal (e.g., *bhitrinu* ‘to enter’) Path, but also the boundary crossing (e.g., *chirnu* ‘to enter’) and vertical orientation (e.g., *jharnu* ‘to descend’). Here again, Path is more diverse in spontaneous Motion events because all

the three portions of Path are lexicalized and also there are verbs that lexicalize Deixis and Path verbs which are absent in caused Motion events.

The analysis of narrative data further confirms the trend observed in descriptive data; both data types confirm the extent of use of the V-framed pattern and by doing so, it also confirms the general typological tendency of Nepali in the typology of Motion events.

Yet, although the majority of the data confirms the pervasiveness of the V-framed pattern, the data also show the use of the reverse V-framed pattern. This is the pattern where Manner is lexicalized in the main verb of the clause and Path is lexicalized in the conjunctive participle. In descriptive data, this pattern accounts for 0.6% of the dataset in caused Motion events ($N=1158$) and 1.4% of the dataset in spontaneous Motion events ($N=949$). Because the reverse V-framed pattern is less frequent in the dataset, the diversity of verbs lexicalizing Manner in the main clause and Path in the conjunctive participle form are also less. In caused Motion events, five different verbs lexicalize Manner in the main clause. Semantically, they imply either the force such as *taannu* 'to pull' or the adhesion. There are four verbs that lexicalize Path in the conjunctive participle form: three of them lexicalize Source (e.g., *lagnu* 'to take away') and one lexicalizes Goal (e.g., *lyaaunu* 'to bring'). In spontaneous Motion events, there are only two verbs that lexicalize Manner in the main clause, *dauDanu* 'to run' and *hi~Dnu* 'to walk' which convey the motor pattern. Six verbs in the conjunctive participle forms lexicalize Path: three of them lexicalize Source (*niklanu* 'to exit'), two lexicalize Median (*tarnu* 'to cross') and one the vertical Motion (*uklanu* 'to ascend'). Both types of event show that there are more Manner verbs in the main clause in caused Motion events than in spontaneous Motion events, and in both events, Path verbs in conjunctive participle form mostly lexicalize the Source Path.

In narrative data, this pattern is attested only in caused Motion events (1.1% of the total, $N=1860$) but not in spontaneous Motion events. What is important is that different patterns are available in Nepali though from a typological point of view, the reverse V-framed pattern is less discussed in the literature on Motion events (see, however, Pourcel, 2004b; Pourcel & Kopecka, 2005 for French).

As discussed in the preceding paragraphs, the V-framed pattern is more pervasive in Nepali which means Path is lexicalized in the main verb of the clause in

the majority of the data whether they are descriptive or narrative. As a result, Manner is either omitted or expressed. In descriptive data both in caused and spontaneous Motion events, speakers adopt different strategies to express Manner. It is expressed in the form of a conjunctive participle, in an aspectual form, and or in an adverbial, and in some cases by a combination of an adverbial and a Manner verb in the conjunctive participle form, nevertheless such combinations are used only in spontaneous Motion events. In both types of event, there is also evidence that Manner is expressed in the main verb (e.g., *dhakelnu* ‘to push’ in caused Motion events and *dauDanu* ‘to run’ in spontaneous Motion events) but it is less frequent in the data (11.7% of caused Motion events and 32.3% of spontaneous Motion events). In spontaneous Motion events, we found the verb *caDhnu* ‘to climb’ that lexicalizes both the Path and Manner which is absent in caused Motion events.

In narrative data, the strategies to express the Manner are the same as in descriptive data, but in addition to these strategies, the narrative data reveal the use of ideophones, thereby showing more linguistic devices to express Manner than descriptive data. Irrespective of the type of data, when the Manner is expressed in these different forms, they compensate for the absence of Manner in the main verb of the clause and, by compensating, they provide additional information about the Motion of the Figure. When Manner is expressed either by an adverbial or an ideophone alone, such constructions are syntactically less complex and cognitively less costly. Furthermore, in spontaneous Motion events in narrative data, Manner is also lexicalized in the main verb of the clause (e.g., *taannu* ‘to pull’ in caused Motion events and *hi~Dnu* ‘to walk’ in spontaneous Motion events) accounting for 13.2% of caused Motion events ($N=1860$) and 16.3% of spontaneous Motion events ($N=1024$). Furthermore, the verb *caDhnu* ‘to climb’ lexicalizes Path and Manner and the very verb is absent in caused Motion events.

Applying the Distributed spatial semantic framework proposed by Sinha and Kuteva (1995), I investigated in Chapter 7 the use of morphosyntactic loci for expressing the Path and the semantic distribution of Path across the clause in descriptive and narrative data. I also examined whether the Path is distributed redundantly (i.e. different linguistic devices express the same segment of Path, for example, the Source, the Median or the Goal) or differentially (i.e. different linguistic devices express different portions of Path such as the Source-Goal, the Median-Goal).

Results in both types of data show that Path can be distributed redundantly and differentially in different morphosyntactic loci between or among different linguistic devices.

In descriptive data, both in caused and spontaneous Motion events, Path is distributed redundantly and differentially in one locus up to five morphosyntactic loci; the distribution in two morphosyntactic loci is the most frequent pattern accounting for 29.63% of caused Motion events (343 motion descriptions) and 14.9 % of spontaneous Motion events (116 motion descriptions).

As regards the redundant distribution, Path is distributed redundantly in Source- and Goal-oriented events in two loci up to four morphosyntactic loci in caused Motion events, but in spontaneous Motion events, it is distributed redundantly in Source-, Median- and Goal-oriented events in two loci up to four morphosyntactic loci. In both types of event, Path distributed in two loci depicting the Goal Path is the more prevalent accounting for 21% of the total in caused Motion events and 12.2% of the total in spontaneous Motion events.

With respect to the differentiated distribution, Path is distributed differentially in two morphosyntactic loci up to four loci in caused Motion events and in two up to five morphosyntactic loci in spontaneous Motion events. The distribution of Path in three morphosyntactic loci encoding the Source-Goal Path is the most frequent pattern in both types of event but the most differentiated pattern consists of five morphosyntactic loci in spontaneous Motion events conveying the Source-Goal Path.

In both types of event, the locative case marker *-maa* 'LOC', the postposition *-bhitra* 'inside', and the adverb *bhitra* 'inside' express the Goal and the ablative case marker *-baaTa* 'from' and the adverb *baahira* 'outside' express the Source Path. Therefore, in both events, Path is expressed by the verb and the case marker, and/or the postpositions, and/or the adverb or in some cases, it is expressed by a combination of all these linguistic devices. Nevertheless, linguistic devices such as adverbs or postpositions are more diverse in forms in spontaneous Motion events than in caused Motion events.

In narrative data too, Path is distributed redundantly as well as differentially in two morphosyntactic loci up to four loci between or among different linguistic devices. Regarding the redundant pattern, in caused Motion events, Path is distributed

redundantly in two up to three morphosyntactic loci; in spontaneous Motion events, it is distributed redundantly in two morphosyntactic loci up to four loci. The distribution of Path in two morphosyntactic loci indicating the Goal Path is the most frequent pattern in Nepali in both types of event, caused and spontaneous, and in both types of data, descriptive and narrative data.

As for the differentiated pattern, Path is distributed differentially in two up to three morphosyntactic loci in caused Motion and in two up to four morphosyntactic loci in spontaneous Motion. However, compared to redundant distribution of Path, Path distributed differentially is less frequent and this in both types of data, narrative and descriptive.

Different linguistic devices are involved in the expression of Path in narrative data. These include the verb, the case marker, the postposition and the adverb, as was also the case in descriptive data. The only difference between descriptive and narrative data in the use of linguistic devices is that the use of postpositions is not attested in the differentiated pattern in narrative data.

This investigation shows that in Nepali, the distribution of Path is not confined to a single linguistic device, for example, the verb or the postposition, but it is overtly distributed in different form classes across the clause.

8.2 Concluding remarks and contribution of the study

The following conclusions can be drawn from this study.

This Thesis is a typologically-oriented descriptive study of the expression of Motion events in Nepali based on descriptive and narrative data investigated at the constructional, lexical and discourse levels. In particular, I investigated the diversity of morphosyntactic devices, unveiled the relationship between the form and the meaning, and showed how language-specific patterns influence the types of information speakers typically encode in discourse. At the constructional level, results obtained from the analysis of both types of data show the simplex and complex constructions. Speakers use simplex constructions more often than complex

constructions in descriptive data but complex constructions are more frequent in narrative data. This is a remarkable difference between descriptive and narrative data.

In descriptive data, both in caused and in spontaneous Motion events, speakers use different verbs in the main verb, 85 in caused Motion events and 54 in spontaneous Motion events, as they describe the video stimuli. Semantically, these verbs express Path, Manner or Path and Manner and the number of Path verbs is significantly more in both types of event. In caused Motion events, Path verbs express only Source and Goal Paths but in spontaneous Motion events, they express Source, Median and Goal Paths. Furthermore, in spontaneous Motion events, there are some verbs that lexicalize two semantic components Path and Manner which caused Motion events lack. These are two main distinctions within descriptive data between caused and spontaneous Motion events. But in both events, there are also Path verbs that express boundary crossing and vertical Motion. Verbs used in both types of event either overlap or differ from each other (cf. Chapter 4 and 5). Despite great lexical diversity in descriptive data, the occurrence of each verb is not equal. As a result, some verbs are more frequent than others. As revealed by the data, *raakhnu* ‘to put’ in caused Motion events and *jaanu* ‘to go’ in spontaneous Motion events are the most frequent verbs in descriptive data. They can be referred as the general verbs in Nepali. Likewise, placement events in caused Motion events and Goal-oriented events in spontaneous Motion events are more frequent in descriptive data. It raises the issue of Source-Goal asymmetry which this study proposes for the future outlook.

The study also shows the diversity of other lexico-grammatical devices that include the case marker, the postposition, and the adverb. Within caused Motion events, there are more lexico-grammatical devices such as postpositions and adverbs in placement events than in removal events but comparing caused and spontaneous Motion events, lexico-grammatical devices are more diverse in forms or inventories in spontaneous Motion events than in caused Motion events. Nevertheless, the locative case marker *-maa* ‘LOC’ and the ablative case marker *-baaTa* ‘from’ are the most frequent grammatical devices in both events. Therefore, they also behave like general grammatical devices in Nepali.

Regarding the distribution of Path, the study showed that Path is distributed in a more elaborate fashion in spontaneous Motion events than in caused Motion events. In caused Motion events, the distribution of Path in two morphosyntactic loci is more

frequent in placement and removal events while the distribution of Path in three morphosyntactic loci is more frequent in removal-placement events. In spontaneous Motion events, the distribution of Path in two morphosyntactic loci is more frequent in Goal- and Median-Goal-oriented events but the distribution of Path in three morphosyntactic loci is more frequent in Source- and Source-Goal-oriented events; interestingly, in Median-oriented events, the expression of Path in one morphosyntactic locus is the most frequent pattern. These show that there is variation in the distribution of Path not only depending on the type of event but also within a particular type of event depending on the segment of Path. Another interesting point is that distribution of Path is more elaborate in removal-placement events in caused Motion events, and Source- and Source-Goal-oriented events in spontaneous Motion events. Yet, there is a general trend in both types of event that Path distributed in two morphosyntactic loci is more frequent. Nevertheless, the use of two loci is more frequent in placement events in caused Motion events and Goal-oriented events in spontaneous Motion events which is another interesting point for investigating the Source-Goal asymmetry.

Overall, given that Nepali offers different lexical and grammatical devices for the encoding of Path, speakers seem to have various alternative choices to elaborate Path in a more general or a more specific way depending on the event type and/or the type of information they intend to convey in discourse.

As regards the conjunctive participle forms, their use is pervasive in both descriptive and narrative data. Given the fact that their uses are varied, they can be considered multifunctional. Depending on the type of constructions, they introduce the subevent of either caused or spontaneous Motion events, elaborate the Path or the Manner of Motion, and/or compensate for the absence of Manner in the main verb of the clause. These are some of the interesting functions that this study highlights but for a detailed investigation a further research is needed (see § 8.3).

In various parts of this Thesis, I have pointed out that numerous studies on Motion events and lexicalization patterns have been conducted and that many of them are mostly focused on European languages. Among them, Germanic and Slavic languages display the S-framed pattern and Romance languages mainly rely on the V-framed patterns. However, this study shows that, among Indo-European family, not only Romance languages resort to the V-framed pattern as first discussed by Talmy

(1975, 1985, 2000) and later by many other scholars (Slobin, 1996, 2004, 2005; Kopecka, 2006, 2010; Rappaport Hovav, 2019 *inter alia*) but also Nepali, an Indo-Aryan language. Investigation of descriptive and narrative data also confirms the use of the reverse V-framed lexicalization pattern, though it is not as pervasive as the V-framed pattern. Consequently, when Path is conveyed by the main verb, Manner is expressed in conjunctive participle forms, aspectuals, adverbials and/or ideophones, all of which compensate for the absence of a Manner verb in the main clause, that is, they provide additional information about the Figure's Motion. The use of adverbs and ideophones to compensate for the absence of Manner in the main clause is syntactically more simple and cognitively less costly than the use of conjunctive participle forms.

Caused vs. spontaneous Motion events reveal some interesting differences regarding the expression of Manner. Manner is more frequently expressed in spontaneous Motion events than in caused Motion events, and it is also expressed in a more complex and fine-grained way in spontaneous Motion events by combining a Manner verb and an adverbial; this strategy is absent in caused Motion events. Furthermore, in spontaneous Motion events, some verbs such as *caDhnu* 'to climb' lexicalize both Path and Manner but such cases are not attested in caused Motion events. Therefore, in spontaneous Motion events, Manner is:

- (a) more frequent,
- (b) more complex (verb and adverb), and
- (c) more diverse (Manner and Path verb).

The 'Distributed spatial semantics' framework allowed to investigate the overt or non-overt distribution of Path within the simplex clause and to examine whether the Path is distributed redundantly or differentially in Nepali. The data revealed that Path can be distributed redundantly and differentially between or among various linguistic devices and that the redundant system is the most prevalent system used by the speakers in Nepali. The redundant distribution of Path in two morphosyntactic loci, especially in the expression of the Goal of Motion is the most frequent pattern and the most redundant distribution was found in the expression of the Source of Motion, Path being distributed in four morphosyntactic loci. As for the differentiated distribution pattern, the most frequent pattern consists of three morphosyntactic loci

and it was found in the expression of the Source-Goal of Motion. Finally, the most differentiated pattern consisting of five morphosyntactic loci was also found in the expression of the Source-Goal Motion.

As shown by the data, the spatial information related to Path is not merely expressed by the verb alone but by means of different lexical and grammatical elements (verbs, case markers, postpositions, and adverbs) that can combine in various ways in a clause. As explained by Slobin (2004: 248) “The spatial meaning of an element does not reside in a single lexical item; rather it is distributed over form classes and constructions.” Clearly, in Nepali, Path is overtly conveyed in motion descriptions in both caused and spontaneous Motion.

The study incorporated two different data sets in order to investigate the domain of Motion events. Comparatively, descriptive data are limited to their uses because they are based on the video stimulus sets and each video clip is meant to show a specific event but narrative data are much broader and elaborate. One of the principal differences found in the data lies in the type of constructions: in descriptive data, most of the constructions are simplex whereas in narrative data, complex constructions are much more frequent. There is also a difference in the distribution of Path: in descriptive data, Path is distributed in one morphosyntactic locus up to six morphosyntactic loci whereas in narrative data Path is distributed in one up to nine morphosyntactic loci. However, despite some differences, both types of data are consistent and comparable, as evidenced by the type, number, and function of Path and Manner verbs, conjunctive participle forms, lexico-grammatical devices used, and lexicalization patterns just to mention a few of them. Therefore, narrative or the naturalistic data validate descriptive or the experimental data as envisaged in § Chapter 3.

Principal contribution

As explained in Chapter 1 of this Thesis, the study of Motion events is an under-represented not only in languages spoken in Nepal but also in South Asia in general. This Thesis is the first typologically oriented study on Motion events in Nepali and, therefore, it contributes to filling that gap. The analysis of stimuli-based descriptive and NNC-based narrative data have shown interesting results in this domain of expression. By doing so, it provides new insights on spatial studies and opens new

perspectives of research. Besides, this study also opens other venues of research be it at the constructional, lexical or discourse level, even though the study itself is focused on the expression of Path. Our investigation shows that Path is an omnipresent component in Nepali irrespective of the type of data. Speakers express Path using different patterns and different linguistic devices showing that Path can be expressed in Nepali in a varied and often in an extended way. Because Path is typically expressed in the main verb of the clause in descriptive as well as narrative data, we can classify Nepali as a V-framed language within the typology of lexicalization patterns. This is one of the principal contributions of this research to the study of Motion events. We hope that this research will inspire further cross-linguistic research on Motion events in languages spoken in Nepal, a home to more than 123 languages, and more generally in South Asia where various languages share common features and, at the same time, differ significantly.

8.3 Perspectives for future research

While working on descriptive and narrative data, new ideas for future research emerged. On several occasions, I thought of incorporating them in distinct Chapters. However, as learning is an endless process and ideas keep on germinating in human mind, it was not possible for me to include them all in this Thesis due to the constraints of resources and time. Therefore, the present study *Motion events in Nepali* conceives a couple of ideas to develop into seedlings and opens a broader avenue to grow these ideas in the form of further research.

a. Asymmetry between Source and Goal

There has been a growing interest in the literature in the asymmetry between Source and Goal. Several studies suggest that there are cognitive, and linguistic biases in spatial representation, and that people tend to pay more attention to the Goal of Motion than to the Source of Motion. These include studies such as Source vs. Goal: A case of linguistic dissymmetry (Ikegami, 1987), cross-linguistic study on Source-Goal asymmetry (Bourdin, 1997), corpus-derived data analysis (Stefanowitsch & Rohde, 2004), and linguistic and non-linguistic test based on video clip elicitation

(Regier & Zheng, 2007) (see among others Dirven & Verspoor, 2004; Lakusta, 2005; Lakusta & Landau, 2005; Nam, 2005; Beavers, 2008; Lakusta *et al.*, 2007; Papafragou, 2010; Lakusta & Landau, 2012; Gaby 2012; Nikitina, 2017; Zanchi, 2017; Fagard & Kopecka, 2020; Kopecka & Vuillermet, 2021 *inter alia*)). Yet, there are also studies which suggest that some languages are not sensitive to Source or Goal. These include Baule, a Niger-Congo language spoken in Ivory Coast that is insensitive to Source and Goal (see Creissels, 2006 for discussion), Wan, a Southeastern Mande language spoken in Central Ivory Coast that does not distinguish Source, Place and Goal (see Nikitina, 2009: 1116, 1121-1122 for discussion), and Mapudungun, a language isolate spoken in South America (Chile and Argentina) that is one of those 17 languages, which treats the local role in a different way (Wälchli & Zúñiga, 2006; see also Kopecka, 2012 in the case of Polish, and Kopecka, 2017 in the case of Old and Modern French). Hence, while speakers of some languages prefer the Goal over the Source, in other languages this distinction is neutralized. Therefore, whether Goal is more prioritized than Source in the linguistic expression is still debatable and needs more research by investigating at the morphological, lexical, semantic, syntactic and discourse levels.

At the morphological or lexical level, the analysis involves whether one segment of Path is represented by more morphological or lexical devices than other (e.g., Goal-oriented events may involve more morphological or lexical devices to express than Source-oriented events or vice versa). The analysis may also focus on the semantic, syntactic, and discourse levels to uncover whether the Goal of Motion is expressed in a more fine-grained or more frequent fashion than the Source. Both descriptive and narrative data suggest that there is some kind of asymmetry in the case of Nepali at the constructional, and morphological levels. However, in order to validate or invalidate this claim, a detailed analysis based on the comprehensive set of data, corpus-based and the data collected with various stimulus sets is necessary to account for asymmetries at different levels of language structure. Besides, this domain of research would benefit from a cross-linguistic study of other languages, be they spoken in Nepal or in other parts of South Asia.

b. Complexity in the conjunctive participle form

Another interesting issue that I foresee is the study of conjunctive participles. There is literature, on Nepali and other languages of South Asia, that discusses this issue to some extent. However, these studies do not explicitly address the use of conjunctive participles in the spatial domain. In this study, I introduced the conjunctive participle form in connection with the clause chaining device in Chapter 2. Taking its function a step further, I discussed its role in descriptive and narrative data where they occur very frequently. In both datasets, its semantic role is diverse and the conjunctive participle form appears to be a multifunctional device. As a matter of fact, verbs used in the conjunctive participle form encode Path, Manner, Deixis and Path, and Path and Manner. Some verbs in conjunctive participle form also convey other meanings but they have also important role in the expression of a given motion description. Some functions are illustrated below. These are but just a few of them and a detailed study is still needed to show the multi-dimensional functions of the conjunctive participle forms. What I point out in this outlook, provides the insights to see them from a distant lens but still demand extensive study for fine-grained analyses, and closer views.

Overall, all verbs in conjunctive participle forms express adverbial function. However, based on the analysis of descriptive and narrative data, verbs in conjunctive participle forms can have the following functions:

- Introducing a sub-event of caused or spontaneous Motion events: When verbs in conjunctive participle forms express Source, and the main verb of the clause encodes Goal or vice-versa, they introduce the sub-event of caused or spontaneous Motion events.
- Introduce a sub-event: CP forms introduce the sub-event of spontaneous Motion events in given motion descriptions when verbs in CP form express caused Motion events and the main verb of the clause conveys spontaneous Motion events or vice-versa. This situation arises when there are minimum two CP forms in the dependent clause.
- Compensation: when Path is lexicalized in the main verb in a clause, verbs in CP forms express Manner additionally, and compensate for the absence of

Manner in the main verbs of the clause. Note that verbs that occur in CP forms are the typical Manner verbs, or, to some extent, verbs expressing posture.

- **Elaboration:** When the verb in the main clause lexicalizes Manner and verbs in CP forms also express Manner, they modify the main verb. By doing so, they elaborate the main verb of a clause. In the same way, verbs in CP forms can lexicalize the Path and hence can also elaborate the Path expressed in the main verb of the clause.
- **Provide further information:** When verbs in CP forms convey other meaning than Path/Manner, they provide further information about the Figure's Motion in spontaneous Motion events, and Agent's manipulation in caused Motion events.
- **Purposive function:** Verbs in CP forms can also convey purposive function whether they are Path/Manner or other than Path/Manner verbs.
- **Syntactically,** verbs in CP form mostly express sequential events but when verbs in conjunctive participle forms are the first tier Manner verbs such as *hi~Dnu* 'to walk' or *dauDanu* 'to run', and verbs in the main clause express, Deixis and Path (e.g., *jaanu* 'to go', *aaunu* 'to come'), they mostly express simultaneous events. This is one of the functions that is not well-discussed in the literature.

Taking into account these factors, a detailed investigation on conjunctive participle forms is still required to unveil their syntactic and semantic functions.

c. Lexicalization patterns and saliency of Manner

One of the main objectives of the present Thesis was to investigate the expression of Path. The data confirmed that Path is highly pervasive in Nepali. It is expressed in an elaborated way by morphological, lexical, and syntactic means. Whether it is in the capacity of use of morphosyntactic loci for the expression of Path or in terms of the lexicalization patterns, the saliency of Path is well-attested in the data. Path is lexicalized in the main verb and Manner is expressed in adverbial subordinate clauses. The study also addresses the lexicalization of Manner, however, in order to investigate its saliency in Nepali, it requires further research by taking into

account all the diverse dimensions of Manner such as motor pattern, velocity, attitude, hurry, among many others. The same detail of analysis is also required to uncover the semantic details of the verbs in the conjunctive participle forms, adverbials, and ideophones that modify the Manner verbs in the main clause and elaborate the Motion of the Figure.

References

- Abadie, P. (1974). Nepali as an ergative language. *Linguistics of the Tibeto-Burman Area*, 1(1), 156-177.
- Abbi, A. & Gopalkrishnan, D. (1991). Semantics of explicator compound verbs in South Asian languages. *Language Sciences*, 13(2), 161-180. Great Britain: Pergamon Press. doi: [10.1016/0388-0001\(91\)90012-P](https://doi.org/10.1016/0388-0001(91)90012-P).
- Acharya, J. R. (1991). *A descriptive grammar of Nepali and an analyzed corpus*. Washington D.C.: Georgetown University Press.
- Acharya, J. R. (2071 VS (2014 AD)). *Bhashavigyanko saiddhantik vimarsha (Theoretical discussion of linguistics)*. Kathmandu: Makalu Prakashan Griha.
- Adhikari, H. R. (2071 VS (2014 AD)). *Samasamyik Nepali vyakarana (A contemporary Nepali grammar)* (5th ed.). Kathmandu: Vidyarthi Pustak Bhandar.
- Aikhenvald, A. Y. (2004). *Evidentiality*. Oxford: Oxford University Press.
- Alonso-Alonso R. (2016). Cross-linguistic influence in the interpretation of boundary crossing events in L2 acquisition. *Review of Cognitive Linguistics*, 14(1), 161-182. doi: [10.1075/rcl.14.1.07alo](https://doi.org/10.1075/rcl.14.1.07alo).
- Alonso-Alonso, R. (2018). Cross-linguistic influence in the interpretation of boundary crossing events in L2 acquisition. In A. M. Piqer-Piriz and R. Alejo-Gonzalez (Eds.), *Applying cognitive linguistics: Figurative language in use, constructions and typology* (pp. 157-178). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Ameka, F. K. (1995). The linguistic construction of space in Ewe. *Cognitive Linguistics*, 6(2/3), 139-181. Walter de Gruyter. (0936-5907/95/0006-0139).

- Antonopoulou, E. & Nikiforidou, K. (2002). Deictic motion and their adoption of perspective in Greek. *Pragmatics*, 12(3), 273-295. International Pragmatic Association.
- Aske, J. (1989). Path predicates in English and Spanish: A closer look. In K. Hall, M. Meacham & R. Shapiro (Eds.), *Proceedings of the 15th Annual Meeting of the Berkeley Linguistics Society* (pp. 1-14).
- Aurnague, M. (2011). How motion verbs are spatial: The spatial foundations of intransitive motion verbs in French. *Lingvisticae Investigationes*, 34(1), 1-34. John Benjamins Publishing Company. <hal-00937871>.
- Ayton, J. A. (1820). *A grammar of the Nepalese language*. Calcutta: Philip Pereira/Hindustanee Press.
- Baker, C. F., Filmore, C. J., & Lowe, J. B. (1998). The Berkeley FrameNet Project. *Proceedings of the 17th International Conference on Computational Linguistics (Coling-ACL '98)* (pp. 86–90).
- Bandhu, C. M. (2052 VS (1995 AD)). *Nepali bhashako utpatti (The origin of the Nepali language)* (5th ed.). Kathmandu: Sajha Prakashan.
- Bandhu, C. M. 2070 VS (2013 AD)). *Bhasha vigyanka sampradaya (Schools of linguistics)* (4th ed.). Kathmandu: Ekta Books Distributors.
- Basnyat, S. (1987). A componential analysis of Nepali verbs of movement. *Bulletin of the Deccan College Post-Graduate and Research Institute*, 46, 9-16. Pune: Vice Chancellor, Deccan College Post-Graduate and Research Institute (Deemed University). Retrieved from <https://www.jstor.org/stable/42930172>, accessed: 26th April 2019.
- Basnyat, S. (1999). A comparative componential analysis of some Nepali and English verbs. In Y. P. Yadava & W. W. Glover (Eds.), *Topics in Nepalese linguistics* (pp. 583-596). Kathmandu: Royal Nepal Academy.
- Beavers, J. (2008). On the nature of goal marking and delimitation: Evidence from Japanese. *Journal of Linguistics*, 44(2), 283-316. Cambridge: Cambridge University Press. doi:10.1017/S0022226708005136.

- Beavers, J., Levin, B., & Tham, S. W. (2010). The typology of motion expressions revisited. *Journal of Linguistics*, 46(2), 331-377. Cambridge: Cambridge University Press. doi:10.1017/S0022226709990272. First published online 30 November 2009.
- Berman, R. A., & Slobin, D. I. (1987). Five ways of learning how to talk about events: A crosslinguistic study of children's narratives. *Cognitive Science Report*, 46. University of California, Berkeley.
- Berman, R. A., & Slobin, D. I. (1994). *Relating events in narrative: A crosslinguistic developmental study*. New Jersey/Hove: Lawrence Erlbaum Associates, Publishers.
- Bernabeu, P., & Tillman, R. (2019). More refined typology and design in linguistic relativity: The case of motion event encoding. *Dutch Journal of Applied Linguistics*. doi: 10.1075/dujal.15019.ber.
- Berthele, R. (2013). Disentangling manner and path: Evidence from varieties of German and Romance. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and change in the encoding of motion events* (pp. 55-76). Amsterdam/Philadelphia: Benjamins.
- Bhat, R. N. (2002). Compound Verbs in Hindi. *Indian Linguistics*, Vol. 63.
- Bickel, B. (1998). Converbs in cross-linguistic perspective [Review article of Haspelmath and König], (Eds.), *Converbs in cross-linguistic perspective: Structure and meaning of adverbial verb forms, adverbial participles, gerunds* [1995], 381-397. Berlin: Mouton de Gruyter. doi: 10.5167/uzh-76655.
- Bisang, W. (2009). On the evolution of complexity: Sometimes less is more in East and mainland Southeast Asia. In: G. Sampson, D. Gil, & P. Trudgill (Eds.), *Language complexity as an evolving variable* (pp. 34-49). Oxford: Oxford University Press.
- Bisang, W. (2014a). Overt and hidden complexity: Two types of complexity and their implications. *Poznan Studies in Contemporary Linguistics* 50(2), 127-143.
- Bohnemeyer, J., Bowerman, M. & Brown, P. (2001). Cut and break clips. In Stephen C. Levinson & N.J. Enfield (Eds.), *Manual for the field season 2001*, 90-96. Nijmegen: Max Planck Institute for Psycholinguistics.

- Bohnenmeyer, J., Enfield, N. J., Essegbey, J., Ibarretxe-Antuñano, I., Kita, S., Lüpke, F., & Ameka, F. K. (2007). Principles of event segmentation in language: The case of motion events. *Language*, 83(3), 495-532. Linguistic Society of America.
- Bosson, G. (1991). Differential object marking in Romance and beyond. In D. Kibbee & D. Wanner (Eds.) *New analyses in Romance linguistics* (pp. 143-170). Amsterdam/Philadelphia: Benjamins.
- Bourdin, P. (1997). Goal bias across languages: Modal, configurational and orientation Parameters, in, B. Palek (Ed.), *Proceedings of LP'96* (pp. 185-218).
- Bowerman, M. & Pederson, E. (1992). Topological relations picture series. In S. C. Levinson (Ed.), *Space stimuli kit*, 1.2. Nijmegen: Max Planck Institute for Psycholinguistics.
- Bowerman, M., De Leon, & Choi, S. (1995). Verbs, particles, and spatial semantics: Learning to talk about spatial actions in typologically different languages. In E. V. Clark (Ed.), *The Proceedings of the 27th Annual Child Language Research Forum* (pp. 101-110). Stanford: Center for the Study of Language and Information.
- Bowerman, M. & Choi, S. (2003). Space under construction: Language-specific spatial categorization in first language acquisition. In D. Gentner & S. Goldin-Meadow (Eds.), *Language in mind: Advances in the study of language and thought* (pp. 387-427). Cambridge, MA: MIT Press.
- Bowerman, M., Gullberg, M., Majid, A. & Narasimhan B. (2004). *Put project: The cross-linguistic encoding of placement events*. In A. Majid (Ed.), *Field Manual*, 9, 10-24. Nijmegen: Max Planck Institute for Psycholinguistics.
- Bowerman, M. (2010) (online publication 2012)). Linguistic typology and first language acquisition. In J. J. Song (Ed.), *The Oxford handbook of linguistic typology*. Oxford: Oxford University Press. doi: 10.1093/oxfordhb/9780199281251.013.0028.
- Brdar, M., Omazic, M., & Takac, V. P. (2009). Iconicity in the verbal expression: The case of “Light” verbs in English. In M. Brdar, M. Omazic & V. P. Takac

- (Eds), *Cognitive approaches to English: Fundamental, methodological interdisciplinary and applied aspects*. UK: Cambridge Scholars Publishing.
- Bresnan, J., & Kaplan, R. M. (1982). Lexical-Functional grammar: A formal theory for grammatical representation. In J. Bresnan (Ed.), *The mental representation of grammatical relations* (pp. 173–281). Cambridge, MA: The MIT Press.
- Brown, P. (2004). Position and Motion in Tzeltal frog stories: The acquisition of narrative Style. In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Typological and contextual perspectives* (pp. 37-58). Mahwah, New Jersey, London: Lawrence Erlbaum Associates.
- Brown, P. (2012). To ‘put’ or to ‘take’? Verb semantics in Tzeltal placement and removal expressions. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 55-78). Amsterdam/Philadelphia: John Benjamins.
- Bruil, M. (2014). *Clause-typing and evidentiality in Ecuadorian Siona* (Doctoral dissertation, Universiteit Leiden, The Netherlands).
- Burton-Page, J. (1957). Compound and conjunct verbs in Hindi. *Bulletin of the School of Oriental and African Studies*, 19(3), 469-478. University of London.
- Butt, M. (2003). The light verb jungle. *Harvard working papers in linguistics*, 9, 1-49. Cambridge, MA: Harvard University.
- Butt, M. (2006). *Theories of case*. Cambridge: Cambridge University Press.
- Butt, M., & Poudel, T. (2007). *Distribution of the ergative in Nepali*. A talk given at a colloquium held in Leipzig, Germany.
- Butt, M., Ahmed, T. & Poudel, T. (2008). *Development of case in South Asian languages*. DGfS workshop (*sprachwandelvergleich*), Bamberg, Germany.
- Butt, M. (2010). The light verb jungle: Still hacking away. In M. Amberber, B. Baker, & M. Harvey (Eds.), *Complex predicates: Cross-linguistic perspectives on event structure* (pp. 48-78). Cambridge: Cambridge University Press.
- Butt, M., & Ahmed, T. (2010). The redevelopment of Indo-Aryan case systems from a lexical semantic perspective. *Morphology*, 21, 545-572.

- Cappelle, B., & Declerck, R. (2005). Spatial and temporal boundedness in English motion events. *Journal of Pragmatics*, 37(6), 889-917. <10.1016/j.pragma.2004.10.012>. <hal- 00660399>.
- Cappelle, B. (2012). English is less rich in manner-of-motion verbs when translated from French. *Across Languages and Cultures*, 13(2), 173-195. doi: 10.1556/Acr.13.2012.2.
- Chafe, W. L. (1980). *The pear stories: Cognitive, cultural, and linguistic aspects of narrative production*. Norwood, NJ: ABLEX Publishing Corporation.
- Chen, L. & Guo, J. (2009). Motion events in Chinese novels: Evidence for an equipollently-framed language. *Journal of Pragmatics*, 41, 1749–1766. www.elsevier.com/locate/pragma.
- Chen, J. (2012). She from bookshelf take-descend-come the box: Encoding and categorizing placement events in Mandarin. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 37-54). Amsterdam/Philadelphia: John Benjamins.
- Choi, S. & Bowerman, M. (1991). Learning to express motion events in English and Korean: The influence of language-specific lexicalization patterns. *Cognition*, 41, 83-121.
- Choudhary, P. K. (2014). Agreement in Ho. In P. Sidwell & B. Migliazza (Eds.), *Mon-Khmer studies in language: The Journal of Austroasiatic Languages and Cultures*, 43(2), 8-16. Thailand: Mahidol University and SIL International.
- Clark, E. V. (2003). Languages and representations. In D. Gentner & S. Goldin-Meadow (Eds.), *Language in mind: Advances in the study of language and thought* (pp. 17-24). Cambridge, MA: MIT Press.
- Comrie, B. (1989). *Language universals and linguistic typology: Syntax and morphology* (2nd ed.). Chicago: The University of Chicago Press.
- Comrie, B. (2005). Writing systems. In M. Haspelmath, M. S. Dryer, D. Gil & B. Comrie (Eds.), *World atlas of language structure* (pp. 568-571). Oxford: Oxford University Press.

- Creissels, D. (2006). Encoding the distinction between location, source and destination. In M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp.19-28). Amsterdam & Philadelphia: John Benjamins.
- Creissels, D. (2019). *Dynamic deixis and associated motion in Jóola Fóoñi (Atlantic)*. Atelier de typology semantique (Workshop on semantic typology), DDL, Lyon.
- Croft, W. A., Barðdal, J., Hollmann W. B., Sotirova, V., & Taoka, C. (2010). Revising Talmy's typological classification of complex events. In H. C. Boas (Ed.), *Contrastive construction grammar* (pp. 201-35). Amsterdam: John Benjamins.
- Dahal, B. M. (1974). *A description of Nepali: Literary and colloquial* (Doctoral dissertation, University of Poone, India).
- Dalrymple, M. (2001). *Lexical functional grammar*. New York: Academic Press.
- Dasgupta, P. (1977a). The internal grammar of compound verbs in Bangla. *Indian linguistics*, 38, 68-85.
- Davison, A. (1980). Hindi *-kar*: The problem of multiple syntactic interpretation. In B. Krishnamurti, C. P. Masica & A. K. Sinha (Eds.), *South Asian languages: Structure, convergence and diglossia*. Delhi: Motilal Banarasidass.
- DeLancey, S. (1981). An interpretation of split ergativity and related patterns. *Language*, 57(3), 626-657.
- DeLancey, S. (1985). The analysis-synthesis-lexis cycle in Tibeto-Burman: A case study in motivated change. In J. Haiman (Ed.), *Iconicity in syntax: Proceedings of a Symposium on Iconicity in Syntax* (pp. 367-390). Amsterdam/ Philadelphia: John Benjamins Publishing Company.
- DeLancey, S. (1989). Klamath stem structure in genetic and areal perspective. *Papers from the 1988 Hokan-Penutian Languages Workshop* (pp. 31–39). Eugene, OR: University of Oregon Press.
- DeLancey, S. (1991). The origins of verb serialization in Modern Tibetan. *Studies in Language* 15(1), 1-23.
- DeLancey, S. (1996). The bipartite stem belt: Disentangling areal and genetic correspondences. *Proceedings of the 22nd Annual Meeting of the Berkeley*

- Linguistics Society: Special Session on Historical Issues in Native American Languages* (pp. 37-54). Berkeley: Berkeley Linguistic Society.
- DeLancey, S. (2001). The mirative and evidentiality. *Journal of Pragmatics*, 33, 369-382.
- DeLancey, S. (2001). Lectures on Functional Syntax. University of Oregon (manuscript).
- DeLancey, S. (2003). Location and direction in Klamath. In E. Shay & U. Seibert (Eds.), *Motion, direction and location in languages: In honor of Zygmunt Frajzyngier* (pp. 59-90). Amsterdam/Philadelphia: John Benjamins.
- DeLancey, S. (2018). Deictic and sociopragmatic effects in Tibeto-Burman SAP indexation. In S. Cristofaro & F. Zúñiga (Eds.), *Typological hierarchies in synchrony and diachrony* (pp. 343-376). Amsterdam: John Benjamins Publishing Company.
- De Pasquale, N. (2017). *Motion event encoding in ancient Greek: A typological corpus-based study of Path and Manner expression* (Doctoral dissertation: University of Salerno, Italy).
- Diehl, L. (1975). Space case: Some principles and their implications concerning linear order in natural language. *Work Papers of the Summer Institute of Linguistics, University of North Dakota Session*, 19(1), 93-150. SIL-UND. doi: 10.31356/silwp.vol19.01.
- Dirven, R., & Verspoor, M. (Eds.). (2004). *Cognitive exploration of language and linguistics* (2nd ed.). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Dixon, R. M. W. (1977). Where have all the adjectives gone? *Studies in Language* 1(1), 19-80.
- Dixon, R. M. W. (1979). Ergativity. *Language*, 55(1), 59-138.
- Dixon, R. M. W. (1994). *Ergativity*. Cambridge: Cambridge University Press.
- Dixon, R. M. W. (2004). Adjective classes in typological perspective. In R. M. W. Dixon & A. Y. Aikhenvald (Eds.), *Adjective classes: A cross linguistic typology* (pp. 1-50). Oxford: Oxford University Press.

- Dryer, M. S. (2005). Order of subject, object and verb. In M. Haspelmath, M. S. Dryer, D. Gil, & B. Comrie (Eds.), *The world atlas of language structures* (pp. 330-331). Oxford: Oxford University Press.
- Dryer, M. S. (2007). Word order. In T. Shopen (Ed.), *Language typology and syntactic description, I* (2nd ed., pp. 61-131). Cambridge: Cambridge University Press.
- Du Bois, J. W. (1987b). The discourse basis of ergativity. *Language*, 63, 805–55.
doi:10.2307/415719.
- Dufresne, M., Dupuis, F., & Tremblay, M. (2000). The role of features in historical change. In S. N. Dworkin & D. Wanner (Eds.), *New approaches to old problems: Issues in Romance historical linguistics* (pp.129-149). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Epele, J. W., Lewis, M. P., Regmi, D. R., & Yadava, Y. P. (2012). *Ethnologue: Languages of Nepal*. Kathmandu: SIL International.
- Fagard, B., & Kopecka, A. (2020). Source/Goal (a)symmetry: A comparative study of German and Polish. *Studies in language*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Farr, C. J. M. (1976). *I don't know whether I am coming or going: A study of some usages of 'come' and 'go' in Korafe*. Summer Institute of Linguistics.
- Filipović, L. (2007). *Talking about motion: A crosslinguistic investigation of lexicalization patterns*. Amsterdam: John Benjamins
- Fillmore, C. J. (1966). Deictic categories in the semantics of 'come'. *Foundations of Language*, 2, 219-227.
- Fillmore, C. J. The case for case. Universals in linguistic theory. Retrieved from (<http://linguistics.berkeley.edu/~syntax-circle/syntax-group/spr08/fillmore.pdf>, accessed on 10th November 2017 [originally published in 1968]).
- Fillmore, C. J. (1971). *Santa Cruz lectures on deixis*. Berkeley: University of California.
- Fortis, J. M. (2010). *Space in language*. Leipzig Summer School 2010, part III.

- Fortis, J. M. & Vittrant, A. (2016). On the morpho-syntax of path-expressing constructions: Toward a typology. *Language typology and universals - STUF (Sprachtypologie und Universalienforschung)*, 69 (3), 341-374.
- Gaby, A. (2012). The Thaayorre lexicon of putting and taking. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 233-252). Amsterdam/Philadelphia: John Benjamins.
- Gautam, D. P. (2049 VS) (1992 AD)). *Nepali bhasha parichaya (An introduction to the Nepali language)*. Lalitpur: Sajha Prakashan.
- Genetti, C. (Ed.). (1994). *Aspects of Nepali Grammar. Santa Barbara Papers in Linguistics*, 6. Santa Barbara: University of California.
- Georgakopoulos, T. &, Karatsareas, P. (2017). A diachronic take on the Source-Goal asymmetry: Evidence from inner Asia Minor Greek. In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)* (pp. 179-206). Amsterdam/Philadelphia: John Benjamins.
- Givon, T. (2001). *Syntax: An introduction, I*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Givon, T. (2001). *Syntax: An introduction, II*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Goddard, C. (1997). The semantics of coming and going. *Pragmatics*, 7(2), 147-162.
doi: [10.1075/prag.7.2.02god](https://doi.org/10.1075/prag.7.2.02god).
- Goldberg, A. E. (1995). *Constructions: A construction grammar approach to argument structure*. Chicago/London: The University of Chicago Press.
- Goodenough, W. H. (1956). Componential analysis and the study of meaning. *Language*, 32(1), 195-216. Linguistic Society of America. Retrieved from <https://www.jstor.org/stable/410665>, accessed on 26th April 2019.
- Goschler, J. & Stefanowitsch, A. (2013). Beyond typology: The encoding of motion events across time and varieties. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and change in the encoding of motion events* (pp. 1-14). Amsterdam/Philadelphia: Benjamins.

- Government of Nepal, National Planning Commission (Central Bureau of Statistics) (CBS) (2012)). *National population and housing census 2011: National report, 01*. Kathmandu: Government of Nepal.
- Government of Nepal (2015) (2072VS)). *The constitution of Nepal*. Kathmandu: Government of Nepal (Ministry of Law, Justice, Constituent Assembly and Parliamentary Affairs).
- Greenberg, J. H. (1966). Some universals of grammar with particular reference to the order of meaningful elements. In J. H. Greenberg (Ed.), *Universals of language* (2nd ed., pp. 73-113). Cambridge, Massachusetts and London: The MIT Press.
- Grice, P. (1975). Logic and conversation. In P. Cole, and J. Morgan (Eds.). *Syntax and semantics* (pp. 41–58). New York: Academic Press.
- Grice, P. (1989). *Studies in the ways of words*. Cambridge/Massachusetts: Harvard University Press.
- Grierson, G. A. (1916). *Linguistic survey of India, IX*, part IV (1st ed.). Delhi: Motilal Banarasidas.
- Grinevald, C. (2006). The expression of static location in a typological perspective. In M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp. 29-58). Amsterdam & Philadelphia: John Benjamins.
- Grinevald, C. (2011). On constructing a working typology of the expression of Path. *Faits de Langues*, 3, 43-70.
- Gruber, J. S. (1965). *Studies in lexical relations* (Doctoral dissertation, MIT Circulated by the Indiana University Linguistics Club (1970), and included in Gruber 1976)).
- Gullberg, M. (2011). Language-specific encoding of placement events in gestures. In J. Bohemeyer & E. Pederson (Eds.), *Event representation in language and cognition* (pp. 166-188). Cambridge: Cambridge University Press.
- Hardie, A. (2008). A collocation-based approach to Nepali postpositions. *Corpus Linguistics and Linguistic Theory* 4(1), 19-62. Retrieved from <http://sci-hub.tw/10.1515/CLLT.2008.002>, Accessed on 21st December 2017.

- Hardie, A., & Mudraya, O. (2009). Collocational patterning in cross-linguistic perspective: Adpositions in English, Nepali, and Russian. *Arena Romanistica*, 4, 138-149.
- Hardie, A. Lohani, R. R., & Yadava, Y. P. (2011). Extending corpus annotation of Nepali: Advances in tokenisation and lemmatization. *Himalayan Linguistics*, 10(1) [Special Issue in Memory of Michael Noonan and David Watters], 151–165.
- Hardie, A. (2012). CQPweb-combining power, flexibility and usability in a corpus analysis tool. *International Journal of Corpus Linguistics*, 17(3), 380–409. John Benjamins Publishing Company. doi 10.1075/ijcl.17.3.04har.
- Haspelmath, M. (2007). Coordination. In T. Shopen (Ed.), *Language typology and syntactic description, II* (2nd ed., pp. 1-51). Cambridge: Cambridge University Press.
- Hautli-Janisz, A. (2014). *Urdu/Hindi motion verbs and their implementation in a lexical resource* (Doctoral dissertation, Konstanz University, Germany). *Konstanzer Online-Publikations-System* (KOPS). Retrieved from <http://nbn-resolving.de/urn:nbn:de:bsz:352-288203>.
- Hayward, W. G. & Tarr, M. J. (1995). Spatial language and spatial representation. *Cognition*, 55, 39-84.
- Hijazo-Gascon, A., & Ibarretxe-Antuñano, I. (2013). Same family, different paths. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and change in the coding of motion events* (pp. 39-54). Amsterdam: John Benjamins.
- Hook, P. E. (1973). *The compound verb in Hindi*. The University of Michigan.
- Hook, P. E. (1991). The compound verb in Munda: An areal and typological overview. *Language Sciences*, 13(2), 181-195. Pergamon Press.
- Hoop, H. de & Narasimhan, B. (2009). Ergative case marking in Hindi. In H. de Hoop & P. de Swart (Eds.), *Differential subject marking* (pp. 63-78). The Netherlands: Springer. Retrieved from <http://www.bhashasanchar.org:80/aboutnnc.php>, accessed on 24th November 2018.
- http://www.bhashasanchar.org:80/ncorpus_written.php, accessed on 24th November 2018.

- Huber, J. (2017). The early life of borrowed path verbs in English. In I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 177-204). Amsterdam/ Philadelphia: John Benjamins Publishing Company.
- Iacobini, C. (2016). *Competition and typological change in Motion expression between system and usage*, Paper presented at the Université Lumière Lyon 2/Laboratoire Dynamique Du Langage (DDL), Lyon.
- Iacobini, C., Corona, L., De Pasquale, N., & Buoniconto, A. (2017). How should a “Classical” Satellite-Framed Language behave?: Path encoding asymmetries in Ancient Greek and Latin. In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony, (Studies in language companion series, 188)* (pp. 95-118). Amsterdam/Philadelphia: John Benjamins.
- Ibarretxe-Antuñano, I. (2009). Path salience in motion events. In J. Guo, E. Lieven, N. Budwig, S. Ervin-Tripp, K. Nakamura, & Ş. Özcalışkan, (Eds.), *Crosslinguistic approaches to the psychology of language: research in the tradition of Dan Isaac Slobin* (pp. 403-414). New York: Psychology Press.
- Ibarretxe-Antuñano, I. (2012). Placement and removal events in Basque and Spanish. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 123-144). Amsterdam/Philadelphia: John Benjamins.
- Ibarretxe-Antuñano, I., Hijazo-Gascon, A., & Maria-Teresa, M. O. (2017). The importance of minority languages in motion event typology: The case of Aragonese and Catalan. In I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 123-150). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Ibarretxe-Antuñano, I. (2017). Motion and semantic typology: A hot old topic with exciting caveats. In I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 13-38). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Ibarretxe-Antuñano, I., Cadierno, T., & Hijazo-Gascon, A. (2018). The role of force dynamics and intentionality in the reconstruction of L2 verb meanings: A

- Danish-Spanish bidirectionality study. In A. M. Piquer-Píriz & R. Alejo-González (Eds.), *Applying cognitive linguistics: Figurative language in use, constructions and typology* (pp. 133-156). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Ichihashi-Nakayama, K. (1994). On dative subject constructions in Nepali. In C. Genetti (Ed.), *Aspects of Nepali Grammar. Santa Barbara Papers in Linguistics*, 6. Santa Barbara: University of California.
- Ikegami, Y. (1969). *The semological structure of the English verbs of Motion. Linguistic automation project*. New Haven CT: Yale University.
- Ikegami, Y. (1987). 'Source' and 'Goal': A case of linguistic dissymmetry. In R. Dirven & G. Radden (Eds.), *Concept of case* (pp. 122-146). Tübingen: Gunter Narr.
- Imbert, C., Grinevald, C. & Sörös, A. (2011). Pour une catégorie de « satellite » de Trajectoire dans une approche fonctionnelle-typologique. *Faits de Langues*, 38(2), 99-116. ISBN 978-2-7080-1345-2.
- Ishibashi, M., Kopecka, A., & Vuillermet, M. (2006). *Trajectoire : Matériel visuel pour élicitation des données linguistiques*. Laboratoire Dynamique du Langage, CNRS / Université Lyon 2. Projet de Fédération de recherche en Typologie et Universaux Linguistiques.
- Ishibashi, M. (2012). The expression of 'putting' and 'taking' events in Japanese: The asymmetry of Source and Goal revisited. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 253-272). Amsterdam/Philadelphia: John Benjamins.
- Ishibashi, M. (2015). A field method to describe spontaneous motion events in Japanese. In Jurgensen, A. E., Sande, H., Lamoureux, S., Baclawski, K., & Zerbe, A. (Eds.), *Proceedings of the 41st Annual Meeting of the Berkeley Linguistic Society* (196-218). Berkeley: Berkeley Linguistics Society.
- Jackendoff, R. (1983). *Semantics and cognition*. Cambridge, Massachusetts/Lodon, England: The MIT Press.
- Jackendoff, R. (1990). *Semantic structures*. Cambridge, Massachusetts/Lodon, England: The MIT Press.

- Jespersen, O. (1965). *A modern English grammar on historical principles, part VI, Morphology*. London: George Allen and Unwin Ltd.
- Ji Y., Hendriks, H., & Hickmann, M. (2011). How children express caused motion events in Chinese and English: Universal and language-specific influences. *Lingua*, 121(12), 1796-1819.
- Kabata, K. (2013). Goal–Source asymmetry and crosslinguistic grammaticalization patterns: A cognitive-typological approach. *Language Sciences*, 36, 78-89.
doi: 10.1016/j.langsci.2012.03.021.
- Kachru, Y. & Pandharipande, R. (1980). Toward a typology of compound verbs in South Asian Languages. In C. W. Kisseberth, B. B. Kachru & J. L. Morgana (Eds.), *Studies in the Linguistic Sciences*, 10(1). Urbana: University of Illinois.
- Kachru, Y. (1987/1990). Hindi-Urdu. In B. Comrie (Ed.), *The major languages of South Asia, the Middle East and Africa* (pp. 37-53). London: Routledge.
- Kachru, Y. (2006). *Hindi*. Amsterdam/Philadelphia: John Benjamins B.V.
- Karkkainen, E. (1994). On the i(n) construction in Nepali. In C. Genetti (Ed.), *Aspects of Nepali Grammar. Santa Barbara Papers in Linguistics*, 6. Santa Barbara: University of California.
- Khan, T. A. (2009). *Spatial expressions and case in South Asian languages* (Doctoral dissertation, Konstanz University, Germany).
- Khatiwada, R. (2014). *Question de phonologie et phonétique en Nepalais: La retroflexion et la double corrélation de voisement et d'aspiration* (Doctoral dissertation, Université Sorbonne Nouvelle-Paris 3, France).
- Kibre, N. (1994). Noun + *garnu* expressions in Nepali. In C. Genetti (Ed.) *Aspects of Nepali grammar. Santa Barbara Papers in Linguistics*, 6. Santa Barbara: University of California.
- Kita, S. (1997). Two-dimensional semantic analysis of Japanese mimetics. *Linguistics* 35, 379-415.
- Kleiman, M. H. (1987/1990). Bengali. In B. Comrie (Ed.), *The major languages of South Asia, the Middle East and Africa* (pp. 54-72). London: Routledge.

- Kopecka, A. (2003). The semantic structure of verbs of motion in French: Typological perspectives. *Proceedings of Conférence Internationale (International Conference) on Space in Languages: Linguistic Systems and Cognitive Categories*. Paris.
- Kopecka, A. (2004). *Etude typologique de l'expression de l'espace : Localisation et déplacement en français et en polonais* (Doctoral dissertation, Université Lumière Lyon 2, Lyon).
- Kopecka, A. (2006). The semantic structure of motion verbs in French: Typological perspectives, in M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp. 83-101). Amsterdam & Philadelphia: John Benjamins.
- Kopecka, A. (2006). From a satellite- to a verb-framed pattern: A typological shift in French (Unpublished paper). Max Planck Institute for Psycholinguistics.
- Kopecka, A. (2009). Continuity and change in the representation of Motion events in French. In J. Guo, E. Lieven, N. Budwig, S. Ervin-Tripp, K. Nakamura, & Ş. Özcalışkan, (Eds.), *Crosslinguistic approaches to the psychology of language: Research in the tradition of Dan Isaac Slobin* (pp. 415-426). New York: Psychology Press.
- Kopecka, A. (2010). Motion events in Polish: Lexicalization patterns and the description of Manner. In V. Hasko & R. Perelmutter (Eds.) *New approaches to Slavic verbs of motion* (pp. 225-246). Amsterdam/Philadelphia: John Benjamins.
- Kopecka, A., & Ishibashi, M. (2011). L'(a)symétrie dans l'expression de la Source et du But: perspective translinguistique, *Faits de Langues*, 3, 131-149.
- Kopecka, A. (2012). *L'expression de la trajectoire du mouvement : Perspectives inter-langues*. Université Paris 8, 15 Octobre 2012.
- Kopecka, A. (2012). Semantic granularity of placement and removal events in Polish. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 327-348). Amsterdam/Philadelphia: John Benjamins.

- Kopecka, A. (2013). Describing Motion events in Old and Modern French: Discourse effect of a typological change. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and change in the encoding of motion events* (pp. 163-184). Amsterdam: John Benjamins.
- Kopecka, A. (2017). Source-oriented and Goal-oriented events in Old and Modern French. In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)* (pp. 305-328). Amsterdam/Philadelphia: John Benjamins.
- Kopecka, A., & Vuillermet, M. (2021). Source-Goal (a)symmetries across languages. In A. Kopecka & M. Vuillermet (Eds.), *Source-Goal (a)symmetries across languages (Special issues of studies in language, 45:1)* (pp. 2-35.). Amsterdam/Philadelphia: John Benjamins.
- Kracht, M. (2002). On the semantics of locatives. *Linguistics and Philosophy* 25, 157-232.
- Lakusta, L., & Landau, B. (2005). Starting at the end: the importance of goals in spatial language. *Cognition*, 96, 1-33.
- Lakusta, L. (2005). *Source and goal asymmetry in non-linguistic motion event representation* (Doctoral dissertation, Johns Hopkins University). Retrieved from https://www.researchgate.net/profile/Laura_Lakusta3/publication/265579297_Source_and_goal_asymmetry_in_non-linguistic_motion_event_representations/links/5900aabcaca2725bd71f394e/Source-and-goal-asymmetry-in-non-linguistic-motion-event-representations.pdf, accessed on 15th May 2020.
- Lakusta, L., Wagner, L., O'Hearn, K., & Landau, B. (2007). Conceptual foundations of spatial language: Evidence for a goal bias in infants. *Language Learning and Development*, 3(3), 179-197.
- Lakusta, L., Reardon, R., Oakes, L., & Carey, S. (2007). *A goal bias in pre-linguistic thought and language: How strong is the homology?* Paper presented at the Conference on Language Development at the Boston University.

- Lakusta, L., & Landau, L. (2012). Language and memory for motion events: Origins of the asymmetry between goal and source paths. *Cognitive Science*, *36*(3), 517-544.
- Lakusta, L., Muentener, P., Petrillo, L., Mullanaphy, N., & Muniz, L. (2016). Does making something move matter? Representations of Goals and Sources in Motion events with causal Sources. *Cognitive Science*, *41*, 814-826. doi: [10.1111/cogs.12376](https://doi.org/10.1111/cogs.12376), accessed on 17th August 2019.
- Landau, B., & Jackendoff, R. (1993). “What” and “Where” in spatial language and spatial cognition. *Behavioral and Brain Sciences*, *16*, 217-265.
- Landau, B., & Lakusta, L. (2006). Spatial language and spatial representation: Autonomy and interaction. In M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp. 309-333). Amsterdam/Philadelphia: John Benjamins.
- Langacker, R. (1987). *Foundations of cognitive grammar, I: Theoretical prerequisites*. Stanford, CA: Stanford University Press.
- Lestrade, S., de Schepper, K., & Zwarts, J. (2011). The distribution of labor between adpositions and case within complex spatial PPs. *STUF-Language Typology and Universals Sprachtypologie Und Universalienforschung*, *64*(3), 256–274.
- Levin, B., & Rappaport Hovav, M. (1991). Wiping the slate clean: A lexical semantic exploration. *Cognition* *41*, 123–151.
- Levin, B. (1993). *English verb classes and alternations: A preliminary investigation*. Chicago, IL: University of Chicago Press.
- Levin B., Beavers, J., & Wei, T. S. (2009). Manner of motion roots across languages: Same or different? Handout of the *Workshop on Roots: Word formation from the perspective of core lexical elements*. Stuttgart: Universitat Stuttgart. Retrieved from <http://web.stanford.edu/~bclevin/stutt09mot.pdf> accessed on 28th May 2019.
- Levin, B. (2010). What is the best grain-size for defining verb classes? *Conference handout on Word classes: Nature, typology, computational representations*. Second TRIPLE International Conference, Università Roma Tre, Rome.

- Retrieved from <http://www.stanford.edu/~bclevin/pubs.html> accessed on 15 April 2018.
- Levin, B., & Rappaport Hovav, M. (2013). Lexicalized meaning and manner/result complementarity. In A. Boban, G. Berit & M. Rafael (Eds.), *Studies in the composition and decomposition of event predicates* (pp. 49-70). Dordrecht: Springer.
- Levin, B., & Rappaport Hovav, M. (2014). Manner and result: A view from clean. In R. Pensalfini, M. Turpin & D. Guillemin (Eds.), *Language description informed by theory* (pp. 337-357). Amsterdam/Philadelphia: John Benjamins.
- Levin, B., & Rappaport Hovav, M. (2019). Lexicalization patterns. In R. Truswell (Ed.), *The Oxford handbook of event structure* (pp.395-425). Oxford: Oxford University Press.
- Levinson, S. C., & Wilkins, D. (2006). The background to the study of the language of space. In S. C. Levinson & D. Wilkins (Eds.), *Grammars of space: Explorations in cognitive diversity* (pp. 1-23). Cambridge: Cambridge University Press.
- Levinson, S. C., & Wilkins, D. (2006). Patterns in the data: Towards a semantic typology of spatial description. In S. C. Levinson & D. Wilkins (Eds.), *Grammars of space: Explorations in cognitive diversity* (pp. 512-552). Cambridge: Cambridge University Press.
- Levinson, S. C. (2004/2006). Deixis. In L. R. Horn & G. Ward (Eds.), *The handbook of pragmatics* (pp. 97-121). Malden/Oxford/Victoria: Blackwell Publishing Company.
- Levinson, S. C., & Brown, P. (2012). Put and Take in Yélî Dnye, the Papuan language of Rossel Island. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 273-296). Amsterdam/Philadelphia: John Benjamins.
- Li, C. (2007). Split ergativity and split intransitivity in Nepali. *Lingua*, 117(8), 1462-82.

- Li, C. N., & Thompson, S. A. (1989). *Mandarin Chinese: A functional reference grammar*. Berkeley/Los Angeles/London: University of California Press.
- Luraghi, S. (2017). Differential Goal marking vs differential Source marking in Ancient Greek. In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)* (pp. 119-146). Amsterdam/Philadelphia: John Benjamins.
- Majid, A., & Bowerman, M. (Eds.). (2007). Cutting and breaking events: A crosslinguistic perspective [Special issue]. *Cognitive Linguistics*, 18(2). Retrieved from <http://hdl.handle.net/11858/00-001M-0000-0013-18BE-8>, accessed on 16th January, 2017.
- Majid, A., Boster, J. S., & Bowerman, M. (2008). The cross-linguistic categorization of everyday events: A study of cutting and breaking. *Cognition*, 109, 235–250.
- Malchukov, A., Haspelmath, M., & Comrie, B. (2010). Ditransitive construction: A typological overview. In A. Malchukov, M. Haspelmath & B. Comrie (Eds.) *Studies in ditransitive constructions: A comparative handbook* (pp. 1-73). Berlin/New York: Walter de Gruyter.
- Mani, I., & Pustejovsky, J. (2012). *Interpreting motion*. Oxford: Oxford University Press.
- Masica, C. P. (1976). *Defining a linguistic area: South Asia*. Chicago: University of Chicago Press.
- Masica, C. P. (1991). *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- Matsumoto, Y. (2003). Typologies of lexicalization patterns and event integration: Clarifications and reformulations. In S. Chiba *et al.* (Eds.), *Empirical and theoretical investigations into language: A Festschrift for Masaru Kajita* (pp. 403-418). Tokyo: Kaitakusha.
- Matsumoto, Y., Akita, K., & Takahashi, K. (2017). The functional nature of deictic verbs and the coding patterns of Deixis: An experimental study in English, Japanese and Thai. In I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 95-122). Amsterdam/Philadelphia: John Benjamins Publishing Company.

- Matsuso, I. (2018). *Distinct coding of deixis and path in Kathmandu Newar*. Manuscript.
- Matthews, D. (1992). *A course in Nepali* (2nd ed.). London: SOAS.
- Mayer, M. (2003) [1969]. *Frog where are you?* New York, United States: Penguin Putnam Inc.
- Miller, G. A., & Johnson-Laird, P. (1976). *Language and perception*. Cambridge, Massachusetts: The Belknap Press of Harvard University Press.
- Montero-Melis, G., Sonja, E., Narasimhan, B., Ibarretxe-Antuñano, I., Kita, S., Kopecka, A., & Bohnemeyer, J. (2017). Talmy's framing typology underpredicts nonverbal motion categorization: Insights from a large language sample and simulations. *Cognitive Semantics*, 3(1). doi:[10.1163/23526416-00301002](https://doi.org/10.1163/23526416-00301002).
- Narasimhan, B. (1998). *The encoding of complex concepts in Hindi and English* (Doctoral dissertation, Boston University).
- Narasimhan, B. (2003). Motion events and the lexicon: A case study of Hindi. *Lingua*, 113, 123-160.
- Narasimhan, B. (2012). Putting and taking in Tamil and Hindi. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 201-230). Amsterdam/Philadelphia: John Benjamins.
- Narasimhan, B., Kopecka, A., Bowerman, M., Gullberg M., & Majid, A. (2012). Putting and taking events: A cross linguistic perspective. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 1-18). Amsterdam/Philadelphia: John Benjamins.
- Nepal Academy (2067 VS (2010 AD)). *Nepali Brihat Shabdakosh (The Comprehensive Dictionary of Nepali*, (7th ed.). Kathmandu: Nepal Academy.
- Nikitina, T. (2009). Subcategorization pattern and lexical meaning of motion verbs: A study of the source/goal ambiguity. *Linguistics*, 47(5), 1113-1141. Walter de Gruyter. doi: 10.1515/LING.2009.039.
- Nikitina, T. (2013). Lexical splits in the encoding of motion events from archaic to classical Greek. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and*

- change in the encoding of motion events* (pp. 185-202). Amsterdam: John Benjamins.
- Nikitina, T. (2017). Ablative and allative marking of static locations: A historical perspective. In S. Luraghi, Tatiana Nikitina & Chiara Zanchi (Eds.). 2017. *Space in diachrony (Studies in language companion series, 188)* (pp. 67-94). Amsterdam/Philadelphia: John Benjamins.
- Niraula, Y. (2072 VS (2015 AD)). *Nepaalikaa bhaashikaaharuko adhyayan (A study of the dialects of Nepali)* (Doctoral dissertation, Tribhuvan University, Kathmandu: Tribhuvan University).
- Noonan, M. (2007). Complementation. In T. Shopen (Ed.) *Language typology and syntactic description, II* (2nd ed., pp. 52-150. Cambridge: Cambridge University Press.
- O'conner, L. (2012). Take it up, down and away: Encoding placement and removal in Lowland Chontal. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 297-336). Amsterdam/Philadelphia: John Benjamins.
- Oshima, D. Y. (2006). *Go and Come revisited: What serves as a reference point?*
<https://www.researchgate.net/publication/266330794>, accessed on 6th December, 2019. doi: 10.3765/bls.v32i1.3466.
- Ostler, N. D. M. (1979). *Case-linking: A theory of case and verb diathesis, applied to Classical Sanskrit* (Doctoral dissertation, Massachusetts Institute of Technology, Cambridge, MA: MIT).
- Papafragou, A. (2010). Source-goal asymmetries in motion representation: Implications for language production and comprehension. *Cognitive Science*, 34, 1064-1092.
- Parajuli, K. P. (2056 VS) (1999 AD)). *Neapali vyavaharik vyakaran (A practical grammar of Nepali)* (18th ed.). Kathmandu: Ratna Pustak Bhandar.
- Pauwels, P. (2000). *Put, set, lay and place: A cognitive linguistic approach to verbal meaning*. Munich: Lincom.

- Payne, T. E. (1997). *Describing morphosyntax: A guide for field linguists*. Cambridge: Cambridge University Press.
- Pederson, E. (2006). Spatial language in Tamil. In S. C. Levinson & D. Wilkins (Eds.), *Grammars of space: Explorations in cognitive diversity* (pp. 400-436). Cambridge: Cambridge University Press.
- Petersen, J. H. (2012). How to put and take in Kalasha. In A. Kopecka & B. Narasimhan (Eds.), *Events of putting and taking: A crosslinguistic perspective* (pp. 349-366). Amsterdam/Philadelphia: John Benjamins.
- Peterson, J. (1999). The Nepali subordinated verb. In Y. P. Yadava & W. W. Glover (Eds.), *Topics in Nepalese Linguistics* (pp. 337-370). Kathmandu: Royal Nepal Academy.
- Pokharel, M. P. S. (1989). *Experimental analysis of Nepali sound system* (Doctoral dissertation, University of Poona, India).
- Pokharel, M. P. (1989a). Order of meaningful constituents in Nepali. *Contribution to Nepalese Studies*, 16(2), 83-101. Kirtipur: CNAS.
- Pokharel, M. P. (1991). Compound verbs in Nepali. *Contribution to Nepalese Studies*, 18(2), 149-173. Kirtipur: CNAS, Tribhuvan University.
- Pokharel, M. P. (2054 VS) (1997 AD). *Nepali vakya vyakaran (A grammar of Nepali syntax)*. Kathmandu: Ekta Books.
- Pokharel, M. P. (1999). Compound verbs in Nepali. In Y. P. Yadava & W. W. Glover (Eds.), *Topics in Nepalese Linguistics* (pp. 185-208). Kathmandu: Royal Nepal Academy.
- Pokharel, M. P. (2000). Benefactive constructions in Nepali. *Kobe Papers in Linguistics*, 2, 149-179. Japan: Department of Linguistics, Kobe University.
- Pokhrel, B. K. (2055 VS) (1998 AD)). *Rastrabhasha (The language of the nation)* (10th ed.). Lalitpur: Sajha Prakashan Press.
- Post, M. W. (2019). Topographical deixis in Trans-Himalayan (Sino-Tibetan) languages. *Transactions of the Philological Society*, 117 (2), 234–255.
doi: 10.1111/1467-968X.12155.

- Poudel, T. R. (2008). Nepali ergativity: A historical perspective. *Workshop on case and alignment in Indo-European*. University of Bergen.
- Pourcel, S. (2004). What makes path of motion salient? *Annual Meeting of the Berkeley Linguistics*. Berkeley Linguistic Society.
- Pourcel, S. (2004b). Rethinking 'Thinking for Speaking'. *Proceedings of the Twenty-Ninth Annual Meeting of the Berkeley Linguistics Society*, 349-358.
- Pourcel, S., & Kopecka, A. (2005). Motion expression in French: Typological diversity. *Durham & Newcastle working papers in linguistics*, 11, 139-153.
- Pray, B. (1970). *Topics in Hindi-Urdu grammar*. Berkeley: Center for South and South East Asian Studies, University of California.
- Rappaport Hovav, M. (2019). The change in Hebrew from a V-framed to an S-framed language. In E. Doron, M. Rappaport Hovav, Y. Reshef & M. Taube (Eds.), *Language contact, continuity and change in the genesis of Modern Hebrew* (pp. 143-178). Amsterdam/Philadelphia: John Benjamins. doi: 10.1075/la.256.06rap.
- Regier, T. & Zheng, M. (2007). Attention to endpoints: A cross-linguistic constraint on spatial meaning. *Cognitive Science*, 31, 705-719.
- Regmi, D. R. (1966). *Medieval Nepal: A history of the three Kingdoms 1520 A.D. to 1768 A.D., Part II*. Calcutta: Firma K. L. Mukhopadhyay.
- Riccardi, T. (2003). Nepali. In G. Cardona & D. Jain (Eds.), *The Indo-Aryan languages* (pp. 538-580). London and New York: Routledge.
- Sapir, E. (1921). *Language*. New York: Harcourt, Brace, Jovanovich.
- Sapir, E. (1921). *Language: An introduction to the study of speech*. New York: Harcourt, Brace and Company.
- Sapir, E. (1949). Language. In D. G. Mandelbaum, (Ed.) *Selected writings of Edward Sapir in language, culture and personality*. Berkeley, Los Angeles, London: University of California Press.
- Schachter, P., & Shopen, T. (2007). Parts-of-speech systems. In T. Shopen (Ed.), *Language typology and syntactic description*, 1 (2nd ed., pp. 1-60). Cambridge: Cambridge University Press.

- Schmidt, R. L. (1994). *A practical dictionary of modern Nepali*. Kathmandu: Ratna Sagar.
- Schultze-Berndt, E. (2000). *Simple and complex verbs in Jaminjung: A study of event categorization in an Australian language*. Radboud University Nijmegen.
- Sharma, T. N. (1980). *The auxiliary in Nepali*. Wisconsin: University of Wisconsin.
- Sharma, M. (2071 VS) (2014 AD)). *Pragya Nepali sandarbha vyakaran (Pragya Nepali reference grammar)*. Kathmandu: Nepal Academy.
- Shrestha, I. K. (2059 VS) (2002 AD)). *Nepali vyakaran: Kehi pakchyaharuko saralikrit charcha (Nepali grammar: Simplified discussion of some aspects)*. Lalitpur: Sajha Prakasan.
- Sigdyal, S. (2055 VS) (1998 AD)). *Madhyachandrika (A middle Nepali grammar)* (24th ed.). Lalitpur: Sajha Prakashan.
- Sinha, A. K. (1972). On the deictic use of ‘Coming’ and ‘Going’ in Hindi. *Papers from the 8th Regional Meeting*, (April 14-16), 351-358. Chicago: Chicago Linguistic Society.
- Sinha, C., & Kuteva, T. (1995). Distributed spatial semantics. *Nordic Journal of Linguistics*, 18(2), 167–199.
- Slade, B. (2013). The diachroy of light and auxiliary verbs in Indo-Aryan. *Diachronica*, 30(4), 531-578.
- Slobin, D. I. (1991). Learning to think for speaking: Native language, cognition and rhetorical style. *Pragmatics*, 1(1), 7-25. International Pragmatics Association.
- Slobin, Dan I., & Hoiting, N. (1994). Reference to Movement in Spoken and Signed Languages: Typological Considerations. *Proceedings of the Twentieth Annual Meeting of the Berkeley Linguistics Society: General Session Dedicated to the Contributions of Charles J. Fillmore*, (pp. 487-505). Berkeley: Berkeley Linguistics Society.
- Slobin, D. I. (1996). Two ways to travel: Verbs of motion in English and Spanish. In M. Shibatani & S. A. Thompson (Eds.), *Grammatical constructions: Their form and meaning* (pp. 195-219). Oxford: Oxford University Press.

- Slobin, D. I. (1996). From "Thought and language" to "Thinking for speaking" In J. J. Gumperz & S. C. Levinson (Eds.), *Rethinking linguistic relativity: Studies in the social and cultural foundations of language* (pp. 70-96). Cambridge: Cambridge University Press.
- Slobin, D. I. (1997). Mind, code and text. In J. Bybee, J. Haiman, & S. A. Thomson (Eds.), *Essays on language function and language type: Dedicated to T. Givon* (pp. 437-467). Amsterdam: John Benjamins. doi:10.1075/z.82.24slo.
- Slobin, D. I. (2002). Cognitive and communicative consequences of linguistic diversity. In S. Strömquist (Ed.), *The diversity of languages and language learning* (pp.7-23). Lund, Sweden: Lund University, Centre for Languages and Literature.
- Slobin, Dan I. (2004). The many ways to search for a frog: Linguistic typology and the expression of motion events. In S. Strömquist & L. Verhoeven (Eds.). *Relating events in narrative: 2. Typological and contextual perspectives* (pp. 219-257). Mahwah, New Jersey, London: Lawrence Erlbaum Associates.
- Slobin, Dan I. (2005). Coding Motion events in texts. Berkeley Coding Manual.
- Slobin, D. I. (2005). Relating events in translation. In D. D. Ravid & H. B. Z. Shyldkrot (Eds), *Perspectives on language and language development: Essays in honor of Ruth A. Berman* (pp.115-130). Dordrecht/Boston/ London: Kluwer Academic Publishers.
- Slobin, D. I. (2006). What makes Manner of Motion salient? Explorations in linguistic typology, discourse, and cognition. In M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp. 59-81). Amsterdam/Philadelphia: John Benjamins.
- Slobin, D., Ibarretxe-Antunano, I., Kopecka, A., & Majid, A. (2014). Manners of human gait: A crosslinguistic event naming study. In J. Newman (Ed.). *Cognitive Linguistics*, 25(4), 701-741. Berlin: De Gruyter Mouton.
- Slobin, D. I. (2017). Typologies and language use. In I. Ibarretxe-Antuñano (Ed.) *Motion and space across languages: Theory and applications* (pp. 419-446). Amsterdam: John Benjamins.

- Sotelo, E. G. (2017). Asymmetries between Goal and Source prefixes in Spanish: A structural account from a diachronic perspective. In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)* (pp. 241-280). Amsterdam/Philadelphia: John Benjamins.
- Stassen, L. (1997). *Intransitive predication*. Oxford: Oxford University Press.
- Stefanowitsch, A., & Rohde, A. (2004). The goal bias in the encoding of motion events. In G. Radden & K. U. Panther (Eds.), *Studies in linguistic motivation* (pp. 249-267). Berlin: Mouton de Gruyter.
- Subbarao, K. V., & Bhaskararao, P. (2004). Non-nominative subjects in Telugu. In K. V. Subbarao & P. Bhaskararao (Eds.) *Non-nominative subjects, 2* (pp. 161-196). Amsterdam/ Philadelphia: John Benjamins Publishing Company.
- Subbarao, K. V., & Arora, H. (2009). The conjunctive participle in Dakkhini Hindi-Urdu: Making the best of both worlds. *Indian Linguistics* 70, 359-386.
- Subbarao, K. V. (2012). *South Asian languages: A syntactic typology*. Cambridge: Cambridge University Press.
- Talmy, L. (1972). *Semantic structures in English and Atsugewi* (Doctoral dissertation, University of California, Berkeley) <https://escholarship.org/uc/item/5g15p348>, accessed on 15th May 2020.
- Talmy, L. (1975). Semantics and syntax of motion. *Syntax and semantics, 4*. New York, San Francisco, London: Academic Press, Inc.
- Talmy, L. (1985). Lexicalization patterns: Semantic structure in lexical forms. In T. Shopen (Ed.) *Language typology and syntactic description 3: Grammatical categories and the lexicon* (pp. 57-149). Cambridge: Cambridge University Press.
- Talmy, L. (1991). Path to realization: A typology of event conflation. *Proceedings of the Seventeenth Annual Meeting of the Berkeley Linguistics Society: General Session and Parasession on The Grammar of Event Structure* (pp. 480-519). Berkeley: Berkeley Linguistic Society. doi: 10.3765/bls.v17i0.1620.
- Talmy, L. (2000a). *Toward a cognitive semantics I: Concept structuring systems*. Cambridge: MIT Press.

- Talmy, L. (2000b). *Toward a cognitive semantics II: Typology and process in concept structuring*. Cambridge: MIT Press.
- Talmy, L. (2006). The representation of spatial structure in spoken and signed language. In M. Hickmann & S. Robert (Eds.), *Space in languages: Linguistic systems and cognitive categories* (pp. 207-238). Amsterdam & Philadelphia: John Benjamins.
- Talmy, L. (2007). Lexical typologies. In T. Shopen (Ed.) *Language typology and syntactic description 3: Grammatical categories and the lexicon* (pp. 60-168). Cambridge: Cambridge University Press.
- Talmy, L. (2009). Main verb properties and equipollent framing. In J. Guo, E. Lieven, N. Budwig, S. Ervin-Tripp, K. Nakamura, & Ş. Özcalışkan, (Eds.), *Crosslinguistic approaches to the psychology of language: research in the tradition of Dan Isaac Slobin* (pp. 389-402). New York: Psychology Press.
- Talmy, L. (2017). Past present and future of motion research, in I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 1-12). Amsterdam: John Benjamins.
- Tesnière, L. (1959). *Éléments de syntaxe structurale*. Paris: Klincksieck.
- Thompson, S. A., Longacre, R. E., & Hwang, S. J. J. (2007). Adverbial clauses. In T. Shopen (Ed.), *Language typology and syntactic description, II* (2nd ed., pp. 237-299). Cambridge: Cambridge University Press.
- Tolkien, J. R. R. (1937). *The Hobbit*. UK: George Allen & Unwin.
- Turnbull, A. (1887). *A Nepali grammar and English-Nepali & Nepali-English vocabulary*. Darjeeling: N. L. Roy at Scotch Mission Orphanage Press.
- Turner, R. L. (1931). *A comparative and etymological dictionary of the Nepali language*. First Indian reprint: Allied Publishers Private Limited.
- Verkerk, A. (2015). Where do all the motion verbs come from? The speed of development of manner verbs and path verbs in Indo-European. *Diachronica*, 32, 69-104.
- Verkerk, A. (2017). The goal-over-source principle in European languages: Preliminary results from a parallel corpus study. In S. Luraghi, T. Nikitina & C.

- Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)*. Amsterdam/Philadelphia: John Benjamins.
- Verma, M. K. (1976). The notion of subject in South Asian languages. *South Asian studies publication series 2*, University of Wisconsin-Madison.
- Vittrant, A. (2015). Expressing motion: The contribution of Southeast Asian languages with reference to East Asian languages. N. Enfield & B. Comrie (Eds.), *The languages of mainland Southeast Asia: The state of arts* (pp. 586-632). Mouton de Gruyter. doi:10.1515/9781501501685.
- Voletz, F. K. E. & Kilian-Hatz, C. (Eds.) (2001). *Ideophones*. Amsterdam/Philadelphia: John Benjamins.
- Vuillermet, M., & Kopecka, A. (2019). Trajectoire: A methodological tool for eliciting Path of motion. In A. Lahaussois & M. Vuillermet (Eds.), *Language documentation and conservation: Methodological tools for linguistic description and typology*, 16, 97-124.
- Wälchli, B. (2001). A typology of displacement (with special reference to Latvian). *STUF-Language typology and universals*, 54(3), 298-323 (published online). doi.org/10.1524/stuf.2001.54.3.298.
- Wälchli, B., & Zúñiga, F. (2006). Source-Goal (in)difference and the typology of motion events in the clause. *STUF- Language Typology and Universals*, 59(3), 284-303. Berlin.
- Wälchli, B., & Cysouw, M. (2012). Lexical typology through similarity semantics: Toward a semantic map of motion verbs. *Linguistics*, 50(3), 671-710. Walter de Gruyter. doi: 10.1515/ling-2012-0021.
- Wälchli, B., & Sölling, A. (2013). The encoding of motion events: Building typology bottom-up from text data in many languages. In J. Goschler & A. Stefanowitsch (Eds.), *Variation and change in the encoding of motion events* (pp. 77-113). Amsterdam: John Benjamins.
- Whorf, B. L. (1956). Languages and logic. In J. B. Carroll (Ed.) *Language, thought, and reality: Selected writing of Benjamin Lee Whorf*. Cambridge, Massachusetts: The MIT Press.

- Whorf, B. L. (1956). Languages mind and reality, in J. B. Carroll (Ed.), *Language, thought, and reality: Selected writing of Benjamin Lee Whorf*. Cambridge, Massachusetts: The MIT Press.
- Wienold, G. (1992). Lexical structures concerning movement and space in some Asian languages. *The Third International Symposium on Language and Linguistics*, Bangkok, Thailand, (pp.1222-1236). Thailand: Chulalongkorn University.
- Wilkins, D. P., & Hill, D. (1995). When “go” means “come”: Questioning the basicness of basic motion verbs. *Cognitive Linguistics*, 6.2 (3), 209-259.
- Wilkins, D. P. (2004). The verbalization of motion events in Arrernte. In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative: Typological and contextual perspectives*, 2 (pp. 143-158). Mahwah, New Jersey, London: Lawrence Erlbaum Associates.
- Yadav, R. (2001). The morphology of the Maithili conjunctive participle *kə*. In T. P. Mishra *et. al.* (Eds.), *Contributions to Nepalese Studies*, 28(2), 269-275. Kirtipur: CNAS.
- Yadava, Y. P. (2004). Non-nominative subjects in Maithili. In K. V. Subbarao & P. Bhaskararao (Eds.), *Non-nominative subjects*, 2 (pp. 253-264). Amsterdam/Philadelphia: John Benjamins Publishing Company.
- Yadava, Y. P., Hardie, A., Lohani, R. R., Regmi, B. N., Gurung, S., Gurung, A., Hall, P. (2008). Construction and annotation of a corpus of contemporary Nepali. *Corpora*, 3 (2), 213-225. doi: 10.3366/E1749503208000166.
- Yadava, Y. P. (2014). Language use in Nepal. *Population monograph of Nepal (Social demography)*, II (pp. 51-72). Kathmandu: Central Bureau of Statistics.
- Zanchi, C. (2017). New evidence for the Source-Goal asymmetry: Evidence from Inner Asia Minor Greek, In S. Luraghi, T. Nikitina & C. Zanchi (Eds.), *Space in diachrony (Studies in language companion series, 188)* (pp. 147-178). Amsterdam/Philadelphia: John Benjamins.
- Zlatev, J., & Yangklang, P. (2004). A third way to travel: The place of Thai in motion event typology. In S. Strömquist, & L. Verhoeven (Eds.), *Relating events in*

narrative. vol. 2, typological and contextual perspectives (pp. 159-190).
Lawrence Erlbaum Associates.

Zwarts, J., & Winter, Y. (2000). Vector space semantics: A model-theoretic analysis of locative prepositions. *Journal of Logic, Language and Information* 9, 169–211.

Zwarts, J. (2003). Vectors across spatial domains: From place to size, orientation, shape and parts. In E. van der Zee and J. Slack (Eds.), *Representing direction in language and space*. Oxford: Oxford University Press.

Résumé de la thèse en français

Cette thèse⁴⁹ vise l'étude de l'expression des événements de mouvement en népalais, une langue indo-aryenne parlée au Népal par environ 12 millions de locuteurs. Le népalais est la langue officielle du Népal et elle a une longue tradition écrite comprenant une littérature de genres variés. L'étude que nous présentons dans cette thèse est basée sur deux types de données : les données descriptives collectées avec des stimuli visuels et les données narratives extraites d'un corpus de textes écrits. Plus particulièrement, les données descriptives ont été collectées à l'oral via des élicitations avec des locuteurs népalais en utilisant deux ensembles de stimuli vidéo, le matériel vidéo 'Put and Take' (Bowerman et al., 2004) et le matériel vidéo 'Trajectoire' (Ishibashi et al., 2006). Les données narratives, quant à elles, ont été extraites du *Corpus National du Népalais* (NNC).

Structure de la thèse

La thèse est organisée en 8 chapitres. L'introduction présente le sujet de la recherche et l'organisation de la thèse en différents chapitres et sections. Le contexte théorique de l'étude est présenté dans le chapitre 1. Le chapitre 2 consiste en une esquisse grammaticale du népalais. La méthodologie adoptée pour conduire cette étude est décrite dans le chapitre 3. Les chapitres 4 et 5 examinent respectivement l'expression des événements de mouvement causé et de mouvement spontané. Le chapitre 6 examine les schémas de lexicalisation des éléments sémantiques du mouvement. Le chapitre 7 consiste en un examen de la sémantique spatiale distribuée en népalais. Enfin, le chapitre 8 résume les résultats de l'étude et présente les conclusions et les perspectives de recherches futures. La thèse contient par ailleurs 12 annexes.

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Le résumé des objectifs et des résultats de chaque chapitre sont présentés ci-dessous.

Chapitre 1. Contexte théorique des événements de mouvement

Le premier chapitre de la thèse esquisse le contexte théorique dans lequel s'inscrit l'étude des événements de mouvement présentée dans cette thèse. Plus particulièrement, il présente les événements de mouvement tels que définis par Talmy (1972, 1975, 2000 *inter alia*) et les différents éléments sémantiques qui les constituent – la Figure (l'objet en mouvement ou mobile), le Fond (l'objet de référence), la Trajectoire (la direction suivie ou le site occupé par la Figure), le Mouvement (le mouvement ou la localisation) et la Manière (la façon dont le mouvement est effectué par la Figure) – et il définit en plus de détails deux notions qui sont au centre de l'étude, à savoir la Trajectoire et la Manière de mouvement. Après la présentation des notions liées à ce domaine d'étude particulier, nous présentons la typologie des événements de mouvement, typologie basée sur les schémas de lexicalisation, à savoir le schéma à cadre verbal (V-framed) et le schéma à cadre satellitaire (S-framed), tels qu'ils ont été proposés par Talmy (*ibid.*).

Les schémas de lexicalisation à cadre verbal et à cadre satellitaire

Selon Talmy, les langues du monde peuvent être classées en deux types en fonction de la façon dont elles expriment la Trajectoire et la Manière de mouvement dans la structure linguistique : les langues à cadre verbal (V-framed) et les langues à cadre satellitaires (S-framed). Dans une langue à cadre verbal, l'élément sémantique de Trajectoire est exprimé par le verbe, tandis que dans une langue à cadre satellitaire, l'élément sémantique de Trajectoire est encodé par le satellite verbal (c'est-à-dire un morphème verbal tel qu'un affixe ou une particule). La typologie proposée par Talmy a donné lieu à de nombreuses recherches dans des langues géographiquement variées. Toutefois, en examinant l'évolution et la dynamique interne des langues et des schémas de lexicalisation spécifiques à des langues particulières, plusieurs chercheurs ont souligné le fait que la classification binaire entre langues à cadre verbal et langues à cadre satellitaire ne peut rendre compte de la spécificité et/ou de la diversité des constructions employées par certaines langues ou dans des langues individuelles. Ils ont donc proposé des révisions de cette classification binaire (voir, entre autres, Slobin, 1987, 2004 ; Aske, 1989 ; Matsumoto, 2003 ; Zlatev & Yangklang, 2004 ;

Kopecka, 2009 ; Croft et al., 2010 ; Vittrant, 2015). En particulier, Slobin (2004) a proposé un troisième schéma de lexicalisation, à savoir le schéma à cadre équipollent (E-framed), pour tenir compte des langues qui possèdent des constructions à verbes en série et/ou des verbes bipartites. D'autres chercheurs, comme par exemple, Vittrant (2015), ont souligné le fait que la classification typologique des schémas de lexicalisation devrait tenir compte des constructions plutôt que des langues. Notons finalement que, les constructions disponibles dans la langue et les schémas de lexicalisation qui lui sont propres, ont des conséquences sur la narration des événements ainsi que la traduction et le type d'information encodée. En effet, dans les langues qui lexicalisent la Trajectoire dans le verbe, la Manière est typiquement encodée dans une construction périphrastique (par exemple, un gérondif) ; comme conséquence, l'expression de la Manière dans ce type de langues est optionnelle, contrairement aux langues qui lexicalisent la Trajectoire dans le satellite et dans lesquelles le verbe principal peut prendre facilement en charge l'expression de la Manière.

Le népalais et le domaine des événements de mouvement

Bien que le domaine des événements de mouvement soit largement étudié dans des langues variées parlées dans différentes parties du monde, en népalais, tout comme dans d'autres langues parlées en Asie du Sud, il s'agit encore d'un domaine de recherche nouveau. Cependant, sur la base de la littérature antérieure, nous présentons dans ce chapitre quelques études conduites sur les langues d'Asie du Sud dédiées à l'expression de l'espace et/ou du mouvement ; celles-ci comprennent notamment les langues telles que l'hindi (Narasimhan, 1998), l'hindi et l'ourdou (Hautli-Janisz, 2014) ainsi que l'analyse componentielle des verbes de mouvement en népalais (Basnyat, 1987).

Chapitre 2. Une esquisse grammaticale du népalais

Le chapitre 2 présente la langue népalaise et ses locuteurs et propose une esquisse grammaticale de la langue. Nous y présentons tout d'abord les différentes parties du discours tels que les noms, les verbes, les adjectifs, les adverbes, les postpositions et les conjonctions (§ 2.2.1). Nous abordons ensuite les syntagmes nominaux, composés d'un nom ou d'un pronom et qui sont modifiables par les adjectifs, ainsi que les clauses relatives (§ 2.2.2). En népalais, le syntagme nominal

est marqué par les cas comprenant l'ergatif (-*le*), le locatif (-*maa* 'dans'), le datif (-*laai* 'à'), le comitatif (-*sa~ga* 'avec'), le génitif (-*ko* 'de'), l'instrumental (-*le*) et l'ablatif (-*baaTa* 'de'). Concernant la prédication non verbale (§ 2.2.4), trois copules (*cha* 'est', *hunu* 'être' et *ho* 'est') sont décrites avec leurs fonctions respectives (attributive, identité, possession). Par ailleurs, nous y présentons l'ordre des mots, l'alignement, le verbe et son système TAM (passé perfectif, passé imperfectif et impératif), les auxiliaires ainsi que les verbes composés et des constructions de type *light verb constructions*. Le népalais est une langue à tête finale avec un ordre des mots SOV. En ce qui concerne le système d'alignement, syntaxiquement, le népalais montre l'alignement nominatif-accusatif, et morphologiquement l'alignement ergatif-absolutif.

Le népalais, une langue flexionnelle

Le népalais est une langue flexionnelle. Les suffixes portmanteaux du verbe marquent le temps, l'aspect, la modalité, la personne, le genre, le nombre ainsi que le statut honorifique de l'argument sujet. Par exemple, le suffixe portemanteau -*yo* marqué sur le verbe indique le passé, l'aspect perfectif, le mode déclaratif, la 3ème personne, le nombre singulier et le statut non-honorifique. Comme dans les autres langues SOV d'Asie du Sud, en népalais aussi les auxiliaires à la forme finie suivent les verbes principaux à la forme non finie. Ces constructions sont appelées dans la thèse des constructions auxiliaires (voir § 2.2.4.3 pour plus de détails).

Verbes composés et constructions à verbe léger

Les constructions à verbes composés sont très productives en népalais, tout comme dans d'autres langues d'Asie du Sud (voir, par exemple, Grierson, 1916 ; Dahal, 1974 ; Masica, 1976 ; Pokharel, 1999 entre autres). Le verbe composé consiste en deux verbes différents minimum ; le premier verbe de la série est la tête lexicale et le second verbe est la tête grammaticale. Par exemple, *gar-i-dinu* 'faire' se compose de deux verbes différents *gar* 'faire' et *dinu* 'donner', mais lorsqu'il se trouve dans le verbe composé, le second verbe *dinu* 'donner' perd son sens lexical original 'donner' en raison de la décoloration sémantique et il se charge de la transmission de toutes les informations grammaticales. Les verbes en tête grammaticale peuvent également véhiculer la certitude, la fonction bénéfique et d'autres fonctions (voir § 2.2.4.4 pour une discussion sur ce sujet). Contrairement aux verbes composés, les constructions à

verbe léger consistent en un NOM+VERBE, un ADJECTIF+VERBE ou une particule indéclinable et d'autres constructions similaires (voir cependant Bandhu, 2052 VS (1995 AD) : 168)) ; Butt, 2003, 2010). Au-delà des verbes composés et des constructions à verbe léger, nous présentons également l'expression de la négation et les constructions interrogatives en népalais.

Clauses complexes

Les clauses complexes comprennent des clauses à compléments, ainsi que des clauses adverbiales et relatives. Pour former les compléments, le népalais utilise les verbes de perception (par exemple, *dekhnū* 'voir'), les verbes de cognition (*jaannū* 'savoir') et les verbes d'énonciation (par exemple, *bhannū* 'dire'). Les clauses adverbiales sont composées de clauses temporelles telles que *-naa saath* 'dès que' et *-ne bittikai* 'dès que' ; les clauses exprimant la Manière sont marquées par la forme du participe conjonctif (CP) *-era*. Par ailleurs, en utilisant les suffixes *-eko* et *-ne*, on peut former les constructions corrélatives et sans tête, ainsi que les clauses relatives. Sémantiquement, une clause relative encode un état ou un événement dont l'un des participants est co-référent avec la tête (Givon, 2001) (voir § 2.2.5 pour la discussion).

Combinaison et enchaînement de clauses

La section 2.2.6 est consacrée aux processus de combinaison de clauses. Il existe différentes conjonctions pour combiner des clauses que l'on peut classer en conjonctions de coordination et conjonctions de subordination. Les conjonctions de coordination comprennent *ra* 'et' (qui fournit une valeur informative égale), *tara* 'mais' (pour la fonction adversative), *tyaskaaraN* 'donc' (pour indiquer la conséquence) et *ani* 'et' (pour indiquer la valeur informative égale). Les conjonctions de subordination, quant à elles, comprennent *kinabhane* 'parce que' (pour indiquer la raison), *yadi* 'si' (pour indiquer la condition) et *taapani* 'bien que' (pour indiquer la fonction concessive).

La deuxième stratégie déployée en népalais pour combiner les clauses consiste à utiliser la stratégie d'enchaînement de clauses au moyen de la forme du participe conjonctive *-era*. Celle-ci peut lier deux clauses ou plus pour décrire les événements séquentiels. On peut noter que le participe conjonctif n'est pas seulement utilisée en népalais mais aussi dans de nombreuses autres langues d'Asie du Sud, ce qui suggère qu'il s'agit d'un trait aréal (voir, par exemple, Masica, 1991).

Chapitre 3

Le chapitre 3 présente les choix méthodologiques et donne les détails relatifs à la collecte des données, les visites sur le terrain, les participants, le corpus de travail, la transcription et le codage des données ainsi que les conventions de gloses.

Données descriptives

Les données descriptives ont été collectées avec deux ensembles de stimuli visuels.

Le premier ensemble de stimuli, appelé « Put and Take », a été conçu par Bowerman et al. (2004) au Max Planck Institute for Psycholinguistics, Nijmegen (Pays-Bas) dans le cadre du projet PUT & TAKE pour l'étude interlinguistique des événements de mouvement causé. Ces stimuli consistent en 63 courts clips (chaque clip dure environ six secondes), ceux-ci étant organisés en trois versions où ils sont présentés dans un ordre différent. Dans chacun de ces clips, un agent réalise une activité qui consiste à placer un objet (Figure) dans un endroit (Fond-But), à le retirer de cet endroit (Fond-Source) ou bien à l'enlever d'un endroit et le mettre dans un autre endroit (Fond-Source & Fond-But).

Le deuxième ensemble de stimuli utilisé pour collecter les données, nommé « Trajectoire », a été conçu par Ishibashi et al. (2006) dans le cadre d'un projet interlinguistique TRAJECTOIRE (la Fédération de Typologie et Universaux Linguistiques) pour étudier les événements de mouvement spontané et plus spécifiquement l'expression de la Trajectoire de mouvement (pour plus de détails voir Vuillermet & Kopecka, 2019). Ces vidéos clips sont également organisés en trois versions et sont disposées selon trois ordres. Le matériel est composé de 76 clips vidéo, d'une durée de 8 à 14 secondes chacun.

Ces deux ensembles de stimuli sont composés d'éléments sémantiques importants – Figure, Fond, Trajectoire et Manière et Mouvement (causé vs. spontané) – et permettent d'examiner comment les locuteurs conceptualisent et expriment ces types d'événements dans une langue ou des langues différentes.

Participants et travail de terrain

Au total, 18 locuteurs natifs du népalais (10 hommes et 8 femmes, âge moyen : 35.2 ans) pour « Put and Take » et 17 locuteurs natifs du népalais (9 hommes et 8 femmes, âge moyen : 33.4 ans) pour « Trajectoire » ont participé à la description des deux ensembles de vidéo clips. Après leur avoir expliqué les détails et les objectifs de chaque ensemble de stimuli, chaque participant pouvait regarder les clips vidéo respectifs aussi longtemps qu'il/elle le souhaitait. Ensuite, chaque participant devait répondre à la question « qu'est-ce qu'elle/il a fait ? » ou, si la vidéo contenait plusieurs protagonistes, « qu'est-ce qu'ils/elles ont fait ? ». Les données ont été collectées dans les régions de Parbat et de Katmandou au printemps 2016 et 2017 et toutes les sessions d'élicitation ont été enregistrées.

Données narratives

Les données narratives ont été extraites à partir du corpus de textes écrits *Nepali National Corpus* (NNC). Pour les extraire, nous avons d'abord procédé à une étude lexicographique basée sur le dictionnaire. Plus particulièrement, 449 verbes encodant le mouvement ont été sélectionnés à partir du dictionnaire *Nepali Brihat Shabdakosh* (The Comprehensive Dictionary of Nepali) publié par l'Académie du Népal en (2067 VS (2010 AD)). Parmi ces 449 verbes, seulement 247 ont été trouvés dans le corpus NNC. Après avoir examiné la fréquence d'utilisation de ces 247 verbes (cf. Annexe H), l'analyse s'est focalisée plus spécifiquement sur 53 verbes les plus fréquents dans le corpus (plus de 65 occurrences, cf. Annexe I). Pour ces verbes, nous avons extrait 50 phrases décrivant le mouvement (les expressions métaphoriques ont été éliminées de l'analyse) (cf. 3.2.2). Notez que les 53 verbes sur lesquels porte l'analyse du corpus contiennent également les verbes trouvés dans des données descriptives produits par les locuteurs.

Au total, les données descriptives et les données narratives qui constituent le corpus de travail de cette thèse comprennent 4991 descriptions de mouvement.

Transcription, codage et gloses

Les deux types de données, descriptives et narratives, ont été transcrits en caractères romains et codés à l'aide du Manuel de codage de Berkeley (Slobin, 2005) qui a été conçu spécifiquement pour coder les descriptions de mouvement. Le codage fournit des informations détaillées sur les catégories syntaxiques (par exemple, nom,

verbe), les catégories conceptuelles (type d'élément sémantique lexicalisé tels que Trajectoire, Manière) et l'expression lexicale (le lemme comme, par exemple, V:m = *hi~Dnu* 'marcher'), le type du verbe (transitif vs. intransitif), le type de mouvement (causé vs spontané), la construction (simple vs. complexe), le type de Trajectoire (Source vs. Médian vs. But). Nous avons codé par ailleurs les métadonnées relatives aux stimuli (PT, Traj..., NNC), le locuteur (s1, s2) et la version de stimuli (v1, v2, v3). Les données ont été glosées selon les conventions de gloses de Leipzig (LGR).

Chapitre 4. Types d'événements

Le chapitre 4 examine les expressions du mouvement causé élicitées avec le matériel « Put and Take ». Ce type d'événements implique le mouvement qui consiste à placer un objet par rapport à un autre objet (par exemple, poser la tasse sur la table), à l'enlever (par exemple, sortir le légume du sac) ou bien encore à le placer et à l'enlever (par exemple, prendre un objet sur la table et le mettre sur la chaise). Alors que dans la plupart des cas les locuteurs décrivent les événements tels qu'ils sont représentés dans les vidéos, certains locuteurs changent la perspective et décrivent certains événements de type PUT comme des événements de type TAKE ou vice versa. Cette tendance à changer la perspective représente 5% de l'ensemble des données (N=1158). De façon intéressante, l'analyse des données révèle l'omission du Fond dans l'expression du mouvement causé. En effet, les données montrent que les locuteurs omettent fréquemment l'expression du Fond dans leurs descriptions. Cette tendance s'observe à la fois dans l'expression des événements de type PUT que dans l'expression des événements de type TAKE, avec une omission du Fond particulièrement fréquente dans l'expression des événements qui consistent à 'mettre un vêtement sur une partie du corps' ou à 'retirer un vêtement d'une partie du corps' (voir Narasimhan (2012) et Petersen (2012) pour des tendances similaires en hindi et en kalasha respectivement).

Types de constructions

Aussi bien les événements de type PUT que ceux de type TAKE sont encodés par les locuteurs au moyen des constructions simples et des constructions complexes. Les prédicats simples, les verbes composés et les constructions à copule constituent des constructions simples et les participes conjonctifs, les clauses relatives et les constructions adverbiales font partie des constructions complexes. Cependant, l'usage

des constructions simples est plus fréquent dans les données que celui des constructions complexes, représentant respectivement 51,8% et 46,6% des données ($N=1158$). On peut noter par ailleurs que l'emploi des constructions simples est plus élevé dans l'expression des événements de type PUT que dans l'expression des événements TAKE (voir § 4.2 pour plus de détails).

Diversité lexicale et granularité sémantique

L'un des principaux objectifs de ce chapitre était d'étudier la diversité des outils lexicaux et des outils grammaticaux employés par les locuteurs pour décrire le mouvement causé. Tout d'abord, nous avons étudié la diversité des verbes dans le corpus « Put and Take ». Les données montrent que les locuteurs ont utilisé 85 verbes différents pour décrire les stimuli vidéos comme, par exemple, *raakhnu* 'mettre', *nikaalnu* 'sortir' et *jhunDyaaunu* 'accrocher'. Les deux verbes les plus fréquents dans les données sont *raakhnu* 'mettre' et *nikaalnu* 'enlever' que les locuteurs utilisent dans l'expression des événements de type PUT et des événements de type TAKE respectivement. Compte tenu de leur fréquence et de leur extension, ces verbes apparaissent comme des verbes à sémantique générale. Parmi les 85 verbes trouvés, la majorité des verbes expriment la Trajectoire (par exemple, *lagaunu* 'mettre sur', *raakhnu* 'mettre'), certains expriment la Manière (par exemple, *taannu* 'tirer', *dhakelnu* 'pousser'), tandis que d'autres expriment d'autres types d'informations (par exemple, *dekhaunu* 'montrer'). L'analyse montre également que certains verbes sont sensibles au type de Figure ou de Fond alors que d'autres ne le sont pas. Par exemple, le verbe *raakhnu* 'mettre' qui exprime l'événement de type PUT et le verbe *nikaalnu* 'enlever' qui décrit l'événement de type TAKE ne sont pas sensibles au type de Figure (solide vs. liquide) ou de Fond (surface vs. confinement) mais des verbes tels que *chiraunu* 'faire entrer' et *jhiknu* 'sortir', par exemple, sont sensibles à la configuration géométrique du Fond (voir 4.3.1.2 et 4.3.1.3 pour la discussion).

Autres outils lexicaux et grammaticaux

Par rapport à la diversité lexicale des verbes, la diversité des adverbes et des éléments grammaticaux est moindre dans les événements de type PUT & TAKE. La plupart du temps, deux adverbes, *bhitra* 'intérieur' et *baahira* 'extérieur', sont utilisés dans les événements de type PUT et TAKE respectivement. En outre, *maathi* 'au-dessus' qui indique la direction vers le haut et *tala* 'au-dessous' qui indique la

direction vers le bas sont également utilisés dans l'expression des événements de type PUT. Le marqueur du cas locatif *-maa* 'dans' dans les événements PUT et le marqueur du cas ablatif *-baaTa* 'de' / *-dekhi* 'de' (dans certains cas) dans les événements TAKE font partie des outils grammaticaux. De plus, parmi les outils grammaticaux les données comprennent également des postpositions telles que *-tira* 'vers' et *-bhitra* 'à l'intérieur' que l'on trouve dans l'expression des événements de type PUT mais pas ceux de type TAKE.

Distribution morphosyntaxique de la Trajectoire

La dernière partie du chapitre 4 est consacrée à l'examen de la distribution de la Trajectoire dans différents outils morphosyntaxiques. Dans cette section, nous étudions les questions de recherche suivantes :

- (a) Comment la Trajectoire est-elle distribuée ? Est-elle encodée dans un seul élément morphosyntaxique ou bien est-elle distribuée dans plusieurs *loci* morphosyntaxique ?
- (b) La Trajectoire est-elle distribuée de la même façon dans l'expression des événements de type PUT que dans l'expression des événements de type TAKE ou sa distribution morphosyntaxique diffère-t-elle selon le type d'événement ?
- (c) Les locuteurs du népalais encodent-ils la partie initiale (Source) et la partie finale (But) de la Trajectoire de la même façon ou ont-ils tendance à se focaliser plus sur une partie de la Trajectoire particulière ?

Ces questions de recherche sont étudiées séparément dans l'expression des événements de type PUT, TAKE et PUT-TAKE. Les résultats des analyses montrent que la Trajectoire est distribuée dans un à cinq *loci* morphosyntaxiques, mais que la distribution la plus fréquente consiste à recourir à deux *loci*; en effet, ce schéma de distribution représente 49,5% des données ($N=1158$).

L'analyse des deux types d'événement causé a montré que, dans l'expression des événements de type PUT, cinq schémas de distribution ont été mis à l'œuvre par les locuteurs dans l'expression de la Trajectoire, allant d'un élément morphosyntaxique - un verbe (par exemple, *kocnu* 'mettre'), un marqueur de cas (par exemple, *-maa* 'dans'), une postposition (par exemple, *-bhitra* 'à l'intérieur') ou un élément adverbial (par exemple, *tala* 'en dessous') - jusqu'aux cinq *loci* morphosyntaxiques mobilisant l'ensemble des outils disponibles. Parmi les différents

schémas, la distribution de la Trajectoire dans deux *loci* morphosyntaxiques est la plus fréquente représentant 27,9% des données ($N=1158$) et pouvant reposer sur le verbe et le marqueur de cas, le marqueur de cas et la postposition ou bien le verbe et l'adverbe. Quant aux événements de type TAKE, la Trajectoire est distribuée dans un élément morphosyntaxique jusqu'aux quatre *loci* morphosyntaxiques. Ici aussi, la distribution dans deux *loci* morphosyntaxiques est un schéma le plus fréquent représentant 20,1% des données. Enfin, dans l'expression des événements de type PUT-TAKE, on trouve également une distribution allant d'un à cinq *loci* morphosyntaxiques. Toutefois, contrairement à ce que nous avons observé pour les deux autres types d'événement, dans ce type d'événement-là, la Trajectoire est distribuée de façon préférentielle dans trois *loci* morphosyntaxiques (1,6% du total des données, $N=1158$) au moyen de la combinaison de différents outils morphosyntaxiques, lexicaux et/ou grammaticaux. Dans tous ces cas de figure, lorsque la Trajectoire est exprimée dans plusieurs *loci* morphosyntaxiques, les différents outils lexicaux et grammaticaux contribuent de façon combinée à l'expression explicite de la Trajectoire.

Chapitre 5

Dans le chapitre 5, nous présentons l'analyse des événements de mouvement spontané qui se réfèrent au déplacement d'un être animé ou d'une entité inanimée d'un endroit à un autre. Les données examinées dans ce chapitre ont été collectées auprès de 17 locuteurs natifs du népalais au moyen des stimuli vidéos 'Trajectoire'.

Événements de Trajectoire simples et complexes

Un événement de Trajectoire simple consiste en une seule partie de la Trajectoire. Il peut s'agir d'une Trajectoire orientée par rapport à la Source (point initial), par rapport au médian (point intermédiaire) ou par rapport au but (point final). Un événement de Trajectoire complexe, quant à lui, consiste en deux ou plusieurs parties de la Trajectoire, celui-ci pouvant comprendre la Source et/ou le Médian et/ou le But. Dans le cas des Trajectoires simples, les données témoignent de l'expression des trois parties de la Trajectoire. Par exemple, une Trajectoire simple orientée par rapport à la Source est encodée par le verbe *niskanu* 'sortir', par rapport au Médian par le verbe *tarnu* 'traverser' et par rapport au But par le verbe *pasnu* 'entrer'. Dans l'expression des événements de Trajectoire complexe, les données montrent les

événements orientés par rapport à deux parties de la Trajectoire, Source-But et But-Médian, la Trajectoire complexe Source-Médian n'étant pas attestée dans les données. Tout comme dans l'expression du mouvement causé, dans l'expression du mouvement spontané aussi, les participants décrivent certains stimuli vidéo différemment de ce qui est attendu, c'est-à-dire que certains événements orientés par rapport à la Source sont décrits comme des événements orientés par rapport au But et certains événements orientés par rapport au But sont décrits au moyen d'un verbe de Manière comme une activité (par exemple, « il marche ») entraînant ainsi un changement de perspective vis-à-vis de la scène illustrée dans la vidéo (voir § 5.1.3).

Types de constructions

Les données attestent différents types de constructions. Elles sont classées en constructions simples et constructions complexes. Les constructions avec un prédicat simple et des verbes composés font partie des constructions simples et les constructions où il y a plusieurs clauses avec une forme de participe conjonctif ou des clauses relatives ou d'autres constructions subordonnées adverbiales font partie des constructions complexes. Notez cependant que les constructions simples sont plus fréquentes dans les données représentant 60% de l'ensemble des données ($N=949$).

Verbes de Trajectoire et verbes de Manière

La section 5.3 vise l'analyse des outils lexicaux (verbes et adverbes) et grammaticaux (marqueurs de cas et postpositions) en s'appuyant sur l'examen des paramètres suivants :

- (a) l'orientation de la Trajectoire (verticale vs. horizontale)
- (b) la Trajectoire avec ou sans franchissement de frontière
- (c) l'information spatiale encodée (source vs. localisation vs. but)
- (d) l'utilisation des outils lexico-grammaticaux dans le corpus 'Trajectoire'

Pour décrire les stimuli vidéo 'Trajectoire', les participants ont utilisé 54 verbes différents dans le slot du verbe principal révélant ainsi une grande diversité lexicale. Parmi ces verbes, on trouve des verbes monomorphémiques comme *dauDanu* 'courir' mais aussi des verbes légers comme *paar garnu* 'entrer'. Parmi les 54 verbes, le verbe *jaanu* 'aller' est le plus fréquemment utilisé dans les données comprenant 200 occurrences sur 949. D'un point de vue sémantique, ces verbes appartiennent à

différentes classes, Trajectoire, Deixis et Trajectoire, Manière, Trajectoire et Manière, et Posture. Certains de ces verbes appartiennent à d'autres classes sémantiques (par exemple, *hernu* 'regarder') ; toutefois, ces verbes n'ont pas été inclus dans l'analyse des données. Les critères pour définir les verbes de Trajectoire et de Manière sont présentés dans les sections 5.3.1.2 et 5.3.1.3. Les verbes de Trajectoire sont définis comme verbes de mouvement intrinsèquement orienté (cf. Levin, 1993). En fonction de leur sémantique, ces verbes sont également divisés en verbes de Trajectoire orienté par rapport à la Source (par exemple, *niklanu* 'sortir'), par rapport au Médian (par exemple, *tarnu* 'traverser'), par rapport au But (par exemple, *pugnu* 'atteindre') et en verbes de franchissement des frontière (par exemple, *pasnu* 'entrer'). Certains verbes de Trajectoire encodent également l'orientation verticale, comme *uklanu* 'monter'. Deux verbes, *jaanu* 'aller' et *aaunu* 'venir', expriment l'éloignement ou le rapprochement par rapport à un centre déictique, autrement dit le mouvement centrifuge et le mouvement centripète. Ces deux verbes sont considérés comme verbes de Deixis et ils sont classés ensemble avec les verbes de Trajectoire. Un verbe, *caDhnu* 'grimper', encode deux éléments sémantiques, Trajectoire et Manière. Les verbes de Manière, quant à eux, sont catégorisés en classes de type COURIR (par exemple, *dauDanu* 'courir'), MARCHER (par exemple, *hi~Dnu* 'marcher'), NAGER (par exemple, *pauDanu* 'nager').

Pour décrire les stimuli vidéo 'Trajectoire', les locuteurs ont utilisé par ailleurs plusieurs verbes sous la forme d'un participe conjonctif. Tout comme les verbes principaux, ces verbes utilisés comme participes conjonctifs expriment, eux aussi, la Trajectoire (par exemple, *pharkanu* 'retourner'), la Manière (par exemple, *kudnu* 'se précipiter') ou d'autres types d'informations (par exemple, *dekhnu* 'voir'). Les formes verbales de participe conjonctif encodant la Trajectoire et la Manière sont examinés dans la section 5.3.2.

Adverbes de Trajectoire et de Manière

Parmi les outils lexicaux utilisés dans l'expression des événements du mouvement spontané, on trouve également les adverbiaux. Ils représentent 18,9% des données du corpus 'Trajectoire' (N=949). Certains adverbiaux encodent la directionnalité et sont considéré comme des adverbiaux de Trajectoire, tandis que d'autres ont pour fonction de modifier les verbes et sont considérés comme des adverbiaux de Manière. Les éléments adverbiaux qui indiquent la Trajectoire peuvent

encoder la Source (par exemple, *baahira* ‘dehors’), le But (par exemple, *bhitra* ‘dedans’), l’orientation (par exemple, *tala* ‘dessous’) et même le franchissement de la frontière (par exemple, *bhitra* ‘dedans’). L’analyse des adverbiaux encodant la Trajectoire et ceux encodant de Manière a permis de montrer que les adverbiaux de Trajectoire sont plus diversifiés sémantiquement et qu’ils forment un inventaire plus riche. En effet, les données ‘Trajectoire’ ne comprennent que quatre adverbiaux encodant la Manière. Ceux-ci incluent *wistaarai* ‘lentement’, *saraasar* ‘tout droit’, *chiTo chiTo* ‘rapide’ et *khurukhuru* ‘sans pause’ (voir § 5.3.3 pour la discussion).

Outils grammaticaux

Le marqueur de cas ablatif *-baaTa* ‘de’ et le marqueur de cas locatif *-maa* ‘dans’ sont des outils grammaticaux le plus fréquemment utilisés dans l’expression des événements de mouvement spontané, représentant respectivement 34,2% et 27,6% des données ($N=949$). Le premier morphème est utilisé dans l’expression de la Source de mouvement et le second dans l’expression du But de mouvement. Les autres outils grammaticaux identifiés dans les données comprennent les morphèmes suivant : - *bhitra* ‘à l’intérieur’, *-maathi* ‘au-dessus’, *-muni* ‘en dessous’ et *-najik* ‘près’. Ces morphèmes ont principalement une fonction locative et, par conséquent, peuvent être utilisés seuls dans l’expression des événements orientés vers le But. Pour être utilisés dans l’expression des événements orientés par rapport la Source, ils doivent être combinés avec le marqueur de cas ablatif qui indique la directionnalité.

Distribution morphosyntaxique de la Trajectoire

L’un des points important d’analyse des données dans ce chapitre porte sur la distribution de la Trajectoire dans différents *loci* morphosyntaxiques. Deux questions principales ont été examinées :

- (a) Comment la Trajectoire est-elle distribuée dans les différents *loci* morphosyntaxiques de la clause ?
- (b) Existe-t-il une variation dialectale entre les participants dans l’utilisation de différents outils morphosyntaxiques et le nombre de *loci* morphosyntaxiques mis à l’œuvre pour décrire la Trajectoire ?

Dans l’ensemble, les données révèlent six schéma de distribution de la Trajectoire, celle-ci pouvant être encodé dans un *locus* jusqu’aux six *loci* morphosyntaxiques ; la distribution de la Trajectoire dans deux *loci*

morphosyntaxiques s'avère être la plus fréquente représentant 31,6% des données ($N=949$). Lorsqu'elle est exprimée dans un élément morphosyntaxique, la Trajectoire peut être encodée soit par le verbe seul (par exemple, *niskanu* 'sortir') soit par un marqueur de cas (par exemple, *-baaTa* 'de'), une postposition (par exemple, *-tira* 'vers') ou bien encore par un élément adverbial (par exemple, *baahira* 'dehors'). Quand elle est exprimée dans deux *loci* morphosyntaxiques, elle peut être distribuée entre le verbe et n'importe quel autre élément grammatical (marqueur de cas ou postposition) ou adverbial et, dans certains cas, son expression peut reposer sur des éléments lexicaux aussi bien que sur des éléments grammaticaux de manière combinée. Pour étudier dans plus de détail la distribution de la Trajectoire, l'expression de différentes parties de la Trajectoire - simples (Source, Médian, But) et complexes (Source-Goal, Médian-Goal et Source-Médian-Goal) - sont examinées séparément.

Concernant tout d'abord les Trajectoires simples, dans l'expression des événements orientés par rapport à la Source, la Trajectoire est distribuée dans un à quatre *loci* morphosyntaxiques, le schéma à trois *loci* morphosyntaxiques étant le plus fréquent (5,7% des données). Dans l'expression des événements orientés par rapport au Médian, la Trajectoire est distribuée dans un à trois *loci* morphosyntaxiques, le schéma à un locus morphosyntaxique étant le plus fréquent (3,5 % des données). Dans les événements orientés par rapport au But, la Trajectoire est distribuée jusqu'à quatre *loci* morphosyntaxiques, le schéma à deux *loci* étant le plus fréquent (22,4% des données).

En ce qui concernant maintenant les Trajectoires complexes, les événements de type Source-But montrent le plus grand nombre de schémas de distribution, allant jusqu'aux six *loci* morphosyntaxiques. Toutefois, la distribution dans deux *loci* morphosyntaxiques est la plus fréquente, soit 6,4 % des données. Dans les événements de type Médian-But, la Trajectoire est typiquement distribuée dans deux ou trois *loci* morphosyntaxiques alors que dans les événements de type Source-Médian-But, elle est distribuée dans trois ou quatre *loci* morphosyntaxiques. Différents éléments lexicaux et/ou grammaticaux peuvent se combiner entre eux pour contribuer à l'expression de la Trajectoire (pour la discussion, voir § 5.4).

L'analyse des données met en lumière les différences notables dans les schémas de distribution mis à l'œuvre dans l'expression de différents types de Trajectoire. Par

exemple, alors que l'expression des événements de type Source-But fait appel à plusieurs schémas de distribution (cinq schémas différents, allant de deux à six *loci* morphosyntaxiques), dans l'expression des événements de type Médian-But on trouve seulement deux schémas de distribution reposant sur trois et quatre *loci* morphosyntaxiques. Par ailleurs, il existe également des variations en termes de fréquence de distribution de la Trajectoire dans différents éléments morphosyntaxiques. Par exemple, dans l'expression des événements orientés par rapport à la partie Médiane, la Trajectoire est le plus fréquemment encodée dans un *locus*, dans les événements orientés par rapport au But, elle est le plus fréquemment distribuée dans deux *loci* morphosyntaxiques, tandis que dans les événements orientés par rapport à la Source et ceux de type Source-But, la distribution dans trois *loci* morphosyntaxique est la plus fréquente. On peut noter que les différences observées ne sont pas dues à la variation dialectale, mais semblent plutôt spécifiques à un type de Trajectoire particulier. Toutefois, quel que soit le schéma utilisé pour encoder la Trajectoire, les données montrent clairement que, tout comme dans l'expression du mouvement causé (cf. chapitre 4), dans l'expression du mouvement spontané aussi, la Trajectoire fait l'objet d'une attention particulière de la part des locuteurs, comme en témoigne la diversité des schémas qu'ils déploient pour la décrire.

Chapitre 6

Ce chapitre vise à étudier les schémas de lexicalisation utilisés dans l'expression du mouvement en népalais et, plus particulièrement, la relation entre les éléments sémantiques de Trajectoire et de Manière et les éléments syntaxiques qui les encodent.

Schéma à cadre verbal

Le schéma de lexicalisation à cadre verbal est attesté aussi bien dans les données descriptives que dans les données narratives. Dans les deux types de données, la question de lexicalisation a été étudiée séparément pour le mouvement causé et le mouvement spontané. Les données descriptives du mouvement causé montrent que dans 81,5 % de descriptions ($N=1158$) la Trajectoire est lexicalisée dans le verbe principal, ce qui représente le schéma à cadre verbal. L'analyse montre par ailleurs que 39 verbes principaux différents lexicalisent la Trajectoire dans la clause principale, encodant soit la Source (par exemple, *haTaaunu* 'enlever'), soit le But (par exemple, *siuranu* 'insérer'), soit le franchissement de frontière (par exemple, *nikaalnu*

'sortir'). Il est à noter qu'aucun verbe lexicalisant le Médian n'a été trouvé dans les données.

Les descriptions du mouvement spontané montrent que 58% des données lexicalisent la Trajectoire dans le verbe principal. Contrairement aux événements du mouvement causé, les trois parties de la Trajectoire sont lexicalisées dans le verbe principal dans l'expression du mouvement spontané ; par exemple, *niklanu* 'sortir', *tarnu* 'traverser' et *prawes garnu* 'entrer' lexicalisent respectivement la Source, la Médian et le But de la Trajectoire. De plus, certains verbes tels que *jharnu* 'descendre' lexicalisent le mouvement vertical et d'autres tels que *pasnu* 'entrer' lexicalisent également le franchissement de frontière. Les deux types de données confirment de manière robuste que, en ce qui concerne la lexicalisation de la Trajectoire, le népalais appartient au type des langues à cadre verbal.

Quant aux données narratives, à l'exception de quelques différences en termes du nombre de descriptions lexicalisant la Trajectoire dans le verbe principal, la tendance est la même dans les deux types d'événements, mouvement causé et mouvement spontanés. Tout comme dans les données descriptives, dans le cas du mouvement causé, la Source et le But sont lexicalisés dans le verbe principal de la clause comme le montrent les verbes *lagnu* 'enlever' qui lexicalise la Source, *dinu* 'donner' qui lexicalise le But et *nikaalnu* 'sortir' qui lexicalise le franchissement de la frontière, toutefois aucun verbe ne lexicalise la partie médiane de la Trajectoire. Au total, 46,9% des données narratives ($N=1860$) lexicalisent la Trajectoire dans l'expression du mouvement causé.

Quant au mouvement spontané, les trois parties de la Trajectoire sont lexicalisées dans le verbe principal de la clause, comprenant la Source (*niskanu* 'sortir'), le Médian (*tarnu* 'traverser') et le But (*pugnu* 'atteindre'). De plus, des verbes tels que *pasnu* 'entrer' et *uklanu* 'monter' lexicalisent respectivement le franchissement de frontière et le mouvement vertical. Au total, les verbes principaux qui lexicalisent la Trajectoire représentent 53,7% des données ($N=1024$) (voir § 6.1.1 pour une discussion plus détaillée).

Schéma à cadre verbal inverse

Les données descriptives des corpus 'Put and Take' et 'Trajectoire' ont révélé l'utilisation d'un autre schéma que nous appelons, suivant Pourcel (2004b) et Pourcel

& Kopecka (2005), cadre verbal inverse encadré (*inverse V-framed pattern*). Celui-ci consiste à encoder l'élément sémantique de Manière dans le verbe principal de la clause et d'exprimer la Trajectoire du mouvement dans un participe conjonctif (CP). Cependant, comparé au schéma à cadre verbal, ce schéma de lexicalisation particulier est moins fréquent dans les données : il représente 0.6% des descriptions du mouvement causé ($N=1158$) et 1.3% des descriptions du mouvement spontané ($N=949$). L'examen des verbes qui se réalisent dans ce type de construction comme verbe principal a permis de montrer que les locuteurs font souvent recours aux verbes impliquant la force (par exemple, *taannu* 'tirer') et l'adhésion (par exemple, *Taa~snu* 'attacher/coller'). Quant aux verbes réalisés à la forme du participe conjonctive, on trouve quelques verbes qui lexicalisent la Source (par exemple, *lagnu* 'enlever'), et le But (par exemple, *lyaaunu* 'apporter'), le franchissement de frontière (par exemple, *nikaalnu* 'sortir') ainsi que les verbes exprimant l'orientation (par exemple, *Tipnu* 'soulever'). On peut noter que les verbes *lyaaunu* 'apporter' et *lagnu* 'emporter' véhiculent un sens déictique et que, en revanche, les données ne révèlent pas de verbes lexicalisant la Trajectoire médiane du mouvement causé.

Dans l'expression du mouvement spontané, on trouve deux verbes lexicalisant la Manière dans la clause principale : *dagurnu* 'courir' et *hi~Dnu* 'marcher'. Quant au participe conjonctif, on y trouve des verbes tels que *niklanu* 'sortir' et *tarnu* 'traverser' qui lexicalisent respectivement la Source (avec le franchissement de frontière) et le médian (avec le franchissement de frontière) ; on peut noter cependant que les données ne révèlent aucun verbe lexicalisant le But dans la forme participiale (voir § 6.1.2 pour la discussion).

Dans les données narratives, le schéma à cadre inverse n'est attesté que dans les événements de mouvement causé représentant 1,1% de l'ensemble du corpus ($N=1860$) ; en effet, les données extraites du corpus NNC n'attestent pas ce schéma dans l'expression du mouvement spontané. Les verbes qui lexicalisent la Manière dans la clause principale incluent, par exemple, *Taa~snu* 'coller' et *phaalnu* 'jeter' décrivant respectivement l'adhésion et la force. Dans la forme non finie du participe conjonctif, on trouve des verbes tels que *lyaaunu* 'apporter' véhiculant le sens déictique et *ucaalnu* 'lever' indiquant le mouvement vertical orienté vers le haut (cf. § 6.2.2).

Lexicalisation de la Manière

Nous avons vu dans les données descriptives et les données narratives que la Trajectoire est souvent exprimée dans le verbe principal de la clause. Comme conséquence, la Manière peut être soit exprimée dans un autre élément de la phrase soit être omise, son expression en dehors du verbe principal n'étant pas obligatoire. Les descriptions du mouvement causé et du mouvement spontané montrent que les locuteurs utilisent différentes stratégies pour exprimer la Manière. Celle-ci peut être exprimée (a) sous la forme d'un participe conjonctif, (b) sous une forme aspectuelle, (c) sous une forme adverbiale et parfois en combinant ces différents stratégies linguistiques.

Dans l'expression de la Manière dans le mouvement causé, on trouve des verbes tels que, par exemple, *dhakelnu* 'pousser' et *ghisaarnu* 'traîner' dans une forme participiale ou aspectuelle et des adverbes tels que *wistaarai* 'lentement' qui se produisent dans le contexte des verbes qui lexicalisent la Trajectoire. Dans l'expression de la Manière dans le mouvement spontané, on trouve, entre autres, les verbes *hi~Dnu* 'marcher', *dauDanu* 'courir' et *pauDanu* 'nager' au participe conjonctif (CP) ou à la forme aspectuelle et des adverbiaux tels que *wistaarai* 'lentement'. Que ce soit le verbe ou un adverbe de Manière, ces expressions compensent l'absence de Manière dans le verbe principal. De façon intéressante, les données montrent également que les locuteurs décrivent la Manière d'une façon plus complexe et plus fine dans l'expression des événements de mouvement spontané en utilisant souvent le participe conjonctive et l'adverbe ensemble, stratégie que nous n'avons pas trouvée dans l'expression des événements de mouvement causé.

En comparant les données descriptives et les données narratives, nous avons pu mettre en lumière le fait que dans les données narratives, on trouve une plus grande diversité de stratégies pour décrire la Manière. En effet, en plus de toutes les stratégies mentionnées ci-dessus, les données narratives révèlent également l'utilisation des idéophones dans l'expression du Manière et ce, aussi bien dans la description du mouvement causé que dans la description du mouvement spontané.

Plus particulièrement, dans l'expression du mouvement causé, on trouve dans la forme participiale ou aspectuelle des verbes tels que *phyaa~knu* 'jeter' et *taannu* 'tirer' entre autres, ainsi que les expressions adverbiales telles que *hataar hataar* 'en

hâte' et *yatnapurwak* 'avec effort'. Dans l'expression du mouvement spontané, on peut noter des formes participiales et aspectuelles des verbes tels que, par exemple, *ghisranu* 'ramper' et *dauDanu* 'courir', des expressions adverbiales telles que *caa~Dai* et *turunta* 'immédiatement' ainsi que les idéophones comme *lusukka* 'secrètement' et *Dangga* 'soudainement' qui se produisent dans le contexte des verbes de Trajectoire pour apporter une information sur la Manière du mouvement.

On peut également noter que, quel que soit le type des données (descriptives ou narratives) ou le type d'événements (causé ou spontané), lorsque le Manière est exprimée par un adverbe ou par un idéophone, une telle construction est syntaxiquement plus simple qu'une construction subordonnée impliquant le participe conjonctif ou une forme aspectuelle et que son coût cognitif semble plus faible par rapport aux constructions qui sont syntaxiquement plus complexes.

A part les expressions de la Manière en dehors du verbe principal, les données contiennent également des exemples où la Manière est lexicalisée dans le verbe principal de la clause et ce, dans les deux types de données. Dans les données descriptives, la lexicalisation de la Manière dans le verbe principal représente 11,7% des données ($N=1158$) dans l'expression du mouvement causé et 32,3% ($N=949$) dans l'expression du mouvement spontané (voir § 6.1.3.1.4 et § 6.1.3.2.4). Quant aux données narratives, la Manière est lexicalisée dans le verbe principal dans 13,2% des descriptions du mouvement causé ($N=1860$) et dans 16,3% des descriptions du mouvement spontané ($N=1024$). Notons également que dans les deux types de données on trouve dans l'expression du mouvement spontané le verbe *caDhnu* 'grimper' qui lexicalise les deux éléments sémantiques, la Manière et la Trajectoire ; ce type de verbe à sémantique complexe n'est pas attesté dans l'expression du mouvement causé.

Chapitre 7. Sémantique spatiale distribuée

Ce chapitre est consacré à l'analyse des expressions spatiales en népalais à la lumière de la Sémantique Spatiale Distribuée, un cadre empirique proposée par Sinha et Kuteva (1995). Nous y étudions l'utilisation des *loci* morphosyntaxiques dans l'expression de la Trajectoire ainsi que la distribution sémantique de la Trajectoire dans la clause, c'est-à-dire le type de composants de la Trajectoire encodés dans différents outils lexicaux et/ou grammaticaux. En népalais, aussi bien dans les

données descriptives que dans les données narratives, l'expression de l'information spatiale est explicitement encodée dans différents éléments lexicaux et grammaticaux montrant des schémas de distribution sémantique redondante et différenciée. Dans le schéma de distribution redondante, le même segment de la Trajectoire (Source, Médian ou But) est pris en charge par différents outils linguistiques, tandis que dans le schéma de distribution différenciée, différents outils linguistiques expriment différents segments de la Trajectoire. Les analyses confirment que le schéma de distribution redondante est plus omniprésent dans les données que le schéma de distribution différenciée.

Schéma de distribution redondante

Dans les données descriptives, la Trajectoire est distribuée de manière redondante dans l'expression des trois parties de la Trajectoire, la Source, le Médian et le But du mouvement. Cependant, il existe une différence notable entre le mouvement causé et le mouvement spontané en ce qui concerne l'expression de la Trajectoire. Dans les événements de mouvement causé, la Trajectoire est distribuée de manière redondante dans l'expression de la Source et du But, tandis que dans les événements de mouvement spontané, elle est distribuée de manière redondante dans l'expression de la partie Médiane, de la Trajectoire verticale ainsi que dans les événements plus complexes de type Source-But. Dans les deux cas, la Trajectoire est distribuée dans deux à quatre *loci* morphosyntaxiques. Le schéma à deux *loci* morphosyntaxique est le plus fréquent et ce, dans les deux types d'événement (causé et spontané), tandis que le schéma à quatre *loci* morphosyntaxiques est le plus redondant. Dans les deux types d'événements, la Trajectoire est exprimée par la sélection simultanée de différents outils linguistiques suivants :

- le verbe, le marqueur de cas et l'adverbe
- le verbe et le marqueur de cas
- le verbe, le marqueur de cas, la postposition et l'adverbe
- le verbe, la postposition et le marqueur de cas.

Rappelons toutefois que dans l'expression des événements de mouvement spontané, l'inventaire des outils linguistiques est plus riche que dans l'expression des événements de mouvement causé.

Dans les données narratives également, l'analyse révèle des schémas de distribution redondante et différenciée dans les deux types d'événements (mouvement causé et mouvement spontané), le schéma de distribution redondante étant le plus fréquent. Ainsi, sont distribués de façon redondante (a) la Source et le But dans les événements de mouvement causé, et (b) la Source, le Médian et le But dans les événements de mouvement spontané, cette distribution redondante pouvant reposer sur deux à quatre *loci* morphosyntaxiques. Ici encore, la distribution de la Trajectoire dans deux *loci* morphosyntaxiques est le schéma le plus fréquent, notamment dans l'expression du But. Les outils linguistiques typiquement impliqués dans ce type d'expression sont le verbe et le marqueur de cas ou le verbe et la postposition ou encore le verbe et l'adverbe. Tout comme dans les données descriptives, dans les données narratives aussi, l'inventaire des outils linguistiques est plus riche dans les événements de mouvement spontané que dans les événements de mouvement causé.

Schéma de distribution différenciée

Le schéma de distribution différenciée se produit à la fois dans les données descriptives et dans les données narratives. Dans les données descriptives, la Trajectoire est distribué de façon différenciée dans l'expression de la Source du mouvement et l'expression des événements de type Source-But. Cependant, dans les descriptions du mouvement causé, la Trajectoire est distribuée de façon différenciée dans l'expression du But du mouvement, tandis que dans l'expression du mouvement spontané ce schéma est absent. De l'autre côté, dans les descriptions du mouvement spontané, la Trajectoire est distribuée de façon différenciée dans l'expression du Médian, des événements de type Médian-Goal et dans l'expression du mouvement vertical, ceci n'étant pas attesté dans les événements de mouvement causé. Dans le schéma de distribution différenciée, la Trajectoire est distribuée dans deux à cinq *loci* morphosyntaxiques, la distribution de la Trajectoire dans trois *loci* morphosyntaxiques que l'on trouve dans la description des événements de type Source-But étant le plus fréquente et la plus différenciée dans les données descriptives.

La distribution sémantique différenciée de la Trajectoire repose sur la combinaison de différents outils appartenant à des catégories morphosyntaxiques différentes, comme illustré ci-dessous :

- le verbe, le marqueur de cas et le marqueur de cas

- le verbe et le marqueur de cas
- le verbe, le marqueur de cas et l'adverbe
- le verbe et l'adverbe
- le verbe, le marqueur de cas, le marqueur de cas et la postposition

Dans les données narratives aussi, la Trajectoire est distribuée de façon différenciée dans deux à quatre *loci* morphosyntaxiques, notamment dans l'expression des événements causé et spontané de type Source-But. Il existe également des cas où la Trajectoire est distribuée de manière différenciée dans l'expression du But et dans l'expression de la Source, mais ces cas de figure sont moins fréquents dans les données. Dans les narrations, la distribution de la Trajectoire peut impliquer les éléments appartenant à la même catégorie ou à des catégories morphosyntaxiques différentes tels que le verbe, la postposition, le marqueur de cas et/ou l'adverbe.

Dans l'ensemble, la Trajectoire de mouvement est distribuée en népalais de façon ouverte (autrement dit explicite) et présente deux schémas différents - une distribution spatiale redondante et une distribution spatiale différenciée - indépendamment du type de données (descriptives et narratives) et du type d'événements (causés et spontanés). Quel que soit le schéma de distribution, redondant ou différencié, différents outils linguistiques expriment explicitement soit la même partie de la Trajectoire (Source, Médian ou But) soit des différentes parties (Source-But).

Chapitre 8. Conclusions et perspectives

Le chapitre 8 résume les résultats des analyses présentées dans les différents chapitres, conclut le travail et propose des perspectives nouvelles pour les recherches futures.

Appendices

Appendix A: The consonant alphabets of Nepali in the Devanagari script

	Voiceless		Voiced		Voiced
	Unaspirated	Aspirated	Unaspirated	Aspirated	Nasals
Velars	क	ख	ग	घ	ङ
	<i>ka</i>	<i>k^ha</i>	<i>ga</i>	<i>g^ha</i>	<i>nga</i>
Palatals	च	छ	ज	झ	ञ
	<i>ca</i>	<i>c^ha</i>	<i>ja</i>	<i>jha</i>	<i>yã</i>
Retroflexes	ट	ठ	ड	ढ	ण
	<i>Ta</i>	<i>Tha</i>	<i>Da</i>	<i>Dha</i>	<i>Na</i>
Dentals	त	थ	द	ध	न
	<i>ta</i>	<i>tha</i>	<i>da</i>	<i>dha</i>	<i>na</i>
Bilabials	प	फ	ब	भ	म
	<i>pa</i>	<i>p^ha</i>	<i>ba</i>	<i>b^ha</i>	<i>ma</i>
<i>antasthas</i> 'remaining inside'	य	र	ल	व	
	<i>y</i>	<i>ra</i>	<i>la</i>	<i>wa</i>	
<i>usmas</i> 'warm'	श	ष	स	ह	
	<i>sha</i>	<i>sʌ</i> or <i>k^h</i>	<i>sʌ</i>	<i>ɦʌ</i>	
Conjuncts or Special clusters	क्ष	त्र	ज्ञ		
	<i>c^hja</i>	<i>tra</i>	<i>dzjã</i>		

Appendix B: The vowel alphabets of Nepali in the Devanagari script

अ	आ	इ	ई	उ	ऊ	ऋ
ʌ	a	i	i:	u	u:	ɹi
ए	ऐ	ओ	औ	अं	अः	
e	ʌi	o	ʌu	ʌ̃	ʌ:	

Appendix C: Video clips depicting placement events

Scene code	Descriptions
001	put cup on table
002	put plastic cup on table with mouth
003	put banana on table with long tongs
004	put armload of books on table
005	put a fistful of rice on a table
006	put box up on shelf
007	put book on floor
008	drop book deliberately onto floor
009	drop book accidentally on floor
010	toss book on floor
011	put apple in bowl
012	drop apple into bag
013	flip block off notepad into bowl
014	put a candle into a candle stand
015	put celery bunch into a recorder case
016	put stone into pocket
017	stuff rag into car exhaust
018	put flower into hair – skewer
019	put stone into pot of water
020	pour liquid into container
021	spill water onto table when pick up glass
022	give a cup to someone
023	put hand into hole in tree
024	put head into a bucket
025	put a hat on head
026	put boot on foot
027	hang rope over tree branch
028	put poster on wall
031	put saucer on top of cup
033	put on coat

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035	put pen in a hole
129	put suitcase out of room, while staying in room

Appendix D: Video clips depicting removal events

Scene code	Descriptions
101	take a cup off a table
102	take plastic cup off table with mouth
104	take armload of books off table
105	take a handful of beans from flat surface
106	take box down from shelf
107	take magazine from floor
111	take orange from box
112	dump blocks out of tin
113	knock over bucket so blocks spill out
115	take a cucumber out a recorder case
116	take stone out of pocket
117	take rag out of car exhaust
118	take flower out of hair - unskewer
119	take stone out of pot of water
120	pour water out of a tin
122	take a coke can from someone
124	take head out of bucket
125	take off hat
127	unhang' rope from tree branch
128	take poster off wall
130	take suitcase out of elevator, going out of room
103	take banana off table with long tongs
114	take a candle out of a candle stand
123	take hand out of hole
126	take off sock
131	take saucer off cup
133	take off coat
135	take pen out a hole

Appendix E: Video clips depicting removal-placement events

Scene code	Descriptions
050	take bag of corn from table and move to chair
051	take apple from pile of books and move to shoe
052	push suitcase from car to tree

Appendix F: Video clips depicting spontaneous Motion events

Scene code	Descriptions
001	Filler_M_pick_fruit_back
002	Filler_M_sleep_side
003	Filler_M_read_book
004	Filler_M_eat_banana
005	Filler_M_feed_ducks
006	Filler_M_drink_water
007	Filler_M_puton_jumper
008	Filler_M_takeoff_jumper
009	Filler_M_footpass_ball_to_F
010	training_M_handpass_ball_to_F
011	Filler_F_give_banana
012	Filler_F_takeoff_cardigan
013	training_F_spread_blanket
014	Filler_F_puton_flipflop
015	Filler_F_sitdown_blanket
016	Filler_F_fold_cloth
017	Filler_F_takeoff_flipflop
018	Filler_F_footpass_ball_to_M
019	Filler_F_comb_hair
020	Filler_F_plait_hair
021	Filler_F_pour_water
022	Path_F_walk_down_into_cave_front
023	Path_F_walk_outof_cave_front
024	Path_F_walk_out_take_walk_into_cave_back
025	Path_F_walk_outof_cave_back
026	Path_M_walk_into_woods_back
027	Path_F_walk_outof_woods_sideRL
028	Path_C_walk_outof_cave_to_sea_sideLR
029	Path_F_walk_outof_cave_up_stairs_back
030	Path_C_walk_outof_cave_toward_C_sideLR

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031	Path_M_run_outof_sea_sideRL
032	Path_F_walk_awayfrom_tree_front
033	Path_F_run_awayfrom_tree_front
034	Path_C_jump_from_stone_run_front
035	Path_M_walk_awayfrom_F_front
036	Path_M_walk_toward_F_back
037	Path_M_run_up_from_river_back
038	Path_F_walk_outof_field_sideRL
039	Path_M_walk_behind_tree_sideLR
040	Path_F_walk_front_tree_sideRL
041	Path_3_walk_under_branch_behind_tree_front
042	Path_C_run_behind_stone_sideLR
043	Path_F_run_behind_tree_sideRL
044	Path_F_run_front_tree-sideLR
045	Path_3_walk_across_bridge_back
046	Path_M_walk_across_bridge_walk_front women_back
047	Path_F_walk_across_bridge_front_man_sideLR
048	Path_F_walk_across_path_sideLR
049	Path_M_walk_across_path_sideRL
050	Path_C_cross_water_sideRL
051	Path_F_cross_field_front
052	Path_F_cross_field_back
053	Path_F_walk_into_cave_back
054	Path_F_walk_into_cave_front
055	Path_M_walk_out_of_woods_front
056	Path_M_walk_into_bush_back
057	Path_F_walk_into_woods_sideLR
058	Path_C_walk_into_cave_sideRL
059	Path_C_run_into_sea_sideRL
060	Path_M_walk_out_cave_pass_walk_into_cave_side
061	Path_F_walk_toward_tree_back
062	Path_C_run_toward_stone_jump_on_stone_sideRL

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063	Path_C_run_toward_stone_jump_over_stone_front
064	Path_C_jump_from_cliff_into_water_sideLR
065	Path_C_walk_up_path_side_LR
066	Path_5_walk_toward_lake_across_road_back
067	Path_C_walk_down_path_front
068	Path_M_walk_front_people_into_cave_back
069	Path_F_walk_into_field_sideLR
070	Path_F_walk_up_stairs_front
071	Path_F_walk_up_stairs_back
072	Path_M_jump_over_tronc_back
073	Path_F_walk_down_to_lake_back
074	Path_F_walk_up_from_lake_front
075	Path_C_jump_from_rock_to_rock_side
076	Path_C_walk_down_rock_front

Appendix G: A sample of motion descriptions transcribed in the Roman script

Scene code	Descriptions produced by one of the the speakers based on the 'Put and Take' video stimuli
116	<i>mailaale aaphno paainTko gojibaaTa kei nikaalin</i>
114	<i>mailaale mainbatti nikaale</i>
027	<i>ekjaanaa mailaale rukhko haa~gaamaa rasi raakhin</i>
117	<i>mailaale gaaNiko saailensarbaaNa kei cij baaira thutin</i>
011	<i>euNaa Tabulmaa raakheko bolmaa phalphul lyaaera raakhin</i>
118	<i>mailaako kapaalbaaNa phulko thungaa nikaalyo</i>
019	<i>euNaa DekcibaaNa Dhungngaa nikaalyo</i>
005	<i>pileTmaa kei khaanikuraa lyaaera raakhyo</i>
022	<i>euNaa leNile arko saathilaai euNaa kap diin</i>
119	<i>euNaa Dekcimaa raheko Dhungngaalaai baaira nikaalyo</i>
135	<i>rukhko phedmaa raheko pwaalbaaNa kei saamaan nikaalyo</i>
102	<i>ekjaanaa leNile Tebulmaa raheko palaasTikko gilaas mukhle uThaain</i>
023	<i>ekjaanaa mailaa rukhko phedmaa rako pwaalmaa haat haalin</i>
020	<i>ekjaanaa mailaale paani lyaaera Dekcimaa khanaain</i>
130	<i>mailaale euNaa byaag liera bhitra chirin</i>
024	<i>ekjaanaa keTaale Tebulmaa rako balTibhitra Taauko haalyo</i>
127	<i>keTaale rukhko haa~gaamaa jhunDaaeko rasi nikaalera lagyo</i>
010	<i>keTaale paNdai gareko kitaab baaira bhu~i~maa phaalyo</i>
009	<i>keTaale khaataapaataa Daaeri bokera aako ekjaanaa bha~i~maa khasaalyo</i>
012	<i>keTaale euNaa syaau plaasTikko jholaamaa haalyo</i>
006	<i>keTaale euNaa Thulo kitaab daraajmaa lyaaera raakhyo</i>
025	<i>usle euNaa kaalo Topi lagaayo</i>
008	<i>mailaale eunNaa kitaab bhu~i~maa raakhin</i>
033	<i>yo keTaale euNaa jyaakeT lagaayo</i>
112	<i>ekjaanaa mailaale euNaa baTTaabaana kei saamaan baaira phaalin</i>
124	<i>ekjaanaa keTile Tebulmaathi raakheko baalTibaaNa</i>

	<i>Taauko baaira nikaalin</i>
106	<i>euNaa kitaab nikaalera lage</i>
018	<i>euNaa phul keTiko kapaalbaaNa nikaalera lage</i>
126	<i>ekjaanaa keTaale moja nikaalyo khuTTaabaana</i>
026	<i>euNaa khuTTaamaa jutaa lagaae</i>
104	<i>Tebulmaa bhaeko kitaab kaakhi cyaapera lera gai</i>
007	<i>euNaa kitaab herera keTile te~i~ choNdi</i>
128	<i>euTaa gho~Naa ra kukur bhako posTar nikaali</i>
021	<i>Tebulmaa bhako kabbaana ciyaa pokhkiyo</i>
004	<i>keTile dherai kitaab kaakhi cyaapera lyaatera Tebalmaa raakhi</i>
125	<i>keTile lagaairaakheko Topi nikaali</i>
123	<i>keTile rukhko phedmaa bhako pwaalmaa kehi raakhi</i>
014	<i>mailaale mainbatti isTyaanmaa mainbatti raakhin</i>
015	<i>euNaa kei saano byaagmaa hariyo kei cij bhitra raakhin</i>
129	<i>mailaale baairako byaag euNaa Dhokaabhitra raakhin</i>
120	<i>saano baTTaabaana paani lyaatera baaira phyaa~ke</i>
103	<i>euNaa keraa Tebulbaana cimTaale samaatera maathi lage</i>
002	<i>mukhmaa cyaapeko gilaa~s Tebulmaa raakhe</i>
017	<i>gaaniko saailensar paaipmaa euNaa kaagaj kocyo</i>
122	<i>leDijle khaairako kei cij choraamaanchele liyo</i>
028	<i>gho~Naa ra kukurko posTar pepar pheri lyaatera Taa~sin</i>
031	<i>pileTle kap chopyo</i>
013	<i>kitaabmaa kei kuraa lyaatera pheri balmaa raakhyo</i>
111	<i>kaarTunbaana euNaa suntaalaa nikaalyo</i>
131	<i>Ti pileT kapmaathi baana baaira raakhyo</i>
131	<i>Ti pileT kapmaathi baana tala raakhyo</i>
016	<i>mailaale kei cij gojibhitra raakhin</i>
107	<i>mailaale euNaa pustak bheTaaera lera gain</i>
101	<i>euNaa kap Tebulmaathibaana lera gae</i>
105	<i>ekjaanaa mailaale kei cij muThibhari liin</i>
003	<i>keTile euTaa keraa cimTaale cyaapera lyaatera Tebalmaa raakhin</i>

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133	<i>keTile aaphno ज्याकेT kholin</i>
035	<i>mailaale rukhko phedmaa bhako pwaalmaa kei cij raakhin</i>
115	<i>euTaa thailibaaTa mailaale bhenTaa nikaalin</i>
001	<i>mailaale ciyaako kap tebulmaathi raakhin</i>
113	<i>euNaa mailaale balTimaa raheko phor laatile hirkaaera palTaain</i>
052	<i>keTaale euNaa byaag ghisaardai utaa lagyo</i>
050	<i>keTile tebulmaa bhako euNaa kapaNaa kurcimaa raakhin</i>
051	<i>kitaabbaaNa euNaa syaau arko Tebulmaa raheko jutaamaathi raakhyo</i>

Appendix H: Verbs of motion extracted from the *Nepali Brihat Shabdakosh* (The Comprehensive Dictionary of Nepali)

N°	Devanagari script	Transcription	English translation	T/I	C/S	N° of occurrences
1	जानु	<i>jaanu</i>	‘to go’	I	S	70815
2	आउनु	<i>aaunu</i>	‘to come’	I	S	48391
3	लिनु	<i>linu</i>	‘to take’	T	C	30084
4	पुग्नु	<i>pugnu</i>	‘to reach’	I	S	23559
5	राख्नु	<i>raakhnu</i>	‘to put’	T	C	22090
6	लगाउनु	<i>lagaauunu</i>	‘to wear’	T	C	11399
7	ल्याउनु	<i>lyaaunu</i>	‘to bring’	T	C	9147
8	हाल्नु	<i>haalnu</i>	‘to put’	T	C	6080
9	चल्नु	<i>calnu</i>	‘to move’	I	S	5533
10	हिँड्नु	<i>hi~Dnu</i>	‘to walk’	I	S	5002
11	उठ्नु	<i>uThnu</i>	‘to get up’	I	S	4977
12	लाउनु	<i>laaunu</i>	‘to wear’	T	S	4220
13	छोड्नु	<i>choDnu</i>	‘to leave’	T	C	4158
14	छाड्नु	<i>chaaDnu</i>	‘to leave’	T	S	3871
15	बोक्नु	<i>boknu</i>	‘to carry’	T	C	3399
16	फर्कनु	<i>pharkanu</i>	‘to return’	I	S	3362
17	पस्नु	<i>pasnu</i>	‘to enter’	T	S	3219
18	निस्कनु	<i>niskanu</i>	‘to exit’	I	S	2971
19	लग्नु	<i>lagnu</i>	‘to take away’	T	C	2748
20	खोल्नु	<i>kholnu</i>	‘to open’	T	C	2744
21	निकाल्नु	<i>nikaalnu</i>	‘to take out’	T	C	2677
22	सानु	<i>saarnu</i>	‘to plant’	T	S	2134
23	भाग्नु	<i>bhaagnu</i>	‘to escape’	I	S	1741
24	चिन्नु	<i>cinnu</i>	‘to know’	T	C	1698
25	लानु	<i>laanu</i>	‘to take away’	T	C	1552

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26	लडनु	<i>laDnu</i>	'to fall down'	T	S	1489
27	लैजानु	<i>laijaanu</i>	'to take away'	T	C	1412
28	सर्नु	<i>sarnu</i>	'to move'	I	S	1409
29	घुम्नु	<i>ghumnu</i>	'to move around'	I	S	1340
30	फेर्नु	<i>phernu</i>	'to change'	T	C	1226
31	झिक्नु	<i>jhiknu</i>	'to take out'	T	C	1217
32	उडनु	<i>uDnu</i>	'to fly'	I	S	1203
33	बग्नु	<i>bagnu</i>	'to flow'	T	S	989
34	झर्नु	<i>jharnu</i>	'to fall'	I	S	941
35	डुब्नु	<i>Dubnu</i>	'to sink'	I	S	870
36	खस्नु	<i>khasnu</i>	'to fall'	I	S	782
37	छिर्नु	<i>chirnu</i>	'to enter'	I	S	768
38	नाच्नु	<i>naacnu</i>	'to dance'	I	S	755
39	टिप्नु	<i>Tipnu</i>	'to pick up'	T	C	751
40	हटनु	<i>haTnu</i>	'to leave a place'	I	S	746
41	पोख्नु	<i>pokhnu</i>	'to spill'	T	C	704
42	लुटनु	<i>luTnu</i>	'to take by force'	T	C	698
43	भित्रिनु	<i>bhitrinu</i>	'to enter'	I	S	631
44	थुन्नु	<i>thunnu</i>	'to keep inside'	T	C	629
45	खोस्नु	<i>khosnu</i>	'to grab'	T	C	563
46	उतार्नु	<i>utaarnu</i>	'to take out'	T	C	544
47	नाघ्नु	<i>naaghnu</i>	'to cross'	T	S	533
48	फाल्नु	<i>phaalnu</i>	'to throw'	T	C	528
49	खिच्नु	<i>khicnu</i>	'to draw'	T	C	471
50	छर्नु	<i>charnu</i>	'to scatter'	T	C	405

51	झार्नु	<i>jhaarnu</i>	‘to cause to fall’	T	C	368
52	थिच्नु	<i>thicnu</i>	‘to press’	T	C	334
53	उचाल्नु	<i>ucaalnu</i>	‘to lift’	T	C	326
54	भाँच्नु	<i>bhaa~cnu</i>	‘to break’	T	C	301
55	दगुर्नु	<i>dagurnu</i>	‘to run’	I	S	277
56	तर्नु	<i>tarnu</i>	‘to cross’	T	S	265
57	धकेल्नु	<i>dhakelnu</i>	‘to push’	T	C	255
58	दौडिनु	<i>dauDinu</i>	‘to run’	I	S	250
59	हाँक्नु	<i>haa~knu</i>	‘to drive’	T	S	232
60	दौडनु	<i>dauDanu</i>	‘to run’	I	S	227
61	डुल्नु	<i>Dulnu</i>	‘to move around’	I	S	223
62	फ्याँक्नु	<i>phyaa~knu</i>	‘to throw’	T	C	218
63	लखेट्नु	<i>lakheTnu</i>	‘to chase’	T	C	197
64	धाउनु	<i>dhaaunu</i>	‘to follow closely’	I	S	195
65	बिसाउनु	<i>bisaaunu</i>	‘to rest’	T	C	193
66	कुद्नु	<i>kudnu</i>	‘to rush’	I	S	188
67	ओर्लनु	<i>orlanu</i>	‘to descend’	I	S	185
68	उछिन्नु	<i>uchinnu</i>	‘to take over’	I	S	184
69	उदाउनु	<i>udaaunu</i>	‘to rise’	I	S	184
70	उत्रनु	<i>utranu</i>	‘to get off’	I	S	174
71	खोतल्नु	<i>khotalnu</i>	‘to search’	T	C	173
72	खसाल्नु	<i>khasaalnu</i>	‘to drop’	T	C	170
73	काढनु	<i>kaaDhnu</i>	‘to extract’	T	C	151
74	उकास्नु	<i>ukaasnu</i>	‘to raise’	T	C	149
75	गिर्नु	<i>girnu</i>	‘to fall’	T	S	148
76	उघार्नु	<i>ughaarnu</i>	‘to open’	T	C	144
77	छिचोल्नु	<i>chicolnu</i>	‘to cross’	T	S	138
78	फुकाल्नु	<i>phukaalnu</i>	‘to take off’	T	C	129

79	मोड्नु	<i>moDnu</i>	‘to change the direction’	T	C	128
80	फिर्नु	<i>phirnu</i>	‘to return’	I	S	119
81	उखेल्नु	<i>ukhelnu</i>	‘to take out’	T	C	108
82	भासिनु	<i>bhaasinu</i>	‘to sink’	I	S	104
83	ओसारिनु	<i>osaarnu</i>	‘to take turn by turn’	T	C	103
84	ओराल्नु	<i>oraalnu</i>	‘to cause to descend’	T	C	102
85	घुस्नु	<i>ghusnu</i>	‘to get into’	T	S	100
86	घुसार्नु	<i>ghusaarnu</i>	‘to cause to get into’	T	C	94
87	हानिनु	<i>haaninu</i>	‘to go in a hurry’	I	S	93
88	ओइरिनु	<i>oirinu</i>	‘to drop’	T	C	91
89	चहार्नु	<i>cahaarnu</i>	‘to move around’	I	S	84
90	कोच्नु	<i>kocnu</i>	‘to put’	T	C	78
91	तार्नु	<i>taarnu</i>	‘to cause to cross’	T	C	77
93	उक्लनु	<i>uklanu</i>	‘to ascend’	I	S	72
94	लुछनु	<i>luchnu</i>	‘to pull out by force’	T	C	71
95	उभड्नु	<i>ubhaDnu</i>	‘to come up’	I	S	66
96	किच्नु	<i>kicnu</i>	‘to press’	T	C	61
97	उछिड्दिनु	<i>uchiTTinu</i>	‘to be flicked’	I	S	59
98	धपाउनु	<i>dhapaaunu</i>	‘to chase’	T	C	59
99	लम्कनु	<i>lamkanu</i>	‘to walk fast’	I	S	55
100	खन्याउनु	<i>khanyaauunu</i>	‘to pour’	T	C	53

101	घिसार्नु	<i>ghisaarnu</i>	‘to pull’	T	C	52
102	हुल्लु	<i>hulnu</i>	‘to keep inside’	T	C	52
103	उफ्रनु	<i>uphranu</i>	‘to jump’	I	S	50
104	भौतारिनु	<i>bhau~taarinu</i>	‘to roam’	I	S	47
105	ठेल्लु	<i>Thehnu</i>	‘to push’	T	C	43
106	होम्नु	<i>homnu</i>	‘to put’	T	C	42
107	खियाउनु	<i>khiyaaunu</i>	‘to row’	T	CS	38
108	बहनु	<i>bahanu</i>	‘to flow’	I	S	37
109	उल्लिटनु	<i>ulTinu</i>	‘to overturn’	I	C	35
110	फाँडनु	<i>phaa~Dnu</i>	‘to cut’	T	C	33
111	घचेटनु	<i>ghaceTnu</i>	‘to push’	T	C	32
112	बर्सनु	<i>barsanu</i>	‘to fall’	I	S	32
113	झम्टनु	<i>jhamTanu</i>	‘to attack’	T	S	31
114	उधिनु	<i>udhinnu</i>	‘to take out’	T	C	30
115	उगालनु	<i>uraalnu</i>	‘to throw’	T	C	30
116	निकलनु	<i>niklanu</i>	‘to come out’	I	S	30
117	चिप्लनु	<i>ciplanu</i>	‘to slip’	I	S	29
118	लोटनु	<i>loTnu</i>	‘to fall down’	I	S	26
119	खस्कनु	<i>khaskanu</i>	‘to come/fall down’	I	S	25
120	उकालनु	<i>ukaalnu</i>	‘to cause to ascend’	T	C	24
121	कातनु	<i>kaatnu</i>	‘to spin’	T	C	24
122	लगार्नु	<i>laghaarnu</i>	‘to chase’	T	C	24
123	लछार्नु	<i>lachaarnu</i>	‘to drag along by force’	T	C	24
124	फुत्कनु	<i>phutkanu</i>	‘to escape’	I	S	23

125	उर्लनु	<i>urlanu</i>	‘to surge up’	I	S	22
126	थचार्नु	<i>thacaarnu</i>	‘to make sit down violently’	T	C	19
127	लतार्नु	<i>lataarnu</i>	‘to drag’	T	C	19
128	बत्तिनु	<i>battinu</i>	‘go astray’	I	S	18
129	टहल्लु	<i>Tahalnu</i>	‘to roam around’	I	S	16
130	हल्लनु	<i>hallanu</i>	‘to move’	I	S	15
131	चोप्नु	<i>copnu</i>	‘to dip’	T	C	14
132	डनु	<i>Dagnu</i>	‘to leave the place’	I	S	14
133	पसाउनु	<i>pasaauunu</i>	‘to cause to enter’	T	C	13
134	जाक्नु	<i>jaaknu</i>	‘to put by force’	T	C	12
135	धर्नु	<i>dharnu</i>	‘to put’	T	C	12
136	पौडनु	<i>pauDanu</i>	‘to swim’	I	S	12
137	अँचेटनु	<i>a~ceTnu</i>	‘to push’	T	C	10
138	उधार्नु	<i>udhaarnu</i>	‘to take out’	T	C	10
139	चोपल्लु	<i>copalnu</i>	‘to sink’	T	C	9
140	फिटनु	<i>phiTnu</i>	‘to mix’	T	C	9
141	बराल्लु	<i>baraalnu</i>	‘to mislead’	T	C	9
142	मुडनु	<i>muDnu</i>	‘to shave’	T	C	9
143	पसाल्लु	<i>pasaalnu</i>	‘to cause to enter’	T	C	8
144	फट्कार्नु	<i>phaTkaarnu</i>	‘to move quickly’	T	C	8
145	कोरल्लु	<i>koralnu</i>	‘to hatch’	T	C	7
146	पन्साउनु	<i>pansaaunu</i>	‘to remove’	T	C	7
147	घिच्च्याउनु	<i>ghiccyaauunu</i>	‘to pull forcibly’	T	C	6

148	झुल्कनु	<i>jhulkanu</i>	‘to rise’	I	S	6
149	लत्रनु	<i>latranu</i>	‘to fall’	I	S	6
150	खाप्नु	<i>khaapnu</i>	‘to put one thing on top of another’	T	C	5
151	घस्रनु	<i>ghasranu</i>	‘to crawl’	I	S	5
152	तर्कनु	<i>tarkanu</i>	‘to get out of the way’	I	S	5
153	कोट्टिनु	<i>koTTinu</i>	‘to get scratched’	I	C	4
154	ड्याक्नु	<i>ngyaaknu</i>	‘to throw by catching in the neck’	T	C	4
155	अफाल्नु	<i>aphaalnu</i>	‘to throw’	T	C;	3
156	उल्टनु	<i>ulTanu</i>	‘to reverse’	I	C	3
157	घुस्रनु	<i>ghusranu</i>	‘to get into’	I	S	3
158	डाँक्नु	<i>Daa~knu</i>	‘to cross’	T	S	3
159	निहुरनु	<i>nihuranu</i>	‘to bow one’s head’	I	S	3
160	पथार्नु	<i>padhaarnu</i>	‘to come’	I	S	3
161	फड्कनु	<i>phaDkanu</i>	‘to jump’	T	S	3
162	लच्चनु	<i>lackau</i>	‘to sway’	I	S	3
1613	अन्मारिनु	<i>anmarinu</i>	‘to come or go’	I	S	2
164	आफल्नु	<i>aaphalnu</i>	‘to throw’	T	C	2
165	उघाउनु	<i>ughaaunu</i>	‘to take out’	T	C	2
166	कोचार्नु	<i>kocaarnu</i>	‘to put’	T	C	2
167	खँदार्नु	<i>kha~daarnu</i>	‘to put’	T	C	2
168	खाम्नु	<i>khaamnu</i>	‘to cause to go into’	T	C	2
169	छड्कनु	<i>chaDkanu</i>	‘to escape’	I	S	2

170	ढेप्नु	<i>Dhepnu</i>	‘to push’	T	C	2
171	भङ्कनु	<i>bhaDkanu</i>	‘to jump’	I	S	2
172	रिँनु	<i>ri~gnu</i>	‘to move around’	I	S	2
173	लर्कनु	<i>larkanu</i>	‘to return’	I	S	2
174	हेल्लु	<i>helnu</i>	‘to cause to go into water/river’	T	C	2
175	अन्भरिनु	<i>anbharinu</i>	‘to go’/‘to come’	I	S	1
176	उप्कनु	<i>upkanu</i>	‘to come out’	I	S	1
177	ओइरनु	<i>oiranu</i>	‘to put’	T	C	1
178	घसेटनु	<i>ghaseTnu</i>	‘to pull’	T	C	1
179	घिच्चिकनु	<i>ghickinu</i>	‘to get pulled’	I	S	1
180	घिसनु	<i>ghisranu</i>	‘to crawl’	I	S	1
181	घुईकिनु	<i>ghui~kinu</i>	‘to go in high speed’	I	S	1
182	घोक्याउनु	<i>ghokryaaunu</i>	‘to push someone holding him/her in the neck’	T	C	1
183	चोबल्लु	<i>cobalnu</i>	‘to dip’	T	C	1
184	चोभ्नु	<i>cobhnu</i>	‘to dip’	T	C	1
185	छिचल्लु	<i>chicalnu</i>	‘to pass through’	T	S	1
186	छिरल्लु	<i>chiralnu</i>	‘to scatter’	T	C	1
187	पहुँल्लु	<i>pahu~cnu</i>	‘to reach’	I	S	1
188	बत्ताउनु	<i>battaaunu</i>	‘to winnow’	I	C	1

189	मडार्नु	<i>maDaarnu</i>	‘to flow with force’	T	S	1
190	मसिन्याउनु	<i>masinyaaunu</i>	‘to make small, thin or fine’	T	C	1
191	अन्भनु	<i>anbhanu</i>	‘to depart’	I	S	0
192	उक्कनु	<i>ukkanu</i>	‘to come out’	I	S	0
193	उखाड्नु	<i>ukhaaDnu</i>	‘to remove’	T	C	0
194	उचेर्नु	<i>ucernu</i>	‘to take out’	T	C	0
195	उझिन्डिनु	<i>ujhinDinu</i>	‘to be hung’	I	S	0
196	उझिन्ड्याउनु	<i>ujhinDyaaunu</i>	‘to hang’	T	C	0
197	ओट्नु	<i>oTnu</i>	‘to take out’	T	C	0
198	ओर्कनुफर्कनु	<i>orkhanupharkanu</i>	‘to turn this side or that side’	T	S	0
199	ओल्तनु	<i>olTanu</i>	‘to turn to one side’	I	S	0
200	कोचेलनु	<i>kocelnu</i>	‘to mix’	T	C	0
201	खतेर्नु	<i>khaternu</i>	‘to pile up’	T	C	0
202	खत्तिनु	<i>khattinu</i>	‘to get spilled’	I	S	0
203	खप्कनु	<i>khapkanu</i>	‘to fill up’	T	C	0
204	खप्टनु	<i>khapTanu</i>	‘to put’	T	C	0
205	खम्कनु	<i>khamkanu</i>	‘to put’	T	C	0
206	गुड्कनु	<i>guDkanu</i>	‘to roll; to walk’	I	S	0
207	गुमर्क्याउनु	<i>gumarkyaaunu</i>	‘to take out’	T	C	0
208	घर्कनु	<i>gharkanu</i>	‘to escape’	I	S	0
209	घसार्नु	<i>ghasaarnu</i>	‘to pull’	T	C	0
210	घहिनु	<i>ghaharinu</i>	‘to escape’	I	S	0
211	घस्कनु	<i>ghaskanu</i>	‘to go’	I	S	0

212	घिरिनु	<i>ghirrinu</i>	‘to get pulled’	I	C	0
213	घिरयाउनु	<i>ghirryaunu</i>	‘to pull’	T	C	0
214	घिस्सिनु	<i>ghissinu</i>	‘to get pulled’	I	CS	0
215	घुचेटनु	<i>ghuceTnu</i>	‘to push’	T	C	0
216	घुच्याउनु	<i>ghuccyaunu</i>	‘to push’	T	C	0
217	टप्कनु	<i>Tapkanu</i>	‘to drip; to come’	I	S	0
218	ठासुनु	<i>Thaasnu</i>	‘to put’	T	C	0
219	ठेसुनु	<i>Thesnu</i>	‘to put’	T	C	0
220	तप्कनु	<i>tapkanu</i>	‘to drip’	I	S	0
221	धड्कनु	<i>dhaDkanu</i>	‘lit. to beat’	I	S	0
222	धपेडनु	<i>dhapeDnu</i>	‘to chase’	T	C	0
223	धाप्नु	<i>dhaapnu</i>	‘to jump’	T	S	0
223	नुगाउनु	<i>nugaaunu</i>	‘to bend down’	T	C	0
224	पछाउनु	<i>pachaaunu</i>	‘to follow’	I	S	0
225	फाँकुनु	<i>phaa~knu</i>	‘to put’	T	C	0
226	फाँज्नु	<i>phaa~jnu</i>	‘to scatter’	T	C	0
227	फुक्लनु	<i>phuklanu</i>	‘to come out’	I	S	0
228	बर्कनु	<i>barkanu</i>	‘to get scattered’	I	S	0
229	बल्याउनु	<i>balyaunu</i>	‘to cut’	T	C	0
230	बहकनु	<i>bahakanu</i>	‘to wander’	I	S	0
231	बेढाउनु	<i>beDhaaunu</i>	‘to take out’	T	C	0
232	भर्कनु	<i>bharkanu</i>	‘to run’	I	S	0
233	मल्कनु	<i>malkanu</i>	‘to walk’	I	S	0
234	मुठिनु	<i>muThinu</i>	‘to be taken in palm’	I	C	0

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235	मुठ्याउनु	<i>muThyaaunu</i>	‘to take out in palm’	T	C	0
236	रङ्कनु	<i>raDkanu</i>	‘to slip away’	I	S	0
237	रेल्लु	<i>relnu</i>	‘to push’	T	C	0
238	लँगाडाउनु	<i>la~gaDaaunu</i>	‘to stagger’	I	S	0
239	लस्कनु	<i>laskanu</i>	‘to walk’	I	S	0
240	वर्कनु	<i>warkanu</i>	‘to return’	I	S	0
241	सट्कनु	<i>saTkanu</i>	‘to run away’	I	S	0
242	सिधार्नु	<i>sidhaarnu</i>	‘to walk’	I	S	0
243	सुइँकनु	<i>sui~kanu</i>	‘to run away’	I	S	0
244	सुल्कनु	<i>sulkanu</i>	‘to go’	I	S	0
245	हुच्चनु	<i>huccanu</i>	‘to throw’	T	C	0
246	हुरेल्लु	<i>hurelnu</i>	‘to put’	T	C	0
247	हुरदुराउनु	<i>hurduraaunu</i>	‘to run’	I	S	0

Appendix I: Verbs of motion used to extract 50 sentences each from the NNC

Number	Devanagari script	Transcription	English translation
1	आउनु	<i>aaunu</i>	'to come'
2	अड्याउनु	<i>aDyaaunu</i>	'to put for a while'
3	चढनु	<i>caDhnu</i>	'to climb'
4	छानु	<i>chaannu</i>	'to choose/filter'
5	छिर्नु	<i>chirnu</i>	'to enter'
6	छोडनु	<i>choDnu</i>	'to leave'
7	छोप्नु	<i>chopnu</i>	'to cover'
8	दौडनु	<i>dauDanu</i>	'to run'
9	ढाक्नु	<i>Dhaaknu</i>	'to cover'
10	दिनु	<i>dinu</i>	'to give'
11	डुबाउनु	<i>Dubaaunu</i>	'to dip'
12	डुल्नु	<i>Dulnu</i>	'to walk'
13	घुम्नु	<i>ghumnu</i>	'to walk'
14	घुसानु	<i>ghusaarnu</i>	'to cause to enter'
15	हाल्नु	<i>haalnu</i>	'to put'
16	हटाउनु	<i>haTaaunu</i>	'to remove'
17	हिँडनु	<i>hi~Dnu</i>	'to walk'
18	जानु	<i>jaanu</i>	'to go'
19	झर्नु	<i>jharnu</i>	'to descend'
20	झिक्नु	<i>jhiknu</i>	'to take out'
21	जोडनु	<i>joDnu</i>	'to attach; fix'
22	खसाल्नु	<i>khasaalnu</i>	'to drop'
23	खस्नु	<i>khasnu</i>	'to fall'
24	खोल्नु	<i>kholnu</i>	'to open; take off'
25	कोच्नु	<i>kocnu</i>	'to put'
26	लडनु	<i>laDnu</i>	'to fall down'
27	लगाउनु	<i>lagaauunu</i>	'to wear'
28	लगनु	<i>lagnu</i>	'to take away'

29	लिनु	<i>linu</i>	'to take'
30	लुकाउनु	<i>lukaauunu</i>	'to hide'
31	नाघनु	<i>naaghnu</i>	'to cross'
32	निकालनु	<i>nikaalnu</i>	'to take out'
33	निस्कनु	<i>niskanu</i>	'to exit'
34	ओर्लनु	<i>orlanu</i>	'to descend'
35	पल्टाउनु	<i>palTaaunu</i>	'to turn upside down'
36	पसनु	<i>pasnu</i>	'to enter'
37	फालनु	<i>phaalnu</i>	'to throw'
38	फर्कनु	<i>pharkanu</i>	'to return'
39	फुकालनु	<i>phukaalnu</i>	'to take off'
40	फ्याँकु	<i>phyaa~knu</i>	'to throw'
41	पुनु	<i>pugnu</i>	'to reach'
42	राखनु	<i>raakhnu</i>	'to put'
43	सानु	<i>saarnu</i>	'to move'
44	टाँसु	<i>Taa~snu</i>	'to glue'/'to stick'
45	तानु	<i>taannu</i>	'to pull'
46	तर्नु	<i>tarnu</i>	'to cross'
47	टिप्नु	<i>Tipnu</i>	'to pick up'
48	उचालनु	<i>ucaalnu</i>	'to lift'
49	उघार्नु	<i>ughaarnu</i>	'to open'
50	उक्लनु	<i>uklanu</i>	'to ascend'
51	उतार्नु	<i>utaarnu</i>	'to take off'
52	उठाउनु	<i>uThaaunu</i>	'to pick up'
53	ल्याउनु	<i>lyaaunu</i>	'to bring'

Appendix J: Main verbs used in the expression of CME

Number	Main verb	English translation	Total occurrences
1	<i>raakhnu</i>	‘to put’	357
2	<i>nikaalnu</i>	‘to take out’	199
3	<i>lagaauunu</i>	‘to wear’	58
4	<i>lagnu</i>	‘to take away’	39
5	<i>jhiknu</i>	‘to take out’	37
6	<i>khanyaaunu</i>	‘to pour’	31
7	<i>uThaaunu</i>	‘to pick up’	31
8	<i>jaanu</i>	‘to go’	29
9	<i>dinu</i>	‘to give’	27
10	<i>phyaa~knu</i>	‘to throw’	21
11	<i>linu</i>	‘to take’	19
12	<i>hi~Dnu</i>	‘to walk’	18
13	<i>phaalnu</i>	‘to throw’	18
14	<i>Other than verbs of Motion</i>		18
15	<i>kholnu</i>	‘to open’	16
16	<i>khasaalnu</i>	‘to drop’	14
17	<i>Taa~snu</i>	‘to paste’	14
18	<i>haalnu</i>	‘to put’	12
19	<i>saarnu</i>	‘to move’	11
20	<i>chiraaunu</i>	‘to cause to enter’	10
21	<i>Dubaaunu</i>	‘to dip into’	10
22	<i>khasnu</i>	‘to fall down’	9
23	<i>chopnu</i>	‘to cover’	8
24	<i>jhunDyaaunu</i>	‘to hang’	8
25	<i>phukaalnu</i>	‘to take off’	8
26	<i>pokhnu</i>	‘to spill’	8
27	<i>Dhaaknu</i>	‘to cover’	7

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28	<i>pokhinu</i>	‘to get spilled’	7
29	<i>kocnu</i>	‘to put’	6
30	<i>ucaalnu</i>	‘to lift’	6
31	<i>palTaaunu</i>	‘to cause to fall’	5
32	<i>Tipnu</i>	‘to pick up’	5
33	<i>samaatnu</i>	‘to hold’	4
34	<i>siuranu</i>	‘to insert’	4
35	<i>boknu</i>	‘to carry’	3
36	<i>chirnu</i>	‘to enter’	3
37	<i>Dhalaanu</i>	‘to cause to fall’	3
38	<i>ghusaarnu</i>	‘to insert’	3
39	<i>laaunu</i>	‘to wear’	3
40	<i>niskanu</i>	‘to exit’	3
41	<i>puryaaunu</i>	‘to cause to reach’	3
42	<i>taannu</i>	‘to pull’	3
43	<i>aDkaaunu</i>	‘to cause to stick’	2
44	<i>aDyaaunu</i>	‘to put’	2
45	<i>banaaunu</i>	‘to make’	2
46	<i>chiralnu</i>	‘to scatter’	2
47	<i>choDaaunu</i>	‘to take off’	2
48	<i>cobnu</i>	‘to dip’	2
49	<i>dekhaaunu</i>	‘to show’	2
50	<i>garnu</i>	‘to do’	2
51	<i>jharnu</i>	‘to fall down’	2
52	<i>joDnu</i>	‘to add’	2
53	<i>kaaDhnu</i>	‘to take off’	2
54	<i>hasaaunu</i>	‘to cause to fall’	2
55	<i>kocaarnu</i>	‘to put’	2
56	<i>milaaunu</i>	‘to arrange’	2
57	<i>Taalnu</i>	‘to patch up’	2
58	<i>thutnu</i>	‘to pull’	2
59	<i>utaarnu</i>	‘to take off’	2

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60	<i>aaunu</i>	‘to come’	1
61	<i>basnu</i>	‘to sit’	1
62	<i>chaaDnu</i>	‘to leave’	1
63	<i>chaannu</i>	‘to choose’	1
64	<i>choDnu</i>	‘to leave’	1
65	<i>chuTTYaaunu</i>	‘to separate’	1
66	<i>cobalnu</i>	‘to dip’	1
67	<i>cyaapnu</i>	‘to press’	1
68	<i>Dhaalnu</i>	‘to cause fo fall’	1
69	<i>dhakelnu</i>	‘to push’	1
70	<i>ghisaarnu</i>	‘to drag’	1
71	<i>haannu</i>	‘to hit’	1
72	<i>haTaaunu</i>	‘to remove’	1
73	<i>hu~i~kyaaunu</i>	‘to throw in a specific way’	1
74	<i>laagnu</i>	‘to stick’	1
75	<i>laDnu</i>	‘to fall’	1
76	<i>laNaaunu</i>	‘to cause to fall’	1
77	<i>lukaunu</i>	‘to hide’	1
78	<i>lyaaunu</i>	‘to bring’	1
79	<i>niklanu</i>	‘to exit’	1
80	<i>palTanu</i>	‘to fall’	1
81	<i>pokhaunu</i>	‘to spill’	1
82	<i>rittyaunu</i>	‘to empty’	1
83	<i>saknu</i>	‘to finish’	1
84	<i>ughaarnu</i>	‘to open’	1
85	<i>ukkaunu</i>	‘to uproot’	1
Total			1158

Appendix K: Main verbs used in the expression of SME

Number	Verbs	English translation	Total
1	<i>jaanu</i>	‘to go’	201
2	<i>hi~Dnu</i>	‘to walk’	197
3	<i>aaunu</i>	‘to come’	78
4	<i>niskanu</i>	‘to exit’	56
5	<i>dauDanu</i>	‘to run’	51
6	<i>pasnu</i>	‘to enter’	45
7	<i>chirnu</i>	‘to enter’	40
8	<i>paar garnu</i>	‘to cross’	27
9	<i>Empty slots (due to the use of English in the main verb slot)</i>		24
10	<i>caDhnu</i>	‘to ascend’	22
11	<i>hernu</i>	‘to look’	19
12	<i>laagnu</i>	‘to feel’/ ‘to go’	14
13	<i>jharnu</i>	‘to descend’	13
14	<i>pharkanu</i>	‘to return’	13
15	<i>agaaDi baDhnu</i>	‘to go ahead’	12
16	<i>haam phaalnu</i>	‘to jump’	12
17	<i>prawes garnu</i>	‘to enter’	12
18	<i>dagurnu</i>	‘to run’	11
19	<i>niklanu</i>	‘to exit’	10
20	<i>phaDkanu</i>	‘to jump	10
21	<i>tarnu</i>	‘to cross’	8
22	<i>naaghnu</i>	‘to pass’	6
23	<i>uphranu</i>	‘to jump’	6
24	<i>kudnu</i>	‘to rush’	5
25	<i>ubhinu</i>	‘to stand up’	5
26	<i>uklanu</i>	‘to ascend’	5
27	<i>pauDi khelnu</i>	‘to swim’	4
28	<i>pugnu</i>	‘to reach’	4
29	<i>basnu</i>	‘to sit’	3
30	<i>khelnu</i>	‘to play’	3

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31	<i>pauDanu</i>	‘to swim’	3
32	<i>abhyaas garnu</i>	‘to practise’	2
33	<i>baaTo kaaTnu</i>	‘to cross the road’	2
34	<i>bhaagnu</i>	‘to escape’	2
35	<i>ghumnu</i>	‘to wander’	2
36	<i>orlanu</i>	‘to descend’	2
37	<i>uThaaunu</i>	‘to pick up’	2
38	<i>yataautaa garnu</i>	‘to move here and there’	2
39	<i>awalokan garnu</i>	‘to observe’	1
40	<i>bheT hunu</i>	‘to meet’	1
41	<i>bheTinu</i>	‘to be found’	1
42	<i>bheTnu</i>	‘to meet’	1
43	<i>Dubulki maarnu</i>	‘to plunge’	1
44	<i>Dulnu</i>	‘to walk about’	1
45	<i>gaph garnu</i>	‘to talk’	1
46	<i>kaaTnu</i>	‘to cross’/ ‘to cut’	1
47	<i>khojnu</i>	‘to search’	1
48	<i>kuraa garnu</i>	‘to talk’	1
49	<i>moDinu</i>	‘to be turned’	1
50	<i>naapnu</i>	‘to measure’	1
51	<i>phaal haalnu</i>	‘to jump’	1
52	<i>ramaaunu</i>	‘to rejoice’	1
53	<i>thaalnu</i>	‘to begin’	1
54	<i>yaatraa garnu</i>	‘to travel’	1
Total			949

Appendix L: Modifiers used in CME and SME in narrative data

Type of Modifiers	Manner component	Modifiers	English translation
Adverbial	Attitude	<i>andhaadhundha</i>	'without taking care of'
Adverbial	Attitude	<i>maryaadaapurwak</i>	'with honour'
Adverbial	Attitude	<i>majaasita</i>	'with fun'
Adverbial	Attitude	<i>raamrari</i>	'well'
Adverbial	Attitude	<i>saa~ccikai</i>	'really'
Adverbial	Attitude	<i>nirdostaapurwak</i>	'innocently'
Adverbial	Attitude	<i>khissa</i>	'in a way one smiles'
Adverbial	Attitude	<i>sajilari</i>	'easily'
Adverbial	Attitude	<i>phurtisaath</i>	'in a smart way'
Adverbial	Attitude	<i>dhumdhaam sita</i>	'in a grand way'
Adverbial	Attitude	<i>jatansaath</i>	'carefully'
Adverbial	Attitude	<i>ghaa~Tighaa~Ti</i>	'as if something has come to the throat level'
Adverbial	Continuity	<i>dhamaadham</i>	'without stopping'
Adverbial	Effort	<i>joD sa~ga</i>	'with effort'
Adverbial	Effort	<i>prayatnapurwak</i>	'with effort'
Adverbial	Effort	<i>ballaballa</i>	'with difficulty'
Adverbial	Effort	<i>ballatalla</i>	'with difficulty'
Adverbial	Effort	<i>kaThinaai sa~ga</i>	'with difficulty'
Adverbial	Effort	<i>kaThinaaikaasaat h</i>	'with difficulty'
Adverbial	Effort	<i>balpurwak</i>	'forcefully'
Adverbial	Hurry	<i>hattapatta</i>	'in a hurry'
Adverbial	Hurry	<i>hataar hataar</i>	'in a haste'

Adverbial	Noise/lack of noise	<i>luruluru</i>	'meekly'/'tamely'
Adverbial	Noise/lack of noise	<i>cupcaap</i>	'silently'
Adverbial	Posture	<i>jurukjuruk</i>	'in a way one gets up'
Adverbial	Posture	<i>jhyaa~ikuTiko sailimaa</i>	'in a way one is carried holding by head and legs'
Adverbial	Simultaneity	<i>ekaisaath</i>	'at the same time'
Adverbial	Slowness	<i>sustasa~ga</i>	'slowly'
Adverbial	Slowness	<i>wistaarai</i>	'slowly'
Adverbial	Suddenness	<i>ekkaasi</i>	'suddenly'
Adverbial	Suddenness	<i>hwaattai</i>	'suddenly'
Adverbial	Suddenness	<i>bittikai</i>	'immediately'
Adverbial	Suddenness	<i>turunta</i>	'immediately'
Adverbial	Velocity	<i>tejsaath</i>	'in a speedy way'
Adverbial	Velocity	<i>bhaTaabhata</i>	'fast'
Adverbial	Velocity	<i>caa~Dai</i>	'fast'
Adverbial	Velocity	<i>chiTo</i>	'fast'
Adverbial	Walking	<i>TukTuk</i>	'walk slowly step by step'
Adverbial	Velocity	<i>saraasar</i>	'straightway'
Ideophone	Appearance	<i>jhamlangnga</i>	'in a way one spreads hair all around'
Ideophone	Contact	<i>gararra</i>	'in a sliding way'
Ideophone	Effort	<i>phyatta</i>	'in a way one throws something'
Ideophone	Effort	<i>phutta</i>	'in a way one throws something'

Ideophone	Effort	<i>Tapakka</i>	'in a way one picks up the leaves'
Ideophone	Noise/lack of noise	<i>suTukka</i>	'slowly'/ 'in a way nobody knows'
Ideophone	Noise/lack of noise	<i>lusukka</i>	'secretly'
Ideophone	Noise/Lack of noise/posture	<i>thapakka</i>	'put some thing quiet'
Ideophone	Perception	<i>palyaakpuluk</i>	'in a way one looks around'
Ideophone	Perception	<i>TuluTulu</i>	'in a way one looks without blinking'
Ideophone	Posture	<i>turlungnga</i>	'in a way someone or something is hung'
Ideophone	Posture	<i>thyacca</i>	'in a way one sits down'
Ideophone	Posture	<i>Tukrukka</i>	'in a way one sits down'
Ideophone	Posture	<i>Tusukka</i>	'in a way one sits down'
Ideophone	Posture	<i>jurukka</i>	'in a way one gets up'
Ideophone	Suddenness	<i>bungga</i>	'suddenly'
Ideophone	Suddenness	<i>khutrukka</i>	'suddenly'
Ideophone	Suddenness	<i>phutrukphutruk</i>	'in a way something falls down'
Ideophone	Suddenness	<i>Dangga</i>	'in a way one falls down'
Ideophone	Suddenness	<i>dhaDyaamma</i>	'in a way one falls down'

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Ideophone	Suddenness	<i>parlakka</i>	'in a way one falls down'
Ideophone	Suddenness	<i>ghuplukka</i>	'at once'
Ideophone	Velocity	<i>phaTaaphaT</i>	'without stopping'
Ideophone	Velocity	<i>saTaasaT</i>	'straightway'
Ideophone	Velocity	<i>khururra</i>	'in a way one runs'
Ideophone	Velocity	<i>khwaarra</i>	'in a way one pulls something'
Ideophone	Velocity	<i>phanphani</i>	'in a moving way'
Ideophone	Velocity	<i>phirra</i>	'in a moving way'
Ideophone	Velocity	<i>khurukka</i>	'without stopping'
Ideophone	Vision	<i>jhimikka</i>	'in a way one blinks the eyes'