Light verbs in Hindi

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Research dissertation submitted in partial fulfilment of the requirements for the degree of Master of Social Science

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Durban

July 2015

Acknowledgements

All praise is due to God alone, and may peace and blessings be upon Muhammad, his companions and those who follow them in goodness until the Last Day.

I am grateful for the Master's scholarship grants I received from the National Research Foundation (NRF) and the School of Arts at UKZN. I am very fortunate to have benefitted from the knowledge and ideas of my supervisor Jochen Zeller, to whom I am sincerely thankful. I would like to thank Heike Tappe and Langa Khumalo for their support and encouragement throughout my study period at the Department of Linguistics. I owe special thanks to Usha Shukla who helped me a great deal with her knowledge and experience in Hindi. I benefitted immensely from the grammar judgements and discussions with my friend, Abhishek. Finally, I appreciate the willingness of countless Hindi speakers who took the time to discuss aspects of their language with me and accommodate my inarticulate Hindi speech ever since my fascination with Hindi began, in 2010.

Abstract

Light verbs (LVs) can be defined as a group of grammatical verbs that are semantically bleached, which means that they have lost some of their lexical content. While light verbs are found in many languages throughout the world, a study of the South Asian language Hindi reveals a wealth of light verbs of various types.

Syntactically, the light verb category (***v***) in transitive sentences is considered to have a causal feature that is responsible for the thematic licensing of the so-called 'external' agent argument (Hale and Keyser 1993; Chomsky 1995).

Previous studies of Hindi light verbs have shown that they can appear in the forms **N**+**V**, **A**+**V** and **V**+**V** , (Mohanan 1991, 2006; Kachru 2006). In addition, light verbs have been assumed to be responsible for hosting tense and aspect features, licensing arguments, and functioning as auxiliaries. I argue that there are four LV categories in Hindi: conjunct LV, compound LV, permissive LV, passive LV.

Due to the variety of light verb constructions (LVCs) in Hindi and the diversity of situations in which they are used, the Minimalist definition of the LV, which only assumes a single category, ***v***, is inadequate to account for all types of LVs at a cross-linguistic level.

The presence of multiple light verbs that can co-occur in a single sentence is evidence that there are several light verb categories or verbal extended projections within the syntactic architecture that need to be investigated. In this dissertation, I provide a syntactic account of LVCs in Hindi by classifying the different types of light verbs according to their functions and morphological properties. In addition, I postulate an expanded syntactic representation, the ***v*** Domain, that includes all four light verbs in Hindi as extended ***v*** projections within the ***v*****P**. This assumption is guided by the theoretical framework of Cartography, which investigates the presence of detailed syntactic configurations within the current Minimalist architecture, see Cinque and Rizzi (2008).

Contents

List of Abbreviations

1	first person
2	second person
3	third person
AO	agent oblique
CAUS	causative
D	direct case
DO	direct object
F	feminine
FUT	future
FV	final vowel
HAB	habitual
INF	infinitive
IO	indirect object
M	masculine
OBL	oblique case
PASS	passive
PERM	permissive
PL	plural
PRF	perfect
PROG	progressive
PRS	present
PST	past
S	singular
SOV	subject, object, verb
SUBJ	subject
V	verb

Chapter 1: Introduction

1.1. Background

Light verbs (LVs) are semantically bleached verbs that lack the semantic content and thematic force of regular lexical verbs (Karimi-Doostan 2005:1737). For example, the verb '*throw*' means: to move an object (from your hand) through the air quickly in a particular direction (Merriam-Webster 2015). However, the LV '*throw*' in '*throw a party*' means: to organise a party, probably for someone else (Macmillan dictionary 2015). The LV '*throw*', as in '*throw a party*', has completely lost its original semantic content and developed a new lighter or reduced meaning which is extremely interesting and significant in terms of current language theories. Early studies of LVs have been conducted by Jespersen (1965); Cattell (1984).

Hindi LVs are significant since they have several unique semantic and syntactic functions that pose problems for the current Minimalist assumption about the nature of LVs and the LV category, ***v***.

The purpose of this study is to: 1) coherently describe each LV category I introduce in Hindi syntactically and examine its functions; 2) show that the current Minimalist theories which only justify the existence of a single LV category, ***v***, are insufficient to account for the several LVs that can co-occur in a single sentence in Hindi; 3) analyse co-occurring LVs in Hindi as evidence for the existence of a ***v*** Domain, which includes independent extended ***v*** projections within the Minimalist architecture of the ***v*****P**.

1.2. Language studied

Hindi is a major South Asian language that is spoken in North India, see Map 1 on page 10. It is classified as a member of the Indo-Aryan sub-group of the Indo-European language family. Hindi is a close relative of the classical Indo-European language Sanskrit but, interestingly, bears a strong Perso-Arabic influence (Masica 1991). Historically, the name *Hind* (Old Persian) originated in the Persian Empire. The Persians named the area east and south-east of the Persian Empire as *Hind*, which includes present-day India/Pakistan. Thus, when the Muslim armies began invading *Hind* from its western border in the 12th century, they referred to the local people as *Hindi*, meaning 'of Hind' (Montaut 2004:2).

In the 12th or 13th century a new language variety began to emerge as a lingua franca between the local inhabitants of *Hind* and the Afghans, Arabs, Persians and Turks who were fighters that settled in the Dehli-Meerat area. This language variety became known as *Hindi*, *Hindustani*, *Rekhta* and *Urdu*. (Kachru 2006:2)

According to Shackle and Snell (1990), Hindi and Urdu developed from a language variety referred to as *Khari boli* which developed out of the interaction between the significant population of Persian speaking settlers and the large community of native people who had recently converted to Islam. Therefore, *Khari boli* embodied a strong Sanskrit influence, which was contributed by the native community, but also included a considerable amount of Persian loan-words (Shackle and Snell 1990: 13).

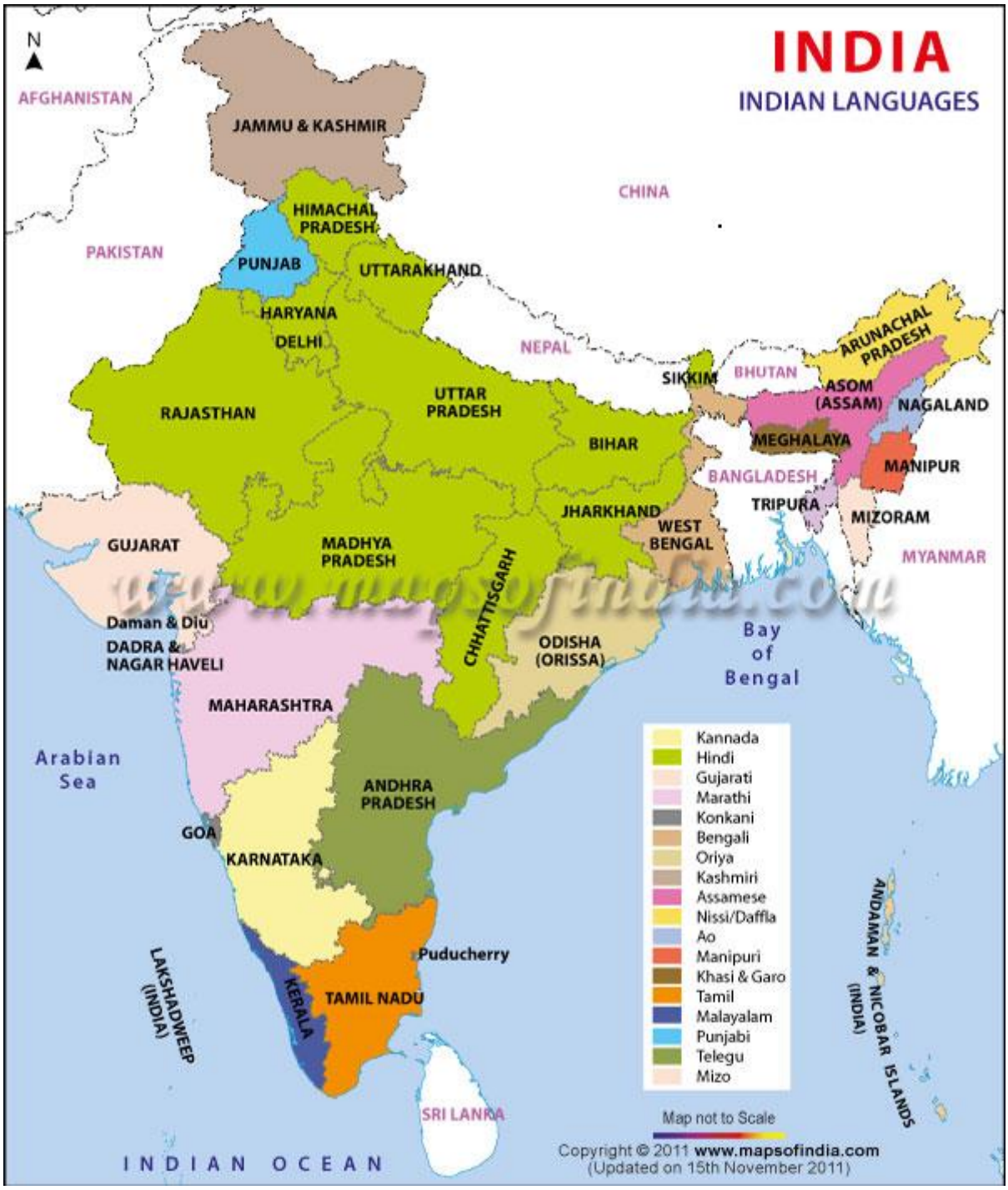
These historical accounts suggest that Hindi and Urdu arose out of the assimilation between the settlers and the local population in India.

Due to their shared origins, Hindi, Urdu and Hindustani continued to develop for centuries as different labels for a single language. This idea is supported by the textual evidence from the works of Mirza Ghalib, who was born in 1797 and died in 1869, who named one of his works "*ood-e-Hindi*" which means "the perfume of Hindi". This is

significant because it shows that Ghalib, who wrote in the Arabic script and is considered a famous Urdu poet, referred to his language as Hindi (Koul 2008:3).

During the British conquest of India which began in the 18th century, English was made the official language of 'British ruled India'. However, the British authorities needed to adopt local languages at lower levels of administration. In 1830, Urdu became recognised as the language of the courts in certain provinces of north India, like Oudh and Bihar, while Hindi was granted semi-official status in other provinces. This division of Hindi and Urdu served to divide the Indian community and quickly became the source of competition between Muslims and Hindus for political recognition (Koul 2008:3-4).

By this time Urdu had already been established as a language of Muslims and their Islamic literary tradition. Urdu was written in the Arabic/Persian script and was viewed as a prestigious language among the Muslim elite. Hindi, as the language of Hindus, on the other hand had not been well codified. In fact, there was no widely accepted form of modern Hindi that could be promoted for official use. This lead to a strong push to develop Hindi as an official language, to adopt a strong Sanskrit influence and to use the Sanksrit Nagari script, which had previously been used in the literature of the Bhasa and Braj dialects of Hindi. The Hindi language project was also viewed as a unifying factor for Hindu nationalists who yearned for political dominance in India. As the Indian struggle for independence from British rule intensified in the 20th century, another struggle continued between the Muslim and Hindu political movements. In addition, the debate regarding what the new official language would be became a central issue. This issue became resolved during the agreement that India would be partitioned into two states, India, which would be managed by the national Hindu political movement, and Pakistan, which would be managed by the national Muslim political movement. Thus, India adopted Hindi as its official language and Pakistan adopted Urdu as its official language (Shackle and Snell 1990: 1-16).



Map 1: Language distribution in India according to region (Maps of India 2011)

Abbi, Hasnain and Kidwai (2004) conducted a sociolinguistic study that investigated how religious identities shape the linguistic identities of Hindi and Urdu speakers in India. The study was based on interviews with Hindi and Urdu speakers in different parts of India. The outcomes of the study provide some interesting results about the relationship between Hindi and Urdu in India.

The study revealed that a significant percentage of speakers considered Hindi and Urdu to be either 'the same' or 'similar'. In addition, a small percentage of speakers identified 'the language they speak at home' as a mixture of both Hindi and Urdu. The speakers that did consider Hindi and Urdu to be dissimilar cited the script, pronunciation and lexicon as the differences between Hindi and Urdu. However, the study did not succeed in finding any Hindu people who claimed Urdu as their first language or any Muslim people who claimed Hindi as their first language.

This sociolinguistic study suggests that a small group of Indian citizens are beginning to acknowledge the similarity of Hindi and Urdu. Moreover, the results of the study reveal the presence of a shared variety or dialect which includes a mixture of both languages, Hindi and Urdu.

Due to the very similar syntactic and morphological properties, and the shared vocabulary of Hindi and Urdu, several researchers group them together as the same language, see Shackle and Snell (1990); Butt (1993, 2003, 2010); Kidwai (2008); Davison (2015).

This study focuses specifically on light verbs in Hindi. However, due to the notion that Hindi and Urdu are studied as a single language morpho-syntactically, I assume that the ideas and arguments investigated here regarding Hindi LVs may also be applicable to Urdu. For accounts of Urdu light verb constructions, see Ur-Rahman (1967); Butt (1993).

As the official language of the State of India, Hindi is spoken by about 40 percent of the population of over one billion citizens (Montaut 2004:1). Hindi is also used as a lingua

franca by speakers of other languages in India, making Hindi speakers one of the largest language communities in the world.

1.3. Organisation of the thesis

In chapter 2, I briefly discuss the theoretical background of the Minimalist Program. I then introduce the basic Minimalist architecture and explain its basic syntactic considerations like Merge, Move and c-command. I also discuss the development of the Cartographic enterprise in syntax as a pathway to explore the richly articulated syntactic configurations of the functional zones for **C**, **T** and, specifically for this study, ***v***.

In chapter 3, I provide a concise introduction to Hindi morphology and syntax. I explain the basic lexical categories, with a special focus on verbal categories. I also outline the basic syntactic structure in Hindi, which has a SOV, predominantly head-final structure.

Chapter 4 is dedicated to investigating the four different LV categories in Hindi. I introduce the (**N**, **A**) + ***v*** conjunct light verb constructions (LVCs) and the **V**+ ***v*** compound, permissive and passive LVCs. I explain their properties and functions.

In chapter 5, I provide data which shows that multiple LVs can co-occur within the same sentence in Hindi. This is significant because it provides strong evidence for the existence of more than one ***v*** category within the ***v*P** structure. Finally, I propose a ***v*** Domain that would accommodate all four LV categories as ***v*** heads within the expanded ***v*P** architecture.

Chapter 6 is the concluding chapter where I summarise the main arguments of the study and suggest topics for further research.

Chapter 2: Research methodology and theoretical framework

2.1. Research methods

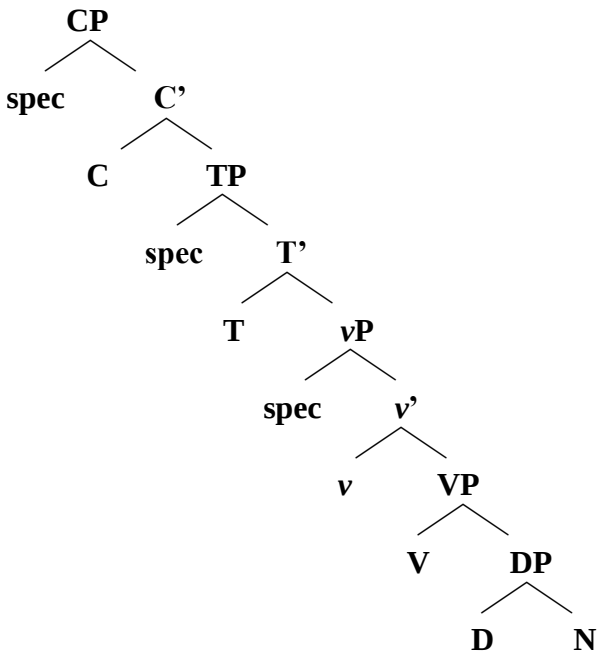
I am not a native speaker of Hindi. Thus, I was unable to rely on personal intuition for grammaticality judgements on the Hindi sentences investigated in this study. Therefore, I have relied on the grammaticality judgements of native Hindi speakers. All of the examples used in this study were approved as grammatically well-formed by at least two native Hindi speakers. Several sentences were taken from grammar books, unpublished dissertations and journal articles. These examples were also approved by native Hindi speakers. The possible meanings of the sentences that included light verb constructions were investigated thoroughly. This is important because a single light verb, for example, can provide a variety of different meanings depending on the context it is used in.

Where data from the literature was insufficient I have generated sentences together with native speakers during informal interviews in which we would discuss each sentence, guided by a series of questions, see Appendix A. Therefore, all sentences that are not accompanied by a reference are sentences that have been generated specifically for the purpose of this study.

2.2. Minimalist Syntax

One of the primary assumptions of the Minimalist Program (MP; Chomsky 1995, 2000, 2001 and subsequent work) is the idea that all languages possess the same basic functional categories or word classes (Carnie 2007: 42). These categories are classified by their meaning and the functional role they occupy in the sentence structure of a given language. The core functional categories are **C** (complementiser), **T** (tense), **D** (determiner) and ***v*** (light verb) while the lexical categories are **N** (noun), **V** (verb), **A** (adjective), **P** (preposition) and **Adv** (adverb). **C**, **T**, ***v*** and **D** have a special status because

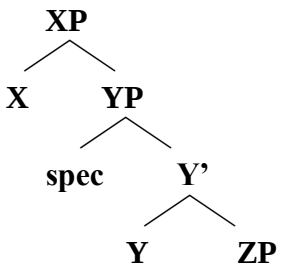
they host syntactic features (Svenonius and Adger 2011). These features, have a significant impact on the structure of language because they are responsible for attracting syntactic objects through the mechanism of head movement and phrasal movement. I adopt the basic Minimalist architecture, below.



Syntax Tree 1: basic architecture

2.2.1. Syntactic Operations

The Minimalist framework is characterised by basic syntactic operations that are essential components of the computational system. The most basic and essential of these operations is Merge. Merge (external Merge) is a binary operation whereby two syntactic objects, typically a head and a non-head, combine to create a new unit or phrase.



Syntax Tree 2: structure of the phrase, **XP**

In the Syntax Tree 2 above, the head **X** is merged with its complement (phrase **YP**) to derive the phrase **XP**. This operation is repeated in successive steps to create the basic syntactic structure of natural language. The phrase **YP** is built by merging the head **Y** with two phrases, its complement and its specifier (spec). The head **Y** is the sister of the phrase **ZP**.

The operation Merge can also apply to items that are already merged into the structure that can be copied and re-merged (an operation known as internal Merge or Move). However, the operation Move is not freely available to the computational system (Haegeman and Lohndal 2011:153). The movement operation (Move) is triggered by attraction whereby a feature of a higher functional head **F**, which typically enters an agreement relation with the moved constituent, also has so called EPP or edge features that attract the element that **F** agrees with. Thus, a phrase may move from its base position to a higher c-commanding position that possesses EPP or edge features. C-command is defined in (1) below.

(1) C-command

A node ***A*** c-commands a node ***B*** if, and only if ***A***'s sister either:

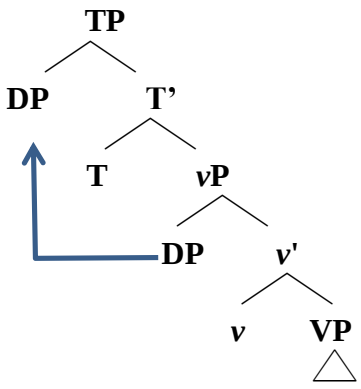
i) is ***B***, or
ii) contains ***B***.

(Adger 2003:116)

In the Syntax Tree 2, the head **X** c-commands its sister **YP** and all the syntactic units that are contained in **YP**, meaning all the units are found below the node **YP**.

Feature-driven syntactic movement is closely related to the operation Agree. Agree establishes a relation between an unvalued syntactic feature on a functional head, the Probe, and the closest corresponding valued feature on a suitable c-commanded element, the Goal (Chomsky 2000:122). If the head hosting the Probe has a syntactic feature, for example, the uninterpretable phi-features of **T**, Agree is established between the features of **T** and the interpretable phi-features of the closest Goal-**DP**, typically the subject. As a result, **T** agrees with the subject in person and number, see (2) and (3). If **T** also has a strong EPP feature, then the Goal-**DP** will move overtly to the specifier of **T** (**Spec T**) in order to check this feature. This results in the subject **DP** being phonologically realised in **Spec T**, see (2). If there is no strong EPP feature available at **T**, or if the EPP feature is checked by an expletive, as in (3), then the subject-**DP** remains in situ, where it is phonologically realised (Chomsky 1995:232).

(2) People are ~~people~~ in the garden.
(3) There are people in the garden.



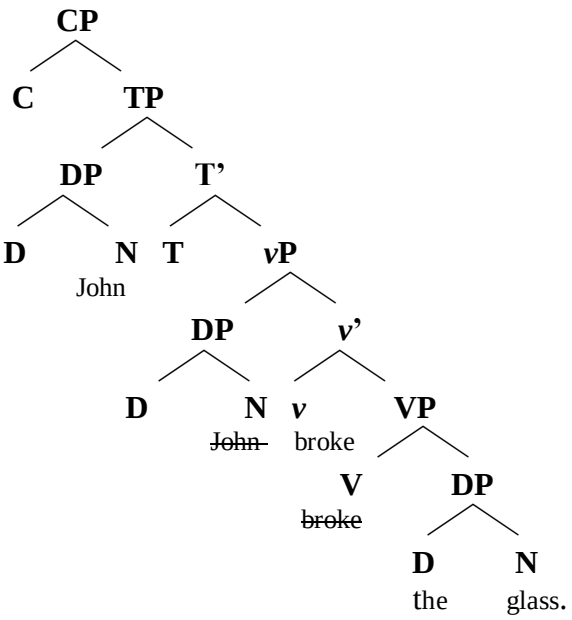
Syntax Tree 3: the movement the subject **DP** 'people' in (2)

The subject **DP** in (2) is represented as the specifier of the light verb category ***v.*** Since this category is obviously relevant for my analysis of light verbs in Hindi, it is discussed in some more detail in the next section.

2.2.2. The light verb hypothesis

The term 'light verb' was initially used by Jespersen (1965: VI: 17) to refer to the verb in **V + NP** structures like *take a walk* where the verb *take* does not contribute to the meaning of the construction but transforms the noun phrase *a walk* into a verbal constituent. Thus, the semantically bleached or reduced verb *take* is referred to as a light verb. In the Minimalist Program, the light verb (LV) is represented by the functional category ***v*** which projects a ***v*P** and selects a lexical predicative category (**VP**, **AP** or **NP)** as its complement. Syntactically, ***v*** has been argued to have a 'causal' feature that serves an agentive function, see Hale and Keyser (1993); Chomsky (1995); Adger (2003); Carnie (2007). This means that the category ***v*** is assumed to be responsible for the thematic licensing of the so-called 'external' agent argument. For example, it is assumed that the subject argument, *John*, of sentence (4a) is introduced by a light verb which combines with the **VP** *broke the glass*. If no light verb is present (or if the light verb is 'defective'), an unaccusative sentence such as (4b) is derived, in which the **VP** internal argument of (4a) is promoted to the subject position.

(4) (a) John broke the glass.
    (b) The glass broke.



Syntax Tree 4: structure of (4a)

As shown in the tree diagram in (4a) above, the light verb hypothesis prescribes that the external agent argument *John* is introduced by the light verb ***v***, which assigns an agentive or causal theta role to its specifier. The verb *broke*, which is attracted by the strong feature in ***v***, moves from **V** to ***v***. This movement triggers the thematic licensing of the external agent **DP** *John* in Spec ***v*P**. The movement of the agent **DP** '*John*' from its base position in the ***v*P** to Spec **T** is correlated with an Agree-relation between the phi-features of **T** and the subject, and licensed by the strong EPP feature present at **T**, as discussed in section 2.2.1.

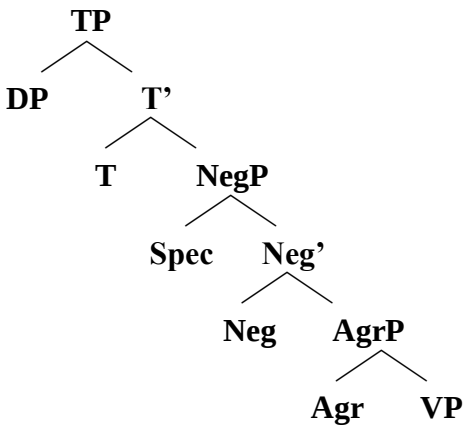
2.3. Cartography

Cartography has emerged as a research program due to the need to explore detailed syntactic configurations within the Minimalist architecture (Cinque 2002:3). Therefore, while there are differences between Minimalism and Cartography, Shlonsky (2010) argues that Cartography is not a theory of language that opposes Minimalism but is an extension of core Minimalist principles. Cartography views the basic Minimalist core

functional categories **C**, **T** and ***v*** as an abbreviated structure of functional categories that need to be expanded to accommodate the fine-grained functional system of natural language (Shlonsky 2010:10). Thus, Cartography is concerned primarily with the study of the hierarchy of functional categories and their detailed syntactic structure.

2.3.1.Early Cartographic Projects

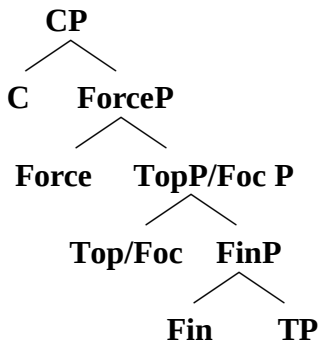
The most famous works in Cartographic studies are found in Cinque (2002); Rizzi (2004); Belletti (2004). However, earlier work in the field of Cartography can be traced back to Pollock (1989), whose study of verb-movement in French revealed that **IP** (**TP**) should be split into two functional categories for agreement and tense with the corresponding heads: **Agr** and **T** (to which the finite verb in French moves). The idea of two inflectional categories was necessary since a single category, **IP**, could not account for the different positions that could be occupied by a verb in French. Pollock (1989) also included a third functional category for negation, **Neg**.



Syntax Tree 5: structure of split IP

Rizzi (1997; 2004) argues that there is a need to propose a detailed structural representation of the **CP** layer or the **C** Domain, which is responsible for hosting several functional categories, including the obligatory **Force** head and the optional **Topic**/**Focus** heads, (1997:281). Rizzi's structure of the **CP** is based on the assumption that each

syntactic feature of **C** is represented by an independent functional head (1997:8). Therefore, in order to account for additional syntactic phenomena like topicalisation, new functional heads would be required. Three functional projections of **C** are postulated below, Force, Topic or Focus and Finiteness.

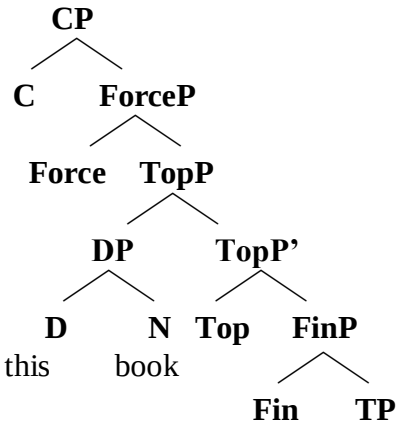


Syntax Tree 6: structure of **C** Domain (Rizzi 2004)

In the topicalised sentence (5) below, the **DP** *this book* which is the thematic argument of the verb *read* is analysed as the topic of the sentence. Thus, the topic **DP** *this book* undergoes movement to the specifier of the **Top** head in the expanded **CP**. This idea is further supported with evidence from some languages having a morphologically realised **Top** marker, see Aboh (2004).

(5) This book, I will read ~~this book~~ tomorrow.

(Cinque and Rizzi 2008:51)



Syntax Tree 7: structure of **C** layer in (5)

2.3.2.Cartography and Minimalism[2]

The field of Cartographic studies began to build momentum at around the same time as the publication of Chomsky's *Minimalist Program* (MP), (1995). At this point it was evident that just as Cartography was heavily dependent on the theoretical framework of Principles and Parameters Theory, it would continue to depend on the theoretical assumptions of its latest version, MP. The reason for this strong reliance on Minimalism is due to the fact that, while there has been much study in the field of Cartography, there has been little contribution to a theory of language structure that is independent of current Minimalist assumptions (Ramchand and Svenonius 2013:2). It is then no surprise that Cartography is considered inseparable from current and previous Minimalist theories (Cinque and Rizzi 2008:53). Furthermore, the close relationship between Minimalism and Cartography enables Cartographic works to be easily understood by students of MP.

As noted above, Minimalism is concerned with stripping language structure down to the simplest possible units of a universal functional structure, namely **C**, **T**, ***v***. Cartography, on the other hand, is guided by the need postulate a fine-grained functional structure that

[2] The Minimalist Program is a research program within the Principles and Parameters theory and not a separate theory.

possibly expands each functional category into its own complex space or domain (Rizzi 2004:6).

While the differences between Cartography and Minimalism are acknowledged (Ramchand and Svenonius 2013), they can be reconciled by the idea that functional categories in the Minimalist architecture are not restricted by any specific principles of UG (Shlonsky 2010:3). Therefore, the simplified Minimalist structure should be understood as an abbreviated structure that sets the framework for complex zones in the functional structure. This means that Minimalism is primarily responsible for generating elementary mechanisms that can be reduced to simple syntactic operations like Merge, which support the core assumptions of MP and make up the basic clause structure. Cartography then uses this basic clause structure, which is supported fully by the principles of MP, to draw detailed maps by expanding the basic clause structure to accommodate the necessary functional categories that are present in natural languages. Therefore, it is argued that both Minimalism and Cartography can pursue their aims in a manner that is effective. (Cinque 1999; Rizzi 2004; Belletti 2008; Cinque and Rizzi 2008)

2.3.3.The Cartographic analysis of ***v*/V**

I have already explained that Cartography is established on the principle that the core functional categories **C**, **T** and ***v*/V** are abbreviations for complex zones in the functional structure. However, thus far, the Cartographic approach to the category ***v*** has been somewhat neglected, when compared to the elaborate studies conducted on the functional categories **T** and **C**.

Previous studies on the idea of 'more than one verbal category' were conducted by Larson (1988) and Hale and Keyser (1993). The subsequent study by Chomsky (1995) which introduced the distinction between ***v*P** and **VP** is regarded as significant to the understanding of the Cartographic study of ***v*** because it introduces the idea of the new expanded functional category ***v***, (Shlonsky 2010: 2). However, Cartographic studies have

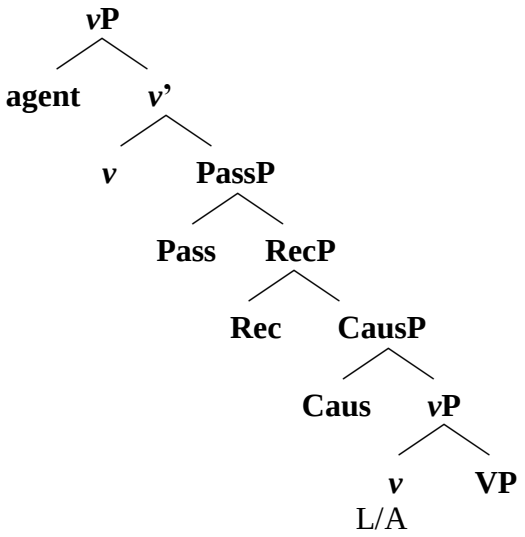
thus far been unable to fully account for the rich functional structure and borders of the category ***v*** and its possible extended projections.

Cocchi (2009) provides a Cartographic approach to the category ***v*** by analysing several Bantu suffixes as realisations of functional projections in the ***v*** Domain. The study investigates three categories of Bantu verbal extensions (suffixes) in Tshiluba: syntactic extensions, lexical extensions and lexical/argumental (L/A) extensions, which display unique properties that resemble both lexical and syntactic extensions. Syntactic and L/A extensions have an impact on the argument structure of the predicative domain. The causative extension, below, is an example of a syntactic extension that influences transitivity.

(6) *mukaji* *u-sumb-**ish**-a* *muana* *tshimuma.*
woman 1-buy-CAUS-FV boy fruit
The woman makes the boy buy fruit. (Cocchi 2009:91)

The sentence (6), above shows the causative function of the syntactic extension *–ish-*.

Since syntactic and L/A extensions influence argument structure, Cocchi argues that they are part of the predicative domain and proposes that syntactic and L/A extensions are morphologically realised as different functional heads within the ***v*P**.



Syntax Tree 8: structure of the ***v*** Domain for syntactic and L/A extensions

The structure above is an abbreviated structure of ***v*** Domain proposed by Cocchi (2009). The following syntactic extensions, which include the passive (**Pass**), reciprocal (**Rec**) and causative (**Caus**) categories, are generated in the upper ***v*P**. The second (lower) ***v*P** which merges with the **VP** is postulated to represent the L/A extensions. This is a fixed hierarchy of projections based on the morphological order of the Tshiluba extensions.

It is noteworthy that Cocchi (2009) does not classify the categories above as light verbs but argues that they are included in the ***v*P** because they influence argument structure and thus, belong in the ***v*** Domain. A detailed description of the ***v*** Domain in Tshiluba, is well beyond the scope of this study. However, this study acknowledges the idea that the Cartographic approach to ***v*** has been present within the body of recent syntactic works and therefore, provides the basis for the current research.

Chapter 3: Introduction to Hindi Morphology and Syntax

Hindi has an extensive grammatical tradition that has been well documented by Bhatia (1987). According to Montaut (2004:7), some of the earliest Hindi grammar books include Ketelaar (1698) and Kellog (1876). The first detailed descriptive grammar of Hindi written in English is credited to Sharma (1958), as cited in (Koul 2008: 8), while the first generative accounts of Hindi syntax are attributed to Kachru (1966, 1980).

As with the grammar of any language, the grammar of Hindi cannot be adequately summarised in one short chapter. Thus, the following is an introduction that attempts to accustom readers who are not familiar with Hindi grammar to the basic word classes and syntax of Hindi. Therefore, the following sections introduce some general morphological and syntactic characteristics of Hindi but may exclude exceptions to these rules that are complex and extend beyond the scope of this work.

3.1. Hindi Morphology

3.1.1.Nouns

Nouns and verbs both carry gender (masculine or feminine). Inanimate nouns are arbitrarily assigned to either masculine or feminine genders (noun classes). Masculine nouns that end in /a/ change to /e/ in plural form. Similarly, feminine nouns that end in /i/ change to /iya/. Feminine nouns that do not end in /i/ take the nasalised /ẽ/ suffix in the plural form.

Singular	Plural
*kamr**a*** room.M.S	*kamr**e*** rooms.M.PL.
*lark**i*** girl.F.S	*lark**iya*** girls.F.PL
kitab book.F.S	*kitabẽ* books.F.PL.

Table 1: Singular and plural forms of nouns

3.1.2.Postpositions and Case

Postpositions in Hindi have two functions: they assign semantic roles to **DP**s and they assign Oblique case to the **N** they combine with. Unlike prepositions that precede **DP**s in English, postpositions follow **DP**s. These postpositions are analysed as clitics that typically attach to nouns and cannot exist on their own (Spencer 2005).

The issue of case in Hindi is complex and there are several arguments regarding the categories and functions of case. I adopt the position that there are two cases in Hindi, Direct and Oblique (Koul 2008:36) [3]. Direct case (D) is the standard, unmarked form of nouns. Thus, all nouns are in D, unless they are followed by a postposition or the agent oblique marker *ne*, which attaches to the agent argument in a perfective sentence. If an noun has a postposition attached to it, it will be in Oblique case (OBL) and typically carry an Oblique case suffix, as shown in the table below. The table illustrates how the two noun-endings of *larka* and *larki* ('boy' and 'girl' respectively), change when they combine with the postposition *ko* 'to'.

[3] Spencer (2005) argues that Hindi has three case forms: Direct, Oblique and Vocative.

Case	Masculine		Feminine	
	S	**PL**	**S**	**PL**
Direct	larka	lark-e	larki	larki-ya
Oblique	lark-e ko	lark-o ko	larki ko	larki-yo ko

Table 2: Case inflections of regular masculine and feminine nouns.

Irregular Oblique nouns (masculine nouns that do not end in /a/ and feminine nouns that do not end in /i/), do not contain Oblique case suffixes.

3.1.3.Basic postpositions

There are four basic postpositions in Hindi, which are shown in Table 3 below and illustrated in examples (1) to (8). Note that only example (5) has a regular noun which carries the Oblique case suffix, discussed above.

Hindi	English
par	on
se	from, by, with
me	in
ko	to, at

Table 3: Basic postpositions[4]

par

(1) *Pustak* *mez =par* *hai.*
book.F table.F.OBL =on be.3.S.PRS
The book is on the table.

[4] An additional postposition, *ka*, is used to denote possession. See (Koul 2008:55).

(2) *Woh samay =par nahin pahunch-a.*
he time.M.OBL =on not reach-M.3.S.PRF
He did not arrive on time. (Koul 2008:53)

se

(3) *Main Kashmir=se aa-ya hun.*
I Kashmir.M.OBL =from come-M.3.S.PRF be.1.S.PRS
I have come from Kashmir.

(4) *Ham hath =se khana kha-t-e hain.*
we hand.M.PL.OBL=with food eat-HAB-PL be.3.PL.PRS
We eat our food with our hands. (Koul 2008:51)

me

(5) *Larke us kamr-e=me hain.*
boy.M.PL that.OBL room.M-OBL =in be.3.PL.PRS
The boys are in that room. (Kachru 2006:101)

(6) *Divali October=me hai.*
Divali.F October.M.OBL =in be.3.S.PRS
Divali is in October.

ko

(7) *Noor=ne Anjum=ko kitab d-i.*
Noor.M.OBL =AO Anjum.M.OBL =to book.F give-F.3.S.PRF
Noor gave a book to Anjum. (Kidwai 2008:3)

(8) *Woh dopahar =ko aae-ga.*
he noon.M.OBL =at come-FUT.M.3.S.PRF
He will come at noon. (Koul 2008:47)

As with the prepositions *on*, *in* and *by* in English, each simple postposition in Hindi has the ability to convey a variety of semantic relations. In (1), *par* is used to state the location of 'the book', *kitab*, while in (2) *par* is used in the adverbial phrase *samay=par,* 'on time'.
In (3) *se* expresses the origin of the **DP** *main*. However, (4) denotes the instrumental relation of 'eating with ones hands'.

The postposition *me* is used to indicate the location of 'the boys' in (5). In (6) *me* is used to indicate the time of the festival, *Divali*. (8) is an example of *ko* used in the adverbial phrase 'at noon', *dopahar* .

In example (7), the verb selects three arguments, *Noor, Anjum* and *kitab*, 'a book'. *ko* attaches to the **DP** *Anjum*, making him the recipient of 'a book'. In addition, *Noor* is followed by the agentive oblique marker *ne*, see section 3.1.4. This sentence is thus unique because both the subject and the indirect object are in oblique case.

3.1.4.Agent Oblique marker

The agent oblique marker *ne* is a clitic that is often categorised as a postposition[5] because it behaves like the simple postpositions in Table 3 since it assigns Oblique case to the noun to which it attaches. However, in contrast to other postpositional clitics, *ne* does not assign any semantic role to the agent **DP**, which always bears the agent theta role. Since

[5] Kachru (2006:104) calls it "the agentive postposition".

the only function of *ne* is to assign Oblique case, I categorise it here as an agent oblique marker (AO).

The AO typically attaches to the agent arguments of transitive verbs in the perfective tense, but not to the agent of intransitive verbs.

(9) *Ram =ne* *kamraa* *saaf* *kiya.*
Ram.M.OBL =AO room.M clean do.M.3.S.PRF
Ram cleaned the room.

However, there are also some transitive verbs that do not permit the use of *ne*, like *'la'* (10a, b). In addition, the AO does is not used in constructions that include modal verbs, see example (11a, b). (Koul 2008:40)

(10a) *Uma* *kamiz* *la-i.*
Uma.F shirt.F bring-F.3.S.PRF
Uma brought the shirt.

(10b) **Uma =ne kamiz la-i.*[6] (Koul 2008:38)

(11a) *Woh* *chitti* *likh* *sak-a.*
he.M.S letter.F write could-M.3.S.PRF
He could write a letter.

(11b) *Us-ne chitti likh saka. (Koul 2008:40)

[6] *indicates that the sentence is ungrammatical.

In example (11b), the pronoun *woh* changes to *us*. This happens when the AO combines with the pronoun *woh*. However, this sentence is ungrammatical because the AO is not used in sentences that have modal verbs.

3.1.5.Compound postpositions

Compound postpositions are regarded as compounds because they contain two morphological elements. The first element is either the possessive marker *ke/ki* or the simple postposition *se.* The second element is the lexical entity that carries the semantic information of the compound. Compound postpositions, like simple postpositions, assign Oblique case to the nouns they attach to.

(12) *Woh* *ghar =ke bahar* *khar-a* *th-a*.
he.M house.M.OBL =outside stand-M.S.PRF be.PST-M.S
He was standing outside the house.

(13) *Yeh* *paani*[7] *pin-e =ke liye* *hai.*
that water.M drink-INF.OBL =for be.3.S.PRS
That water is for drinking. (Kachru 2006:104)

(14) *Mer-e* *bhai =ke paas* *chata* *hai.*
I.POSS-M.OBL brother.M.OBL =near umbrella.M. be.3.S.PRS
My brother has an umbrella. (Kachru 2006:105)

The noun *ghar* in (12) is in OBL but it does not carry the OBL suffix since masculine nouns that do not end in /a/ do not carry the Oblique suffix. In (13) *pine* 'drink', carries the masculine OBL suffix. *bhai* in (14) also does not carry the OBL suffix. However,

[7] Nouns ending in /i/ are generally feminine but *paani* is masculine.

the oblique is overtly marked on the possessive pronoun *mere*, which does carry the OBL suffix.

3.1.6. Verbal Morphology

Hindi verbs are commonly inflected according to their tense and aspectual categories. Verbs often appear in their root form when they are accompanied by auxiliaries or used in light verb constructions, whereby the light verb absorbs the verbal inflection and the main verb remains in its root form.

Kachru (2006:73) lists four inflected forms of the Hindi verb. The following forms are in the third person, masculine, singular form:

Root	*dekh* 'see, look'
Infinitive	*dekh-**na***
Habitual	*dekh-**ta***
Perfect	*dekh-**a***[8]
Causative	*d**i**k-**va** / d**i**kh-**a***

(15) *Ram =ne darvaaza khol-a.*
Ram.M =AO door.M open-M.3.S.PRF
Ram opened the door. (Mohanan 1990:10)

(16) *Woh accha ga-t-i hai.*
She.F good.M sing-HAB-F be.3.S.PRS
She sings well.

[8] Some verbs like *kar* 'do' and *aa* 'come' take an irregular perfective suffix *–ya*, becoming *ki-ya* and *aa-ya* respectively. See example (18) below.

(17) *Der se* *jag-na* *bura* *hai.*
late wake-INF bad.M be.3.S.PRS
It is bad to wake up late.

(18) *Us =ne* *kaam* *kar-va-ya.*
he.M.OBL =AO work.M do-CAUS-M.3.S.PRF
He got the work done. (Kachru 1966:63)

3.1.7. Agreement

Hindi displays noun-verb agreement according to number and gender. Mohanan (1990) argues that the verb always agrees with the subject if the subject is in D. If the subject is not in D and the direct object is in D, then the verb will agree with the direct object. If however, neither the subject nor the direct object is in D, then the verb is in neutral or "default non-agreeing" form (Mohanan 1990:133), which is the form of the third-person masculine singular.

Mahajan (1990) illustrates these same rules using three scenarios:
Firstly, the main verb and auxiliary agree with the subject of a clause in a non-perfective tense, since in a non-perfective tense, the subject will be in D. This is illustrated in example (12), repeated below:

(12) *Woh* *ghar =ke bahar* *khar-a* *th-a.*
he.M house.M.OBL =outside stand-M.S.PRF be.PST-M.S
He was standing outside the house.

Secondly, in the perfect tense, the subject will be followed by the Agent Oblique marker *ne*, thereby relinquishing its D for OBL. In this situation, the verb will agree with the direct object only if it is in D. This rule applies to (19a), below, where the subject *Ilaa*, is feminine. Since it is followed by the Agent Oblique marker, *ne*. Thus, the verb, *uthaaya*, agrees with the direct object *haar*, which is in D and masculine.

Thirdly, if the direct object is followed by a postposition, it therefore has OBL. Thus, the verb becomes neutral and carries the third person masculine singular agreement (Mohanan 1990:72-74).

This rule applies to (19b) and (19c), below. In (19b), the subject, *Ilaa*, and the direct object, *roti*, are both feminine and in OBL. Therefore, as explained above, there is no noun-verb agreement and the verb, *uthaaya,* is in its non-agreeing neutral form. (19c) also displays the neutral non-agreeing form since the subject and the direct object are not in D.

(19a) *Ilaa =ne* *ek* *haar* *uthaa-ya.*
Ilaa.F.OBL =AO one necklace.M lift-M.3.S.PRF
Ilaa lifted a necklace. (Mohanan 1990:105)

(19b) *Ilaa =ne* *roti =ko* *uthaa-ya.*
Ilaa.F =AO bread.F =OBL lift-M.3.S.PRF
Ilaa picked up the bread. (Mohanan 1990:117)

(19c) *Meri* *patni =ne* *mujh =ko* *barbad* *ki-ya.*
My wife.F.OBL =AO me.M.OBL =to ruin do-M.3.S.PRF
My wife ruined me.

3.1.8.Tense

Hindi has tense auxiliaries that correspond to the simple past, present and future. The future tense auxiliary is an affix that attaches to the verb.

Past	*tha* (M) / *thi* (F)
Present	*hai*
Future	*-ga* (M) / *-gi* (F)

(20) *Kal* *ghar =par* *koi* *nahin* *th-a.*
yesterday house.M.OBL =at anyone not be PST-M.S
No one was at home yesterday.

(21) *Kamra* *saaf* *hai.*
Room.M clean be.3.S.PRS
The room is clean.

(22) *Agle* *saal* *main* *Paris* *jaun-ga.*
next year I Paris go.1-M.S.FUT
Next year I will go to Paris. (Kachru 2006: 149)

3.1.9.Perfective categories

The simple tense auxiliaries combine with a perfective verb to create the following perfective categories. The examples listed below are in third person, masculine singular form.

Root	*dekh* 'see'
Simple perfect	*dekh-**a***
Present perfect	*dekh-**a** hai*
Past perfect	*dekh-**a** th-a*
Future perfect	*dekh-**a** ho-ga*

The simple perfect tense is used to express an idea or event that has already been completed.

In (23), a repeat of example (19a) above, the perfective tense affix attaches to the verb to form the perfective verb *uthaa-ya*.

The present perfect tense, (24), expresses an idea that has begun in the past but continues until the present moment. This is achieved by the combination of the simple perfective verb and the auxiliary *hai* in its present tense form, *gay-a hai*, respectively.

(23) *Ilaa =ne ek haar uthaa-ya.*
Ilaa.F =AO one necklace.M lift-M.3.S.PRF
Ilaa lifted a necklace.

(Mohanan 1990:105)

(24) *Mohan London ga-ya hai.*
Mohan London go-M.3.S.PRF be.3.S. PRS
Mohan has gone to London.

Similarly, the past perfect tense is achieved by the combination of the simple perfective and the auxiliary in its past tense form, *dekha tha*. As shown in (25), the past perfect tense is used to express an event that was completed in the past, before another event or idea. In

(25) the first clause is in the past perfect tense and the second clause is in the simple perfect tense.

(25) *Main =ne us aadmi =ko pehle kabhi nahin dekh-a th-a,*
I.OBL =AO that man.OBL =to before ever not see-M.3.S.PRF be-M.S.PST

isliye uska pata nahin jan-a.
therefore his address.M not know-M.3.S.PRF

I had never seen that man before. Therefore, I did not know his address.

(26) *Main theen ghant-e cha-la hun-ga*[9].
I three hour-PL walk-M.3.S.PRF be.1.S-FUT
I will have walked for three hours.

The future perfect tense is derived by combining the perfective verb with the future tense auxiliary, *chala honga*. The future perfect is used to express an event that is expected to begin in the future and end in the future. Therefore, in example (26) the event of walking for three hours is expected to have begun and ended before the time of reference in the future.

3.1.10. The progressive auxiliary

The continuous tense in Hindi is created by three verbal elements: the verb, the progressive auxiliary *raha* and a tense auxiliary. The following examples below are in third person masculine singular form.

[9] The future perfect auxiliary *hoga* changes to *hunga* when it is used with a first person pronoun, like *main.*

Progressive: Present *dekh raha hai*
Past *dekh raha th-a*
Future *dekh raha ho-ga*

(27) *Main ghar ja rah-i hu.*
I. house.M go PROG-F.S be.1.S
I am going home.

(28) *Main ghar ja rah-a th-a.*
I house.M go PROG-M.S be-M.S.PST
I was going home.

(29) *Main ghar ja rah-a hun-ga.*
I house.M go PROG-M.SG be.1-SG.FUT
I will be going home.

The progressive auxiliary attaches to an uninflected verb and absorbs all the tense and agreement features from the verb. In (27) the progressive auxiliary is in the feminine form, *rah**i***, thereby determining that the subject, *main* 'I', which is not overtly marked for gender, is feminine. As shown above, (28) is in the past progressive tense and (29) is in the future progressive tense.

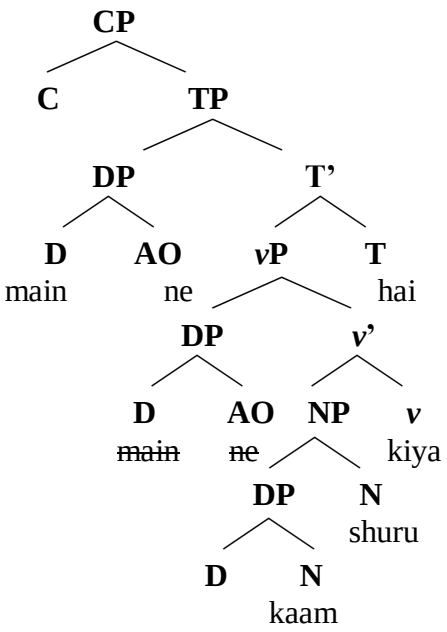
3.2. Hindi Syntax

In this section I will introduce the basic minimalist architecture in Hindi and briefly discuss scrambling and wh-constructions with examples.

3.2.1. Basic characteristics

Sentence (30) below, depicts the basic word order of Hindi, SOV.

(30)	*Main =ne*	*kaam*	*shuru*	*kiya*	*hai.*
	I.M.OBL=AO	work.M	beginning	do	be.PRS.PL
	I have started the work.				



Syntax Tree 1: structure of (30)

The syntactic representation of (30), above, displays the canonical word order of Hindi, which is subject - object - verb (SOV) and assumes a right branching phrase structure where the heads of phrases **TP** and ***v*P** are realised on the right side of their complements.

The complex verb construction contains a light verb. The light verb *kiya* is merged with an **NP** complement *shuru*. This light verb construction *shuru kiya* is semantically similar to the English construction 'make a start'. However, *shuru kiya* is transitive and

introduces an external argument *main* in **Spec *v***. The **DP,** *kaam*, is the internal argument of the LVC, *shuru kiya*, and is therefore, the complement of the **N** *shuru*. This is classified as a conjunct light verb construction and will be analysed, along with other light verb constructions, in detail in Chapter 4.

The tense and aspectual inflections are carried by the conjunct verb *kiya* and the auxiliary *hai*, which contributes to the present perfect tense of the sentence. Therefore, if the auxiliary is omitted from the sentence, the sentence would then be in the simple perfect tense, as shown in (31) below:

(31) *Main =ne* *kaam* *shuru* *kiya.*
I.M.OBL=AO work.M start do
I started the work.

In contrast to **TP** and ***v*P**, the head of the **CP** is always on the left in Hindi. (Davison 2015:23). This can be established by considering embedded clauses, which are introduced by the complementiser *ki* in Hindi:

(32) *Main* *jan-ta* *th-a* *ki* *barf* *gire-gi.*
I.M.S.OBL know-M.HAB be.PST-M.S that snow.F fall-F.FUT
I knew that it would snow.

In (32) above, the position of the complementiser ‘that’ (*ki*) is evidence that the **C** node is merged on the left, as it is in the English structure of the Minimalist architecture.

3.2.2.Free word-order and scrambling

(33) is an example of a sentence with SOV word order:

(33) *Noor =ne* *Anjum =ko* *kitab* *di.*
Noor.M =AO Anjum.M.OBL =to book.F give.F.PRF
Noor gave a book to Anjum. (Kidwai 2008:3)

However, the sentence structure of Hindi does not strictly adhere to a fixed SOV word order. There are several other scrambled word orders that are allowed in Hindi. Kidwai (2008) argues that the word order of Hindi is relatively free. Therefore, example (33), which is a repeat of example (7), could have several word order variations, which are shown below.

(34) Anjum = ko Noor = ne kitab di.
IO SUBJ DO V

(35) kitab Noor = ne Anjum = ko di.
DO SUBJ IO V

(36) Noor = ne di kitab Anjum = ko.[10]
SUBJ V DO IO

(Kidwai 2008:3)

As shown in examples (34) – (36), the postposition *ko* and the AO *ne* explicitly mark the relationships between the SUBJ, DO, V and IO. In a scrambled sentence, like (35), the SUBJ is marked by the AO and the IO is marked by the postposition. Therefore, as long as the AO remains attached to the SUBJ and the postposition remains attached to its respective **DP**, the order of the constituents can be changed freely within a clause. There

[10] This construction is rarely used.

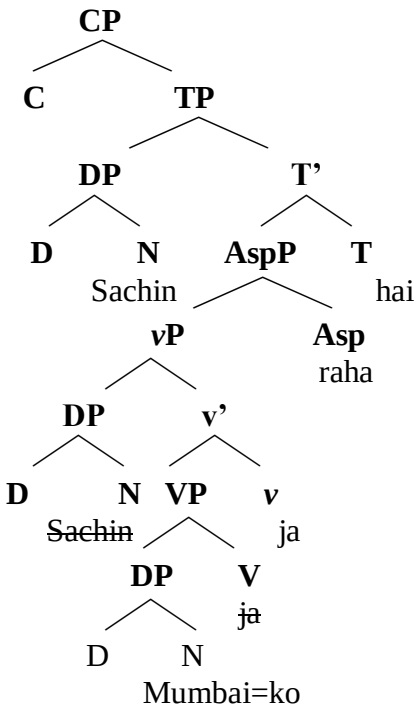
are exceptions to this rule. However, for the purpose of this brief introduction, it will suffice to classify Hindi as a language that typically permits scrambling.[11]

3.2.3.Wh constructions

Hindi is classified as a 'wh in situ' language (Montaut 2004: 267). This means that the Hindi wh-phrase usually remains in its base position, in contrast to languages that display wh-movement of the wh-phrase to the specifier of **CP**. Sentence (37), below, is a declarative sentence in the present continuous tense. The main verb, *ja*, is in its root form while the tense and aspectual features are carried by the progressive auxiliary, *raha*, and the auxiliary, *hai*.

(37)	*Sachin*	*Mumbai=ko*	*ja*	*raha*	*hai.*
	Sachin.M	Mumbai.M=to	go	PROG.M.PRF	be.PRS.S
	Sachin is going to Mumbai.				

[11] For a detailed analysis of scrambling in Hindi, see Mahajan (1990).

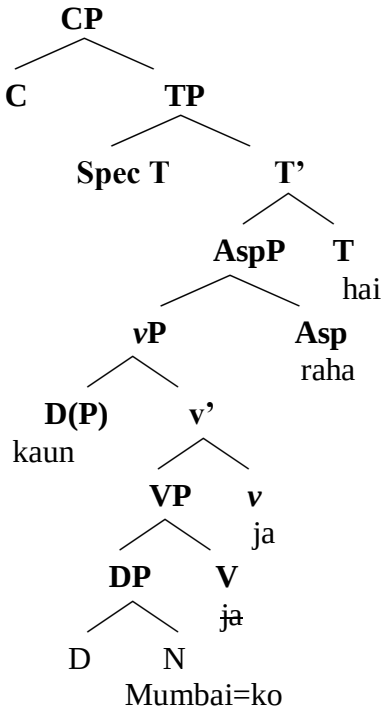


Syntax Tree 2: syntactic structure of (37)

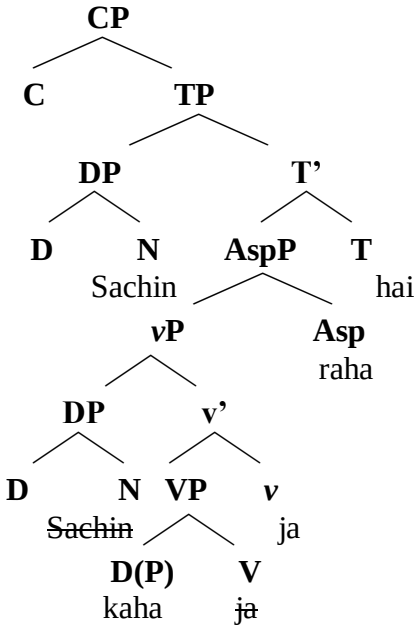
Examples (38) and (39) illustrate the wh- in situ characteristic of Hindi wh-phrases.

(38) *Kaun* *Mumbai=ko* *ja* *rah-a* *hai.*
who Mumbai.M=to go PROG-M.PRF be.PRS.S
Who is going to Mumbai?

(39) *Sachin* *kaha* *ja* *rah-a* *hai.*
Sachin.M where go PROG-M.PRF be.PRS.S
Where is Sachin going?



Syntax Tree 3: syntactic structure of (38)



Syntax Tree 4: syntactic structure of (39)

Thus, the syntactic representation of (38) and (39) would remain the same as (37) with the only difference being the substitution of the respective **DPs** by their respective wh-phrase **DP**s.

Regarding the position of **C**, there is evidence to argue that **Spec C** can be filled in certain constructions. Yes/no questions in Hindi are commonly understood by aid of intonation. However, yes/no questions are sometimes introduced by the optional wh-phrase *kya* 'what'. In examples (40) and (41) below, the wh-phrase *kya* is optional.

(40) *(Kya)* *tum* *bimar* *ho?*
(what) you.S ill be.2.PRS.S
Are you ill? (Kachru 2006:186)

(41) *(Kya)* *Mohan* *kal* *bazaar* *jae-ga?*
(what) Mohan.M tomorrow market.M go.S-FUT.M.S
Will Mohan go to the market tomorrow? (Koul 2008:247)

I assume that the wh-phrase *kya* in (40) and (41) is the optional phonological realization of an interrogative operator which is base-generated in **Spec C** in yes-no questions, see Montaut (2004:265).

This concludes the introductory chapter on Hindi morphology and syntax. The basic characteristics and ideas explained here will be adopted in chapter 4 and chapter 5, where four different light verb categories will be investigated.

Chapter 4: Light verbs in Hindi

The study of complex verbs in Hindi, which I classify as light verbs, has been given specific importance within the study of Hindi grammar. A section dealing with Compound (light) verbs can be found in most Hindi grammar books, including some of the earliest grammatical accounts of Hindi available in the English language, see (Ketelaar 1698). This is evidence that the study of light verbs in Hindi has been acknowledged, categorised and studied for several years. Since the term 'light verb' was only coined by Jespersen (1967), the category of Hindi light verbs has been known by several names, including: compound verbs; conjunct verbs; vector verbs; explicators; auxiliary verbs. Some studies have avoided the use of the term 'light verb' and instead uniformly classified conjunct verbs and compound verbs as distinct categories where conjunct verbs are characterised as verbs that attach to either adjectives or nouns while compound verbs attach to only lexical verbs, see (Koul 2008). I argue that both conjunct and compound verbs are light verbs in Hindi and belong to the category ***v***, as discussed in section 2.2.2.

4.1. Light verb constructions in previous studies

The examples (1) to (4) demonstrate that light verb constructions (LVCs) have been identified in previous studies as being compound and conjunct verb constructions.

Kachru (1966) introduces both conjunct and compound LVCs. Conjunct LVCs are defined as consisting of a nominal or adjectival element and a verb (**N, A** + **V**), shown in (1). The compound LVC, shown in (2), is defined as the combination of two verbs (**V** + **V**). The semantically bleached verb *liya* 'take' which combines with the lexical verb *parh* 'read' is classified as the "operator" (1966: 51). A detailed list of compound verbs can be found in Kachru (1966: 49-60).

Conjunct LVC

(1) *Us-ne* *bandook* ***saaf*** ***ki***.
he.M.S-AO gun.F clean do.F.S.PRF
He cleaned the gun. (Kachru 1966:59)

Compound LVC

(2) *Us-ne* *patr* ***parh*** ***li-ya***.
he.M.S-AO letter.M read do-M.S.PRF
He read the letter. (Kachru 1966:50)

The classification of light verbs as conjunct/compound verbs is well established in the traditional study of Hindi grammar, see McGregor (1972); Mohanan (1990); Hook (1991); Verma (1993); Montaut (2004); Kachru (2006); Koul (2008).

Montaut (2004) and Kachru (2006) make reference to examples of light verbs in Hindi without explaining their relation to current minimalist theories of light verbs and the light verb category ***v***. However, their basic analysis of light verbs serves as evidence of the popular idea that there are indeed light verbs in Hindi. However, this idea has not been explained or justified theoretically by Montaut (2004) or Kachru (2006).

Hook's (1991) study on perfective aspect in Indo-Aryan Languages describes compound verbs as being semantically bleached verbs that have lost some of the features of their original meaning (1991:59). Hook further explains that the strong tense and aspectual features present in Hindi compound verbs suggest that they have developed through the process of grammaticalisation.

Butt (1993) provides an interesting theoretical account of Urdu complex predicates according to the Lexical Functional Grammar framework. As part of her study, Butt groups light verbs into two separate classes: aspectual complex predicates and permissive constructions. These two categories are examined according to their complex lexical and semantic properties. The aspectual complex predicate shown in (3) is the same (**V** + **V**) type of construction as (2), which is classified above as a compound verb construction. The permissive, (4), has not been classified as a light verb in Montaut (2004), Kachru (2006) or Koul (2008).

(3) *Anjum=ne* *khat* *likh* *li-ya.*
Anjum.M=AO letter.M write take-M.3.S.PRF
Anjum wrote a letter (completely). (Urdu; Butt 1993: 91)

(4) *Anjum=ne* *Saddaf=ko* *haar* *bana-ne* *di-ya.*
Anjum.M.OBL=AO Saddaf.F.OBL=to necklace.M make-INF give-M.3.S.PRF
Nadya let Saddaf make a necklace. (Urdu; Butt 1993:34)

The idea that light verbs are semantically bleached verbs, that have lost most of their semantic content and cannot predicate arguments on their own, has been used by Butt (1993; 2003), which is similar to the description of Hook (1991). In addition, Karimi-Doostan's (2011) study of light verbs in Persian adopts the same definition. I adopt this definition as it best describes the characteristics of all of the different light verb categories in Hindi.

In this chapter I will introduce four light verb categories: conjunct LVCs (4.2); compound LVCs (4.3); Permissive LVCs (4.4); Passive LVCs (4.5).

4.2. Conjunct light verb constructions

A conjunct LV may combine with a noun or an adjective. A typical conjunct LVC will consist of one of these categories (**N** or **A**) and the do-LV *kar*[12], for example *saaf kar* 'clean do'. In addition, the other conjunct LVs that are used are *de* 'give' and *aa* 'come'. Syntactically, the conjunct LV adheres to the traditional (Minimalist) light verb hypothesis, see section 2.2.2., whereby the LV introduces an external agent argument.

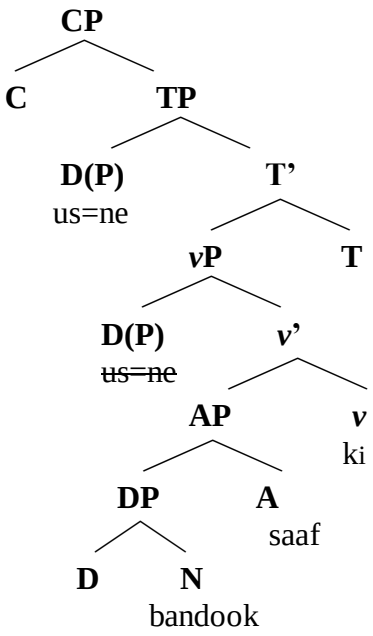
According to the light verb hypothesis, a light verb category ***v*** which projects a ***v*P** and selects a lexical predicative category (**VP, AP** or **NP)** as its complement introduces the external agent argument into a sentence. I classify the following constructions as LVCs:

(5a) *Us=ne* *bandook* *saaf* *ki.*
he.M.S.OBL=AO gun.F clean do-F.3.S.PRF
He cleaned the gun. (Kachru 1966:59)

(5b) *Bandook* *saaf* *th-i.*
gun.F clean be-F.S.PST
The gun was clean.

In example (5a), which is repeated from (1), the LVC consists of the overt light verb *kiya* which selects the adjective *saaf* as its complement, (**A** + ***v***). This is the same structure outlined in the light verb hypothesis in section 2.2.2. In the unaccusative sentence (5b), there is no overt light verb and the causal feature at ***v*** is defective. Thus, the object *bandook* is promoted to the subject position. This example illustrates that where there is a defective light verb at ***v***, as in (5b), the thematic licensing of the external agent argument is not available and, therefore, the sentence is unaccusative.

[12] The LV *kar* is usually in its masculine perfective (*kiya*) or feminine perfective (*ki*) forms.



Syntax Tree 1: syntactic structure of (5a)

Conjunct LVCs contain a noun (**N** + ***v***) or adjective (**A** + ***v***). According to Kachru (2006:92), it is possible to form a conjunct LVC using any noun or adjective. However, the list of possible LVs that can be used in conjunct LVCs is small.

The conjunct LV *kar* (*kiya*), which is by far the most productive of all Hindi LVCs, is illustrated in examples (6) to (8).

(6)	*Main=ne*	*kaam*	*shuru*	*ki-ya*	*hai.*
	I.1.S.OBL=AO	work.M	begin.F	do-M.3.S.PRF	be.3.S.PRS
	I have started my work.				
	I have started work.				

(7) *Ram=ne* *Mohan=par* *bharosa* *ki-ya.*
Ram.M.OBL=AO Mohan.M=on reliance.M do.M.3.S.PRF
Ram relied on Mohan. (Mohanan 1990:268)

(8) *Ram=ne* *guru=ko* *pranam* *ki-ya.*
Ram.M.OBL=AO teacher=to respect.M do-M.3.S.PRF
Ram showed respect to his teacher. (Kachru 1966:58)

In (6) the (**N** + ***v***) conjunct LVC consists of the noun *shuru* 'begining' and the perfective do-LV *kiya*. The auxiliary *hai* adds the continuous tense to the LVC. Examples (7) and (8) are also (**N** + ***v***) constructions.

(9) and (10) are examples of (**N** + ***v***) conjunct LVCs consisting of the less common conjunct LVs *de* and *aa*.

(9) *Nina=ne* *kahani=par* *dhyan* *di-ya.*
Nina.F.OBL=AO story.F=to attention.M give-M.3.S.PRF
Nina paid attention to the story. (Mohanan 1990:269)

(10) *Mohan=ne* *garib=par* *taras* *aa-ya.*
Mohan.M.OBL=AO poor.F.OBL=on pity.F come-M.3.S.PRF
Mohan took pity on the poor.

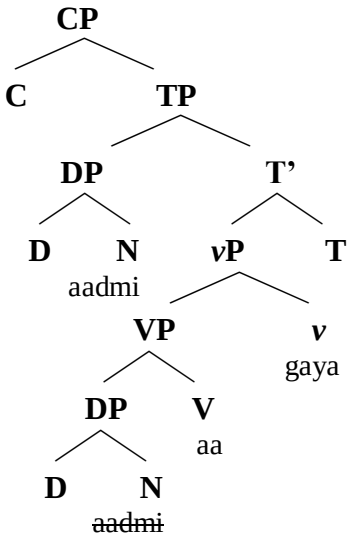
4.3. Compound light verb constructions

Unlike conjunct LVs, which combine with nouns and adjectives, compound LVs only attach to lexical verbs and, in exceptional cases, other conjunct LVs. Compound LVCs have the form (**V** + ***v***). In addition, compound LVCs depart from the traditional light verb hypothesis in that they do not introduce an external agent argument. Instead, the compound LV adds an aspectual dimension to the lexical verb like inception, completion, suddenness, benefaction and volitionality, (Butt 2003:9).

(11) *Aadmi* *aa-ya.*
man.S come-M.3.S.PRF
The man came.

(12) *Aadmi* *aa* *ga-ya.*
man.S come go- M.3.S.PRF
The man came (finally/eventually).

The example (11) is a sentence that has the lexical verb *aa* 'come' in the perfective tense. The next example, (12), is the same sentence with the only difference being the addition of the compound LV *ja* 'go', which in its perfective form changes to *gaya,* to form a (**V** + ***v***) compound LVC. As a result, the LV adds an aspectual meaning which is not available in (11). The LVC in (12) shows that the lexical verb retains all its meaning while the LV has been significantly semantically bleached to the level that it adds the adverbial meaning 'finally/eventually'.



Syntax Tree 2: syntactic structure of (12)

In (12) above, the **DP** *aadmi* is not introduced by the LV *gaya*.

Morphologically, the compound LV combines with an uninflected lexical verb but is, itself, always inflected, carrying the relevant number, gender and tense agreement morphemes, (Kachru 2006:86).

Compound LVCs form a significant part of Hindi discourse. In fact, it is common for any comprehensive work on Hindi grammar to devote a section to compound verbs[13], which I argue are light verbs that do not license arguments. Some common compound LVs used are *ja* 'go', *aa* 'come', *par* 'fall', *daal* 'drop', *de* 'give', *le* 'take' and *mar* 'hit'. It is noteworthy that *de* and *aa* may also function as conjunct LVs, see section 4.1. Each of these LVs may combine with the roots of a number lexical verbs to form several combinations of compound LVCs. There is no rule that determines how verbs are paired with LVs. The skill of using LVCs is acquired through linguistic experience. For example, the verb *kar*, which was introduced in section 4.1, does not function as a compound LV (Ur-Rahman 1967:190). However, *kar* may combine with a compound LV

[13] See Kachru (2006), Koul (2008), Montaut (2004).

to produce an LVC with the form: **N** + ***v*** + ***v***. This is a co-occurring LVC which forms part of the discussion of chapter 5.

Due to the variety of meanings a single compound LV can produce it is difficult to determine the general meaning and function of each compound LV. For example, according to Kachru (2006: 87) *ja* could express a completed or impulsive action. Koul (2008:103) argues that *ja* expresses "a change of state". Investigating the full set of potential meanings and functions of a particular compound LV would require the analysis of a large corpus of data, which goes beyond the scope of this study. Therefore, for the purpose of this study, I will explain the meaning of each compound LV used within its particular context, but I will not make any claims about the general meaning of a specific LV that would capture all its uses.

(13a)	*Main=ne*	*kitab*	*parh*	*li.*	
	I.OBL=AO	book.F	read	take.F.3.S.PRF	
	I read a book (to myself).				(Learning-Hindi 2015)

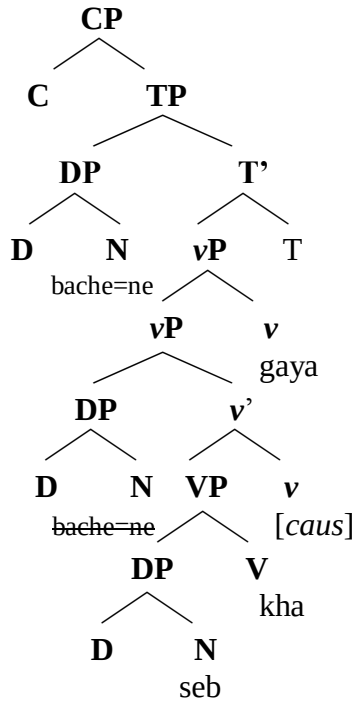
(13b)	*Main=ne*	*kitab*	*parh*	*di.*	
	I.OBL=AO	book.F	read	give.F.3.S.PRF	
	I read a book (out loud/to someone).				(Learning-Hindi 2015)

While it is evident that compound LVs are semantically bleached, having lost their original meaning, they may not be used interchangeably. Using the wrong LV may render a sentence ungrammatical. In addition, the choice of an LV can significantly modify the meaning of a sentence. This is the case in examples (13a) and (13b), above, where the different LVs express a change of the beneficiary. In (13a) the LV *li* 'take' indicates that the reading was done for the benefit of the agent. In (13b) the LV *di* 'give' is used instead

of *li* and indicates that the book was read for the benefit of someone other than the agent. (13b) could also mean that the reading was done audibly. It is also significant that there is no apparent relationship between the aspectual meaning of the LV and its original meaning as a full lexical verb.

(14) *Bache=ne* *seb* *kha* *ga-ya.*
Child.S.OBL=AO apple.M eat go- M.3.S.PRF
The child ate the apple (completely).
The child 'ate up' the apple.

In example (14) the LV *ja* expresses the completion of the act of eating the apple, implying that the child ate the whole apple. However, this example provides a problem for the idea that the external agent argument in Hindi is introduced by a phonologically realised conjunct LV since there is no conjunct LV present in (14). Therefore, I assume that although the conjunct LV is absent, the causal [*caus*] feature responsible for the thematic licensing of the external agent argument is still present. This idea is based on the observation that compound LVs never introduce arguments. Hence, if the agent in (14) is not introduced by the overt LV then it must be introduced by another ***v***. According to the LV hypothesis, the external argument is introduced by a null causative ***v***. Thus, it is clear that the compound LV, ***v***, is different from the causative ***v***. In the structure of (14) below, there are two ***v*** categories, the traditional causative ***v***, as it is postulated in the Minimalist architecture, and an additional ***v*** which I argue hosts the compound LV



Syntax Tree 3: syntactic structure of (14)

Sometimes a (**V** + ***v***) compound LVC may contain a lexical verb that has lost some of its semantic content along with the LV. The LVC *aa* 'come' and the LV *ja* 'go' combine in (15) to convey the meaning of the action 'to return'.

(15)	*Priyanka*[14]	*ghar*	*aa*	*ga-yi*	*hai.*
	Priyanka.F	house.M	come	go- F.3.S.PRF	be.3.S. PRS
	Priyanka has returned home.				(Learning-Hindi 2015)

The LV *par* 'fall' in (16) expresses that the agent, *Aysha*, laughed involuntarily or uncontrollably. In (17) the less common LV *daal* 'drop' is used to express the completion of the work. This example is also special since it has two LVs a conjunct LV *kar* and a

[14] Subject **DP**s of intransitive verbs do not take the AO *ne*. Refer to chapter 3 for the discussion of the AO (Agent Oblique marker)

compound LV *daala*. The possibility of combining two or more LVs will be discussed in chapter 5.

(16) *Aysha* *has* *par-i.*
Aysha.F laugh fall- F.3.S.PRF
Aysha laughed (uncontrollably).

(17) *Main=ne* *kaam* *kar* *daal-a.*
I.OBL=AO work.M do drop- M.3.S.PRF
I completed the work.

The example in (18a) does not contain an LV and, thus, the lexical verb, **V**, is inflected for tense and agreement. In (18b) the (**V** + ***v***) compound LV expresses that the car was bought for the benefit of the agent or buyer, *Ali*.

(18a) *Ali=ne* *car* *kharid-i.*
Ali.M.OBL=AO car.F buy- F.3.S.PRF
Ali bought a car.

(18b) *Ali=ne* *car* *kharid* *li.*
Ali.M.OBL=AO car.F buy take.F.3.S.PRF
Ali bought a car (for himself).

When asked to choose which of these two sentences is more favourable, all the Hindi speakers I consulted chose (18b), even though they admitted that (18a) is grammatical and has the same meaning. This result suggests that the compound LV has an additional

function which is not related to its typical semantic contribution to the lexical verb. In section 4.6. I will discuss the idea that compound LVs have an additional function of hosting perfective aspect.

4.4. The permissive light verb construction

I have, thus far, shown that the verb *de* 'give' can function as a conjunct verb and a compound verb in Hindi. In this section I will show that *de* can also express another category of LV, the permissive. The permissive LVC has the same form as the compound LVC (**V** + ***v***). However, there are morphological and syntactic differences between the permissive LV and the compound LV. The permissive LV attaches to an inflected infinitival verb (Kachru 2006:205), which may carry oblique case marking, while the compound LV attaches to a bare root verb.

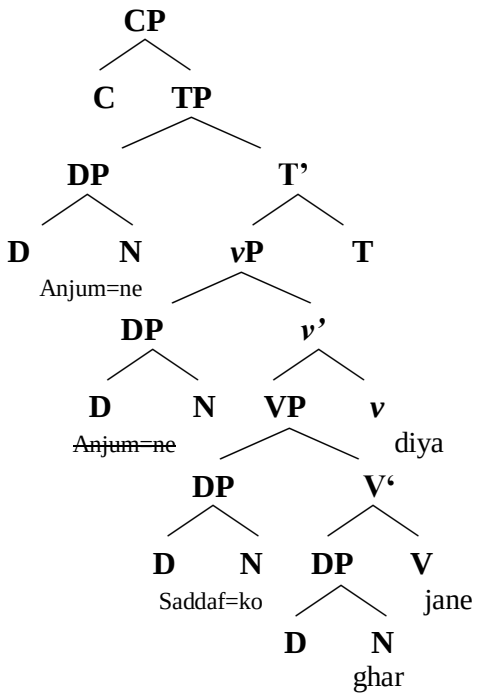
Syntactically, the permissive is characterised as a valence-increasing causative verb which conveys the meaning of 'to let/to allow' (Montaut 2004:131). If the permissive LV is analysed according to the light verb hypothesis, it can be seen to introduce an external agent argument or assign an external theta role.

There are two arguments in example (19), below, the theme argument **DP** *Saddaf* and the goal **DP** *ghar*. By adding the permissive LV in example (20), the external agent argument *Anjum* is introduced. The permissive LV is also used in imperative constructions, like example (21). The permissive LV carries the imperative inflection *-o* and attaches to the infinitival verb *khelne.* However, in (21) there is no external agent argument present.

(19) *Saddaf* *ghar* *ga-ya.*
Saddaf.M house.M go-M.3.S.PRF
Saddaf went home.

(20) *Anjum=ne* *Saddaf=ko* *ghar* *ja-ne* *di-ya.*
Anjum.M.OBL=AO Saddaf.M.OBL=to house.M go-INF.OBL give-M.3.S.PRF
Anjum let Saddaf go home.
Anjum allowed Saddaf to go home.

(21) *Bache=ko* *khel-ne* *d-o.*
child.OBL=to play-INF.OBL give-IMP
Let the children play!



Syntax Tree 4: syntactic structure of (20)

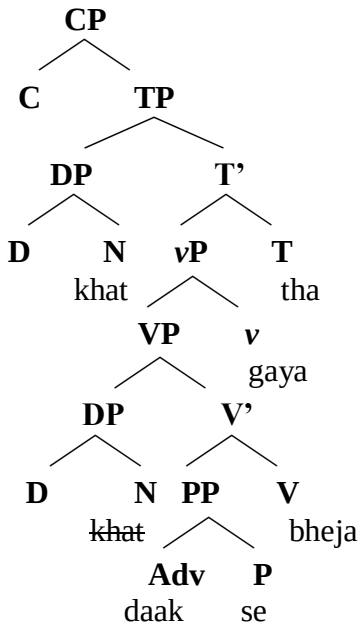
In (20) above, the external agent argument *Anjum* is introduced by the permissive LV *diya* (in perfective form). The internal arguments, the patient *Saddaf* and the goal *ghar*, are both generated in the **VP**. The lexical verb in **V**, *ja-ne*, carries the infinitive affix typically associated with permissive LVCs

4.5. The passive light verb construction

The verb *ja* 'go', which is commonly used as a compound LV, also serves as the passive LV. The passive LV *ja* is easily distinguished from the compound LV *ja* because the passive LV combines with an inflected verb while the compound LV combines with a bare root verb.

(23)	*Khat*	*dak =se*	*bhej-a*	*ga-ya*[15]	*th-a.*
	Letter.M	post=by	send-M.3.PRF	go-M.3.S.PRF	be-M.3.S.PST

The letter had been sent by post.



Syntax Tree 5: syntactic structure of (23)

In the passive LV construction (23) above, the passive LV *gaya* is represented in the ***v*** position. The category ***v*** does not introduce any arguments because the passive LV

[15] The verb *ja* changes to *gaya* in the perfective form.

absorbs the external argument which is the opposite of the function of the permissive LV. All verbal elements are inflected.

4.6. Analysis

In this chapter I have introduced four LV categories: conjunct LV; compound LV; permissive LV; passive LV. Each of these LVs fulfils the condition of being a semantically bleached verb that has lost some of its thematic content. This definition has been proposed by Hook (1991); Butt (1993); Karimi-Doostan (1995, 2011). However, the different functions of each LV category suggest that the degree of semantic bleaching that each LV category has undergone is different. This idea is supported by the ability of the verb *de* to be a conjunct, compound or permissive LV. The examples (9), (13b) and (20) have been repeated below to illustrate that *de* can assume the characteristics of three separate LV categories.

(9) *Nina=ne* *kahani=par* *dhyan* *di-ya.*
Nina.F.OBL=AO story.F=to attention.M give-M.3.S.PRF
Nina paid attention to the story. (Mohanan 1990:269)

(13b) *Main=ne* *kitab* *parh* *di.*
I.OBL=AO book.F read give.F.3.S.PRF
I read a book (out loud/to someone). (Learning-Hindi 2015)

(20) *Anjum=ne* *Saddaf=ko* *ghar* *ja-ne* *di-ya.*
Anjum.M.OBL=AO Saddaf.M.OBL=to house.M go-INF.OBL give-M.3.S.PRF
Anjum let Saddaf go home.
Anjum allowed Saddaf to go home.

In (9) the perfective *diya* functions as a conjunct LV which introduces the external agent argument *Nina*. In (13b) the feminine perfective *di* adds an aspectual dimension to the lexical verb and does not introduce any argument. In (20) *diya* functions as the permissive LV which introduces the external agent argument *Anjum* but also constructs the specialised permissive meaning, 'to allow', which is not possible in (9). Similarly, the LV *ja* (*gaya*) functions as a compound LV in (12) and as the specialised passive LV in (23).

(12) *Aadmi* *aa* *ga-ya.*
man.S come go- M.3.S.PRF
The man came (finally/eventually).

(23) *Khat* *dak =se* *bhej-a* *ga-ya*[16] *th-a.*
Letter.M post=by send-M.3.PRF go-M.3.S.PRF be-M.3.S.PST
The letter had been sent by post.

The multiple functions of *de* and *gaya* support the idea that there are several LV categories within the ***v*P.**

Hook (1991) examined compound LVCs in several Indo-Aryan languages, including Hindi and Urdu. The study of Hindi/Urdu compound LVCs shows that their frequency of

[16] The verb *ja* changes to *gaya* in the perfective form.

usage is extremely high. In addition, Hook argues that compound LVs have become obligatory markers of perfective aspect in situations when they are deemed redundant. This means that compound LVs are often used in sentences where they do not contribute anything to the sentence except perfective aspect. This observation is significant because morphologically, a lexical verb is just as capable of carrying the perfective *-a*/*-ya* affix as the compound LV is. Another significant finding of the study is that compound LVs often occur in the absence of modals and auxiliaries. Hence, Hook argues that compound LVs have become grammaticalised to assume the functions like inception/completion that were previously reserved for Hindi modals like *lag* 'start' and *chuk* 'complete'.

The idea that LVs have become preferred markers of perfective aspect explains why there is such a high occurrence of single LVC constructions in Hindi. The following examples (11), (12) and (18 a, b) are repeated below. The reason why (11) and (18a) are uncommon, although they are grammatical, is because the accompanying compound LVs in (12) and (18b) have become default markers of perfective aspect for the lexical verbs they combine with. The analysis of Hook (1991) explains the reason why these examples have the LV (to carry the perfective aspect). This suggests that some compound LVs, like *gaya* and *li* below, have become default hosts of perfective aspect in Hindi.

(11) *Aadmi* *aa-ya.*
man.S come-M.3.S.PRF
The man came.

(12) *Aadmi* *aa* *ga-ya.*
man.S come go- M.3.S.PRF
The man came (finally/eventually).

(18a) *Ali=ne* *car* *kharid-i.*
Ali.M.OBL=AO car.F buy- F.3.SG.PRF
Ali bought a car.

(18b) *Ali=ne* *car* *kharid* *li.*
Ali.M.OBL=AO car.F buy take.F.3.SG.PRF
Ali bought a car (for himself).

The traditional Minimalist light verb hypothesis introduced in section 2.1. only postulates a single ***v*** category for LVs. However, the study of Hindi LVs provides sufficient evidence that there are several ***v*** categories within the ***v*P**. The idea that semantically bleached verbs have lost some of their semantic content but still have the ability to influence argument structure is evidence that they occupy a position which is between the inflectional **TP** and the lexical **VP**. This idea serves as evidence for the existence of the ***v*P**. Thus, I argue that the Hindi LV categories belong precisely in the ***v*P** which is the interface between the fully functional **T** categories and the fully lexical **V** categories. In the next chapter, chapter 5, I will provide further evidence to support my assumption that the four LV categories identified in this chapter can be postulated as four separate ***v*** categories within the ***v*P**.

Chapter 5: Co-occurring light verb categories and the ***v*** *Domain*

There is sufficient evidence from Hindi data to support the idea that more than one LV category can co-occur in a single sentence. I first provide examples of Hindi sentences that contain co-occurring LVCs in 5. 1. In 5.2. I adopt the hypothesis from Cartographic studies that postulates an expanded ***v*** *Domain* which includes multiple extended projections of the ***v*****P**. I argue that the presence of co-occurring LVCs in Hindi provides strong evidence for the Cartographic hypothesis of the ***v*** *Domain*.

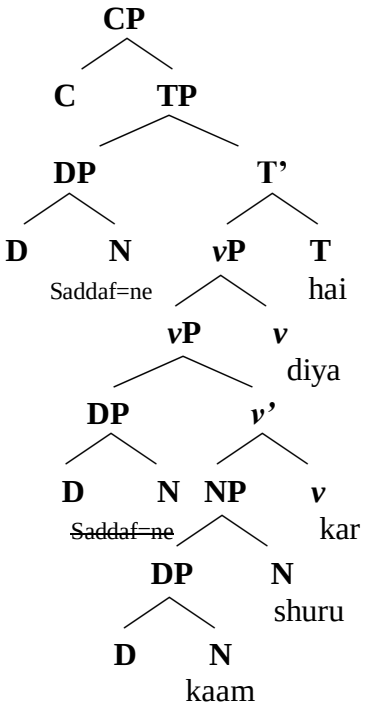
5.1. Co-occurring LVCs

5.1.1.conjunct LV + compound LV

The following example has two LVs, a conjunct LV and a compound LV.

(1)	*Saddaf=ne*	*kaam*	*shuru*	*kar*	*di-ya*	*hai.*
	Saddaf.M.OBL=AO	work.M	start.M	do	give-M.3.S.PRF	be.3.S.PRS
	Saddaf has (certainly) started the work.					
	Saddaf has (already) started the work.					

The example (1), above, contains two LVs: the conjunct LV *kar* which introduces the external agent argument *Saddaf*, and the compound LV *diya* which carries the tense features and adds the aspectual meaning to the sentence. The compound LV *diya* does not impact on the argument structure of the sentence. Since compound LVs characteristically combine with root verbs, the conjunct LV *kar* remains in its root form while the compound LV *diya* carries the tense features. The auxiliary *hai* gives the sentence its present perfect tense, as explained in section 3.1.9.



Syntax Tree 1: syntactic structure of (1)

In the structure of example (1) above, the external agent argument *Saddaf*, which is introduced by the conjunct ***v*** *kar*, is generated in the specifier of the lower ***v*P.**

5.1.2.conjunct LV + permissive LV

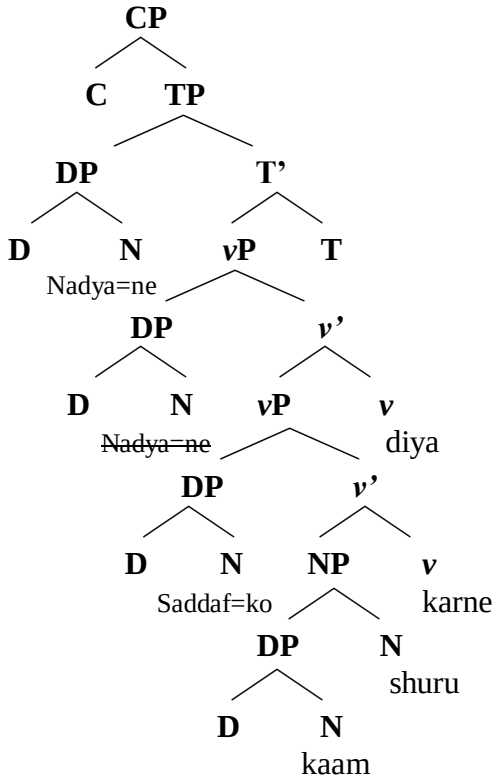
The following example contains two LVs, the conjunct LV *kar* and the permissive LV *diya*.

(2)	*Nadya=ne*	*Saddaf=ko*	*kaam*	*shuru*	*kar-ne*	*di-ya.*
	Nadya.F.OBL=AO	Saddaf.M.OBL=to	work.M	start.M	do.INF	give-M.3.S.PRF

Nadya allowed Saddaf to start the work.

Example (2) above, is derived from example (1) by replacing the compound LV *diya* with the permissive LV *diya*. The conjunct LV *kar* is in its infinitive form, carrying the

infinitive suffix, since the permissive LV *diya* typically agrees with infinitives, unlike the compound LV in (1) which only agrees with root verbs. Syntactically, the external agent argument *Nadya* is introduced by the permissive LV and not the conjunct LV.



Syntax Tree 2: syntactic structure of (2)

In the structure of (2) the external agent argument is introduced by the permissive LV *diya*, and not the conjunct LV *kar*. Thus, the agent **DP** is generated in the specifier of the upper ***v*P**. Also, the conjunct LV carries the infinitive suffix, *kar-ne*, as it is required that the permissive LV attaches to a verb in the infinitive form.

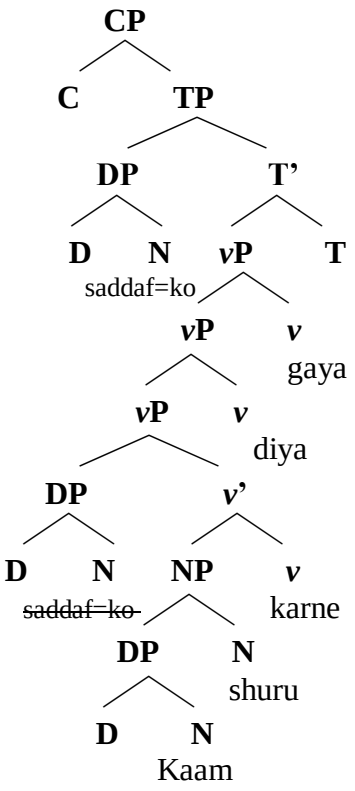
5.1.3. conjunct LV + permissive LV + passive LV

Hindi also allows the combination of three LVs:

(3)	*Saddaf=ko*	*kaam*	*shuru*	*kar-ne*	*di-ya*	*ga-ya.*
	Saddaf.M.OBL=to	work.M	start.M	do.INF	give-M.3.S.PRF	go.PST- M.3.S.PRF

Saddaf was allowed to start the work.

Example (3) above is derived from (2) whereby the passive LV is added. Syntactically, passivisation has the effect that the agent theta role is absorbed, and accusative case can no longer be assigned. The addition of the passive LV *gaya*, therefore, means that the agent argument *Nadya* in (2) is no longer present in (3). Thus, the direct object from (2) is promoted to the subject position in **Spec T** in order to check the strong EPP- feature of **T**.



Syntax Tree 3: syntactic structure of (3)

5.1.4. compound LV + permissive LV + passive LV

Example (4) shows that the permissive and the passive can also combine with compound LVs:

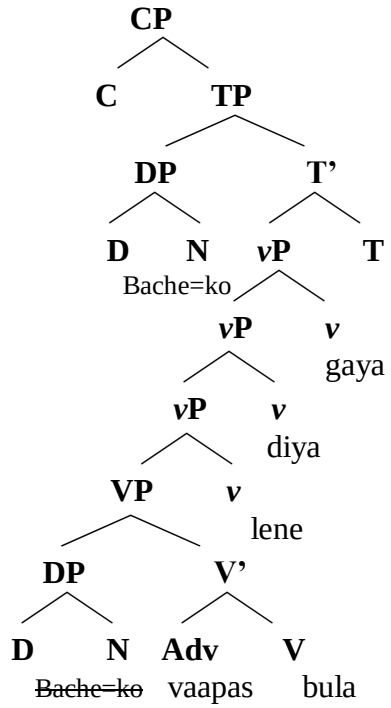
(4)	*Bache=ko*	*vaapas*	*bula*	*le-ne*	*di-ya*	*ga-ya.*
	child.3.S.OBL=AO	back	call	take-INF	give- M.3.S.PRF	go-.3.S.PRF

The child was allowed to be called back.

The child was allowed to be sent back.

Example (4) is a passive construction that contains three LVs: the compound LV *lene*; the permissive LV *diya* and the passive LV *gaya*. The compound LV carries the infinitive

suffix and adds the aspectual meaning of ‘returning’ to the lexical verb *bula* ‘call’. Thus, the compound LVC *bula lene* means ‘call back’ or ‘send back’ (to return to its original position). The adverb *vaapas* also conveys the meaning of ‘back’ to the verb *bula*. Therefore, the compound LV *lene* is actually redundant in this sentence.



Syntax Tree 4: syntactic structure of (4)

5.1.5.Analysis

The examples (1) to (4) illustrate that either the conjunct LV or the compound LV may co-occur with both the permissive and passive LVs. Unlike the other LV categories, the compound LV plays no part in transitivity. Thus, in (1) the conjunct LV introduces the external argument and the compound LV does not impede the transitivising function of the conjunct LV. However, in (2) the permissive LV replaces the function of the conjunct LV by introducing the external agent argument. In (3) the passive LV cancels the external agent argument introduced by the permissive making the sentence unaccusative.

In example (4) there are three LVs, the compound LV, the permissive LV and the passive LV. However, even though the conjunct LV is not overtly realised, I assume that the defective null causative conjunct ***v*** is present in the structure. Therefore, (4) is the only example which includes all four ***v*** categories, although the conjunct LV is not overtly realised.

In my study I have not been able to find a sentence that includes all overtly realised four LVs. This shortcoming could be attributed to my inability to find a substantial number of Hindi speakers to provide grammaticality judgements for this study and my inability to generate grammatical examples myself. However, I assume that sentences that have all four LV categories are possible in Hindi, although they may not be commonly used.

According to the Minimalist light verb hypothesis introduced in section 2.2., the category ***v*** is argued to have a causal feature which is responsible for the thematic licensing of the external agent argument, see Chomsky (1995). However, if the light verb, ***v,*** is defective then the thematic licensing of the external agent argument fails and the resultant sentence will be unaccusative.

In the case of Hindi, the idea that several ***v*** categories can co-occur poses problems for the theory of ***v***. The initial problem is that there is no space for four ***v*** heads in the Minimalist architecture. If the architecture were modified to accommodate multiple ***v*** heads then another problem will be determining which head is responsible for the thematic licensing of the external argument, according to the Minimalist hypothesis. The analysis of examples (1) to (4) shows that the conjunct ***v***, overt or null, is always responsible for the thematic licensing of the external argument unless there is a permissive or passive LV present. If the permissive is present then it will assume the role of the thematic licensing of the external argument. If the passive LV is present it will cancel the external argument and passivise the sentence. However, if both the permissive LV and the passive LV are present in the same sentence then the passive LV will cancel the external argument that was introduced by the permissive LV and the sentence will be passivised.

5.2. The ***v*** *Domain*

In section 5.1. I have shown, with the aid of several examples that as many as three LV categories can co-occur in a single sentence. The phenomenon of co-occurring LVs within a single sentence provides strong evidence for the existence of a complex syntactic space between the **TP** and the **VP** which accommodates several ***v*** categories. The idea that **C**, **T** and ***v*** are abbreviated structures of more complex domains has been central to the framework of Cartography in syntax (Cinque and Rizzi 2008). Thus far, Cartographic studies of the **CP** and **TP** have already established complex zones or domains that house multiple extended projections of **C** and **T**. Furthermore, Cocchi (2009) postulates a ***v*** *Domain* in which several Bantu verbal extensions are represented as multiple extended projections of the category ***v***.

There is the sufficient theoretical evidence from Cartographic Studies in favour of postulating a ***v*** *Domain*, in addition to the strong morpho-syntactic evidence from the data described here on the Hindi LVCs that can co-occur. Therefore, I propose a ***v*** *Domain* that encompasses the four light verb categories that are investigated in this study.

Although Hindi is regarded as a language that can permit scrambling, see section 3.2., the order of LV categories is always fixed, see Butt (2003; 2010). The following verbal complex shown below is provided by Butt (2003:8):

Main Verb (light verb) (passive) (progressive) Be-Auxiliary

Verbal complex 1: Order of verbal complex (Butt 2003)

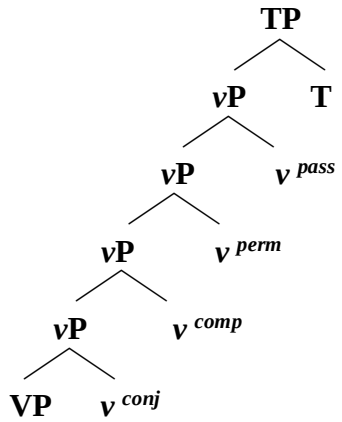
The examples in this chapter support this word order. I have shown the fixed order of the four LV categories investigated in this study, below. This is the fixed word order of

verbal elements in Hindi which is supported by the Hindi grammar studies of Montaut (2004); Koul (2008).

V (conjunct LV) (compound LV) (permissive LV) (passive LV) T

Verbal complex 2: Order of LV categories

The ***v*** *Domain* below, is postulated to represent the LV categories in Hindi. The external agent argument **DP**, which is not included above, will be generated in the specifier of the ***v*P** of the ***v*** category that the external agent argument **DP** is licensed by.



Syntax Tree 5: structure of the ***v*** *Domain*

Chapter 6: Conclusion

This study has introduced Hindi LVs and grouped them into four different LV categories based on their characteristics and functions. The LVs have also been analysed according to current Minimalist and Cartographic theories.

Conjunct LVs, (**N**, **A** + ***v***), combine with nouns or adjectives and carry tense and agreement morphology. I have shown that the conjunct LV may possess the strong causal feature which is responsible for the thematic licensing of the external agent argument. Thus, the conjunct LV serves the same function as the LV in the traditional LV hypothesis which proposes a solitary LV category, ***v***, see Chomsky (1995).

The compound LV, (**V** + ***v***), departs from the traditional Minimalist LV hypothesis since it: 1) does not introduce the external agent argument; 2) contributes an aspectual dimension to the sentence. The compound LV could be responsible for a variety of aspectual meanings, including inception, completion, volitionaity, change of state, see Butt (1993, 2003).

I have provided evidence that supports the argument of Hook (1991) that a small number of LVs have become default perfective markers for the lexical verbs they combine with. However, I think this idea would need to be investigated further.

The permissive LV, (**V** + *de*), is significant for current theories of the category ***v*** since it conforms to the LV hypothesis, by introducing an external agent argument, while carrying a special semantic relation of ‘to allow/ to let’. This shows that the permissive LV is different from the conjunct LV. Furthermore, the permissive LV can co-occur with both the conjunct and compound LVs.

The passive LV, (**V** + *ja*), is responsible for passivisation. In chapter 5, I examined examples where the passive LV co-occurs with either: 1) a conjunct LV and the permissive LV; 2) a compound LV and the permissive LV. This phenomenon has significant implications for the syntactic structure of Hindi and for the theory of the category ***v*** in general.

The existence of multiple LVs that can co-occur in a single sentence supports the strong position, of Chomsky (1995), Kratzer (1996) and subsequent studies, that a functional space ***v*P** is present between the functional **TP** and the lexical **VP**. In addition, multiple co-occurring LVs within a single sentence provide strong evidence for the idea that has been proposed by Cartographic studies, that the core functional categories **C**, **T** and ***v*** are abbreviated structures for more complex zones or domains that contain several functional categories, see Rizzi (2004); Cocchi (2009); Shlonsky (2010).

Therefore, I argue that the syntactic structure of Hindi provides this richly articulated ***v*** *Domain* that has been proposed by numerous Cartographic works.

I have provided a structure of the ***v*** *Domain* which is based on the order of the co-occurring LV categories in Hindi. To my knowledge, this structure, which is guided by the Cartographic approach to syntax, has not previously been applied to Hindi LVs.

The idea of the presence of a ***v*** *Domain* could be significant for similar studies conducted in other languages in the Indo-European language family. There are several studies available that account for the strong presence of LVs in the languages of the Indo-Iranian sub-group of the Indo-European language family. These accounts include Karimi-Doostan (1995, 2005) on Persian and Kurdish; Paul (2003) on Bangla; Pokharel (1991) on Nepali. It would therefore be of interest for future studies of LVs in Indo-Iranian to investigate whether these languages have LVs that can co-occur and whether these co-occurring LVs could be represented within the ***v*** *Domain*.

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Appendix A

The following questions were asked during the informal interviews with speakers to produce the well-formed co-occuring LVCs used in chapter 4 and chapter 5.

Interview Questions:

1. Do you think the following sentence is grammatically well formed?

2. Do you use sentences like this?

3. How would you correct this sentence?

4. How do you say the following sentence in Hindi?

5. Is it possible to convey this sentence using a using more than one verb?

6. If not, could you provide a new sentence that contains the following verbs?

7. What is the meaning of this new sentence?

8. How does each light verb influence the meaning of this sentence, and if a particular light verb was removed, how would the sentence structure and the meaning of the sentence change?

9. Which of the following sentences would you prefer and why?