LIGHT VERB CONSTRUCTIONS IN POTWARI

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ABSTRACT

The understudied South Asian language Potwari (Indo-Aryan: Pakistan/Azad-Kashmir/UK) manifests a productive formation of light verb constructions (LVCs hereafter), which are integral to the structure of the language. A typical LVC contains two components, which form a single verbal predicate; a coverbal element, such as a noun, verb, or an adjective, and a light verb (LV hereafter). The latter is always form-identical with a lexical verb and has very little semantic content within the LVC (Butt, 2010). For example, the two components of the Potwari LVC $a_{\underline{t}}^{th}$ 'hand' and mar 'to hit' in (1) together form the LVC meaning 'to wave'. The nominal $a_{\underline{t}}^{th}$ is otherwise a canonical noun and mar 'to hit' has a lexical verb corresponding to it, as illustrated in (2).

- (1) me dəveria-ki ath mar-ja si 1.SG.PLN Javeria.F.SG-OBL hand.M.SG hit-M.SG NPR.3.SG 'I waved at Javeria.'
- (2) us miki pijala mar-ja si 3.SG.ERG 1.SG.OBL cup.M.SG hit-M.SG NPR.3.SG 'He/She hit a cup at me.'

As noted by Butt & Geuder (2001), LVCs are an interesting challenge for theories of syntax and semantics because they display dual properties that prove to be difficult to categorise them as function words, such as auxiliaries or with full lexical verbs. Previous analyses have distinguished coverbs of LVCs from complements of main verbs (Butt, 1995; Karimi, 1989; Megerdoomian, 2012; Mohanan, 1994), while others have treated the two uniformly (Barjasteh, 1983; Ghomeshi & Massam, 1994; Vahedi-Langrudi, 1996). Similarly, LVCs are often classified as a form of an auxiliary verb construction, with the LV identified as belonging to the syntactic class of tense/aspect auxiliaries (Cattell, 1984; Grimshaw & Mester, 1988; Hook, 1974; Hopper & Traugott, 1993), whereas others advocate for their syntactic independence (Butt & Geuder, 2001; Butt & Lahiri, 2013).

In this thesis, I provide conclusive evidence via empirical data based on language internal diagnostics, that LVCs are morphosyntactically and semantically distinct to main verb complement structures and auxiliary verb constructions. To sum, in my work, I hope to reevaluate previous claims and revalidate the important contribution of studies by Butt & Geuder (2001), Megerdoomian (2012), and others, but with a much greater amount of empirical data from Potwari.

DECLARATION

I declare that no portion of this work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

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GLOSSING CONVENTIONS

A adjective

ABS absulative case

ACC accusative case

ADJ adjective

AGR agreement

DAT dative case

DEM demonstrative pronoun

DIM dimmuntive

DISRESP disrespect demonstrative

DIST distal demonstrative

ERG ergative case

F feminine

FUT future tense

GEN genitive case

IMPF imperfective aspect

INF infinitive

LOC locative case

M masculine

MOD modal

N noun

NEG negative

NFN non-finite

NMLZ nominalizer/nominalization

NOM nominative case

NP noun phrase

NPR non-present tense

OBJ object

OBL oblique case

PERF perfective aspect

PL plural

PLN plain case

PRF perfect aspect

PROG progressive aspect

PROX proximate

PRS present tense

PST past tense

RESP respect demonstrative

RFL reflexive

sg singular

subject

TOP topic marker

VOC vocative case

- 1 first person agreement
- 2 second person agreement
- 3 third person agreement

CHAPTER

ONE

INTRODUCTION

1.1 Complex Predicates

Investigations into multi-verbal structures, such as light verb constructions (LVCs hereafter), serial verb constructions (SVCs hereafter), control structures, auxiliary verb constructions (AVCs hereafter), coverb constructions, and compound verbs in natural languages, particularly amongst those of the South Asian languages, have revealed a huge body of discussions, and empirical evidence on how they are morphosyntactically and semantically manifested. Despite the huge body of work received on multi-verbal structures, it is still difficult to categorise which of these constructions/structures are complex predicates. In fact, such sentiments are echoed across a long line of linguists and grammarians working on complex predicates. That is, what constitutes a complex predicate? Butt (1995) defines the term 'complex predicate' as a construction that involves two or more predicational elements (such as nouns, verbs, and adjectives), which predicate as a single element i.e. their arguments map onto a monoclausal syntactic structure.

Despite Butt's (1995) clear definition of a complex predicate, cross-linguistically it is still a difficult task to differentiate complex predicates from syntactic structures, such as main verb complement structures (MV-complement structures hereafter). Amberber et al. (2010, 1) note that there is no widely accepted answer, nor is there a set of diagnostic tools that can facilitate the categorisation of a given construction as a complex predicate. For example, a typical LVC contains two components that form a single verbal predicate, a light verb (LV hereafter), and a co-verbal element, such as a noun, a verb, or an adjective. An LV typically is always identical to a lexical verb in a language, has very little semantic content within the LVC, and in some languages, like Urdu (Indo-Aryan: Pakistan), it can determine case marking of the subject. To some degree, this categorisation does differentiate LVCs from other constructions/structures. However, certain analyses still treat LVCs as MV-complement structures, such as Vahedi-Langrudi's (1996) analysis of Persian LVCs. Similarly, LVCs are often classified as a form of auxiliary construction, with the LV

identified as a functional item similar to that of a tense/aspect auxiliary. A question often raised in the complex literature is whether there can be a crosslinguistically valid criteria to distinguish LVCs from MV-complement structures and AVCs. Butt (2010, 74) concludes that the category LV must be established according to language-internal tests, as the precise syntax of LVs differs across languages.

Defining complex predicates is outside the scope of the thesis. Therefore, we proceed in this matter as follows; we include under complex predicates, monoclausal predications¹ comprising of multi-verbal structures that have a single argument structure, such as V/N/Adj +V and V/Adj/N + auxiliary.² We follow Anderson's (2006) definition of AVCs: AVCs are monoclausal structures with one verbal element expressing lexical meaning and a second one contributing grammatical/functional information. Establishing crosslinguistic criteria is also beyond the scope of this thesis. However, the present study does begin the task of differentiating LVCs from MV-complement structures, and AVCs, within the understudied South Asian language, Potwari. The comparison is carried out in respect of their syntactic and semantic properties. I address the following three research questions:

- (1) What are the similarities and differences between LVs and MV-complement structures?
- (2) Do LVs constitute a syntactically distinct class to auxiliaries in Potwari, and can this be diagnosed by syntactic/morphological diagnostics?
- (3) Do LVCs based on the same LV share any semantic component with one another?

I provide conclusive evidence via empirical data based on language internal diagnostics, that the LVCs are morphosyntactically and semantically distinct to MV-complement structures, and AVCs.

The chapter is organised as follows. Section 1.1.1 begins by introducing typological characteristics that identify LVCs cross-linguistically. In section 1.1.2, I review the much debated status of coverbs as complements, and their syntactic relation to the LV. Section 1.1.3 focuses on the LV vs. auxiliary debate. Section 1.2 provides a background on Potwari, in respect of its understudied status and

¹Diagnosing for monoclausality is not in the remit of this thesis, though no doubt an avenue I believe to be necessary to re-visit in the context of the synchronic data I present in this thesis. With that said, as a preview the LVCs and AVCs can be diagnosed as monoclausal predications in respect of the monoclausal diagnostic tools negation and control.

²Amberber et al. (2010, 2) do not consider AVCs as complex predicates. This is rooted in comparing the periphrastic construction formation of the future tense in English, 'will walk' with the inflectional affix formation of the past tense, 'walk-ed'. They note if the former is to be treated as a complex predicate, then latter should also be analysed in the same way. They only consider 'elements of the multi-headed predicate that make a significant lexical-semantic contribution including, in particular, information that is relevant to determining the argument structure of a clause.' Therefore they exclude periphrastically marked tenses because they do not make any deep syntactic consequences.

sociolinguistic context. The basic phonemic inventory for Potwari is laid out in section 1.3. The methods employed to eliciting the data are presented in section 1.4. Section 1.5 concludes with an outline of the thesis.

1.1.1 Light Verb Constructions

LVs have proven to be an interesting challenge for theories of syntax and semantics because they display dual properties that make it difficult to class them either with function words, such as auxiliaries or with full lexical verbs. The first use of the term 'light verb' was by Jespersen (1965, Volume VI, 117) to describe LVCs in English, such as those listed in (4). In these constructions, the non-verbal element provides most of the semantic information and the LV contributes little to the semantics of the clause. The verbs take, have, and give can be said to be semantically light in comparison to the full/lexical verb. For example, one does not physically give a shout but rather one shouts, whereas in she will give him the book, entails she will physically give the book. Also, it is only the LV that inflects for tense/aspect/person, rather than the nominals. For example give a shout in the past tense reading would be gave a shout, rather than *give shouted. The considerably reduced semantics of the LV is said be a result of it having evolved from its lexical verb analogue (also referred to as "heavy" verb) through a process of semantic bleaching. In this process, the LV loses some of its original semantics or, according to some, it can lose all its semantics and merely have a functional element (Cattell, 1984).

- (4) a. have a rest, have a read, have a cry, have a think
 - b. take a sneak, take a drive, take a walk, take a plunge
 - c. give a sigh, give a shout, give a shiver, give a pull, give a ring

Butt (2010, 48)

LVCs are not restricted to English and are in fact exhibited in a large number of diverse languages, from South and Central Asian languages, such as Hindi/Urdu (Butt, 1995; Butt & Geuder, 2001; Hook, 1974; Mohanan, 1994), Farsi/Persian (Folli et al., 2005; Ghomeshi, 1996; Goldberg, 2003), Turkic languages (Anderson, 2004; Bowern, 2008) to languages of Northern Australia (Bowern, 2004; Nash, 1982; Schultze-Berndt, 2000, 2003a,b; Wilson, 1999). Unlike Potwari, LVCs in English are much less frequent than simple verbs and often have simple counterparts that express similar meanings, as with walk vs. take a walk. The strong distribution of LVCs across languages of the South Asian region has led Masica (1976) to categorise them as an areal feature. Hence the South Asian language Potwari manifests a productive formation of LVCs, which are integral to the structure of the language. LVs contribute to a number of constructions in South Asian languages. These include complex forms made up of a lexical category and an LV (N/V/Adj + V).

An example of an LVC in Potwari is illustrated in (5), which is made up of the noun at hand', referred to as the coverb of the construction, and the verb mar 'hit', referred to as the LV, which together form the LVC meaning 'to wave'³. The term 'coverb' employed in the context of Potwari is not synonymous with the definition of 'coverb' found in the complex predicate literature of Australian languages⁴. I adopt the term 'coverb' as a cover term for the complement of the LV in an LVC, whatever its syntactic category elsewhere in the language. The LVC $a\underline{t}^h$ mar 'to wave', lit. 'hand hit' is identified as an LVC based on the typologically characteristics summarised in (7). The LV always has a corresponding MV⁵ as illustrated in (6). Canonically the coverb corresponds to a noun, an adjective, or a verb. The coverbal element contains the main predicational content, which intuitively can be seen in (5). The nominal coverb $a_{\underline{t}}^{th}$ 'hand' in this example contributes more information than the LV and is critical to the meaning of the verbal predicate. The LV has very little semantic content in comparison to its MV analogue. For example, there is a clear intuition among native speakers that the interpreted meaning in (5) is not a literal hitting of a hand at someone, while the lexical verb analogue in (6) has the interpretation that one does literally hit a cup at someone. However, the LV is not completely void of semantic content, contrary to the viewpoint that LVs merely have a functional element and no semantic element (Cattell, 1984; Grimshaw & Mester, 1988). For example, one does not literally hit the ath 'hand' at saima 'Saima'. However, there is some degree of contact between the two items. It is argued in Pert & Letts (2006, 356) that one of the uses of mar is to express the concept of contact between the use of two items.

- (5) me saima-ki aṛh mar-ja si 1.SG.PLN Saima.F.SG-OBL hand.M.SG hit-M.SG NPR.3.SG 'I waved at Saima.'
- (6) us miki pijala mar-ja si 3.SG.ERG 1.SG.OBL cup.M.SG hit-M.SG NPR.3.SG 'He/She hit a cup at me.'

The number of LVs in languages are usually based on their productivity. Mohanan (1994) argues that in Hindi kar 'to do' and ho 'become' are commonly used as LVs. In Punjabi (Indo-Aryan: Pakistan/India) there are approximately eight to ten LVs documented by Akhtar (2000, 84) and Singh (1990). Butt (1995, 91) introduces 13 for Urdu (Indo-Aryan: Pakistan) and Bukhari (2009) documents 17 LVs in Gojri (Indo-Aryan: Pakistan/India). In many Indo-Aryan languages (Urdu,

³Note the following: I follow the traditional glossing of LVs throughout the data examples, in which the LV is glossed according to its corresponding lexical verb meaning.

⁴Northern Australian languages are comprised of a small closed class of inflected verbs. Such verbs can form complex predicates with members of an open class of uninflected elements which are formally distinct from both verbs and nominals. These have been termed 'preverbs', 'verbal particles', or 'coverbs' in the literature (Dixon, 2002; Schultze-Berndt, 2000, 2001, 2003a,b).

⁵In this thesis, I interchangeably use MV and lexical verb.

Hindi, Punjabi, Bangla, etc.), Dravidian languages (Malayalam, Tamil), and some East Asian languages (Japanese and Korean), the same set of LVs tend to participate in complex predicate formation. Butt (1995, 92) reports that these items include give, take, go, come, put, hit, and fall. However LVs are not necessarily restricted to these verbs. Potwari exhibits 12 LVs, which are listed in table 1.1.

Table 1.1: Light Verbs in Potwari

(Di) Transitive	Intransitive
kar 'to do'	e 'to come'
mar 'to hit'	lag 'to hurt'
$r ightarrow k^h$ 'to put'	pe 'to attack'
de 'to give'	o 'to become'
le 'to take'	#ər 'to climb'
	re 'to stay'
	₫a 'to go'

The above verbs are categorsied as LVs based on the typological characteristics summarised in (7).

(7) Typological Properites of LVCs (Butt, 1995, 2003, 2010)

- a. Cross linguistically LVCs involve the same basic set of LVs, such as *give*, go, take, come, put, hit, fall, and sit, which combine with a wide range of coverbs.
- b. The LV has little semantic content in comparison to a lexical verb.
- c. The LV is always inflected for tense, aspect, and mood.
- d. LVs generally add information about lexical-aspect: a telic, boundness, or a causation component.
- e. An LV is always form-identical with a MV in the language.

In Urdu, the LVs contribute two types of lexical semantic features to the clause; namely, volitionality and aspectual information (inception/completion) (Butt, 1995). It is claimed that LVs like de 'to give' and lai 'to take', which have (di)transitive analogues imply that the act is carried out volitionally by the subject and that LVs such as \(\frac{1}{2}aa \) 'to go' and \(aa \) 'to come', which have intransitive MV counterparts involve non-volitional subjects. This semantic distinction coincides with the case marking on the subject. The +volitional component of meaning is accompanied by the appearance of the ergative case marker -ne on the subject in the perfective, while -volitional correlates with nominative (unmarked) case on the subject.

Butt (1995, 115) notes that aspectual features such as completion and inception (also referred to as inchoative) are 'an integral part of complex predicate formation and the determination of case marking on the subject' (cf. Akhtar (2000); Bashir (1993); DeLancey (1986); Ramchand (1990); Singh (1990)). Butt (1995) in line

with Singh (1990, 1994, 1998) argues that LVs, in addition to having a volitionality component, also contribute aspectual information to the clause in that they focus on the particular points of an event, such as inception, duration, or completion. It has been proposed that the Urdu-Hindi LV par 'to fall' emphasises the initial stage of the event, while LVs such as d_5aa 'to go', de 'to give', and lai 'to take' focus on the final point of the event. The latter is a well attested phenomena within the complex predicate literature (Butt, 1995; Singh, 1990, 1994, 1998; Hook, 1974, 1991, 1993). The aspectual distinction is not necessarily exhibited in related languages, for example Akhtar (2000) observes that Punjabi is not sensitive to this distinction. The notion of inception can categorise one of Potwari's LVs, namely the LV o_{asp} 'to become'. Whether other Potwari LVs contribute aspectual information to the clause in which they focus on the inception, duration, or completion of the event is worthy of further research, but one that goes beyond the scope of the thesis.

Similar to the volitional type LVs in Urdu, we observe that certain LVs in Potwari can be categorised as agentive and non-agentive. The latter semantic distinction also coincides with the case marking. For example, kar 'to do', mar 'to hit', $r > k^h$ 'to put', de 'to give', and le 'to take' can be categorised as agentive LVs, as they imply that the eventuality is carried out agentively by the subject. The agentive LVs only appear with an ergative case subject (restricted to the third person pronoun) or a subject in the plain case (canonically referred to as the nominative case). In contrast, the subjects of complex predicates consisting of the LVs e 'to come', lag 'to hurt', pe 'to attack', and f or 'to climb' are viewed as carrying out an act non-agentively. The non-agentive element is accompanied by the appearance of the oblique case marker -ki, which is otherwise a canonical marker of direct and indirect objects.

In the present study, the syntactic and semantic properties of the 12 LVs led me to chose seven of these LVs for my investigation, as they are broadly representative of two main syntactic and semantic structures: (i) agentive subject restricted to either the ergative or plain case and (ii) non-agentive subject restricted to the oblique case. Six of the seven LVs investigated in this thesis are listed in table 1.2, in which the LVs are placed in the class that represents their syntactic and semantic properties. The LVs max 'to hit' and kax 'to do' are categorised as agentive LVs, in that their first argument is always an agent. The second argument of the transitive LVCs can change to a patient, a theme, or a recipient. The agentivity component of these LVs is reflected in the case marking on the subject; the agentive LVs can only appear with an ergative or plain case subject (as discussed briefly above). The intransitive agentive LVCs are categorised as internally caused, whereas the transitive LVCs are categorised as externally caused.

The LVs pe 'to attack', e 'to come', lag 'hurt', and o 'to become' are categorised as non-agentive LVCs that have an identical argument structure: intransitive with the sole argument being an experiencer. All three LVs only appear with the oblique

case marking on the subject, which gives rise to what is known in the Indo-Aryan literature as an experiencer subject (Belletti & Rizzi, 1988; Cardona, 1976; Hook, 1990; Klaiman, 1980; Masica, 1990; Mishra, 1990; Pandharipande, 1990; Shibatani, 1999; Sridhar, 1979; Verma & Mohanan, 1990; Verma, 1976). Also it is shown that the non-agentive LVCs are internally caused eventualities.

The seventh LV o_{asp}^6 'to become' does not fit in the two main syntactic and semantic structures illustrated in table 1.2. For this reason, the LV o_{asp} 'to become' is not listed in table 1.2 (see Chapter 7 for its description). A distinction is made between the LV o_{asp} 'to become' and the agentive LV kar 'to do', in that the two alternate in the inchoative-causative alternation. The LV kar forms the causative counterpart, while the LV o_{asp} 'to become' forms the inchoative counterpart.

Agentive	Non-Agentive
Ergative &/or Plain Case Subject	Oblique Case Subject
kar 'to do'	e 'to come'
mar 'to hit'	lag 'to hurt'
	pe 'to attack'
	o 'to become'

Table 1.2: Agentive Vs. Non-Agentive Light Verbs

The agentivity component of the LVCs is captured by employing two diagnostic tools for agentivity: (i) the ability to be modified by an agent oriented adverb such as didenal 'deliberately' and (ii) the happen vs. do agentivity test (taken from Cruse (1973)). I diagnose internal and external causation via the inchoative-causative alternation (Levin & Rappaport Hovay, 1995).

Six of Potwari's 12 LVs (in table 1.1) are restricted to forming complex predicates with nominal coverbs, of which five are investigated in this thesis; (i) mar 'to hit', (ii) lag 'to hurt', (iii) e 'to come', (iv) pe 'to attack', and (v) o 'to become'. Since almost all the LVs investigated form a complex predicate with a nominal, it can be said that nominal coverbs are broadly representative. In contrast, the same cannot be said for the adjectival and verbal coverbs. That is, they are not necessarily representative of all adjectival and verbal coverbs because they are shown to combine with seven LVs, of which only two are investigated in this study, namely the LV kar 'to do' and the aspectual o_{asp} 'to become'. To be specific, adjectival and verbal coverbs can also combine with the following five LVs: de 'to give', re 'to stay', le 'to take', and $r \ni k^h$ 'to put', and $d \nmid a$ 'to go'.

Due to the understudied status of Potwari, it would be impossible to do a detailed corpus-based quantitative study of productivity. However one measure of productivity can be the ability of the LV to create new LVCs with English loans. Based on the latter, it is shown that the LV kar 'to do', o_{asp} 'to become', and mar 'to hit' are the most productive LVs. The LV kar is particularly susceptible to forming

⁶The LV o_{asp} 'to become' independent of its variants with kar is labelled as o 'to become'.

LVCs with coverb loans from English (and Perso-Arabic). The LV *mar* 'to hit' forms less LVCs with coverb loans than *kar* 'to do', though there are several examples of LVCs created with English loans, such as *tekst mar* 'to text', lit. 'text hit'.

The LV o_{asp} 'to become' is etymologically related to the Hindi-Urdu and Punjabi ho 'to become' and Punjabi hona 'to become' and is also particularly productive, with examples of English coverb loans, such as friz o 'to become frozen', lit. 'freeze become'. The productivity of kar 'to do' and o_{asp} 'to become' is in line with the behaviour of kar 'to do' and ho 'become' in sister languages Hindi-Urdu and Punjabi (Mohanan, 1994; Romaine, 1986). Romaine's study focuses on two main operators: hona 'to become' and karna 'to do'. Out of the 77 verbs drawn from Romaine's sample, karna 'to do' was the most frequent operator and hona 'to become' was shown to combine with 12 verbs, of which five had variants with karna 'to do'. The Potwari data presented in this thesis shows that of the 19 kar-type LVCs, seven have variants with kar, is shown to form five complex predicates, of which two are formed with English loans. In contrast, all other non-agentive LVCs do not combine with an English loan⁷.

1.1.2 Status of the Coverb

The nature of nominal coverbs and their relation to the LV have been the focus of much debate in languages that employ LVCs. Certain analyses have argued that nominal coverbs in LVCs are distinct from nominal complements of MVs (Butt, 1995; Karimi, 1989, 1997; Khanlari, 1995; Megerdoomian, 2012; Mohanan, 1994; Moyne, 2007; Pantcheva, 2010), while others have treated the two uniformly (Barjasteh, 1983; Ghomeshi & Massam, 1994; Vahedi-Langrudi, 1996). In respect of the Potwari examples (5) and (6) above, the LVC seems identical to that of an MV-complement structure. Superficially the nominal coverb at^h 'hand' is like the unmarked direct object pijala 'cup', as they both appear in their bare forms and are verb-adjacent. The agreement patterns of the LVC and the MV-complement structure are also identical. The verb mar 'to hit' agrees in gender and number with the nominal complement pijala 'cup' in (6) and with the gender and number of the nominal coverb at^h 'hand' in (5). The agreement is realised by the masculine singular inflectional suffix -ja. However the two components pijala 'cup' and mar 'to hit' do differ, in that the two do not together form a verbal predicate meaning. The noun is an unmarked direct object of the verb mar 'to hit', whereas the nominal at^h 'hand' contributes to the verbal meaning.

It appears beyond the semantic differences between the LVC and MV-complement

⁷It is also important to note that the elicitation of the coverbs is carried out by asking informants the type of constructions that can be built with the LVs under investigation. Details on the informants are discussed in section 1.4.

structures, there are no morphosyntactic properties differentiating the two structures. Recent developments by Megerdoomian (2012) on Persian LVCs provide an insight in the latter. The study illustrates substantial evidence supporting the argument that nominal coverbs and complements are in fact morphosyntactically distinct. Her argumentation is based on language internal diagnostics derived from the morphosyntactic behaviour of canonical nouns. To mention a few, nominal complements can be questioned, whereas nominal coverbs cannot be. In respect of adjectival modification, the two categories behave differently: adjectival modification of coverbs leads to an adverbial modification, while a complement was shown to modify without an adverbial interpretation. Similarly, nominal coverbs do not mark for plurality, whereas nominal complements can. The investigation demonstrated differences in respect of case, the two were shown to give rise to distinct caseassignments. The coverbs were shown to co-occur with a non-specific object, which confirmed Megerdoomian's (2012) pre-theoretical claim that if the nominal coverb and nominal complement belonged to the same syntactic class then we would not expect to find the two nominals co-occurring within one given clause.

Butt's (1995) in-depth investigation of two types of LVCs in Urdu: (i) the permissive LVC, and (ii) the aspectual LVC, which she compares to an MV-complement structure, labelled as the instructive, also supports the argument that LVCs are distinct to MV-complement structures. In comparing the permissive to the instructive, she establishes that the two clearly differ in their morphosyntactic properties, while she also established that the two are identical in their syntactic composition. The latter was based on three syntactic operations that separated the two components, namely: (i) scrambling, (ii) negative structure, and (iii) coordination.

The nature of the LVC in Urdu is therefore one of a dual nature, on the one hand it possesses distinct morphosyntactic properties to that of an MV-complement structure, though on the other hand, its syntactic composition is identical to that of an MV-complement structure. The opening paragraph of the present section draws on exactly this point. That is, LVCs challenge theories of compositionality, as the two components of the LVC do not together qualify as a constituent, though they can together express the meaning of a verbal predicate. The latter is reinforced by the inability of the coverb to take on canonical morphosyntactic properties of complements. Nevertheless, regardless of these dual properties, Butt argues that they are in fact distinct, by illustrating the monoclausality of LVCs.

Beyond Megerdoomian (2012) there is very little in the literature on the morphosyntactic properties of nominal coverbs. Hence the present study is at large dedicated to investigating the morphosyntactic properties of nominal coverbs. I take the stand point of scholars such as Megerdoomian (2012) and show that nominal coverbs are morphosyntactically distinct from nominal complements. My

argumentation is based on language internal diagnostics. I employ three sets of diagnostic tools derived from the canonical morphosyntactic properties of nominals. The first set of diagnostic tools establish the general morphosyntactic properties The second set of diagnostics are derived from the morphosyntactic properties of nominal complements alone, rather than the broader word class It is shown that majority of the nominal complements have the (i) ability to take the oblique case -ki (marker of objects), (ii) ability to be determined by a demonstrative, (iii) ability to be modified by an adjective, (vi) ability to pluralise, and (v) ability to trigger gender and number agreement. Thus, investigations into the coverb are based on such nominal properties. The third set of diagnostics compare the syntactic flexibility of LVCs with MV-complement constructions. Syntactic flexibility encompasses the behaviour of the nominal complements and coverbs with five syntactic operations, which are as follows: (i) fronting, (ii) adverb insertion, (iii) object movement, (iv) pronominalisation, and (iv) question formation.

The general pattern observed amongst the nominal coverbs is one in which adjectival modification, determination by a demonstrative pronoun, oblique case marking, and plurality are incompatible with nominal coverbs, as such properties affect the LVC meaning or induce an ungrammatical sentence. The syntactic relation between an LV and a coverb is shown to be identical to the relation of an MV and a complement, in respect of the fronting, adverb insertion, and object movement operations. However the two structures behave differently with question formation and pronominalisation. Coverbs cannot be questioned or substituted by a pronoun, whereas complements can participate in pronominalisation and be questioned.

This thesis also provides a small scale comparison between adjectival and verbal coverbs and complements. Similar to nominal coverbs and complements, verbal and adjectival coverbs superficially resemble verbal and adjectival complements. Adjectival complements and coverbs appear in their bare form and are pre-verbal, as illustrated for the adjectival coverb sa:f 'clean' in (8-a) and the adjectival complement kuf in (8-b).

- (8) a. me kəmţa sa:f kəta si
 1.SG.PLN room.M.SG clean do-M.SG NPR.3.SG
 'I cleaned the room.'
 - b. usman ku∫ re na ε Usman.M.SG.PLN happy stay.M.SG IMPF.M.SG PRS.3.SG 'Usman is (always) happy.'

The verbal complement and coverb also appear in their bare form, though the two do differ in their positioning. The coverb occurs pre-verbally (9-a) and the complement is positioned post-verbally, as illustrated in (9-b). The differences and similarities between the adjectival coverbs and complements, and verbal coverbs

and complements are investigated in the same manner as the nominal coverbs and complements. It is shown via the morphosyntactic properties that two categories are distinct.

- (9) a. sara kəm ∫uru kəta si Sara.F.PLN.SG work.M.SG start do-M.SG NPR.3.SG 'Sara started the work.'
 - b. me uski akh-ja si dor $1.SG.PLN\ 3.SG.OBL\ ask-M.SG\ NPR.3.SG\ run$ 'I asked her/him to run.'

To summarise, this thesis establishes the differences and similarities between coverbs and complements, by conducting an in-depth investigation of 70 LVCs, which contain seven distinct LVs: (i) kar 'to do', (ii) o_{asp} 'to become', (iii) mar 'to hit' (iv) lag 'to hurt', (v) e 'to come' (vi) pe 'to attack', and (vii) o 'to become'.

1.1.3 Light Verbs Vs. Auxiliaries

Returning to the point made above regarding the semantic content of the LV, Cattell (1984) and Grimshaw & Mester (1988) view the LV as being completely void of all semantic meaning and merely having a functional role within the LVC, parallel to that of an AVC. Under this assumption, the LVs are said to not contribute any semantic content but rather are merely functional elements. However, this was the view of the final quarter of the last century, which has since progressed substantially in the way of showing via diachronic and synchronic based evidence that LVs are in fact syntactically distinct categories to auxiliaries. Alsina (2006), Butt (1995), Butt & Lahiri (2013), amongst others (Butt & Geuder, 2001; Mohanan, 1994)), are part of the vanguard in advocating that LVs are a syntactically distinct class to auxiliaries.

Cattell (1984) and Grimshaw & Mester (1988) view the LV as being completely void of all semantic meaning and merely having a functional role within the LVC, parallel to that of an auxiliary. That is, the LVs are said to not contribute any semantic content. Cattell (1984) and Grimshaw & Mester's (1988) view of LVs constituting the same class as auxiliaries has mainly been from a diachronic perspective. To be specific, it is based on the historical development of auxiliaries rooted in the grammaticalization theory (Hopper & Traugott, 1993). Earlier research in grammaticalization analysed aspectual LVCs as a rare example of the gradual emergence of aspectual meaning (also referred to as "aspectogenesis"). The LVs according to Hook (1974) exhibit a degree of semantic bleaching, having lost their contentful lexical meaning, and are said to have acquired a 'functional' grammatical meaning. This apparent emerging ability of LVs to mark perfectivity distinctions led Hook (1974) (Hook, 1991, 1993; Hook & Pardeshi, 2001) to propose that LVs in Hindi are an intermediary stage between MVs and auxiliaries, which was also extended to

other Indo-Aryan languages. Hopper & Traugott (1993) also highlight that a subset of all LVs are developing functional properties which act as an intermediary between between those of full verbs and auxiliaries on their grammaticalization cline, which is depicted in (10). The grammaticalization cline shows that the LV (referred to as vector verb on the cline) is an optional stage between a full verb (MV) and an auxiliary.

(10) Grammaticalization Cline:

 $full verb > (vector verb)^8 > auxiliary > clitic > affix$

Hopper & Traugott (1993, 108)

However, the latter is not the consensus amongst other researchers, particularly the likes of Butt & Lahiri (2013). They present substantial evidence drawn from a diachronic investigation of the two syntactic classes in Indo-Aryan and claim that the LV is a variant of an MV and that the LV is historically "a dead end". That is, the life of an LV does not pass through the process of the grammaticalization stages. It is shown that LVs in Urdu have been employed in the same manner for thousands of years and therefore, they view LVs as stable and having a low probability in being subject to reanalysis or restructuring. The extensive work over the last decade has led Hopper & Traugott (2003) to revise their view and state that it is in fact not clear that auxiliaries developed from LVs. However this has not been the case for all work, for instance Roberts & Roussou (2003) state English modal auxiliaries have developed from LVs, though it seems this claim has failed to materialise. Others, such as Bowern (2008) agree that LVs are not a necessary step for the development from MVs to auxiliaries, though Bowern reserves any concrete claim on whether LVs can develop further down the grammaticalization cline into auxiliaries and inflections. My investigation, and thoughts on this matter are restricted as they are not in the remit of the present study. This is no doubt an avenue I believe to be necessary to re-visit, in context of the synchronic data I present in this thesis.

The present study investigates whether LVs constitute a syntactically distinct class to auxiliaries in Potwari, and whether this can be diagnosed by syntactic/morphological diagnostics. By acknowledging Potwari's understudied status, defining what it means to be an auxiliary is therefore the first and critical stage towards addressing whether an LV constitutes a syntactically distinct class to an auxiliary. With this comes further complications, as auxiliaries look very different from language to language. Nevertheless, researchers do agree that auxiliaries in some manner position the event of the MV in context to the speech or reference time (Reichenbach, 1947). Anderson (2006, 5) states that there '...probably cannot be,

 $^{^{8}}$ The term $vector\ verb$ is akin to the term LV, which comes from the Slavic tradition and has been employed in South Asian languages, such as Masica (1976).

any specific, language-independent formal criteria that can be used to determine the characterization of any given element as a lexical verb or an auxiliary verb'. In certain languages, auxiliaries can carry all morphological information relating to a predicate such as person, number, and tense/aspect/modality, while in other languages, auxiliaries carry less information, or the information is split between the auxiliary and MV. Furthermore, it is stated in Butt (2010) that diagnostic tools to distinguish LVs from auxiliaries differ from language to language.

The consensus is then that language internal diagnostics must be employed in differentiating the two syntactic classes. However, Butt (2010) and Butt & Lahiri (2013) do develop more general diagnostic tools that are said to at some level differentiate LVs from auxiliaries cross-linguistically, which are listed in (11).

(11) Cross-linguistic properties of LVs & auxiliaries

- a. LVs are always form identical to their lexical verb analogue, while auxiliaries do not.⁹
- b. LVs possess subtle lexical semantic differences in terms of combinatorial possibilities with MVs hence the restrictions between LV and coverb combinations. In contrast, auxiliaries are not restricted in the same manner.
- c. LVs always span the entire verbal paradigm, while auxiliaries appear with just one tense/aspect form.
- d. LVs do not display a defective paradigm.

More specifically than the properties summarised in (11), Butt & Geuder (2001, 325) propose language internal diagnostics, which prove that LVs in Urdu constitute a syntactic class that is distinct from auxiliaries. The diagnostics are derived from the different syntactic behaviours displayed by both members of the LV class and the auxiliary class. The two categories behave differently in regard to the following syntactic characteristics: (i) case marking, (ii) word order, (iii) reduplication, and (iv) topicalisation. They demonstrate that in Urdu LVs assign case marking on the subject, whereas auxiliaries do not (Butt & Geuder, 2001, 330). Butt & Geuder (2001) also show that the syntactic composition of an LVC is far more flexible than an AVC. For example an LV can be topicalized away from the MV, while an auxiliary cannot be topicalized away from its adjacent position to the MV. In contrast, Butt (1995) compares aspectual LVCs to AVCs and demonstrates that the two constructions are identical in their syntactic composition. That is, they both form very tight units, in which the components are not separable. With that said, she goes on to show that they are in fact distinct in their morphosyntactic properties.

In this thesis, I provide conclusive evidence via empirical data based on language internal diagnostics to show that LVs and auxiliaries are distinct syntactic classes.

⁹Auxiliaries are usually form identical at the initial stage of reanalysis from verb to auxiliary

I employ syntactic operations partly inspired by Butt & Geuder's work on Urdu. The diagnostic tools are derived from the core syntactic and semantic properties of Potwari. LVs are shown to (i) combine with a non-verbal category, whereas aspectual auxiliaries are shown to not combine with a non-verbal category, (ii) appear with the same case marking on the subject, while auxiliaries do not, and (iii) have the ability to take the non-finite marker, whereas auxiliaries do not. The syntactic relation between an LV and a coverb is also shown to be distinct from the relation of an MV and an auxiliary. The coverbs can be fronted away from LVs, whereas the MV cannot be fronted away from auxiliaries. Similarly, an adverb can separate the coverb and LV, while it cannot separate the MV and auxiliary.

1.2 Potwari

The data in this thesis is drawn from the dialect of Potwari spoken in Leeds, in the north of England, in the county of West Yorkshire. Potwari is otherwise a language spoken in Azad-Kashmir, Pakistan, as well as different regions of the UK. It is classified as an Indo-European language, branching into Indo-Iranian, Indo-Aryan and into the northern zone and finally coming under Western Pahari. The linguistic background of Potwari is one which is complex because of its vague linguistic classification. The ambiguity begins with the term "Western Pahari", which goes back to the first affiliated subgroups made by Grierson (1917), who classifies Potwari as a dialect belonging to a cluster of languages named as "lahanda", which means "Western Punjabi". Grierson's classification is somewhat vague, as it is not known which languages/dialects fall under "lahanda". Similar sentiments are shared by the likes of Lothers & Lothers (2010), Masica (1991) and others. For instance Masica (1991) acknowledges that other experts find such a classification particularly unsatisfactory. Nevertheless, the least problematic according to Masica may in fact be Potwari.

The Ethnologue (Raymond, 2005) reports a number of names to describe languages under the Western Pahari label, which are as follows: 'Potwari, Pothohari, Potohari, Chibhali, Pahari (Dhundi-Kairali), Pothwari, Punchhi (Poonchi), and Mirpuri'. Mirpuri, Potwari, and Pahari are used simultaneously more so than any of the other names by officials and non-officials. Lothers & Lothers (2010) provide a substantial level of research in getting to the root of the different names, by defining the dialects by the geographical areas in which they are spoken in. They label this issue as the Pahari-Pothwari language complex, which encompasses the three intelligible dialects: Pahari, Potwari, and Mirpuri. According to their reports, Pahari is primarily spoken in Murree (part of the Rawalpindi District) in northern Pakistan. In contrast, Potwari is spoken in the plateau south of the Pahari dialect area.

Mirpuri is spoken in the city of Mirpur in Azad Kashmir. However, the indigenous speakers from Mirpur and the surrounding areas call themselves Pahari speakers, rather than Mirpuri speakers. The speakers of the language of focus in this thesis are migrants from the Mirpur district now living in Leeds. The speakers of this community employ various names to describe their language, such as Punjabi, Potwari, and Mirpuri. Certain speakers believe the name Mirpuri to be coined in the UK by the Punjabi community to describe the migrants from Azad Kashmir (Pert & Letts, 2006). The label Mirpuri has since said to be used to describe the ethnicity and the language of people from Mirpur (Pert & Letts, 2006). In contrast, the majority of the speakers accept the name Pahari, coinciding with Lothers & Lothers' (2010) findings. Consequently, various names are employed by the few linguistics working on Potwari, for example Pert & Letts (2006) use "Mirpuri", while others like Reynolds (2002) use "Punjabi". This variation amongst speakers is particularly vague, and I do not begin to uncover the complexities surrounding it, as it is tangential to the aims of this thesis. For the purposes of this thesis, I use the name Potwari to describe the dialect of the Leeds speaking community.

Over the years, large numbers of speakers from the Mirpur District have immigrated to the UK. The number of speakers living in the UK highlights the extent of this mass migration, ¹⁰ as it is claimed that there are over 500, 000 Potwari/Mirpuri/Pahari speakers in the UK alone (Lothers & Lothers, 2012). Using the 1998 District Census Reports of Abbottabad and Rawalpindi as a guide, Lothers & Lothers (2010) provide an estimate of 2.5 million speakers across all the Pakistan and Azad-Kashmir regions in which the three dialects are spoken in. Thus it is surprising that there is no linguistic work on Potwari, as highlighted by Pert & Letts (2006, 356): 'grammatical descriptions of Mirpuri do not exist'.

The sociolinguistic status of Potwari in England has also been ignored as has any attempt of documenting it (Pert & Letts, 2006). Pert & Letts (2006, 355) note that Potwari speakers are 'often viewed negatively, as is the Kashmir community' in the UK with the stereotype that the Potwari speakers are backward or uneducated hill folk. Their language is often described as 'non-standard, inferior, a dialect or a form of slang in a pejorative sense' (Pert & Letts, 2006, 355). These sentiments are to some extent echoed by native Potwari speakers themselves. The fact that Potwari has no written form, links with the perception of the status it holds amongst Potwari speakers, and non-Potwari speakers.¹¹ This might explain why Potwari speakers

¹⁰The Azad Kashmiris effectively started to arrive in England, during the First World War and post Second World War due to the demand for 'tough male labour especially in the munitions factories in the Midlands and the North of England' (Ballard, 1983, 125). Large levels of immigration during the 1960s was also a consequence of the mass expansion of the Mangla Damn being built in Mirpur, in which many villages were flooded out, leaving hundreds of people homeless. Due to this a 'short-lived voucher system to enter Britain between 1962 and 1966' (Ballard, 1983, 125) was established to compensate for the loss of homes/villages. The emigration since has been relatively intense and there are now three generational families living in England.

¹¹Recent attempts have been made to combat this issue, with conferences promoting Pahari

frequently report themselves as Urdu speakers, because Urdu is the official language of Pakistan and therefore holding prestige over Potwari (Pert & Letts, 2006, 355). Similarly, many speakers also report themselves as Punjabi speakers, which can also be considered to be more prestigious that Potwari, as it is one of the largest regional languages of Pakistan. The fact that the speakers themselves do not report Potwari as their language can also be linked to the lack of work on Potwari. With that said, Lothers & Lothers' (2012) work provides the first substantial documentation of the sociolinguistic status of Pahari, Potwari, and Mirpuri within the UK. Still, beyond the sociolinguistic studies, no grammatical description or analysis has been made. I aim in my work to begin the task of filling this void.

1.3 Basic Phonemic Inventory

The observed vowel system in Potwari and the representative examples can be seen in table 1.3. We propose in Potwari a symmetric set of 10 vowels, broadly similar to those in many of the new Indo-Aryan languages. It contrasts for five front vowels; [I], [e], [I], [e], [a], three back vowels [v], [u], [o], [o] and one central vowel [ə]. Potwari seems to fit into certain diachronic facts of West-Pahari languages pointed out by Masica (1991, 110). Similar to Hindi and Punjabi, the Potwari vowel system includes the monopthongisation of the historic dipthongs /ai/, /au/ to / ϵ / and / ϵ / respectively; in other respects, this is a relatively conservative system.

	front	near-front	central	near-back	back
close	i				u
	[pijala] 'cup'				[hun] 'blood'
close-mid	e	I		υ	0
	[ge n ta] 'hour'	[vɪʧ] 'in'		[kʊkər̞] 'chicken'	[go da] 'knee'
mid			Э		
			[gərmi] 'hot'		
open-mid	3				Э
	[per] 'foot'				[pɪst̪əl] 'gun'
open			a		
			[samar] 'April'		

Table 1.3: Vowel System

Vowels in Potwari's sister languages Hindi/Urdu and Punjabi are often marked both by quality and by duration (historically assumed to be entirely by duration, i. e. in Old Indo-Aryan), however this is not the pattern of all languages in the

languages in the UK (KKRC, 2005). In the last decade, an increasing number of Potwari speakers write via the Roman alphabet in mediums such as the internet. Additionally, the National Health Service has published numerous health guides in Potwari/Mirpuri via the Urdu script (National Health Service, 2013). As well as this, Potwari has started to become more apparent in the media, with radio shows broadcasting in Potwari (Mirpuri) (British Broadcasting Corporation, 2014). Social conscious activists are also currently working on devising a written form of Potwari based on the Urdu script. However, little has progressed in the way of linguistics. Therefore, in this thesis, the Potwari data examples are transcribed in accordance with the International Phonetic Alphabet (IPA).

Indo-Aryan family. For example, the length distinction in Bengali and Marathi is decentered and it is vowel quality that is the main distinguishing factor in the phonetic discussions. The present data is not sufficient to produce a definitive comment on the phonemic status of vowel length. In cases when it is evident the vowel length is extended, we employ the usual diacritic ':' to symbolise it. The nasalisation of vowels is present phonetically, as in [pɔñk] 'bark', but it is not clear whether it is contrastive; no minimal pairs for nasalisation have surfaced. Assimilatory nasalisation may spread to vowels from a preceding nasal consonant.

The consonant inventory is presented in table 1.4 (see overleaf). It is a tentative list of consonants, as we do not have a complete set of minimal pairs available for all suggested phonemic contrasts. The minimal pairs that do represent certain contrasts are evident in table 1.4. For example, voicing is straightforwardly contrastive, as is aspiration.

1.4 Elicitation of Data

The author is a native speaker and a member of the Leeds Potwari speaking community, and consequently had access to a community of speakers. The author always checked the data against four main informants that speak the same dialect, though they differed in their bilingual capabilities. Such measures were taken in place to ensure the accuracy of the data and to avoid any structural influences from similar languages, such as Urdu and Punjabi, as well as languages that are structurally distinct like English. The author also conferred with other native speakers from a neighbouring city called Bradford, in the county of West Yorkshire. However, this was considerably less frequent in comparison to the four main informants.

The author and one of the four informants are second generation bilingual speakers of Potwari and English. They were born and grew up in an English and Potwari speaking household in Leeds. The speakers use English as their primary language within and outside the home. While Potwari is spoken mainly within the home, with first generational speakers whose primary language is Potwari. The second informant is a native speaker from a village outside of the Mirpur district in Azad-Kashmir, who growing up spoke only Potwari, and has had very little influence from national and regional languages, such as Urdu and Punjabi. The latter is due to the speaker living in Azad-Kashmir for their entire adulthood and being illiterate in Urdu. The speaker currently lives within the Potwari speaking community in Leeds, though still is strictly a monolingual Potwari speaker. That is, they do need speak English either.

The third informant is a first generational speaker, who growing up spoke Potwari in Azad-Kashmir, is literate in both Urdu and English, and has had considerable

approximant	flap	fricative		affricate			plosive	nasal	
						$[\mathrm{beq}_{\mathrm{d}}]$, "i", ' [jagd] b	m [ami]	bilabial
							b [baŗi] 'field'		
		f [fir] 'again'							labio- dental
l [pila] 'yellow'	$[\max_{\Gamma}]$	s [se]			[tu] 'bottom' [pɪtʰ] 'door'	t [than] 'cloth'	t [to] 'wash'	n [kana] 'food'	dental/ alveolar
	'window'	z (zer)			$[dunja]$ $world$ d^{h} $[dud^{h}]$ $[dud^{h}]$	$egin{array}{l} \dot{ ext{d}}^{ ext{h}} \ ext{d} \end{array}$	owt, [ob] p		
l ta li 'branch'	r [kırki]		[thetri]				d [dol] 'drum'		retroflex
j [asjo] 'June'		∫ [ʃɛr] 'city'	'umbrella'	$[\mathfrak{fua}]$ 'mouse'					post-alv./ palatal
				& [&ua] 'gambling'					
						$[k^{h}eta]$	k [kali] 'black		velar
						g^{μ} [g ^h ani] 'necklace'	g [gali] 'swear'		
		h [hun] 'blood'							glottal

Table 1.4: Consonants

amount of exposure to spoken Punjabi. However, has lived in the UK since a child, though in contrast to the author and the other informant, this speaker considered Potwari and English as their primary languages. The fourth informant is first generational speaker of Potwari, with knowledge of English and Urdu, though their primary language is Potwari. The less frequent informants employed were from similar backgrounds to the author, in respect of their bilingual capabilities.

The grammatical judgements across the four informants were found to be consistent. Therefore it can be said that all of the data has been confirmed from a source other than the author. Whether there is variation amongst other speakers is an avenue I believe to be necessary to re-visit, in context of the data presented in this thesis.

1.5 Outline of Thesis

The thesis is divided into eight chapters, in which the first (present chapter) is dedicated to contextualising complex predicates and providing a background on Potwari. Chapter 2 provides the necessary syntactic and morphological properties that form the basis of developing language internal diagnostic tools. It focuses on three necessary morphosyntactic properties: (i) the word order, (ii) the tense/aspect system, and (iii) the case system. Essentially, in this chapter I demonstrate that Potwari manifests the classic properties of Indo-Aryan languages, from the classic three layering case system to the double case phenomena, as well as differential object marking and remnants of ergativity in the past tense. In respect of tense and aspect, I show that Potwari distinguishes for the past, present and future tense periphrastically. The aspectual system is shown to be made up of an imperfective auxiliary, a resultative/existential perfect auxiliary, and an existential perfect auxiliary. As for the word order, it is particularly flexible, though we do observe word order freezing in certain environments.

Chapter 3 introduces the theoretical motivations of the diagnostic tools employed in establishing the similarities and differences between the two classes: (i) coverbs and (ii) complements. I pose questions related to the syntactic composition (which I refer to as syntactic flexibility) and morphosyntactic properties of complements. The language internal diagnostics can be divided into three sets. The first set is dedicated to the morphosyntactic properties of general word class categories in Potwari: (i) nouns, (ii) verbs, and (iii) adjectives. The second set of diagnostics are derived from the morphosyntactic properties of nominal, verbal and adjectival complements alone, rather than the broader word class properties. The third set of diagnostics are derived from the syntactic flexibility properties of MV-complement structures comprised of nominal, verbal, and adjectival complements.

The subsequent three chapters are the data chapters, which encompass the

application of the diagnostic tools. The chapters are divided according to the lexical semantic feature agentivity: Chapter 4 provides an in-depth investigation the agentive LV kar 'to do', as does Chapter 5 does for the agentive LV mar 'to hit'. Chapter 6 investigates the non-agentive LVs lag 'to hurt', e 'to come', and pe 'to attack'. In each of these chapters, the similarities and differences between the LVCs and MV-complement structures in respect of their morphosyntactic properties and syntactic flexibility are established. All three chapters show that the coverbs and complements are morphosyntactically. The general pattern observed amongst the nominal coverbs is one in which adjectival modification, determination by a demonstrative pronoun, oblique case marking, and plurality are incompatible with nominal coverbs, as such properties affect the LVC meaning or induce an ungrammatical sentence. The syntactic relation between an LV and a coverb is shown to be identical to the relation of an MV and a complement, in respect of the fronting, adverb insertion, and object movement operations. However the two structures behave differently with question formation and pronominalisation. Coverbs cannot be questioned or substituted by a pronoun, whereas complements can participate in pronominalisation and be questioned.

In Chapter 7, it is argued that LVCs are morphosyntactically distinct to AVCs. I provide conclusive evidence via empirical data based on language internal diagnostics, that the LVs in Potwari are syntactically distinct from auxiliaries. I employ the following morphosyntactic diagnostics: (i) ability to combine with a non-verbal category, (ii) ability to assign case marking, (iii) ability to take a non-finite marker, (iv) ability to be fronted away from the MV, and (v) ability to be separated by a time adverb. The diagnostics are applied to the MV, auxiliary, and LV o 'to become', which identify that the LVs have the ability to possess all the above properties, while the auxiliaries do not. It is also shown that the syntactic positioning of the verbal template is very rigid, in which the LVs and auxiliaries do not compete for the same slot.

Chapter 8 offers an across-the-board view of the results, and points out further research avenues.

SYNTACTIC & MORPHOLOGICAL PRELIMINARIES

2.1 Introduction

This thesis argues, using language internal diagnostics, that LVCs are distinct from MV-complement structures with regard to their morphosyntactic properties, while being almost identical in their syntactic flexibility. In a similar manner, it is argued that LVCs and AVCs are heterogeneous with respect to their morphosyntactic and syntactic flexibility properties. With the understanding that there is no previous linguistic work on Potwari (Pert & Letts, 2006), this chapter begins by laying out the necessary syntactic and morphological properties that form the basis of developing the language internal diagnostic tools. This chapter is therefore divided according to four morphosyntactic properties: (i) word order, (ii) tense, (iii) aspect, and (iv) case.

The chapter begins with the basic word order in section 2, which leads on to the presentation of the two BE-auxiliaries in section 3. It introduces the aspectual auxiliaries in section 4 and the non-finite marker -i in section 5. Section 6 begins the task of introducing the five case markers in Potwari, the basic alignment system and differential object marking (DOM hereafter). Section 7 forms the conclusion of the chapter by looking to the implications of the tense/aspect system, the case system, and word order within the main argumentation of the thesis. It also links the aspectual data in Potwari to Condoravdi & Deo's (2008) work within the grammaticalization literature on aspect in Indo-Aryan languages.

2.2 Basic Word Order

The basic word order in Potwari sentences consists of a subject and an intransitive verb (Masica, 1991, 332-3). For example, in (1) the nominal argument is the third person pronoun o 'he/she', which is followed by the intransitive verb k^her 'to play' and then the auxiliaries; the imperfective auxiliary na and the present BE-auxiliary ε .

(1) o k^h er na ϵ 3.SG.PLN play IMPF.M.SG PRS.3.SG 'He is playing.'

In a transitive sentence, the object position is between the subject and the verbal predicate; in (2) the object amrina 'Amrina' is placed between the subject us and the transitive verb max 'hit'.

(2) us amrina-ki mar-ja si 3.SG.ERG Amrina.F.SG-OBL hit-M.SG NPR.3.SG 'He/She hit Amrina.'

The objects that are oblique case marked via -ki precede the objects that are not overtly case marked. For example, the -ki marked indirect object amrina of the ditransitive verb de 'to give' in (3) precedes the unmarked direct object kitab 'book'.

(3) us amrina-ki kitab de-ti si 3.SG.ERG Amrina.F.SG-OBL book.F.SG give-F.SG NPR.3.SG 'He/She gave the book to Amrina.'

The generalisation is that in Potwari the 'basic', 'canonical' or 'unmarked' word order is SOV, similar to its sister languages Urdu-Hindi and Punjabi (Bhatia, 1993; Jain & Cardona, 2007; Gill & Gleason, 1969; Kachru, 1980, 2006; Masica, 1991; Mcgregor, 1972; Mohanan, 1994; Mohanan & Mohanan, 1994; Schmidt, 1999, 2007; Shapiro, 2007). Generally, Potwari has a free word order, with different word order possibilities, such as those presented in (4). We observe six possible orderings of subject, object, and verb without change in the basic sentential meaning. In (4-a), we have the canonical SOV order, while the other orders in (4) are deviations from this canonical order. Such deviations are also found in Hindi-Urdu (Mohanan & Mohanan, 1994). The deviations in Urdu-Hindi are used to mark a special information structure and are generally associated with shifts in prominence, emphasis, and semantic effects (Hanjung, 2004, 244). Hanjung (2004, 245) notes that the differences reflect a well-known cross linguistic generalisation that languages with rich morphological resources for grammatical specification tend to make less use of fixed phrase structures, whereas languages lacking morphology seem to have rigid phrase structures.

- (4) a. us f on h-ja si g-si g
 - b. t = us $t = k^h = is$ si moon.M.SG 3.SG.ERG see-M.SG NPR.3.SG 'He/She saw the moon.'
 - c. us $t \ni k^h$ -ja si $t \ni n$ 3.SG.ERG see-M.SG NPR.3.SG moon.M.SG 'He/She saw the moon.'

- d. \mathfrak{f} ən \mathfrak{f} ək h -ja si us moon.M.SG see-M.SG NPR.3.SG 3.SG.ERG 'He/She saw the moon.'
- e. $\mbox{tok}^h\mbox{-ja}$ si us $\mbox{tfən}$ see-M.SG NPR.3.SG 3.SG.ERG moon.M.SG 'He/She saw the moon.'
- f. $\mbox{}\mbox{$\mbox{\mbo

Despite a high level of word order freedom, under certain circumstances free word order freezes into a fixed, canonical word order (see (Mohanan, 1994; Mohanan & Mohanan, 1994) for word order freezing in Hindi). For example, the same type of flexibility in the word order of sentence (5-a) is not available, as illustrated in (5). The change in the canonical word order to OSV, VSO, OSV, and OVS induces an ungrammatical sentence.

- (5) a. usman təkh-ja si sara-ki Usman.M.SG.PLN see-M.SG NPR.3.SG Sara.F.SG-OBL 'Usman saw Sara.'
 - b. *sara-ki usman təkh-ja si Sara.F.SG-OBL Usman.M.SG.PLN see-M.SG NPR.3.SG 'Usman saw Sara.'
 - c. *təkh-ja si usman sara-ki see-M.SG NPR.3.SG Usman.M.SG.PLN Sara.F.SG-OBL 'Usman saw Sara.'
 - d. * tək h -ja si sara-ki usman see-M.SG NPR.3.SG Sara.F.SG-OBL Usman.M.SG.PLN 'Usman saw Sara.'
 - e. *sara-ki təkh-ja si usman Sara.F.SG-OBL see-M.SG NPR.3.SG Usman.M.SG.PLN 'Usman saw Sara.'

This type of word order freezing also exists in Hindi and Urdu. Based on the different environments that word order freezing occurs in Hindi, Mohanan & Mohanan (1994) make the following generalisation: 'canonical word order determined by the thematic role hierarchy becomes fixed if the case markings on two nominal arguments of a single predicate are identical under two alternative thematic role interpretations of the nominals'. Typological word order studies show that factors affecting canonical word order varies from language to language. We observe an instant of word order freezing in (5). Whether it is affected by grammatical function and/or thematic role in Potwari is a matter worthy of further research, but which goes beyond the scope of this study.

The order of adverbs is considerably flexible. In Hindi-Urdu, the canonical ordering of a time adverb and a place adverb is that the former occurs immediately

after the subject (Schmidt, 1999, 2007; Shapiro, 2007). Potwari patterns in the same way, for example the adverb k > l 'yesterday' is in the post-subject position in (6-a) and the place adverbial $duka:ne \ vrtf$ 'in the shop' follows it. The sentence is also deemed as acceptable when the order is reversed, reflecting nuances of emphasis. For example, the place adverb can be placed to the left, as in (6-b), in which the time adverb occurs straight after the verb, in the final position of the sentence, reflecting its prominence. Alternatively, the time adverb can be given prominence by placing it at the front of the sentence (i.e. pre-subject position), as in (6-c).

- (6) a. me kəl duka:n-e viff gi sa
 1.F.SG.PLN yesterday shop.F.SG-LOC in go.F.SG NPR.1.SG
 'Yesterday, I went into the shop.'
 - b. me kəl gi sa duka:n-e vitf 1.F.SG.PLN yesterday go.F.SG NPR.1.SG shop.F.SG-LOC in 'Yesterday, I went into the shop.'
 - c. kəl me duka:n-e vit gi sa yesterday 1.F.SG.PLN shop.F.SG-LOC in go.F.SG NPR.1.SG 'Yesterday, I went into the shop.'

Example (7) exemplifies all the positions within the word order discussed above.

(7) me amrina-ki kəl bazar-e vit səsti 1.SG.PLN Amrina.F.SG-OBL yesterday market.M.SG-LOC in cheap.F.SG duka:n dasal-i si shop.F.SG show-F.SG NPR.3.SG 'I showed Amrina the cheap shop in the Pakistani Bazaar yesterday.'

The following word order² template can be deduced; (8).

(8) Basic Word Order:

Subject Object-(ki) Time Adverbial Place Adverbial Unmarked Object Verb

2.3 Introducing the Tense System

In this section, the descriptive facts are laid out on the non-present tense BE-auxiliary and the present tense BE-auxiliary. Potwari inflects for the future tense and the past tense via the non-present BE-auxiliary si (the third person, singular form). The agreement patterns differentiate the two tenses. In the past tense, we observe verb-object agreement, in which the verb agrees with the object in number and gender. The latter is realised by an inflectional suffix. Intransitive verbs in the

¹Like Potwari's sister languages, such as Urdu-Hindi, the adverb *kəl* means 'one day away from today', hence it can refer to 'yesterday' and 'tomorrow' depending on the tense/aspectual environment.

²The ordering within a noun clause is illustrated in Chapter 3, section 3.2.

past tense also take the same inflectional morphology. In contrast, the agreement patterning in the future tense is verb-subject agreement. The number and gender agreement is not realised as an inflectional marker on the verb. Rather, the form of the non-present BE-auxiliary agrees in person and number with the subject. The latter is also the case for intransitive verbs in the future tense. The verb forms in the past tense and future tense are exemplified via the MV $p \ni n$ 'to break' in table 2.1.

Table 2.1: Verb Forms in Past & Future Tense

Tense	Root	M SG	M PL	F SG	F PL
Future:	рәп	рәп	рәп	рәп	рәп
Past:	p ightarrow n	pə n - ja	pə n - e	pə n - i	pə n - ija

The present tense is expressed via a BE-auxiliary, such as the third person form ε . The agreement patterns of a present tense sentence is identical to the future tense: verb-subject agreement. The present and non-present BE-auxiliary forms are determined by person and number³. In order to fully understand the agreement patterns, I turn to noun-adjective agreement.

2.3.1 Agreement

2.3.1.1 Gender & Number of Nouns

The most important grammatical characteristic of nouns is their interface with gender, number, and case, as they have consequences for agreement patterns in sentences⁴. Hence, grammars of South Asian languages (Bhatia, 1993; Jain & Cardona, 2007; Gill & Gleason, 1969; Kachru, 1980, 2006; Masica, 1991; Mcgregor, 1972; Mohanan, 1994; Mohanan & Mohanan, 1994; Schmidt, 1999, 2007; Shapiro, 2007) begin their classifications of nouns in respect of their gender, number, and case marking. This section is a brief overview of agreement in Potwari, which acts as an aid in understanding the agreement patterning found across the different tense and aspect paradigms⁵ and the different types of LVCs⁶.

Nouns of many Indo-Aryan languages are inherently masculine or feminine, however as Masica (1991, 217) notes, gender does not categorise all nouns in new Indo-Aryan languages. Potwari is among the Indo-Aryan languages, in which nouns are inherently masculine or feminine, as are the nouns in its sister languages Punjabi and Urdu-Hindi. Neither the noun semantics nor the natural gender is relevant for

³The forms for the BE-auxiliaries are shown in section 2.3.2 and section 2.3.3

⁴This is not the case for all Indo-Aryan languages (see Masica (1991) on agreement).

⁵See section 2.3.2 and 2.3.3 for details on the two types of agreement patterns found in Potwari: (i) verb-subject agreement and (ii) verb-object agreement.

⁶I go on to show in the LV chapters that the LV of a noun + LV complex predicates agrees in number and gender with the nominal component, behaving as a nominal complement. However, other morphosyntactic properties prove nominal coverbs and complement are distinct categories.

the grammatical gender of the noun. The natural gender and grammatical gender do coincide for human nouns, while animate nouns belong to one gender category or another. Table 2.2 provides a sample of nouns in Potwari, in which we see that the human nouns mora 'boy' and kuri 'girl' coincide with their grammatical gender. In table 2.2, we also observe that the animate noun bili 'cat' is allocated in the feminine column and kuṭa 'dog' in the masculine column. The feminine bili 'cat' has a corresponding derived masculine form bila. That is, the grammatical gender category can be changed by derivational processes.

Table 2.2	Grammatical	Gender	of Nouns
10010 4.4.	Ciammantan	Condo	or riouns

Masculine	Feminine
mora 'boy'	kuri 'girl'
<i>ʤəna</i> 'man/husband'	♂nani 'woman/wife'
pra 'brother'	pën 'sister'
kuta 'dog'	bili 'cat'
at^h 'hand'	$p_{I}t^{h}$ 'door'
pijala 'cup'	♂iv 'tongue'
$k\tilde{a}\eta a$ 'comb'	$\mathcal{G} = p + l$ 'slipper'
per 'foot'	kıţki 'window'
t'kən 'lid'	pa:tər 'metal plate'

In respect of number, the system is grammatical and therefore it is not possible to predict from the meaning of the noun whether it is treated as countable. The count/non-count distinction has not been a major topic of discussion in Urdu, Hindi, or Punjabi grammars, as it is not as integral to the description of such languages, as it is for English. For example, in English there are interesting restrictions between articles and nouns depending on the count, non-count, and mass distinction, which can affect the lexical aspect of the verbal predicate. Similar to Urdu-Hindi, the count/non-count distinction does not have consequences for the noun declensions in Potwari. Nouns in Hindi-Urdu (Kachru, 2006; Schmidt, 1999) vary in their declension for number depending on the final vowel/consonant of the noun, the etymology of the noun (borrowed vs. native), and its case. We are therefore conscious of the complexity of describing the different types of noun declensions. The present study is interested in the type of nouns that occur within a given LVC and whether their behaviour is akin to nominal complements. Thus, in this section, we merely introduce the two-way number number and gender distinction for the count noun pijala 'cup' and $\partial \eta li$ 'finger'. However, in Chapter 3 (section 3.2.1), we introduce a modest set of noun declensions, which show that number is conditioned by the final vowel/consonant of the noun, the etymology of the noun (borrowed vs. native), and its case.

The masculine noun *pijala* 'cup' is categorised as count because it has the ability to be modified by a quantifier, illustrated in (9-b). The latter example shows that the noun in the plural form takes the suffix -a. In contrast, the masculine, singular

form is bare in (9-a).

- (9) a. us pijala pən-ja si 3.SG.ERG cup.M.SG break-M.SG NPR.3.SG 'He/She broke the cup.'
 - b. us tfar pijal-e pən-e sən 3.SG.ERG four cup-M.SG break-M.PL NPR.3.PL 'He/She broke four cups.'

The feminine noun $f \ni p \ni l$ 'slipper' shows that in the singular form it appears in its bare form, illustrated in (10-a). In the plural form, the inflection -ija is suffixed on the noun, shown in (10-b). The latter example also shows that it can be modified by the quantifier $f \mid ar$ 'four', hence it is categorised as a count noun.

- (10) a. us hali ikh \mathfrak{f} əpəl kmd-i si 3.SG.ERG only one slipper.F.SG buy-F.SG NPR.3.SG 'He/She only bought one slipper.'
 - b. us tfar tfəpəl-ija kınd-ija sən 3.SG.ERG four slipper-F.PL buy-F.PL NPR.3.PL 'He/She bought four slippers.'

Based solely on the number and gender of the above two count nouns, we deduce the paradigm in (11).

(11) Paradigm 1:

2.3.1.2 Gender & Number of Adjectives

Morphologically, the majority of adjectives in South Asian languages inflect for gender and number⁷. They can be divided into two classes: (i) inflecting adjectives and (ii) uninflecting⁸. Inflecting adjectives are those that end in the vowel -a and must change their form according to the gender and number of a noun that they modify, whereas the uninflected adjectives have zero inflection, that is, they have one form. Table 2.3 below provides a list of each class.

⁷They also inflect for case, which we see in Chapter 3 for Potwari (section 3.5.1).

⁸The traditional terms employed in the Indo-Aryan literature are "red" and "black" adjectives. These terms stem from the observation that the adjective laal 'red' in Urdu (Indo-Aryan:Pakistan) and in Punjabi (Indo-Aryan: Pakistan) is a non-inflecting adjective, whereas kala 'black' is an inflecting adjective (Gill & Gleason, 1969). I do not employ such terms, as the distinction between laal and kala do not reflect the two classes in Potwari, as suwa 'red' is an inflecting adjective in Potwari. Also to note, many modern descriptions of Indo-Aryan languages do not use the traditional classification. For example, Bhatia (1993, 273) for Punjabi, groups the adjectives as "ending in -aa" and "not ending in -aa, a similar classification is also given for Hindi by Kachru (2006, 64-65), Schmidt (2007, 318) refers to them as "marked" and "unmarked" adjectives, and Shapiro (2007, 264) refers to them as "declinable and "indeclinable" adjectives. Despite the fact

Table 2.3: Inflected & Uninflected Adjectives

Inflected Adjectives	Uninflected Adjectives
bara 'big'	sa:f 'clean'
nıka 'small'	puk^h 'hunger'
pera 'nasty'	galabi 'pink'
sona 'beautiful'	nim 'blue'

For example in (12-a), the suffix -i attached to soni 'beautiful' is the feminine, singular agreement marker, which is in agreement with the feminine, singular subject sara 'Sara'. In contrast, -a attached to sona 'beautiful' is the masculine singular agreement marker, which is in agreement with the masculine singular subject usman 'Usman'. To reinforce the noun-adjective agreement, we see that the masculine singular agreement marker induces ungrammaticality in (12-a), as does the feminine singular agreement marker in (12-b).

- (12) a. sara son-i/*a jε
 Sara.F.SG.PLN beautiful-F.SG/*M.SG PRS.3.SG
 'Sara is beautiful.'
 - b. usman son-a/*i
 Usman.M.SG.PLN beautiful-M.SG/*F.SGPRS.3.SG
 'Usman is beautiful.'

The adjectives in (13) are in agreement with the nouns they modify, in respect of gender and number; d enthinder ba 'box' is a masculine noun, whereas tf enthinder pol 'slipper' is a feminine noun (see table 2.2). In (13-a), the feminine adjective inflects for the plural via the suffix -ija and the masculine adjective form inflects for the plural via the suffix -e (13-b).

- (13) a. me sonija tfəpəl-ija kınd-ija sən 1.SG.PLN beautiful.F.PL slipper-F.PL buy-F.PL NPR.3.PL 'I bought beautiful slippers.'
 - b. me sone dəb-e kınd-e sən
 1.SG.PLN beautiful.M.PL box-M.PL buy-M.PL NPR.3.PL
 'I bought beautiful boxes.'

The paradigm in (14) summarises the gender and number agreement of inflecting adjectives. In Chapter 3 (section 3.5.1), we introduce a full adjectival declension, which encompasses the different forms in respect of number, gender, and case.

(14) Paradigm: adjectives

Adjective	M SG	M PL	F SG	F PL
Inflected	-a	- e	- <i>i</i>	-ija

the labels vary from author to author, the phenomenon under description is the same.

With the understanding of the basic agreement complete, the following section presents the non-present BE-auxiliary.

2.3.2 Non-Present BE-Auxiliary

The formation of the past tense involves a cluster of properties consisting of agreement marking that are attached to the MV preceding the non-present BE-auxiliary. For example, in (15-a) the inflectional suffix -ja is attached to the verb $p \ni n$ 'to break'. The latter inflection is in agreement with the masculine, singular object pijala 'cup', whereas in (15-b) the inflectional marker is -i, as it is in agreement with the feminine, singular object kijki 'window'. The agreement inflections are then followed by the third person, singular form of the BE-auxiliary si.

- (15) a. us pursu pijala pən-ja si 3.SG.ERG yesterday cup.M.SG break-M.SG NPR.3.SG 'He/She broke the cup the day before yesterday.'
 - b. us pursu kıţki pən-i si 3.SG.ERG yesterday window.F.SG break-F.SG NPR.3.SG 'He/She broke the window the day before yesterday.'

The inflectional suffixes are summarised in (16) below.

(16) Paradigm: Past Tense Suffixes

Interestingly, Potwari's sister language Punjabi, forms the past tense via almost identical suffixes that attach to a verb stem (see example (727) in Bhatia (1993, 245)), which are labelled as 'perfective aspectual affixes' (Bhatia, 1993, 245). Bhatia (1993, 245) labels this as the past participle form of the verb, which he argues to be homophonous with the indicative past form. The verb root in Punjabi when inflecting for the number and gender inflections undergo certain morphophonemic changes. Bhatia (1993) exemplifies five types of patterns, in which verbs change. For example, (i) de 'to give' changes to ditt, (ii)pii 'to drink' changes to pitt, (iii) da changes to g(a), (iv) da a 'to eat' changes to da, and (v) mar 'to die' changes to mo. The Potwari data presented in this thesis exemplify verbal roots that undergo changes that follow a similar pattern to the Punjabi verbs. Whether the aspectual aspect auxiliaries analysis can be extended to the past tense suffixes in Potwari is a matter worthy of further research, but which goes beyond the scope of this study. We therefore gloss these suffixes as past tense⁹.

In contrast, the future tense formation does not consist of the agreement inflections attached to the MV, nor does the verb agree with the object in the future

⁹See also the "perfective-for-past problem" (section 5) in Davison (2002)

tense. Rather, the verb agrees with the subject, which is realised in the form of the non-present BE-auxiliary. For example in (17), the non-present sa is in agreement with the first person, singular subject pronoun me. In (18), the non-present BE-auxiliary si is in agreement with the third person, singular subject pronoun o. The non-present auxiliary son is in agreement with the third person, plural, subject pronoun o, in (19).

- (17) me pijala pən sa 1.SG.PLN cup.M.SG break NPR.1.SG 'I will break the cup.'
- (18) o pijala pən si 3.SG.PLN cup.M.SG break NPR.3.SG 'He/She will break the cup.'
- (19) o pijal-e pən sən
 3.PL.PLN cup-M.PL break NPR.3.PL
 'They will break the cup.'

The BE-auxiliary forms are only determined by person and number, as illustrated by the verbal paradigm presented in (20).

(20) Paradigm: Non-present tense BE-auxiliary

PERSON	$_{ m SG}$	PL
1	sa	sa
2	se	SЭ
3	si	sə n

In the context of the tense/aspect discussion, Reichenbach's (1947) terminology is introduced to better understand the tense and aspect auxiliaries described in this chapter. Reichenbach (1947) proposes an analysis of the English tense system based on the following notions: (i) S, which corresponds to the point or act of speech (the time when the utterance is made), (ii) E, refers to the time when the depicted event happens (iii) R, refers to the point of reference. There are two possible temporal relations that can be drawn between these notions: (a) Precedence and (b) Simultaneity. For example, E can precede S or E can follow S. This is expressed via a dash '-'. The latter is where E and S occur at the same time or that S is included in E; this is expressed by a comma ','. The relation between S and E defines three basic temporal relations in natural languages: present, past and future, as seen in table 2.4. In the past tense E takes place before S as in I saw him, whereas in the future tense S takes place before E like in I will see him. In contrast to the past and future tense, the S and E coincide at the same point in the present tense, for example in I see him.

Adapted from: Borik (2006, 122)

Relation	Meaning	Tense	English Example
$\overline{\mathrm{E}}_{\mathrm{S}}$	E takes place before S	Past	I saw him.
S_E	S takes place before E	Future	I will see him.
E.S	E coincides with S	Present	I see him.

Table 2.4: Temporal Relations: Past, Present, and Future

In the context of the past and future tense in Potwari, we observe that the E takes place before S in (15-a). That is, the event of breaking the cup occurs prior to the S time. In contrast, in (17) the S time takes place prior to the E time - the breaking of the cup has not yet occurred. For example, the past time adverbial pursu 'day before yesterday' when combined with the future tense, as in (21) is deemed as contradictory. This is because the adverbial is referring to an event that has occurred prior to S time, while the sentence is referring to an event that occurs after S time. Hence the sentence is deemed as semantically infelicitous. The reverse results are illustrated in (22), in that the future time adverbial peri 'tomorrow' induces a semantically odd sentence when combined with the past tense. The latter is related to the adverbial referring to an event that occurs after S time, while the sentence is referring to an event that occurs after S time, while the sentence is referring to an event that occurs after S time, while the

- (21) #o pursu pijala pən si 3.SG.PLN day.before.yesterday cup.M.SG break NPR.3.SG '#He/She will break the cup the day before yesterday.'
- (22) #us pɛri pijala pən-ja si 3.SG.ERG tomorrow cup.M.SG break-M.SG NPR.3.SG '#He/She broke the cup tomorrow.'

2.3.2.1 Past Tense Transitive & Intransitive Verb Agreement

The inflection markings we see in the verbal paradigm for the non-present BE-auxiliary above are not found in all past tense environments. The non-present BE-auxiliary only inflects for person and number if the verb is intransitive, in the past tense. For example, in (23-a), the sentence consists of the first person, singular subject of the intransitive verb kul 'to fight'. As predicted by the verbal paradigm presented in (20), the first person, singular non-present BE auxiliary form sa is in agreement with the first person, singular subject me (23-a). In (23-b), the third person, singular non-present BE-auxiliary form si in agreement with the third person subject pronoun o 'he/she'.

- (23) a. me kul-i/ja sa 1.SG.PLN fight-F.SG/M.SG NPR.1.SG 'I fought.'
 - b. o kul-i/ja si 3.SG.PLN fight-F.SG/M.SG NPR.3.SG 'He/she fought.'

Transitive verbs in the past tense agree with their object, in respect of number and gender. However, the person and number agreement forms of the non-present BE-auxiliary is dependent on whether the object is animate. That is, if the object is animate then the non-present BE-auxiliary appears in its default, third person, singular form si regardless of the object's number and person, as seen in (24). In (24-a) the object argument of the transitive verb mar 'hit' is the third person, singular object pronoun uski. According to the verbal paradigm in (20) the BE-auxiliary form should appear as si, in agreement with the object, which is the form that follows the MV (24-a). The si form also appears in (24-b) rather than the predicted first person, singular form sa, as the object is the first person, singular pronoun miki. Similarly, the si form appears in (24-c) and (24-d) instead of the predicted BE-auxiliary form san, as we have the third person, plural object pronoun una 'them' in (24-c) and the plural form of the noun kuri 'girl' in (24-d).

- (24) a. me uski mar-ja si 1.SG.PLN 3.SG.OBL hit-M.SG NPR.3.SG 'I hit her/him.'
 - b. us mīki mar-ja si/*sa 3.SG.ERG~1.SG.OBL~hit-M.SG~NPR.3.SG/*NPR.1.SG 'He/She hit me.'
 - c. us una-ki mar-ja si/*sən
 3.SG.ERG 3.PL-OBL hit-M.SG NPR.3.SG/*NPR.3.PL
 'He/She hit them.'
 - d. us kur-ija-ki mar-ja si/*sən 3.SG.ERG girl-F.PL-OBL hit-M.SG NPR.3.SG/*NPR.3.PL 'He/She hit the girls.'

A further observation can be made in regards to the agreement on the MV: if the object is human then the verb takes by default with the masculine, singular inflection -ja, which can be seen throughout the data examples in (24).

The data facts in (24) show that regardless of the person and number of the object, the non-present BE-auxiliary always occurs in its third person singular form si. However, different results are found when the object is inanimate. If the object is inanimate then the non-present BE-auxiliary agrees in number with the object. That is, we have two possible forms: si and si. This can be seen by comparing (25-a) and (25-b). The object in the former example is the singular object pijala 'cup' and the BE-auxiliary form is in the third person singular form si. In the latter example,

the same object pijala 'cup' is in its plural form and the BE-auxiliary occurs in its third person plural form $s \ni n$.

- (25) a. us pijala pən-ja si 3.SG.ERG cup.M.SG break-M.SG NPR.3.SG 'He/She broke the cup.'
 - b. us tfar pijal-e pən-e sən 3.SG.ERG four cup-M.PL break-M.PL NPR.3.PL 'He/She broke four cups.'

The difference between the objects in (24) and (25) is not only in animacy; the objects in the former data are in their oblique form, whereas in the latter example, the objects are not in their oblique form. This difference has no consequences on the form of the non-present BE-auxiliary; si and sen remain the two possible forms. The latter can be seen by comparing (26-a) and (26-b) with (25-a) and (25-b).

- (26) a. me pijala-ki balti vɪtʃ sət̞-ja si
 1.SG.PLN cup.M.SG-OBL bin.M.SG in throw-M.SG NPR.3.SG
 'I threw the cup in the bin.'
 - b. me pijal-e balti vit sət-e sən 1.SG.PLN cup-M.PL bin.F.SG in throw-M.PL NPR.3.PL 'I threw the cups in the bin.'

The agreement patterns of the non-present BE-auxiliary in the past tense of a transitive verb are summarised in (27).

(27) Non-Present BE-Auxiliary: Past Tense Transitive Verb

OBJECT TYPE	SG	PL
-Human	si	s ightarrow n
+ Human	si	si

2.3.2.2 Future Tense Transitive & Intransitive Verb Agreement

In the future tense, the verb agrees with the subject. The verbal paradigm in (20) applies to all environments in which the future tense is formed regardless of the verb type. For example, in (28-a) the sentence consists of the first person singular subject of the intransitive verb kul 'to fight' and as predicted by the verbal paradigm presented in (20), we see the corresponding first person, singular non-present BE-auxiliary form sa. While, in (28-b) we find the third person singular non-present BE-auxiliary form si in agreement with the third person subject pronoun o 'he/she'.

- (28) a. me kul sa 1.SG.PLN fight NPR.1.SG 'I will fight.'
 - b. o kul si 3.SG.PLN fight NPR.3.SG 'He/She will fight.'

The non-present BE-auxiliary also changes according to person and number of a subject in the future tense when the verb is transitive, as shown in (29).

- (29) a. me pijala pən sa 1.SG.PLN cup.M.SG break NPR.1.SG 'I will break the cup.'
 - b. o pijala pən si 3.SG.PLN cup.M.SG break NPR.3.SG 'He/She will break the cup.'
 - c. o pijala pən sən
 3.PL.PLN cup.M.SG break NPR.3.PL
 'They will break the cup.'

The agreement patterns established for the non-present BE-auxiliary are summarised in 2.5. The non-present BE-auxiliary in the future tense and the past tense of an intransitive verb agrees in person and number with the subject. The latter agreement pattern is also of a transitive verb in the future tense. In the past tense, the BE-auxiliary occurs in its default third person singular form (si) if the object is +human i.e. there are no number or person distinctions. If the object is -human then it agrees with the non-present BE-auxiliary in number, though not in person i.e. it occurs in its default form.

Tense	Verb Type	Obj Type	Agreement Type	Person	Number
FUT, PST	INTR	NA	Verb-Subject	1,2,3	SG, PL
FUT	TR	NA	Verb-Subject	1,2,3	SG, PL
PST	TR	-Human	Verb-Object	3	SG, PL
PST	TR	$\pm \mathrm{Human}$	Verb-Object	3	SG

Table 2.5: Agreement Patterns of Non-Present BE-Auxiliary

2.3.3 Present BE-Auxiliary

The present form of the BE-auxiliary is ε , which together with the imperfective auxiliary ni/na forms the present tense in Potwari (see section 2.4.1 for the imperfective aspect in Potwari), as shown in example (30) below.

(30) o ũn məntfəstər re na ε 3.SG.PLN now Manchester stay.M.SG IMPF.M.SG PRS.3.SG. 'He now lives in Manchester.' The present BE-auxiliary paradigm is summarised in (31), which is similar to that of the present BE-auxiliary in that it inflects for person and number. The agreement pattern found in the present tense is the same as the future tense. That is, the verb agrees with the subject, rather than the object¹⁰.

(31) Paradigm: present tense BE-auxiliary

PERSON	$_{ m SG}$	PL
1	a	a
2	e	0
3	ε	ən

In line with Reichenbach's meaning of the past, present and future tense; I propose the three tenses summarised in table 2.6 for Potwari.

Table 2.6: Temporal Relations in Potwari: Past, Present and Future

Relation	Meaning	Tense	Potwari
E_S	E takes place before S	Past	-ja si
S_E	S takes place before E	Future	si
$_{\rm E,S}$	E coincides with S	Present	ε

2.4 Introducing Grammatical Aspect

2.4.1 The Imperfective & Perfective Aspect

The contrast between the imperfective and perfective aspect is in the viewpoint of the event; the perfective aspect is viewed as closed and as whole, whereas the viewpoint of the imperfective is viewed from "inside" as an ongoing process (Smith, 1997). For example, the perfective sentence in (32-a) entails an event of eating a date, which leads to the date being eaten (completed), while there is no such entailment in the imperfective sentence in (32-b), as the event is viewed as still ongoing.

- (32) a. Dad ate the date.
 - b. Dad is eating the date.

There are several semantic tests that determine whether a sentence is imperfective or perfective. I employ the conjunction test in (33) to show that Potwari distinguishes for the perfective and the imperfective aspect.

 $^{^{10}}$ Also to note here is the following phonological rule: if the preceding vowel is the front close vowel /i/ then a glide precedes the present BE-auxiliary.

- (33) Imperfective & Perfective Diagnostic (Comrie, 1976; Smith, 1997)
 - a. If the sentence can conjoin a contradictory or cancellation assertion about an on-going situation then it is an example of the imperfective aspect.
 - b. If the sentence cannot conjoin a contradictory or cancellation assertion about an on-going situation then it is an example of the perfective aspect.

Conjunction tests are based on the compatibility of two assertions. To test whether a sentence is perfective or imperfective, you conjoin a sentence with a contradictory or cancellation assertion about the situation. If the sentence is reasonable in conjunction with such assertions, it is then an example of the imperfective aspect (34). However, if it is incompatible, it is then an example of the perfective aspect (35) (Smith, 1997, 101). Example (34) shows that the cancellation (subordinate) clause is acceptable in English, whereas the cancellation clause in (35) is deemed as contradictory.

- (34) Mary was walking to school but she didn't actually get there.
- (35) #Mary walked to school but she didn't actually get there.

(Smith, 1997, 64)

In Potwari, the present imperfective and the past imperfective are both expressed periphrastically. The imperfective aspect auxiliary inflects for number and gender, in agreement with the subject. The imperfective paradigm can be seen in (36).

(36) Paradigm: imperfective aspect auxiliary

In (37), the imperfective aspect is in the masculine singular form na, which is combined with the present tense BE-auxiliary for the present imperfective, and the non-present tense BE-auxiliary for the past imperfective. In (38), we have the feminine singular form of the imperfective ni, which is combined with the two BE-auxiliaries to form either the present or past imperfective reading.

- (37) me pani val na sa/a
 1.SG.PLN water.M.SG boil IMPF.M.SG NPR.1.SG/PRS.1.SG
 'I was/am boiling the water.'
- (38) me pani val ni sa/ja 1.SG.PLN water.M.SG boil IMPF.M NPR.1.SG/PRS.1.SG 'I am boiling the water.'

The conjunction diagnostic employed in (34) can also be used in the context of Potwari's imperfective auxiliary. For example, (39) shows that the cancellation (subordinate) clause is acceptable in Potwari, as there is no entailment of completion associated under the imperfective reading.

(39) me pani val na sa te adevi val na 1.SG.PLN. water.M.SG boil IMPF.M.SG PRS.1.SG and still boil IMPF.M.SG a PRS.1.SG
'I was boiling the water and I am still boiling it.'

2.4.2 The Perfects

The perfect aspect refers to a previous action that is viewed from the perspective of a later time or a previous action with relevance to a particular time. For example, in (40) the first part denotes 'I went to the theatre' (previous action) as well as 'I am in the theatre now' (the current state). Example (40) shows that a previous action happened and that a current state is a result of it.

(40) I have gone to the theatre.

In providing an analysis of the perfect in English, Reichenbach introduces the notion reference point/time (R). The motivation behind introducing R-time is in order to differentiate the past perfect from the past tense in English, such as in (41). Both sentences are interpreted as reporting an eventuality that occurred in the past (prior to S). Thus, the representation based on the notions S and E is not adequate in accounting for the difference between the past perfect and the past tense. For example we see that the past perfect presents a sequence of two events within a time order, while the past tense presents one event. The R-time is defined on this point; the R-time refers to the point in time between the E-time and the S-time.

(41) a. He has seen her. \rightarrow E_S (E_R,S) b. He saw her. \rightarrow E_S

The Perfect can now be analysed with the introduction of reference time. Perfect sentences locate a situation prior to reference time of a sentence. Example (42) illustrates the present, past, and future perfects in English. The adverbials are fronted to avoid ambiguity and they specify reference Time.

- (42) a. Now John has arrived.
 - b. Last Saturday John had (already) arrived.
 - c. Next Saturday John will have already arrived.

Smith (1997, 107)

In these examples, the event *John arrived* occurs before reference time. The Perfect presents the prior situation as related to reference time. For instance in (42), the moment of speech functions as reference time and the present is understood as covering an interval that extends back from Speech.

Table 2.7: Perfect Relations: Past, Present, and Future Perfects

Relation	Meaning	Perfect
E_R_S	E takes place before R and R takes place before S	Past Perfect
S_E_R	S takes place before S	Future Perfect
$E_R,S \text{ or } E_S,R$	E coincides with S	Present Perfect

Adapted from: Borik (2006, 122)

One diagnostic characteristic of the English perfect is that it cannot be used together with a specification of time (Comrie, 1976, 54). For example, (43) is deemed as unacceptable because the specific reference to the point of time, such as *at five o'clock this morning*, is incompatible with the English perfect. This diagnostic also holds in Potwari, which is shown in the next section.

(43) *Saddaf has gone to the theatre at five o'clock this evening.

The perfect reading is not restricted to one particular meaning, in fact there are a range of distinct perfect meanings. Example (44) provides a summary of four distinct types of perfects in English, which I discuss in turn below for English and Potwari.

- (44) a. Existential: Fred has visited Paris several times.
 - b. Universal: I have known him since 1960.
 - c. Resultative Perfect: The police have probably caught the suspect by now.
 - d. "Hot news" (Recent Past): Archduke Ferdinand has been assassinated in Sarajevo. [June 28, 1914]

Kiparsky (2002, 1)

The existential reading is comprised of an event that is atelic/iterative, in which the existential asserts one or more events of that type occurred during the interval E. The event does not have to extend throughout the entire interval E to the beginning of R (Kiparsky, 2002). For example, (44-a) asserts that Fred has visited Paris on more than one occasion during a period that extends from some past time up to R time and implicates that he is not currently there. That is, there is no entailment that any result state holds at R-time. Hence the example in (45) is semantically felicitous because it is not necessarily the case that Fred is at Paris at S-time.

(45) Fred has visited Paris but he is not there now.

Kiparsky (2002) also shows that the existential perfect has the following two presuppositions: (i) NP arguments must exist at S time and (ii) the event must be of repeatable type. For example, in (44-a) the event of *visiting* Paris occurs at a past time and on several different occasions. It implies that Fred might visit Paris again; therefore Fred must be alive at S-time and Paris must exist at S-time. In contrast, the two examples in (46) and (47) are incongruous, as Nazi Germany does not exist at S time and Fred can only be born once.

- (46) #Fred has visited Nazi Germany [uttered in 2000].
- (47) # Fred has been born in Paris.

Kiparsky (2000, 4)

The universal reading arises when the event of an atelic or iterative telic verbal predicate is coexistent with the interval E time. For the sentence in (44-b) to be true under the universal reading, the state/process must last from the entire duration of the period, terminating at R, where the R time is present "now". The universal reading requires an adverb specifying a duration such as always, since 1960, or for two years. This adverb usage cancels out the existential reading/implicature: the event does not obtain throughout the interval of E up to R. For example, (48) is true under the universal reading, rather than the existential reading. That is, there are sub intervals between "1977" and "now", and at all these sub intervals I has to have been in Hyderbad between "1977" and "now". However, under the existential reading the time intervals between "1977" and "now" are not counted.

(48) I have been in Hyderbad since 1977.

The resultative perfect reading is confined to predicates of events with associated result states (i.e. accomplishments and achievements), where the result state of these predicates holds at R-time, such as the sentence in (49-a) and (49-b) below.

- (49) a. Kim had broken the cup in seconds.
 - b. Kim had built the house in five months

Accomplishments and achievements are telic predicates, that is, they have an inherent endpoint, such as (50) and (51); break is an achievement and built the house is an accomplishment. The inherent endpoint can be captured via a time adverbial such as in x time. The idea behind the in x time adverbial is to make an explicit reference to the end point of the eventuality. If the in x time adverbial can modify the eventuality and the sentence is deemed as acceptable, then the verb has an endpoint. However, if the adverbial leads to a contradiction, then there is no endpoint, as in (52).

(50) Kim broke the cup in seconds.

- (51) Kim built the house in five months.
- (52) #Saddaf knows philosophy in five minutes.

The resultative perfect in (49-a) is comprised of the achievement predicate break, in which we see that it can be modified by the time adverbial in seconds, as can the achievement break independent of the resultative perfect, illustrated in (50) above. Similarly, (49-b) is comprised of the accomplishment built the house, which can be modified by the time adverbial in five months. The accomplishment predicate is shown to be modified by the time adverbial independent of the resultative perfect reading in (51) above. The diagnostic tools in (53) are employed to establish the resultative perfect in Potwari.

- (53) a. Event type must be telic (an accomplishment or achievement).
 - b. Telic Diagnostic: in x time

The hot-news perfect reading is a special case of the resultative perfect reading; the event is situated at a time which verges on S-time (Kiparsky, 2002, 1).

2.4.3 Perfects in Potwari

In Potwari, we claim that there are two types of perfect auxiliaries, which in contrast to the BE-auxiliaries have lexical verb analogues, namely: (i) gi/ga-ja 'to go' and (ii) ri/re-ja 'to stay'. The MV use of the two forms is illustrated in (54) and (55). We see the feminine form ri 'to stay' in (54-a) and the masculine form ra-ja 'to stay' in (54-b).

(54) a. saima bæðji-ne ka:r ri
Saima.F.SG.PLN grandmother.F.SG-GEN.M.SG house.M.SG stay.F.SG
si
NPR.3.SG

'Saima stayed at grandmother's house.'

b. usman bæði-ne ka:r re-ja Usman.M.SG.PLN grandmother.F.SG-GEN.M.SG house.M.SG stay.M.SG si NPR.3.SG

'Usman stayed at grandmother's house.'

The feminine form gi 'to go' is illustrated in (55-a), while the masculine form ga-ja 'to go' is shown in (55-b).

- (55) a. saima ka:r gi si
 Saima.F.SG.PLN house.M.SG go.F.SG NPR.3.SG
 'Saima went home.'
 - b. usman ka:r ga-ja si Usman.M.SG.PLN house.M.SG go.M.SG NPR.3.SG 'Usman went home.'

We claim gi/gaja 'to go' is a general perfect auxiliary, in that it can have a resultative perfect reading, as well as an existential perfect reading. The latter is shown in section 2.4.5 and the former is shown in section 2.4.4. In comparison, we show that ri/re-ja 'to stay' is a more specialised perfect auxiliary, as it is confined to the existential perfect reading. That is, they cannot be used together with a specification of time (see example (43) above). For example, in (57) and (56) the gi and ri perfects do not permit a specific time diagnostic such as at one o'clock, as the sentence is deemed as semantically infelicitous.

- (56) #kədi ik^h bəʤε karav o-i gi jε car.F.SG.PLN one o'clock bad become-NFN PRF.F.SG PRS.3.SG '#The car has broken down at one o'clock.'
- #sara ikh bəʤε roti kai ri jε
 Sara.SG.F.PLN one o'clock bread.F.SG eat.NFN PRF.F.SG PRS.SG

 '#Sara has eaten bread at one o'clock.'

The verbal paradigm for the resultative and existential aspect auxiliary gi/ga-ja 'to go' is presented in (58).

(58) Paradigm: resultative & existential perfect aspect auxiliary

The verbal paradigm of the existential perfect aspect auxiliary is presented in (59).

(59) Paradigm: existential perfect aspect auxiliary

2.4.4 Resultative gi/ga-ja

In context of the resultative perfect in English, the predication is that a resultative perfect is not compatible with an event that does not have an inherent endpoint, such as activities like I ran and states like I know. The incompatibility is related to the fact that they are viewed as ongoing states, which makes them atelic. In contrast, the resultative perfects are compatible with telic predicates, such as achievements and accomplishments. In showing resultative perfects involving telic predicates, I employed the telic diagnostic in x time (see examples (49-a), (49-b), (50), and (51) above). In the same manner as I presented the resultative perfect in English, I show that gi is a resultative perfect, as it is compatible with achievement and accomplishment events. The telicity of the latter event types are confirmed by the telic diagnostic in x time.

Let us begin with the resultative perfect example in (60), in which I claim the described event $p_{I}t^h$ $l\partial k$ 'lock the door' is an accomplishment event. For example, $p_{I}t^h$ $l\partial k$ 'lock the door' independent of the resultative perfect can be modified by the in x time adverbial, as illustrated in (61).

- (60) mare atf ni-o pəle sara pṛṭʰ lək kar-i 1.SG.GEN come IMPF-NOML first Sara.F.SG door.F.SG lock do-NFN gi si PRF.F.SG NPR.3.SG 'Before my arrival, Sarah had locked the door.'
- (61) sara ik^h minte vit pṛt lək kəṭ-i si Sara.F.SG.PLN one minute in door.F.SG lock do-F.SG NPR.3.SG 'Sara locked the door in a minute.'

The compatibility of the telic predicate is related to the fact that telic predicates hold a result state. We observe that the resultative perfect gi holds at R-time. That is, the locking of the door holds at the R time in (60). The result state can be captured by conjoining a contradictory or cancellation assertion, such as the assertion bu' pt_i^h k > ni si l > k 'but the door was not locked'. If the result state holds at R-time then the resultative perfect reading we see in (60) must be deemed as contradictory with the above insertion. The example in (62) confirms the latter, in that the contradictory assertion induces a semantically infelicitous sentence.

#sara məse pith lək kar-i gi si bu'
Sara.F.SG.PLN now door.F.SG lock do-NFN PRF.F.SG NPR.3.SG but
pith koni si lək
door.F.SG NEG NPR.3.SG lock
'Sarah had just locked the door but the door was not locked.'

In contrast, stative sentences induce a semantically infelicitous sentence when combined with the $in\ x\ time$ adverbial. This is because states are not telic predicates, as illustrated for the state pota 'to know' in (63). The latter reinforces the fact that the telic diagnostic $in\ x\ time$ works in the same way as we saw for English.

(63) uski saima-ne barat (#ikh mine vit) peta si 3.SG.OBL Saima.F.SG-GEN.M.SG about (one month in) know NPR.3.SG 'He/She knew about Saima (#in one month).'

Based on this observation, the resultative perfect gi should be incompatible with stative predicates because there is no result state associated with the states. The latter is confirmed in example (64). Here we see that the state $p \not = t a$ 'to know' is not compatible with the resultative perfect gi, as it induces a semantically infelicitous sentence.

#uski saima-ne baratf (#ikh mine vitf) pəṭa gi
3.SG.OBL Saima.F.SG-GEN.M.SG about one month in know PRF.F.SG
si
NPR.3.SG
'He/She knew about Saima (#in one month).'

Similarly, example (65-a) shows that the resultative form gaja cannot occur with activities either. This incompatibility is related to the lack of telicity associated with activities, such as nətf 'to dance'. That is, they are atelic predicates. The latter is shown via the $in\ x\ time$ adverbial, whereby the adverbial is unacceptable with the verb nətf 'to dance' independent of the perfect gaja in (65-b).

- (65) a. #o nətʃ-i gaja si 3.SG.PLN dance-NFN PRF.M.SG NPR.3.SG 'He had danced.'
 - b. #o ikh minte vitf nətf-ja si 3.SG.F.PLN one minute in dance-M.SG NPR.3.SG '#She danced in one minute.

2.4.5 Existential gi/ga-ja

In section 2.4.2 above, I showed that a existential reading is comprised of an event that is atelic/iterative, in which the existential asserts one or more events of that type occurred during the interval E. In contrast to the resultative perfect, the event does not have to extend throughout the entire interval E to the beginning of R (Kiparsky, 2002). That is, there is no entailment that any result state holds at R-time. The existential reading is also associated with the presupposition that a recurrence of the event type in question is possible and that the NP arguments exist at S time. For example *Fred has visited Paris many times* illustrated in example (44) above, implies that Fred may visit Paris again, which also means that Fred is alive and Paris exists at S time.

We claim gi/ga-ja is also an existential perfect auxiliary, as exemplified in (66) and (67) below. The nature of the event bir 'to bite' and $ka \ rav \ o$ 'to go bad' are repeatable and are therefore compatible with the existential perfect ga-ja.

- (66) e mətfəl miki kitni vari bir-i ga-ja
 DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG
 si
 NPR.3.SG
 'That mosquito had bit me (so) many times.'
- (67) kədi kıţni vari kaţav o-i gi si car.F.SG.PLN many time bad become-NFN PRF.F.SG NPR.3.SG 'The car had broken down (so) many times.'

The above examples show that one or more event of biting and breaking occurred

during the interval E, without the entailment that any result state holds after R time. That is, the event does not have to extend throughout the entire interval E to the beginning of R. The latter can be captured by conjoining a cancellation clause, similar to the clause that captured the result state of the resultative perfect reading in (60). If there is no entailment of a result state at R-time, then the existential perfect reading we see in (66) and (67) must be deemed as semantically felicitous with the cancellation insertion. The two examples (68) and (69) confirm the latter; we see that the contradictory assertion induces a semantically felicitous sentence.

- (68) e mətfəl miki kitni vari bir-i ga-ya
 DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG
 si bu' ün miki koni bir na
 NPR.3.SG but now 1.SG.OBL NEG bite TOP
 'That mosquito had bit me so many times but now it is not biting me.'
- (69) kədi kıtni vari karav o-i gi si bu' ün koni car.PLN.F many time bad become-NFN PRF.F.SG NPR.3.SG but now NEG karav bad

 'The car had broken down (so) many times but now it is not broken.'

The existential perfect is also semantically infelicitous in example (70), as a mosquito can only be born once.

(70) #mətfəl bəda o-i gaja si mosquito.M.SG born become-NFN PRF.M.SG NPR.3.SG '#The mosquito had been born.'

The second characteristic of the existential perfect is that the NP argument must exist at S time, which the above examples in (66) and (67) exemplify. For example, it is interpreted that the mosquito is alive and the car in question exists at S time. If they do not exist at S time, then the sentence is deemed as unacceptable, as illustrated in (71). The latter example shows that the existential perfect ge-ja is incompatible with NP arguments that do not exist at S time, such as mojavja mətfəl 'the dead mosquito' in (71).

(71) #mojavja mətfəl miki kitni vari bir-i ge-ja dead mosquito 1.F.SGOBL many time bite-NFN PRF.F.SG-M.SG si

NPR.3.SG
'The dead mosquito had bit me so many times.'

Based on the above examples, it can be said that ga-ja can also occur as an existential perfect auxiliary, as well as a resultative perfect auxiliary. However, the existential perfect reading is dependent on whether the subject argument is human or non-human; if the subject is non-human then gi can have an existential perfect reading,

as we saw in example (66) and (67) above. However, the existential perfect is lost if the subject is human. Instead, it is replaced by the hot news perfect (a sub-type of the resultative perfect reading). For example, in (72) the subject of the event of eating the snake is human; the event itself has to have happened in the most recent past.

(72) sara səp^h kai gi jε Sara.F.SG.PLN snake.M.SG eat.NFN PRF.F.SG PRS.1.SG 'Sara has eaten the snake!'

2.4.6 Existential Perfect ri/re-ja

The preceding section characterises gi/gaja as an existential perfect auxiliary, though it was shown that it only gives rise to an existential reading if the subject is non-human. In this section, I show that ri, which otherwise is the lexical verb 'to stay' is also an existential perfect auxiliary. However, it differs to the existential gi in that it only gives rise to an existential perfect reading if the subject is human. This can be seen by comparing example (73) and (74) below. The latter is semantically felicitous because the subject is the human noun sara 'Sara', whereas the latter example is deemed as semantically unacceptable, as the subject is the non-human nominal $p^h l$ 'flower'.

- (73) sara kıţni vari o filəm ţək-i ri
 Sara.F.SG.PLN many time DEM.DIST.SG film watch-NFN PRF.F.SG
 jε
 PRS.3.SG
 'Sarah has watched that film so many times.'
- (74) #e p^hul kıţni vari kır-i reja DEM.SG.PROX flower.M.SG.PLN many times bloom-NPR PRF.M.SG ε PRS.3.SG 'This (same) flower has bloomed so many times.'

Example (73) shows that one or more event of watching occurs during the interval E, without the entailment that any result state holds at R time. That is, the event does not have to extend throughout the entire interval E to the beginning of R. The latter can be captured by conjoining a cancellation clause, similar to the clause that captured the result state of the resultative perfect reading in (60). If there is no entailment of a result state at R-time, the existential perfect reading we see in (73) must be deemed as semantically felicitous with the cancellation insertion. The latter is confirmed in example (75), as the cancellation clause does not induce a semantically infelicitous sentence.

(75) sara kıţni vari o filəm tək-i ri
Sara.F.SG.PLN many time DEM.DIST.SG film.F.SG watch-NFN PRF.F.SG
si bu' ũn kəni tək ni
NPR.3.SG but now NEG watch IMPF.F.SG
'Sarah had watched that film so many times but now she does not watch
it.'

Characteristic of the existential perfects is their incompatibility with non-repeatable predicates and with NP arguments that do not exist at S time. For example, in (76), the existential perfect ri is deemed as semantically odd when combined with the non-repeatable predicate $pada\ o$ 'to be born'.

(76) #sara pəda o-i ri si Sara born become-NFN PRF.F.SG NPR.3.SG 'Sarah had been born.'

The sentence in example (77) is also deemed as semantically odd because the NP argument ifk^h in pa:ris 'Love in Paris' is not released at S time. That is, it does not exist at S time.

(77) #sara kıtıni vari i∫kh in pa:ris tək-i ri Sara.F.SG.PLN many time love in Paris.M.SG watch-NFN PRF.F.SG ja PRS.3.SG 'Sara has watched Love in Paris many times.' (uttered 2012)

Table 2.8 below provides a summary of the environments, in which the resultative/existential auxiliary gi and the existential auxiliary ri appear in.

Table 2.8: The Perfects

Perfect Type	+Human	+Non-Human
Existential Perfect	ri	gi
Resultative Perfect	gi	gi

2.5 Non-Finite Marker -i

The non-finite marker -i is found to attach to an MV if a finite auxiliary follows it, such as an aspectual auxiliary. For example, the resultative perfect ga-ja 'to go' in (68) follows the MV bir 'to bit', as it is the resultative auxiliary ga-ja 'to go' that carries the finite properties.

(78) e matfəl miki kitni vari bir-i ga-ja DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG ϵ PRS.3.SG 'That mosquito has bit me (so) many times.'

In a similar manner to the MV, the non-finite marker can also be attached to an LV when the resultative auxiliary ga-ja 'to go' follows, as illustrated in (79). In the latter example, we see the non-finite marker -i attached to the LV mar 'hit', which is followed by the finite resultative aspectual auxiliary ga-ja 'to go'.

(79) o kıţni vari dəkar mar-i gaja ε 1.SG.PLN many time burp.M.SG hit-NFN PRF.M.SG PRS.3.SG 'He has burped so many times.'

The BE-auxiliaries are always finite, carrying number and person inflections, illustrated in their verbal paradigms in the previous section: (20) and (31). The aspectual auxiliaries always carry number and gender inflections. Hence, the nonfinite marker -i is incompatible with the finite tense/aspect auxiliaries (see Chapter 7 for data examples). In Chapter 7, we observe that the behaviour displayed by the auxiliaries and LVs with the non-finite marker furthers the difference between the two classes, as LVs are compatible with the non-finite marker. The non-finite marker -i can be said to mark the boundary between an MV/LV and the tense/aspect auxiliaries within the ordering of the verbal template (see Chapter 7 for verbal template). That is, it always precedes the tense/aspect auxiliaries when attached to the MV or the LV.

2.6 Introducing Case Marking

Upon understanding the basic workings of the tense and aspect system, I now embark on the basic workings of the case system. Case marking in Potwari is integral to the structure of the language, as it marks the relationship arguments have to verbs. Without diverging from the topic at hand, the case system is also integral in the investigation of the LVCs, particularly in their comparison to AVCs. One of the differentiating properties between LVs and auxiliaries, is that the former can determine the subject case marking, while the latter cannot. Consequently, the working of the case system facilitates the argumentation that LVs are syntactically distinct from auxiliaries (see Chapter 7).

This section establishes that Potwari nouns and pronouns canonically distinguish for four cases in non-past environments: (i) plain, (ii) oblique, (iii) genitive, and (iv) locative, while third person subject pronouns also distinguish for the ergative case, in the past. Based on the understanding of the case system, I establish that the canonical alignment system is two-way split intransitivity, while in the third person subject pronouns of the past tense a three-way split alignment system is proposed. Generally, we observe that Potwari manifests the classic case properties of Indo-Aryan languages, from the classic three layering case system (Masica, 1991), with the retention of the Layer I locative case marker -e dating back to Sanskrit, to the double case phenomena (Plank, 1995), as well as the DOM phenomena and split

ergativity exhibited in the past tense of third person pronouns (Sharma & Deo, 2006).

2.6.1 Basic Alignment System

Morphosyntactic alignment is employed to differentiate arguments of transitive and intransitive verbs via case marking, agreement and constituent order (word order). Cross linguistically, case marking, agreement and constituent order are employed to identity the relationship that the NP bears to the verb in terms of semantic and grammatical relations (Whaley, 1997). That is, the nominal must be recoverable from the morphosyntax of a language (Dziwirek et al., 1990). In the following sections, I show the complexity of marking the relationship between the NP and the verb, and the grammatical relations they mark at the clause level. In order to describe the different alignment systems, I employ the terminology used in the literature, which is defined in (80).

- (80) a. S: Subject of intransitive
 - b. **A:** Subject of transitive
 - c. O: Object of transitive (Whaley, 1997, 156)

The nominative-accusative and the ergative absolutive systems are amongst the most attested systems cross-linguistically. In languages with a nominativeaccusative grammar, S and A naturally group together, whereas the O is treated differently. Languages of the ergative-absolutive type treat S and O the same, whereas the A is marked differently. However, languages are not so rigid in employing solely one system. It is often the case that any given language employs two or more systems depending on the type of construction involved. For example, many languages have some accusative and some ergative characteristics, linking S with A for certain purposes and S with O for other purposes. This is what is referred to as "splits", which are conditioned by various factors. Dixon (1994, 70) notes that the splits can be determined by the semantic content of the verb, the tense/apect of the verb/clause, the semantic-pragmatic context of a noun, the grammatical status of a clause; main/subordinate (Dixon, 1994, 70). The latter is in no manner an exhaustive list, as not all languages exhibit splits based on each of the above conditions, rather the split can be based on one factor or more. Nevertheless it is sufficient for our discussion.

The canonical case alignment system in Potwari is two-way split intransitivity. That is, in some contexts S and A are grouped together: the S sara 'Sara' in (81-a) and the A usman 'Usman' in (81-b) are both in the unmarked plain case form, while the O sara 'Sara' in (81-b) takes the oblique case form -ki. However, we see in (81-c) that the subject is marked the same as the object (O) via the oblique case marker -ki, rather than being in the unmarked plain form found with S and

A. This is referred to as split-intransitivity (more commonly in the literature it is referred to as an active-stative system). Unlike the nominative-accusative system, split-intransitivity accounts for the fact that a sole argument of an intransitive verb can either be treated as the A or O. In context of Potwari, we see that the sole argument of an intransitive verb can either take the unmarked plain case or the oblique case marker -ki.

- (81) a. sara dor-i si Sara.F.SG.PLN run-F.SG NPR.3.SG 'Sara(S) ran.'
 - b. usman sara-ki sar-ja si usman.M.SG.PLN sara.F.SG-OBL burn-M.SG NPR.3.SG 'Usman(A) burnt Sara(O).'
 - c. sara-ki pəta si Sara.F.SG-OBL know NPR.3.SG 'Sara(O) knew.'

Interestingly, the third person subject pronouns in the past tense do not exhibit the canonical two-way split intransitivity pattern, rather they exhibit a three-way split. The examples below illustrate this. In example (82), we have the plain case subject pronoun o, the oblique case subject pronoun in (83), and the ergative case subject pronoun in (84) of the intransitive verbs dor 'to run', pəṭa'to know', and dəkar mar 'to burp', lit. 'burp hit'. 11

- (82) o dor-i si 3.SG.PLN run-F..SG NPR.3.SG 'She(S) ran.'
- (83) uski pəta si 3.SG.OBL know NPR.3.SG 'He/She(S) knew.'
- (84) us dəkar mar-ja si 3.SG.ERG burp.M.SG hit-M.SG NPR.3.SG 'He/She(S) burped.'

The ergative subject case pronoun is not restricted to the sole argument of intransitive verbs, as it can also appear as the subject of a transitive verb (A) in the past tense, illustrated in (85).

(85) us miki mar-ja si 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She(A) hit me.'

¹¹This is an example of an LVC formed with the LV max 'to hit' and the nominal $d\partial kax$ 'burp'. In section 2.6.6, it is shown that simple intransitive verbs do not give rise to the ergative case in the third person pronoun.

As a preview, (86) presents the pronominal paradigm, which distinguishes for four cases in non-past environments: (i) plain¹², (ii) oblique, (iii) genitive, and (iv) locative

(86) Pronominal Paradigm: Non-Past Tense

	PLN	OBL	LOC	GEN
1.SG	me	m_Iki	mar-e pər	mar-a/i
1.PL	asa	asaki	sar-e pər	sar- $a/i/e$
2.disresp.sg.	tu tu	tuki	tar-e pər	tar-a/i/e
2.resp.pl.	tusa	tusaki	tus-e ne pər	tus-a $ni/a/e$
3.PROX.SG	e	iski	is ne pər	is n-a/i/e
3.Prox.pl	$\mid e \mid$	inaki	in-e ne pər	is n-a/i/e
3.dist.sg	0	uski	us ne pər	$us \ n$ - $a/i/e$
3.dist.pl	o	uski	una pər	$una \ n$ - $a/i/e$

In the past tense, we observe the above four cases, as well as the fifth ergative case, in the third person pronoun, illustrated in (87). Similar patterns of the ergative case are exhibited in many New Indo-Aryan languages, which are discussed in section 2.6.6.

¹²The motivation of the term "plain case" is rooted in the diachronic claims that the Middle Indo-Aryan languages overtly marked the ergative case on subjects of perfective sentences. I employ the term plain case as a way of representing the progressive neutralisation of the ergative and the "nominative case" in all other environments. This can be seen by comparing the pronominal paradigm in (86) and the pronominal paradigm in (87).

	PLN	ERG	OBL	LOC	GEN
1.SG	me	me	m_Iki	mar-e pər	mar-a/i
1.PL	asa	asa	asaki	sar-е рәr	sar-a/i/e
2.disresp.sg.	ţu	ţu	ţuki	tar-e pər	tar-a/i/e
2.Resp.pl.	ţusa	tusa	tusaki	tus-e ne pər	tus-a ni/a/e
3.PROX.SG	e	is	iski	is ne pər	is n-a/i/e
3.Prox.pl	e	ina	inaki	in-e ne pər	is n-a/i/e
3.dist.sg	0	us	uski	us ne pər	$us \ n$ - $a/i/e$
3.dist.pl	o	una	uski	una pər	una n-a/i/e

(87)Pronominal Paradigm: Past Tense

2.6.2 Split Conditions

I argue tense is a necessary condition though not a sufficient condition in determining the three-way split intransitivity, which typologically is in line with properties that underline split case marking (Dixon, 1994; Sharma & Deo, 2006). For example, the ergative case is restricted to the past tense of transitive change of state (CoS)) verbs, such as $p \ni n$ 'to break', as well as the past tense of intransitive and transitive LVCs consisting of the LV mar 'to hit' or kar 'to do'. In contrast, the plain case o and the oblique case uski are not restricted to the past tense, but rather can occur in all tense/aspect environments. Thus, a factor independent of the tense must work alongside it in determining the case, namely the lexical semantics feature agentivity of the verb.

An Agent, as defined by Foley & Van Valin (1984, 29), is a participant that performs, effects, instigates, or controls the situation devoted to the predicate. The ergative case arguments involve participants that perform, control, and are seen as the instigator of the action denoted by the verb, whereas oblique case arguments do not involve such participants. By contrasting the ergative and oblique case arguments with plain case arguments, we see that they involve both non-agentive and agentive types of arguments. We diagnose agentivity via two diagnostic tools, which are presented in (88).

(88)Agentivity Diagnostics

- The ability to be modified by an agent oriented adverb such as didenal 'deliberately' in Potwari.
- The happen vs. do agentivity diagnostic (Cruse, 1973, 13).

The happen vs. do agentivity diagnostic, taken from Cruse (1973, 13), comprises of the relative normality of question-and-answer sequences, as in the English question and answer sequence in (89). The latter example shows that the English do can capture the agent John in the question and answer sequence in (89-a) without it being deemed as unacceptable. In contrast, the happen-clause sequence in (89-b)

sounds odd and is deemed as unacceptable. In (89-c) the happen-clause sequence is acceptable with the argument the flower, though not with the do-clause sequence in (89-d). This is because the happen clause requires a non-agentive argument, whereas do requires an agent argument; the flower is non-agentive, whereas John is agentive.

- (89) a. A: What did John do? B: He moved the table.
 - b. #A: What happened to John? B: He moved the table.
 - c. A: What happened to the flower? B: It blossomed.
 - d. #A: What did the flower do? A: It blossomed.

(Cruse, 1973, 13)

The same patterning is found in Potwari. For example, the question-answer sequence is felicitous in (90-a) and (90-b), because the argument *usman* 'Usman' is an agent. The unacceptability when patterned with the *o*-clause 'happen-clause' in the question-answer sequence in (90-c) and (90-d) also shows that *usman* is agentive.

- (90) a. usman kε kət-a si Usman.SG.M.PLN what do-SG.M NPR.3.SG 'What did Usman do?'
 - b. usman miki mar-ja si Usman.M.SG.PLN 1.SG.OBL hit-M.SG NPR.3.SG 'Usman hit me.'
 - c. usman-ki kε o-ja si Usman.M.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Usman?'
 - d. #us miki mar-ja si 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He hit me.'

In contrast, the argument p^hul 'flower' patterns with the o-clause, rather than the kar-clause. In the latter, the question-sequence is deemed as unacceptable, as illustrated in (91-c) and (91-d). In contrast, the question-answer sequence with o 'to become', shown in (91-a) and (91-b) is deemed as acceptable. We therefore refer to the argument p^hul 'flower' as non-agentive.

- (91) a. is p^hul -ki ke o-ja e DEM.PROX.SG flower.M.SG-OBL what happen-M.SG PRS.3.SG 'What happened to this flower?'
 - b. e $$p^{h}ul$$ kır-i ga-ja $\epsilon$$ DEM.PROX.SG flower.M.SG bloom-NFN go-M.SG PRS.3.SG 'The flower bloomed.'
 - c. is p^hul ke kəṭ-a si DEM.PROX.SG flower.M.SG what do-M.SG NPR.3.SG 'What did this flower do?'
 - d. #e p^hul kır-i ga-ja ϵ DEM.PROX.SG flower.M.SG bloom-NFN go-M.SG PRS.3.SG

'The flower bloomed.'

The idea behind the agent oriented adverb $d_{I}denal$ 'deliberately' diagnostic is rooted in its ability to only combine with an agent argument. That is, if the argument is non-agentive then the sentence must be deemed as semantically infelicitous, whereas if it is agentive then the sentence is deemed as semantically felicitous. Take as an example the agent usman 'Usman' in (92-a). It can be modified by the agent oriented adverb $d_{I}denal$ 'deliberately', as it results in a felicitous sentence. In contrast, $d_{I}denal$ 'deliberately' is deemed as unacceptable when modifying p^hul 'flower' in (92-b). The adverb can be said to be agent oriented, hence it captures the non-agentivity component of the sentence in (92-b) and the agentivity component of the sentence in (92-a).

- (92) a. usman miki didenal mar-ja si Usman.SG.PLN 1.SG.OBL deliberately hit-M.SG NPR.3.SG 'Usman hit me deliberately.'
 - b. #e p^hul &idenal kir-i ga-ja ϵ DEM.PROX.SG flower.M.SG deliberately bloom-NFN go-M.SG PRS.3.SG '#The flower bloomed deliberately.'

We come to observe in the subsequent sections that the ergative case patterns with the kar 'to do' clause, whereas the oblique case patterns with the o 'to become' clause. The plain case can pattern with both depending on the verb type. Similarly, when employing the $d_{I}denal$ 'deliberately' diagnostic, a plain case argument can be deemed as semantically felicitous or infelicitous depending on the verb type. The ergative case always combines with the agent oriented adverb $d_{I}denal$ 'deliberately'. In direct contrast, the oblique case does not combine with $d_{I}denal$ 'deliberately' as the sentence is deemed as semantically odd. Table 2.9 provides a summary of the environments in which each case is found.

Table 2.9: The Three-Way Split: Conditions

Third Person Pronoun	Verb Type	Tense
Plain Case o:	Agentive/Non-Agentive MVs & LVs	Past & Non-Past
Ergative Case us :	TR Agentive MVs	Past
	INTR/TR Agentive mar-type & kar-type LVCs	Past
Oblique Case $uski$:	Experiencer Subjects	Past & Non-Past
	Psych Predicates	Past & Non-Past
	Non-Agentive LVs	Past & Non-Past

These generalisations are supported in the sections that follow: section 2.6.6 presents the ergative case, section 2.6.7 moves onto the plain case, and section 2.6.8 presents the oblique case. Each section also goes beyond the conditioning of the splits by exemplifying all the alignment patterns summarised in table 2.11 and table 2.10. Prior to these sections, I introduce Masica's (1991) three layer case system proposed for Indo-Aryan languages. This contextualises the case markings

we observe in Potwari, and in particular facilitates the discussions on the locative case in section 2.6.5, and the genitive case in section 2.6.4.

2.6.3 Masica's (1991) Three Layer Case System

Masica (1991, 231) distinguishes three layers in the case system of Indo-Aryan languages, which essentially is rooted in the historical development of case and postpositional marking in Indo-Aryan languages. As a brief overview, Layer I case markers canonically do not occur independently. That is, they always occur in concomitant with a Layer II or Layer III case marker and date back to the original Sanskrit case morphology. Remnants of case Layer I are commonly found as oblique cases and can function still as locative case markers in certain languages (Butt & King, 2004), such as the locative case marker -e in Potwari (see discussion in section 2.6.5). In some Indo-Aryan languages, the case Layer I can be observed with a stem-change operation on the noun, such as the Hindi nominative larka 'boy' (which changes to larke 'boy' in the oblique case). In this example, the case Layer I is the suffix -e, which does not occur independently. Postpositions form Layer II and III, which are both later developments. The Layer II are simple postpositions that consist of one form that marks the core arguments and adjuncts, such as the Urdu ergative -ne, the accusative/dative -ko, and the genitive ke (Butt & King, 2004). In contrast, the Layer III are complex postpositions; they can comprise of Layer II case markers with postpositions that function as lexical items, such as the Hindi us-keniffe 'this-Layer II-under', which means 'under this' (Verbeke, 2013).

In contextualising the Potwari case marking with the Masica's (1991) three layer case system, we claim that the oblique, and genitive cases in Potwari are Layer II case markers, whereas the locative case marker -e is a Layer I case marker, as it dates back to the Sanskrit locative marker¹³. Layer III case markers are the postpositions that combine with the locative -e or the genitive case marker -na.

2.6.4 The Genitive Case

In Potwari, the genitive case inflects to agree with the head noun in terms of gender and number, which can be seen by comparing (93) with (94). In (93), the head noun $k\tilde{a}\eta a$ 'comb' is a masculine singular noun, hence the masculine singular genitive form na is attached to the dependent sara 'Sara' in (93-a). In contrast, the plural masculine form of the genitive naj is attached to the dependent sara 'Sara' in agreement with the masculine plural head $k\tilde{a}\eta e$ 'combs' in (94-b).

 $^{^{13}}$ In many Indo-Aryan languages, such as Hindi, Urdu, and Punjabi (Bhatia, 1993; Butt & King, 2004; Kachru, 1980) the locative -e is often referred to as the oblique case. To clarify, we employ the label oblique case for the Layer II case marker -ki

- (93) a. e sara-na kãŋa ε DEM.PROX.SG Sara.F.SG-GEN.PLN.M.SG comb.M.SG.PLN PRS.3.SG 'This is Sara's comb.'
 - b. e sara-naj kãŋ-e ən

 DEM.PROX.GEN Sara.F.SG-GEN.PLN.M.PL comb.PLN-M.PL PRS.3.PL

 'These are Sara's combs.'

In contrast, the genitive case form ni inflects for feminine singular, in agreement with the head noun $ki\underline{t}ab$ 'book' in (94-a), whereas the genitive form nija inflects for feminine plural, which is in agreement with the plural, feminine head noun $ki\underline{t}aba$ 'books'.

- (94) a. e usman-ni kiṭab ε
 DEM.PROX.SG Usman.M.SG-GEN.PLN.F.PL book.F.SG.PLN PRS.3.SG
 'This is Usman's book.'
 - b. e usman-nija kitab-a ən

 DEM.PROX.SG Usman.M.PL-GEN.PLN.F.PL book.PLN.F-PL PRS.3.PL

 'These are Usman's books.'

2.6.5 Locative Case & Postpositions

The locative case marking in Potwari is divided in two types according to the three layer case forms proposed by Masica (1991, 231). The locative case marker -e is derived from Old Middle Indo-Aryan. Masica (1991, 230) shows that the -e in Sanskrit is one of the singular locative case endings. Hence it is characterised as a Layer I case marker. The postpositions in (95) can be categorised as Layer III case markers as they can form complex postpositions with the genitive Layer II case marker and occur as lexical items.

(95) $prtf = behind', a:t^h$ 'under', t = below', p = below', up = b

The first type of locative case marking consists of the layer I case marker -e attached to the nominal, followed by one of the Layer III postpositions in (95). The example in (62) exemplifies the case layer I -e attached to the nominal petfos 'diarrhoea', followed by the postposition nal 'with'.

(96) o kuri petfəs-e nal mar-i gi
DEM.DIST.SG girl.F.SG diarrhoea.M.SG-LOC with die-NFN go.F.SG
si
NPR.3.SG
'That little girl died from diarrhoea.'

The second type of locative case marking is comprised of all three case layers. They comprise of the locative case Layer I -e and the genitive case Layer II, combined

with the case Layer III postposition, such as *tebl-e ne a:t*^h 'table-Layer I-Layer II Layer III' in (97).

(97) usman tebl-e-ne a:t^h ker na ε Usman.M.SG.PLN table.M.SG-LOC-GEN under play IMPF.M.SG PRS.3.SG 'Usman is playing under the table.'

The genitive case in South-Asian languages, such as the Hindi -ke also inflects to agree with the head noun, though in addition to the gender and number agreement, it also inflects for case (Mohanan, 1994, 177), This is referred to as the double-case phenomena (Plank, 1995). Plank (1995) discusses the Hindi genitive and views the agreement pattern as an instance of Suffixaufnahme. Suffixaufnahme refers to an unusual pattern of multiple case marking due to agreement. That is, a nominal that is already 'case-marked for its own adnominal function in addition copies the case of the nominal to which it is to be related' (Plank, 1995, 1-5). This phenomena can be seen with the genitive case in Potwari, which is illustrated in (98). The form of the genitive case is neither in the feminine/masculine or singular/plural forms we see above. Instead in this example we see the genitive form -ne on the nominal usman 'Usman', which is in agreement with the locative case -e attached to the head noun ustad 'teacher'. This is then followed by what can be considered as the postposition of the entire noun phrase; the oblique case marker ki.

(98) me usman-ne ustad-e-ki mar-ja 1.SG.PLN Usman.M.SG-GEN.LOC-LOC teacher.M.SG-LOC-OBL hit-M.SG si NPR.3.SG 'I hit Usman's teacher.'

2.6.6 The Ergative Case

Cross linguistically, ergative marking is triggered by properties of events, such as volitional vs. non-volitional and properties of arguments, such as animacy (Van Valin & Lapolla, 1997, 317-340)¹⁴. The ergative case is restricted to the third person subject pronoun in the past tense of a set of verbs; namely, transitive verbs, transitive and intransitive LVCs consisting of max 'to hit' and kax 'to do' in the past tense. The behaviour of the ergative case to a certain degree is similar to other South Asian languages and is an example of split-ergativity. Split-ergativity refers to the occurrence of ergative marking only in certain syntactic-semantic configurations.

Sharma & Deo (2006) note the ergative case is triggered canonically in New Indo-Aryan languages on the A argument in the perfective aspect. The latter is rooted in the claim that each language derives from a Middle Indo-Aryan stage, in which overt ergative case marking was characteristic of all pronominal and nominal subjects

¹⁴See also Butt (2006) and Mohanan (1994) for the ergative case discussion in Urdu/Hindi.

of transitive, perfective clauses (Sharma & Deo, 2006, 375-376). By providing an across-the-board study of five Indo-Aryan languages, as well as five dialects of Marathi (Indo-Aryan: India), they demonstrated varying degrees of the perfective subject pattern. For instance, Hindi retains the pattern of overt ergative marking on all nominal and pronominal subjects in the perfective aspect, while Bengali displays no overt ergative case marking. Between the two languages, it was shown that Gujarati has lost overt ergative marking in the first and second plural pronouns, while two Marathi dialects retain the ergative case only in the third person pronoun (Sharma & Deo, 2006, 378).

The ergative case in Potwari is a testament to the varying degrees of ergativity, with the ergative case restricted to the past tense of third person subject pronouns of agentive verbal predicates. The latter is illustrated in section 2.6.1, paradigm (86) and (87) above. The three verb classes that give rise to an ergative case pronoun us are presented below; the transitive verb $p \ni n$ 'to break' in (99), the transitive kax-type LVC in (100), and the transitive max-type LVC in (101).

- (99) us didenal pijala pən-ja si 3.SG.ERG deliberately cup.M.SG break-M.SG NPR.3.SG 'He/She broke the cup deliberately.'
- (100) us dzidenal kirki bənd kət-i si 3.SG.ERG deliberately window.F.SG close do-F.SG NPR.3.SG 'He/She closed the window deliberately.'
- (101) us carpit-e-ki didenal məʃin mar-i
 3.SG.ERG carpet.M.SG-LOC-OBL deliberately vacuum.F-SG hit-F.SG
 si
 NPR.3.SG
 'Usman vacuumed the carpet deliberately.'

The intransitive examples of the max and kax-type LVCs exemplify the ergative subject pronoun us in (102-a) and (102-b). The intransitive LVCs behave similarly to the transitive MV-complement structures in respect of agreement. The LV agrees with the nominal component of the LVC, as does the MV pan 'to break' with its object in (99).

- (102) a. us didenal pis mar-i si 3.SG.ERG deliberately fart.F.SG hit-F.SG NPR.3.SG 'He/She farted deliberately.'
 - b. us dzidenal ulti kat-i si 3.SG.ERG deliberately vomit.F.SG do-F.SG NPR.3.SG 'He/She vomited deliberately.'

In addition to the identical agreement patterns between a nominal coverb and complement, it appears the nominal coverb's dual nature is also captured in its interaction with the ergative case. That is, it seems to have the ability to licence the ergative case, which is otherwise restricted to transitive verbs. For example agentive intransitive MVs listed in (103) do not appear with an ergative subject.

(103) $k^h er$ 'play', sotf 'think', tar 'swim', tur 'walk', dor 'run', kul 'fight', ro 'cry', par 'study', as 'laugh', and natf 'dance'.

This seems to be related to the inability of these verbs to form the past tense via the past tense suffixes + the non-present BE-auxiliary. The incompatibility of nətf 'dance' with the ergative case/past tense is illustrated in (104). The agentive MVs in (103) form the past tense with the imperfective auxiliary + the non-present BE-auxiliary. The latter can be seen for the verb nətf 'dance' in (105).

- (104) *us/o nətf-ja/i si 3.SG.ERG/3.SG.PLN dance-M.SG/F.SG NPR.3.SG '*He/She danced.'
- (105) o nətf ni si 3.SG.PLN dance IMPF.F.SG NPR.3.SG 'He/She was dancing.'

Further evidence to show that the ergative case does not appear in any of the non-past environments, such as the future tense and the imperfective aspect can be seen in (106) and (107).

- (106) o/*us ffali mar si 3.SG.PLN/3.SG.ERG jump hit NPR.3.SG 'He/She will jump.'
- (107) o/*us tfali mar na si/ ϵ 3.SG.PLN/3.SG.ERG jump.F.SG hit IMPF.M.SG NPR.3.SG/PRS.3.SG 'He was/is jumping.'

The incompatibility between the ergative case and the perfect aspect auxiliaries ri and gi induce an ungrammatical sentence, as seen in (109) and (108).

- (108) o/*us kıçki bənd kar-i ri si 3.SG.PLN/3.SG.ERG window.F.SG close do-NFN PRF.F.SG NPR.3.SG 'She had closed the window.'
- (109) o/*us kıţki bənd kar-i gi si 3.SG.PLN/3.SG.ERG window.F.SG close do-NFN PRF.F.SG NPR.3.SG 'She had closed the window.'

The above data also show that the ergative case arguments involve participants that perform, control, and are seen as the instigator of the action denoted by the verb. For example, the above examples are felicitous when modified by the agent oriented adverb d_{idenal} 'deliberately'. Furthermore, the ergative case patterns with the kar-clause in the question-answer sequence in (110-a) and (110-b), whereas it is

deemed as odd when patterned with the o-clause in the question-answer sequence in (110-c) and (110-d). The latter observation is in line with Butt and King's (2004) observation, as well as Mohanan's (1994) findings, in which they show the ergative case in Urdu is associated with volitionality or the feature [+conscious choice].

- (110) a. usman kε kəṭ-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?'
 - b. us pijala pən-ja si 3.SG.ERG cup.M.SG break-M.SG NPR.3.SG 'He broke the cup.'
 - c. usman-ki ke o-ja si Usman.M.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Usman?'
 - d. #us pijala pən-ja si3.SG.ERG cup.M.SG break-M.SG NPR.3.SG'He broke the cup.'

2.6.7 The Plain Case

The plain case is phonologically null and is categorised as the default case occurring with non-agentive and agentive verbs, and in all tense/aspect environments. The motivation of the term plain case is rooted in the diachronic claims that the Middle Indo-Aryan languages overtly marked the ergative case on subjects of perfective sentences. I employ the term plain case as a way of representing the progressive neutralisation of the ergative and the "nominative case" in all other environments¹⁵.

The first set of examples in (106) (see section 2.6.6 above) also show that the plain case third person singular pronoun o is compatible with the future tense. Similarly, (107), (109) and, (108) present examples that illustrate the compatibility of the plain case with the imperfective aspect and perfect aspect. The verb classes in (111) show that the plain case pronoun can occur with agentive lexical verbs, such as gaja 'to go' in (111-a), non-agentive lexical verbs such as te 'to fall' in (111-b), and agentive LVCs such as te 'to jump', lit. 'jump hit', as illustrated in (111-c). The difference between the ergative and plain case is that the plain case arguments can also involve participants that do not instigate the action denoted by the verb, as in (111-b) below.

(111) a. o didenal ga-ja si 3.M.SG.PLN deliberately go.-M.SG NPR.3.SG

¹⁵Similarly, the case system of nouns in English are also treated in this manner. For instance, English nouns distinguish for two cases namely the nominative and the genitive, whereas the pronoun system differentiates for three cases, namely the nominative, accusative and the genitive. The plain case label is given to nouns that occur in both the nominative and accusative environments (Huddleston & Payne, 2002, 323-523).

'He went deliberately.'

- b. o (#&rdenal) te pi ga-ja si 3.M.SG.PLN (deliberately) fall pi go-M.SG NPR.3.SG 'He fell (#deliberately).'
- c. o didenal fali mar na si 3.M.SG.PLN deliberately jump.F.SG hit IMPF.M.SG NPR.3.SG 'He was deliberately jumping.'

In (111), the agentivity component is captured by the inability and ability to be modified by the agent oriented adverb ga-ja 'to go' and fa is mar 'to jump.lit jump hit' the sentence is felicitous when the subject argument is modified by the agent oriented adverb. These plain case arguments also pattern with the kar-clause in the question-answer sequence in (112-a) and (112-b), whereas it is deemed as odd when patterned with the o-clause in the question-answer sequence in (112-c) and (112-d).

- (112) a. usman kε kar na si Usman.M.SG.PLN what do.M.SG IMPF.M.SG NPR.3.SG 'What was Usman doing?'
 - b. o tfali mar na si 3.M.SG.PLN jump.F.SG hit IMPF.M.SG NPR.3.SG 'He was jumping.'
 - c. usman-ki kε o-ja si Usman.M.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Usman?'
 - d. #o tfali mar na si 3.SG.PLN jump.F.SG hit IMPF.M.SG NPR.3.SG 'He was jumping.'

In contrast, the argument of the non-agentive verb te 'to fall' in the sentence (111-b) is deemed as semantically odd when the subject is modified by the agent oriented adverb $d_{I}denal$ 'deliberately'. Furthermore, the argument of te 'to fall' patterns with the o-clause rather than the kar-clause, which can be seen by comparing (113) with (114).

- (113) a. usman kε kəṭ-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?'
 - b. #o te pi ga-ja si 3.SG.PLN fall pi go-M.SG NPR.3.SG 'He fell.'
- (114) a. usman-ki kε o-ja si
 Usman.M.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Usman?'
 - b. o te pi ga-ja si 3.M.SG.PLN fall pi go-M.SG NPR.3.SG

'He fell.'

The example in (115) shows that a plain case argument can appear with a nominal subject, such as *sara* 'Sara', as well as with a nominal object such as *pijala* 'cup'. This confirms that a sentence can contain more than one plain case argument, as predicted in alignment table 2.11 above.

(115) sara pijala pən-ja si Sara.F.SG.PLN cup.M.SG break-M.SG NPR.3.SG 'Sara broke a unknowncup.'

2.6.8 The Oblique Case

The dative/accusative -ko in Urdu-Hindi is similar in form to the Potwari -ki. According to Beames (1872-1878) (c.f. Butt & Ahmed (2011); Butt (2006); Dalrymple & Nikolaeva (2011); Hewson & Bubenik (2006); Kellogg (1893)), the Hindi -ko goes back to the Sanskrit noun ka'kshe 'armpit, side'. As argued by Butt (2006) and Butt & Ahmed (2011), the original function of this element was purely locational. That is, the word meaning 'armpit' grammaticalised as a spatial postposition. Its cognates in related languages also denote location. For example, the Iranian language Pashto has a locative kii/ke, which can be traced back to Averstan kaase. The Averstan kaase is the locative form of kassa 'armpit', which is said to be etymologically related to the Sanskrit ka'kshe (Hewson & Bubenik, 2006, 150).

The oblique case -ki occurs in various environments and is not restricted to the third person pronouns. That is, it marks nominals, as well as the entire pronoun paradigm, whereas the ergative case is confined to the third person pronoun. The oblique case -ki canonically marks indirect and direct objects, for example in (116-a), the -ki is a dative case marker, whereas in (116-b) it is an accusative case marker.

- (116) a. saddaf sara-ki buk^h det-i si Saddaf.F.SG.PLN Sara.F.SG-OBL book.F.SG give-F.SG NPR.3.SG 'Saddaf gave Sara the book.'
 - b. saddaf sara-ki mar-ja si Saddaf.F.SG.PLN Sara.F.SG-OBL hit-M.SG NPR.3.SG 'Saddaf hit Sara.'

The oblique case pronoun can be found in all tense/aspect environments, which is what we see for the plain case pronoun, while the ergative is confined to the past tense. Example (83) shows the compatibility between uski and the past tense, whereas (117) shows uski in the future tense. The oblique case pronoun uski is also compatible with the imperfective aspect, illustrated in (118).

(117) uski nmdər e si 3.SG.OBL sleep.F.SG come NPR.3.SG 'He/She will fall asleep.'

(118) uski nındər atf ni si
3.SG.OBL sleep.F.SG come IMPF.F.SG NPR.3.SG
'He/She was getting sleep.'

2.6.8.1 Experiencer Subjects & the Notion of Subjecthood

The -ki can also mark subjects, experiencer subjects that include psych predicates, modal verbs (cf. Belletti & Rizzi (1988); Cardona (1976); Hook (1990); Klaiman (1980); Masica (1990); Mishra (1990); Pandharipande (1990); Shibatani (1999); Sridhar (1979); Verma & Mohanan (1990); Verma (1976)), and non-agentive LVCs consisting of a nominal coverb and an LV. The transitive experiencer subject constructions consist of two NPs and a predicate. The first NP is known as the logical-subject which is idiosyncratically marked by a dative or an oblique case. The dative case is by default the case of an indirect object of ditransitive verbs, which we see for -ki in (116-a) above. The second NP is unmarked for the plain case (nominative case). A transitive experiencer subject construction in Potwari can be seen in (119) with the psychological verb pasənd 'to like'. Here, the experiencer subject sara is marked by the oblique case marker -ki. The second NP tfavəl 'rice' is the unmarked plain case, which triggers the masculine plural agreement on the verb.

(119) sara-ki tfavəl pasənd ən Sara.F.SG-OBL rice.M.PL like PRS.3.PL 'Sara likes rice.'

Other experiencer subjects can be seen with the epistemic modal auxiliary o in (120-a) and with the denotic modal pe in (120-b). The denotic modal surfaces in a 'to-infinitive' syntactic structure, whereas the epistemic modal does not have such a surface structure.

- (120) a. uski peta o si 3.SG.OBL know MOD NPR.3.SG 'She must know.'
 - b. saddaf-ki wapəs da na pe si Saddaf.F.SG-OBL back go IMPF.M.SG MOD NPR.3.SG 'Saddaf will have to go back.'

The non-agentive complex predicates presented in Chapter 6 are also shown to involve an experiencer argument with a self-controlled body acting eventuality that is non-volitional. Thus the argument gives rise to an oblique case on the subject, triggering an experiencer subject. For example, the LVC ulti lag 'to vomit', lit.

 $^{^{16}}$ Also referred to as dative subjects because they are associated with the $\theta\text{-role goal/experiencer}$ - see Mohanan (1994) for discussion.

'vomit hurt' in (121-a) is deemed as non-volitional. Similarly, the sole argument of the LVC ninder e 'to sleep', lit. 'sleep come' (121-b) is a non-volitional experiencer.

- (121) a. uski ulti lag-i si 3.SG.OBL vomit.F.SG hurt-F.SG NPR.3.SG 'He/She vomited (non-agentive).'
 - b. uski nımdər aı si 3.SG.OBL sleep.F.SG come.F.SG NPR.3.SG 'He/She fell asleep.'

The non-agentivity feature of the oblique case pronoun is reflected in its inability to be modified by the agent oriented adverb didenal 'deliberately', illustrated in (122).

(122) #uski didenal ninder ai si 3.SG.OBL deliberately sleep.F.SG come.F.SG NPR.3.SG 'He/She fell asleep deliberately.'

Similarly, the uski is deemed as semantically odd in the question-answer sequence with the kax-clause in (123).

- (123) a. usman ke kəṭ-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?'
 - b. #uski nındər aı si 3.SG.OBL sleep.F.SG come.F.SG NPR.3.SG 'He/She fell asleep.'

In contrast, (124) is deemed as semantically acceptable with the o-clause, as predicted for a non-agentive argument.

- (124) a. usman-ki kε o-ja si
 Usman.M.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Usman?'
 - b. uski nındər aı si 3.SG.OBL sleep.F.SG come.F.SG NPR.3.SG 'He/She fell asleep.'

The grammatical function of the experiencer subject has been under much debate, with certain scholars stating the experiencer subject is a grammatical subject, while other stating it is an indirect object (Mishra, 1990, 105)¹⁷. The status of the experiencer subject is determined by how we define a subject. Keenan (1976, 1987) has been in the forefront in defining the notion subject and his work has been particularly influential in the experiencer subject literature. In line with scholars such as Kachru et al. (1976), Bhatia (1990), and Sridhar (1979), I employ Keenan's

¹⁷Essentially the viewpoints agree that experiencer subject can form part of a transitive sentence. However some reject this view altogether, such as Shibatani (1999). He suggests that experiencer subjects are intransitive by nature and are like double subject constructions.

subject tests in determining the subjecthood of the above experiencer subjects. I therefore turn my attention to the syntactic processes which are critically sensitive to the notion of 'subject of the sentence' in Potwari. The latter are the rules of reflexivization and conjunction reduction, which is also the case for large number of South Asian languages, such as related languages Punjabi and Lahanda (Bhatia, 1990).

Reflexivization

A reflexive pronoun is an anaphor that must be bound by its antecedent. Sridhar (1979, 104) notes that 'the crucial condition for reflexivization is that the controller of the reflexive must be the subject of the sentence'. In Potwari, a possessive pronoun that is coreferential with its preceding subject in the same clause becomes a possessive reflective pronoun, as can be seen in (125). Here we have the possessive reflective pronoun apne, which follows the first person subject pronoun me and agrees with following nominal ka:r 'house' in gender and number. If the possessive pronoun is not coreferential with its preceding subject in the same clause then it does not become a possessive reflective pronoun. This is illustrated in (126), in which the genitive case pronoun usne is not coreferential with its subject. Similar reflexivization rules are also postulated in sister languages Punjabi and Lahanda (Bhatia, 1990).

- (125) me apne/*mara ka:r gi sa
 1.SG.PLN REFL.M.SG/1.GEN.M.SG house.M.SG go.F.SG NPR.1.SG
 'I went to my house.'
- (126) me usne ka:r gi sa
 1.SG.PLN 3.M.SG.GEN house.M.SG go.F.SG NPR.1.SG
 'I went to his house.'

The reflexivization rule can be further illustrated in the transitive sentence (127). Here the possessive reflective pronoun is anteceded by the first person subject pronoun me, rather than usmanki. This is because the antecedent must be a subject; usmanki is an indirect object.

(127) mei usman-kij apnii/*j kitab de sa 1.SG.PLN Usman.M.SG-OBL REFL.F.SG book.F.SG give NPR.1.SG 'Ii will give Usmanj my book.'

Similarly, a direct object cannot control reflexivization, as illustrated in (128).

(128) sara_i apne_{*j/i} mure-ki kuri_j det-i si Sara.F.SG.PLN REFL.M.SG boy.M.SG-OBL girl.F.SG give-F.SG NPR.3.SG 'Sara_i gave her_{*j/i} boy a girl_j.' Experiencer subjects are considered to be "true" subjects in their interaction with the reflexivization rules. We observe that an experiencer subject can also be the controller of the reflexive pronoun. Example (129) illustrates this, in which the reflexive pronoun *apni* is the antecedent of the experiencer subject *sara*.

(129) sara-kiı apni_{i/*j} badşi-ni_j ja:d Sara.F.SG-OBL REFL.F.SG granddad.M.SG-GEN.F.SG memory.F.SG si NPR.3.SG 'Sara remembers her granddad.'

The experiencer subject of the verb pasend 'to like' also controls reflexivization, shown in (130).

(130) sara-kii apne_{i/*j} mure_j pasənd ən Sara.F.SG-OBL REFL.M.SG boy.M.SG like PRS.3.PL 'Sara likes her boys.'

Similar results can be seen for experiencer subjects of complex predicates comprised of nominal coverbs. For example, in (131), the possessive reflective pronoun apne is coreferential with its preceding experiencer subject me, hence the possessive pronoun mara 'mine' is incompatible.

(131) miki apnei/*mara ka:r nindər ai 1.SG.OBL REFL.M.SG/1.M.SG.GEN house.M.SG sleep.F.SG come.F.SG si NPR.3.SG 'I got sleep in my own house.'

It is also observed that if the possessive pronoun is not coreferential with its preceding experiencer subject then it does not yield a possessive reflective pronoun. Rather, we get the possessive pronoun *usne* 'his', as illustrated in (132).

(132) uskiı usne*ı ka:r nındər aı si 3.SG.OBL 3.M.SG.GEN house.M.SG sleep.F.SG come.F.SG NPR.3.SG 'He got sleep in his house.'

In light of the above, it can be said that an experiencer subject does behave as a canonical subject despite the fact that it is marked by the oblique case marker -ki, which is canonically a case marker of objects.

Conjunction Reduction

A common feature among many South Asian languages is the conjunction of sentences. Sridhar (1979, 107) notes that 'a favourite mode of conjoining sentences is by turning the main verbs of all but the last component clause into participles, and deleting all but one (either the first or the last) occurrence of identical subjects'.

Conjunction reduction in canonical transitive sentence of Potwari is illustrated in (133). Here, the unmarked nominal sara occurs in the initial position of the clause and has scope over the entire sentence, hence it is deleted in other positions (\emptyset).

(133) ami duka:ne ge ən tε Ø mətfi mum.F.SG.PLN shop.F.SG go.M.SG PRS.3.pl and (mum) fish.F.SG kınd-i ε ne tε fır Ø mətfi sa:f kət-i buy-F.SG PRS.3.SG TOP and then (mum) fish.F.SG clean do-F.SG ε ne PRS.3.SG TOP 'Mum went to the shop, bought fish and then cleaned the fish.'

If arguments are not both subjects then the rule of deletion is revoked (Hudson, 1973, 303). For example in (134), the subject *saddaf* of the second clause cannot be deleted as it is the object of the first clause.

(134) sara saddaf-ki mar-ja si tɛ fir Sara.F.SG.PLN Saddaf.F.SG-OBL hit-M.SG NPR.3.SG and then saddaf/*Ø seb kaḍ-a si Saddaf.F.SG.PLN apple.M.SG eat-M.SG NPR.3.SG 'Sara hit Saddaf and then Saddaf ate an apple.'

Conjunction reduction can crucially occur in a sentence with an experiencer subject¹⁸. Example (135) illustrates this, in which the first clause is comprised of the experiencer subject, while the second clause is intransitive and is comprised of an unmarked plain case nominal. The experiencer subject *saraki* has scope over the entire sentence, hence the plain case nominal in the second clause can be deleted. This data point provides further evidence that the experiencer subject is a true subject.

(135) sara-ki pɛse-ni ja:d e-ja tɛ fir Sara.F.SG-OBL money.M.Sg-M.SG.GEN memory.F.SG come-M.SG and then
∅ bəri ku∫ o-i gi jɛ (Sara.F.SG.PLN) very.F.SG happy become-NFN go.F.SG PRS.3.SG 'Sara remembered the money and became very happy.'

2.6.9 Summary of Alignment

Table 2.10 summarises the three-way intransitive alignment pattern of the third person pronouns in the past tense. The first three rows are dedicated to showing the S arguments, while the remaining set of rows show the alignment of the A and O arguments.

¹⁸In Chapter 6, the subjecthood tests also reveal that the experiencer subjects of the non-agentive complex predicates are true subjects.

Table 2.10: Alignment Patterns for 3rd SG Pronominal A/S

Argument	Case
S_1	ERG
S_2	PLN
S_3	OBL
AO_1	$\langle \mathrm{ERG}, \mathrm{PLN} \rangle$
AO_2	$\langle \mathrm{ERG}, \mathrm{OBL} \rangle$
AO_3	$\langle \mathrm{OBL}, \mathrm{PLN} \rangle$

In contrast, table 2.11 summarises the canonical two-way alignment pattern. Similar to table 2.10, the first three rows present the S arguments, with "S₂" representing the neutralisation of the ergative and nominative case. The final three rows present the types of alignment of A and O arguments.

Table 2.11: Canonical Alignment Patterns

Argument	Case
S_1	PLN
S_2	PLN
S_3	OBL
AO_1	$\langle \text{PLN}, \text{PLN} \rangle$
AO_2	$\langle \mathrm{PLN}, \mathrm{OBL} \rangle$
AO_3	$\langle \mathrm{OBL}, \mathrm{PLN} \rangle$

2.6.10 Differential Object Marking

The above data demonstrating the two-way split intransitivity shows that the oblique case marker -ki can mark the sole argument of an intransitive verb and an object of a transitive verb. For instance, the proper noun sara 'Sara' in (136-a) takes the oblique case marker -ki, which is obligatory. That is, the absence of the -ki marker induces an ungrammatical sentence (136-b). However, not all objects can take the oblique case -ki, for example, the common noun pijala 'cup' in (136-c) does not take the oblique case marker, as it induces an unacceptable sentence.

- (136) a. us sara-ki mar-ja si 3.SG.ERG Sara.F.SG-OBL hit-M.SG NPR.3.SG 'He/She hit Sara.'
 - b. *us sara mar-ja si 3.SG.ERG Sara.F.SG hit-M.SG NPR.3.SG 'He/She hit Sara.'
 - c. us pijala-#ki pən-ja si 3.SG.ERG cup.M.SG-OBL break-M.SG NPR.3.SG 'He/She broke the cup.'

This phenomenon is referred to in the literature as DOM (Aissen, 2003), which is widespread among the languages of the world and is particularly common for languages that overtly mark direct objects. Bossong (1985) notes that a minimum of 300 known languages exhibit DOM in some way. Languages can differ in which properties influence DOM (Aissen, 2003; Bossong, 1985; Comrie, 1979; García, 2007; Hopper & Thompson, 1980; von Heusinger et al., 2008; Malchukov, 2008). von Heusinger et al. (2008) list the typical semantic/pragmatic properties of a given nominal that can influence DOM, such as animacy, referentialtype (definiteness/specificity), topicality/givenness minor features: number, gender, concreteness, and formal properties of the argument (DP-type). They also note that the semantic features of the predicate such as aspect, tense and mode and formal features of the clause, such as word order can condition DOM rules. Languages also differ in how many of these features determine DOM, as well as to what degree these features determine DOM. The general understanding of DOM which has emerged from the functional/typological literature is characterised by Aissen (2003, 436) in (137).

(137) The higher in prominence a direct object, the more likely it is to be overtly case-marked.

This section focuses solely on the role of animacy in determining DOM in Potwari, though it must be noted that I do not claim animacy is the sole parameter in determining DOM, however it is sufficient for the aims of this thesis.

The degree in which features condition DOM is summarised for animacy by Aissen (2003, 437) in (138). Those objects that are highest in prominence on the animacy scale are case marked, whereas those objects that are lowest on the scale, such as inanimate objects, are either optionally case marked or do not take case marking altogether.

- (138) a. Animacy scale: Human > Animate > Inanimate
 - b. Definiteness scale: Personal pronoun > Proper name > Definite NP > Indefinite specific NP > Non-specific NP

By employing a more intricate scale of animacy given by Lazard (1984) in (139), I begin with the data set related to the animacy scale.

(139) First/second person pronouns > third person pronouns > proper names > kin terms > human common nouns > non-human animate common nouns > inanimate, countable common nouns > mass nouns

The interaction between the first and second pronouns with the -ki marker is in line with Lazard's animacy scale, in which the first and second person pronouns are

highest on the scale. That is, the first and second person pronouns in Potwari are obligatorily marked by the oblique case marker -ki. For example, in (140-a), the first person pronoun miki is -ki marked, and the absence of it induces an ungrammatical sentence, as in (140-b), as does the second person pronoun tuki. In (141-a), the -ki is present, while in (141-b) it is absent and thus the sentence is ungrammatical.

- (140) a. us miki mar-ja si 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She hit me.'
 - b. *us mi mar-ja si 3.SG.ERG 1.SG hit-M.SG NPR.3.SG 'He/She hit me.'
- (141) a. us tuki mar-ja si 3.SG.ERG 2.SG.OBL hit-M.SG NPR.3.SG 'He/She hit you.'
 - b. *us tu mar-ja si 3.SG.ERG 2.SG hit-M.SG NPR.3.SG 'He/She hit you.'

The third person pronouns are next on the scale and similarly -ki marking is obligatory on the third person pronouns, which can be seen by comparing (142-a) and (142-b). The latter is reduced to an ungrammatical sentence because -ki is omitted.

- (142) a. us uski mar-ja si 3.SG.ERG~3.SG.OBL~hit-M.SG~NPR.3.SG 'He/She hit him/her.'
 - b. *us us mar-ja si 3.SG.ERG 3.SG hit-M.SG NPR.3.SG 'He/She threw him/her.'

Proper nouns follow the third person pronouns on Lazard's scale, which behave the same in Potwari. That is, -ki is obligatory on proper nouns. For example, we see that the proper noun usman 'Usman' in (143-a) is -ki marked. However, when it is omitted as in (143-b), the sentence is deemed as semantically infelicitous.

- (143) a. me usman-ki mar-ja si 1.SG.PLN Usman.M.SG-OBL hit-M.SG NPR.3.SG 'I hit Usman.'
 - b. #me usman mar-ja si 1.SG.PLN Usman.M.SG hit-M.SG NPR.3.SG 'I hit Usman.'

The behaviour of the kin terms and human count nouns shows that -ki is obligatory. For example, #af 'young, paternal Uncle' in (144-a) and #af 'girl' in (144-b) are case marked.

- (144) a. me tfətfa-ki mar-ja si 1.SG.PLN paternal.young.uncle-OBL hit-M.SG NPR.3.SG 'I hit (young paternal) Uncle.'
 - b. me is kuri-ki mar-ja si 1.SG.PLN DEM.SG.PROX girl.F.SG-OBL hit-M.SG NPR.3.SG 'I hit this girl.'

The removal of the oblique case marker -ki induces a grammatically incorrect sentence, which can be seen in (145-a) and (145-b).

- (145) a. *me tfətfa mar-ja si 1.SG.PLN paternal.young.uncle hit-M.SG NPR.3.SG 'I hit (young paternal) Uncle.'
 - b. *me kuri mar-ja si 1.SG.PLN girl.F.SG hit-M.SG NPR.3.SG 'I hit the girl.'

We have not yet observed DOM, however going down the scale of animacy, the optionality and/or the incompatibility of -ki marking on certain nouns is apparent. For example, the non-human animate count noun bili 'cat' is marked by -ki in (146-a), while it is unmarked in (146-b). The latter is not deemed as grammatically or semantically unacceptable.

- (146) a. me bili-ki balti vit sət-i si 1.SG.PLN cat.F.SG bin.F.SG in throw-F.SG NPR.3.SG 'I threw the cat in the bin.'
 - b. me bili balti vitf sət-i si 1.SG.PLN cat.F.SG bin.F.SG in throw-F.SG NPR.3.SG 'I threw the cat in the bin.'

In contrast, the inanimate countable nouns are lower down on the animacy scale, such as fabi 'key' and for this reason they appear unmarked, illustrated in (147-a), while its marked form in (147-b) causes a semantically odd sentence.

- (147) a. me tfabi balti vitf sət-i si 1.SG.PLN key.F.SG bin.F.SG in throw-F.SG NPR.3.SG 'I threw the key in the bin.'
 - b. #me tfabi-ki balti vitf sət-i si 1.SG.PLN key.F.SG bin.F.SG in throw-F.SG NPR.3.SG 'I threw the key in the bin.'

Mass nouns are lowest in prominence on the animacy scale and as expected they do not take the oblique case marker. For example, compare the unmarked mass noun favel 'rice' in (148-a) and the marked form in (148-b).

(148) a. us tfavəl bən-e sən
3.SG.ERG rice.M.SG make-M.PL NPR.3.PL
'He/She made rice.'

b. #us tfavəl-ki bən-e sən
3.SG.ERG rice.M.SG-OBL make-M.PL NPR.3.PL
'He/She made the rice.'

Potwari also has a class of non-count singular nouns, which interestingly behave as mass nouns with DOM. For example the non-count singular noun pani 'water' does not permit the oblique case marker -ki, which can be seen in the minimal pair below, by comparing (149-a) and (149-b).

- (149) a. me pani pit-a si 1.SG.PLN water.M.SG drink-M.SG NPR.3.SG 'I drank water.'
 - b. #me pani-ki pit-a si 1.SG.PLN water.M.SG-OBL drink-M.SG NPR.3.SG 'I drank water.'

To summarise, this section has presented the affect of animacy on the marking of an object. The varying degrees of animacy are exemplified in (150) below. Those objects that are highest in prominence on the animacy scale are case marked, whereas those objects that are lowest on the scale, such as inanimate objects, are either optionally case marked or do not take -ki altogether.

(150) First/second/third person pronouns, proper names, kin terms, human common nouns > non-human animate common nouns > inanimate, countable common nouns, mass nouns, non-count singular nouns

2.7 Conclusion

As acknowledged in the literature there is no linguistic work on Potwari (Pert & Letts, 2006, 356). My work in this chapter has addressed this void by providing a modest description and analysis of the (i) word order, (ii) tense/aspect system, and (iii) case system. Essentially, we laid out the necessary syntactic and morphological properties to better understand the nature of LVCs in Potwari. The establishment of the tense and aspect auxiliaries are pertinent in the auxiliary and LV debate, as I go on to show that in terms of inflectional marking, the aspectual auxiliaries and LVs have identical paradigms, while the BE-auxiliaries hold distinct paradigms. Regardless of this similarity, it is shown in Chapter 7 that LVs and auxiliaries are morphosyntactically distinct classes. The case markers are also crucial in the auxiliary and LV debate, as LVs can determine case marking on the subject, whereas the tense/aspect auxiliaries cannot (see Chapter 7). Furthermore, case markers are typologically shown to be characteristic of canonical nouns (Payne, 1997), hence they are employed as a word class diagnostic for classifying the word category of coverbs.

The word ordering facts facilitate the syntactic flexibility diagnostic tools, as they encompass the movability of subjects and objects from their canonical positions, as well as separability of objects from MVs by time adverbs. The agreement patterns prove to be important, as they reflect the gender and number of nominals. The latter is therefore employed as another nounhood diagnostic. Perhaps more interesting is that LVCs and MV-complement structures are identical in terms of their agreement patterning. That is, in the past tense, the LV agrees in gender and number with a nominal coverb, as does an MV with a nominal complement in the past tense. In this regard, the nominal coverb and complement can be considered to belong to the same class. However, we come to see in the following chapters that the two are morphosyntactically distinct.

My work here is of a preliminary nature with many pre-theoretical arguments, which point to a number of interesting theoretical avenues; with one of them being related to the grammaticalization literature on aspect. The grammaticalization literature shows that the perfect readings have a diachronic pattern, whereby the resultative aspect markers often develop into perfect markers, which then end up as perfective markers. My data on the two perfects makes two major contributions. First, it is in line with the grammaticalization cline illustrated in (151), whereby the two-way perfect shift is found with the perfect gi. The perfect gi is a resultative perfect in all environments, while it can also have an existential perfect reading if the subject is human.

(151) Resultative » Perfect » Perfective

Condoravdi & Deo (2008, 1)

Condoravdi & Deo (2008) support the grammaticalization cline in (151) by providing data from the history of Old and Middle Indo-Aryan languages. They provide a semantic analysis of the diachronic stages in Indo-Aryan, which shows Indo-Aryan to exhibit the two aspect shifts shown in (151). Condoravdi and Deo (2008) provide evidence for the instantiation of the Indo-Aryan resultative perfect to perfective shifts in I through the changes in the reading of the ta operator¹⁹. The readings are investigated by employing distributional diagnostics, such as compatibility with temporal adverbials and use in narrative discourse. Table 2.12 summarises the stages in which the different perfect readings are found for ta. Here we see that the resultative perfect originates first, which then extends to other perfect readings such as the existential and the universal.

Condoravdi & Deo (2008, 3)

The second contribution is as follows: the existential perfect ri does not extend

¹⁹The operatior is previously known in Indo-Aryan as a deverbal result stative adjectival participial form from Vedic to Late Vedic and Middle Indic.

Table 2.12: Diachronic Stages in Indo-Aryan Perfect Readings

Readings	Resultative	Perfect	Perfective
	Stage I	Stage II	Stage III
Resultative Perfect	✓	✓	✓
Existential Perfect	Ø	✓	✓
Universal Perfect	Ø	✓	✓
Eventive/Past	Ø	Ø	✓

to a resultative reading, as predicated by Condoravdi & Deo's (2008) work on the diachronic account of the perfect shift in Indo-Aryan languages. However, this is merely a pre-theoretical observation and further work is required on the distribution of ri to make it a plausible claim.

CHAPTER

THREE

THE STATUS OF COVERBS

3.1 Introduction

This chapter begins by laying out the necessary syntactic and morphological properties that form the basis of establishing the similarities and differences between coverbs and complements. To recap, the nominal coverb at^h 'hand' in (1-a) is like the unmarked direct object pijala 'cup' in Potwari, as they both appear bare and are verb-adjacent. The agreement patterns of the LVC and the MV-complement structure are also identical. That is, the verb mar 'to hit' agrees in gender and number with the nominal complement pijala 'cup' in (1-b), as it does with the gender and number of the nominal coverb at^h 'hand' in (1-a), and is realised by the masculine, singular inflection -ja.

- (1) a. saima saddaf-ki ath mar-ja si Saima.F.SG.PLN saddaf.F.SG-OBL hand.M.SG hit-M.SG NPR.3.SG 'Saima waved at Saddaf.'
 - b. saima saddaf-ki pijala mar-ja si Saima.F.SG.PLN saddaf.F.SG-OBL cup.M.SG hit-M.SG NPR.3.SG 'Saima hit a cup at Saddaf.'

Adjectival coverbs and complements also behave similarly; they both appear in their bare forms and and take up the same position in the sentence. The latter can be seen by comparing the complement kuf 'happy' in (2-a) with the coverb sa:f 'clean' in (2-b).

- (2) a. usman ku \int re na ϵ Usman.M.SG.PLN happy stay-M.SG IMPF.M.SG PRS.3.SG 'Usman is (always) happy.'
 - b. me kəmça sa:f kət-a si 1.SG.PLN room.M.SG clean do-M.SG NPR.3.SG 'I cleaned the room.'

The verbal coverb and complement are both in their bare forms, which can be seen by comparing (3-a) and (3-b). The two differ in their syntactic position: the coverb occurs pre-verbally, illustrated in (3-a) and the complement is positioned post-verbally in (3-b).

- (3) a. sara kəm furu kəṭ-a si Sara.F.SG.PLN work.M.SG start do-M.SG NPR.3.SG 'Sara started the work.'
 - b. me uski akh-ja si dor $1.SG.PLN\ 3.SG.OBL\ ask-M.SG\ NPR.3.SG\ run$ 'I asked her/him to run.'

In this thesis, we explore the similarities and differences between the two classes: (i) coverbs and (ii) complements. I pose questions related to both their syntactic composition (which I refer to as syntactic flexibility) and morphosyntactic properties independent of and within their structures. We do so by employing language internal diagnostics, which can be divided into three sets of diagnostic tools. The first set is dedicated to the morphosyntactic properties of general word class categories in Potwari: (i) nouns, (ii) verbs, and (iii) adjectives. By contrast, the second set of diagnostics are derived from the morphosyntactic properties of nominal, verbal and adjectival complements alone, rather than the broader word class properties. The third set of diagnostics are derived from the syntactic flexibility properties of MV-complement structures comprised of nominal, verbal and, adjectival complements.

Syntactic flexibility encompasses the behaviour of the complements and coverbs with respect to five syntactic operations: (i) fronting, (ii) adverb insertion, (iii) object movement, (iv) pronominalisation, and (v) question formation. I employ the syntactic flexibility diagnostics according to the word class in which the coverb is categorised as independent of the LVC. In respect of the morphosyntactic properties, the following nominal complement properties are established: (i) ability to take oblique case -ki, (ii) ability to be modified by a demonstrative, (iii) ability to be modified by an adjective, (vi) ability to pluralise, and (v) agreement patterns. The verbal and adjectival complements occur in their root form.

The structure of the chapter is as follows: section 3.2 presents the morphosyntactic properties of nouns based on cross-linguistic behaviour of nouns (Payne, 1997) and the behaviour of nouns in sister languages, such as Urdu-Hindi and Punjabi (Bhatia, 1993; Gill & Gleason, 1969; Jain & Cardona, 2007; Kachru, 1980, 2006; Masica, 1991; Schmidt, 1999, 2007; Shapiro, 2007). We observe different types of noun declensions as well as the behaviour of count, mass, and non-count singular nouns with case marking, adjectival modification, determination, plural marking, and agreement. Also, we briefly layout the derivational properties of nouns. Section 3 is dedicated solely to the differences and similarities of nominal complements and coverbs in respect of their syntactic flexibility. Section

4 introduces the two morphological causative markers -a and -wal and analytical causation. The interaction of verbs is investigated with the non-finite marker, the imperfective auxiliary na (3.SG.M), and nominalisation. I also explore the similarities and differences between verbal coverbs and complements, in respect of their syntactic flexibility. In section 3.5, the attributive and predicative adjectives are laid out, as are the comparative and superlative structures and the formation deadjectival nouns. We also explore the similarities and differences between adjectival complements and coverbs, in respect to syntactic flexibility. Section 3.6 concludes with the main findings.

3.2 Morphosyntactic Properties of Nouns

We come to see that the LV kar 'to do' is particularly susceptible to forming new LVCs with loan words, some of which do not exhibit prototypical morphosyntactic properties of nouns though their collocates in the source language are categorised as nouns. Whether there might be morphosyntactic, language internal reasons for the difference in behaviour of borrowed nouns is no doubt worthy of further research, but one that goes beyond the scope of the thesis. Consequently, derivational morphology is employed as a way of categorising coverbal roots that fail to exhibit any of the canonical nominal properties shown above or any of the verbal or adjectival properties shown below. It must be noted that this section is not an attempt to establish all derivational morphology processes, rather we focus on specific derivational processes that make nouns from nouns. Due to the lack of linguistic description of Potwari, we lean to Bhatia's (1993, 279) description of the derivational morphology processes in Punjabi, a closely related language. There is an exhausative list of derivational processes that create nouns from nouns and nouns from adjectives in Punjabi (Bhatia, 1993, 279), which also hold for Potwari. The type of nouns that participate in these processes are conditioned by their lexical semantic features. With our aims in mind, the present section is sufficient in categorising a small class of coverbs as nouns independent of the LVC that otherwise fail to exhibit the nominal morphosyntactic properties. Hence, we do not list all derivational processes.

The present section begins by laying out the canonical morphosyntactic properties of Potwari nouns inspired by Hindi-Urdu and Punjabi grammars (Bhatia, 1993; Kachru, 2006), as well as typological observations by scholars such as Payne (1997). Kachru (2006, 43) describes Hindi nouns to be morphologically a class of lexical items that are inflected for gender, number, and case. Syntactically a class that '...cooccurs with determiners, adjectives, and postpositions, and functions as subject of a sentence, object of a verb and a postposition, complement of a verb, modifier of a noun in a compound noun, and a constituent of the conjunct verb (or, nominal compound verb)' (Kachru, 2006, 43). Similar claims are also made for

Punjabi nouns (Bhatia, 1993). The typological properties taken from Payne (1997, 96) in (4) are also in line with the above properties.

- (4) a. Prototypical nouns can function as subjects and objects of clauses.
 - b. Possibility of taking a descriptive modifier.
 - c. Use of genitive case pronouns.
 - d. Pluralise, determiner, quantifiers.
 - e. Argument of another verb.

Payne (1997, 96)

3.2.1 Noun Declensions

Grammars of South Asian languages (Bhatia, 1993; Gill & Gleason, 1969; Jain & Cardona, 2007; Kachru, 1980, 2006; Masica, 1991; Mcgregor, 1972; Mohanan, 1994; Mohanan & Mohanan, 1994; Schmidt, 1999, 2007; Shapiro, 2007) begin their classifications of nouns in respect of their gender, number, and case marking. As shown in Chapter 2, Potwari is one of the Indo-Aryan languages, where nouns are inherently masculine or feminine (see table 2.2 in Chapter 2). We also saw that the number marking system is grammatical, that is, it is not possible to predict from the meaning of the noun whether it is treated as countable. A noun declension was introduced for two count nouns, in respect of their number and gender behaviour. However, Potwari nouns, like nouns in Hindi-Urdu, Punjabi (Bhatia, 1993; Kachru, 2006; Schmidt, 1999) and other South Asian languages vary in their declension for number depending on the final vowel/consonant of the noun, the etymology of the noun (borrowed vs. native), and its case. The latter was not shown in Chapter 2, we therefore begin in this section by introducing a modest set of nouns that decline differently, not only in respect of their number and gender but also in respect of their case. We follow the case cells of languages, such as Urdu-Hindi and Punjabi, which comprise of only Layer I case markers (see Chapter 2).

The paradigms encompass a three-way distinction in the case marking: (i) plain case, (ii) locative case, and (iii) vocative case, and a two-way-distinction in number and gender. These distinctions are in line with the behaviour of nouns in sister languages Urdu-Hindi and Punjabi. The vocative is used for calling someone or drawing someone's attention. It occurs with interjections, such as e 'hey!' as in (5).

(5) e kurijo hey girl.F.SG.VOC 'Hey (young) girls.'

The vocative in Potwari and languages such as Urdu-Hindi and Punjabi has no syntactic function; it is independent of the sentence with which it occurs (Bhatia, 1993; Gill & Gleason, 1969; Jain & Cardona, 2007; Kachru, 1980, 2006; Masica, 1991; Mcgregor, 1972; Mohanan, 1994; Mohanan & Mohanan, 1994; Schmidt, 1999,

2007; Shapiro, 2007), as in (6).

(6) murjo tε kurijo tusa miki bara ku∫ rak^h-ja boy.M.PL.VOC and girl.F.PL.VOC 2.PL.PLN 1.SG.OBL very happy put-M.SG si

NPR.3.SG
'Girls and boys! You kept me very happy.'

The first noun declension is shown for masculine nouns ending in -a and feminine nouns ending in -i, such as muca 'boy' and kuci 'girl', illustrated in (7). The masculine noun muca is unmarked in the plain case singular, while it inflects for plural marking in the plain case via the suffix -e. In the locative case, we have the noun inflected for -e in the singular and -jo in the plural. In the vocative, we have -ja in the singular and jo in the plural. The feminine noun kuci 'girl' behaves the same in the plain case and locative case cells; it is unmarked in the singular, whereas in the plural it takes -ija. In the vocative case, it takes -jo in the plural and is unmarked in the singular.

(7) Type I Paradigm: Masculine Nouns ending in -a and feminine nouns ending in -i; mura 'boy' kuri 'girl'

	M SG	M PL	F SG	F PL
PLN	mura	mure	kuri	kurija
LOC	mure	murjo	kuri	kurija
VOC	murja	murjo	kuri	kurijo

Masculine nouns ending in -a do not always decline in the same manner, take for example the noun fafa 'paternal uncle' in (8). We observe that it is in its unmarked form in the plain case singular cell, while in the plain case plural cell, it takes the suffix -e. In the locative singular form, it takes the suffix -e. The locative plural form of fafa 'paternal uncle' differs to the paradigm in (7), as the noun inflects for -ja, rather than -jo. In the vocative case, we have the suffix -u in the singular form and -jo in the plural form.

(8) Type II Paradigm: Masculine nouns ending in -a; #a#a 'paternal uncle'

	M SG	M PL
PLN	tfatfa	tfatfe
LOC	tfatfe	tfatfja
VOC	tfatfu	tfatfjo

Masculine nouns ending in consonants decline differently to masculine nouns ending in -a, such as $p\varepsilon r$ (M) 'foot' in (9). The noun appears unmarked in the plain case singular and plural. In the locative case singular and plural, it takes the suffix -e. The suffix -a marks its vocative case form in both the singular and plural.

(9) Type III Paradigm: Masculine nouns ending in consonants; per 'foot'

	M SG	M PL
PLN	рег	рег
LOC	$p\varepsilon re$	рєге
VOC	рєга	рєга

Not all feminine nouns decline according to the type I paradigm either. For example, feminine nouns ending in consonants decline differently, as illustrated for $pa:t ext{pr}$ 'metal plate' in (10) and $decolorize{qi}$ in (11). In all the plural cells of the noun $pa:t ext{pr}$ 'metal plate', regardless of the case type, the noun is inflected via the suffix -a. We observe differences in the singular cells; the plain case and the vocative case are unmarked, while the vocative case is marked via the suffix -e.

(10) Type IVa Paradigm: Feminine nouns ending in consonants; pa:tər 'metal plate'

	F SG	F PL
PLN	pa:tər	pa:təra
LOC	pa:təre	pa:təra
VOC	pa:tər	pa:təra

In (11), the noun is unmarked in the plain and vocative case, singular cell, while in the locative case singular, it takes the suffix -e. In contrast, the plural forms of the nouns are relative to each case type. We have the suffix -a in the plain case cell, the suffix -e in the locative cell, while in the locative case we have zero marking.

(11) Type IVb Paradigm: Feminine nouns ending in consonants; \(\delta iv \) 'tongue'

Another example of a feminine noun ending in a consonant is sas 'mother in law', which declines differently to type IVa and IVb, illustrated in (12). In the plain case singular cell, it appears unmarked, while in the plural we have the suffix -a. In the locative and vocative case, we observe a stem modification in both the singular and plural forms. The vowel changes from /a/ to /u/. In the plural, we have the addition of the nasalised vowel \tilde{o} in the final position. Similar cells are found in Hindi with nouns ending in $-\tilde{u}$, such as $sa_{\tilde{l}}^h\tilde{u}$ 'wife's sister's husband (M)' and $bh\tilde{u}$ 'bride (F)' (Kachru, 2006, 53).

(12) Type IVc Paradigm: Feminine nouns ending in consonants; sas 'mother in law'

	M SG	M PL
PLN	sas	sasa
LOC	susu	$susu\widetilde{o}$
VOC	susu	susuõ

The primary sources for non-Indo Aryan loans into related languages such as Hindi-Urdu and Punjabi are Arabic, Persian, Portuguese, Turkic, and English (Shapiro, 2007, 274). The borrowed Arabic lexemes into Hindi-Urdu were commonly mediated through Persian, which resulted in many types of hybrid compounds and compound words¹. Hindi-Urdu nouns borrowed from Perso-Arabic and English are declined in an identical manner (Kachru, 2006). Also all borrowed nouns in Hindi-Urdu are assigned to a gender category either on the basis of their form, i.e., the final vowel or consonant, or on the basis of their meanings, or both. For example English loans, such as rel 'rail' and bas 'bus' are types of vehicles that are assigned the feminine gender based on the fact the Hindi noun $gar\tilde{i}$ 'vehicle/car' is feminine (Kachru, 2006, 49). Kachru (2006, 49) provides another example, the noun $sk\tilde{u}l$ 'school' is assigned the masculine case because it is argued to be equivalent to a Sanskrit compound vidyalay 'house of learning' that is masculine. The English loan $sk\tilde{u}l$ 'school' in Potwari is also a masculine noun.

Not all Perso-Arabic and English loans in Potwari decline in an identical manner, which can be seen by comparing the noun declension for the Perso-Arabic loan admi 'man' in (13) and the English loan mofin 'vacuum' in (14). The borrowed noun admi 'man' ends in -i, which is the prototypical marker of feminine nouns² (see derivational morphology in section 3.2.3), however it is categorised as a masculine noun because it collocates with the Potwari domai 'man/husband'. The gender assignment is particularly interesting since it is used in diagnosing for nounhood. We come to see in the following chapter that many of the coverbs that combine with the LV kar 'to do' are borrowed words that may not exhibit other nominal properties, but do trigger agreement for gender.

¹Hence it is difficult to separate the lexemes to their original language. For this reason, the label Perso-Arabic is employed in describing such borrowed words. See Shapiro (2007) for a further discussion on the lexicon in Hindi and (Romaine, 1986) for types of compounds in Panjabi-English discourse.

 $^{^{2}}$ The suffix -i is not restricted to nouns, as we have seen in Chapter 2; it is also a piece of verbal morphology and a nominalizer.

(13) Type V Paradigm: Perso-Arabic loan; admi (M) 'man'

	M SG	M PL
PLN	admi	admi
LOC	admi	admio
VOC	admi	admio

(14) Type VI Paradigm: English loan; məfin (F) 'vacuum'

	M SG	M PL
PLN	mə∫in	mə∫ina
LOC	mə $fine$	mə $fina$
VOC	mə $fina$	mə∫ino

It is clear that there are several categories of nouns according to how they decline for gender, number, and case. However, the declensions are not representative of all nouns in Potwari. In order to do a complete justice to the behaviour of nouns, we need further research in establishing all types of noun declensions, which at present goes beyond the scope of this study.

3.2.2 Quantifying, Pluralising, Agreement, Modification, & Determination

The count/non-count distinction has not been a major topic of discussion in Urdu, Hindi, or Punjabi grammars, as it is not as integral to the description of such languages, as it is for English (Kachru, 2006, 43). For example, in English there are interesting restrictions between articles and nouns depending on the count, non-count, and mass distinction (Kachru, 2006, 43). Similar to Urdu-Hindi, the count/non-count distinction does not have consequences for the noun declensions in Potwari. The present study is interested in the type of nouns that occur within a given LVC and whether their behaviour is akin to nominal complements. We come to see that certain (but not all) nominal coverbs independently are either count, non-count singular, or mass nouns. The count/non-count categorisation is based on the behaviour of canonical count/non-count nouns. In this section, we investigate the behaviour of count/non-count nouns with quantification, adjectival modification, determination, plural marking, agreement, and oblique (-ki) case marking.

Let us begin with the noun kuri 'girl', a prototypical count noun which can take a numeral quantifier such as ik^h 'one', as well as far 'four', illustrated in (15-a) and (15-b) respectively. By comparing these two examples, we observe that the plural marking of the noun is in line with its declension illustrated in (7).

- (15) a. me hali ik^h kuri tək-i si 1.SG.PLN only one girl.F.SG see-F.SG NPR.3.SG 'I only saw one girl.'
 - b. me hali tfar kur-ija tək-ija sən 1.SG.PLN only four girl-F.PL see-F.PL NPR.3.PL 'I only saw four girls.'

Depending on the declension of the noun, pluralisation can be expressed via an overt marker or via null affixation. In the latter case, the noun is in its unmarked form and it is the inflectional marking carried by the MV and the form of the BEauxiliary that differentiates between the plural and singular entities. To single out an example, the Perso-Arabic loan word admi 'man' does not inflect for number overtly, as shown in its declension in (13), although it does make a two-way number distinction. This can be seen by comparing (16-a) and (16-b). In the former example, the masculine singular inflectional marker -ja attached to the MV $\underline{t} \partial k$ 'to see' and the singular form of the BE-auxiliary are in agreement with singular form of the noun admi 'man'. In the latter example, an overt plural marker attached to the noun induces an ungrammatical sentence (16-b). We observe that it is the plural form of the BE-auxiliary and the past tense agreement suffixes attached to the MV that express the plurality of the noun. Unmarked loans are not a novel feature of Potwari, for example Schmidt (2007, 343) notes that unmarked nouns in Urdu have increased greatly since massive borrowings from other languages such as Persian, Arabic, and English.

- (16) a. me hali ik^h admi tək-ja si 1.SG.PLN only one man.M.SG see-M.SG NPR.3.SG 'I only saw one man.'
 - b. me tfar admi-*a/*e tək-e sən
 1.SG.PLN four man-M.PL/M.PL see-M.PL NPR.3.PL
 'I only saw four men.'

In contrast, certain nouns cannot (i) be quantified via a numeral quantifier or (ii) have a plural form via null affixation or the overt plural marker. This results in the noun only having a singular form, hence we label such nouns as non-count singular nouns. The noun pani 'water' is a prototypical example of a non-count singular noun. In (17-a) we observe a grammatical correct sentence, in which the inflectional marking of the MV is the singular masculine suffix -ja and the BE-auxiliary is also in its singular form. While example (17-b) shows that pani 'water' is a non-count noun, as it cannot be quantified by the numeral ik^h 'one'. (17-c) shows that pani 'water' cannot be pluralised via the overt plural marker or via null affixation.

(17) a. me hali pani pit-a si 1.SG.PLN only water.M.SG drink-M.SG NPR.3.SG 'I only drank water.'

- b. *me hali ik^h pani pit-a si 1.SG.PLN only one water.M.SG drink-M.SG NPR.3.SG 'I only drank one water.'
- c. *me hali tʃar pani-*a/*e pit̞-e sən
 1.SG.PLN only four water-M.PL/M.PL drink-M.PL NPR.3.PL
 'I only drank four waters.'

The behaviour of mass nouns with numeral quantifiers and plural marking is the same as non-count singular nouns. A canonical mass noun such as favol 'rice' cannot be quantified by a numeral quantifier, as illustrated in (18-a) and it cannot be pluralised, shown in (18-b).

- (18) a. *us hali ikh tfavəl kəd-ja si 3.SG.ERG only one rice.M.SG eat-M.SG NPR.3.SG '*He/She only ate one rice.'
 - b. us tfavəl-*a/*e kəd-e sən 3.SG.ERG rice-M.PL/M.PL eat-M.SG NPR.3.PL 'He/She ate the rice(*s).'

Also, mass nouns and non-count singular nouns are treated the same under the DOM rules, as postulated in Chapter 2 (see Chapter 2 for examples). It was shown that they rank the lowest on the animacy hierarchy and thus the -ki is non-optional. In contrast, human common nouns were ranked fourth highest on the animacy scale and thus it was shown that the oblique case marker -ki is optional.

However, mass nouns and non-count singular nouns differ in one fundamental aspect: mass nouns are treated as inherently plural whereas non-count singular nouns are not. That is, favel 'rice' does not have a singular form, which can be reflected in the inflectional marking on the MV and the form of the BE-auxiliary. For example, in (19-a) we observe the masculine, plural inflectional marker -e on the MV ka 'to eat' and the plural form of the BE-auxiliary, in agreement with favel 'rice'. While, the singular agreement gives rise to an ungrammatical sentence, as shown in (19-b).

- (19) a. us tfavel ked-e sen 3.SG.ERG rice.M.PL eat-M.PL NPR.3.PL 'He/She ate the rice.'
 - b. *us tfavəl kəd-ja si 3.SG.ERG rice.M.SG eat-M.SG NPR.3.SG '*He/She ate a rice.'

Recall also that the number and gender assignment of the noun is not only reflected in the inflectional marking on the MV and BE-auxiliary in the past tense. The inflecting adjectives that modify a nominal also identify the gender and number of a noun. The latter can be seen in examples (16-a) and (16-b) above. In the former example, the masculine, singular form of the adjective *bara* 'big' modifies

the masculine singular nominal complement admi 'man'. In the latter example, the masculine plural form of the adjective modifies the masculine plural form of admi 'man'. Similarly, only the masculine plural form of an adjective can modify the mass noun tfavel 'rice', as any other form in ungrammatical (20). As for the count noun pani 'water', it is a masculine, singular noun and therefore can only be modified by a masculine, singular form of an adjective. All other forms are ungrammatical, which can be seen in (21).

- (20) us son-e/*a/*i/*ija tfavəl ban-ei sən 3.SG.ERG beautiful-M.PL/M.SG/F.SG/F.PL rice.M.PL make-M.PL NPR.3.PL 'He/She made beautiful rice.'
- (21) me tad-a/*e/*i/*ija pani pi-ta si 1.SG.PLN cold.M.SG/M.PL/F.SG/F.PL water.M.SG drink-M.SG NPR.3.SG 'I drank cold water.'

It is shown in Chapter 2 that third person pronouns are the same as the remote and proximate demonstrative pronouns, which is in line with many Indo-Aryan languages (Jain & Cardona, 2007, 532). According to Payne's (1997) criteria in (4), prototypical nouns can be determined by a demonstrative, which is true for count, non-count singular, and mass nouns. For example, in (22) we see that the count noun *kuri* 'girl' can be modified by the remote demonstrative pronoun *is* 'this'.

(22) me is kuri-ki mar sa
1.SG.PLN DEM.PROX.SG girl.F.SG-OBL hit NPR.1.SG
'I will hit this girl.'

Similarly, the non-count singular noun pani 'water' can be modified by the demonstrative e 'this', shown in (23).

(23) me e pani pi sa 1.SG.PLN DEM.PROX.SG water.M.SG drink NPR.1.SG 'I will drink this water.'

The mass noun can also be modified by the demonstrative pronouns e 'this', as illustrated in (24)

(24) me e tfavəl ka sa 1.SG.PLN DEM.PROX.SG rice.M.PL eat NPR.1.SG 'I will eat this rice.'

3.2.3 Derivational Morphology

We come to see that the LV *kar* 'to do' is particularly susceptible to forming new LVCs with loan words, of which some do not exhibit prototypical morphosyntactic properties of nouns, although their collocates in the source language categorise them as nouns. Whether there might be morphosyntactic, language internal reasons for

the difference in behaviour of borrowed nouns is no doubt worthy of further research, but one that goes beyond the scope of the thesis. Consequently, derivational morphology is employed as a way of categorising coverbal roots that fail to exhibit any of the canonical nominal properties shown above or any of the verbal or adjectival properties shown below (see section 3.4 and section 3.5). It must be noted that this section is not an attempt to establish all derivational morphology processes, rather we focus on specific derivational processes that make nouns from nouns. Due to the lack of linguistic description of Potwari, we lean towards Bhatia's (1993, 279) description of the derivational morphology processes in Punjabi, a closely related language. There is an exhausative list of derivational processes that create nouns from nouns in Punjabi (Bhatia, 1993, 279), which also hold for Potwari. The type of nouns that participate in these processes are conditioned by their lexical semantic features. With our aims in mind, the present section is sufficient in categorising a small class of coverbs as nouns independent of the LVC that otherwise fail to exhibit the nominal morphosyntactic properties. Hence, we do not list all derivational processes.

In Punjabi, the suffix $-ii^3$ creates nouns from nouns and expresses possession, agency, or relation (pertaining to) with words borrowed from Sanskrit and Perso-Arabic sources, and usually yields masculine nouns, such as: vair 'animosity(F)' > vairii 'enemy(M)' (Bhatia, 1993, 283). The suffix can also be used to create nouns from nouns in Potwari. For example, in (25-a) the Perso-Arabic masculine noun fara:b 'wine' is modified by suwa 'red' and is an argument of pi 'to drink'. The suffix -i attaches to the same root (25-b) deriving the meaning 'drunkard'.

- (25) a. me suwa ʃaṭa:b pi sa
 1.SG.PLN red.M.SG wine.M.SG drink NPR.3.SG
 'I will drink the red wine.'
 - b. ο ∫aţa:b-i ε3.SG.PLN wine-i PRS.3.SG'He/She is a drunkard.'

The same form -ii is also described as the "diminutive" suffix by Bhatia (1993, 284), which in Punjabi is productive with inanimate masculine nouns and yields derived feminine nouns. It is also noted that the stem-final vowel undergoes deletion as the result of the suffixation process. Bhatia (1993, 284) provides several examples, such as paar 'mountain' > paarii 'a small hill'. In Potwari, we also have the -i functioning in the same way. For example, the nominal par 'mountain' is illustrated in (26-a), and the derived meaning 'small hill' via the suffix -i is illustrated in (26-b).

³It seems Bhatia (1993) is symbolising vowel length of the suffix by inserting two of the same vowels. We omit the second vowel as the vowel length of the suffix in Potwari is not extended.

- (26) a. e par ε
 DEM.PROX.SG hill PRS.3.SG
 'This is a hill.'
 - b. e par-i laka ε

 DEM.PROX.SG hill-DIM area PRS.3.SG

 'This is the small hill area.'

The suffix -ii is labelled as the most productive feminine suffix in Punjabi (Bhatia, 1993, 284), which is also the case in Potwari too (see Chapter 2). Examples taken from Punjabi are as follows (cognates also exist in Urdu-Hind):

- (27) a. Masculine billaa 'cat' > Feminine bilia
 - b. Masculine *kora* 'horse' > Feminine *korii*
 - c. Masculine bakraa 'goat' > Feminine bakrii.

The above are also cognates of Potwari, take bila 'cat(M)' > bili 'cat(F)' in (28) as an example. The masculinity and femininity of the nouns are captured by the type of adjective that can modify them. In (28-a) only the masculine adjective form kala 'black' can modify bila 'cat(M)', whereas in (28-b) only the feminine adjective form kali 'black' can modify bili 'cat(F)'.

- (28) a. saima kol ikh kala/*i bıla ε Saima.F.SG.PLN has one black.M.SG/F.SG cat.M.SG PRS.3.SG 'Saima has one black male cat.'
 - b. saima kol ik^h kali/*a bīli ε
 Saima.F.SG.PLN has one black.F.SG/M.SG cat.F.SG PRS.3.SG
 'Saima has one black female cat.'

The most productive source of deriving an abstract feminine noun from an adjective is via the suffix -i and its variant -aaii is used to form abstract and concrete nouns (Bhatia, 1993, 294). De-adjectival nouns are unmarked feminine nouns ending -i, which are inflected for number and case. The following examples are found in Potwari and Punjabi:

- (29) a. Adjective nek 'noble' > Abstract feminine noun neki 'nobility'
 - b. Adjective saaf 'clean' > Abstract feminine noun saafaii 'cleanliness'
 - c. Adjective lammaa 'tall' > Abstract feminine noun lamiaaii 'length'

The noun ala 'the one' is a very productive device for forming agentive experiencer, and instrumental nouns from nouns. ala 'the one' is cognate with the Punjabi and Urdu-Hindi valaa, which is treated by Bhatia (1993, 297) as a "postposition" because of its ability to induce the oblique case. Based on the latter, Bhatia suggests that one can argue that nouns can be derived from a postposition. The Punjabi valaa agrees in number and gender with the following noun. In contrast, Schmidt (1999, 44-45) refers to valaa as a suffix in Urdu that also agrees in number

and gender with a noun. In Potwari, ala 'the one' agrees with the subject of the sentence, as illustrated in (30). We do not follow Bhatia's (1993, 297) categorisation of ala 'the one' as a postposition. Rather, following Schmidt (1999, 44-45), it is labelled as a suffix⁴ that combines with other parts of speech, which together forms a compound noun.

- (30) a. o mura pese-ala ε
 3.SG.PLN boy.M.SG money.M.SG-the.one.M.SG PRS.3.SG
 'That boy is the owner of money.'
 - b. o kuri pese-ali jε
 3.SG.PLN girl.F.SG money.M.SG-the.one.F.SG PRS.3.SG
 'That girl is the owner of money.'

3.2.4 Summary

To summarise, all noun types can be modified by an adjective and are determined by a demonstrative. The adjectival modification reflects the gender and number of the nouns. Only count nouns can be quantified by a numeral and be pluralised either via overt marking or null affixation. As for case marking, only count nouns can take the oblique case marker -ki, as the mass nouns and non-count singular nouns are exempt due to the DOM rules. The morphosyntactic properties of the three types of nouns investigated in the preceding sections are summarised in table 3.1, in which the binary features +/- capture whether they exhibit the morphosyntactic properties listed in the first column.

Properties	Count	Non-Count Singular	Mass
QUANT	+	-	-
PL	+	-	-
OBL	+	-	-
LOC	+	+	+
AGR	+	+	+
ADJ	+	+	+
DEM	+	+	+

Table 3.1: Count, Non-Count Singular, and Mass Nouns

It is shown in the following chapter that the coverbs are at large non-count singular nouns, with a small class of count and mass nouns. Only one coverb participates in the derivational process, whereby the suffix -ii derives a noun from a nominal root, which otherwise fails to exhibit other nominal properties (see Chapter 4). A list of nominal complement properties is presented in (31) below.

 $^{^4}$ The categorisation of -ala as an affix is indeed a tentative one, as it could be categorised as a clitic. The precise categorisation of -ala is dependent on further investigations, but one that goes beyond the scope of the thesis.

(31) Morphosyntactic Properties of Nominal Complements

- a. **CASE:** Canonical nominal complements can take the oblique case marker -ki, whereas mass nominal complements and non-count singular nominal complements cannot due to the DOM rules.
- b. **DEM:** Nouns can be determined by demonstrative pronouns, such as e 'this', o 'that', and/or is 'this'.
- c. AGR: The gender and number of a noun is reflected in agreement patterns of a past tense MV and by a modifying inflecting adjective.
- d. **ADJ:** Nouns have the possibility of taking a descriptive modifier such as feminine or masculine form adjectives like *kali* 'black (F)' or *kala* 'black (M)'
- e. **PL:** They can pluralize via an overt plural marker -e/-a or via null affixation.

As a preview, the data shows that there exists a clear morphosyntactic difference between coverbs and complements. The majority of the nominal coverbs display distinct behaviour with case assignment, determination, adjectival modification, and plural marking to nominal complements. Certain similarities can also be observed between a small set of coverbs and complements. It is shown that certain coverbs can be (i) modified by an adjective, (ii) determined by a demonstrative pronoun, and (iii) mark for plurality, without changing the basic sentential meaning or grammaticality of the sentence.

3.3 Syntactic Flexibility of a Nominal Complement

I now turn to the syntactic flexibility of MV-complement structures that are comprised of nominal complements. My investigation of syntactic flexibility is based on five syntactic operations: (i) fronting, (ii) object-movement, (iii) adverb insertion, (vi) pronominalisation, and (v) question formation, of which only pronominalisation and question formation differentiate the two structures⁵. That is, the nominal coverbs cannot be substituted by a pronoun or moved away from the LV via the question formation operation, as the meaning of the LVC is lost to the MV-complement structure. In contrast, nominal complements can be substituted by a pronoun and questioned without any affect on the meaning of the MV-complement structure. The similarities between the two classes are shown via the fronting and separation diagnostic tools.

⁵An appropriate note to make here is that a fully fledged comparison of the LVC and MV-complement structure is not provided in this section, but rather a comparison that suffices to show how the diagnostics work. However, this section does conclude the implications of the diagnostic tools.

3.3.1 Fronting

Fronting is a mechanism which moves a particular constituent to the front of the sentence from its canonical position further to the right, which gives rise to a special or marked word order (Haegeman, 2006, 81). That is, an order that diverges from the neutral word order. The assumption then is that creating a pattern that deviates from the neutral word order is an additional operation (Haegeman, 2006, 81) with some specific interpretive effect. Hageman (2006, 81) goes on to propose that a nonneutral or marked order must be associated with some difference in interpretation, by the principle of economy. That is, 'operations that rearrange constituents also have to be associated with some particular interpretive effect' (Haegeman, 2006, 81), otherwise creating a word order that differs from that of the neutral word order is according to the principle of economy simply redundant. Therefore, the general consensus is that marked word orders are less neutral as they carry some specific communicative effect. Let us take English to exemplify the latter: the neutral word order is one in which the subject precedes the verb and the object follows it, as we see in (32-a). In contrast, the fronting of the object book in (32-b) is employed by the speaker to contrast one book with another, which can also be referred to as topicalization.

- (32) a. I didn't like this book very much.
 - b. This book, I didn't like very much (but that one I really enjoyed).

Haegeman (2006, 81)

The general consensus amongst scholars working in Indo-Aryan languages is that the topicalization mechanism involves various clausal constituents, alhough it is observed that more commonly it is the object that can be topicalized by displacement leftward to the initial position (also referred to as the topic position) (Masica, 1991, 394). The motivation of such a movement is a type of de-emphasis, which according to Masica (1991, 394) canonically involves concomitant emphasis of another constituent, rather than emphasis placed on the fronted consistent as we see for English. However, this work asserts that the motivations of the fronting operation is independent of the pragmatics of the sentence, as it is related to the syntactic flexibility of the MV-complement structure and the LVC. Other than merely contextualising the fronting operation, I do not in any way discuss the pragmatic implications. Thus, to avoid ambiguity, I employ the term "Fronting" rather than "topicalization".

Returning back to Masica's (1991, 394) observation: most commonly, the object can be fronted in Indo-Aryan languages. The latter can be seen in Potwari, for example, the object pijala 'cup' of the simple transitive verb p
i n 'to break' can be

fronted from its preverbal position in (33-a) to the front of the sentence in $(33-b)^6$.

- (33) a. sara pijala pən-ja si Sara.F.SG.PLN cup.M.SG.PLN break-M.SG NPR.3.SG 'Sara broke the cup.'
 - b. pijala sara pən-ja si cup.M.SG.PLN Sara.F.SG.PLN break-M.SG NPR.3.SG 'Sara broke the cup.'

Similar to the nominal complement pijala 'cup' above, the nominal coverb pis 'fart' in the intransitive LVC $pis\ mar$ 'to fart' can also be fronted away from the LV mar 'to hit' to the front of the sentence, as shown in example (34) below.

- (34) a. is pis mar-i si 3.SG.PROX fart.F.SG hit-F.SG NPR.3.SG 'He/She farted.'
 - b. pis is mar-i si fart.F.SG 3.SG.PROX.ERG hit-F.SG NPR.3.SG 'He/She farted.'

The canonical ordering of an indirect object and direct object is that the former precedes the latter, as illustrated in the data example (35-a) below. Similar to the direct object of a transitive verb, the direct object kitab 'book' of the di-transitive verb de 'to give' can be moved to the front of the sentence in (35-b), without inducing an ungrammatical sentence.

- (35) a. usman sara-ki kitab de-ti si Usman.M.SG Sara.F.SG-OBL book.F.SG give-F.SG NPR.3.SG 'Usman gave the book to Sara.'
 - b. kiṭab usman sara-ki de-ṭi si book.F.SG Usman.M.SG Sara.F.SG-OBL give-F.SG NPR.3.SG 'Usman gave the book to Sara.'

The positioning of the nominal coverb bruf 'brush's of the transitive LVC bruf mar 'to brush', lit. 'brush hit' in (36-a) mirrors that of the direct object $ki\underline{t}ab$ 'book' of the di-transitive verb $\underline{d}e$ 'to give' in (35-a). That is, an object-ki precedes them both and they are both adjacent to the verb. Interestingly, they also behave in the same manner with the fronting operation. For example, in (36-b) the coverb bruf 'brush' can be fronted away from the LV mar 'to hit'.

⁶This environment appears to be exempt from word order freezing - see Chapter 2 for the discussion on word order freezing.

 $^{^{7}}$ The coverb pis 'fart' is categorised as a noun via the morphosyntactic properties presented in the previous section - see Chapter 5.

 $^{^8}$ The nominal coverb bruf 'brush' is categorised as a count noun independent of the LVC - see Chapter 5 for argumentation in support of this.

- (36) a. sara carpit-e-ki bru∫ mar-ja si Sara.F.SG.PLN carpet.M.SG-LOC-OBL brush.M.SG hit-M.SG NPR.3SG 'Sara brushed the carpet.'
 - b. bruf sara carpit-e-ki mar-ja si brush.M.SG Sara.F.SG.PLN carpet.M.SG-LOC-OBL hit-M.SG NPR.3.SG 'Sara brushed the carpet.'

The fronting operation shows that the two constructions are identical in their syntactic flexibility, which I go onto show is the case for all the LVCs consisting of nominal coverbs, as well as adjectival and verb complements (see section 3.4.4 and section 3.5.6).

3.3.2 Object Movement

In the neutral word order (see word order template in Chapter 2, section 2), we see that the indirect object precedes the direct object and it is the direct object that is in the verb-adjacent position. The nature of the object movement operation requires two objects, as we require the movement of the indirect object. Hence, I employ the di-transitive verb de 'to give' to demonstrate this diagnostic. The idea behind the object movement operation is to establish whether an indirect object can be placed in between a direct object and MV without inducing an ungrammatical sentence. Example (37-b) shows that the indirect object sara 'Sara' can be moved from its canonical position in (37-a) to between the direct object kitab 'book' and the MV de 'to give' without inducing an ungrammatical sentence.

- (37) a. usman sara-ki kitab de-ti si Usman.M.SG.PLN Sara.F.SG-OBL book.F.SG give-F.SG NPR.3.SG 'Usman gave the book to Sara.'
 - b. usman kiṭab sara-ki de-ṭi si Usman.M.SG.PLN book.F.SG Sara.F.SG-OBL give-F.SG NPR.3.SG 'Usman gave the book to Sara.'

As pointed out in the previous section, the positioning of a nominal coverb of a transitive verb is identical to that of a direct object of a di-transitive verb. That is, the position of the coverb bruf 'brush' of the transitive LVC bruf mar 'to brush', lit. 'brush hit' is the same as the direct object kiṭab 'book'. For clarity, (36-a) is repeated in (38-a), in which we can see that the positioning mirrors the direct object in (37-a). Going beyond the positioning of the nominal complement and coverb, the two also display identical syntactic flexibility, as the nominal coverb bruf 'brush' and the LV mar 'to hit' can be separated by the ki-object carpit 'carpet', illustrated in (38-b).

(38) a. sara carpit-e-ki bru∫ mar-ja si Sarah.F.SG.PLN carpet.M.SG-LOC-OBL brush.M.SG hit-M.SG NPR.3SG 'Sarah brushed the carpet.'

b. sara bru∫ carpit-e-ki mar-ja si Sarah.F.SG.PLN brush.M.SG carpet.M.SG-LOC-OBL hit-M.SG NPR.3.SG 'Sarah brushed the carpet.'

3.3.3 Adverb Insertion

The canonical ordering of adverbs is one in which the time adverb immediately follows the subject and the place adverb follows the time adverb (see word template in Chapter 2, section 2), however the order of adverbs is considerably flexible. In line with the above two diagnostics, the aim of separation by an adverb is to investigate the relation of the nominal complement with the MV, and whether it is the same for a nominal coverb and an LV. That is, can an adverb such as $k \ni l$ 'tomorrow/yesterday' separate both components of the LVC and the MV-complement structure? The data shows both components can be separated by a time adverb. For example, (39-a) demonstrates the canonical positioning of the time adverb $k \ni l$ 'yesterday', while (39-b) shows that it can enter between the nominal complement and MV $p \ni n$ 'to break', without resulting in an ungrammatical sentence or affecting the basic sentential meaning.

- (39) a. me kəl pijala pən-ja si 1.SG.PLN yesterday cup.M.SG break-M.SG NPR.3.SG 'I broke the cup.'
 - b. me pijala kəl pən-ja si
 1.SG.PLN cup.M.SG yesterday break-M.SG NPR.3.SG
 'I broke the cup.'

The intransitive LVC structure is parallel to that of the transitive MV-complement structure, in which the time adverb $k \ni l$ 'yesterday' in (40-a) can be moved between the two components of the intransitive LVC $pis\ mar$ 'to fart', lit. 'fart hit' and the sentence remains grammatical (40-b).

- (40) a. is kəl pis mar-i si 3.SG.PROX yesterday fart.F.SG hit-F NPR.3.SG 'He/She farted yesterday.'
 - b. is pis kəl mar-i si 3.SG.PROX fart.F.SG yesterday hit-F.SG NPR.3.SG 'He/She farted yesterday.'

The same pattern is also found when comparing transitive LVCs with di-transitive MV-structures. The adverb $k\partial l$ 'yesterday' can enter between the unmarked object $ki\underline{t}ab$ 'book' and the ditransitive verb $\underline{d}e$ 'to give' without affecting the grammaticality of the sentence, as illustrated in (41). Similarly, the adverb can enter between the coverb bruf 'brush' and the LV mar 'to hit', shown in (42).

- (41) usman sara-ki kitab kəl de-ti si Usman.M.SG.PLN Sara.F.SG-OBL book.F.SG yesterday give.F.SG NPR.3.SG 'Usman gave the book to Sara yesterday.'
- (42) me carpit-e-ki bru∫ kəl mar-ja si 1.SG.PLN carpet.M.SG-LOC-OBL brush.M.SG yesterday hit-M.SG NPR.3.SG 'He/She brushed the carpet yesterday.'

3.3.4 Pronominalisation

Pronominalisation is a diagnostic that focuses on replacing a particular constituent via an appropriate pronoun. The reasoning runs as follows: if you can replace a string with a pronoun then it must be a constituent (Hengeveld, 1992; Kuno, 1972). Take as an example in English, the string of words the treasure in (43-a), they can be replaced by the pronoun it (43-b).

- (43) a. The boys are looking for the treasure.
 - b. I hope they find it.

We observe similar results in Potwari too, for example the object $k \ni ta$ 'dog' in (44-a) can be replaced by the pronoun o 'it', as illustrated in (44-b).

- (44) a. sara kəta-ki būni mar-ja si Sara.F.SG.PLN dog.M.SG-OBL lots hit-M.SG NPR.3.SG 'Sara hit the dog lots of times.'
 - b. te fir o mər-i ge-ja si and then 3.SG.PLN die-NFN go.M.SG NPR.3.SG 'And then it died.'

Example (46) further exemplifies that the pronoun uski in the second clause is substituted for its antecedant kata 'dog', which is uttered in context of (45). The basic sentential meaning of the sentence remains unaffected.

- (45) Context: Sara tells a friend of her outrageous behaviour towards the dog. Sara utters (46).
- (46) me pate ke kata si me uski mar-ja si 1.SG.PLN know what do NPR.SG 1.SG.PLN 3.SG.OBL hit-M.SG NPR.3.SG 'You know what I did, I hit it!'

What is interesting is that the nominal coverb of the LVCs cannot be substituted by a pronoun in such a manner without it affecting the verbal meaning. Take the LVC pis max in (54), in which pis 'fart', the nominal component together with the verb max 'to hit' form the verbal meaning 'to fart'.

(47) me pis mar-i si 1.SG.PLN fart.F.SG-OBL hit-F.SG NPR.3.SG 'I farted.' The demonstrative pronoun o in the second clause of (49) is substituted for its antecedant pis 'fart' in (54) above, which is uttered in context of (48). This causes the meaning of the LVC to be lost, as it is the coverb that provides the main predicational information in the LVC, whereas the nominal complement does not contribute such information within the MV-complement structure. That is, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (48) Context: A patient discusses flatulent problems with their doctor. The sentence (49) is uttered to the doctor when describing the eventuality of farting.
- (49) #me pate kε kəta si me o mar-i 1.SG.PLN know what do NPR.SG 1.SG.PLN DEM.DIST.SG hit-F.SG si NPR.3.SG 'You know what I did, I hit that.' (Impossible LVC meaning: 'to fart')

3.3.5 Question Formation

Evidence for the distinct distribution of the nominal coverb and the nominal complement can be found in the formation of interrogatives. Questions which ask for a replacement of an interrogative constituent, are called constituent questions: the answer to such questions supplies the missing constituent (Hengeveld, 1992). For example, in order to establish the constituent *kiṭab* 'a book' in (50), we ask the question (51-a) and the answer provided in (51-b) is the object of the verb *pər* 'to read'.

- (50) sami kitab pər ni si Sami.F.SG.PLN book.F.SG.PLN read IMPF.F.SG NPR.3.SG 'Sami was reading a book.'
- (51) a. sami kε pər ni si Sami.F.SG.PLN what read IMPF.F.SG NPR.3.SG 'What was Sami reading?'
 - b. kitab book.F.SG.PLN 'A book.'

One of the differences between nominal complements and coverbs is that the latter cannot be questioned, whereas the former can be questioned, as we see for the nominal complement kitab of the MV par 'to read'. The latter verb does not have a LV analogue, in order to provide a just comparison between complements and coverbs,

we must look to the behaviour of complements of MVs that have LV analogues, such as mar 'to hit'. We observe the nominal complement sara-ki of the MV mar 'to hit' in (52) can be questioned, as shown in the question-answer sequence in (53).

- (52) sami sara-ki mar-ja si Sami.F.SG.PLN sara-OBL hit-M.SG NPR.3.SG 'Sami hit Sara.'
- (53) a. sami kus-ki mar-ja si Sami.F.SG.PLN who hit-M.SG NPR.3.SG 'Who did Sami hit?'
 - b. sara-ki Sara.F.SG-OBL 'Sara.'

The same results are not found for the nominal coverb *pis* 'fart', which forms an LVC with the LV *mar* 'to hit', illustrated n (54). That is, it cannot be questioned as the meaning of the LVC is affected. The MV meaning of *mar* 'to hit' is interpreted rather than the approximate LV meaning 'to make contact'. The latter is illustrated in the question-answer sequence in (55). The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (54) me pis mar-i si 1.SG.PLN fart.F.SG-OBL hit-F.SG NPR.3.SG 'I farted.'
- (55) a. us kε mar-ja si 3.SG.ERG what hit-M.SG NPR.3.SG 'What did he hit?'
 - b. #pis fart.F.SG 'Fart.'

The above results are shown for an intransitive LVC and a transitive MV-structure. The transitive LVCs pattern in the same manner. For example, the coverb bruf 'brush' of the transitive LVC bruf mar 'to brush', lit. 'brush hit' in (56) cannot be questioned, illustrated in the question-sequence in (57). Similar to the results above, the LV meaning of mar is replaced by the MV meaning 'to hit' because the two components of the LVC are separated. The change in the meaning also induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (56) sara carpit-e-ki bru∫ mar-ja si Sarah.F.SG.PLN carpet.M.SG-LOC-OBL brush.M.SG hit-M.SG NPR.3SG 'Sarah brushed the carpet.'
- (57) a. sara carpit-e-ki kɛ mar-ja si Sara.F.SG.PLN what hit-M.SG NPR.3.SG 'What did Sara hit on the carpet?'

b. #bruf brush.M.SG.PLN 'Brush.'

Megerdoomian (2012) (as mentioned previously), shows the same pattern for nominal coverbs in Persian. That is, they cannot be questioned whereas canonical nominal complements can be questioned. For example the nominal coverb *færib* 'deceit' of the LVC *færib xordæn* 'to be deceived', lit. 'deceit/eat collide' cannot be questioned, as can be seen in (58).

(58) a. mærdom ĉi xord-æn?

people what ate-3.PL

'What did people eat?'

b. *færib.

deceit

'Deceit.'

Megerdoomian (2012, 191)

3.4 Verbs

In Potwari, a complex system of verb tense and aspect is elaborated with auxiliaries (see Chapter 2). Certain verbs are also formed by the suffixation of elements to the root/lexical base, as is the case for its sister languages Urdu-Hindi and Punjabi (Masica, 1991, 257). The verbal forms are as follows; (59). The nonfinite form is created via the non-finite marker -i. The causative forms of the verbs are expressed via the causative marker -a or -wal. Only in the past tense does the verb itself mark for tense via the past tense gender and number suffixes, which must be followed by the non-present BE-auxiliary. The agreement pattern of a past tense transitive verb is V-O and of a past tense intransitive verb is V-S. Other tenses are also marked by auxiliaries. The present tense is expressed by occurring with the imperfective auxiliary + the present BE-auxiliary, which both agree with the gender and number of the subject. The future tense is expressed via the bare form of the verb and the non-present BE-auxiliary, which agree with the subject in gender and number. In Urdu-Hindi and Punjabi, we observe an almost identical system, though it is the participles that determine the aspect of the verb and the auxiliaries determine the tense (Bhatia, 1993; Kachru, 2006; Schmidt, 1999).

- (59) Verb Forms
 - a. Bare form: pən 'to break'
 - b. Non-Finite: bare form + -i
 - c. Causative: bare form + -a/-wal
 - d. Past tense agreement: bare form + past tense suffixes + NPR BE-auxiliary
 - e. Present: bare form + IMPF auxiliary + PRS BE-auxiliary
 - f. Future Tense: bare form + NPR BE-auxiliary
 - g. Imperfective: bare form + IMPF auxiliary + BE-auxiliary

In respect of the syntactic behaviour, verbs determine the number and function of nominal arguments in a sentence. Semantically, they express states, processes, and actions. In this section, we begin with the investigation of the non-finite marker -i, the causatives, and nominalisation.

3.4.1 Nominalisation, Non-Finite Marker & the Imperfective

Bhatia (1993, 288) argues that in Punjabi the 'most productive suffix which derives nouns from verbs is -Naa'infinitive marker'...'. The attachment of the infinitive -Naa to a stem produces a verbal noun, which is treated as a masculine singular noun. Bhatia (1993, 288) provides the following examples:

- (60) a. Stem &aa 'go' > Gerundive/Infinitive noun jaauNaa 'departure'
 - b. Stem aa "come' > Gerundive/Infinitive noun aaNaa 'arrival'
 - c. Stem paR 'read' > Gerundive/Infinitive noun paRNaa 'reading'
 - d. Stem suN 'hear' > Gerundive/Infinitive noun suNnaa 'listening'

We introduced na in Potwari as the imperfective masculine singular auxiliary (see Chapter 2). The label given in Punjabi distinguishes itself from the Potwari na, however we can draw on some comparisons. For example, it too forms a gerundive/infinitive noun with na. The latter can be seen by comparing (61-a) and (61-b).

- (61) a. o pərna pəsənd kər ni/na ε 3.SG.pln reading like do IMPF.F.SG/masc.SG PRS.3.SG 'He/She likes reading/studying.'
 - b. o kitab pər ni/na ε 3.SG.pln book.F.SG.PLN read IMPF.F.SG/masc.SG PRS.3.SG 'He/She is reading a book.'

Canonical verbs can also be nominalised via two distinct processes. The first involves the imperfective auxiliary ni and the derivational affix o. An example of

⁹We use the terms "stem form" and "root form" interchangeably with the term "bare form".

this can be seen with a simple verb such as *dor* 'to run' in (62), which is not found in sister languages Punjabi and Urdu-Hindi.

(62) me dor ni-o pəsənd kər ni ε
1.SG.F.PLN run IMPF.F.SG-o like do IMPF.F.SG PRS.3.SG
'I like running.'

The second nominalisation process involves the derivational suffix -i, as seen in (63). The morphological component -i is attached to the verb n
other f 'to dance', which creates the nominal 'dancing'. Interestingly, the latter seems to be a distinctive method of nominalisation in Potwari, as it is not described for Punjabi or Urdu-Hindi.

(63) Its nətf-i na sək ne here dance-NMLZ NEG permit TOP 'Dancing is not permitted here.'

The number of processes to create nouns from verbs is considerably less than nouns from nouns. A large number of intransitive and transitive verbal stems yield abstract nouns via zero derivation, as noted by Bhatia (1993, 289) for a class of Punjabi verbs. The illustrations in Bhatia (1993, 289) that exemplify the latter type of derivation are cognates with Potwari verbs, which are shown in (64).

- (64) a. Stem (INTR) $d \rightarrow r$ 'be afraid' $> d \rightarrow r$ 'fear'
 - b. Stem (INTR) akər 'show off > akər 'pride'
 - c. Stem (INTR) fik^h 'to scream' $> fik^h$ 'scream'

The observation of transitive stems yielding abstract nouns and nouns expressing agency and patient relationships in Punjabi also holds for Potwari. Bhatia lists numerous examples, of which two can be seen in (65).

a. mar 'hit/beat/kill' > mar 'beating'
b. samn& 'understand' > samn& 'understanding'

These two examples are also present in Potwari, for example we see the verb mar 'to hit' in (66-a), while we have the noun mar 'beating' in (66-b).

- (66) a. me uski mar-ja si 1.SG.PLN 3.SG.obl hit-M.SG NPR.3.SG 'I hit him/her.'
 - b. uski mar pi si 3.SG.obl beating attack NPR.3.SG 'He got a beating.'

Similarly, we have the verb samnj 'to understand' in (67-a) and the noun samnj 'understanding' in (67-b).

- (67) a. me uski samndz-ja si 1.SG.PLN 3.SG.obl hit-M.SG NPR.3.SG 'I made her understand.'
 - b. uski samndz e si 3.SG.obl understanding.F.SG attack NPR.3.SG 'He/she will get an understanding.'

Prototypical verbs in Potwari have the ability to inflect for the non-finite marker -i, as illustrated in Chapter 2. To recap, it is found to attach to an MV if a finite auxiliary follows it, such as an aspectual auxiliary. For example, the resultative perfect ga-ja 'to go' in (68) (repeated for convenience) follows the MV bir 'to bit', as it is the resultative auxiliary ga-ja 'to go' that carries the finite properties.

(68) e matfəl miki kitni vari bir-i ga-ja
DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG
ε
PRS.3.SG
'That mosquito has bit me (so) many times.'

We also observe that verbs typically have the ability to combine with the imperfective aspect auxiliary na/ni. For example, the verb pi 'to drink' is shown to take the imperfective aspect in (69) below.

(69) o dudh pi ni/na ϵ 3.sg.pln milk.m.sg drink IMPF.F.sg/m.sg PRS.3.sg 'She/He is drinking milk.'

3.4.2 Causatives

Causatives in Potwari are formed mainly morphologically, by suffixation and in some cases lexically. The basic causative marker across the New Indo-Aryan (NIA) languages is -av-, found in Bhojpuri, Awandi, Gujarati, and West Rajathani, which is generally pronounced /aw/ or /au/ in Nepali, Punjabi and Braj. In Kashmiri, it is /an/ or /aw/, while in Marathi, the vowel is shortened in accordance to /aw/, and in Kumauni only /u/ remains. The -av- is lost completely to -a- in standard Hindi-Urdu, Bengali, Oriya, Sindhi, "Lahnda", Eastern Rajasthani, Bundeli, and Sinhalese (Masica, 1991, 318). An illustration of the latter can be seen in (70) for Hindi-Urdu, in which the causative -aa is suffixed to the verb &al 'to burn' in (70-b), while in (70-a) the verb &al appears in its bare form (Balachandran, 1973; Bhatt & Embick, 2003; Hook et al., 1979; Hook & Koul, 1984; Kachru, 1980; Masica, 1976, 1991; Ramchand, 2008; Saksena, 1980, 1982).

- (70) a. makaan dal raha hai house.M.SG burn PROG.M BE.PRS 'The house is burning.'
 - b. akaitõ-ne makaan dal-aa diyaa bandits-ERG house.M.SG burn-CAUS give.PERF.M.SG 'Bandits burned the house.'

Bhatt & Embick (2003, 2)

We also observe the reduction of -av to the causative -a in Potwari. The -a is a productive causative marker in Potwari, suffixing to numerous intransitive verbs to form transitive verbs. For example in (71-a) we observe the intransitive verb par 'to read/to study', while in (71-b) the causative marker -a attaches to the root, producing the transitive verb para 'to teach'.

- (71) a. sami pər ni ε
 Sami.F.SG.PLN read IMPF.F.SG PRS.3.SG
 'Sam is reading/studying.'
 - b. sami ama:n-ki par-a si Sami.F.SG.PLN Amaan-M.SG-OBL read-CAUS NPR.3.SG 'Sami will teach Amaan.'

Similarly, we have the intransitive verb $d\partial r$ 'to fear/to scare' in (72-a) and in (72-b) we have the causative marker attached to the root, forming the transitive verb 'to scare'.

- (72) a. usman dər na si
 Usman fear IMPF.M.SG NPR.3.SG
 'Usman was scared.'
 - b. usman ami-ki dər-a-ja si Usman.M.SG.PLN mum-F.SG-OBL fear-CAUS-M.SG NPR.3.SG 'Usman scared mum.'

This is typical of Indo-Aryan languages, which Masica (1991, 319) refers to as "First Causatives". The first causatives encompass two purposes: (i) to turn primary intransitives into transitives and (ii) to turn primary transitives to indirect causatives, in which the latter entail getting something done by another person. We observe the former type in (72) and (71), while the latter can be seen in (73), in which the transitive verb kar 'to do' takes the causative -a.

(73) me uski kəm kar-a-ja si 1.SG.PLN 3.SG.OBL work.M.SG do-CAUS-M.SG NPR.3.SG 'I made him/her do work.'

The causative markers are not restricted to the above, we observe competing causative suffixes of more obscure origin amongst the Indo-Aryan languages. For example, -ar- is found in Shina, Kashmiri, and Sindhi, (uth-/uthar 'rise/raise') and -l or -al- are found in Hindi, Nepali, and Siraiki (Masica, 1991, 318). In Potwari, we

find the causative marker -wal, which can perhaps be traced back to the two obscure, Indo-Aryan causative markers -al- and -aw-. The causative -wal is restricted to the type of verbs it can attach to, whereas the causative -a is very productive with little restriction. We can see in the examples below that -wal- can attach to verbs of consumption, such as k^ha 'to eat', verbs of caring for the whole body/verbs of preparation, such as na 'to wash', and verbs of existence such as sawal 'to sleep'.

- (74) me usman-ki k^ha-wal sa 1.SG.PLN usman.M.SG-OBL eat-CAUS NPR.1.SG 'I will feed Usman.'
- (75) me usman-ki na-wal sa 1.SG usman.M.SG-OBL wash/shower-CAUS NPR.1.SG 'I will wash Usman.'
- (76) me usman-ki sa-wal sa 1.SG usman.M.SG-OBL sleep-CAUS NPR.1.SG 'I will put Usman to sleep.'

There are other non-morphological causative expressions in Indo-Aryan languages, such as those participating in the inchoative-causative/transitive alternation. Haspelmath (1993, 90) defines the inchoative and causative verbs as sharing a root, in which the causative involves an agent participant that causes the situation. In contrast, the inchoative excludes such a participant and consequently the situation is viewed as occurring spontaneously. For example, Hindi-Urdu is comprised of a class of alternating verbs that do not have an overt causative affix in the transitive form, as illustrated in (77). Rather, the difference between the inchoative and causative is in the vowel length. That is, the short vowel is present in the inchoative, such as $b\tilde{a}t$ in (77-a) and the long vowel is present in the causative, as in $b\tilde{a}\tilde{a}t$ in (77-b). Bhatt & Embick (2003, 2) refer to the latter as a process of vowel simplification, in which the phonological form of the intransitive is derived from the phonological form of the transitive. They categorise such verbs as the NULL-class.¹⁰

- (77) a. jaayzaa bãt rahii hai property divide PROG-F BE-PRS 'The property is dividing.'
 - b. ram-ne jaayzad bããt dii Ram-ERG property divide give-PRF 'Ram divided the property.'

Bhatt & Embick (2003, 2)

 $^{^{10}\}mathrm{See}$ also Section 7 for an appendix that includes an exhaustive list of NULL-class verbs in Bhatt & Embick (2003, 55).

The inchoative-causative alternation in Potwari also involves a class of verbs that do not overtly mark for causation, which can be seen with the verb sar 'to burn' in (78). The phonological form of the inchoative differs from the causative form in respect to their vowel. In the inchoative we have the schwa /ə/, whereas in the causative we have the open, central vowel /a/. There are other examples too, such as $k^h u l/k^h o l$ 'to open (INTR/TR)' and m ə r/m a r 'to hit (INTR/TR)', which are also found in languages such as, Hindi-Urdu, Punjabi, and Gujarati (Masica, 1991, 319).

- (78) a. roti sər-i da si bread.F.SG burn-NFN go NPR.3.SG 'The bread will burn.'
 - b. me roti-ki sar sa 1.SG.PLN bread.F.SG-OBL burn NPR.1.SG 'I will burn the bread.'

The inchoative-causative alternation can be expressed analytically, as illustrated in (79), in which the causative is formed by the LV kar 'to do' and the inchoative is formed by the LV o 'to become'. We discuss this type of alternation in context of the LV kar 'to do' in Chapter 4.

- (79) a. prt bənd o-i da si door.F.SG close become-NFN go NPR.3.SG 'The door will close.'
 - b. usman pıţ bənd kar si Usman.M.SG.PLN door.F.SG close do NPR.3.SG 'Usman will close the door.'

Another type of morphological indirect causation, which is distinct to the indirect causation shown in (73) is very common across South Asian languages (Bhatt & Embick, 2003; Balachandran, 1973; Hook et al., 1979; Hook & Koul, 1984; Kachru, 1980; Masica, 1976, 1991; Ramchand, 2008, 2011; Saksena, 1980, 1982; Shibatani, 1973, 2002; Shibatani & Prashand, 2002). In Hindi-Urdu and other related languages, the -vaa causative is traditionally considered to be the 'indirect' causation marker, interpreted by Kachru (1980) and Masica (1991, 319) as a 'second causative', and by Shibatani (1973) as a 'syntactic causative' alongside a more 'lexical', 'first causative'. Take as an example the Hindi-Urdu sentence in (80), in which the affix -vaa attached to \(dxal\) 'to burn' encodes indirect causation.

(80) zamiindaar-ne (dakaitõ-se) makaan dal-vaa diyaa landlord-ERG bandits-INSTR house.M.SG burn-CAUS give-PERF.M.SG 'The landlord had the house burned (by the dacoits)'

Bhatt & Embick (2003, 2)

However not all Indo-Aryan languages have a second causative, such as Bengali, Oriya, and Marathi, of which the latter two are official languages in India and the former is spoken in Bangladesh (Masica, 1991, 318-319). Potwari differs from its sister languages Hindi-Urdu and Punjabi, as it does not exhibit a second causative.

3.4.3 Mid-Summary

We conclude with the verbal properties in (81), which are in turn used to diagnose the word class of a given coverb. As a preview, it is shown that neither the verbal coverb or the verbal complement exhibit the morphosyntactic properties in (81). That is, the coverb when part of the LVC cannot be causativized, inflect for past tense suffixes, inflect for the non-finite marker -i, combine with the imperfective aspect, nor undergo nominalisation. Instead, it is the entire LVC which takes on these verbal properties. This proves that coverbs contribute to the verbal predicate, rather than behaving as a type of complement.

(81) Verbal Properties

- a. Canonical verbs take the non-finite marker -i.
- b. Prototypical verbs inflect for gender and number suffixes in the past tense.
- c. Typical verbs have the ability to take the morphological causative marker -a or -wal.
- d. Prototypical verbs take the imperfective aspect: auxiliary na/ni
- e. Canonical verbs can be nominalised via the imperfective auxiliary ni + the derivational affix o (e.g. dor ni-o 'running'.

3.4.4 Syntactic Flexibility of a Verbal Complement

In this section, we explore the similarities and differences between verbal complements and coverbs in respect to their syntactic flexibility. I employ the same diagnostic tools that investigate the syntactic flexibility of nominal complements and coverbs. They are as follows: (i) object movement, (ii) fronting, (iii) adverb insertion, and (iv) question formation. We observe that the positioning of the two classes differentiate one from the other and that the coverbs cannot be questioned, whereas complements can be questioned. The coverbs and complements can be fronted away from the verbal predicate. In respect of the adverb insertion operation, an adverb can enter between a MV and its complement. Similarly, an adverb is permitted to enter between a coverb and a LV.

3.4.4.1 Positioning

One of the major differences between a verbal complement and coverb is to their differing positions within the verbal predicate. A verbal complement is always postverbal, as illustrated in (82). In (82-a), we see the verbal complement dor 'run' in

its bare form following the MV and BE-auxiliary. Similarly, in (82-b), we observe the deverbal nominal complement *dorna* 'running' following the MV and BE-auxiliary.

- (82) a. me uski ak^h -ja si dor 1.SG.PLN 3.SG.OBL ask-M.SG NPR.3.SG run 'I asked her/him to run.'
 - b. me uski tək-ja si dorna 1.SG.PLN 3.SG.OBL see-M.SG NPR.3.SG running 'I saw him running.'

In contrast, the verbal coverb precedes the LV kar 'to do', which can be seen for the verbal coverb $\int uru$ 'start' of the LVC $\int uru \ kar$ 'to start', lit. 'start do' in (83).

(83) sara kəm furu kəṭ-a si Sara.F.SG.PLN work.M.SG start do-M.SG NPR.3.SG 'Sara started the work.'

The verbal complement cannot be moved between the MV ak^h 'to ask' and the direct object uski 'her/him, as it induces an ungrammatical sentence. That is, the verbal complement cannot occur in the canonical position of the verbal coverb (see (83) above).

(84) *me uski dor akh-ja si 1.SG.PLN 3.SG.OBL run ask-M.SG NPR.3.SG 'I asked her/him to run.'

Similarly, the verbal coverb $\int uru$ 'start' of the LVC $\int uru \ kar$ 'to start', lit. 'start do' cannot appear in the position of the verbal complement. That is, it cannot occur post verbally, as it induces an ungrammatical sentence demonstrated in (58).

(85) *saima kəm kət-a si ∫uru Saima.F.SG.PLN work.M.SG do-M.SG NPR.3.SG start 'Saima started the work.'

Thus far, we observe the verbal categories do not compete for the same syntactic slot. The next set of diagnostics draw on the similarities between the two classes.

3.4.4.2 Fronting

The fronting diagnostic shows that the two verbal categories behave the same. That is, the coverb and complement can be fronted away from their canonical positions adjacent to the verb without inducing an ungrammatical sentence or intervening with the LVC meaning. This can be seen by comparing (86-a) and (86-b) below.

- (86) a. dor me uski ak^h -ja si run 1.SG.PLN 3.SG.OBL ask-M.SG NPR.3.SG 'I asked her/him to run.'
 - b. Juru saima kəm kət-a si start Saima.F.SG.PLN work.M.SG do-M.SG NPR.3.SG 'Saima started the work.'

3.4.4.3 Adverb Insertion

The canonical position of the verbal predicate is verb final, as illustrated for dor 'to run' in (87-a), which is preceded by the MV ak^h 'to ask' and the third person, singular form of the non-present BE-auxiliary si. In this sentence, we also see that the canonical positioning of the time adverb k > l 'tomorrow' is immediately after the subject. In contrast, example (87-b) shows that the time adverb can enter between the MV, BE-auxiliary sequence, and the verbal complement, without inducing an ungrammatical sentence or affecting the meaning of the LVC.

- (87) a. me kəl uski akh-ja si dor 1.SG.PLN tomorrow 3.SG.OBL ask-M.SG NPR.3.SG run 'I asked her/him to run tomorrow.'
 - b. me uski ak $^{\rm h}$ -ja si kəl dor 1.SG.PLN 3.SG.OBL ask-M.SG NPR.3.SG tomorrow run 'I asked her/him to run tomorrow.'

Similarly, the time adverb $k \ni l$ 'tomorrow' is permitted to enter between the two components of the LVC, without affecting the grammaticality of the sentence or the meaning of the LVC. For example, in (88-a) the time adverb $k \ni l$ 'yesterday' is placed between the verbal coverb $\int u r u$ 'start' and the LV k a r. While, the canonical position of the adverb immediately follows the subject, as illustrated in (88-b).

- (88) a. us kəm Juru kəl kəta si 3.SG.ERG work.M.SG start yesterday do.M.SG NPR.3.SG 'He/She started the work yesterday.'
 - b. us kəl kəm furu kəta si 3.SG.ERG yesterday work.M.SG start do.M.SG NPR.3.SG 'He/She started the work yesterday.'

3.4.4.4 Question Formation

Verbal complements can be questioned, however verbal coverbs cannot be questioned. For example, the verbal complement dor 'to run' of the MV ak^h 'to ask' in (82-a) can be questioned, which can be seen in the question-answer sequence in (89).

(89) a. tu uski kε akh-ja si kar 2.SG.PLN 3.SG.OBL what ask-M.SG NPR.3.SG do 'What did you ask her to do?'
b. dor run

The verbal coverb *furu* 'to start' in (83) cannot be questioned as the meaning of the LVC is affected. That is, the MV meaning of *kar* 'to do' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (66). The change in the meaning induces an ungrammatical sentence.

- (90) a. us kəm-e-ki kɛ kət-a si 3.SG.ERG. work-LOC-OBL what do-M.SG NPR.3.SG 'What did she do to the work?'
 - b. *furu start 'start!'

'Run!'

3.5 Adjectives

The present section illustrates the morphological behaviour of adjectives in respect of their agreement and derivational processes. It also briefly shows how adjectives in Potwari form their comparative and superlative forms.

3.5.1 Inflecting and Uninflecting Adjectives

Morphologically, the majority of adjectives in South Asian languages inflect for gender and number. As shown in Chapter 2, they can be divided into two classes: (i) inflecting adjectives and (ii) uninflecting adjectives. To recap, inflecting adjectives are those that end in the vowel -a and must change their form according to the gender and number of a noun that they modify, whereas the uninflected adjectives have zero inflection (see section 2.3.1.2). However, as shown in section 3.2, nouns do not only inflect for number and gender, they also inflect for case, such as the Layer I case markers: plain case, locative case, and vocative case. Inflecting adjectives must also change their form according to the case of the noun they modify. Their form changes according to the plain case and locative case of the noun. The adjectival paradigm is laid out in (91). In the masculine cells, the adjective is in its bare form in the plain case singular and is marked by the suffix -a, which changes to -e in the plain case plural and the locative singular and plural forms. In the feminine cells, we have -i in the singular forms, while the plural forms are marked by the suffix -ija.

(91) Paradigm: Inflecting Adjective suwa 'red'

	M SG	M PL	F SG	F PL
PLN	suwa	suwe	suwi	suwija
LOC	suwe	suwe	suwi	suwija

3.5.2 Attributive and Predicative Adjectives

A canonical adjective in Potwari is one that can be attributive and predicative. The former can be seen in (92-a) for the inflecting adjective soni/a 'beautiful', in which it modifies the noun kadi 'car'. It can occur in a predicative structure, in which the tense and/or aspect auxiliary follows the adjective, illustrated in (92-b). By following the viewpoint of traditional grammarian (functionalist) authors, such as Croft (1991), Hengeveld (1992), and Bhat (1994), who take the ability to modify nouns to be the defining property of adjectives, we make the stipulation that all Potwari adjectives behave attributively.

- (92) a. me soni kadi kın sa 1.SG.PLN beautiful.F.SG car.F.SG buy NPR.1.SG 'I will buy a beautiful car.'
 - b. mari kadi bari soni ε
 1.GEN.SG car.F.SG very beautiful.F.SG PRS.3.SG
 'My car is very beautiful.'

It appears that the syntactic structure of predicative adjectives is parallel to the syntactic structure of an intransitive verb. For example, compare the intransitive verb dor 'to run' in (93-a) with the inflecting adjective suwi 'red' in (93-b). The predicative adjective and intransitive verb are followed by the number and gender agreement suffixes, which are followed by the non-present BE-auxiliary si. Thus, the tense feature and the gender and number suffixes do not differentiate the two categories. The following properties are employed in differentiating the two categories: if the main predicate is followed by a tense/aspect auxiliary and can form an attributive adjective structure, then the root is categorised as an adjective. However, if it cannot form an attributive structure then it is categorised as a verb.

- (93) a. sara dor-i si Sara.F.SG.PLN run-F.SG NPR.3.SG 'Sara ran.'
 - b. sara suwi si
 Sara.F.SG.PLN red.F.SG NPR.3.SG
 'Sara was red.'

3.5.3 Comparative and Superlative Structures

Further characteristics that we employ in identifying an adjective are their ability to participate in the comparative and superlative structures. Their productive method in expressing in languages such as Urdu (Schmidt, 2007, 318), Hindi (Kachru, 1978, 65-66), and Punjabi (Bhatia, 1993) is by means of phrasal strategies, rather than sentential or morphological devices. Potwari follows the same pattern, in which the phrasal comparison is expressed by a postposition associated with the standard of comparison. The comparative adjectival structure can be seen in (94) below, in which the adjective soni 'beautiful' is followed by the postposition nalu 'with'. Similarly, the most widely used postposition in Punjabi is naalo/kolo 'with' 'from/than', as well as to 'than' and de mukaable (vicc) 'in comparison with' (Bhatia, 1993, 141).

(94) saddaf zainab nalu gəndi ε Saddaf.F.SG.PLN Zainab.F.SG.PLN with dirty.F.SG PRS.3.SG 'Saddaf is dirtier than Zainab.'

The canonical way of expressing the superlative comparison is by inserting $sa:\tau e$ 'all' prior to the comparative adjective structure; adjective + postposition nalu 'with', as illustrated in (95). The $sa:\tau e$ 'all' is cognate with the Punjabi saraa 'all' (Bhatia, 1993, 143). The Punjabi superlative formation can also employ sab 'all' and similarly in the Hindi-Urdu superlative is formed with sab 'all' (Kachru et al., 1976, 66). In contrast, Potwari does not seem to permit sab 'all' as forming part of a superlative.

(95) sami sa:τe nalu fəngi ε
Sami.F.SG.PLN all with good.F.SG PRS.3.SG.
'Sami is the greatest of all.'

The phrasal strategies are summarised in (96).

- (96) a. Comparative: compared entity + standard of comparison + nalu + ADJ + BE-auxiliary
 - b. Superlative: compared entity + sa: re 'all' + nalu + ADJ + BE-auxiliary

Although phrasal strategies are the most productive in Urdu-Hindi and Punjabi, they do exhibit morphological comparative, superlative, adjectival, and adverbial forms, though they are borrowed from either Sanskrit and/or Persian. For instance, Kachru (1978, 65-66), amongst others, notes that derivative affixes in Hindi can be employed with adjectives borrowed from Sanskrit and Perso-Arabic. The Sanskrit suffixes are -tər for comparative and -tər for superlative, and the Persian suffixes are tər for comparative and -tər in for superlative (see Kachru (1978, 66) for examples). This type of comparative and superlative forms occur only in educated speech and texts written in high style (Kachru, 1978, 66). Morphological comparison, although

possible, is also not productive in standard Punjabi. In Lahanda and other north-western dialects, such as Pothohari exhibit the suffix -eraa, which used quite often with adjectives ending in -a (inflecting adjectives) to signify comparative degree, such as vaDDaa 'big' > vaDDeraa 'bigger/elder' and can,gaa 'good' > ca,geraa (Bhatia, 1993, 273). In attaching the suffix -eraa to the adjective, the final vowel is lost. Assuming Bhatia (1993, 273) is referring to Potwari when describing this particular derivational process in "Pothohari", the -eraa does not attach to adjectives. Further research is required in establishing whether this holds for all type of adjectives.

3.5.4 Derivational Morphology

Two of the most productive suffixes used to form adjectives from nouns in Punjabi are -ii and -aa, in which the former suffix expresses the meaning of 'pertaining to', whereas the latter denotes an experience (Bhatia, 1993, 299-300). The derived inflecting adjectives (ending in -aa) agree with their following nouns in number and gender i.e. they have four forms. The latter holds in Potwari; take as an example, the noun puk^h 'hunger', in (97-b).

a. mrki puk^h si
1.SG.OBL hunger.F.SG NPR.3.SG
'I had hunger.'

b. o puk^h-e nalu mər-i gi si
3.SG.PLN hunger.F.SG-LOC with die-NFN go.F.SG NPR.3.SG

The de-nominal adjective formed via the suffix -i/a is illustrated in (98). The predicative form of puk^h 'hunger' agrees in gender and number of the subject, as in (98-a) and (98-b) below. In contrast, the root puk^h in (97) does not inflect for gender or number.

a. o pukh-i/a ε
3.SG.PLN greedy-F.SG/M.SG PRS.3.SG
'He/She is greedy.'
b. o pukh-e ən
3.PL.PLN greedy-M.PL PRS.3.PL
'They are greedy.'

'He/She died of hunger.'

It is a difficult task to determine whether puk^h 'hunger' is in indeed an adjective or a noun in (98), as adjectives are not distinguished morphologically from certain nouns. This is not a novel issue and has been addressed by Bhatia (1993, 94) in the context of Punjabi. The distinguishing properties of the two classes in Punjabi (Bhatia, 1993, 94) also hold for Potwari, which are: (i) adjectives hold distinct semantics to nouns, (ii) an adjective is a modifier of a substantive, (iii) the form of

most adjectives is determined by the gender and number of a noun, whereas nouns are inherently marked for gender, and (iv) adjectives immediately precede a head noun and occur in the attributive position. The basic word order of an adjective phrase is illustrated in (99).

(99) Adjective phrase:

Determiner Quantifier Adjective Noun

The structure is exemplified in (100), in which we have the demonstrative pronoun e in the first slot, the quantifier do 'two' in the second slot, followed by the inflecting adjective, and the noun kurija 'girls'. The adjective kalija is in its feminine, plural form in agreement with the noun kurija 'girls'

(100) e do kal-ija kur-ija seb ka-da si DEM.SG.PROX two black-F.PL girl-F.SG apple.M.SG eat-M.SG NPR.3.SG 'These two black girls ate an apple.'

Similarly, puk^h can occur within the position of the adjective phrase illustrated in (101). Here, the adjective also agrees with the noun kurija in gender and number.

(101) e do puk^h-ija kur-ija seb ka-da si DEM.SG.PROX two hunger-F.PL girl-F.SG apple.M.SG eat-M.SG NPR.3.SG 'These two greedy girls ate an apple.'

Adjectives can also be derived from nouns via zero derivation, for instance *gərmi* 'heat' is a noun in (102) and an adjective in (103) (see also section 6.3.1).

- (102) me is gərmi nal mər-i da sa 1.SG.PLN DEM.PROX.SG hot.F.SG with die-NFN go NPR.1.SG 'I will die with this heat.'
- (103) o gərmi mosəm pasənd kar ni/na 3.SG.PLN hot weather.M.SG like do IMPF.SG.F/IMPF.M.SG (j) ϵ PRS.1.SG 'He/She likes the hot weather.'

3.5.5 Mid-Summary

Traditional grammarians of South Asian languages group adjectives into several sub-classes on the basis of the properties of cooccurrence potential, internal composition, and semantics. This section does not provide such an analysis, as it is not in the remit of the present investigation. Further work is required in dividing adjectives according to the following semantic classes: (i) gradable and non-gradable adjectives, (ii) inherent and non-inherent adjectives, and (iii) stative and dynamic

adjectives¹¹. To conclude, the adjectival properties laid out above are summarised in (104), which are employed in categorising whether a given coverb is an adjective.

(104) Adjectival Properties

- a. ATT: Prototypical adjectives can be attributive.
- b. COMP: Adjectives can form a comparative adjectival structure: compared entity + standard of comparison + nalu + ADJ + BE-auxiliary
- c. SUPR: Adjectives form superlative comparison structures by inserting saraa 'all': compared entity + sa:re 'all' + nalu + ADJ + BE-auxiliary
- d. AGR: Inflecting adjectives mark for gender and number in agreement with a noun.
- e. DE-ADJ NOM: Certain adjectives can be derived from nouns via the suffix -i or -a.

3.5.6 Syntactic Flexibility of an Adjectival Complement

3.5.6.1 Fronting & Movement

The adjectival coverbs and complements precede the verb, as illustrated for the adjectival complement kuf 'happy' in (105-a) and the adjectival coverb sa:f 'clean' in (105-b). In the former example, the MV re 'to stay' takes the adjectival complement kuf, which is cognate with the verb rehna 'stay' in Hindi-Urdu (Kachru, 2006). Kachru (2006, 140-141) refers to it as a linking verb or an intransitive verb that takes a subject complement. Verbs such as hona 'be, become' and bena 'become' are grouped together with rena 'stay'.

- (105) a. usman ku \int re na ϵ Usman.SG.M.PLN happy stay.M.SG IMPF.M.SG PRS.3.SG 'Usman is (always) happy.'
 - b. me kəmça sa:f kət-a si 1.SG.PLN room.M.SG clean do-M.SG NPR.3.SG 'I cleaned the room.'

The above structures differ in their argument structure; the LVC is transitive, whereas the MV-complement structure is intransitive. In Potwari, a transitive adjective appears to be formed via an LV, such as sa:f kar 'to clean', lit. 'clean do' (105-b) and kuf rakh 'to keep', lit. 'happy stay' in (106). Further data is required to make the claim that there are no transitive simple adjectives. In investigating the similarities and differences between complements and coverbs, we look to the behaviour of the object complement of the LVC and the subject complement of the MV.

 $^{^{11}\}mathrm{See}$ Kachru (2006, 67-72) for definitions and examples of such semantic distinctions made for Hindi adjectives.

(106) ina mari bətʃi-ki ku∫ rakʰ-ja si 3.PL.PLN 1.SG.F.GEN child.F.SG-OBL happy put-M.SG NPR.3.SG 'They kept my daughter happy.'

The syntactic structures are otherwise the same in their syntactic flexibility, for example in (107-a) we see that the adjectival complement can be moved from its canonical position shown in (105-a) to the front of the sentence illustrated in (108). Similarly, the adjectival coverb can be moved from its canonical position illustrated in (105-b) to the front of the sentence, shown in (108). The fronting of the adjectival complement and coverb does not interfere with the grammaticality of the sentence nor does it interfere with the meaning of the verbal predicate. That is, the LVC meaning is retained as is the MV-complement meaning.

- (107) a. ku \int usman re na ϵ happy Usman.SG.M.PLN stay-M.SG IMPF.M.SG PRS.3.SG 'Usman is (always) happy.'
 - b. sa:f me kəmça kəţ-a si clean 1.SG.PLN room.M.SG do-M.SG NPR.3.SG 'I cleaned the room.'

In contrast, the object movement operation shows that the object $k \ni m \gamma a$ 'room' of the LVC sa:f kar 'to clean', lit. 'clean do' cannot enter between the two components of the LVC because it affects the basic sentential meaning of the sentence. That is, the adjectival coverb no longer contributes to the meaning of the LVC, rather it behaves attributively. That is, it modifies the object $k \ni m \gamma a$ 'room'. Consequently, the LV kar 'to do' loses its LV meaning to the literal meaning of the MV 'to do'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

(108) #me sa:f kəmra kəṭ-a si
1.SG.PLN clean room.M.SG do-M.SG NPR.3.SG
'I did a clean room.' (Impossible: 'I cleaned the room.')

3.5.6.2 Adverb Insertion

An adverb such as $a:t w \rightarrow k \rightarrow t$ 'every moment' can separate a canonical adjective complement from its MV. For example, the adverb can be moved from its canonical position in (109-a) to between the adjectival complement kuf 'happy' and the MV re 'to stay' without resulting in an ungrammatical sentence (109-b).

(109) a. usman a:τ wəkət ku∫ re na
Usman.SG.M.PLN every moment happy stay-M.SG IMPF.M.SG
ε
PRS.3.SG
'Usman is happy in every moment.'

b. usman ku∫ a:τ wəkət re na
Usman.SG.M.PLN happy every moment stay-M.SG IMPF.M.SG
ε
PRS.3.SG
'Usman is happy in every moment.'

Similar to the fronting diagnostic, the adverb insertion diagnostic tool shows that the adjectival coverb and adjectival complement are similar in their interaction with the adverbs. For example, the adverb k > l 'yesterday' can separate the coverb sa:f 'clean' and LV kar 'to do' (110).

(110) me rũm sa:f kəl kəṭ-i si 1.SG.PLN room.F.SG clean yesterday do-F.SG NPR.3.SG 'I cleaned the room yesterday.'

3.5.6.3 Question Formation

Adjectival complements can be questioned, however adjectival coverbs cannot be questioned. For example, the adjectival complement kuf 'happy' of the MV re 'to stay' in (105-a) can be questioned, which can be seen in the question-answer sequence in (89).

- (111) a. usman kisra re na ϵ Usman.M.SG how stay IMPF.M.SG PRS.3.SG 'How is Usman keeping?'
 - b. ku∫ happy 'Happy.'

The same results are not found for the adjectival coverb sa:f 'clean'. For example, the adjectival coverb sa:f 'clean' of the LVC sa:f kar 'to clean', lit. 'clean do' cannot be questioned, as the basic sentential meaning of the sentence is lost. It is deemed semantically odd to use the coverb independently as an answer to (112-a), as it ceases to contribute to the verbal meaning (112-b). Consequently the MV meaning of kar is interpreted rather than the LV meaning. Due to the thematic conditions of the MV kar 'to do' the question-answer sequence is deemed as semantically odd.

- (112) a. tu uski k ϵ akh-ja si kar 2.SG.PLN 3.SG.OBL what ask-M.SG NPR.3.SG do kəm ϵ -e-ki room.M.SG-LOC-OBL 'What did you ask her to do to the room?'
 - b. #sa:f clean 'Clean!'

3.6 Results

In this chapter, I embarked on an investigation that focused on the morphosyntactic properties and the syntactic flexibility of MV-complement structures consisting of nominal, verbal and adjectival complements and LVCs consisting of nominal, verbal, and adjectival coverbs. Syntactic flexibility was shown to encompass the behaviour of the complements with five syntactic operations, which are as follows: (i) fronting, (ii) adverb insertion, (iii) object movement, (iv) pronominalisation, and (v) question formation. An overview of the similarities and differences are presented in table 3.2.¹² Regardless of the word class, it was shown that LVCs and MV-complement structures behave the same in respect to the fronting and adverb insertion operations. That is, all coverbs and complements can be fronted away from the verbal predicate and the two components of the LVC and MV-complement structure can be separated by an adverb. A main difference between the classes is apparent in their behaviour with the question formation operation; it was shown coverbs cannot be questioned, whereas complements can be questioned. The major difference between adjectival coverbs and complements is that the former form part of a transitive predicate, whereas the latter form part of an intransitive predicate. Interestingly, the LVCs do not interact in a similar manner with the object insertion diagnostic; verbal and nominal coverbs can be separated from a LV by an object but adjectival coverbs cannot be separated from LV. A major difference between the verbal coverbs and complements is their different positions; the latter are post-verbal and the former are pre-verbal. The main difference between nominal coverbs and complements is their ability to undergo pronominalisation; coverbs cannot be substituted by a pronouns, whereas nominal complements can.

¹²Key: FRONT: fronting operation, OBJ: syntactic operation involving object movement, ADV: syntactic operation involving movement of adverb, PRNM: the ability to under go the pronominalisation operation, and Q-FOR: the ability to be questioned.

Table 3.2: Similarities & Differences between Complements & Coverbs

Complements & Coverbs	FRONT	ADV	OBJ	PRNM	Q-FOR
Nominal Complement	✓	✓	✓	✓	✓
Nominal Coverb	✓	✓	✓	X	X
Verbal Complement	✓	✓	-	-	✓
Verbal Coverb	✓	✓	-	-	X
Adjective Complement	✓	✓	-	-	✓
Adjectival Coverb	✓	✓	X	-	×

Interestingly what was shown to be relative to the word class of the complements was the degree of syntactic flexibility, which can be conceptualised as figure 3.1 below. Nominal complements were shown to be the most flexible in their syntactic relation with the MV. While, verbal complements were shown to be marginally more rigid in their relation to the MV than the adjectival complements are to the MV. By looking at the overall results in table 3.2, it seems pre-theoretically that the coverbs' relation with an LV mirror the relation of that the complement types have with an MV.

Figure 3.1: Degree of Syntactic Flexibility Relative to Word Class of Complement

Flexible Nouns	Adjectives Verbs	Rigid	
	Word Class	_	

Looking beyond this chapter, which has been limited in its investigation, it is shown in Chapter 4 and 5 that there is a set of 11 coverbs that do not display the canonical word class properties presented in this chapter. Rather their categorisation is based on their interaction with derivational processes. They are interesting not only based on the latter, but the two components of the LVC are inseparable, which is in direct contrast to the remaining LVCs. Together with their very limited word class properties and rigid syntactic flexibility, it seems these type of LVCs have undergone lexicalisation. The latter is discussed further in Chapter 4, which is first in a line of three chapters that begins the task of applying the diagnostic tools to the agentive kar 'to do' type LVCs.

LIGHT VERB KAR 'TO DO'

4.1 Introduction

The present chapter is dedicated to the application of the diagnostic tools (see Chapter 3) to the agentive LV kar 'to do'. The data presented on the kar-type LVCs supports the argument that coverbs are heterogeneous with complements in respect of their morphosyntactic properties. The kar-type LVCs are categorised into three groups based on the category to which the coverb belongs to independent of the LVC: (i) nouns, (ii) verbs, and (iii) adjectives. The coverb categories are listed in table 4.1. From this list, we observe that LVCs can be formed with English loan words, such as $f\tilde{o}n$ 'telephone', puf 'push', and start 'to start'. The Potwari star 'to do' is in line with other languages such as Panjabi (Romaine, 1986), Urdu (Butt, 2010), Hindi (Davison, 2004), transplanted Hindi (Bhatia, 1982; Moag, 1977), and Tamil (Annamalai, 1978), in that it is particularly susceptible to forming new LVCs with loan words from English and other contact languages. Such facts are pertinent in the categorisation of the coverbs, as we come to see that certain coverbs do not exhibit typical verbal, adjectival, or nominal properties. The latter can be said to be related to their loan word status.

Romaine (1986) argues that the high frequency of borrowed words from English in Panjabi¹ is in fact a consequence of partial relexification from English (Romaine, 1986). In Panjabi, this has led to a number of new verb forms that are not only employed in place of Panjabi LVCs but also in place of simple verbs (see Romaine (1986, 37) for data examples). Romaine's observations are based on data extracted from a sociolinguistic study of Panjabi speakers in Birmingham, who are to differing extents bilingual in English and Panjabi. Interesting parallels can be drawn between the Potwari data on kar 'to do' and the Panjabi kar 'to do'. First, the data is extracted from participants that are bilingual in English and Potwari, which is

¹Certain authors employ "Panjabi" or "Punjabi" when describing the language of the Punjab region of Pakistan and India. In this thesis, both "Panjabi" and "Punjabi" are employed depending on the author under citation (Romaine (1986) employs "Panjabi", while Bhatia (1993) uses "Punjabi".

Table 4.1: Word Class for Coverbs in kar-Type LVCs

Coverbal Element	Word Class
suwa 'red'	Adjective
sa:f 'clean'	Adjective
bənd 'close'	Adjective
fup^h 'silent'	Verb
p ota ta 'to know'	Verb
furu 'start'	Verb
start 'to start'	Verb
kətəm 'finish'	Verb
$\int awar$ 'shower'	Noun
$p \ni mp$ 'to pump'	Noun
$f\tilde{o}n$ 'telephone'	Noun
ulti 'vomit'	Noun
ja:d 'memory'	Noun
gusə 'anger'	Noun
kətəl 'murder'	Noun
bəs 'to stop'	Noun
mədəd 'help'	Noun
malə∫ 'massage'	Noun
puf 'to push'	Noun

closely related to Panjabi. Second, the Potwari kar 'to do' combines with more coverb loans than any other LV, thus making it the most frequent LV. Third, there are examples of English coverb loan + LV complex predicates which are not only being used in place of Potwari LVCs but also in place of simple verbs. Illustrations of the latter can be seen in (1).

- (1) a. SV n
 et f 'to dance' > LVC $d \tilde{a} n s k a r$ 'to dance', lit. 'dance do'
 - b. SV ker 'to play' > LVC ple kar 'to play', lit. 'play do'
 - c. LVC təka mar 'to push', lit. 'push hit' > LVC puf kar 'to push', lit. 'push do'
 - d. LVC furu kar 'to start', lit. 'start do' > start kar 'to start', lit. 'start do'

The restructuring of the Panjabi verb system is not a novel feature. In fact Romaine (1986) notes that it could be cited as an areal feature of South Asia. The latter is linked to the fact the primary sources for non-Indo Aryan loans into related languages such as Hindi-Urdu and Punjabi are Arabic, Persian², Portuguese, Turkic, and English (Shapiro, 2007, 274). Kachru (1978, 36) provides examples of partial relexification from Sanskrit, Persian, and English. Examples are illustrated in (2). The Potwari data presented in this chapter also exemplify Sanskritized, Persianized, and Englishized complex predicates.

²Shapiro (2007) notes that the Persian and Arabic lexical elements in Hindi-Urdu are a result of the 'effects of centuries of Islamic administrative rule over much of north India in the centuries before the establishment of British rule in India.'

(2)

Sanskritized Persianized Englishized 'to pity' daya karna raham karna pity karna

Romaine (1986, 37) (cf. (Kachru, 1978))

In a logical manner, this chapter is divided by the word class in which the coverbs are categorised as independent of the LVC. Section 4.3 is dedicated to LVCs containing verbal coverbs, which leads onto the analysis of LVCs containing adjectival coverbs in section 4.4. In section 4.5, a description and analysis is presented for the noun + LV complex predicates, which are the most frequent type of LVCs and prove to be very productive in creating new LVCs with not only English loan words but also Perso-Arabic loans. Each of these sections comprises of a three-part investigation, which is as follows: (i) morphosyntactic properties of parts of speech, (ii) morphosyntactic properties of coverbs, and (iii) syntactic flexibility of LVCs. Section 4.6 concludes with a brief discussion and summary of the results. I begin with section 2, which focuses on lexical semantic features contributed to the clause by the *kar*-type LVCs and their argument structures.³

4.2 Argument Structure & Lexical Semantics

Pert & Letts (2006, 357) observe that many actions in Mirpuri are expressed via a 'compound verb form consisting of a noun-like item and an operator'. They categorise mar 'to hit' and kar 'to do' as 'two main operators that carry subject-verb gender agreement in the same way as lexical verbs and they also function as lexical verbs when they occur in isolation, referring to generic action' (2006, 357). An example of the latter can be seen in (3), in which kar 'to do' is referred to as an operator, which together with ifara describes the generic action of pointing. These descriptive facts describe an LVC. That is, ifara 'pointing' is the coverb that forms an LVC with the LV kar 'to do'. To recap, the coverbal element, whether it is a noun, an adjective or a verb, is the component that contains the main predicational content. In contrast, the LV inflects for the past tense suffixes, determines agreement patterns, determines the case marking of the subject, and always has a lexical verb corresponding to it. The LV can also contribute other lexical semantic features, such as aspect and agentivity.

³It must be noted that this is a small-scale analysis and by no means accounts for the range of lexical semantic features associated with Potwari LVCs.

(3) danani isara kar ni pi lady.F.SG point do IMPF.F.SG is '(The) lady is pointing'

Pert & Letts (2006, 358)

The lexical verb analogue of the LV kar in (3) can be seen in (4), in which kar 'to do' is referring to a generic action. The lexical verb agrees with the object kam 'work' rather than the subject, as expected for the past tense (see Chapter 2). In (4), the subject can be feminine or masculine, hence the masculine singular inflectional suffix -a attached to the verb is in agreement with the masculine singular nominal object kam 'work'. Also, it is shown that the lexical verb kar 'to do' is compatible with the ergative case and plain case marked subject and incompatible with the oblique case subject uski.

(4) me/us/*uski kəm kət-a si 1.SG.PLN/3.SG.ERG/3.SG.OBL work.M.SG do-M.SG NPR.3.SG 'I/He/She did the work.'

Similar to the LVC in (3), kar 'to do' is an LV that forms an LVC with the coverbal element $b \ni n \not d$ 'close' in (5) forming the LVC meaning $b \ni n \not d$ kar 'to close', lit. 'close do'. Similarly, in (6) kar 'to do' is an LV that forms an LVC with the coverb ulti 'vomit', resulting in the LVC meaning ulti kar 'to vomit', lit. 'vomit do'. In (5) the LV agrees in number and gender with the object winda 'window'. In contrast, the LV in (6) agrees in gender and number with the nominal coverb ulti 'vomit'. The latter is not the expected agreement, rather it is predicted that the LV must agree with the subject, as the coverb ulti 'vomit' is interpreted as being part of the verbal predicate.

- (5) saima wmda bənd kət-a si Saima.F.SG.PLN window.M.SG close do-M.SG NPR.3.SG 'Saima closed the window.'
- (6) usman ulti kət-i ε Usman.M.SG.PLN vomit.F.SG do-F.SG PRS.1.SG 'Usman vomited.'

There is a clear intuition among native speakers that kar 'to do' in sentences (5) and (6) is an LV containing less semantic content than the corresponding lexical verb. These intuitions point out that the LV contains underspecified or bleached semantics. In contrast, the MV analogue kar 'to do' in (4) is not semantically bleached, rather it refers to the literal act of doing, whereas the LV usage in (3), (5), and (6) does not. However, the LV is not completely void of semantic content, contrary to Cattell's (1984) and Grimshaw & Mester's (1988) viewpoint that LVs are merely a functional element with no semantic component. For example, in (4) we see that the lexical

verb kar 'to do' encompasses meanings such as performance/completion/creation (of the work). In comparing the lexical verb meaning to the LV meanings in (5) and (6), it can be said that the meaning is semantically lighter. Take the LV kar 'to do' in (6), one does not literally do the vomit, however it can be argued that there is some degree of performance and creation. Similarly in (5), one does not literally do the door, though the activity does involve an element of performance. The actual lexical semantics of kar 'to do' in a given LVC is in fact variable. For instance, in (5), the LV kar 'to do' is expressing an element of causation, i.e. Saima causes the window to be closed. In contrast, the LV kar 'to do' in (6) adds the notion agentivity to the LVC meaning, i.e. Usman vomited agentively rather than non-agentively.

In the subsequent sections, the lexical semantic features are described and analysed with a focus on agentivity, internal, and external causation. Prior to the latter, we begin with the types of argument structures.

4.2.1 Argument Structure

In context of kar-type LVCs, we merely lay out the argument structures of the entire LVCs. The argument structure for the kar-type LVCs are divided into three types, according to the number of arguments they project and the thematic roles associated with them. A summary of the argument structures are listed in (7) below.

(7)

- a. Intransitive $\langle Agent \rangle$ (e.g./ ulti kar 'to vomit', lit. 'vomit do').
- b. Transitive $\langle Agent, Patient \rangle$ (e.g/ kətəl kar 'to murder', lit. 'murder do').
- c. Transitive $\langle Agent, Theme \rangle$ (e.g/ ja:d~kar 'to remember', lit. 'remember do').

The LVC *ulti kar* 'to vomit', lit. 'vomit do' projects one argument, which is an agent argument, such as the first person, singular, plain case pronoun *me* in (8).

- (8) us ulti kət-i ε
 3.SG.ERG vomit.F.SG do-F.SG PRS.1.SG
 'He/She vomited.'
- In (9), we observe that the LVC $k \ni t \ni l$ k a r 'to murder', lit. 'murder do' projects a transitive argument structure. The first argument m e 'I' is an agent, and the second argument u s man k i 'Usman' is a patient.
- (9) us usman-ki kətəl kət-a si 3.SG.ERG Usman.M.SG.OBL murder do-M.SG NPR.3.SG 'He/She murdered Usman.'

The third type also projects a transitive argument structure, though it differs to (9) in that the second argument is a theme and is in the genitive case. For example in (10), the LVC ja:d kar 'to remember', lit. 'remember do' projects the agent argument

me 'I' and the theme argument backi 'granddad'.

(10) me bedi-ni ja:d kar ni sa 1.SG.PLN granddad-GEN.F.SG memory.F.SG do IMPF.F.SG NPR.1.SG 'I was remembering granddad.'

The argument structures presented in table 4.2 show that all *kar*-type LVCs project an agent argument. Hence they permit an ergative case on the subject as in (11) below and a plain case in (12). In contrast, they are incompatible with the oblique case marker in the past tense and future tense, which can also be seen in (11) and (12). This data point illustrates that the agentivity component coincides with the case marking on the subject, namely ergative or plain. Similarly, in Urdu the +volitional component of meaning is accompanied by the appearance of the ergative case marker -ne on the subject in the perfective (Butt, 1995).

- (11) us/*uski ulti kət-i si 3.SG.ERG/3.SG.OBL vomit.F.SG do-F.SG NPR.3.SG 'He/She vomited.'
- (12) o/*uski ulti kar si 3.SG.PLN/3.SG.OBL vomit.F.SG do NPR.3.SG 'He/She will vomit.'

Table 4.2: Argument Structure of kar-Type LVCs

Coverbal Element	MV	LVC Meaning	INTR/TR	Arguments
bəs 'to stop'	kar	'to stop'	INTR	$\langle Agent \rangle$
ulti 'vomit'	kar	'to vomit'	INTR	$\langle Agent \rangle$
$t fup^h$ 'silence'	kar	'to shut up'	INTR	$\langle Agent \rangle$
$\int aw \partial r$ 'shower'	kar	'to shower'	INTR	$\langle Agent \rangle$
gusə 'anger'	kar	'to do anger'	INTR	$\langle Agent \rangle$
kətəm 'finish'	kar	'to finish'	TR	$\overline{\langle Agent, Patient \rangle}$
bənd 'close'	kar	'to close'	TR	$\langle Agent, Patient \rangle$
furu 'start'	kar	'to start'	TR	$\langle Agent, Patient \rangle$
kətəl 'murder'	kar	'to murder'	TR	$\langle Agent, Patient \rangle$
start 'to start'	kar	'to start'	TR	$\langle Agent, Patient \rangle$
pəmp 'to pump'	kar	'to pump'	TR	$\langle Agent, Patient \rangle$
puf 'to push'	kar	'to push'	TR	$\langle Agent, Patient \rangle$
mədəd 'help'	kar	'to help'	TR	$\langle Agent, Patient \rangle$
suwa 'red'	kar	'to redden'	TR	$\langle Agent, Patient \rangle$
sa:f 'clean'	kar	'to clean'	TR	$\langle Agent, Patient \rangle$
malaf 'massage'	kar	'to massage'	TR	$\langle Agent, Patient \rangle$
$f\tilde{o}n$ 'telephone'	kar	'to telephone'	TR	$\langle Agent, Patient \rangle$
ja:d 'memory'	kar	'to remember'	TR	$\overline{\langle Agent, Theme \rangle}$
<i>pət</i> ə 'know'	kar	'to find out'	TR	$\langle Agent, Theme \rangle$

As previously noted, LVs are viewed as semantically bleached or defective in comparison to their MV analogues. A central question within the complex literature

is related to this intuition. That is, how do we represent that the LV is semantically bleached in comparison to the lexical verb? Various theoretical approaches have addressed this question, though there has been little formalism of the "light" intuition in the way of South Asian languages. Generally, the argument structure approaches are in the vanguard, as they capture the idea that both the LV and the coverbal element jointly contribute to the predication power of the LVC, which are represented in various formal architectures (Alsina, 1993; Butt, 1995; Mohanan, 1994). Grimshaw & Mester (1988) and Rosen (1989) show that LVs are light because they have either a completely empty or merely an incomplete argument structure and thus LVs need to hook onto the argument structure of another predicate i.e. the coverb. Alsina (1993) views LVs as incomplete predicates that must combine with 'another argument taking predicate in order to be syntactically well formed' (Butt, 1995; Alsina, 1993).

Butt (1995, 143-144) elaborates on the incomplete predicate phenomena, by proposing that at a-structure of the LV there is a transparent Event. A transparent Event (ET) requires combination with the a-structure of another predicate and triggers Event or Argument Fusion.⁴ That is, the a-structure of the LV is fused with the argument structure of the co-verbal element. By using Jackendoff's (1990) model of Lexical Conceptual Structure (LCS), Butt goes onto argue that complex predicate formation in Urdu is best analysed as a merger operation on LCS. In employing Jackendoff's (1990) distinction between the Thematic Tier (the roles Agent, Theme, Location, Goal, Source, Route) and the Action Tier (the roles Actor, Undergoer, Patient, and Beneficiary), Butt (1995) proposes that the two Tiers can provide the right mechanism to reflect the intuition that the LV is semantically bleached compared to its MV analogue.⁵

The Thematic Tier essentially encodes the meaning of the verb and is headed by a function, such as CS 'cause'⁶, followed by other functions depending on the verb. One of the issues we come against in applying Butt's analysis is that her analysis for Urdu is based on verbal coverbs, whereas majority of the coverbal elements are nominals in Potwari: fart, vomit, fever, vacuum, hand, help, and memory. It is a difficult task to map on functions that are canonically employed to capture the semantics of a verb. The precise meanings and truth conditions of the functions are not found in Butt's or Jackendoff's (1990) work. To facilitate a formal analysis, it

⁴See Butt (1995) for definitions of Argument Fusion and Event Fusion.

⁵According to Butt (1995, 143) 'a natural way to express semantic bleaching is to have the Thematic Tier contain less semantic information' than the corresponding lexical verb. For example, the LV par 'to fall' in Urdu would first lose information on the Thematic Tier. That is, it will cease to mean 'to fall', but will retain the semantic features of falling, such as involuntariness and inception. Consequently, the semantic information on the Action Tier will not be lost, as the verb still requires an argument. Hence why LVs continue to play a role in determining case marking in Urdu.

⁶Amongst many examples of conceptual functions, BE, GO, STAY are some of them - see Jackendoff (1990) for further examples.

is vital to understand the definitions and truth conditions/values of the functions, which could be facilitated via a compositional analysis.

With that said, we do not reject the claim that the coverb contributes to the argument structure, as it is intuitive by examining the argument structure of the LVCs that the coverb certainly does play a role. The data presented in this thesis can begin addressing such a question. For example, it seems evident in (10) that the nominal coverb ja:d 'memory' is determining the genitive case on the object (also see section 6.2). However by comparing (11) and (12), it appears that the LV is determining the case marking, as kar 'to do' is restricted to the ergative or the plain case. Furthermore, based on a small-scale investigation into all the possible combinations between coverbs and the seven LVs investigated, we observe that only three coverbs can combine with both agentive and non-agentive LVs, of which one of them is ulti 'vomit'. The latter is compatible with the non-agentive LV lag 'to hurt' (13) and as we have already seen, it is compatible with the LV kar 'to do' (11).

(13) uski/*us ulti lag-i si 3.SG.OBL/3.SG.ERG vomit.F.SG hurt-F.SG NPR.3.SG 'He/She vomited.'

The difference seems to be one of agentive subject vs. experiencer subject, in which the former is confined to an ergative or a plain case subject and the latter is confined to an oblique case subject. Based on these data points ((13) and (11)), it can also be argued that it is the LV that determines the case. However, there must be a morphosyntactic and/or semantic property of the coverb *ulti* 'vomit' that allows it to combine with both syntactic structures (agentive and experiencer), as not all coverbs are compatible with an oblique case marked subject or an ergative/plain case subject. These compatibilities are merely suggestive and of course the question regarding whether they are determined by the syntactic and lexical item properties of the coverbal element is one which is reserved for further research⁷.

4.2.2 Lexical Semantics

Romaine's study focuses on two main operators hona 'to become' and karna 'to do'. Out of the 77 verbs drawn from Romaine's sample, karna 'to do' was the most frequent operator, while only 12 verbs occur with hona 'to become', of which five of these have variants with karna 'to do'. The Potwari data presented in this chapter shows that of the 19 kar-type LVCs, seven have variants with the LV o_{asp} 'to become'. In Panjabi, the choice between the two verbs is determined by the stativity of the verb (Romaine, 1986, 39). Intuitions seem to lean to a similar case for Potwari, though with majority of the coverbs belonging to the noun category, it would be a premature argument to claim the nominal coverbs are indeed stative. Nevertheless

⁷Also see discussion in Chapter 8.

it is not implausible, as Ahmed & Butt (2011, 308-9) show, that in Urdu LVCs the eventive vs. statitivity of nouns and the agentivity vs. experience of the action are the main semantic factors that constrain combinatorial possibilities of coverbs and LVs.

Romaine's (1986) study is largely syntactic, with modest claims and insights about the semantic constraints on code-mixed compounds. Romaine (1986, 45) states in order to do a complete justice to the semantic aspects contributed to the clause by the "compound verbs", we would need to go into the semantics of causativity. That is, whatever type of investigation is carried out, it cannot be done without considering the causation component of the LV kar 'to do'. The latter is explored below via the inchoative-causative alternation in context of Potwari. Like Romaine's work, our work here is not exhaustive. However, it is a natural avenue that is necessary in fully understanding the LV kar.

4.2.2.1 The Inchoative-Causative Alternation

The inchoative/causative alternation is a lexical alternation that characterises pairs of transitive (referred to as the causative) and intransitive (also referred to as an inchoative) verbs in terms of their semantic relation to each other. Haspelmath (1993, 90) defines the inchoative and causative verbs as sharing a root, in which the causative involves an agent participant that causes the situation. In contrast, the inchoative excludes such a participant and consequently the situation is viewed as occurring spontaneously. The Inchoative-causative verbs are typically 'verbs of states or a going-on' (Haspelmath, 1993, 94), in which the inchoative verb denotes a change of state (CoS) and the causative verb denotes a bringing about of this change. For example, in the inchoative variant of the verb break in (14), it is the theme participant that undergoes a change of state i.e. becoming broken. While in the causative counterpart, the agent describes the causation of these states.⁸

- (14) a. Rebecca broke the pencil.
 - b. The pencil broke.

Piñón (2001, 1)

Haspelmath's (1993, 91-92) study, inspired by Nedjalkov's (1969) findings on the inchoative-causative alternation, surveys 31 verb pairs across 21 languages. The conclusions drawn from the study show that the manner in which the inchoative-causative alternation is marked cross-linguistically varies considerably. Haspelmath distinguishes five distinct ways in which languages express the inchoative-causative alternation; (i) anticausative, (ii) causative, (iii) equipollent, (iv) suppletive, and/or

 $^{^8\}mathrm{Refer}$ to Chapter 3 for the inchoative-causative alternation in Potwari's sister languages Hindi-Urdu.

(v) labile. In the causative alternation, the inchoative is basic and the causative is derived. In the anticausative alternation, the causative is basic and the inchoative is derived. The causative and anticausative are marked by an affix, a causative auxiliary, or by a stem modification. Suppletive alternations use different verb stems (e.g. English pair *die* and *murder*). Equipollent alternations are both derived from the same stem which express the basic situation, but through different affixes, auxiliary verbs or different stem modifications. In Labile alternations, the same verb is used in the inchoative and in the causative.

It was shown in Chapter 3 that the most productive form of expressing causation in Potwari is morphologically via the suffix -a. The kar-type LVCs can be causativized via -a. This is not surprising since the general consensus amongst the literature of Potwari's sister languages Hindi-Urdu is that almost all verbs can undergo morphological causativization (Ramchand, 2011). The causation of kar-type LVCs via -a is referred to as first causatives. The first causatives encompass two purposes: (i) to turn primary intransitives into transitives and (ii) to turn primary transitives to indirect causatives, in which the latter entail getting something done by another person (Masica, 1991, 319). However, there are other types of causatives, such as analytical causatives (see also Chapter 3). For example, seven of the 19 kar-type LVCs, listed in table 4.3 are examples of analytical causatives.

Table 4.3: Inchoative-Causative Alternation

Causative kar 'to do'	Inchoative o 'to become'
kətəm kar 'finish do'	kətəm o 'finish become'
bənd kar 'close do'	bənd o 'close become'
bəs kar 'stop do'	bəs o 'stop become'
<i>furu kar</i> 'start do'	$\int u c u \ o$ 'start become'
$fup^h kar$ 'silent do'	$fup^h o$ 'silent become'
sa:f kar 'clean do'	sa:fo 'clean become'
kətəl kar 'murder do'	kətəl o 'murder become'

In the above LVCs, the same coverb stem expresses the basic situation of the inchoative and causative, while the LVs distinguish between the causative and the inchoative verb, exemplifying equipollent alternations. In the causative counterparts the LV kar 'to do' expresses the causation, whereas in the inchoative we see the LV o 'to become'. For example, the agent argument us 'he/she' of the LVC $k \ni to$ to finish', lit. 'finish do' in (15-a) is the causer of the finishing eventuality.

⁹The anticausative and causative alternations are referred to as directed alternations, which in almost all cases are found in languages, such as Finnish, Turkish, Mongolian, and Hebrew. Other languages such as English, Japanese, Georgian, and Greek employ a significant amount of non-directed alternations, which include the equipollent, suppletive, and/or labile marking. Also to note, there are considerable differences within languages. For instance Japanese, Georgian and Indonesian prefer equipollent marking, whereas English, German and Greek prefer labile verbs (Haspelmath, 1993, 102).

In contrast, the inchoative counterpart in (15-b), the LV o 'to become' is present, which excludes a causer of the eventuality, as it is viewed as occurring spontaneously. In both examples, the coverb $k \ni t \ni m$ 'finish' remains the same expressing the basic situation. This is similar to Hindi-Urdu, for example $suruu\ karnaa$ 'begin (TR)' and $suruu\ honaa$ 'begin (INTR)' (Haspelmath, 1993, 92). The two LVs are etymologically related but o has undergone fundamental phonological changes.

- (15) a. us didenal kəm kətəm kət-a si 3.SG.ERG deliberately work.M.SG finish do-M.SG NPR.3.SG 'He/She finished the work deliberately.'
 - b. mara kəm kətəm o-i ge-ja ϵ 1.SG.GEN work.M.SG finish become-NFN go-M.SG PRS.3.SG 'My work has finished.'

4.2.2.2 Externally Caused & Internally Caused LVCs

Levin & Rappaport Hovav's (1995) main work deals with unergative and unaccusative verbs. The majority of their work has been centred on devising diagnostic tools to determine whether a verb is unaccusative (Sami arrived) or unergative (Sally sings). They claim that the causative alternation is an unaccusative diagnostic and that a causative lexical semantic analysis is valid for a large class of unaccusative verbs (Levin & Rappaport Hovay, 1995, 80). Intransitive verbs which do not participate in the causative alternation are unaccusative verbs. In contrast, those which do participate in the causative alternation are unergative verbs. Levin & Rappaport Hovay (1995) have distinguished the difference between intransitive verbs which do not have causative counterparts and intransitive verbs which do have causative counterparts, through the concept of control. By adopting the work of Smith (1970), they describe intransitive verbs (unergative verbs) which have causative counterparts as externally caused eventualities and those intransitive verbs (unaccusative verbs) which do not have causative counterparts as internally caused eventualities (Levin & Rappaport Hovav, 1995, 93). 10

An internally caused eventuality is an intransitive verb, which encodes 'some inherent property to the argument of the verb' (Levin & Rappaport Hovav, 1995, 91), which is responsible for bringing about the eventuality. For example, in activity verbs such as *play* and *speak*, the inherent property is the will or volition of the agent who performs the activity. However, not all internally caused verbs are agent oriented (*play*, *speak*). Consider the sentence *kim blushes*; Kim blushes because of the inherent properties of Kim; it is something internal to Kim that makes

¹⁰This generalisation is not void of discrepancies, which is borne out from data collected in McKoon & Macfarland's (2000) corpus based investigation. The investigation encompassed 21 verbs internally caused COS verbs categorised by Levin & Rappaport Hovav (1995). Their results showed that participation in transitive constructions cannot be the sole factor distinguishing externally vs. internally caused COS verbs. We at present gloss over such criticisms, as it is not within the aims of this thesis.

Kim blush. Verbs of emotions or bodily processes are typically internally caused. Therefore it can be said agentivity is a sufficient condition of internal causation, though not a necessary condition.

Potwari distinguishes agentive and internally caused eventualities, as well as non-agentive and internally caused eventualities. The intransitive mar 'to hit' and kar-type LVCs are agentive LVCs that are internally caused. In contrast, the LVs e 'to come', lag 'to hurt', and pe 'to attack' type LVCs are non-agentive LVCs that are internally caused. The generalisations are based on the agentivity diagnostics presented in Chapter 2, which are repeated (for convenience) in (16).

(16) Agentivity Diagnostics

- a. The ability to be modified by an agent oriented adverb such as didenal 'deliberately'.
- b. The happen vs. do agentivity diagnostic (Cruse, 1973).

Externally caused verbs differ to internally caused verbs in that by nature they imply the existence of an external cause with immediate control over bringing about the eventuality described by the verb. The external control can be by an agent, an instrument, a natural force, or a circumstance. For example, consider the verb break; something breaks because of the existence of an external cause, something does not break because of its properties. Levin & Rappaport Hovav (1995, 93) claim that the inchoative-causative alternation can distinguish internally caused and externally caused verbs. In line with these claims, I categorise the inchoative counterparts shown in table 4.3 as externally caused LVCs based on their ability to participate in the inchoative-causative alternation. For example, the LVC kətəm o 'to become finished', lit. 'finish become' is categorised as an externally caused verb because it has a causative counterpart, illustrated in (15) above.

The causative counterparts (in table 4.3) are categorised as agentive, as they pattern with the do-clause and they can be modified by an agent oriented adverb. For example, (15-a) above shows that the LVC can be modified by didenal 'deliberately'. By contrasting (17) and (18) below, we can see that the LVC patterns with the question-answer sequence of the do-clause, rather than the happen-clause. This further supports the claim that the inchoative counterparts in table 4.3 are agentive LVCs.

- (17) a. usman ke kət-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?'
 - b. us kəm kətəm kət-a si 3.SG.ERG work.M.SG finish do-M.SG NPR.3.SG 'He/She finished the work.'

- (18) a. usman-ki kε o-ja si
 Usman.M.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Usman?'
 - b. #us kəm kətəm kət-a si 3.SG.ERG work.M.SG finish do-M.SG NPR.3.SG 'He/She finished the work.'

The remaining intransitive LVCs are categorised as internally caused LVCs because of their inability to alternate in the inchoative-causative alternation. They are as follows: ulti kar 'to vomit', lit. 'vomit do', bəs kar 'to stop', lit. 'stop do', fup kar 'to quieten', lit. 'silent do', gusə kar 'to do anger', lit. 'anger do', and fawər kar 'to shower', lit. 'shower do'. By contrasting (19-a) and (19-b), we can see the intransitive LVC ulti kar 'to vomit', lit. 'vomit do' fails to have a causative counterpart. That is, the insertion of an external cause (the first person pronoun me) in (19-b) induces an ungrammatical sentence.

- (19) a. me didenal ulti kət-i ε fir o
 1.SG.PLN deliberately vomit.F.SG do-F.SG PRS.1.SG then 3.PL.PLN
 sotf^h sən me mond-i ja
 think NPR.3.PL 1.SG.PLN. ill-F.SG PRS.1.SG
 'I deliberately vomited so they will think I am ill.'
 - b. *me uski ulti kət-i si 1.F.SG.PLN 3.F.SG.OBL vomit.F.SG do-F.SG NPR.3.SG 'I vomited him/her.'

That is not to say that the internally caused LVCs cannot form causatives morphologically. As mentioned above, the kar-type LVCs can be causativized via the productive causative marker -a. The latter is illustrated for the LVC ulti kar 'to vomit', lit. 'vomit do' in (20). Levin (1993, 31) (Abusch, 1985, 1986; Brousseau & Ritter, 1991; Cruse, 1972, 1973; Davidse, 1992; Dixon, 1991; Gawron, 1983; Hale & Keyser, 2013; Haliday, 1967; Huddleston, 1970; Ikegami, 1970; Lee, 1970; Pinker, 1989/2013) label such instances as "induced action alternations" rather than an instance of the inchoative-causative alternation, which primarily involve a subset of run verbs. It differs from the causative-inchoative alternation in that the causee is typically an animate volitional entity that is induced to act by the causer. This alternation is also referred to as "accompanied causation" because in certain transitive variants, the causer is interpreted not only to cause the causee to move but also to be accompanying the causee. However, as noted by Levin (1993), the accompaniment interpretation is not necessary (see Levin (1993, 31) for an example of the latter). We refer to internally caused LVCs that do not canonically participate in the inchoative-causative alternation, as participating in the induced action alternation when causativized via the affix -a (e.g. ulti kar 'to vomit', lit. 'vomit do').

(20) me uski ulti kar-a si 1.SG.PLN 3.F.SG.OBL vomit.F.SG do.F.SG-CAUS NPR.3.SG 'I made her vomit.'

The internal and external causation can also be diagnosed by an adverbial modifier that reflects the presence of an external cause (Levin & Rappaport Hovav, 1995; Chierchia, 2004). Chierchia (2004, 42) shows that an adverbial modifier such as the Italian phrase da se 'by itself' can reflect the cause found in external caused verbs. The da se can appear with the alternating intransitive verbs, though it cannot appear with those non-alternating intransitive verbs. In applying the by itself diagnostic to English, it is noted that the by itself phrase in English has two interpretations: 'with outside help' and 'alone' (Levin & Rappaport Hovav, 1995, 88). For the purposes of diagnosing external causation, only the first interpretation is relevant to Chierchia's (2004) point (Levin & Rappaport Hovav, 1995, 88). (Levin & Rappaport Hovav, 1995, 88) show that the intransitive verbs that do not participate regularly in the causative alternation do not appear with the adverbial, whereas the alternating intransitive verbs do appear with the adverbial. Take as an example, the verb blush, which when used with the 'by itself' phrase denotes that x blushed 'alone' rather than 'without outside help'.

The assumption is then that internally caused verbs cannot appear with the phrase 'by itself'. The interaction of the Potwari reflexive pronoun appear by itself' with internally caused verbs is in line with Levin & Rappaport Hovav's (1995) and Chierchia's (2004) observations. That is, internally caused LVCs (as well as verbs - see Nazir (2009) and Nazir (2010)) cannot appear with appear by itself (without outside help)'. For example, the internally caused LVC ulti kar 'to vomit', lit. 'vomit do' can occur with the appear by itself' phrase, however only in the 'alone' interpretation. There is no 'without outside help' interpretation, which is the expected pattern.

(21) us apne-ap ulti kət-i si 3.SG.ERG REFL-REFL vomit.F.SG do-F.SG NPR.3.SG 'He/She vomited by himself/herself.'

In respect to the agentivity feature, we see also in (19-a) above that the LVC can be modified by the agent oriented adverb didenal 'deliberately', without inducing a semantically infelicitous sentence. The question-answer sequence diagnostic below also shows that the internally caused LVCs are agentive, as they pattern with the doclause, rather than the happen-clause. For example, in (22) the sentence is deemed as semantically felicitous because the LVC is agentive.

(22) a. usman kε kət-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?' b. usman ulti kət-i ε Usman.M.SG.PLN vomit.M.SG do-F.SG PRS.3.SG 'Usman vomited.'

In contrast, the LVC *ulti kar* 'to vomit', lit. 'vomit do' is deemed as semantically infelicitous in (23), as the LVC is agentive rather than non-agentive¹¹.

- (23) a. usman-ki kε o-ja si
 Usman.M.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Usman?'
 - b. #usman ulti kət-i ε Usman.M.SG.PLN vomit.M.SG do-F.SG PRS.3.SG 'Usman vomited.'

4.2.2.3 Non-Alternating Transitive LVCs

According to Levin and Rappaport Hovav (1995), externally caused verbs are basically causative, hence transitive. The remaining set of LVCs are transitives, which I categorise as externally caused verbs that do not have a inchoative counterpart. They are as follows: fõn kar 'to telephone', lit. 'telephone do', pəṭa kar 'to find out', lit. 'know do', pəmp kar 'to pump', lit. 'pump do' puf kar 'to push', lit. 'push do', maləfkar 'to massage', lit. 'massage do'. For example, by contrasting (24-a) and (24-b) we see that the LVC fõn kar 'to telephone', lit. 'telephone do' fails to participate in the inchoative-causative alternation. Similar to the above LVCs, the non-alternating transitive class is agentive. For example, we can see that fõn kar 'to telephone', lit. 'telephone do' can be modified by didenal 'deliberately' in (24-a) without inducing a semantically infelicitous sentence.

- (24) a. us mīki dzīdenāl fon kət-a si 3.SG.ERG 1.SG.OBL deliberately phone.M.SG do-M.SG NPR.3.SG 'He/She telephoned me deliberatley.'
 - b. us mīki fõn kət-a si 3.SG.ERG~1.SG.OBL~phone.M.SG~do-M.SG~NPR.3.SG 'He/She telephoned me.'

The LVC also patterns with the question-answer sequence of the do-clause in (25), rather than the happen-clause shown in (26). In the latter, the sentence is deemed as semantically infelicitous.

- (25) a. usman kε kət-a si Usman.M.SG.PLN what do-M.SG NPR.3.SG 'What did Usman do?'
 - b. us miki fõn kət-a si
 3.SG.ERG 1.SG.OBL phone.M.SG do-M.SG NPR.3.SG
 'He/She telephoned me.'

 $^{^{11}}$ It is shown in Chapter 5 that the coverb *ulti* 'vomit' can combine with the LV *lag* 'hurt', in which the LVC is categorised as an internally caused, non-agentive eventuality.

- (26) a. usman-ki kε o-ja si Usman.M.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Usman?'
 - b. #us mīki fõn kət-a si 3.SG.ERG~1.SG.OBL~phone.M.SG~do-M.SG~NPR.3.SG 'He/She telephoned me.'

4.2.3 Summary

The preceding section focused on the typological features of the *kar*-type LVCs, the argument structure, and the lexical semantic features of the LVC. We saw that the lexical verb *kar* 'to do' in (4) and the LV *kar* 'to do' in (5) and (6) are identical in their agreement patterns and syntactic positioning; the coverb and complement precede the verb *kar* 'to do', while the tense/aspect auxiliaries follow the verb. The structures are distinct in their meanings, with the LV containing a semantically "lighter" meaning in comparison to the MV analogue. The subsequent sections move onto the investigation of the morphosyntactic similarities and differences between coverbs and complements.

4.3 Verb Class

The distribution of mixed compounds¹² in Panjabi shows no instances of noun + verb mixed compounds, as can be seen in table 4.4 (Romaine, 1986, 38). This is strikingly different to the majority of the LVCs presented in this thesis. We come to observe in this chapter (and the following chapters) that the most productive Potwari LVCs consist of nominal coverbs. In total we investigate 7 LVs, of which only the LVs o 'to become' (see Chapter 7) and kar 'to become' appear to combine with adjectival and verbal coverbs. Like Panjabi, the verbal coverbs are frequently loans from English and other languages, such as Persian, Urdu, and Arabic. This fact is pertinent in the categorisation of the verbal coverbs because they do not exhibit canonical verbal properties (nor do they exhibit nominal or adjectival properties). The latter can be said to be related to their loan word status.

4.3.1 Word Class Independent & within LVC

The categorisation of a verb is based on derivational morphology and general verb properties introduced in Chapter 3. However, we come to see in the present section that roots listed in listed in (27) are not prototypical verbs because they do not manifest the typical verb properties listed in (28) (repeated for convenience).

¹²Romaine (1986) notes there are various names employed to describe LVCs depending on the author. However she does not state the motivation for her label nor does she shed light on whether the "compounds" are examples of LVCs. For the purposes of this discussion, we assume such compounds are indeed LVCs. However, empirical data is required to support the latter.

Table 4.4: Types of Mixed Compounds in Panjabi (Romaine, 1986, 38)

Compounds with hona:

Verb (English) + operator (Panjabi) e.g./involve hona
Verb + Preposition (English) + operator (Panjabi) e.g./cut off hona

Compounds with kərna:

Verb (English) + operator (Panjabi) e.g./appreciate kərna
Verb + Preposition (English) + operator (Panjabi) e.g./pick up kərna
Noun (English) + Verb (English) + Operator (Panjabi) e.g./exam pass kərna
Gerund/Verbal noun (English) + Operator (Panjabi) e.g./lobbying kərna

The latter is perhaps related to the fact they are loans, for example *start* 'to start' is an English loan, *kəṭəm* ' to finish', *furu* 'to start' *tfup* 'to quieten', and *pəṭa* 'to know' are cognates of Punjabi and Urdu. Their categorisation as verbs is therefore based on their ability to occur with tense auxiliaries independent of the LVC and their inability to possess nominal and adjectival properties.

- (27) Verb Class: #\(\mu p \) 'to quieten', p
 otin ta ' 'to know', $k
 otin ta ' to finish', \(\int u r u ' to \) start', and <math>start$ 'to start'.
- (28) Verbal Properties
 - a. Canonical verbs take the non-finite marker -i.
 - b. Prototypical verbs inflect for gender and number suffixes in the past tense.
 - c. Typical verbs have the ability to take the morphological causative marker -a or -wal.
 - d. Prototypical verbs take the imperfective aspect: auxiliary na/ni
 - e. Canonical verbs can be nominalised via the imperfective auxiliary ni + the derivational affix o (e.g. dor ni-o 'running').

4.3.1.1 Verbal Properties

Examples (29) - (33) show that the verbal roots precede the non-present tense BE-auxiliary si or the present tense BE auxiliary ε . For example, the root $p \not= ta$ in (29), the root $k \not= ta$ "to finish" in (30), and chup "to quieten" in (31) are followed by the two BE-auxiliaries.

- (29) sara-ki mara pəṭ-a si/ ϵ Sara.F.SG-OBL 1.GEN.SG know-M.SG NPR.3.SG/PRS.3.SG 'Sara knew/knows about me.'
- (30) pani kətəm si/ϵ water.M.SG finish NPR.3.SG/PRS.3.SG 'The water was/is finished.'

(31) o ffup si 3.SG.PLN quiet NPR.3.SG 'He/She was quiet.'

Similarly, the root $\int uru$ 'to start' and start 'to start' can also be followed by the two BE auxiliaries, shown in (32) and (33). start 'to start' is an example of an English loan that has entered into Potwari by forming an LVC with the LV kar 'to do'. Loan words can be borrowed as verbs or as nouns to form an LVC with kar 'to do'. The loan start 'to start' has taken on verbal characteristics rather than nominal characteristics, which is not the case for majority of the English loans. It appears to be following the behaviour of the native $\int uru$ 'to start', which is a verb. A question often raised within South Asian languages is as follows. Why is a particular word borrowed into a language when there exists an equivalent? I do not begin to dissect this question, as it is outside of my aims. However, it can be noted that two verbs perhaps differ in their semantic scope. For example, the two are not interchangeable, which appears to be related to their thematic conditions. In (33), $\int uru$ 'to start' cannot replace start 'to start', as it induces a semantically infelicitous sentence. However, in (32), start 'to start' can replace the simple Potwari verb. A similar discussion on the interchangeability of native Panjabi roots and borrowed English roots can be found in Romaine (1986). Native intuitions suggest that the thematic conditions are perhaps related to aspect. The latter is interesting for future research on the aspectual contributions the coverbs make within the LVCs.

- (32) kəm ∫uru/start si/ε work.M.SG start/start NPR.3.SG/PRS.3.SG 'The work was/is started.'
- (33) kədi start/# furu si/ ϵ car.F.SG start/start NPR.3.SG/PRS.3.SG 'The car was/is started.'

All the verbal roots appear to be restricted in the environments shown in the above examples (29) - (33), environments that are similar to the latter, and their LVC. Thus other than the tense property, the roots fail to (i) take the non-finite marker -i, (ii) causativise via the derivational affix -a, (iii) nominalise via ni o, and (iv) combine with the imperfective auxiliary na^{13} . For example, pata 'to know' fails to take the non-finite marker as illustrated in (34).

(34) *rtε kəm pət-i tfəŋgi gəl ε here work.M.SG know-NFN good.F.SG thing.F.SG PRS.3.SG 'Knowing the work here is a good thing.'

 $^{^{13}}$ This imperfective auxiliary is in the third person, masculine singular form; other forms of the imperfective auxiliary are not listed here. All forms can be seen in Chapter 2.

Similarly, $\int ucu$ 'to start' and $k \to t \to m$ 'to finish' fail to take the non-finite marker -i, shown in (35) and (36).

- (35) *kəm ∫ur-i fəjər tu bad bəri tfəŋgi gəl
 work.M.SG start-NFN morning.prayer tu after very good.F.SG thing.F.SG
 ε
 PRS.3.SG
 'Starting your work after morning prayer is a very good thing.'
- (36) *kəm kətəm-i tfəngi gəl ε work.M.SG finish-NFN good.F.SG thing.F.SG PRS.3.SG 'Fininshing your work is a good thing.'

The roots do not have the ability to occur with the imperfective auxiliary na, as we can see in (37) and (38) for $k \not = t \not = m$ 'to finish' and $\int u r u$ 'to start'.

- (37) *me e kətəm na si/ ϵ 1.SG.PLN DEM.PROX.SG finish IMPF.M.SG NPR.3.SG/PRS.3.SG 'I was/is finishing this.'
- (38) *me e \int uru na si/ ϵ 1.SG.PLN DEM.PROX.SG start IMPF.M.SG NPR.3.SG/PRS.3.SG 'I was/is starting this.'

Also, this can be observed for the root p
otin ta 'to know' in (39). This is possibly related to the lexical semantic properties of p
otin ta 'to know', as it seems to be a stative verb. Stative verbs, such as p
otin ta n
otin ta n

(39) *miki e pəṭa na ε
1.SG.OBL DEM.PROX.SG know IMPF.M.SG PRS.3.SG
'I am knowing this.'

Prototypical verbs can be nominalised via the imperfective auxiliary ni and the derivational affix o (see Chapter 3 for data examples). However, the verbal roots listed in (27) do not participate in the IMPF + derivational affix o nominalisation process. Take as examples, the verbs furu 'to start' and k to finish in (40) and (41).

- (40) *me kəm furu ni-o pəsənd kar ni ϵ 1.SG.F.PLN work.M.SG start IMPF.F.SG-o like do IMPF.F.SG PRS.3.SG 'I like starting work.'
- (41) *me kəm kətəm ni-o pəsənd kar ni ε
 1.SG.F.PLN work.M.SG finish IMPF.F.SG-o like do IMPF.F.SG PRS.3.SG
 'I like finishing work.'

Furthermore, the roots do not have the ability to take the causative marker - a. For example, p
i t a 'to know' does not have the ability to take the causative -a,

illustrated in (42).

(42) *us miki pəta-a-ja si 3.SG.ERG me like-CAUS-M.SG NPR.3.SG '*He/She knowed me.'

4.3.1.2 Adjectival Properties

In Chapter 3, we saw that verbs and predicative adjectives are identical in their syntactic structure. We made the stipulation that all Potwari adjectives behave attributively. Thus, the attributive structure is employed as a way of differentiating the verbal and adjectival category, as are other adjectival properties, repeated (for convenience) in (43).

(43) Adjectival Properties

- a. ATT: Prototypical adjectives can be attributive.
- b. COMP: Adjectives can form a comparative adjectival structure: compared entity + standard of comparison + nalu + ADJ + BE-auxiliary.
- c. SUPR: Adjectives form superlative comparison structures by inserting saraa 'all': compared entity + sa:re 'all' + nalu + ADJ + BE-auxiliary.
- d. AGR: Inflecting adjectives mark for gender and number in agreement with a noun.
- e. DE-ADJ NOM: Certain adjectives can be derived from nouns via the suffix -i or -a.

In (44) we see that furu 'to start' cannot modify the noun ka:ni 'story', as it results in an ungrammatical sentence. Similarly, $k \ni \underline{t} \ni m$ 'to finish' does not participate in the attributive structure, as it cannot modify nouns, such as $b \ni \underline{t} \ni l$ 'bottle', illustrated in (44-b).

- (44) a. *furu ka:ni start story.F.SG 'Start story.'
 - b. *e kətəm bõtəl DEM.PROX.SG empty bottle 'This finished/empty bottle.'

The verbal roots do not participate in the comparative or superlative adjectival structures. For example, fup 'to be quiet' and pota 'to know' cannot form a comparative structure, as illustrated in (45) and (46).

(45) *saddaf-ki sara nalu tfup ε Saddaf.F.SG-OBL Sara.F.SG.PLN with quiet PRS.3.SG 'Saddaf is quieter than Sara.' (46) *saddaf-ki sara nalu pəta ε
Saddaf.F.SG-OBL Sara.F.SG.PLN with know PRS.3.SG
'Saddaf knows more than Sara.'

Rather they participate in what we label the general comparative,¹⁴ shown in (47) for pəta 'to know'. The general comparative structure comprises of the comparative adverb $s \ni d \varepsilon$ 'more' prior to the verbal root and the postposition is in the post verbal root position, whereas in the comparative adjective structure the postposition precedes the adjective and there is no comparative adverb.

(47) saddaf-ki sədε pəta ε sara nalu Saddaf.F.SG-OBL more know PRS.3.SG Sara.F.SG.PLN with 'Saddaf knows more than Sara.'

The verbal roots also fail to participate in the superlative structures, take as an example the the verbal root fup 'to quieten' in (48).

(48) sami sa:τe nalu ffup ε Sami.F.SG.PLN all with quiet PRS.3.SG. 'Sami is the quietest of all.'

4.3.1.3 Nominal Properties

Evidence in support of the roots in (27) behaving as verbs is also drawn from the behaviour of the roots with the formal criteria of nouns in Potwari, listed in (49). The following data sets are dedicated to showing that the roots fail to exhibit such properties.

(49) Nominal Properties

- a. **CASE:** Canonical nominal complements can take the oblique case marker -ki whereas mass nominal complements and non-count singular nominal complements cannot due to the DOM rules.
- b. **DEM:** Nouns can be determined by demonstrative pronouns, such as e 'this', o 'that', and/or is 'this'.
- c. **AGR:** The gender and number of a noun can be reflected in agreement patterns of a past tense MV and by the modifying inflecting adjective.
- d. **ADJ:** Has the possibility of taking a descriptive modifier such as feminine or masculine form adjectives like *kali* 'black (F)' or *kala* 'black (M)'
- e. PL: Pluralize via an overt plural marker -e/-a or via null affixation.

Characteristic of these roots is their inability to be modified by an adjective. Take as an example, the feminine or the masculine adjective forms suwa/i 'red'

 $^{^{14}}$ Prototypical verb and adjectives also participate in the general comparative, such as ka 'to eat' and suwa 'red'.

cannot modify $p \ni ta$ 'know', as illustrated in (50). These descriptive points illustrate that the root does not assign number or gender, which is a canonical noun feature.

(50) *suwa/i pəṭa red.M.SG/F.SG know 'The red know.'

Further illustrations can be seen for the root $\int uru$ 'to start' in (51-a) and $\int uru$ 'to quieten' in (51-b).

- (51) a. *fjənga/i furu good.M.SG/F.SG start 'A good start.'

Similarly, they cannot be determined by a determiner, as illustrated for the root fup 'to quieten' in (52).

(52) me *e tfup na pəsənd kar ni 1.SG.PLN DEM.PROX.SG silence NEG like do IMPF.F.SG 'I am not liking this silence.'

4.3.1.4 Morphosyntactic Similarities & Differences between Verbal Coverbs & Complements

I now come to address the main question regarding whether the verbal coverbs display the same morphosyntactic properties to verbal complements. Canonical verbal complements appear in their bare forms, as illustrated in (53). In (53), the verbal complement dor 'run' is in its bare form and it is the MV ak^h 'to ask' that inflects for the past tense suffixes.

Similarly, verbal coverbs also appear in their bare form and it is the LV that carries the past tense suffixes. For example, the verbal coverb furu 'to start' in (54) appears in its bare form when part of the LVC furu kar 'to start', lit. 'start do'. The masculine, singular inflection marker -a is attached to kar 'to do' in agreement with the masculine, singular object $k \ge m$ 'work'.

(54) sara kəm furu kəta si Sara.F.SG.PLN work.M.SG start do-M.SG NPR.3.SG 'Sara started the work.' It appears that the two classes are similar in respect to their form, however a major difference that crucially separates the two classes is their differing positions. We turn to the latter in the section below and discover other similarities and differences between the two classes, in respect of their syntactic flexibility.

4.3.2 Syntactic Flexibility

I employ the syntactic flexibility diagnostic tools introduced in Chapter 3, in which each syntactic mechanism is discussed in detail. The diagnostics are as follows: (i) object movement, (ii) fronting, (iii) adverb insertion, and (iv) question formation.

4.3.2.1 Positioning

One of the major differences between a verbal complement and coverb is to their differing positions within the verbal predicate. A verbal complement is always postverbal, as illustrated in (55). The verbal complement *dor* 'run' in its root form and follows the MV and BE-auxiliary.

(55) me uski akh-ja si dor $1.SG.PLN\ 3.SG.OBL\ ask-M.SG\ NPR.3.SG\ run$ 'I asked her/him to run.'

In contrast, the verbal coverb precedes the LV kar 'to do', which can be seen for the verbal coverb furu 'start' of the LVC furu kar 'to start', lit. 'start do' in (56).

(56) sara kəm ∫uru kəṭ-a si Sara.F.SG.PLN work.M.SG start do-M.SG NPR.3.SG 'Sara started the work.'

The verbal complement cannot be moved between the MV ak^h 'to ask' and the direct object uski 'her/him', as it induces an ungrammatical sentence. That is, the verbal complement cannot occur in the canonical position of the verbal coverb (see (56) above).

(57) *me uski dor akh-ja si 1.SG.PLN 3.SG.OBL run ask-M.SG NPR.3.SG 'I asked her/him to run.'

Similarly, the verbal coverb $\int uru$ 'start' of the LVC $\int uru \ kar$ 'to start', lit. 'start do' cannot appear in the position of the verbal complement. That is, it cannot occur post verbally, as it induces an ungrammatical sentence (59).

(58) *saima kəm kət-a si ∫uru Saima.F.SG.PLN work.M.SG do-M.SG NPR.3.SG start 'Saima started the work.' Thus far, we observe the verbal categories do not compete for the same syntactic slot. The next set of diagnostics draw on the similarities between the two classes.

4.3.2.2 Object Movement

The verbal coverb $\int uru$ 'start' and the LV kar 'to do' can be separated by the object $k \ni m$ 'work', whilst retaining the grammaticality of the sentence, as illustrated in (59).

(59) saima ∫uru kəm kət-a si na Saima.F.SG.PLN start work.M.SG do-M.SG NPR.3.SG TOP 'Saima started the work.'

(60) *us kətəm kəm kət-a si 3.SG.ERG finish work.M.sg do-M.SG NPR.3.SG 'He/She finished the work.'

The components within MV-complement structure are not separable. For example, the object uski of the MV ak^h 'to ask' in (61) cannot be placed between the MV and the verbal complement, as it induces an ungrammatical sentence.

(61) *me akh-ja si uski dor 1.SG.PLN ask-M.SG NPR.3.SG 3.SG.OBL run 'I asked her/him to run.'

4.3.2.3 Fronting

The LVCs can also be separated via the fronting operation. For example, the coverb $\int uru$ 'start' can be moved from its canonical positions to the front of the sentence without inducing an ungrammatical sentence, as shown n (62). All the V + V complex predicates behave in the same manner, with the exception of the LVC $k \partial_t \partial_t m \ kar$ 'to finish', lit. 'finish do'. The latter LVC comprises of syntactically tighter units. For example, in (63) the coverb $k \partial_t \partial_t m$ 'finish' cannot be fronted away from the LV kar 'to do' as it induces an ungrammatical sentence. This particular LVC was also shown to be inseparable via the object insertion operation (see (60)).

- (62) Juru saima kəm kəṭ-a si na start Saima.F.SG.PLN work.M.SG do-M.SG NPR.3.SG TOP 'Saima started the work.
- (63) *kətəm us kəm kət-a si finish 3.SG.ERG work.M.sg do-M.SG NPR.3.SG 'He/She finished the work.'

The components of the LVC were shown to be inseparable via the object insertion diagnostic. However, the verbal complement can in fact be fronted away from the verbal predicate, without inducing an ungrammatical sentence, as illustrated in (64).

(64) dor me uski akh-ja si run 1.SG.PLN 3.SG.OBL ask-M.SG NPR.3.SG 'I asked her/him to run.'

4.3.2.4 Adverb Insertion

The time adverb $k \ni l$ 'tomorrow' is permitted to enter between the two components of the LVC, without affecting the grammaticality of the sentence or the meaning of the LVC. The canonical position of the adverb immediately follows the subject, as illustrated in (65-b). In (65-a), the time adverb $k \ni l$ 'yesterday' is placed between the verbal coverb furu 'start' and the LV kar, which does not affect the grammaticality or the basic sentential meaning of the sentence. The same results are found for all V + V complex predicates.

- (65) a. us kəm furu kəl kəta si 3.SG.ERG work.M.SG start yesterday do.M.SG NPR.3.SG 'He/She started the work yesterday.'
 - b. us kəl kəm \int uru kəta si 3.SG.ERG work.M start yesterday do.M.SG NPR.3.SG 'He/She started the work.'

In Chapter 3, we observe that the time adverb $k \ni l$ 'tomorrow' can also enter between the MV, BE-auxiliary sequence, and the verb complement without inducing an ungrammatical sentence or affecting the meaning of the LVC.

4.3.2.5 Question Formation

In respect of the adverb insertion and fronting mechanisms, we observe no differences between the complements and coverbs. With the question formation operation, we see that the two classes behave differently. Verbal coverbs cannot be questioned (see Chapter 3), however verbal complements can be questioned. For example, the coverb $\int uru$ 'to start' in (56) cannot be questioned as the meaning of the LVC is affected. That is, the MV meaning of kar 'to do' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in

(66). The change in the meaning induces an ungrammatical sentence.

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(66) a. us kəm-e-ki kɛ kət-a si 3.SG.ERG. work-LOC-OBL what do-M.SG NPR.3.SG 'What did she do to the work?' b. *furu
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b. *Juru start 'start!'

4.3.3 Summary

Little variation is apparent amongst the behaviour of LVCs, as almost all LVCs are susceptible to separability. That is, they can undergo syntactic movement operations that separate coverbs and LVs, whilst retaining the grammaticality and basic sentential meaning of the sentence. With that said, the components of the LVC kətəm kar 'to finish', lit. 'finish do' are inseparable. It is shown in the remaining part of the chapter that this not the only LVC that is not susceptible to separability. The LVC kətəm kar 'to finish', lit. 'finish do' reflects syntactically tight units, patterning with the syntactic flexibility of the class B nominal roots (see section 4.5 below). This data point indicates there are two types of LVCs: (i) separable LVCs and (ii) inseparable LVCs. Also, the results overall show that the coverbs and complements share syntactic flexibility properties and are morphosyntactically similar. The coverb and complement can be fronted and separated by an adverb. Though, the two classes do differ, as they do not compete for the same syntactic slot and they behave differently with the object-movement and question formation operations.

Table 4.5^{15} provides an overview of the results. The table is divided in two parts according to the morphosyntactic and syntactic flexibility properties. The first part of the table is dedicated to the interaction of coverbs with the parts of speech properties independent of the LVC (abbreviated as: in isolation). The second part is dedicated to the results of the syntactic flexibility properties of the LVC. The check marks (\checkmark) show that the coverbal element exhibits the properties listed in the second column, while the cross marks (\divideontimes) show that the coverbal element's inability to exhibit such properties.

¹⁵Key: TNS: the ability to combine with BE-auxiliaries, ATT: the ability to behave as an attributive adjective, PRED ADJ: the ability to participate in the predicative adjective structure, COMP ADJ: the ability to participate in the comparative adjective structure, SUPR ADJ: the ability to participate in the superlative adjective structure, NFN: the ability to take the non-finite marker, CAUS: the ability to causativise, IMPF: the ability to combine with the imperfective auxiliary, NOML: the ability to undergo nominalisation, CASE: the ability to take a case marker, ADJ: adjectival modification, AGR: MV-nominal complement agreement and LV-coverb agreement, DEM: determination by a demonstrative pronoun, PL: plural marking, FRONT: fronting operation, OBJ: the syntactic operation involving object movement, ADV: the syntactic operation involving movement of adverb, and Q-FOR: the ability to be questioned.

	Diagnostic	tfup	pəta	ſuru	start	kə <u>t</u> əm
	Tools	'to quieten'	'to know'	'to start'	'to start'	'to finish'
IN ISOLATION:	TNS	✓	✓	✓	/	✓
	ATT	×	×	X	X	×
	PRED ADJ	×	×	X	X	×
	COMP ADJ	×	×	X	X	×
	SUPR ADJ	×	×	X	X	×
	NFN	Х	X	Х	Х	Х
	CAUS	×	×	X	X	×
N C A	IMPF	×	×	X	X	×
	NOML	×	×	X	X	×
	CASE	Х	X	Х	Х	Х
	ADJ	×	×	X	X	×
	AGR	×	×	X	X	×
	PL	×	×	X	X	×
	DEM	×	×	X	X	×
IN LVC:	FRONT	✓	✓	✓	/	Х
	OBJ	✓	✓	✓	✓	×
	ADV	✓	✓	✓	✓	✓
	Q-FOR	×	×	×	X	×

Table 4.5: Verb Class

4.4 Adjective Class

4.4.1 Word Class Independent of & within LVC

This section is dedicated to three coverbs that are categorised as adjectives independent of the LVC, which are listed in (67) below.

(67) Adjective Class: suwa/i 'red', sa:f 'clean', and bənd 'close'.

The coverbs are categorised as adjectives via the formal adjectival criterion stipulated in Chapter 3, which is also listed in (43) above. To begin, the coverbs suwa 'red', sa:f 'clean', and band 'close' have both attributive and predicative forms. The former adjective is an inflecting adjective, whereas the latter two are examples of uninflected adjectives. Inflected adjectives are those that must change their form according to the gender and number of the noun that they modify, whereas the uninflected adjectives do not change their form in any circumstance. The predicative use of each of the adjectives can be seen in (68) for band 'close', for suwa/i 'red' in (69), and sa:f 'clean' in (70).

- (68) pith bənd si/ ϵ door.SG.F.PLN close NPR.3.SG/PRS.3.SG 'The door was/is closed.'
- (69) sara-na mũ suwa ε Sara.F.SG.PLN-GEN.M.SG face.M.SG red.M.SG PRS.3.SG 'Sara's face is red.'

(70) sara-na mũ sa:f ϵ Sara.F.SG.PLN-GEN.M.SG face.M.SG clean PRS.3.SG 'Sara's face is red.'

In each example, we see that that the BE-auxiliary follows the adjective, as expected of a predicative adjective, which is also characteristic of intransitive verbs. The difference between a canonical intransitive verb and an adjective in Potwari is that adjectives can behave attributively, whereas verbs do not. The attributive diagnostic tool rules out the possibility of the three roots being verbs. For example, they can behave attributively, as illustrated in (71). Here, the adjective sa:f 'clean' modifies the noun $k \ni m g a$ 'room'. Similarly in (72), suwa modifies the noun $p i t^h$ 'door'.

- (71) me sa:f kəmţa km sa
 1.SG.PLN clean room.M.SG want NPR.1.SG
 'I want the clean room'
- (72) me suwa kəmça km sa 1.SG.PLN red.M.SG room.M.SG want NPR.1.SG 'I want the red room'
- (73) me e bənd pıţh kol-i si 1.SG.PLN DEM.PROX.SG close door.F.SG open-F.SG NPR.3.SG 'The closed door.'

The canonical morphosyntactic properties of the general word class of adjectives are not exhibited by adjectival complements. The coverbs when part of the LVC also do not exhibit the above adjectival properties. The following section is dedicated to comparing their syntactic flexibility of the two classes.

4.4.2 Syntactic Flexibility of Adjectival Coverbs

4.4.2.1 Fronting

The adjectival coverbs and complements precede the verb, as illustrated for the adjectival complement kuf 'happy' in (74-a) and the adjectival coverb band 'close' in (74-b). The structures differ in their argument structure; the LVC is transitive, whereas the MV-complement structure is intransitive.

- (74) a. usman ku∫ re na ε
 Usman.M.SG.PLN happy stay-M.SG IMPF.M.SG PRS.3.SG
 'Usman is (always) happy.'
 - b. me pṛṭʰ bənda kəṭ-i si 1.SG.PLN door.F.SG close do-F.SG NPR.3.SG 'I closed the door.'

The syntactic structures are otherwise the same in their syntactic flexibility, the adjectival coverb can be moved from its canonical position illustrated in (74-b) to the front of the sentence, shown in (75-b). The fronting of the adjectival complement and coverb does not interfere with the grammaticality of the sentence nor does it interfere with the meaning of the verbal predicate. That is, the LVC meaning is retained. The same is shown for the adjectival complements and the adjectival cover sa:f 'clean' in Chapter 3.

- (75) a. $\text{ku}\int \text{usman}$ re na ϵ happy Usman.SG.M.PLN stay-M.SG IMPF.M.SG PRS.3.SG 'Usman is (always) happy.'
 - b. bənd me pıth kət-i si close 1.SG.PLN door.F.SG do-F.SG NPR.3.SG 'I closed the door.'

However, the adjectival coverb suwa 'red' within the LVC suwa kar 'to redden', lit. 'red do' cannot be moved from its canonical position in (76-a) to the front of the sentence in (76-b), as the LVC meaning 'to dye' is lost. Instead, the meaning 'to wear' is interpreted, hence the coverb no longer contributes to the meaning of the verbal predicate. Rather, it forms part of the attributive structure, modifying the noun tfila 'shawl'.

- (76) a. me tfila suwa kəṭ-a si 1.SG.PLN shawl.M.SG red.M.SG do-M.SG NPR.3.SG 'I dyed the shawl red.'
 - b. suwa me tfila kəṭ-a si red.M.SG 1.SG.PLN shawl.M.SG do-M.SG NPR.3.SG 'I wore a red shawl.'

4.4.2.2 Object Movement

The above data shows that LVCs and MV-complement structures differ in their argument structure; the LVC is transitive, whereas the MV-complement structure is intransitive. Hence the MV-complement structure is exempt from the object movement operation, while it is applicable for the LVCs. The object movement operation shows that the object $p_{I_{\mu}}^{h}$ 'door' of the LVC bend kar 'to close', lit. 'close do' cannot enter between the two components of the LVC because it affects the basic sentential meaning of the sentence, illustrated in (77). That is, the the adjectival coverb no longer contributes to the meaning of the LVC. Rather, it modifies the object $p_{I_{\mu}}^{h}$ 'door'. Consequently, the LV kar 'to do' loses its LV meaning to the literal meaning of the MV 'to do'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

(77) #me bənd pıţh kəţ-i si 1.SG.PLN close do-F.SG door.F.SG NPR.3.SG 'I did the closed door.'

Similarly, when coverb *suwa* 'red' in (78) is separated from the LV *kar* 'to do', it modifies the the nominal complement *&ərsi* 'jumper' of the sentence, rather than contributing to the meaning of the verbal predicate. The new meaning of the sentence is not deemed as semantically odd. The LV *kar* results in the meaning 'to wear' instead of the LVC meaning 'to dye'.

(78) me suwi dərsi kət-i si 1.SG.PLN red.F.SG jumper.F.SG do-F.SG NPR.3.SG 'I wore the red jumper.' (Impossible: 'I dyed the jumper red.')

4.4.2.3 Adverb Insertion

We observe variation in the the interaction of the three Adj + LV complex predicates with the adverb insertion mechanism. For example, an adverb is permitted to enter between the two components of band kar 'to close', lit. 'close do' and sa:f kar 'to clean', lit. 'clean do' (see Chapter 3). Illustrations of the latter can be seen in (79) for band kar 'to close', lit. 'close do', in which kal 'tomorrow/yesterday' can enter between the coverb and LV, without intervening with the meaning or grammaticality of the sentence.

(79) me prth bənd kəl kəti si 1.SG.PLN door.F.SG close yesterday do-F.SG NPR.3.SG 'I closed the door.'

In contrast, the LVC suwa kar 'to dye', lit 'red do' loses its meaning when an adverb enters it, as illustrated in (80). The interpreted meaning is that of an MV-complement structure, in which the adjective behaves attributively rather than contributing the verbal predicate.

(80) me dərsi suwi kəl kət-i si
1.SG.PLN jumper.F.SG red.F.SG yesterday do-F.SG NPR.3.SG
'I wore the red jumper yesterday.' (Impossible: 'I dyed the jumper red yesterday.')

4.4.2.4 Question Formation

Adjectival coverbs cannot be questioned, however adjectival complements can be questioned. For example, the adjectival coverb *suwa* 'red' of the LVC *suwa kar* 'to do' cannot be questioned, as it ceases to contribute to the verbal meaning of 'to dye', lit. 'red do'. Consequently the MV meaning of *kar* is interpreted rather than the LV meaning. The coverb independently as an answer to (81-a) is deemed as semantically odd due to the thematic conditions of the MV *kar* 'to do'.

- (81) a. tu uski kε akh-ja si kar tfila-e-ki 2.SG.PLN 3.SG.OBL what ask-M.SG NPR.3.SG do shawl-LOC-OBL 'What did you ask her to do to the shawl?'
 - b. #suwa red 'Red!'

4.4.3 Summary

The main similarities between adjectival coverbs and complements are as follows: both occur in their root form, can be fronted, be separated by an adverb, and are positioned pre-verbally. Though the two classes behaved differently with the objectmovement, question formation operations, and the two have distinct argument structures. Also, almost all LVCs are susceptible to separability. That is, they can undergo syntactic movement operations that separate coverbs and LVs, whilst retaining the grammaticality and basic sentential meaning of the sentence. However, the inseparability of the components of the LVC suwa kar 'to dye', lit. 'red do' causes the LVC to lose its meaning to the MV-complement structure. The behaviour of the latter LVC reflects syntactically tighter units, as does the LVC kətəm kar 'to finish', lit. 'finish do' (discussed in section 4.3). This reinforces the fact that there are two types of LVCs: (i) separable LVCs and (ii) inseparable LVCs, which is confirmed further by the behaviour of class B nouns in the following section. Also the results overall show that the coverbs and complements share syntactic flexibility properties and are morphosyntactically similar. Certain coverbs and complements can be fronted and separated by an adverb, and they both are positioned pre-verbally. Though the two classes behave differently with the object-movement, question formation operations, and have distinct argument structures. It is therefore argued that the two classes cannot be treated as the same syntactic category.

Table 4.6 provides an overview of the results. The table is divided in two parts according to the morphosyntactic and syntactic flexibility properties. The first part of the table is dedicated to the interaction of coverbs with the parts of speech properties independent of the LVC (abbreviated as: in isolation). The second part is dedicated to the results of the syntactic flexibility properties of the LVC. The check marks (\checkmark) show that the coverbal element exhibits the properties listed in the second column, while the cross marks (\divideontimes) show that the coverbal element's inability to exhibit such properties.

Table 4.6: Adjective Class

	Diagnostic Tools	suwa 'red'	sa:f 'clean'	bənd 'close'
IN ISOLATION:	ATT	✓	✓	✓
	PRED ADJ	\checkmark	✓	✓
	CASE	×	×	X
	ADJ	×	×	X
	AGR	×	×	X
	PL	×	×	X
	DEM	×	×	X
IN LVC:	FRONT	Х	✓	✓
	OBJ	×	×	X
	ADV	\checkmark	✓	✓
	Q-FOR	X	X	X

4.5 Noun Class

The investigation of word classes and the syntactic flexibility of the LVCs in this section is confined to coverbs that are categorised as nouns independent of the LVC. We present two classes of nouns, listed in (82), which differ in terms of the nominal properties they exhibit. The categorisation of class A nouns are based on canonical nominal properties listed in (49) above, whereas class B nouns are categorised as nouns based on derivational properties of nouns. Derivational based categorisation is employed as the class B nouns fail to exhibit the canonical nominal properties. Three of the four class A nouns are count nouns: $\int awar$ 'shower', $p \ni mp$ 'pump', and $f \circ n$ 'telephone', whereas the fourth noun ulti 'vomit' is a non-count singular noun.

(82) Noun Class A: *ulti* 'vomit', *gusə* 'anger', *ja:d* 'memory', *fawər* 'shower', *pəmp* 'pump', and *fõn* 'telephone'.

Noun Class B: *kəṭəl* 'murder', *bəs* 'stop', *məḍəḍ* 'help', *puf* 'push', and *maləf* 'massage'.

In respect of the syntactic flexibility of the complex predicate consisting of class A N + LV kar 'to do', we observe that the components are considerably free to move, in comparison to V or Adj + LV complex predicates. For example, the nominal coverbs can be fronted and separated by an object and adverb, whilst retaining the LVC meaning. In contrast, class A N + LV kar 'to do' complex predicates have a very rigid syntactic unit. I begin with the application of the nounhood diagnostics summarised in (49), which leads onto the derivational based evidence, and I then proceed to the syntactic flexibility diagnostics.

4.5.1 Nounhood Independent of LVC

4.5.1.1 Class A

The interaction of class A nouns with the quantifiers divides them into two subcategories: (i) count nouns and (ii) non-count, singular nouns. The nouns fawar 'shower', pamp 'pump', and $f\tilde{o}n$ 'telephone' are count nouns that can be modified by a quantifier. For example, pamp 'pump' in (83-a), fawar 'shower' in (83-b), and $f\tilde{o}n$ 'telephone' in (83-c) are shown to be quantified by the numeral far: 'four'.

- (83) a. me tfa:r pəmp-(*a) kind-e sən
 1.SG.PLN four pump-M-PL buy-M.PL NPR.3.PL
 'I bought four pumps.'
 - b. me tfa:r fawər-(*a) kind-e sən 1.SG.PLN four shower-M.PL buy-M.PL NPR.3.PL 'I bought four showers.'
 - c. me tfa:r fõn-(*a) kind-e sən 1.SG.PLN four telephone-M.PL buy-M.PL NPR.3.PL 'I bought four phones.'

The above count nouns also mark for plurality via null affixation rather than overt marking. That is, the same form of the noun is employed for singular and plural readings. The inflectional marker in agreement with the noun on the MV and the form of the BE auxiliary differentiates the singular and plural forms. The data in (83) exemplify the latter. We also see in the examples that the plural marker induces ungrammaticality when attached to the count nouns. The English loans do not pattern with the noun declension paradigm type VI, which is illustrated in Chapter 3 for the English noun $m \circ fi:n$ (F) 'vacuum'. Instead, the nouns pattern with Perso-Arabic noun declension (paradigm type V) for admi (M) 'man', as it does not mark for plurality. This is not surprising since the Hindi-Urdu nouns borrowed from Perso-Arabic and English are declined in an identical manner (Kachru, 2006). Borrowed nouns in Potwari are assigned a gender category either on the basis of their form, i.e., the final vowel or consonant or on the basis of their meanings or both. The three count nouns end in consonants hence they are assigned the masculine gender.

The noun *ulti* 'vomit' is categorised as a non-count, singular noun because it cannot be quantified, as illustrated in (84-a). It inflects for number and gender, in which the number agreement is always the singular inflection. ¹⁶ That is, it does not mark for plurality via null affixation or the canonical plural marker -a, which can be seen by comparing (84-a) and (84-b).

 $^{^{16}}$ In contrast, a canonical mass noun is one that also fails to take plural marking, though the verb that agrees with a mass noun is inflected for number and gender, in which the number agreement is always the plural inflection, in agreement with a mass noun (see mass noun favel 'rice' in Chapter 3).

- (84) a. *talət-e pər tfa:r ulti-(*a) sən toilet.F.SG-LOC on four vomit-F.PL NPR.3.PL 'There were four vomits on the toilet.'
 - b. talət-e pər būni ulti si toilet.F.SG-LOC on lots vomit.F.SG NPR.3.SG 'There was lots of vomit on the toilet.'

The following data sets show that the count nouns can be modified by an adjective. For example, the adjective $p_{\overline{l}}ana$ 'old' can modify the noun fawar 'shower' in (85-a), the noun pamp 'pump' in (85-b), and the noun $f\tilde{o}n$ in (85-c). The adjective reinforces the fact they are masculine nouns because the adjective is in the masculine singular form.

- (85) a. me prana ∫awər kın sa 1.SG.PLN old.M.SG shower.M.SG buy NPR.1.SG 'I will buy an old shower.'
 - b. me prana pəmp km sa1.SG.PLN old.M.SG pump.M.SG buy NPR.1.SG'I will buy an old pump.'
 - c. me prana fõn km sa 1.SG.PLN old.M.SG telephone.M.SG buy NPR.1.SG 'I will buy an old telephone.'

Similarly, the non-count, singular noun ulti 'vomit' can also be modified by an adjective, such as suwi 'red' in (86), which also reflects its feminine gender. That is, the form of the adjective is in its feminine singular form. Furthermore, the latter exemplifies its ability to take the locative case. However, ulti 'vomit' does not have the ability to take the oblique case marker -ki due to the DOM rules. It is shown in Chapter 2 that due to the DOM rules, non-count singular nouns are incompatible with -ki.

(86) bin-e vitf suwi ulti si bin.M.SG-LOC in red.F.SG vomit.F.SG NPR.3.SG 'There was red vomit in the bin.'

Out of the class A nouns, ja:d 'memory' exhibits the least morphosyntactic properties, as it does not mark for case nor can it be determined by a demonstrative pronoun. However, it can be modified by an adjective, as well having the ability to be pluralised, as shown in (87) below. The form of the modifying adjective is feminine singular, which reflects the gender of ja:d. That is, it is a feminine noun.

(87) miki us-nija sonija ja:d-a atf ni
1.SG.OBL 3.SG.-GEN.F.PL beautiful.F-PL memory-F.PL come IMPF.F.SG
jən
PRS.3.PL
'I have beautiful memories of her.' (lit. 'Beautiful memories of her come to me.')

Inanimate count nouns also cannot take the oblique case marker -ki because of the DOM rules. It is illustrated in Chapter 2 that inanimate countable nouns are also incompatible with -ki. The data examples show this for p
ildet p p mp 'pump' in (88), faw
ildet r 'shower' in (89), and f
ildet n 'telephone' (90).

- (88) #me is prana pəmp-ki ffe tɛ
 1.SG.PLN DEM.PROX.SG old.M.SG pump.M.SG-OBL pick then
 bın-e vitf sət-ja si
 bin.M.SG-LOC in throw-M.SG NPR.3.SG
 'I picked up that old pump and then threw it in the bin.'
- (89) #me is prana ʃawər-ki pəti tɛ 1.SG.PLN DEM.PROX.SG old.M.SG shower.M.SG-OBL uplift then bin-e vitʃ sət-ja si bin.M.SG-LOC in throw-M.SG NPR.3.SG 'I uplifted out that old shower and then threw it in the bin.'
- (90) #me is prana fõn-ki ţīki tɛ
 1.SG.PLN DEM.PROX.SG old.M.SG telephone.M.SG-OBL pull then
 bin-e viţ sət-ja si
 bin.M.SG-LOC in throw-M.SG NPR.3.SG
 'I pulled out that old phone and then threw it in the bin.'

However, they can take the locative case, as illustrated for pəmp 'pump' in (88), fawar 'shower' in (92), and $f\tilde{o}n$ 'telephone' in (93). These illustrations also show that the nouns can be determined by the demonstrative pronoun is.

- (91) me is pəmp-e nal nəŋg-a sa 1.SG.PLN DEM.PROX.SG pump.M.SG-LOC with pass-M.SG NPR.1.SG 'I passed by this old pipe.'
- (92) #me uski is ʃawər-e nal mar-ja 1.SG.PLN 3.SG.OBL DEM.PROX.SG shower.M.SG-LOC with hit-M.SG si NPR.3.SG 'I hit him with this shower.'
- (93) #me uski is fõn-e nal mar-ja 1.SG.PLN 3.SG.OBL DEM.PROX.SG telephone.M.SG-LOC with hit-M.SG si NPR.3.SG 'I hit him with this telephone.'

The root gusə 'anger' can also be determined by the demonstrative pronoun e, as well as having the ability to take the locative case marker -e, illustrated in (94).

(94) me is gus-e nal mar-i & sa 1.SG.PLN DEM.PROX.SG hunger-LOC with die-NFN go NPR.1.SG 'I will die with this anger.'

Furthermore it has the ability to combine with the suffix -ala 'the one', as illustrated in (88). The suffix -ala 'the one' is a productive device for forming agentive, experiencer, and instrumental nouns from nouns (see Chapter 3).

(95) usman guse-ala ε
Usman.M.SG.PLN anger.M.SG-the.one.M.SG PRS.3.SG
'Usman is the angry one.'

4.5.1.2 Class B

Class B nouns are not as productive as the class A nouns and are rarely employed independent of the LVC. Despite the lack of nominal morphosyntactic properties, we label class B roots as nouns based on their derivational morphology. Let us begin with the the root $k \partial_t \partial l$ 'murder', which is a loan word from Perso-Arabic. Also, cognates of the entire LVC $k \partial_t \partial l$ k a a a noun because it has the ability to take the derivational affix -i 'agentive/possession/pertaining to (relation)'. The suffix -i creates nouns from nouns, which expresses possession, agency, or relation (pertaining to) with words borrowed from Sanskrit and Perso-Arabic sources. The suffix usually yields masculine nouns, such as: sharaab 'wine(F)' > sharaabi 'drunkard(M)' in Potwari and Punjabi (see Chapter 3 for examples). The affix -i works in the same way, suffixing to the nominal Perso-Arabic root $k \partial_t \partial l$ 'murder' creating the noun $k \partial_t \partial l$ 'murderer', as illustrated in (96).

(96) ο kəṭəl-i ε 3.SG.PLN murder-i PRS.3.SG 'He/She is a murderer.'

The coverb otherwise fails to exhibit the nominal properties listed in (49) above. For example, in (97), the root $k \ni t \ni l$ 'murder', as well as the root $m \ni d \ni d$ 'help' fail to mark for plurality via an overt affix or null affixation. The inability to be determined by the demonstrative pronoun e 'this' is also shown for the coverbs in (97).

- (97) a. *us e kətəl-(*a) tək-e sən 3.SG.OBL DEM.PROX.SG murder-PL watch-M.PL NPR.3.PL 'He/She watched lots of the murders.'
 - b. *us e mədəd-(*a) tək-e sən
 3.SG.OBL DEM.PROX.SG help.F.PL watch-M.PL NPR.3.PL
 'He/She will watch lots of the helps.'

The roots also cannot be modified by an adjective. For example, in (98) the feminine and masculine forms of the inflecting adjectives cannot modify bas 'stop' or madad 'help'.

(98) a. *bara/i mədəd big.M.SG/F.SG help.F.SG 'A big help.'
b. *bara/i bəs
big.M.SG/F.SG stop.F.SG
'The big stop.'

The LVC puf kar 'to push', lit. 'push do' is an example of a mixed LVC, which includes the English loan puf 'push' and the Potwari kar. The root puf'push' is difficult to place as either a verb or noun, as it does not exhibit any of the morphosyntactic properties presented above nor does it participate in any the derivational processes. For instance, it cannot be categorised as a verb because it cannot combine with a BE-auxiliary, while borrowed verbs thus far can occur with a BE-auxiliary. It also does not behave attributively, hence it cannot be categorised as an adjective. Taking into account the canonical patterning of loans words and the high frequency of nouns borrowed into an LVC, the probability of it behaving as a noun within the LVC is particularly high. Furthermore, loans that have an equivalent in Potwari seem to be borrowed into the same category. For example, the English loan start 'to start' is a verb, as is its equivalent native furu 'to start'. In (1-c), it is pointed out that the LVC puf kar 'to push', lit. 'push do' is an example of an LVC that can be used in place of the Potwari equivalent toka mar 'to push', lit. 'push hit', which is made of the nominal toka 'push' and the verb mar 'to hit'. It can be suggested that 'push' enters into Potwari as a noun patterning with the native equivalent $\underline{t} \circ ka$ 'push'. Therefore a plausible categorisation of the borrowed word puf is to place it with the class B nouns.

The class B nouns bes 'stop', malef 'massage', and meded 'help' do not possess the prototypical noun properties, nor do they participate in N-N, Adj, V, or other derivational processes. However, their behaviour in respect of agreement within the LVC reflects remnants of nounhood, as they agree with the LV in gender and number. A phenomena that is not only found in Potwari but also in Urdu, which we now turn to in 4.5.2. As a preview, the agreement patterns reveal that the gender of all three nouns is feminine.

4.5.2 Nounhood within the LVC

The data presented above provides clear evidence that the class A coverbs listed in (82) are nouns, as they can take case marking, be determined by a demonstrative, be modified by an adjective, are inherently feminine or masculine, and/or can mark for plurality. While class B coverbs fail to exhibit these nominal properties, they are considered nouns based on their interaction with N-N derivational affixes and agreement patterning within the LVC. A summary of the results for class A nouns can be observed in table 4.7¹⁷ below. The first set of cells summarise the results of

 $^{^{17}}$ Key: TNS: ability to take tense/aspect marking, CASE: case marking, ADJ: adjectival modification, AGR: coverb and LV agreement, PL: plural marking, DEM: determination by a

the category diagnostics independent of the LVC. The check marks (\checkmark) reflect the ability of the root to exhibit the nominal properties listed in the first column, while the cross marks (\checkmark) reflect the inability of the root to exhibit the nominal properties.

Table 4.7: Noun Class A

Diagnostic-	ulti	$\int aw$ ər	$p ilde{ u} p$	$f\widetilde{o}n$	gus θ	ja:d
Tools	'vomit'	'shower'	'pump'	'telephone'	'anger'	'memory'
CASE	✓	✓	✓	✓	✓	Х
DEM	✓	✓	✓	✓	✓	X
AGR	✓	✓	✓	✓	X	X
PL	X	✓	✓	✓	X	✓
ADJ	✓	✓	✓	✓	X	✓
TNS	X	X	X	×	X	✓
ATT	X	X	X	×	X	X
OBL	-	-	-	-	-	-
DEM	X	X	X	×	X	-
AGR	✓	✓	X	×	-	_
PL	-	X	X	×	X	X
ADJ	✓	X	X	×	X	X
FRONT	✓	✓	✓	✓	✓	✓
OBJ	-	-	✓	✓	X	✓
ADV	✓	✓	✓	✓	X	✓
PRNM	X	X	X	×	X	X
Q-FOR	X	X	X	×	X	Х

Similarly, the results of class B nouns can be seen in table 4.8.

Table 4.8: Noun Class B

Diagnostic	kətəl	тәдәд	mal ə \int	b ightarrow s	puf
Tools	'murder'	'help'	'massage'	'stop'	'push'
CASE	Х	Х	Х	Х	Х
DEM	×	X	×	X	X
AGR	×	X	×	X	X
PL	×	X	×	X	X
ADJ	×	X	×	X	X
TNS	×	X	×	X	X
ATT	X	X	×	X	X
OBL	-	-	-	-	-
DEM	-	-	-	-	-
AGR	-	✓	✓	✓	1
PL	-	-	-	-	-
ADJ	-	-	-	-	-
ADV	✓	✓	✓	✓	✓
FRONT	×	X	×	✓	X
OBJ	-	X	×	-	X
PRNM	X	X	×	X	X
Q-FOR	X	X	×	X	X

demonstrative pronoun, ATT: attributive adjective, FRONT: fronting operation, OBJ: syntactic operation involving object-movement, and ADV: syntactic operation involving movement of adverb.

In the following sections, we investigate whether the nominal properties are exhibited by the nominals when part of the LVC and their syntactic flexibility in the LVC. As a preview, table 4.7 and table 4.8 also provide a summary of these results. The second part of the table is confined to the results of the morphosyntactic properties exhibited by the coverbal elements. The third part is dedicated to the results of the syntactic flexibility properties of the LVC. Certain word class diagnostics are not applicable to the coverbs, such as the class B nouns, which is symbolised by the use of a dash (-). I begin by presenting data on class A nouns and then move on to the syntactic flexibility diagnostics.

4.5.2.1 Agreement

There are three types of agreement patterns within the kar-type LVCs, which can be generalised as the following:

- (99) a. LV-coverb agreement in the past tense: LV agrees with a nominal coverb element in intransitive LVCs.
 - b. LV-object agreement pattern in the past tense: LV agrees with object.
 - c. LV-Verb-subject agreement pattern in all other tense/aspect environments.

The agreement diagnostic shows that the LV kar 'to do' agrees in gender and number with the nominal coverb in intransitive LVCs. For example, in (100-a) the LV agrees with the nominal coverb ulti 'vomit' of the intransitive LVC ulti kar 'to vomit', lit. 'vomit do', rather than the sole argument of the LVC us 'he/she'. The nominal coverb ulti 'vomit' independent of the LVC is a feminine singular noun. This is reflected in the LVC via the feminine singular inflectional marker -i attached to kar 'to do'. The feminine marker must be in agreement with the coverb, as the pronoun us can be feminine or masculine. The ungrammaticality induced by the masculine singular inflection -a attached to the LV rules out verb-subject agreement and reinforces verb-coverb agreement, shown in (100-a). In (100-b), the reverse results are observed with the masculine singular nominal coverb fawar 'shower'. The LV takes the masculine singular inflectional marker -a in agreement with the coverb and it is the feminine singular inflection attached to the verb that induces an ungrammatical sentence.

- (100) a. us ulti kət-i/*a si 3.SG.ERG vomit.F.SG do-F.SG/M.SG NPR.3.SG 'He/She vomited.'
 - b. us fawer ket-a/*i si 3.SG.ERG shower.M.SG do-M.SG/F.SG NPR.3.SG 'I showered.'

The class B nominal roots bas 'stop', malaf 'massage', and madad 'help' do not exhibit morphosyntactic properties of verbs, adjective, or nouns. Amongst many properties, the coverbs fail to show that they assign gender and/or number agreement independent of the LVC. Based on these facts, it is predicted that the LV must agree with a nominal complement. That is, it would not be expected that the LV agrees with these particular coverbs, despite the fact the sentence is intransitive. However, the data set in (101) shows otherwise. The canonical feminine singular inflectional marker -i is attached to the LV kar 'to do' in each example and the canonical masculine singular -a inflectional marker is incompatible. The latter induces an ungrammaticality, which reinforces that the all three roots are feminine singular nouns. This is the single piece of evidence that we use in categorising the three coverbs bas 'stop', malaf 'massage', and madad 'help' as nouns. Also, the gender of the latter noun is reflected in the genitive case; it appears in its feminine singular form in agreement with the head noun (101-c).

- (101) a. us bəs kəṭ-i/*a si 3.SG.ERG stop.F.SG do-F.SG/M.SG NPR.3.SG 'He/She stopped.'
 - b. us mīki maləf kəṭ-i/*a si 3.SG.ERG 1.SG.OBL massage.F.SG do-F.SG/M.SG NPR.3.SG 'He/She massaged me.'
 - c. us usman-ni mədəd kəţ-i/*a si 3.SG.ERG Usman.M.SG.-GEN.F.SG help.F.SG do-M.SG NPR.3.SG 'He/She helped usman.'

The agreement of the LV with the nominal coverb (and the nominal coverb in agreement with the genitive case) does not alter the meaning of the LVC. Thus, it does not suffice as argumentation in support of its status as a nominal complement. This contrasts with the interaction of the coverbs with the demonstrative pronoun. For example, it is shown below that a coverb determined by a demonstrative pronoun within the LVC does not intervene with the meaning or grammaticality of the LVC.

The agreement patterning of the remaining set of class A nominal coverbs is verbobject, as in (102), in which the masculine, singular inflectional marker attached to the verb is in agreement with the human object. Recall, if the object is human the verb then by default it always takes masculine, singular inflection marking.

(102) me usman-ki fõn kəṭ-a si 1.SG.PLN Usman.M.SG-OBL telephone.M.SG do-M.SG NPR.3.SG 'I phoned Usman.'

In the transitive LVC formed by the class B nominal root kətəl 'murder' (103), the LV agrees with the first person, singular pronoun miki, which gives rise to the masculine, singular inflection -a on the verb, as expected of a verb. For example, I show in Chapter 3 that an MV does not agree in gender and number with an animate

object.

(103) us mīki kətəl kət-a si 3.SG.ERG 1.SG.OBL murder do-M.SG NPR.3.SG 'He/She killed me.'

4.5.2.2 Determination & Plural Marking

The determination of the nominal coverbs induces an ungrammatical sentence, as illustrated in (104) and (105) below. The determination causes the coverb to behave as an argument rather than part of the LVC. Consequently, kar 'to do' takes three arguments as opposed to two arguments. The latter is the cause of the ungrammaticality, as the verb kar 'to do' can be a transitive or an intransitive verb, though it does not seem to function as a di-transitive verb¹⁸.

- (104) *me uski e fõn kəṭ-a si 1.SG.PLN 3.SG.OBL DEM.PROX.SG telephone.M.SG do-M.SG NPR.3.SG 'I did this telephone to her.'
- (105) *me kədi-ki e pəmp kəṭ-a si 1.SG.PLN car.F.SG-OBL DEM.PROX.SG pump.M.SG do-M.SG NPR.3.SG 'I did this pump to the car.'

In contrast, the demonstrative pronoun e 'this' does not induce an ungrammatical sentence when modifying nominal coverbs of intransitive LVCs. Rather, the LVC meaning is lost to the MV-complement structure meaning. Illustrations of the latter can be seen in (106-a) and (106-b), in which the demonstrative pronoun modifies the nominal coverbs fawar 'shower' and ulti 'vomit'. The demonstrative e forces them to behave as nominal complements of the verb kar 'to do'. The change in meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV kar 'to do'.

- (106) a. #me e fawər kar ni sa 1.SG.PLN DEM.PROX.SG shower.M.SG do IMPF.F.SG NPR.1.SG 'I was doing this shower.' (Impossible: 'I was showering.')
 - b. #me e ulti kət-i si 1.SG.PLN DEM.PROX.SG vomit.F.SG do-F.SG NPR.3.SG 'I did this vomit.' (Impossible: 'I vomited.')

The nominals pomp 'pump' and $f\tilde{o}n$ 'telephone' independent of the LVC mark for plurality via null affixation. The plural forms of the nouns cannot participate within the LVC, as it results in an ungrammatical sentence. The latter can be seen in (107) and (108). The ungrammaticality of the two sentences is related to the argument structure, the verb kar 'to do' is restricted to two arguments.

 $^{^{18}}$ The nature of whether the verb kar 'to do' can function as a di-transitive is tangential to the present research, though current research is addressing it.

- (107) *me usman-ki fõn kət-e sən 1.SG.PLN Usman.M.SG-OBL telephone.M.PL do-M.PL NPR.3.PL '*I did phones to Usman.'
- (108) *me kədi-ki pəmp kət-e sən
 1.SG.PLN car.F.SG-OBL pump.M.PL do-M.PL NPR.3.PL
 '*I did pumps to Usman.'

As for the intransitive LVCs, the plural marking on the coverb causes the LVC to lose its meaning, in which we interpret the MV meaning. Consequently, the coverb is treated as the complement of kar 'to do', as illustrated in (109). The change of meaning leads the sentence to be deemed as semantically odd, due to the thematic conditions of the MV kar 'to do'.

(109) #me fawer ket-e sen
1.SG.PLN shower.M.PL do-M.PL NPR.3.PL
'I was doing showers.' (Impossible: 'I was showering.')

4.5.2.3 Adjectival Modification

Adjectival modification of the nominal coverbs of the transitive LVCs induces an ungrammatical sentence, which can be seen in (110) and (111) below. Again, this is because the modified noun is treated as a third argument and as we saw above, the LV kar 'to do' does not permit a third argument.

- (110) *me usman-ki bara fõn kəṭ-a si 1.SG.PLN Usman.M.SG-OBL big.M.SG telephone.M.SG do-M.SG NPR.3.SG 'I did a big phone to Usman.'
- (111) *me kədi-ki bara pəmp kət-a si 1.F.SG.PLN car.F.SG-OBL big.M.SG pump.M.SG do-M.SG NPR.3.SG 'I did a big pump to the car.'

Interestingly, the nominal coverb *ulti* 'vomit' can be modified by an adjective whilst retaining the meaning of the LVC. For example, in (112) we see that the modifying adjective *suwi* 'red' does not intervene with the meaning of the LVC.

(112) me suwi ulti kət-i si 1.SG.PLN red.F.SG vomit.F.SG do-F.SG NPR.3.SG 'I vomited red (vomit).'

4.5.3 Syntactic Flexibility of LVC

With the understanding that nominal coverbs do not morphosyntactically behave as nominal complements complete, I now turn to the analysis of the syntactic flexibility of the above LVCs. The investigation of syntactic flexibility is based on the four syntactic operations introduced in Chapter 3: (i) fronting, (ii) objectmovement, (iii) adverb insertion, (iv) pronominalisation, and (v) question formation. The investigation consists of a comparison between the MV-complement structures that are comprised of nominal complements with N + V complex predicates. I demonstrated above that LVCs are distinct from MV-complement structures in respect of their morphosyntactic properties. This section shows that the syntactic flexibility of the class A LVCs is almost identical to the MV-complement structure. In contrast, the syntactic flexibility of the class B LVCs is more rigid then the MV-complement structures and the class A LVCs.

4.5.3.1 Class A

Nominal complements can be questioned, fronted, substituted by a pronoun, separated from the MV by the time adverb kaəl 'tomorrow/yesterday' and an object (see Chapter 3 for examples). The nominal coverb can also be fronted away from the LV, without intervening with the meaning of the LVC or inducing an ungrammatical sentence. For example, pəmp 'pump' can be moved from its canonical position in (113) to the front of the sentence in (114).

(113) me kədi-ne t^h er-e-ki pəmp kar ni 1.SG.PLN car.F.SG-GEN. tyre.M.SG-LOC-OBL pump.M.SG do IMPF.F.SG sa NPR.1.SG 'I was pumping the car tyre.'

(114) pəmp me kədi-ne t^her-e-ki kar ni pump.M.SG 1.F.SG.PLN car.F.SG-GEN tyre.M.SG-LOC-OBL do IMPF.F.SG sa

NPR.1.SG
'I was pumping the car tyre.'

By comparing (115-a) and (115-b), we can see that the nominal coverb *ulti* 'vomit' can be fronted without the basic sentential meaning or the grammaticality of the sentence affected.

- (115) a. me ulti kət-i jε
 1.SG.PLN vomit.F.SG do-F.SG PRS.1.SG
 'I vomited.'
 - b. ulti me kəṭ-i jεvomit.F.SG 1.SG.PLN do-F.SG PRS.1.SG'I vomited.'

Similarly, the object movement diagnostic shows that the LVC does not lose its meaning when the object is placed between the coverb and the LV. For instance, in (116) the object $p \ni mp$ 'pump' can be moved between the two components, as can $f \circ n$ 'phone' in (117).

- (116) me pəmp kədi-ne t^h er-e-ki kar ni 1.SG.PLN pump.M.SG car.F.SG-GEN tyre.M.SG-LOC-OBL do IMPF.F.SG sa NPR.1.SG 'I was pumping the car tyre.'
- (117) us fõn mīki kət-a si 3.SG.ERG telephone.M.SG 1.SG.OBL do-M.SG NPR.3.SG 'He/She telephoned me.'

An adverb can also freely enter the LVC, without causing the LVC meaning to be lost or forcing an ungrammatical sentence. This can be seen for the LVC pəmp kar 'to pump', lit. 'pump do' in (118-a) and ulti kar 'to vomit', lit. 'vomit do' in (118-b), in which the adverb pursu 'day before yesterday' is inserted between the two components.

- (118) a. me kədi-ne t^her-e-ki pəmp
 1.SG.PLN car.F.SG-GEN tyre.M.SG-LOC-OBL pump.M.SG
 pursu kar ni sa
 day.before.yesterday do IMPF.F.SG NPR.1.SG
 'I was pumping the car tyre the day before yesterday.'
 - b. me ulti pursu kəţ-i ϵ 1.SG.PLN vomit.F.SG day.before.yesterday do-F.SG PRS.1.SG 'I vomited the day before yesterday.'

Canonical nominal complements can undergo pronominalisation, however a nominal coverb cannot be substituted by a pronoun. For example, in (120), the demonstrative pronoun o in the second clause is substituted for its antecedant ulti 'vomit' (see (6) above). In providing a context, (120) is uttered in context of (119). Regardless of the context, the substitution forces the meaning of the LVC to be lost. That is, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. As a result in the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV kar 'to do'.

- (119) Context: A patient discusses that after a meal they vomit. The patient utters (120) to their psychologist.
- (120) #me pəte kε kət-a si me o kət-i 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.DIST.SG do-F.SG si NPR.3.SG 'You know what I did, I did that.'

This can also be seen for the LVC gusə kar 'to do anger', lit. 'anger do' in (122), which is uttered in context of (121). The pronoun o in the second clause is substituted for its antecedant gusə 'anger', which causes the meaning of the LVC to be lost. As a result in the change of meaning, the sentence is deemed as semantically odd because of the thematic conditions of the MV kar 'to do'.

- (121) Context: A friend discusses their reaction to some bad news (the friend was in anger) and the sentence (122) is uttered.
- (122) #me pəte kε kət-a si me o kət-a 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.PROX.SG do-M.SG si NPR.3.SG 'You know what I did, I did that.'

Nominal complements can be questioned (see Chapter 3), however nominal coverbs cannot be questioned. For example, the nominal coverb *ulti* of the LVC in (123) cannot be questioned, which can be seen in the question-answer sequence in (84). The coverb ceases to contribute to the verbal predicate and consequently the meaning of the LVC is affected. That is, the MV meaning of *kar* 'to do' is interpreted rather than the LV meaning. As a consequence, the question-answer sequence is deemed as semantically odd. However, if the entire verbal predicate including the LVC and the BE-auxiliary is questioned then the sentence is deemed as semantically felicitous, illustrated in (124-c). The questioning of all class A coverbs pattern in this way.

- (123) me ulti kəṭ-i si 1.SG.PLN vomit.F.SG do-F.SG NPR.3.SG 'I vomited.'
- (124) a. us ke kəṭ-a si 3.SG.ERG what do-M.SG NPR.3.SG 'What did he/she do?'
 - b. #ulti vomit.F.SG.PLN 'Vomit.'
 - c. ulti kət-i si vomit.F.SG do-F.SG NPR.3.SG 'Vomited.'

4.5.3.2 Class B

Based alone on the lack of word class properties of class B nouns, it seems these LVCs have undergone lexicalization. The latter is reflected in their syntactic flexibility properties, which show that class B nominal coverbs have a rigid syntactic unit, particularly in comparison to class A nominal coverbs and verbal coverbs. The class B coverbs (with the exception of one coverb) cannot be fronted without inducing an ungrammatical sentence. The separation of the two components within the LVC by an object is not permitted, as it results in an ungrammatical sentence. However, the LVCs are not completely rigid, as the two components can be intruded by the time adverb kəl 'tomorrow/yesterday'.

The LVC bos kar 'to stop', lit. 'stop do' is one of the five class B coverbs that passes the fronting diagnostic. That is, the fronting mechanism does not induce an ungrammatical sentence or intervene with the meaning of the LVC. The canonical position of the coverb bos is exemplified in (125-a), while (125-b) shows its position at the front of the sentence.

- (125) a. o bəs kar-i ga-ja si 3.SG.PLN stop.F.SG do-NFN go-M.SG NPR.3.SG 'He had stopped.'
 - b. bəs o kar-i ga-ja si stop.F.SG 3.SG.PLN do-NFN go-M.SG NPR.3.SG 'He had stopped.'

All other class B coverbs cannot be fronted away from the LV, as it induces an ungrammatical sentence. The latter can be seen for the LVC maləfkar 'to massage', lit. 'massage do' in (126). We observe the coverb maləf 'massage' cannot be fronted away from the LV kar 'to do' as it induces an ungrammatical sentence.

(126) *malə∫ us mıki kət̯-a si massage.F.SG 3.SG.ERG 3.SG.OBL do-M.SG NPR.3.SG 'He/She massaged me.'

The object movement results also prove that the LVCs are syntactically tighter units in comparison to the LVCs that contain class A nominal coverbs, verbal coverbs, and adjectival coverbs. For example, the object miki in (127) also cannot be placed between the two components, as it induces an ungrammatical sentence.

*o (127)maləf mıki kar-i ga-ja 3.SG.PLN massage.F.SG 1.SG.OBL do-NFN go-M.SG NPR.3.SG 'He had massaged me.'

In contrast, an adverb can be placed between the LVC components without interfering with the grammaticality of the sentence. For example in (128), the time adverb is placed between the coverb male if 'massage' and the LV kar 'to do'.

(128)mıki maləf kəl kət-i \sin us na. 3.SG.ERG 1.SG.OBL massage.F.SG yesterday do-F.SG NPR.3.SG TOP 'He massaged me yesterday.'

Despite the differences between class A and B, we observe that they interact in a similar manner with the question formation and the pronominalisation operation. That is, class B coverbs cannot be questioned. Unlike class A, the questioning of class B coverbs induces an ungrammatical sentence, rather than a semantically infelicitous sentence. For example, bes 'stop' cannot be questioned as it ceases to contribute to the verbal predicate, shown in (129). The latter unit cannot stand independent of kar 'to do' and consequently the sentence is ungrammatical.

- (129)kε kət-a a. 118 si 3.SG.ERG. what do-M.SG NPR.3.SG 'What did he/she do?' b. *bəs
 - stop 'Stop.'

4.5.4 Summary

The different morphosyntactic properties exhibited by the two noun classes is reflected in their syntactic flexibility. Class A nominal coverbs are almost identical in their syntactic flexibility to a nominal coverb, whereas the syntactic flexibility of class B nominal roots is very rigid. The inseparability of class B LVCs is similar to the LVC kətəm kar 'to finish', lit. 'finish do' and suwa kar 'to dye', lit. 'red do', as they too are shown to constitute a syntactically tight LVC. Based on these illustrations, there are two types of LVCs: (i) separable and inseparable. An overview of the types of LVCs is presented in the following section.

4.6 Concluding Remarks & Further Research

4.6.1 Results

To summarise, I have made a basic division between LVCs and MV-complement structures, which have previously been classed together. The coverbs independent of the LVC were categorised as (i) verbs, (ii) adjectives, and (iii) nouns. The results for all classes can be seen in table 4.9, which is divided according to the word class categories. The check marks (\checkmark) show that the coverbal element exhibits the word class properties listed in the first column, while the cross marks (\checkmark) symbolise their inability to exhibit the word class properties. Despite the restricted set of LVCs investigated in this chapter, the results confirm that coverbs cannot be categorised as complements.

Table 4.9: Word Class Independent of kar-Type LVCs

Coverbal Element	CASE	DEM	AGR	PL	ADJ	TNS	ATT
ulti 'vomit'	✓	1	/	✓	1	Х	X
$\int aw \partial r$ 'shower'	1	✓	1	✓	1	X	X
$f\tilde{o}n$ 'telephone'	1	✓	1	✓	1	X	X
$p \ni mp$ 'to pump'	1	✓	1	✓	1	X	X
gus_{∂} 'anger'	X	X	X	X	X	X	X
k ota t ota l 'murder'	X	X	X	X	X	X	X
mədəd 'help'	X	X	X	X	X	X	X
mala f 'massage'	X	X	X	X	X	X	X
bəs 'to stop'	X	X	X	X	X	X	X
suwa 'red'	Х	X	X	X	Х	✓	✓
sa:f 'clean'	X	X	X	X	X	1	✓
bənd 'close'	X	X	X	X	X	✓	✓
ja:d 'memory'	Х	Х	X	Х	Х	√	X
$\int u c u$ 'start'	X	X	X	X	X	1	X
p ota t a 'know'	X	X	X	X	X	1	X
fup^h 'silence'	X	X	X	X	X	X	X
k otin tem 'finish'	X	X	X	X	X	X	X
start 'to start'	X	X	X	X	X	X	X
<i>pu</i> ∫ 'to push'	Х	Х	Х	Х	Х	Х	Х

The interaction of all the coverb types with the word class properties is presented in table 4.10 below. Certain morphosyntactic properties are not applicable to a number of coverbs, as they are not exhibited independent of the LVC, which is symbolised by the use of a dash (-). Drawing on these results and the results of table 4.9 above, we observe that the nominal, adjectival, and verbal coverbs do not possess the same properties as they do independent of the LVC.

Table 4.10: Word Class of Coverb within kar-Type LVCs

Coverbal Element	LV	LVC meaning	DEM	AGR	ADJ	PL	TNS
ulti 'vomit'	kar	'to vomit'	X	✓	1	X	-
$\int aw \partial r$ 'shower'	kar	'to shower'	X	✓	X	X	-
$f\tilde{o}n$ 'telephone'	kar	'to telephone'	X	✓	X	X	-
$p \ni mp$ 'to pump'	kar	'to pump'	X	✓	X	X	-
gus_{∂} 'anger'	kar	'to do anger'	-	-	-	-	-
kətəl 'murder'	kar	'to murder'	-	-	-	-	-
mədəd 'help'	kar	'to help'	-	-	-	-	-
mala f 'massage'	kar	'to massage'	-	-	-	-	-
$b \ni s$ 'to stop'	kar	'to stop'	-	-	-	-	-
suwa 'red'	kar	'to redden'	-	-	-	-	Х
sa:f 'clean'	kar	'to clean'	-	-	-	-	X
bənd 'close'	kar	'to close'	-	-	-	-	X
ja:d 'memory'	kar	'to remember'	-	-	-	-	Х
$\int u r u$ 'start'	kar	'to start'	-	-	-	-	X
p otin ta 'know'	kar	'to find out'	-	-	-	-	X
fup^h 'silence'	kar	'to shut up'	-	-	-	-	-
kətəm 'finish'	kar	'to finish'	-	-	-	-	-
start 'to start'	kar	'to start'	-	-	-	-	X
pu∫ 'to push'	kar	'to push'	-	-	-	-	-

It is apparent that there exists a clear difference between class A nominal coverbs and complements. Class A nouns independent of the LVC can be determined by the demonstrative pronoun e 'this', mark for plurality, be modified by an adjective, and agree with a verb in gender and number. The behaviour of the nominals as coverbs is in direct contrast; they cannot be determined, modified, or pluralised, as they induce an ungrammatical sentence or the LVC meaning is lost to the meaning of the MV-complement structure. Interestingly, an exception to the latter is the coverb ulti 'vomit', which can be modified by an adjective whilst still appearing to contribute to the LVC meaning. It is shown in the following chapters that this is not the only type of coverb that permits adjectival modification. Furthermore, coverbs are not stripped of all their nounhood, as it is shown that the LV u 'to do' agrees in gender and number with a coverb of an intransitive sentence.

The main similarities between adjectival coverbs and complements are as follows: both occur in their root form, can be fronted, be separated by an adverb, and are positioned pre-verbally. Though the two classes behaved differently with the object-movement, question formation operations, and the two have distinct argument structures. The positioning of verbal coverbs and complements differentiated one from the other, as did the question formation operation. The coverbs cannot be questioned, whereas complements can be questioned. In contrast, the verbal coverbs and complements can be fronted away from the verbal predicate and an adverb can enter between an MV and its complement and an LV and coverb.

Further similarities and differences are established between LVCs and MV-complement structures via the syntactic flexibility operations, which can be seen in table 4.11. Like Potwari's related languages, namely Urdu (Butt, 1995) and

Persian (Karimi-Doostan, 2011), its LVCs fall into the two classes: separable and inseparable. Table 4.11 is organised according to these two types of LVCs which are borne out from the data presented in this chapter. The label "separable" is borne out from the interaction of N/V/Adj + V complex predicates with the movement and separation diagnostics. Such LVCs can be fronted, separated by an adverb and/or an object without affecting the LVC meaning or inducing an ungrammatical sentence. The inseparable LVCs include eight of the 12 LVCs, which are shown to comprise of syntactically tight units. If the two components are not adjacent to one another then the LVC meaning is lost or the sentence is deemed as ungrammatical. Hence they fail to undergo the syntactic operations (symbolised by a cross mark). Though they can be separated by an adverb without affecting the LVC meaning. However because of their syntactically tight nature with other movement operations, we continue to label them as inseparable LVCs.

Table 4.11: Syntactic Flexibility in kar-Type LVCs

Coverb Type	Coverbal Element	LV	LVC meaning	FRONT	OBJ	ADV	PRNM	Q-FOR
Separable LVCs:	ulti 'vomit'	kar	'to vomit'	✓	-	1	Х	Х
	$\int aw \partial r$ 'shower'	kar	'to shower'	✓	-	✓	X	X
	pəmp 'to pump'	kar	'to pump'	✓	1	✓	X	X
	$f\tilde{o}n$ 'telephone'	kar	'to telephone'	✓	1	✓	X	X
	ja:d 'memory'	kar	'to remember'	✓	✓	✓	-	X
	b in d 'close'	kar	'to close'	✓	X	1	-	X
	sa:f 'clean'	kar	'to clean'	✓	X	1	-	X
	fup^h 'to quieten'	kar	'to shut up'	✓	_	1	-	X
	furu 'to start'	kar	'to start'	✓	1	1	-	X
	pətə 'to know'	kar	'to find out'	✓	1	1	-	X
	start 'to start'	kar	'to start'	✓	✓	1	-	X
Inseparable LVCs:	bəs 'to stop'	kar	'to stop'	Х	-	1	Х	Х
	k otin telested length in the second seco	kar	'to murder'	X	X	✓	X	X
	mədəd 'help'	kar	'to help'	X	X	✓	X	X
	malaf 'massage'	kar	'to massage'	X	X	✓	X	X
	puf 'push'	kar	'to push'	X	X	✓	X	X
	gusə 'anger'	kar	'to do anger'	X	-	1	X	X
	kətəm 'to finish'	kar	'to finish'	X	X	1	-	X
	suwa 'red'	kar	'to redden'	Х	X	X	-	X

It appeared majority of the inseparable LVCs consisted of class B nominal coverbs. The latter class did not manifest the canonical nominal properties. That is, they did not have the ability to be modified by an adjective, be determined by a demonstrative pronoun, be pluralised, or be an argument of an MV. Similar results are found for Persian nominal coverbs in Karimi-Doostan (2011). Unlike the nominal coverbs in the inseperable LVCs, the nominal coverbs of seperable LVCs in Persian can function as a direct object argument, can be modified by an adjective, and can be relativized, scrambled and focused on by Wh-interrogatives (Karimi-Doostan, 2011, 70). Karimi-Doostan (2011, 73) shows that the different behaviours of nominal coverbs and the (in)separability of LVCs is related to the fact that nominal coverbs are of three different types: (i) verbal nouns, (ii) predicative nouns, and (iii) non-

predicative nouns. It is shown that predicative nouns are able to be developed into arguments, which can be separated in the syntax, while the other two types of nominals are unable to be arguments due to their semantic and morphosyntactic properties. A natural progression of the present work is to investigate whether the syntactic and/or semantic properties of the nominal coverbs can explain their ability to be (in)separable from the LV.

Micro differences emerge from within the separable LVC class, which are best explained via a conceptualised representation, such as figure 4.1 below. Complex predicates consisting of nominal coverbs were shown to be the most flexible in their syntactic relation with the LV kar, mirroring that of a nominal complement. While, the verbal coverbs subtly displayed more flexibility than the adjectival coverbs.

Figure 4.1: Syntactic Flexibility of kar-Type LVCs

Flexible Nouns	Verbs Adjectives	Rigid	
	Word Class	•	

This dataset is arguably too small both in overall size, as is the number of diagnostic tools for formulating strong conclusions about the similarities and differences between complements and coverbs. Diagnosing to what degree an LVC is syntactically flexible has been restricted to four/five operations. Further diagnostics need to be developed to fully understand the syntactic nature of the LVC. Also the application of the diagnostic tool set itself needs to be applied to other kar-type LVCs, as it was restricted to 19 N/V/Adj + V complex predicates, which is not exhaustive. This is not surprising since the kar LV is very productive, which is measured by the ability of the LV to create new LVCs with English loans.

LIGHT VERB MAR 'TO HIT'

5.1 Introduction

In this chapter, I begin the task of investigating the coverbs of agentive max-type LVCs. The data presented in this chapter supports the claim that the coverbs do not behave as complements. The coverbs that form LVCs with the LV max 'to hit' are all nominals, which are listed in table 5.1. The LV max 'to hit' functions differently from the LV kax 'to do', in that kax lends itself more to incorporating loan nouns into Potwari and predicating with them, while max is not as opened to this type of incorporation or predication. However, it can be seen from the list of nouns in table 5.1 that the LV does create LVCs with English loans, such as $m entsignificant{max}{loans}$ 'vacuum', bxuf 'brush', tekst 'text', and $p\tilde{e}nt$ 'paint'. Based on this, max is considered to be one of the productive LVs.

Table 5.1: Word Class for Coverbs in mar-Type LVCs

Coverbal Element	Word Class
pis 'fart'	Count Noun
nif 'sneeze'	Count Noun
$k\tilde{a}\eta a$ 'comb'	Count Noun
<i>mə∫in</i> 'vacuum'	Count Noun
$l otin t^h$ 'leg'	Count Noun
ak^h 'eye'	Count Noun
<i>bru</i> ∫ 'brush'	Count Noun
at^h 'hand'	Count Noun
θar 'wire'	Count Noun
tekst 'text'	Count Noun
$p\tilde{e}nt$ 'paint'	Non-Count Singular Noun
dəkar 'burp'	Non-Count Singular Noun
sas 'sigh'	Non-Count, Singular Noun
#ali 'jump'	Noun
#ut 'lie'	Noun

The 15 nominal coverbs are divided into five classes, as listed in (1). Their

classification is according to the number of morphosyntactic properties they possess independent of the LVC. Noun class I and II contain a class of nouns that exhibit all five of the canonical nounhood properties. In contrast, nouns contained within noun class III do not have the ability to inflect for the oblique case marker -ki due to the DOM rules postulated in Chapter 2. However, they can be modified by an adjective and determined by a demonstrative pronoun, while only one member can mark for plurality. Similarly, class IV also do not inflect for the oblique case -ki because of the DOM rules. They also do not permit determination, while only one member can be modified by an adjective and mark for plurality. Class V are interesting as they cannot be modified by an adjective, determined by a demonstrative pronoun, mark for plurality, or inflect for case. Nevertheless, they are categorised as nouns based on derivational processes and their ability to agree in gender and number with mar.

- (1) a. Noun Class I: $m \ni fin$ 'vacuum', $k \tilde{a} \eta a$ 'comb', $l \ni t^h$ 'leg', ak^h 'eye', and bruf 'brush'.
 - b. Noun Class II: a_{ξ}^{th} 'hand' and θar 'wire'.
 - c. Noun Class III: pent 'paint' and tekst 'text'.
 - d. Noun Class IV: pis 'fart, nit 'sneeze', dəkar 'burp', and sas 'sigh'.
 - e. Noun Class V: #ali 'jump' and #ut 'lie'.

The chapter is organised as follows. The first section lays out the basic facts on the argument structure and lexical semantic features of mar-type LVCs. We see that mar is an agentive LV and that the intransitive mar-type LVCs are internally caused eventualities, while the transitive ones do not have causative counterparts. The body of the chapter is divided by the five nominal classes. Section 5.3 is dedicated to LVCs containing class I coverbs, which leads onto the analysis of LVCs containing class II in section 5.4. In section 5.5, a description and analysis is presented for the noun class III + LV complex predicates. Section 5.6 presents data on class IV nouns, which are labelled as event related nouns. While, section 5.7 describes class V nominals. Each of these sections comprises of a three-part investigation, which is as follows: (i) morphosyntactic properties of the nominals, (ii) morphosyntactic properties of the nominal coverbs, and (iii) the syntactic flexibility of the LVCs. Section 5.8 concludes with a brief discussion and summary of the results.

5.2 Argument Structure & Lexical Semantics

Superficially, it seems max 'to hit' in (2-a) exhibits LVC characteristics. For example, the LVC consists of two components, the LV max 'to hit' and the coverb $m \partial f in$ 'machine'. Intuitively, it appears the coverb is the component that holds the main predicational content, while, the verb max 'to hit' takes on the typical characteristics of an LV. For instance, it inflects for the past tense suffixes, which

are followed by the non-present BE-auxiliary. Also, it has a lexical verb analogue, as illustrated in (2-b).

- (2) a. us carpit-e-ki mə∫in mar-i si 3.SG.ERG carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/She vacuumed the carpet.'
 - b. us mīki pijala mar-ja si 3.SG.ERG 1.SG.OBL cup.M.SG hit-M.SG NPR.3.SG 'He/She hit a cup at me.'

However, the LV mar 'to hit' does not behave as a full lexical verb in respect of its meaning. The LV mar in (2-a) has very little semantic content in comparison to the lexical verb mar 'to hit' in (2-b). That is not to say it is completely void of semantic content, contrary to the viewpoint that LVs merely have a functional element and no semantic element (Cattell, 1984; Grimshaw & Mester, 1988). For example, one does not literally hit the məfin 'vacuum' on the carpit 'carpet'. However, there is some degree of impact between the vacuum and carpet. Interestingly, Pert & Letts (2006) discuss the latter when describing the LV usage of mar 'hit' as one of the main operators in Mirpuri. They conclude the following three types of usages: (i) a verb expressing activity, (ii) to carry verb-subject agreement, and (iii) to express the concept of contact between the use of two items such as 'brush' and 'clap' i.e. where items are brought together (Pert & Letts, 2006, 357). The mar-type LVCs do have such grammatical and lexical semantic features. For example, the LVC #ali mar 'to jump', lit. 'jump hit', expresses an activity, whereas the LVC shown above məfin mar 'to vacuum', lit. 'machine hit' seems to express the concept of contact with the object *carpit* 'carpet'.

Going beyond the semantics of mar, the LVC otherwise seems identical to an MV-complement structure. For example, superficially, the nominal coverb mofin 'machine' is like the unmarked direct object pijala 'cup', as they both appear in their bare forms and are verb-adjacent. The agreement patterns of the LVC and the MV-complement structure are also identical. The MV mar 'to hit' agrees in gender and number with the nominal complement pijala 'cup' in (2-b). Similarly, mar 'to hit' agrees with the gender and number of the nominal coverb mofin 'machine' in (2-a). The main question is: are there other similarities and differences between two structures? It is shown that they share syntactic flexibility and morphosyntactic properties. However, it is argued that the two are distinct in their lexical semantic, morphosyntactic, and syntactic flexibility properties. The subsequent sections establish the basic lexical semantic properties and argument structures exhibited by the mar-type LVCs.

5.2.1 Argument Structure

I begin by presenting the argument structure of the entire LVC, by which I mean the number arguments projected by the LVC and the thematic roles associated with those arguments. The max-type LVCs project three different types of argument structures. The LVC məfin max 'to vacuum', lit. 'machine hit' in example (2-a) above is a transitive LVC, which takes the agent argument o 'she/he' and the patient argument carpit 'carpet'. A large amount of LVCs consisting of max 'to hit' are transitive, however the thematic roles can differ. For example in (3), we have a transitive LVC, in which the agent argument is sadəf 'Saddaf' and the third person pronoun us 'him/her' is a recipient argument rather than a patient argument.

(3) saddaf uski ak^h mar-i si Saddaf.F.SG.PLN 3.SG.OBL eye.F.SG hit-F.SG NPR.3.SG 'Saddaf winked at him.'

The third type of argument structure found with mar-type LVCs is intransitive, where the sole argument is an agent. An example of this can be seen in (4), where the third person pronoun us 'he/she' is the sole argument.

(4) us tfali mar-i si 3.SG.ERG jump.F.SG hit-F.SG NPR.3.SG 'He/She jumped.'

Table 5.2 lists the argument structure types of the *mar*-type LVCs investigated in this chapter.

Coverbal Element	LV	LVC Meaning	INTR/TR	Arguments
pis 'fart'	mar	'to fart'	INTR	$\langle Agent \rangle$
<i>ffali</i> 'jump'	mar	'to jump'	INTR	$\langle Agent \rangle$
sas 'sigh'	mar	'to sigh'	INTR	$\langle Agent \rangle$
nitf 'sneeze'	mar	'to sneeze'	INTR	$\langle Agent \rangle$
dəkar 'burp'	mar	'to burp'	INTR	$\langle Agent \rangle$
<i>mə∫in</i> 'vacuum'	mar	'to vacuum'	TR	$\langle Agent, Patient \rangle$
$k\tilde{a}\eta a$ 'comb'	mar	'to comb'	TR	$\langle Agent, Patient \rangle$
<i>bru</i> ∫ 'brush'	mar	'to brush'	TR	$\langle Agent, Patient \rangle$
$l_{\mathcal{O}}t^{h}$ 'leg'	mar	'to kick'	TR	$\langle Agent, Patient \rangle$
$c\widetilde{u}nd^h$ 'scratch'	mar	'to scratch'	TR	$\langle Agent, Patient \rangle$
$p\tilde{e}nt$ 'paint'	mar	'to paint'	TR	$\langle Agent, Patient \rangle$
ak^h 'eye'	mar	'to wink'	TR	$\langle Agent, Recipient \rangle$
at^h 'hand'	mar	'to wave'	TR	$\langle Agent, Recipient \rangle$
θar 'wire'	mar	'to fax'	TR	$\langle Agent, Recipient \rangle$
tekst 'text'	mar	'to text'	TR	$\langle Agent, Recipient \rangle$
#ut 'lie'	mar	'to lie'	TR	$\langle Agent, Recipient \rangle$

Table 5.2: Argument Structure of mar-Type LVCs

The three different types of argument structures found with mar-type LVCs are summarised in (5).

- (5) a. Intransitive $\langle Agent \rangle$ e.g./ $fali\ mar$ 'to jump', lit. 'jump hit'.
 - b. Transitive $\langle Agent, Patient \rangle$ e.g./ $m \circ fin\ mar$ 'to vacuum', lit. 'machine hit'.
 - c. Transitive $\langle Agent, Recipient \rangle$ e.g./ ak^h mar 'to wink', lit. 'wink hit'.

5.2.2 Agentivity, Internal & External Causation

I categorised a sub-class of *kat*-type LVCs in the previous chapter (see table 4.3 in Chapter 4) as externally caused LVCs. The remaining intransitive *kat*-type LVCs were categorised as internally caused LVCs. The categorisation was based on their ability/inability to alternate in the inchoative-causative alternation (Levin & Rappaport Hovav, 1995). In the same manner as the *kat*-type LVCs, I categorise the intransitive *mat*-type LVCs listed in (6) as internally caused eventualities.

- (6) a. pis mar 'to fart', lit. 'fart hit'
 - b. #ali mar 'to jump', lit. 'jump hit'
 - c. sas mar 'to sigh', lit. 'sigh hit'
 - d. *nitfmar* 'to sneeze', lit. 'sneeze hit'
 - e. dəkar mar 'to burp', lit. 'burp hit'

It is also shown that all max-type LVCs are agentive via the agentivity diagnostics presented in Chapter 2, which are repeated in (7) below.

(7) Agentivity Diagnostics

- a. The ability to be modified by an agent oriented adverb such as didenal 'deliberately'.
- b. The happen vs. do agentivity diagnostic (Cruse, 1973, 13).

As predicted for internally caused eventualities, the LVCs listed in (6) fail to participate in the inchoative-causative alternation. For example, by contrasting (8-a) and (8-b), we can see the intransitive LVC *fali mar* 'to jump', lit. 'jump hit' fails to have a causative counterpart. That is, the insertion of an external cause (the third person pronoun us) in (8-b) induces an ungrammatical sentence.

- (8) a. sara tfali mar-i si
 Sara.F.SG.PLN jump.F.SG hit-F.SG NPR.3.SG
 'Sara jumped.'
 - b. *sara uski tfali mar-i si Sara.F.SG.PLN 3.SG.OBL jump.F.SG hit-F.SG NPR.3.SG 'Sara jumped him/her.'

Similarly, the LVC *niff mar* 'to sneeze' does not form a causative, which can be seen by comparing (9-a) and (9-b).

- (9) a. sara nitf mar-i si
 Sara.F.SG.PLN sneeze.F.SG hit-F.SG NPR.3.SG
 'Sara sneezed.'
 - b. *sara uski nɪtʃ mar-i si
 Sara.F.SG.PLN 3.SG.OBL sneeze.F.SG hit-F.SG NPR.3.SG
 '*Sara sneezed him/her.'

The remaining set of LVCs are transitives that do not have an inchoative counterpart and are categorised as activity verbs; (10).

- (10) a. məfin mar 'to vacuum', lit. 'machine hit'
 - b. $k\tilde{a}\eta a \ mar$ 'to comb', lit. 'comb hit'
 - c. brufmar 'to brush', lit. 'brush hit'
 - d. ləth mar 'to kick', lit. 'leg hit'
 - e. $c\tilde{u}nd^h$ mar 'to scratch', lit. 'scratch hit'
 - f. pent mar 'to paint'
 - g. $ak^h mar$ 'to wink', lit. 'eye hit'
 - h. $at^h mar$ 'to wave', lit. 'wave hit'
 - i. θ ar mar 'to fax/email', lit. 'wire hit'
 - j. tekst mar 'to text', lit. 'text hit'
 - k. #ut mar 'to lie', lit. 'lie hit'

The nominals in the intransitive *mar*-type LVC combinations are event related nouns, which presuppose an agent argument. Hence all of the *mar*-type LVCs project an agent as their first argument (see table 5.2 above). The agentivity diagnostic tools (in (7) above) capture the agentivity feature of the *mar*-type LVCs. For example, the LVC *niff mar* 'to sneeze' and *ffali mar* 'to jump', lit. 'jump hit' can be modified by the agent oriented adverb *criterial* 'deliberately', without inducing a semantically infelicitous sentence, as illustrated in (11-a) and (11-b).

- (11) a. sara didenal tfali mar-i si Sara.F.SG.PLN deliberately jump.F.SG hit-F.SG NPR.3.SG 'Sara jumped deliberately.'
 - b. sara &idenal nitf mar-i si Sara.F.SG.PLN deliberately sneeze.F.SG hit-F.SG NPR.3.SG 'Sara sneezed deliberately.'

The question-answer sequence diagnostic also shows that the internally caused LVC nut mar 'to sneeze' is agentive, as it patterns with the do-clause, rather than the happen-clause. For example, in (12) the sentence is deemed as semantically infelicitous. In (13), the reverse results are illustrated, in that the sentence is not deemed as semantically odd.

- (12) a. sara-ki kε o-ja si
 Sara.F.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Sara?'
 - b. #sara nut mar-i si
 Sara.F.SG.PLN sneeze.F.SG hit-F.SG NPR.3.SG
 'Sara sneezed.'
- (13) a. sara ke kəṭ-a si Sara.F.SG.PLN what do-M.SG NPR.3.SG 'What did Sara do?'
 - b. sara nntf mar-i si
 Sara.F.SG.PLN sneeze.F.SG hit-F.SG NPR.3.SG
 'Sara sneezed.'

The LVC $fali\ mar$ 'to jump', lit. 'jump hit' also patterns with the do-clause rather than the happen-clause. For example, we see in (14) that the question-answer sequence with the do-clause is semantically felicitous. However in (15), the question-answer sequence with the happen-clause is deemed as semantically unacceptable. The latter reinforces the notion that these LVCs are agentive.

- (14) a. sara ke kəṭ-a si Sara.F.SG.PLN what do-M.SG NPR.3.SG 'What did Sara do?'
 - b. sara tfali mar-i si Sara.F.SG.PLN jump.F.SG hit-F.SG NPR.3.SG 'Sara jumped.'
- (15) a. sara-ki kε o-ja si Sara.F.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Sara?'
 - b. #sara tfali mar-i si Sara.F.SG.PLN jump.F.SG hit-F.SG NPR.3.SG 'Sara jumped.'

The transitive LVCs project an agent as their first argument, hence they also pattern with the do-clause and can be modified by the agent oriented adverb didenal 'deliberately'. To single out an example, the LVC məfin mar 'to vacuum', lit. 'machine hit' patterns with the do-clause illustrated in (16) rather than the happen-clause in (17). That is, it is deemed as semantically acceptable with the question-answer sequence with the do-clause, though semantically odd with the question-answer sequence with the happen-clause.

- (16) a. sara kε kəṭ-a si Sara.F.SG.PLN what do-M.SG NPR.3.SG 'What did Sara do?'
 - b. us carpit-e-ki mə∫in mar-i si 3.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/She vacuumed the carpet.'

- (17) a. sara-ki kε o-ja si
 Sara.F.SG-OBL what happen-M.SG NPR.3.SG
 'What happened to Sara?'
 - b. #us carpit-e-ki məʃin mar-i si 3.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/She vacuumed the carpet.'

The ability to be modified by the agent oriented adverb didenal 'deliberately' is evident in example (18) for the LVC məfin mar 'to vacuum', lit. 'machine hit'.

(18) us didenal carpit-e-ki məʃin mar-i 3.SG.PLN deliberately carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG si NPR.3.SG 'He/She deliberately vacuumed the carpet.'

In respect of case marking in Potwari, a subject can be assigned three different cases dependent on tense/aspect and agentivity: (i) plain case, (ii) ergative case, and (iii) oblique case. It is shown that the plain case and ergative case arguments involve participants that perform, control, and are seen as the instigator of the action denoted by the verb, whereas oblique case arguments do not involve such participants. The LV mar 'to hit' can only appear with the ergative case or the plain case. The ergative case is restricted to the third person pronoun in the past tense, while in other environments, the subject is in the plain case. For example, in (19-a) and (19-b) we can see the single argument is the ergative case third person pronoun us. Also in the above examples, such as (11-a) and (11-b), the sole argument is in the plain case.

- (19) a. us nɪtʃ mar-i si 3.SG.ERG sneeze.F.SG hit-F.SG NPR.3.SG 'He/She sneezed.'
 - b. us tfali mar-i si 3.SG.ERG. jump.F.SG hit-F.SG NPR.3.SG 'He/She jumped.'

5.3 Noun Class I

In table 5.1 above, I make the observation that all coverbal elements that occur in mar-type LVCs are nouns when considered independently. The nouns are categorised into five classes based on the morphosyntactic properties they exhibit. The nouns contained in noun class I, listed in (20) can take all case markers, such as the oblique -ki, as well as the locative -e, and the genitive -n-a/i. They also have the ability to be modified by the demonstrative pronoun e 'this'.

(20) Noun Class I: m = fin 'vacuum', $k \tilde{a} \eta a$ 'comb', $l = f^h$ 'leg', ak^h 'eye', and bruf 'brush'.

In this section, I provide a comparison of nominal complements and coverbs in respect of their morphosyntactic properties. I then move on to comparing their syntactic flexibility properties.

5.3.1 Morphosyntactic Properties Independent & within LVC

5.3.1.1 Case

There is no variation in the results for the case marking diagnostic; all of the coverbs have the ability to take case marking independent of the LVC. For example, they can take the oblique case marker -ki, as illustrated for the noun $m \ni fin$ 'vacuum' in (21-a), and the noun ak^h 'eye' in (21-b).

- (21) a. sadəf mə∫in-ki pən-i ε
 Saddaf.F.SG.PLN vacuum.F.SG break-F.SG PRS.3.SG
 'Saddaf broke the machine.'
 - b. mari sədzi ikh-ki dərd ϵ 1.SG.GEN right.F.SG eye.F.SG-OBL pain PRS.3.SG 'My right eye has pain.'

However, the reverse results are found with the nominal coverbs; all nouns that take the oblique -ki independent of the LVC fail to take -ki when part of the LVC. The oblique case -ki attached to the nouns when part of the LVC forces an ungrammatical sentence because in Potwari two ki marked objects cannot appear in one sentence. Recall the word order in Potwari is that a di-transitive sentence requires a marked object by the oblique case marker -ki preceding the unmarked object. With the latter being the direct object and the former being the indirect object. This is not the case for the sentences in (22) and (23) below, whereby both objects are -ki marked,

- (22) *sadəf carpit-e-ki məʃin-ki mar-i
 Saddaf.F.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG-OBL hit-F.SG
 si
 NPR.3.SG
 'Saddaf hit the vacuum on the carpet.' (Impossible: 'Saddaf vaccumed the carpet.')
- (23) *sadəf uski akh-ki mar-i jε Saddaf.F.SG.PLN 3.SG.OBL eye.F.SG-OBL hit-F.SG PRS.3.SG 'Saddaf hit the eye at her/him.' (Impossible: 'Saddaf winked at him/her.')

For the above sentences to be grammatically correct their must be an unmarked direct object. However, the removal of the oblique case marker -ki results in a transitive sentence, in which the nominal coverb m = fin 'machine' in (24) contributes to the verbal predicate rather than behaving as an unmarked direct object. The latter also reigns true for the nominal coverb ak^h 'eye' in (25), in that the removal of the oblique case marker causes the nominal to be part of the LVC meaning.

- (24) sadəf carpit-e-ki məʃin mar-i Saddaf.F.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG-OBL hit-F.SG si NPR.3.SG 'Saddaf vacummed the carpert.'
- (25) sadəf uski akh mar-i j ϵ Saddaf.F.SG.PLN 3.SG.OBL eye.F.SG-OBL hit-F.SG PRS.3.SG 'Saddaf winked at him/her.'

5.3.1.2 Determination

Interesting, and perhaps unexpected, is that the nominal coverbs unlike their interaction with the oblique case marker -ki, do have the ability to be determined within the LVC without interfering with the meaning of the LVC. That is, the LV meaning of mar is retained and the coverb contributes to the verbal meaning. For example, the nominal $m \ni fin$ 'vacuum' is determined by the demonstrative e 'this' independent of the LVC in (26) and within the LVC in (27).

- (26) me e mə∫in kmḍ-i si 1.SG.PLN DEM.PROX.SG machine.F.SG buy-F.SG NPR.3.SG 'I bought this machine.'
- (27) me carpit-e-ki e mə∫in mar-i 1.SG.PLN carpet.M.SG-LOC-OBL DEM.PROX.SG machine.F.SG hit-F.SG si NPR.3.SG 'I used this vacuum to vacuum.'

Similarly, the noun $k\tilde{a}\eta a$ 'comb' can be determined by the demonstrative e 'this' independent of and within the LVC, as illustrated in (28-a) and (28-b).

- (28) a. me e kãŋa kmd-a si 1.SG.PLN DEM.PROX.SG comb.M.SG buy-M.SG NPR.3.SG 'I bought this comb.' b. me bal-a-ki e kãṇa mar
 - o. me bal-a-ki e kãŋa mar-ja 1.SG.PLN hair-M-PL-OBL DEM.PROX.SG comb.M.SG hit-M.SG si NPR.3.SG 'I used this comb to comb (my) hair.'

The illustrations in (29-a) and (29-b) also show that the coverbs ak^h 'eye' and lot^h 'leg' can be determined by the demonstrative e independent of the LVC.

- (29) a. mari e ak^h duk^h ni j ϵ 1.F.SG.GEN DEM.PROX.SG eye.F.SG pain IMPF.F.SG PRS.1.SG 'This eye of mine hurts.'
 - b. me e ləţh kmd-i si $1.SG.PLN\ DEM.PROX.SG\ leg.F.SG\ buy-F.SG\ NPR.3.SG$ 'I bought this leg.'

They also have the ability to be determined within the LVC, without causing the LVC to lose its meaning. This can be seen for the LVC ak^h mar 'to wink', lit. 'eye hit' in (30-a) and the LVC lot_h^h mar 'to kick', lit. 'leg hit' in (30-b).

- (30) a. me uski e ak^h mar-i si 1.SG.PLN 3.SG.OBL DEM.PROX.SG eye.F.SG hit-F.SG NPR.3.SG 'I winked with this eye.'
 - b. me uski e ləth mar-i si 1.SG.PLN 3.SG.OBL DEM.PROX.SG leg.F.SG hit-F.SG NPR.3.SG 'I kicked her with this leg.'

5.3.1.3 Adjectival Modification & Agreement

Class I nouns can be modified by an adjective, as illustrated in (31). In (31-a), the noun $m \ni fin$ 'vacuum' is modified by the feminine form of the adjective bara 'big(F)'. The adjective is in its feminine singular form, as the masculine singular form is incompatible with $m \ni fin$, because it induces an ungrammatical sentence. The gender and number of the noun $m \ni fin$ is also reflected in the past tense suffixes attached to the MV. That is, in the past tense the MV agrees with the object. For example, in (31-a) the feminine singular inflection marker -i is in agreement with the noun $m \ni fin$ 'machine'. In contrast, the nouns $k \in an$ 'comb' (31-b) and bru f 'brush' (31-c) independent of the LVC are modified by the masculine adjective form bara, as they are masculine nouns. The latter is also reflected on the verb, in which the inflectional marker -a is attached to the verb kin 'to buy', in agreement with these masculine nouns.

- (31) a. usman bar-i/*a məʃin kmḍ-i si Usman.M.SG.PLN big-F.SG/M.SG vacuum.F.SG buy-F.SG NPR.3.SG 'Usman bought a big vacuum.'
 - b. saddaf bara/*i kãŋa kmḍ-a/*i si Saddaf.F.SG.PLN big.M.SG/F.SG comb.M.SG buy-M.SG NPR.3.SG 'Saddaf bought a big comb.'
 - c. saddaf bara/*i bru∫ kmd-a/*i si Saddaf.F.SG.PLN big.M.SG/F.SG brush.M.SG buy-M.SG NPR.3.SG 'Saddaf bought a big brush.'

The coverbs are divided according to their ability/inability to be modified within the LVC. The nouns $m \ni fin$ 'vacuum', $k \tilde{a} \eta a$ 'comb' and br u f 'brush' can be modified by an adjective within the LVC, without forcing the LVC meaning to be lost, as illustrated in (32), (33), and (34). Like determination, the LVC meaning is retained and the coverb continues to contribute to the verbal meaning irrespective of it being modified by an adjective.

- (32) me carpit-e-ki bari mə∫in mar-i si 1.SG.PLN carpet.M.SG-LOC-OBL big.F.SG vacuum.F.SG hit-F.SG NPR.3.SG 'I used the big vacuum to vacuum.'
- (33) saddaf zainab-ne bal-a-ki bara
 Saddaf.F.SG.PLN Zainab.F.SG-GEN.M.PL hair.M-PL-OBL big.M.SG
 kãŋa mar-ja si
 comb.M.SG hit-M.SG NPR.3.SG
 'Saddaf combed Zainab's hair with a big comb.'
- (34) saddaf zainab-ne bal-a-ki bara
 Saddaf.F.SG.PLN Zainab.F.SG-GEN.M.PL hair-M-PL-OBL big.M.SG
 bru∫ mar-ja si
 brush.M.SG hit-M.SG NPR.3.SG
 'Saddaf combed Zainab's hair with a big brush.'

The nouns ak^h 'eye' and $l \not = 1$ 'leg' can be modified by an adjective independent of the LVC, illustrated in (35-a) and (35-b).

- (35) a. sadəf-ki kal-ija ak^h-a pasənd sən Saddaf.F.SG.OBL black-F.PL eye-F.PL like NPR.3.PL 'Saddaf liked black eyes.'
 - b. us bar-ija lət-a kmd-ija sən 3.SG.ERG big-F.PL leg-F.PL buy-F.PL NPR.3.PL 'He/She bought big (chicken) legs.'

However ak^h 'eye' and lot 'leg' cannot take a modifying adjective when part of the LVC as it interferes with the LVC meaning. By which I mean, the approximate meaning of 'contact' associated with the LV max is lost to the literal lexical verb meaning of 'hitting'. Hence the nominal coverbs ak^h 'eye' and lot 'leg' are treated as nominal complements of max 'to hit'. As a consequence, both sentences are deemed as semantically odd due to the thematic conditions of the LV max 'to hit'.

- (36) a. #sadəf mıki bari ak^h mar-i si Saddaf.F.SG.PLN 1.SG.OBL big.F.SG eye.F.SG hit-F.SG NPR.3.SG 'Saddaf hit a big eye at me.'
 - b. #us miki bari lət mar-i si 3.SG.ERG 1.SG.OBL big.F.SG leg.F.SG hit-F.SG NPR.3.SG 'He/She hit a leg at me.'

Although there is variation with adjectival modification, it is observed that the agreement patterns are the same across all nominal coverbs and complements contained in this class. For example, the MV km 'to buy' in (31-a) agrees with object $m \circ fin$ 'machine' in number and gender, which is reflected by the inflectional marker -i, as $m \circ fin$ is a feminine singular noun. However, what is different within the LVCs is that the LV agrees with the nominal coverb rather than than complement. For instance, the LV agrees with the coverb $m \circ fin$ in terms of its gender and number, which is realised in the inflectional marker -i on the LV mar in (32) above. Similarly, the LV also agrees with nominal coverbs $k \tilde{a} \eta a$ 'comb' in (33) and bruf 'brush' (34), rather than the object of the LVC. The agreement of the LV with the nominal coverb does not alter the meaning of the LVC. Thus irrespective of the nominal coverb retaining its agreement patterning to that of a canonical nominal complement, it does not suffice as argumentation in support of its status as a nominal complement on the whole.

5.3.1.4 Plural Marking

The minimal pair in (37) shows that the coverb $l \not = 1$ 'leg' can be pluralized independent of the LVC $l \not = 1$ mar 'to kick', lit. 'leg hit' and within the LVC. For example in (37-a), $l \not = 1$ 'leg' is an argument of the verb k m 'to buy' and is marked for plurality via the plural marker -a. In (37-b), it can be seen that $l \not = 1$ 'leg' when part of the LVC can also mark for plurality via -a, without forcing the LVC to lose its meaning. Rather the plural marker gives rise to a pluractionality reading to the LVC $l \not = 1$ mar 'to kick', lit. 'leg hit'. Pluractionality refers to the grammatical marking of verbal or event plurality and is usually either marked on the verb, or within the verbal predicate (Faller, 2012, 55).

- (37) a. us lət-a kınd-ija sən 3.SG.ERG leg-F.PL buy-F.PL NPR.3.PL 'He/She bought (chicken) legs.'
 - b. us miki lət-a mar-ija sən 3.SG.ERG 1.SG.OBL leg.F-PL hit-F.PL NPR.3.PL 'He/She kicked me more than once.'

Similarly, the noun $m \rightarrow fin$ 'machine' independent of the LVC $m \rightarrow fin$ mar 'to vacuum. lit vacuum hit' can be pluralised by the canonical plural marker -a as in (38).

(38) saddaf kol dəs məfin-a sən Saddaf.F.SG.PLN has ten machine-F.PL NPR.3.PL 'Saddaf had ten machines.'

However, the LVC itself differs in its interaction with plural marking, in that the attachment of the plural marker -a to the coverb $m \ni fin$ 'machine' results in the

LVC meaning being lost to the MV-complement structure. Consequently, there is no pluractionality reading and the sentence is deemed as semantically infelicitous. The coverbs $k\tilde{a}\eta a$ 'comb' and ak^h 'eye' also display the same behaviour with plural marking within the LVC.

(39) #sadəf carpit-e-ki məʃin-a mar-ija sən Saddaf.F,PLN carpet.M.SG-LOC-OBL vacuum-F.PL hit-F.PL NPR.3.PL 'Saddaf hit the vacuums on the carpet.' (Impossible: 'He/She vacuumed more than once.')

In contrast, the noun bruf 'brush' is a count noun that does not pluralise via an overt plural marker, but does so via null affixation. That is, the singular and plural forms are the same and it is the agreement on the verb that differentiates between the singular and plural forms. This can be seen in (40), the plural marker -e induces ungrammaticality when attached to bruf 'brush'. In contrast to the coverb lot 'leg' in (37-b) (pluralises via overt marking), the plural form of bruf 'brush' cannot occur within the LVC as the LVC meaning is lost entirely. That is, the LV meaning 'contact' is lost to the literal meaning of mar 'to hit' and as a result the coverb bruf 'brush' is treated as a nominal complement rather than contributing to the meaning of the verbal predicate.

- (40) saddaf far bruf pən-e sən Saddaf.F.SG.PLN four brush.M.PL break-M.PL NPR.3.SG 'Saddaf broke the brushes.'
- (41) saddaf miki bru∫ mar-e sən Saddaf.F.SG.PLN 1.SG.OBL brush.M.PL hit-M.PL NPR.3.SG 'Saddaf hit the brushes at me.' (Impossible: 'He/She brushed more than once.')

As a consequence, the plural form of the coverb *bruf* 'brush' does not give rise to a pluractionality reading. Based on the above data, it can be said that nouns which do not overtly mark for plural marking will not give rise to a pluractionality reading, whereas nouns that are overtly marked for plurality will give rise to a pluractionality reading. The latter is a necessary condition, though not a sufficient condition. We summarise this observation in (42).

(42) PLURACTIONALITY GENERALISATION: Overt plural marking on the nominal independent of the LVC is a necessary condition, though not a sufficent condition in giving rise to a pluractionality reading when the nominal inflects for plural marking within the LVC.

5.3.1.5 Summary

The data presented above provides clear evidence that the coverbs that form part of the max-type LVC are nouns independent of the LVC, and hold certain nounhood properties within the LVC. For example, all the coverbs can be determined by a demonstrative, while a subset of coverbs can also be modified by an adjective without causing the LVC meaning to be lost. Similarly, one of the coverbs that inflect for overt plural marking independent of the LVC can also inflect for plural marking within the LVC, which gives rise to a pluractionality reading. Regardless of their complement-like behaviour within the LVC, the nominal coverbs fail to take the oblique case marker -ki, which they can take independent of the LVC. Therefore, I argue that the nominal coverbs and complements are distinct in their morphosyntactic properties.

A summary of the morphosyntactic properties independent of the LVC (abbreviated as: IN ISOLATION) are provided in the first part of table 5.3^1 , while the second part of the table is dedicated to the morphosyntactic properties held by the coverbs within the LVC (abbreviated as: IN LVC). The final part of table 5.3 is dedicated to the syntactic flexibility of the LVC, which is discussed in the following the section. The check marks (\checkmark) indicate that the coverb exhibits the word class properties listed in the second column, while the cross marks (\checkmark) show that the coverb does not exhibit the word class properties.

	Diagnostic-	mə fin	$k \tilde{a} \eta a$	l ə t^h	ak^h	bruf
	Tools	'machine'	'comb'	'leg'	'eye'	'brush'
IN ISOLATION:	OBL CASE	✓	✓	✓	✓	✓
	DEM	\checkmark	\checkmark	✓	✓	✓
	AGR	\checkmark	\checkmark	✓	✓	✓
	ADJ	✓	✓	✓	✓	✓
	PL	\checkmark	✓	✓	✓	✓
IN LVC:	OBL CASE	X	X	Х	Х	X
	DEM	\checkmark	✓	✓	✓	✓
	AGR	✓	✓	✓	✓	✓
	ADJ	✓	✓	X	X	✓
	PL	×	X	✓	X	X
IN LVC:	FRONT	✓	✓	✓	✓	√
	OBJ	✓	✓	✓	✓	✓
	ADV	✓	✓	✓	✓	✓
	PRONM	×	X	X	X	X

Table 5.3: Morphosyntactic Properties of Noun Class I

Q-FOR

X

 $^{^{1}}$ Key: OBL: the ability to take the oblique case marker -ki, ADJ: adjectival modification, AGR: MV-nominal complement agreement and LV-coverb agreement, DEM: determination by a demonstrative pronoun, PL: plural marking, FRONT: fronting operation, OBJ: the syntactic operation involving object movement, ADV: the syntactic operation involving movement of adverb, PRNM: the ability to under go the pronominalisation operation, and Q-FOR: the ability to be questioned.

5.3.2 Syntactic Flexibility

With the understanding of the morphosyntactic properties of nominal complements complete, I now turn to the comparison of these LVCs with MV-complement structures, in respect of their syntactic flexibility properties. I argue based on the above data that the LVCs are distinct from MV-complement structures in respect of their morphosyntactic properties, however I show that the syntactic flexibility of the LVC and MV-complement structure is almost identical. My investigation of syntactic flexibility is based on the five syntactic operations introduced in Chapter 3, (i) fronting, (ii) object-movement, (iii) adverb insertion, (vi) pronominalisation, and (v) question formation

5.3.2.1 Fronting

The canonical position of a nominal coverb is adjacent to the left of the LV, similarly a nominal complement is also adjacent to the left of a MV (see Chapter 3 for examples). A nominal complement can be fronted from its canonical position without interfering with the grammaticality or the basic sentential meaning of the sentence. This also holds for a nominal coverb of a mar-type LVC; the coverb can be moved from its canonical position to the front of the sentence without causing the meaning of the LVC to be lost. Take as an example, the coverb məʃin 'machine' in its canonical position in (43-a), which can be fronted away from mar without affecting the meaning of the LVC or (43-b) to show that it can be fronted without inducing an ungrammatical sentence.

- (43) a. us carpit-e-ki mə∫in mar-i si 3.SG.ERG carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/She vacuumed the room.'
 - b. məfin us carpit-e-ki mar-i si vacuum. F.SG 3.SG.ERG carpet.M.SG-LOC-OBL hit-F.SG NPR.3.SG 'He/She vacuumed the room.'

The coverb lot_h^h 'leg' of the LVC lot_h^h mar 'to kick', lit. 'leg hit' can also be fronted away from the LV, without causing an ungrammatical sentence or affecting the LVC meaning. This is illustrated in (44) below.

(44) ləth usman mıki mar-i si leg.F.SG Usman.M.SG.PLN 1.SG.obl hit-F.SG NPR.3.SG 'Usman kicked me.'

5.3.2.2 Object Movement

The canonical positioning of a direct and indirect object in a sentence consisting of a di-transitive verb is one in which an indirect oblique case marked (-ki) object precedes an unmarked direct object, which is followed by the MV. The canonical

positioning of a nominal coverb of a transitive mar-type LVC precedes the LV, while the direct object precedes the coverbal element. The nominal coverb behaves as a nominal complement, in that the coverb and the LV can be separated by the direct object of the LVC without inducing an ungrammatical sentence. For example, the canonical position of the coverb $m \partial fin$ 'vacuum' of the transitive LVC $m \partial fin$ mar 'to vacuum', lit. 'machine hit' in (45-a) shows that it precedes the LV mar 'to hit', while (45-b) shows that the coverb $m \partial fin$ 'vacuum' and the LV can be separated by the object $ru\tilde{m}$ 'room'.

- (45) a. us rũm-e-ki mə∫in mar-i si 3.SG.ERG room.F.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/She vacuumed the room.'
 - b. us məfin rũm-e-ki mar-i si 3.SG.ERG vacuum.F.SG room.F.SG-LOC-OBL hit-F.SG NPR.3.SG 'He/She vacuumed the room.'

Separation of the two components within the LVC by an object is not restricted to the above LVC, in fact it is characteristic of all the LVCs within this class. For example, the first person oblique pronoun m_iki can separate the LVC components of lot_n^{th} max 'to kick', lit. 'leg hit', whilst the sentence retains its grammatical correctness. Similarly, the object bal 'hair' can also separate the two components of the LVC $k\tilde{a}\eta a$ max 'to comb', lit. 'comb hit' in (46-b).

- (46) a. usman lətəh miki mar-i si Usman.M.SG.PLN leg.F.SG 1.SG.OBL hit-F.SG NPR.3.SG 'Usman kicked me.'
 - b. sara kãŋa bal-a-ki mar ni si Sara.F.SG.PLN comb.M.SG hair-M.PL-OBL hit IMPF.F.SG NPR.3.SG 'Sara was combing her hair.'

5.3.2.3 Adverb Insertion

Similar to the results of the object-movement diagnostic, an adverb can also enter between the two components of the LVC, without straining the grammaticality of the sentence or intervening with the meaning of the LVC. The canonical position of the time adverb is between the subject and the object of the sentence, illustrated in (47). As stated in Chapter 2, the time adverb can be moved to various positions within a sentence for reasons related to prominence. I show in Chapter 3, that the time adverb $k \ni l$ 'tomorrow/yesterday' can be placed between the two components of the MV-complement structure. The time adverb $k \ni l$ 'tomorrow/yesterday' can also be moved between the two components of the LVC bruf mar 'to brush', lit. 'brush hit', as shown in (48).

- (47) saddaf kəl carpit-e-ki bru∫ mar-ja Saddaf.F.SG.PLN yesterday carpet.M.SG-LOC-OBL brush.M.SG hit-M.SG si

 NPR.3.SG
 'Saddaf brushed the carpet yesterday.'
- (48) saddaf carpit-e-ki bruf kəl mar-ja Saddaf.F.SG carpet.M.SG-LOC-OBL brush.M.SG yesterday hit-M.SG si NPR.3.SG 'Saddaf brushed the carpet yesterday.'

The adverb $k \ni l$ 'yesterday/tomorrow' entering the two components of an LVC, without causing the sentence to lose its grammaticality is observed for all mar-type LVCs presented in this chapter, as well as for the kar-type LVCs in Chapter 4.

5.3.2.4 Pronominalisation

The syntactic operations of movement show that the nominal coverb resembles the behaviour of a nominal complement. The latter couched with the results of the morphosyntactic properties, such as the ability to be determined by a demonstrative and the agreement patterns, suggests that the nominal coverb behaves as a nominal complement. However, nominal coverbs are different to nominal complements in respect of their inability to undergo pronominalisation. It is shown in Chapter 3 that a canonical nominal complement of an MV-complement structure can be substituted by a pronoun, without inducing a semantically infelicitous sentence. In contrast, a nominal coverb cannot be substituted by a pronoun, as the LVC meaning is lost entirely. The meaning can be said to correspond closest to that of an MV-complement structure, however the sentence is deemed as semantically infelicitous. For example, in (51), the pronoun o in the second clause is substituted for its antecedant bruf 'brush' in (49). Regardless of the context (50) in which (51) is uttered, the LVC meaning is lost.

- (49) me carpit-e-ki bru∫ mar-ja si 1.SG.PLN carpet.M.SG-LOC-OBL brush.M.SG hit-M.SG NPR.3.SG 'I brushed the carpet.'
- (50) Context: A child reassures their parent that after swimming they brush their hair. The child utters (51) to their parent.

#me pəte kε kəṭ-a si me o mar-ja
1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.DIST.SG hit-M.SG
si mare bal-a-ki
NPR.3.SG 1.GEN.M.SG hair-M.PL-OBL
'You know what I did, I hit that on my hair.' (Impossible: 'I brushed my hair.')

5.3.2.5 Question Formation

The two classes also behave differently with the question formation operation; coverbs cannot be questioned whereas complements can be questioned. For example, the nominal coverb ak^h of the LVC in (3) cannot be questioned, which can be seen in the question-answer sequence in (52). The coverb ceases to contribute to the verbal predicate and consequently the meaning of the LVC is affected. That is, the MV meaning of mar 'to hit' is interpreted rather than the LV meaning. As a consequence, the question-answer sequence is deemed as semantically odd.

- (52) a. us tuki kε mar-ja si 3.SG.ERG 2.SG.OBL what hit-M.SG NPR.3.SG 'What did he hit you with?'
 - b. #ak^h eye.F.SG 'Eye.'

5.4 Noun Class II

Noun class II contains the two nominal coverbs listed in (53) that are shown to be nominals independent of the LVC, as well as within the LVC. The two are categorised into one class according to their morphosyntactic properties. Similar to class I nouns, the two nouns can take the oblique case marker -ki and have the ability to be determined by a demonstrative pronoun. However they differ to class I nouns in that they cannot be determined by a demonstrative when part of the LVC, as it interferes with the LVC meaning.

(53) a_n^{th} 'hand' and θar 'wire'.

5.4.1 Morphosyntactic Properties Independent of & within LVC

The case observation made for noun class I, also holds for class II nouns. That is, the nouns independent of the LVC have the ability to take a case marking, though cannot as a coverbal element. For example, a_n^{th} 'hand' and θar 'wire' are inflected for the case marker -ki in (54) and (55).

- (54) saddaf apna at h-e-ki tfut-ja si Saddaf.F.SG.PLN RFL hand.M.SG-LOC-OBL trap-M.SG NPR.3.SG 'Saddaf deliberately trapped her hand.'
- (55) me is θ ar-e-ki bin-e vit sət 1.SG.PLN DEM.PROX.SG wire.F.SG-LOC-OBL bin.M.SG-LOC in throw sa NPR.1.SG 'I will throw this wire in the bin.'

Similar to noun class I, the nouns do not have the ability to inflect for the oblique case marker -ki within the LVC, as it causes an ungrammatical sentence. This can be seen for the LVC at^h mar 'to wave', lit. 'wave hit' in (56-a) and the LVC θar mar 'to fax/email', lit. 'wire hit' in (56-b). The ungrammaticality of the sentence is related to the number of oblique case marked nominals. As noted previously, the canonical ordering of objects in a di-transitive sentence is as follows: the indirect object, which is marked by the oblique case -ki precedes the direct object, which is unmarked. What we see in (56-a) and (56-b) are two nominals that are in the oblique case, hence the sentences are ungrammatical.

- (56) a. *sadəf mıki ath-e-ki mar-ja si Saddaf.F.SG.PLN 1.SG.OBL hand.M.SG-LOC-OBL hit-M.SG NPR.3.SG 'Saddaf hit the hand at me.' (Impossible: 'Saddaf waved.')
 - b. *me uski θar-ki mar-ja si
 1.SG.PLN 3.SG.OBL wire.F.SG-OBL hit-M.SG NPR.3.SG
 'I hit the wire at her/him.' (Impossible: 'I faxed.')

The nominal coverbs canonically appear unmarked, which results in a transitive sentence as the nominal coverb contributes to the meaning of the verbal predicate rather than behaving as an unmarked direct object. The latter can be seen in (57-a) and (57-b) below.

- (57) a. sadəf mıki ath mar-ja si Saddaf.F.SG 1.SG.OBL hand.M.SG hit-M.SG NPR.3.SG 'Saddaf waved at me.'
 - b. me uski θ ar mar-i si 1.SG.PLN 3.SG.OBL wire.F.SG hit-F.SG NPR.3.SG 'I faxed him/her.'

The nouns θar 'wire' and at^h 'hand' can be determined by the demonstrative e 'this' independent of the LVC, as we see for θar 'wire' in (55) above and for at^h 'hand' in (58-a) below. However, they differ from noun class I, in that the nouns cannot be determined by the demonstrative within the LVC because it interferes with the meaning of the LVC, as illustrated in (58-b) and (58-c). Both the examples show that the bleached LV meaning of mar 'to hit' is lost and it is the lexical verb meaning 'to hit' that is forced by the insertion of the demonstrative e 'this'. Hence

the nominal coverb no longer contributes to the meaning of the LVC, but forms part of the MV-complement structure.

- (58) a. mara e ath dukh na ε
 1.GEN.M.SG DEM.PROX.SG hand.M.SG pain IMPF.M.SG PRS.1.SG
 'This hand of mine is hurting.'
 - b. me uski e ath mar-ja si 1.SG.PLN 3.SG.OBL DEM.PROX.SG hand.M.SG hit-M.SG NPR.3.SG 'I hit her/him with this hand.' (Impossible: 'I waved at her/him.')
 - c. me uski e θ ar mar-i si 1.SG.PLN 3.SG.OBL DEM.PROX.SG wire.F.SG hit-F.SG NPR.3.SG 'I hit her/him with this wire.' (Impossible: 'I faxed her.')

Modification by an adjective is permitted independent of the LVC, for example $a\underline{t}^h$ 'hand' in (59-a) is modified by the masculine plural form of the adjective bare 'big', in agreement with the masculine plural form $a\underline{t}^h$. However, adjectival modification is not possible within the LVC for the noun $a\underline{t}^h$ 'hand', shown in (59-b). The adjective bara 'big' in the latter example causes the LVC to lose its meaning. Similar to the determination results, the LV behaves as an MV and the nominal coverb does not contribute to verbal meaning, but instead is interpreted as a complement. Though the sentence is not ungrammatical, rather it is deemed as semantically odd due to the thematic conditions of the MV.

- (59) a. sadəf-ki bar-e ath pasənd sən Saddaf.F.SG.OBL big-M.PL hand.M.PL like NPR.3.PL 'Saddaf liked big hands.'
 - b. #sadəf sara-ki bara ath mar-ja Saddaf.F.SG.PLN Sara.F.SG-OBL big.M.SG hand.M.SG hit-M.SG si nə NPR.3.SG TOP 'Saddaf hit a big hand at Sara.' (Impossible: 'Saddaf waved at Sara.')

The behaviour observed above also holds for θar 'wire', in that it can be modified by an adjective independent of the LVC, illustrated in (60), though it cannot be modified when part of the LVC θar mar 'to fax/email', lit. 'wire hit' (61). This is because the latter triggers the MV-complement structure, by which I mean that the approximate LV meaning of contact is lost and we find the literal meaning of hitting. Consequently, the nominal coverb no longer contributes to the meaning of the LVC but rather is a complement of the MV.

(60) me ləmbi θar kmd-i si 1.SG.PLN long.F.SG wire.F.SG buy-F.SG NPR.3.SG 'I bought a long wire.' (61) usman aba-ki ləmbi θar mar-i si Usman.M.SG dad.M.SG-OBL long.F.SG wire.F.SG buy-F.SG NPR.3.SG 'Usman hit dad with a long wire.' (Impossible: 'Usman faxed dad.')

In terms of agreement patterning, the coverb θar 'wire' resembles the behaviour of a nominal complement. For example, the LV also agrees with the coverb in (60): the inflectional marker is the feminine singular -i, as θar 'wire' is a feminine singular noun. The LV does not agree with the subject or object, as they are both masculine. The agreement patterning of the LVC at^h_{τ} mar 'to wave', lit. 'wave hit' in (59-b) is ambiguous. The subject and object are humans, which canonically triggers the default masculine singular inflection -ja on the verb. Similarly, the coverb at^h_{τ} 'hand' triggers masculine singular agreement on the verb, as it is a masculine noun. The ambiguity lies in whether the LV in (59-b) is in agreement with its subject, object, or the nominal coverb. By following the agreement patterns of all other LVCs, it is assumed that the LV is in agreement with the coverb at^h_{τ} 'hand'.

The manner in which the two nouns mark for plurality differ; θar 'wire' marks for plurality via the overt marker -a (62-a), whereas at^h 'hand' marks for plurality via null affixation (62-b). That is, the same form of the noun is employed for singular and plural readings and it is the inflectional marker in agreement with the noun on the MV and the form of the BE-auxiliary that differentiates the singular and plural forms. The plural marker induces ungrammaticality when attached to at^h 'hand', as shown in (62-b).

- (62) a. me θ ar-a bin-e vit sət-e sən 1.SG.PLN wire-F.PL bin.M.SG-LOC in throw-F.PL NPR.3.PL 'I threw the wires in the bin.'
 - b. sadəf-ki bar-e ath-*a pasənd sən Saddaf.F.SG-OBL big-M.PL hand-M.PL like NPR.3.PL 'Saddaf liked big hands.'

Regardless of the manner in which the nouns mark for plurality, they both cannot occur in their plural forms when part of the LVC, as the meaning of the LVC is lost to the MV-complement structure meaning. Hence it fails to give rise to a pluractionality reading, illustrated in (63) and (64). Consequently, the nominal coverb is interpreted as the nominal complement of mar 'to hit'.

(63) sadəf miki gudi-ne ath mar-e Saddaf.F.SG.PLN 1.SG.OBL doll.F.SG-GEN.SG hand.M.PL hit-M.SG sən

NPR.3.PL

'Saddaf hit the doll's hands at me.' (Impossible: 'Saddaf waved her hands.')

(64) me uski θar-a mar-ija sən
1.SG.PLN 3.SG.OBL wire.F-PL hit-F.PL NPR.3.PL
'I hit wires at him.' (Impossible: 'Saddaf faxed faxes.')

5.4.2 Mid-Summary

An overview of the morphosyntactic diagnostics are presented in table 5.4 below. Unlike, noun class I, the nominals possess less nounhood properties within the LVC. The two nouns independent of the LVC can take the oblique case marker -ki, be determined by a demonstrative, be modified by an adjective, assign gender and number, and mark for plurality. However, in contrast, neither of these properties are held by the nouns when part of the LVC. The result of each of these properties being present within the LVC either forces the LVC meaning to be lost to the MV-complement structure or an ungrammatical sentence. Such observations show that in respect of morphosyntactic properties, the nominal coverbs cannot be categorised as nominal complements. To further the latter argument, I turn to the syntactic flexibility of the nominal coverbs. As a preview, the results of the syntactic flexibility diagnostic tools are presented in the final part of table 5.4 below.

 at^h Diagnostic- θar 'hand' Tools 'wire' IN ISOLATION: OBL CASE DEM AGR ADJ PLX X IN LVC: OBL CASE X X DEM AGR X X ADJ X X PL/ / IN LVC: FRONT ADV OBJX X PRNM X X Q-FOR

Table 5.4: Morphosyntactic Properties of Noun Class II

5.4.3 Syntactic Flexibility

Similar to object movement diagnostic results presented for class II, the coverb a_n^{th} 'hand' and the LV mar 'to hit' can be separated by the direct object. For example, the canonical positioning of the coverb is left of the LV mar 'hit' in (65-a), though

it can be separated away from the LV by the direct object m_ik_i 'me', illustrated in (65-b).

- (65) a. me ik^h dəne- ik^h dəne- ik^h mar-ja si 1.SG.PLN one man.M.SG-OBL hand.M.SG hit-M.SG NPR.3.SG 'I waved at one man.'
 - b. me ath Ikh dene-ki mar-ja si 1.SG.PLN hand.M.SG one man.M.SG-OBL hit-M.SG NPR.3.SG 'I waved at one man.'

The coverb θar 'wire' can also be separated from the LV by an object, which can be seen by comparing the canonical positioning in (66-a) and the movement of the object miki in (66-b).

- (66) a. us miki θ ar mar-i si 3.SG.ERG 1.SG.OBL wire.F.SG hit-F.SG NPR.3.SG 'He/She faxed/emailed me.'
 - b. us θ ar miki mar-i si 3.SG.ERG wire.F.SG 1.SG.OBL hit-F.SG NPR.3.SG 'He/She faxed/emailed me.'

The two components of the LVC θ ar mar 'to fax/email', lit. 'wire hit' can also be separated by the adverb $k \ni l$ 'yesterday'. The canonical positioning is shown in (67-a) and the movement of the adverb between the two components of the LVC is shown in (67-b).

- (67) a. us kəl miki θ ar mar-i si 3.SG.ERG yesterday 1.SG.OBL wire.F.SG hit-F.SG NPR.3.SG 'He/She faxed/emailed me yesterday.'
 - b. us mīki θ ar kəl mar-i si 3.SG.ERG 1.SG.OBL wire.F.SG yesterday hit-F.SG NPR.3.SG 'He/She faxed/emailed me yesterday.'

The fronting diagnostic also involves movement of the coverbal element, in which the coverb is fronted away from the LV. Like the coverbs in noun class I, the coverbs in this class can also be fronted away from the LV without inducing an ungrammatical sentence. For example in (68-a) the coverb $a_{\vec{c}}^{th}$ 'hand' is fronted away from mar 'to hit' and the coverb θar 'wire' in (68-b) is also fronted away from mar 'to hit'.

- (68) a. $a_n^{\rm th}$ us mīki mar-ja si hand.M.SG 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She waved at me.'
 - b. θar us mīki mar-i si wire.F.SG 3.SG.ERG 1.SG.OBL hit-F.SG NPR.3.SG 'He/She faxed/emailed me.'

The syntactic flexibility results provide evidence in support of the nominal coverb behaving as a nominal complement. For example, the above data shows that a coverb can be fronted away from the LV, and the two components of LVC can be separated by an adverb and a direct object, without inducing an ungrammatical sentence. The coverb differs to the complement in that it cannot undergo pronominalisation. For example in (70), the demonstrative pronoun o in the second clause is substituted for its antecedant a_c^{th} 'hand' in (65-a). In providing a context, (70) is uttered in context of (69). Regardless of the context, the substitution forces the meaning of the LVC to be lost. That is, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. As a result in the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV mar 'to hit'.

- (69) Context: A child informs their parent that they only waved at the strange man. The child utters (70) to their parent.
- (70) #me pəte kε kəṭ-a si me e mar-ja 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.PROX.SG hit-M.SG si ʤəna-ki NPR.3.SG man.M.SG-OBL 'You know what I did, I hit this at the man.'

The question formation operation also differentiates the two classes. Coverbs cannot be questioned. For example, the nominal coverb a_n^{th} 'hand' of the LVC in (3) cannot be questioned, which can be seen in the question-answer sequence in (71). The coverb ceases to contribute to the verbal predicate and consequently the meaning of the LVC is affected. That is, the MV meaning of mar 'to hit' is interpreted rather than the LV meaning. As a consequence, the question-answer sequence is deemed as semantically odd.

- (71) a. us tuki kε mar-ja si 3.SG.ERG 2.SG.OBL what hit-M.SG NPR.3.SG 'What did he hit you with?'
 - b. #ath hand.M.SG 'Hand.'

5.5 Noun Class III

Noun class III contains the nouns listed in (72), which are paired in accordance to their behaviour with case marking and determination (by a demonstrative pronoun). The nouns in the previous two classes have the ability to take the oblique -ki case in isolation, as well as having the ability to be determined by the demonstrative pronoun e 'this'. In contrast, class III nouns do not have the ability to inflect for

the oblique case marker -ki, due to the DOM rules postulated in Chapter 2. However, they can inflect for the Layer I case marker -e, hence qualifying as members of the noun class. They can also be determined by the demonstrative pronoun e 'this' independent of the LVC, though only one member of the class can be determined within the LVC. The present section investigates case marking, determination, modification, and plural marking of the nouns independent and within the LVCs. The syntactic flexibility is also investigated in section 5.5.2.

(72) tekst 'text (message)' and $p\tilde{e}nt$ 'paint'.

As a preview, the results are summarised in table 5.5 below.

	Diagnostic-	$p \tilde{e} n t$	tekst
	Tools	'paint'	'text'
IN ISOLATION:	OBL CASE	Х	Х
	$\operatorname{GEN}/\operatorname{LOC}$ CASE	\checkmark	✓
	DEM	\checkmark	✓
	AGR	\checkmark	✓
	ADJ	✓	\checkmark
	PL	X	\checkmark
IN LVC:	OBL CASE	=	=
	DEM	\checkmark	X
	AGR	\checkmark	✓
	ADJ	\checkmark	X
	PL	-	X
IN LVC:	FRONT	✓	✓
	ADV	\checkmark	\checkmark
	OBJ	✓	✓
	PRNM	X	X
	Q-FOR	X	X

Table 5.5: Morphosyntactic Properties of Noun Class III

5.5.1 Morphosyntactic Properties Independent & within LVC

The nouns tekst 'text' and $p\tilde{e}nt$ 'paint' can inflect for case, though they do not have the ability to inflect for the oblique case marker -ki because of the DOM rules. The two nouns in this class are categorised as non-count, singular nouns hence they do not take the oblique case marker -ki. In contrast, the coverbs can take the genitive case plus the concomitant Layer I locative, as in $p\tilde{e}nt$ -e ni in (73) and tekst-e in (74).

(73) miki pënt-e ni bo ei ϵ 1.SG.OBL paint.M.SG-LOC GEN.F.SG smell.F.SG come.F.SG PRS.3.SG 'The smell of paint came to me.'

(74) miki itu tekst-e na vas e-ja si 1.SG.OBL from text.M.SG-LOC GEN.M.SG noise.M.SG come-M.SG NPR.3.SG 'I heard the sound of the text from here.'

Both nouns can be determined by the demonstrative e 'this' independent of the LVC. For example, in (75) $p\tilde{e}nt$ 'paint' can be determined independent of the LVC. Similarly, in (76) we see that it can also be determined within the LVC. In the latter example, the LVC meaning 'to paint' is retained despite determination of the coverb.

- (75) uni e pent sa:f kar now DEM.PROX.SG paint.M.SG clean do 'Clean this paint now!'
- (76) me rũm-e-ki e pẽnt mar-ja 1.SG.PLN room.F.SG-LOC-OBL DEM.PROX.SG paint.M.SG hit-M.SG si NPR.3.SG 'I painted the room with this paint.'

The noun tekst 'text' can be determined by the demonstrative pronoun e 'this' in isolation of the LVC (77-a). It differs from $p\tilde{e}nt$ 'paint' in that it cannot be determined by the demonstrative pronoun e 'this' within the LVC tekst mar 'to text', as it interferes with LVC meaning. The latter can be seen in (77-b), in which the LV takes on its lexical verb meaning and the coverb behaves as its complement. The sentence is deemed as semantically odd due to the thematic constraints of the MV mar 'to hit.

- (77) a. us mīki e tekst pedz-ja si 3.SG.ERG~1.SG.OBL~DEM.PROX.SG~text.M.SG~send-M.SG~NPR.3.SG 'He/She sent this text to me.'
 - b. #us miki e tekst mar-ja si 3.SG.ERG 1.SG.OBL DEM.PROX.SG text.M.SG send-M.SG NPR.3.SG '#He/She hit this text at me.' (Impossible: 'He/She texted this text.')

Similar results are also found with adjectival modification for the noun tekst 'text'. For example, it can be modified by an adjective independent of the the LVC, illustrated in (78-a), in which the masculine adjective ləmba 'long' modifies tekst 'text'. However, it cannot be modified by an adjective within the LVC, shown in (78-b). Here the nominal coverb modified by the same adjective ləmba 'long' causes the bleached LV meaning to be lost. This in turn causes the nominal coverb to lose its contribution to the LVC meaning and behave as a nominal complement. Hence the lexical sense of mar 'to hit' is interpreted. The sentence is also deemed as semantically odd due to the thematic constraints of the MV.

- (78) a. me aba-ki ik^h ləmba tekst pedj-ja 1.SG.PLN dad.M.SG-OBL one long.M.SG text.M.SG send-M.SG si NPR.3.SG 'I sent dad one long text.'
 - b. #saddaf aba-ki ləmba tekst mar-ja Saddaf.F.SG.PLN dad.M.SG-OBL long-M.SG text.M.SG hit-M.SG si NPR.3.SG '#Saddaf hit a long text at dad.' (Impossible: 'He/She sent dad a long text.')

In contrast, the noun $p\tilde{e}nt$ 'pain' can be modified by an adjective independent of and within the LVC, as seen in (79-a) and (79-b). In the latter example, the basic sentential meaning of the sentence is not affected.

- (79) a. saddaf suwa pent siŋ-ja si Saddaf.F.SG.PLN red-M.SG paint.M.SG smell-M.SG NPR.3.SG 'Saddaf smelt red paint.'
 - b. saddaf rũm-e-ki suwa pẽnt mar-ja Saddaf.F.SG.PLN room.F.SG-LOC-OBL red-M.SG paint.M.SG hit-M.SG si NPR.3.SG 'Saddaf painted the room red.'

 $p\tilde{e}nt$ 'paint' is categorised as a non-count, singular noun. Hence it does not inflect for plural marking. Example (80) shows that the noun does not mark for plurality via the overt plural marking or via null affixation.

(80) *saddaf pent-e siŋ-e ən
Saddaf.F.SG.PLN paint-M.PL smell-M.PL NPR.3.PL
'Saddaf smelt paints.'

tekst 'text' is categorised as a count noun that marks for plurality via null affixation, as in (81-a). tekst 'text' does not possess the same ability to mark for plurality when part of the LVC, as it causes the components within the LVC to lose their special LVC meaning, which can be seen in (81-b).

- (81) a. me aba-ki tekst ped-e sən 1.SG.PLN dad.M.SG-OBL text.M.PL send-M.SG NPR.3.PL 'I sent dad texts.'
 - b. #me aba-ki tekst mar-e sən
 1.SG.PLN dad.M.SG-OBL text.M.PL hit-M.PL NPR.3.PL
 '#I hit texts at dad.' (Impossible: 'He/She sent dad texts.')

5.5.2 Syntactic Flexibility

In line with the previous data, the coverbs in class III cannot be substituted by a pronoun without it affecting the LVC meaning. Take the LVC $p\tilde{e}nt$ mar in (82), here the nominal component $p\tilde{e}nt$ 'paint' together with the verb mar 'to hit' form the verbal meaning 'to paint'.

(82) us is rũm-e-ki pẽnt mar-ja 3.SG.ERG DEM.PROX.SG room.F.SG-LOC-OBL paint.M.SG hit-M.SG si NPR.3.SG 'He/She painted this room.'

The pronoun o in the second clause of (84) is substituted for its antecedant $p\tilde{e}nt$ 'paint' in (82) above, which is uttered in context of (83). This causes the meaning of the LVC to be lost. That is, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (83) Context: A decorator explains what they did to the customer's room. The sentence (84) is uttered to the customer when describing the eventuality of painting.
- #me pəte kε kəṭ-a si me o mar-ja
 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.DIST.SG hit-M.SG
 si rũm-e-ki
 NPR.3.SG room.F.SG-LOC-OBL
 'You know what I did, I hit that at the room'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. That is, it cannot be questioned as the meaning of the LVC is affected. The MV meaning of mar 'to hit' is interpreted rather than the approximate LV meaning 'to make contact'. The latter is illustrated in the question-answer sequence in (85) for the LVC tekst mar 'to text', lit. 'text hit'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (85) a. us tuki kε mar-ja si 3.SG.ERG 2.SG.OBL what hit-M.SG NPR.3.SG 'What did he hit you with?'
 - b. #tekst text.M.SG 'Text.'

In contrast, the coverbs can be fronted away from the LV whilst continuing to contribute to the overall verbal predicate meaning. For example, we see that the coverb *tekst* is moved from its canonical position in (86-a) to the front of the sentence in (86-b) with no affect to the LVC meaning.

- (86) a. us miki tekst mar-ja si 3.SG.ERG~1.SG.OBL~text.M.SG~hit-M.SG~NPR.3.SG 'He/She texted me.'
 - b. tekst us miki mar-ja si text.M.SG 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She texted me.'

Akin to the above, the coverb $p\tilde{e}nt$ 'paint' can also be fronted away from the LV, which can be seen by comparing its canonical position in (82) and its new position at the front of the sentence in (87). In the latter example the LVC meaning 'to paint' is retained despite the separation of the two LVC components.

(87) pent us is rum-e-ki mar-ja paint.M.SG 3.SG.ERG DEM.PROX.SG room.F.SG-LOC-OBL hit-M.SG si NPR.3.SG 'He/She painted this room.'

The two components are flexible in that they can be separated by the object of the sentence. For example the object $ru\tilde{m}$ 'room' of the LVC $p\tilde{e}nt$ mar 'to paint', lit. 'paint hit' can enter between the two components without affecting the grammaticality or the meaning of the LVC, shown in (88). Similarly, the object miki 'me' can be placed between the two components of the LVC tekst to 'to text', lit. 'text hit', shown in (89).

- (88) us pent is rum-e-ki mar-ja 3.SG.ERG paint.M.SG DEM.PROX.SG room.F.SG-LOC-OBL hit-M.SG si NPR.3.SG 'He/She painted this room.'
- (89) us tekst miki mar-ja si 3.SG.ERG 1.SG.OBL text.M.SG hit-M.SG NPR.3.SG 'He/She texted me.'

The adverb $k \ni l$ 'yesterday' can also intrude the two components of the LVC without intervening with the meaning of the LVC, as illustrated in (90) and (91) below.

(90) us miki tekst kəl mar-ja si 3.SG.ERG 1.SG.OBL text.M.SG yesterday hit-M.SG NPR.3.SG 'He/She texted me yesterday.'

(91) us rũm-e-ki pẽnt kəl mar-ja si 3.SG.ERG room.F.SG-LOC-OBL paint.M.SG yesterday hit-M.SG NPR.3.SG 'He/She painted the room yesterday.'

5.6 Noun Class IV

The final class of nouns listed in (92) are event-related nouns. In a similar manner to the previous three classes of nouns, I begin with the morphosyntactic properties of nouns both when independent of the LVC and when part of the LVC. I then turn to the syntactic flexibility properties of the these LVCs.

(92) Noun Class IV: pis 'fart, niff 'sneeze', sas 'sigh', and dəkar 'burp'.

5.6.1 Morphosyntactic Properties Independent of & within $_{ m LVC}$

The DOM rules do not permit the oblique case marker -ki on these set of nouns. However they are compatible with other case markings. For example, the noun pis 'fart' takes the locative case layer I, followed by the genitive case layer II ni in (93), whereas nif differs in that the locative case -e follows the postposition kulu 'from' in (94). Example (95) shows that the noun dicata 'burp' can take the same case marking found on the noun nif, in which the locative case -e is followed by the postposition kulu 'from'.

- (93) miki pis-e ni bo ei si
 1.SG.OBL fart.F.SG-LOC GEN.F.SG smell.M.SG come.F.SG NPR.3.SG
 'The smell of a fart came to me.'
- (94) sami mari nπf-e kulu dər ni jε Sami.F.SG.PLN 1.GEN.F.SG sneeze.F.SG-LOC from fear IMPF.F.SG PRS.3.SG

'Sami is scared of my sneeze.'

(95) us-ni dəkar-e kulu bo atf ni jε 3.SG-GEN.F.SG burp.F.SG-LOC from smell.F.SG come IMPF.F.SG PRS.3.SG 'The smell is coming from her/his burp.'

All nouns contained in the preceding noun classes can be determined by the demonstrative e 'this' independent of the LVC, with some variation as to whether they can be determined within the LVC. The nouns in this class behave differently, in that they do not have the ability to be determined by the demonstrative pronoun e 'this', as it induces a semantically odd sentence. We can see this for pis 'fart' in (96) nif 'sneeze' (97), and dokar 'burp' in (98).

- (96) #miki e pis-e-ni bo ei
 1.SG.OBL DEM.PROX.SG fart.F.SG-LOC-GEN.F.SG smell.M.SG come.F.SG
 si
 NPR.3.SG
 'The smell of this burp came to me.'
- (97) #miki pəta ε sami e nitf-e 1.SG.OBL know PRS.1.SG Sami.F.SG.PLN DEM.PROX.SG sneeze.F.SG-LOC kulu dər ni jε from fear IMPF.F.SG PRS.3.SG 'I know Sami is scared of this sneeze.'
- (98) #e dəkar-e kulu bo atf ni jε
 DEM.PROX.SG burp.F.SG-LOC from smell.F.SG come IMPF.F.SG PRS.3.SG
 'The smell is coming from this burp.'

Reverse results are seen with adjectival modification when comparing to the other noun classes. For example, all of the nominals cannot be modified independent of the LVC because it leads to a semantically odd sentence, though they can be modified within the LVC. For example, the coverb pis 'fart' in the intransitive LVC pis mar 'to fart', lit. 'fart hit' cannot be modified by an adjective bara 'big' independent of the LVC shown in (99). However, when part of the LVC it can be modified by the same adjective bara 'big', without causing the LVC meaning to be lost, shown in (100).

- (99) #mīki bari pis-e-ni vas eī 1.SG.OBL big.F.SG fart.F.SG-LOC-GEN.F.SG sound.F.SG come.F.SG jε PRS.3.SG 'I heard the sound of a big fart.'
- (100) us bari pis mar-i si 3.SG.ERG big.F.SG fart.F.SG hit-F.SG NPR.3.SG 'He/She did a big fart.'

Similarly, the noun $d\partial kar$ 'burp' is deemed as semantically infelicitous when modified by an adjective independently, shown in (101-a). However, there is no semantic oddity when being modified by an adjective within the LVC, illustrated in (101-b).

- (101) a. #sara-ki bara dəkar pəs-i gaja si Sara.F.SG-OBL big-M.SG burp.M.SG trap-NFN go.M.SG NPR.3.SG 'Sara's big burp got trapped.'
 - b. sara bara dəkar mar-ja si Sara.F.SG.PLN big-M.SG burp.M.SG hit-M NPR.3.SG 'Sara did a big burp.'

The noun *pis* 'fart' independent of the LVC *pis mar* 'to fart', lit. 'fart hit' can take a plural marker, as shown in (102), as well when part of the LVC, as in (103). The plural marker -a attached to the coverb *pis* does not cause the LVC to lose

its meaning or induce an ungrammatical sentence. Rather, it has a pluractionality interpretation (103), whereas the absence of the plural marking refers to one event of farting.

- (102) e arvəle pis-a-ne barətf gələ kar ni
 DEM.PROX.SG always fart-F.PL-GEN.F.PL about talk do IMPF.F.SG
 o ni jɛ
 NOML IMPF.F.SG PRS.3.SG
 'This girl is always talking about farts.'
- (103) bek-bi:n kai te samija pis-a mar-ija bake-bean.M.SG eat.F.SG after Saamiya.F.SG.PLN fart-F.PL hit-F.PL sən

 NPR.3.PL

 'After eating bake beans, Samiya did lots of farts.'

The above behaviour is also found with the noun nif 'sneeze'. It can inflect for plurality via the overt marker -a, as illustrated in (104), as well as having the ability to inflect for the plurality within the LVC. The latter gives rise to a pluractionality reading, as shown in (105).

- (104) miki bu sarija nitj-a-nija vas ei-a
 1.F.SG.OBL lots all.F.PL sneeze-F.PL-GEN.F.PL noise.F.SG come-F.PL
 sən
 NPR.3.PL
 'I heard lots of sneezes.'
- (105) me bu sarija nītf-a mar-ija sən 1.F.SG.PLN lots all.F.PL sneeze-F.PL hit-F.PL NPR.3.PL 'I did lots of sneezes.'

Interestingly, the noun $d\partial kar$ 'burp' does not have the ability to pluralise via the overt marker -a or via null affixation independent of and within the LVC, illustrated in (106) and (107) below.

- (106) *miki dəkar-e ne vas e sən 1.SG.OBL burp-M.PL IMPF.M.PL noise.F.SG come.M.PL NPR.3.PL 'I heard the sound of burps.'
- (107) *us dəkar-e mar-e sən 3.SG.ERG burp-M.PL hit-M.PL NPR.3.PL 'He/She did lots of burps.'

5.6.2 Syntactic Flexibility

All coverbs in this class can also be fronted away from the LV without either the LVC meaning or the grammaticality of the sentence being affected. For example in (108-a), the canonical position of the coverb nnt 'sneeze' in (108-a) can be fronted

away from the LV mar 'to hit' without interfering with the meaning of the LVC, as illustrated in (108-b).

- (108) a. us nitf mar-i si 3.SG.ERG sneeze.F.SG hit-F.SG NPR.3.SG 'He/She sneezed.'
 - b. nrtf us mar-i si sneeze.F.SG 3.SG.ERG hit-F.SG NPR.3.SG 'He/She sneezed.'

The syntactic operation of separability of the LVC components is also carried out by the following two diagnostics: (i) adverb insertion and (ii) indirect object movement. The latter diagnostic is not applicable as the LVCs in this class are intransitive. All the coverbs pass the adverb insertion diagnostic. That is, the adverb kəl 'tomorrow/yesterday' can be placed between the coverb and LV, without inducing a grammatically incorrect sentence or intervening with the LVC meaning. For example, the time adverb kəl 'yesterday' can be moved from its canonical position in (109-a) to between the coverb dəkar 'burp' and LV mar 'hit' in (109-b). This is in line with the behaviour of canonical complements which, regardless of their word class, permit an adverb between themselves and the MV they are adjacent to.

- (109) a. sara kəl dəkar mar-ja si Sara.F.SG.PLN yesterday burp.M.SG hit-M.SG NPR.3.SG 'Sara burped yesterday.'
 - b. sara dəkar kəl mar-ja si Sara.F.SG.PLN burp.M.SG yesterday hit-M.SG NPR.3.SG 'Sara burped yesterday.'

The syntactic flexibility results show that the nominal coverbs and complements behave the same in respect of the fronting and adverb insertion operations. Similar to the preceding LVCs, the coverbs in this class do not participate in pronominalisation, as it affects the meaning of the LVC. For example, in (111) the coverb dəkar 'burp' of the LVC dəkar mar 'to burp', lit. 'burp hit' (109-a) cannot be substituted by the pronoun o, regardless of the context of the utterance (110). As a consequence, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. Under this meaning the sentence is deemed as semantically infelicitous.

- (110) Context: A patient discusses digestive problems with their doctor. The sentence (111) is uttered to the doctor when describing the eventuality of burping.
- (111) #me pəte kε kət-a si me o mar-ja 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.DIST.SG hit-M.SG si NPR.3.SG 'You know what I did, I hit that.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. That is, it cannot be questioned as the meaning of the LVC is affected. The MV meaning of mar 'to hit' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (112) for the LVC sas mar 'to sigh', lit. 'sigh hit'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (112) a. us ke mar-ja si 3.SG.ERG what hit-M.SG NPR.3.SG 'What did he/she hit?'
 - b. #sas sigh.M.SG 'Sigh.'

The results are summarised in table 5.6 below for the morphosyntactic and syntactic flexibility properties.

Table 5.6: Morphosyntactic Properties of Noun Class IV

	Diagnostic-	pis	nıţſ	dəkar	sas
	Tools	'fart'	'sneeze'	'burp'	'sigh'
IN ISOLATION:	DEM	Х	Х	Х	Х
	OBL CASE	X	X	X	X
	LOC/GEN CASE	✓	✓	✓	✓
	AGR	✓	✓	✓	✓
	ADJ	X	X	X	X
	PL	✓	✓	X	X
IN LVC:	AGR	✓	✓	✓	✓
	ADJ	✓	✓	✓	X
	PL	✓	✓	-	X
IN LVC:	FRONT	✓	✓	✓	✓
	ADV	✓	✓	✓	✓
	PRNM	X	X	X	X
	Q-FOR	X	Х	X	X

5.7 Noun Class V

The categorisation of the four noun classes above are based on their ability to exhibit canonical nominal properties. The present section presents two coverbs, listed in (113), which when independent of the LVC exhibit few canonical nominal properties. In contrasting the two, #ut 'lie' manifests more nominal properties than #uli 'jump'. We come to see that #ut 'lie' can be an argument of a verb and can form an adjective via a productive derivational affix that creates adjectives from nouns. The nominal root #uli 'jump' fails to be an argument of a verb and thus does not have the ability to be determined, modified, inflect for case, and so forth. However, it does have the ability to agree with the LV mar in gender and number. The two nominals contrast with the other nominals in respect of their syntactic flexibility. The two form a tight syntactic unit with mar permitting only the adverb to enter between the LVC components.

(113) Noun Class V: #ali 'jump' and #ut 'lie'.

5.7.1 *tfut* 'lie'

Similar to the previous nominal classes, the noun fut 'lie' is categorised as noun based on its ability to exhibit the certain nominal properties. For example, it can be an argument of a verb, such as bud5 'to listen' in (114).

(114) me tari tfut bud-i ri ja 1.SG.PLN 2.GEN.F.SG lie.F.SG listen-NFN PRF.F.SG PRS.1.SG 'I have listened to your lie.'

The root fut 'lie' fails to overtly mark for plurality via null affixation or overt marking, as illustrated in (115). It also cannot be modified by an adjective, as seen in (116). Here the adjective gandi 'dirty' modifies fut 'lie', which results in a semantically infelicitous sentence. The form of the adjective is feminine, which reflects that fut 'lie' is a feminine noun. The latter is reinforced by the ungrammaticality induced when the masculine form ganda 'dirty' modifies it.

- (115) *us bũni tʃut-a buʤ-e sən 3.SG.OBL lots lie-F.PL/F.PL listen-M.PL NPR.3.PL 'He/She listened to lots of lies.'
- (116) me tari gəndi/*a tʃut buʤ-i ri
 1.SG.PLN 2.GEN.F.SG dirty.F.SG/M.SG lie.F.SG listen-NFN PRF.F.SG
 ja
 PRS.1.SG
 'I have listened to your dirty lie.'

Similarly, the determination of the noun induces a semantically odd sentence, which can be seen in (117).

(117) #e #fut miki mar-i fur si
DEM.PROX.SG lie 1.SG.OBL die-F.SG fur NPR.3.SG
'This lie will kill me.'

Unlike the other nouns that form part of a *mar*-LVC, *ffut* 'lie' can form an adjective via the derivational affix -i 'pertaining to'. The latter is a productive method in creating adjectives from nouns (see Chapter 3). The derived adjectival meaning is 'liar', illustrated in (118).

(118) e kuri tfut-i ε
DEM.PROX.SG girl.F.SG lie-F.SG PRS.3.SG
'This girl is a liar.'

The adjective can also behave attributively as shown in (119).

(119) me is tfut-i kuri-ki mar sa 1.SG.PLN DEM.PROX.SG lie-F.SG girl.F.SG-OBL hit NPR.1.SG 'I will hit this lying girl.'

Derived inflecting adjectives agree with their following nouns in gender, number, and case i.e. they have four forms. futi 'liar' is an inflecting adjective, which has different forms according to gender, number, and case. Its paradigm can be seen in (120).

(120) Paradigm: Denominal Inflecting Adjective tfuti 'liar'

In the complex predicate, it is the nominal root that forms an LVC with max, as the derivational affix is not attached to the root. The latter can be seen in (121). In line with its behaviour independent of the LVC, fut 'lie' cannot be modified, determined, or pluralised within the LVC.

(121) us miki tfut mar-ja si 3.SG.ERG 1.SG.OBL lie.F.SG hit-M.SG NPR.3.SG 'He/She lied to me.'

5.7.2 *tfali* 'jump'

The root *tfali* 'jump' is difficult to categorise as it does not exhibit the typical nominal properties nor does it participate in N-N, Adj, or V derivational processes.

It fails to be an argument of a verb, as illustrated in (122). Thus, it does not have the ability to be determined, modified, or inflect for case,

(122) *me tfali-ki tək-i si 1.SG.PLN jump-OBL watch-F.SG NPR.3.SG 'I watched the jump.'

However its behaviour in respect of agreement within the LVC reflects remnants of nounhood, patterning with coverbs bas 'stop', malaf 'massage', and madad 'help' of the kar LVCs (see Chapter 4). That is, the gender and number of tfali 'jump' agrees with the LV. For example in (123), the past tense feminine singular suffix -i attached to the LV mar is in agreement with the gender and number of the coverb tfali 'jump'. The latter is reinforced by the ungrammaticality of the masculine singular inflection -a suffixed to mar 'to hit'.

(123) us tfali mar-i/*a si 3.SG.ERG jump.F.SG hit-F.SG/M.SG NPR.3.SG 'He/She jumped.'

Therefore it can be argued that f ali 'jump' inherently marks for gender and thus it is categorised as a noun.

5.7.3 Syntactic Flexibility

Class B nouns that form a complex predicate with the LV kar 'to do' (see Chapter 4) were shown to lack typical nominal properties and they proved to be particularly rigid in their syntactic flexibility. The class V nouns behave similarly, in that they fail to exhibit majority of the prototypical nominal properties and their syntactic relation with the LV mar is shown to be very rigid i.e. the two components of the LVC are inseparable. For example, #ali mar 'to jump', lit. 'jump hit' cannot be fronted away from the LV without affecting the grammaticality of the sentence, as illustrated in (124).

(124) *tfali us mar-i si jump.F.SG 3.SG.ERG hit-F.SG NPR.3.SG 'He/She jumped.'

Similarly, the coverb fut 'lie' cannot be fronted away from the LV, as it causes an ungrammatical sentence. The latter can be seen by comparing its canonical position in (121) above with the fronted position in (125).

(125) *ffut us miki mar-ja si lie.F.SG 3.SG.ERG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She lied to me.' The object movement diagnostic is restricted to *fut mar* 'to lie', lit. 'lie hit'. Contrary to the results of the nominal coverbs in class I, II, III, and IV, the object *miki* in (126) cannot separate the two components of the LVC, as it induces an ungrammatical sentence.

(126) *us tfut miki mar-ja si 3.SG.ERG lie.F.SG 1.SG.OBL hit-M.SG NPR.3.SG 'He/She lied to me.'

Similarly, an adverb cannot enter between the components of the LVC *tfut mar* 'to lie', lit. 'lie hit' in (127-a) or the LVC *tfali mar* 'to jump', lit. 'jump hit' in (127-b).

- (127) a. *us miki tfut kəl mar-ja si 3.SG.ERG 1.SG.OBL lie.F.SG yesterday hit-M.SG NPR.3.SG 'He/She lied to me yesterday.'
 - b. *us tfali kəl mar-i si 3.SG.ERG jump.F.SG yesterday hit-F.SG NPR.3.SG 'He/She jumped yesterday.'

In line with the preceding LVCs, the coverbs in this class do not participate in pronominalisation, as it affects the meaning of the LVC. For example in (129), the coverb fali 'jump' of the LVC fali mar 'to jump', lit. 'jump hit' (123) cannot be substituted by the pronoun e, regardless of the context of the utterance (128). As a consequence, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. Under this meaning the sentence is deemed as semantically infelicitous.

- (128) Context: A thief tells the officer that he jumped when caught in the criminal act of shop lifting. The sentence (129) is uttered to the officer when describing the eventuality of jumping.
- (129) #me pəte kε kəṭ-a si me e 1.SG.PLN know what do-M.SG NPR.3.SG 1.SG.PLN DEM.PROX.SG mar-i si hit-M.SG NPR.3.SG 'You know what I did, I hit this.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. That is, it cannot be questioned as the meaning of the LVC is affected. The MV meaning of mar 'to hit' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (130) for the LVC tfut mar 'to lie', lit. 'lie hit'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (130) a. us tuki ke mar-ja si 3.SG.ERG 2.SG.OBL what hit-M.SG NPR.3.SG 'What did he hit you with?'
 - b. #tfut lie.F.SG 'Lie.'

5.7.4 Summary

The results of both the morphosyntactic and syntactic flexibility properties are summarised in table 5.7 below. I now go on to discuss the major findings in this chapter and provide a comparison of the five LVC classes.

	Diagnostic Tools	<i>tfali</i>	ʻjump'	tfut 'lie'
IN ISOLATION:	CASE		Х	✓
	ADJ		X	X
	AGR		X	✓
	PL		X	X
	DEM		X	X
IN LVC:	ADJ		Х	Х
	AGR		✓	X
IN LVC:	FRONT		Х	Х
	ADV		X	X
	OBJ		-	X
	PRNM		X	X
	Q-FORM		X	X

Table 5.7: Morphosyntactic Properties of Noun Class V

5.8 Discussion

The nature of nominal coverbs and their relation to the LV have been the focus of much debate in languages that employ LVCs. This chapter set out to establish the status of coverbs in mar-type LVCs. We observed that there is a clear distinction between coverbs and complements in respect of their morphosyntactic properties, while their syntactic flexibility properties were shown to be overlapping. The syntactic flexibility results can be seen for all the mar-type LVCs in table 5.8. The table is divided according to two types of LVCs: (i) separable and (ii) inseparable. Similar to the kar-type LVCs, the label "inseparable" describes the LVCs that cannot be separated by the syntactic operations listed in the first row of table 5.8, as the LVC meaning is affected. In contrast, the separable LVCs' meaning is not affected by the syntactic operations of movement. The main difference between the mar LVCs and kar LVCs, is that the mar LVCs are all separable, with the exception of two of the 15 investigated LVCs. While of the 19 kar LVCs, eight were categorised as inseparable LVCs.

Table 5.8: Syntactic Flexibility in mar-Type LVCs

	Coverbal Element	LV	LVC Meaning	FRONT	OBJ	ADV	PRNM	Q-FOR
Separable LVCs:	<i>mə∫in</i> 'vacuum'	mar	'to vacuum'	√	✓	1	Х	Х
	$k\tilde{a}\eta a$ 'comb'	mar	'to comb'	✓	1	1	X	X
	bruf 'brush'	mar	'to brush'	✓	1	1	X	X
	$l otin t^h$ 'leg'	mar	'to kick'	✓	1	1	X	X
	ak^h 'eye'	mar	'to wink'	✓	1	1	X	X
	$a\underline{t}^h$ 'hand'	mar	'to wave'	✓	1	1	X	X
	θar 'wire'	mar	'to fax'	✓	1	1	X	X
	tekst 'text'	mar	'to text'	✓	1	1	X	X
	$p\tilde{e}nt$ 'paint'	mar	'to paint'	✓	1	1	X	X
	pis 'fart'	mar	'to fart'	✓	_	1	X	X
	nitf 'sneeze'	mar	'to sneeze'	✓	_	1	X	X
	dəkar 'burp'	mar	'to burp'	✓	_	1	X	X
	sas 'sigh	mar	'to sigh'	✓	-	✓	X	X
Inseparable LVCs:	tfali 'jump'	mar	'to jump'	Х	-	Х	Х	Х
	#ut 'lie'	mar	'to lie'	X	X	X	X	X

The inseparable LVCs are also interesting in respect of their morphosyntactic properties, or lack thereof. These coverbs were shown to exhibit very few nominal properties in contrast to the nominals of the separable LVCs. Table 5.9 provides an overview of these results. The 15 nominal coverbs were divided into five nominal classes according to the number of noun properties they possess independent of the LVC. The table is divided according to the five noun classes, in which the check marks (\checkmark) indicate that the nominal exhibits the nominal properties listed on the first row. In contrast, the cross marks (X) symbolise the inability of the nouns to possess these nominal properties.

Table 5.9: Nominal Properties of Coverbs Independent of mar LVCs

	Coverbal Element	CASE	OBL CASE	DEM	ADJ	AGR	PL
Noun Class I:	<i>bru</i> ∫ 'brush'	✓	✓	1	1	✓	/
	ak^h 'eye'	✓	✓	✓	1	✓	1
	<i>mə∫in</i> 'vacuum'	✓	✓	✓	✓	✓	1
	$k\tilde{a}\eta a$ 'comb'	✓	✓	✓	✓	✓	1
	$l_{\theta}t^{h}$ 'leg'	✓	✓	✓	✓	✓	1
Noun Class II:	ath 'hand'	✓	✓	√	✓	√	/
	θar 'wire'	✓	✓	✓	✓	✓	1
Noun Class III:	tekst 'text'	✓	Х	✓	√	✓	√
	$p\tilde{e}nt$ 'paint'	✓	X	✓	✓	✓	X
Noun Class IV:	pis 'fart'	✓	Х	X	Х	✓	✓
	nitf 'sneeze'	✓	X	X	X	✓	1
	dəkar 'burp'	✓	X	X	✓	✓	X
	sas 'sigh'	✓	X	X	X	✓	X
Noun Class V:	tfut 'lie'	✓	Х	X	Х	✓	X
	tfali 'jump'	X	×	X	X	✓	X

We observe from the above table that all nouns are inherently marked for gender, which is reflected in their agreement patterns. The roots vary with other nounhood properties; not all nouns can inflect for case, can be determined, modified or mark for plurality. The degree of nouniness can be best understand in the form of a language specific squish, similar to that of the nouniness squish postulated for English nouns by Ross (1972, 1973). The nouniness hierarchy illustrated in (131) is based on the interaction of the five classes of nouns with gender, case marking, and determination (by a demonstrative pronoun). The hierarchy of nouniness in (131) increases from left to right. Gender is the lowest on the nouniness hierarchy, whereas oblique case is the highest. Whilst applying to some point in the hierarchy, each rule also applies to all points lower than that.

(131) Gender > Locative & Genitive Case > Determination > Oblique Case

Finer details of which noun class exhibits the three morphosyntactic properties in (131) can be seen in table 5.10 below.

Noun Type	GENDER	LOC & GEN CASE	DEM	OBL CASE
Noun Class I	✓	✓	1	✓
Noun Class II	✓	✓	✓	\checkmark
Noun Class III	✓	✓	✓	×
Noun Class IV	✓	\checkmark	X	×
Noun Class V	✓	X	Х	X

Table 5.10: Hierarchy of Nouniness

The interaction of the nominal properties with the coverbs is presented in table 5.11 below. Certain morphosyntactic properties are not applicable to a number of coverbs, as they are not exhibited independent of the LVC, which are symbolised by the use of a dash (-).

Coverbal Element	LV	LVC Meaning	OBL CASE	DEM	ADJ	AGR	PL
ak^h 'eye'	mar	'to wink'	X	✓	Х	1	X
<i>mə∫in</i> 'vacuum'	mar	'to vacuum'	×	✓	X	1	X
$k\tilde{a}\eta a$ 'comb'	mar	'to comb'	×	✓	X	✓	X
$l_{ extstyle j} t^h$ 'leg'	mar	'to kick'	×	✓	X	✓	1
<i>bru</i> ∫ 'brush'	mar	'to brush'	×	✓	X	1	X
ath 'hand'	mar	'to wave'	X	X	Х	1	Х
θar 'wire'	mar	'to fax/email'	×	X	X	✓	X
tekst 'text'	mar	'to text'	-	X	Х	1	Х
$p\tilde{e}nt$ 'paint'	mar	'to paint'	-	✓	✓	✓	-
pis 'fart'	mar	'to fart'	_	-	✓	1	✓
nitf 'sneeze'	mar	'to sneeze'	-	-	1	1	✓
dəkar 'burp'	mar	'to burp'	-	-	1	1	X
sas 'sigh'	mar	'to sigh'	-	-	✓	✓	-
tfali 'jump'	mar	'to jump'	-	-	-	√	-
#ut 'lie'	mar	'to lie'	-	-	-	✓	-

The ability to be determined within the LVC varies, in that the determination of coverbs in transitive LVCs causes an ungrammatical sentence or affects the meaning of the LV, as one may anticipate, because the coverb is not an argument of the verb, but is in fact part of a verbal predicate. A somewhat unanticipated finding is that determination of certain coverbs is permitted without the loss of the LVC meaning or grammaticality. Such coverbs are listed in (132). The type of meaning interpreted for the transitive LVC məfin mar 'to vacuum', lit. 'machine hit' was 'he/she is vacuuming the carpet with this vacuum'. Whether this is related to the internal properties of the entire LVC (or both), is certainly a matter worthy of further research, but which goes beyond the scope of this study.

- (132) a. məfi:n mar 'to vacuum', lit. 'machine hit'
 - b. $k\tilde{a}\eta a \ mar$ 'to comb', lit. 'comb hit'
 - c. brufmar 'to brush', lit. 'brush hit',
 - d. pent mar 'to paint', lit. 'paint hit'
 - e. $let^h mar$ 'to kick', lit. 'leg hit'
 - f. $ak^h mar$ 'to wink', lit. 'eye hit'

The adjectival modification diagnostic tool displayed interesting results in differentiating the two constructions too. Independent of the LVC, ten of the 15 nominals can be modified by an adjective, of which eight cannot be modified by an adjective within the LVC as the LVC meaning is affected. That is, the semantically bleached LV meaning of the LVC is lost entirely and the MV-complement structure meaning is interpreted. However not all coverbs modified by an adjective cause the LVC meaning to be lost. Six nominal coverbs listed in (133) can be modified by an adjective without intervening with the LVC meaning, of which four can also be determined within the LVC (132-a) - (132-d). To single out an example, when the adjective suwi/a 'red' modifies the coverb məfin 'machine' of the LVC məfi:n mac 'to vacuum', lit. 'machine hit', it gives rise to the meaning 'I used the red vacuum to vacuum'. The coverbs of LVCs in (133-e) - (133-g) do not permit adjectival modification independent of the LVC, though can be modified in the LVC. These LVCs are particularly interesting and further investigations in what conditions a coverb can be modified without affecting the LVC meaning is required.

- (133) a. məfin mar 'to vacuum', lit. 'machine hit'
 - b. $k\tilde{a}\eta a \ mar$ 'to comb', lit. 'comb hit'
 - c. bruf mar 'to brush', lit. 'brush hit'
 - d. pent mar 'to paint', lit. 'paint hit'
 - e. *nitf mar* 'to fart', lit. 'fart hit'
 - f. nich mar 'to sneeze', lit. 'sneeze hit'
 - g. dakar mar 'to burp', lit. 'burp hit'

Similar results are found with plural marking of the coverb, in that certain coverbs can be pluralised, without forcing the LVC to lose its meaning, although they are restricted to three coverbs, listed in (134). The three coverbs listed in (134) mark for plurality via the overt marking, in line with their behaviour independent of the LVC. However in such examples, the plural marker gives rise to a pluractionality reading. The singular forms of these coverbs refers to a single event, whereas the plural marker refers to more than one event of kicking, farting, and sneezing. The remaining coverbs cannot be pluralised within the LVC, as it either affects the grammaticality of the sentence or the LVC meaning. This is in line with general understanding that the coverb is number neutral. That is, there is no number implicature despite the nouns giving rise to a number implicature independent of the LVC. I argue this is due to the nominal coverb being interpreted as part of the verbal predicate, rather than behaving as a nominal complement of an MV.

- (134) a. l_{σ}^{th} mar 'to kick', lit. 'leg hit'
 - b. pis mar 'to fart', lit. 'fart hit'
 - c. nitf mar 'to sneeze', lit. 'sneeze hit'

The agreement patterns within the LVC mirror the agreement patterns of the MV-complement structure. Related languages, such as Urdu-Hindi, also display similar patterns, in which the LV agrees with a nominal coverb (Mohanan, 1994). That is, all the *mar* LVCs agree with the gender and number of a coverb in the past tense. The latter contrasts with the agreement of the *kar* LVCs, as *kar* only agreed with a nominal coverb in an intransitive LVC.

THE NON-AGENTIVE LIGHT VERB CONSTRUCTIONS

6.1 Introduction

In this chapter, I provide an in-depth investigation into three types of LVCs which involve the LV e 'to come' (1), lag 'to hurt' (2), and pe 'to attack' (3). The investigation of the three LVCs in the present chapter is rooted in their unifying lexical semantic features and argument structure. I categorise all three LVCs as non-agentive LVCs that have an identical argument structure: intransitive with the sole argument being an experiencer. The three LVs only appear with oblique case marking on the subject, which gives rise to what is known in the Indo-Aryan literature as an experiencer subject (Belletti & Rizzi, 1988; Cardona, 1976; Hook, 1990; Klaiman, 1980; Masica, 1990; Mishra, 1990; Pandharipande, 1990; Shibatani, 1999; Sridhar, 1979; Verma & Mohanan, 1990; Verma, 1976).

- (1) uski uttu e-ja si 3.SG.OBL choke.M.SG come-M.SG NPR.3.SG 'He/She choked.'
- (2) miki petfəs lag-e sən 1.SG.OBL diarrhoea.M.PL hurt-PL.M NPR.3.PL 'I got diarrhoea.'
- (3) miki iţe nil pe-ja si 1.F.SG.OBL here bruise.M.SG attack-M.SG NPR.3.SG 'I got a bruise here.'

The LV e 'to come', lag 'to hurt' and pe 'to attack' are categorised as LVs based on typological characteristics, as well as their syntactic and semantic properties. The LVCs consists of two adjacent components, a coverb and an LV. The coverbs are shown to be either nouns and/or adjectives independent of the LVC and it is this coverbal component that contains the main predicational content. In contrast, the LV component inflects for the past tense suffixes, in agreement with gender and

number of the coverb. The LV also has a lexical verb analogue, illustrated in (4), (5), and (6).

- (4) o e-ja si 3.SG.PLN come.-M.SG NPR.3.SG 'He came.'
- (5) uski kursi lag-i si 3.SG.OBL chair.F.SG hurt-F.SG NPR.3.SG 'He/She got hurt by the chair.'
- (6) kota saima-ki pi ga-ja si dog.M.SG.PLN Saima.F.SG-OBL attack.F.SG go-M.SG NPR.3.SG 'The dog attacked Saima.'

In a logical manner, the lexical semantic and argument structure properties that unify the three LVs are presented in section 6.2. The LVs are parted in their morphosyntactic analysis, in which section 6.3 is dedicated to the syntactic flexibility and morphosyntactic properties of the *lag*-type LVCs, section 6.4 is dedicated to the analysis of the *e*-type LVCs, while section 5 describes and analyses the *pe*-type LVCs. Section 6.6 provides an across-the-board view of non-agentive LVCs, with some concluding remarks about the nature of LVCs in Potwari, and how it is they can be distinguished from AVCs.

6.2 Argument Structure & Lexical Semantics

This section focuses on the aspects of meaning that are contributed to sentences by the LVCs' lexical semantic features and argument structure.

6.2.1 Experiencer Subjects

The MVs serving as non-agentive LVs are shown to all have distinct argument structures, as illustrated in (7).

- (7) a. MV e 'to come': intransitive $\langle Theme \rangle$
 - b. MV lag 'to hurt': transitive $\langle Experiencer, Causer \rangle$
 - c. MV pe 'to attack': transitive $\langle Agent, Patient \rangle$

In contrast, the non-agentive LVCs project one type of argument structure, as we saw above in (1), (2), and (3). All three LVCs are intransitive, in which the sole argument is an experiencer, which always takes the oblique case marker -ki. These data points indicate that the coverb must also contribute to the argument structure of the LVC. It has been pointed out in the previous chapters that the LVs always appear with the same case marked subject, however we do not address which component of the LVC is determining the case marking on the subject. Is

it the coverb, or the LV, or do they both determine the case marking? Under the assumption that the lexical verb and LV have an identical argument structure, i.e. they have the same lexical entry, it can be said that it is the coverb that is determining the case marking on the subject and can therefore explain the different case marking of the non-agentive LVCs and the MVs. However, if one assumes that the lexical verb and LV have a distinct argument structure i.e a distinct lexical entry, then it can be argued that the LV determines the case marking on the subject. As mentioned in Chapter 4, under the argument structure viewpoint, the coverb and the LV both contribute to the argument structure. Whether the coverb, or the LV, or both determine the argument structure of the LVC in Potwari is certainly a matter worthy of further research, but which goes beyond the scope of this study.

In the Indo-Aryan literature, the argument structure of such LVCs are referred to as experiencer subjects. The latter was discussed in the context of the oblique case distribution in Chapter 2. Experiencer subjects are canonically found to be restricted to the following set of verbs: (i) psychological states, (ii) physiological states, (iii) modal states, and (iv) visual/auditory perceptions (Masica, 1991, 347-349). Masica (1991) also argues that the underlying characteristic of such constructions is related to control, that is, they are non-volitional. sentiments are also shared by the subjective-hypothesis; experiencer subjects are subjective expressions that occur solely within the body and mind of the experience (Klaiman, 1980, 280). Subjective experiences include events/states such as liking, disliking, states, health, sickness, happiness, unhappiness, feeling, remembering, thinking, embarrassing, pity, doubt, pain, thirst, hunger, sleepiness, anger (Masica, 1976, 160). The latter is not an exhaustive list, though parallels can certainly been seen from the type of experiences described above with the non-agentive LVCs. For example, such predicates are found with e-type LVCs, as can be seen in table 6.1 below.

Table 6.1: Argument Structure of e-Type LVCs

Coverbal Element	LV	LVC Meaning	INTR/TR	Arguments
nitf 'sneeze'	e	'to sneeze'	INTR	$\overline{\langle Experiencer \rangle}$
$d \partial kar$ 'burp'	e	'to burp'	INTR	$\langle Experiencer \rangle$
nındər 'sleep'	e	'to sleep'	INTR	$\langle Experiencer \rangle$
pərsina 'sweat'	e	'to sweat'	INTR	$\langle Experiencer \rangle$
utru 'choke'	e	'to choke'	INTR	$\langle Experiencer \rangle$
<i>pi∫av</i> 'urine'	e	'to urinate'	INTR	$\langle Experiencer \rangle$
rõn 'cry'	e	'to cry'	INTR	$\langle Experiencer \rangle$
sas 'sigh'	e	'to sigh'	INTR	$\langle Experiencer \rangle$

Similarly, subjective, non-volitional predicates are amongst the *lag*-type LVCs, which are listed in table 6.2.

LV	LVC Meaning	INTR/TR	Arguments
lag	'to vomit'	INTR	$\langle Experiencer \rangle$
lag	'to cough'	INTR	$\langle Experiencer \rangle$
lag	'to get cold'	INTR	$\langle Experiencer \rangle$
lag	'to get hot'	INTR	$\langle Experiencer \rangle$
lag	'to get fever'	INTR	$\langle Experiencer \rangle$
lag	'to get diarrhoea'	INTR	$\langle Experiencer \rangle$
	lag lag lag lag lag	lag 'to vomit' lag 'to cough' lag 'to get cold' lag 'to get hot' lag 'to get fever'	lag'to vomit'INTRlag'to cough'INTRlag'to get cold'INTRlag'to get hot'INTRlag'to get fever'INTR

INTR

INTR

INTR

INTR

 $\langle Experiencer \rangle$

 $\langle Experiencer \rangle$

 $\langle Experiencer \rangle$

 $\langle Experiencer \rangle$

'to hiccup'

'to get pain'

to get hungry'

'to get thirst'

lag

lag

lag

laq

Table 6.2: Argument Structure of lag-Type LVCs

The subjective, non-volitional predicates are also characteristics of all the *pe*-type LVCs presented in table 6.3.

Table 6.3: Argument Structure of pe-Type LVCs

Coverbal Element	LV	LVC Meaning	INTR/TR	Arguments
## ## fala 'blister'	pe	'to blister'	INTR	$\langle Experiencer \rangle$
sot^h 'swelling'	pe	'to swell'	INTR	$\langle Experiencer \rangle$
nil 'bruise'	pe	'to get a bruise'	INTR	$\langle Experiencer \rangle$
kira 'insect'	pe	'to rot'	INTR	$\langle Experiencer \rangle$
₫uw 'nit'	pe	'to get nits'	INTR	$\langle Experiencer \rangle$
falə& 'stroke'	pe	'to have a stroke'	INTR	$\langle Experiencer \rangle$
mırgi 'seizure'	pe	'to have a seizure'	INTR	$\langle Experiencer \rangle$

6.2.1.1 Subjecthood

ırki 'hiccup'

 $puk^{\overline{h}}$ 'hunger'

dərd 'pain'

tre 'thirst'

I now turn my attention to the syntactic processes; reflexivization and conjunction reduction, which proved to be useful subjecthood tests in Chapter 2. We saw that experiencer subjects do indeed behave as true subjects in respect of the reflexivization and conjunction reduction rules. These syntactic processes can crucially show that the experiencer subjects of the above complex predicates behave as true subjects, as they can control reflexivization and conjunction reduction (consult section 2.6.8.1 for the rules). Let us begin with an experiencer subject of the lag-type LVCs. It can be seen in (8) that the reflective possessive pronoun apne is coreferential with the experiencer subject miki, as the possessive pronoun mara 'mine' is incompatible. We also observe that if the possessive pronoun is not coreferential with its preceding experiencer subject then it does not yield a possessive reflective pronoun. Rather, we get the possessive pronoun usne 'his', as illustrated in (9).

- (8) miki, apne*i/*mara ka:r ulti lag-i
 1.SG.OBL REFL.M.SG/1.M.SG.GEN house.M.SG vomit.F.SG hurt-F.SG
 si
 NPR.3.SG
 'I vomited in my own house.'
- (9) uski; usne*; ka:r ulti lag-i si 3.SG.OBL 3.M.SG.GEN house.M.SG vomit.F.SG hurt-F.SG NPR.3.SG 'He vomited in his house.'

The same results are found with the complex predicates comprised of e 'to come' and pe 'to attack'. In (10) and (11), the possessive reflective pronoun apne is coreferential with its preceding experiencer subject miki. Also, it can be seen from these illustrations that the possessive pronoun mara 'mine' is incompatible, which reinforces the notion that reflective pronoun is coreferential with the experiencer subjects.

- (10) miki apne*i/*mara ka:r rõn e-ja
 1.SG.OBL REFL.M.SG/1.M.SG.GEN house.M.SG cry.M.SG come-M.SG
 si
 NPR.3.SG
 'I cried in my own house.'
- (11) miki apne*i/*mara ka:r dzuwa-a pij-a
 1.SG.OBL REFL.M.SG/1.M.SG.GEN house.M.SG nit-F.PL attack-F.PL
 sən
 NPR.3.SG
 'I got nits in my own house.'

If the possessive pronoun is not coreferential with its preceding experiencer subject then it does not yield a possessive reflective pronoun. Instead, the possessive pronoun *usne* is employed, which can be seen in (12) and (13).

- (12) miki usne*i ka:r rõn e-ja si 1.SG.OBL 3.M.SG.GEN house.M.SG cry.M.SG come-M.SG NPR.3.SG 'I cried in his house.'
- (13) uski usne*i ka:r dzuwa-a pij-a sən
 1.SG.OBL 3.M.SG.GEN house.M.SG nit-F.PL attack-F.PL NPR.3.SG
 'I got nits in his house.'

The experiencer subject can be shown to be a true subject via conjunction reduction. It was shown in Chapter 2 that experiencer subjects can have scope over non-experiencer subjects, such as plain case nominals (nominative). Illustrations of the latter can be seen for each LVC in (14), (15), and (16) below. In each example, the first clause is comprised of the experiencer subject, while the second clause is intransitive and is comprised of an unmarked plain case nominal. The experiencer subject saraki has scope over the entire sentence, hence the plain case nominal in

the second clause can be deleted. This data point provides further evidence that the experiencer subject is a true subject.

- (14) sara-ki ulti lag-i ε tε fir ∅
 Sara.F.SG-OBL vomit.F.sg hurt-F.SG PRS.3.SG and then (Sara.F.SG.PLN)
 tik^h o-i gi jε
 fine become-NFN go.F.SG PRS.3.SG
 'Sara vomited and then became fine.'
- (15) sara-ki kire pe ən tɛ fir Ø
 Sara.F.SG-OBL insect.M.pl attack.M.PL PRS.3.PL and then (Sara.F.SG.PLN)
 mər-i gi jɛ
 die-NFN go.F.SG PRS.3.SG
 'Sara got infested and then died.'
- (16) sara-ki nındər aı ε tε fır ∅
 Sara.F.SG-OBL sleep.F.SG come.F.SG PRS.3.SG and then (Sara.F.SG.PLN)
 bio∫ o-i gi si
 faint become-NFN go.F.SG NPR.3.SG
 'Sara got sleep and then fainted.'

6.2.2 Internal Causation

I categorised a sub-class of complex predicates made up of the LVs kar and mar in Chapter 4 and 5, as internally caused eventualities. The categorisation was based on their ability/inability to participate in the inchoative-causative alternation (Levin & Rappaport Hovav, 1995). In the same manner, all the non-agentive LVCs listed in table 6.1, 6.2, and 6.3 are categorised as internally caused eventualities. The internal causation feature complements Masica's (1991) claim that the underlying characteristic of experiencer subjects is related to non-volitionality. The illustrations below show that the non-agentive LVCs fail to participate in the inchoative-causative alternation. Take as examples, the LVCs bahar lag 'to get a fever', lit. 'fever hurt' in (17-a), sərdi lag 'to get cold', lit. 'cold hurt', and petfəs lag 'to get diarrhoea', lit. 'diarrhoea hurt' in (17-c).

- (17) a. *sara uski bahar lag-ja si Sara.F.SG.PLN. 3.SG.OBL fever.M.SG hurt-M.SG NPR.3.SG '*Sara fevered him/her.'
 - b. *sara uski sərdi lag-i si Sara.F.SG.PLN 3.SG.OBL cold.F.SG hurt-F.SG NPR.3.SG '*Sara colded him/her.'
 - c. *sara uski petfəs lag-e sən Sara.F.SG.PLN 3.SG.OBL diarrhoea.M.PL hurt-M.PL NPR.3.PL '*Sara diarrhoead him.'

The same results can be seen for the LVCs $d\partial kar$ e 'to burp', lit. 'burp come'in (18-a), $r\tilde{o}n$ e 'to cry', lit. 'cry come' in (18-b), and nindar e 'to sleep', lit. 'sleep

come' in (18-c). Their failure to participate in the inchoative-causative alternation categorises them as internally caused LVCs.

- (18) a. *sara uski dəkar e-ja si
 Sara.F.PLN.SG. 3.SG.OBL burp.M.SG come-M.SG NPR.3.SG
 '*Sara burped him/her.'
 - b. *sara uski rõn e-ja si Sara.F.PLN.SG 3.SG.OBL cry.M.SG come-M.SG NPR.3.SG '*Sara cried him/her.'
 - c. *sara uski rmdər e si Sara.F.PLN.SG 3.SG.OBL sleep.F.SG come.F.SG NPR.3.SG '*Sara slept him.'

Similarly, the *pe*-type LVCs do not participate in the inchoative-causative alternation, which can be seen in (19).

(19)

- a. *saima mare pɛre-ki soth pe-ja si Saima.F.SG.PLN 1.GEN.M.SG foot.M.SG swell.M.SG attack-M.SG NPR.3.SG '*Sara swelled my foot.'
- b. *sara saima-ki mırgi pi si Sara.F.SG.PLN Saima.F.SG-OBL seizure.F.SG attack.F.SG NPR.3.SG '*Sara seizured Saima.'
- c. *sara uski tfala pe-ja si Sara.F.SG.PLN 3.SG.OBL blister.M.SG attack-M.SG NPR.3.SG '*Sara blistered him/her.'

The mar-type LVCs were shown to comprise of prototypical internally caused eventualities, in that they involve an agentive argument with a self controlled body, acting volitionally. The latter type are repeated in (20).

- (20) a. pis mar 'to fart', lit. 'fart hit'
 - b. *tfali mar* 'to jump', lit. 'jump hit'
 - c. sas mar 'to sigh', lit. 'sigh hit'
 - d. *nitfmar* 'to sneeze', lit. 'sneeze hit'
 - e. dəkar mar 'to burp', lit. 'burp hit'

The major difference between the internally caused LVCs in (20) and the internally caused LVCs presented in this chapter is related to agentivity. That is, the latter involve an experiencer argument that is non-agentive, whereas the former are agentive. Hence the argument gives rise to an oblique case on the subject. The non-agentivity component of the LVCs can be illustrated via Cruse's (1973) happen vs. do agentivity test and the ability to be modified by the agent oriented adverb didenal 'deliberately'. The LVCs pattern with the question-answer sequence that comprises of the happen-clause rather than do-clause, as the latter is deemed as

semantically unacceptable. Illustrations in (22) and (21) exemplify these facts for the LVC utru e 'to choke', lit. 'choke come'. Here the happen-clause sequence is deemed as semantically felicitous, whereas the do-clause sequence is deemed as semantically infelicitous.

- (21) a. saima-ki kε o-ja si Saima.F.SG-OBL what happen-SG.M NPR.3.SG 'What happened to Saima.'
 - b. saima-ki uttu e-ja si Saima.F.SG-OBL choke.M.SG come-M.SG NPR.3.SG 'Saima choked.'
- (22) a. saima ke kət-a si Saima.F.SG.PLN what do-M.SG NPR.3.SG 'What did Saima do?'
 - b. #saima-ki uttu e-ja si Saima.F.SG-OBL choke.M.SG come-M.SG NPR.3.SG '#Saima choked.'

Similarly, by comparing the question-answer sequence in (23) and (24) we can see that the LVC *nil pe* 'to bruise', lit. 'bruise attack' patterns with the happen-clause, while it is deemed as semantically odd with the do-clause.

- (23) a. saima-ki kε o-ja si Saima.F.SG-OBL what happen-M.SG NPR.3.SG 'What happened to Saima.'
 - b. uski nil pe-ja si 3.SG.OBL bruise.M.SG attack-M.SG NPR.3.SG 'She got a bruise.'
- (24) a. saima ke kət-a si
 Saima.F.SG.PLN what do-M.SG NPR.3.SG
 'What did Saima do?'
 - b. #uski nil pe-ja si 3.SG.OBL bruise.M.SG attack-M.SG NPR.3.SG 'She got a bruise.'

The idea behind the agent oriented adverb didenal 'deliberately' diagnostic is that it picks out an agent argument. That is, it requires an agent argument or the sentence is deemed as unacceptable. The e, pe and lag-type LVCs are incompatible with the adverb didenal 'deliberately', as the sole argument is non-agentive. For example, in (25) we see that the LVC gərmi lag 'to get hot', lit. 'hot hurt', the LVC pərsma e 'to sweat', lit. 'sweat come", and the LVC nil pe 'to bruise', lit. 'bruise attack' cannot be modified by didenal 'deliberately' because it is deemed as semantically infelicitous sentence.

- (25) a. #uski didenal gərmi lag-i si 3.SG.PLN deliberately hot.F.SG hurt-F.SG NPR.3SG 'He/She deliberately got hot.'
 - b. #uski didenal pərsma e-ja si 3.SG.PLN deliberately sweat.M.SG come-M.SG NPR.3SG 'He/She deliberately got sweaty.'
 - c. #uski dzidenal nil pe-ja si 3.SG.F.OBL deliberately bruise.M.SG attack-M.SG NPR.3.SG 'He/She deliberately got a bruise.'

6.3 Light Verb *lag* 'to hurt'

This section is dedicated to the description and analysis of the complex predicates consisting of the LV lag 'to hurt'. To single out an example, the LVC petfos lag 'to get diarrhoea', lit. 'diarrhoea hurt' in (26) is built with the LV lag 'to hurt' and the nominal coverb petfos 'diarrhoea'. Similar observations made for the LVCs consisting of mar 'to hit' and kar 'to do' can also be made for the LVC in (26). For instance, it is the coverb that contains the main lexical information, whereas the LV seems to have more of a functional role in the LVC, in that it inflects for the past tense suffixes. However the LV is not completely void of meaning. The LV meaning can be said to be semantically lighter in meaning when compared to the lexical verb in (27), in that there is a degree of being hurt by the non-agentive physiological, bodily act petfos 'diarrhoea'. This bleached meaning holds for all the lag-type LVCs (see table 6.2 above).

- (26) miki petfəs lag-e sən 1.SG.OBL diarrhoea.M.PL hurt-M.PL NPR.3.PL 'I got diarrhoea.'
- (27) uski kursi lag-i si 3.SG.OBL chair.F.SG hurt-F.SG NPR.3.SG 'He/She got hurt by the chair.'

In this section, I investigate the morphosyntactic properties of the coverb and the syntactic flexibility properties of the entire LVC. The latter in turn establishes the similarities and differences between the LVCs and MV-complement structures. Naturally in providing an analysis of the coverb, I first investigate the morphosyntactic properties of each coverb independent of the LVC. That is, does the coverb constitute a syntactic class independent of the LVC? The theoretical motivations behind the category diagnostics are discussed at length in Chapter 3. In addition to these diagnostics, I introduce the possessive construction as a diagnostic tool. The possessive construction is comprised of an experiencer argument, a nominal root and the BE auxiliary si or ε , as shown in (28). This construction is characteristic of certain nominals.

(28) miki bahar si 1.SG.OBL fever.M.SG NPR.3.SG 'I had a fever.'

Table 6.4 lists the word classes for the serving coverbs independent of the LVC.

Coverbal Element	Word Class
ıcki 'hiccup'	Noun
ulti 'vomit'	Noun
bahar 'fever'	Noun
$k \ni \tilde{\eta}^h$ 'cough'	Noun
tre 'thirst'	Noun
petfəs 'diarrhoea'	Noun
dərd 'pain'	Noun
sərdi 'cold'	Noun & Adjective
gərmi 'hot'	Noun & Adjective
puk^h 'hunger'	Noun & Adjective

The nominal coverbs of the lag-type LVCs can be sub-classified as: (ii) count nouns, (ii) non-count, singular nouns, and (iii) a mass noun. I begin by categorising the word class of the coverbs independent of the LVC. Table 6.5^1 provides an overview of the morphosyntactic properties exhibited by the nominals independent of the LVC. The check marks (\checkmark) show that the coverbal element passes the diagnostic tools listed in the first row, while the cross marks (\checkmark) show that the coverbal element fails to pass these diagnostic tools.

Table 6.5: Morphosyntactic Properties of Coverbs Independent of lag-Type LVCs

Coverbal Element	CASE	DEM	OBL	AGR	ADJ	PL	POSS	ATT	PRED
ırki 'hiccup'	✓	Х	Х	✓	Х	√	X	Х	Х
ulti 'vomit'	✓	✓	X	✓	1	X	X	X	X
petfəs 'diarrhoea'	✓	X	X	✓	1	X	X	X	X
$k \ni \tilde{\eta}^h$ 'cough'	✓	✓	X	✓	X	X	✓	X	X
bahar 'fever'	✓	✓	X	✓	1	X	✓	X	X
tre 'thirst'	✓	✓	X	✓	X	X	X	X	X
sərdi 'cold'	✓	✓	Х	✓	Х	Х	✓	✓	Х
g otherwise respect to the following points of the second contract the second contr	✓	✓	X	✓	X	X	✓	1	X
puk^h 'hunger'	✓	✓	X	✓	X	X	✓	✓	✓

I then go on to demonstrate whether the coverbs possess the same morphosyntactic properties within the LVC. Table 6.14 presents the results of the morphosyntactic properties exhibited by the coverbs.

¹Key: TNS: ability to take tense/aspect marking, CASE: ability to take case marking, DEM: determination, OBL: ability to take oblique case, AGR: coverb and LV agreement, ADJ: adjectival modification, PL: plural marking, ATT: attributive adjective, and PRED: predicative adjective.

Coverbal Element	LV	LVC Meaning	OBL	DEM	AGR	ADJ	PL
ıcki 'hiccup'	lag	'to hiccup'	-	_	1	-	X
ulti 'vomit'	lag	'to vomit'	-	X	1	✓	-
petfəs 'diarrhoea'	lag	'to get diarrhoea'	-	-	1	✓	-
$k \ni \widetilde{\eta}^h$ 'cough'	lag	'to cough'	-	X	1	✓	-
tre 'thirst'	lag	'to get thirst'	-	X	1	X	-
sərdi 'cold'	lag	'to get cold'	-	X	1	Х	Х
gərmi 'hot'	lag	'to get hot'	-	X	1	X	X
puk^h 'hunger'	lag	to get hungry'	-	X	1	X	-
bahar 'fever'	lag	'to get fever'	-	X	✓	X	-

Table 6.6: Morphosyntactic Properties of Coverbs within lag-Type LVCs

The syntactic flexibility of the LVCs is also investigated. An overview of the results can be seen in table 6.15² below.

Coverbal Element LVC meaning FRONT ADV PRNM Q-FOR ulti 'vomit' X 'to vomit' X lagpetfəs 'diarrhoea' 'to get diarrhoea' X X laq $k \ni \tilde{\eta}^h$ 'cough' 'to cough' X X lagsərdi 'cold' X X lag'to get cold' X gərmi 'hot' 'to get hot' X laqX bahar 'fever' X 'to get fever' laq puk^h 'hunger' X X to get hungry' lagtre 'thirst' 'to get thirst' X X laq*ırki* 'hiccup' 'to hiccup' X X laq

Table 6.7: Syntactic Flexibility in lag-Type LVCs

6.3.1 Noun-Adjective Class

The first class consists of a set of nouns that can form an adjective via one of the following derivational processes: (i) affix -i 'pertaining to' or (ii) zero affixation. The root puk^h forms an adjective via the derivative affix -i, while sardi and garmi form an adjective via zero affixation.

6.3.1.1 Coverb Properites Independent of the LVC

In respect to the oblique case marker -ki, neither of the nominals can inflect for the oblique case marker, due to the DOM rules. The non-count singular nouns were shown to not receive the oblique case because they are lower down on the animacy hierarchy. However, the nominals can inflect for locative case, as seen in (29-a), as

²Key: FRONT: fronting operation, OBJ: syntactic operation involving object movement, ADV: syntactic operation involving movement of adverb, PRNM: the ability to under go the pronominalisation operation, and Q-FOR: the ability to be questioned.

well as occurring in a nominative predicate, in which it is a subject complement of the non-present BE-auxiliary si (29-b).

- (29) a. o pukh-e nalu mər-i gi si 3.SG.PLN hunger.F.SG-LOC with die-NFN go.F.SG NPR.3.SG 'He/She died of hunger.'
 - b. miki puk^h si 1.SG.OBL hunger.F.SG NPR.3.SG 'I was hungry.'

As for determination, the nouns can be determined by a demonstrative pronoun, such as is 'this', as illustrated for all nouns in (30), (31), and (32).

- (30) me is pukh-e nal mər-i da sa 1.SG.PLN DEM.PROX.SG hunger-LOC with die-NFN go NPR.1.SG 'I will die with this hunger.'
- (31) me is gərmi nal mər-i da sa 1.SG.PLN DEM.PROX.SG hot.F.SG with die-NFN go NPR.1.SG 'I will die with this heat.'
- (32) me is sərdi nal mər-i da sa 1.SG.PLN DEM.PROX.SG cold.F.SG with die-NFN go NPR.1.SG 'I will die with this cold.'

 puk^h 'hunger' is categorised as a non-count singular noun, as it does not give rise to a plural form either via over marking or null affixation, illustrated in (33).

(33) *miki pukh-a sən 1.SG.OBL hunger-F.PL NPR.3.PL '*I had hungers.'

The above illustrations provide evidence in support of the roots behaving as nouns, I now turn my attention to their adjectival properties. The root puk^h can form an adjective via the derivational affix -i 'pertaining to'. The latter is a productive method in creating adjectives from nouns (see Chapter 3). The derived adjectival meaning is 'greedy', as illustrated in (34). Here we observe that the attributive form inflects for number and gender according to the following noun. In (34-a) the inflectional marker -i agrees with the feminine singular noun kuri 'girl, while -a agrees with the masculine singular noun mora 'boy' in (34-b).

- (34) a. o puk^h-i kuri mər-i gi ϵ DEM.PROX.SG hunger-F.SG girl.F.SG die-NFN go.F.SG PRS.3.SG 'That greedy girl died.'
 - b. o pukh-a mora mər-i ge-ja ϵ DEM.PROX.SG hunger-M.SG boy.M.SG die-NFN go-M.SG PRS.3.SG 'That greedy boy died.'

The inflecting paradigm for puk^h can be seen in (35).

(35) Paradigm: Denominal Inflecting Adjective puk^hi 'greedy'

	M SG	M PL	F SG	F PL
				puk^hija
LOC	puk^he	puk^he	$\int puk^hi$	puk^hija

The roots sardi 'cold' and garmi 'hot' also behave attributively, though they differ from puk^h 'hunger' in that they do not inflect for number or gender. For example, both roots do not change according to the masculine noun mosam 'weather' in (36-a) and (36-b).

- (36) a. o gərmi mosəm pasənd kar ni/na
 3.SG.PLN hot weather.M.SG like do IMPF.SG.F/IMPF.M.SG
 (j)ɛ
 PRS.1.SG
 'He/She likes the hot weather.'
 - b. me sərdi mosəm pasənd kar ni ja 1.SG.PLN cold weather.M.SG like do IMPF.F.SG PRS.1.SG. 'I like the cold weather.'

They also do not agree in gender and number with their subject when occurring predicatively, as shown in example (37) below.

(37) a. uski gərmi si
3.SG.OBL hot NPR.3.SG
'He/She was hot.'
b. uski sərdi si
1.SG.OBL cold NPR.3.SG
'He/She was cold.'

In contrast, the predicative form of puk^h 'hunger' agrees in gender and number with the subject, which can be seen in example (38-a) and (38-b) below.

a. o pukh-i/a ε
3.SG.PLN greedy-F.SG/M.SG PRS.3.SG
'He/She is greedy.'
b. o pukh-e ən
3.PL.PLN greedy-M.PL PRS.3.PL
'They are greedy.'

The adjectives can be further categorised as either inflecting or uninflecting adjectives. The root puk^h 'hunger' is an inflecting adjective, whereas sardi 'cold' and garmi 'hot' are uninflecting adjectives. Interestingly, the behaviour of the uninflecting adjectives resembles the behaviour of a class of nouns that do not inflect for person or number inflection when occurring predicatively within a possessive construction, such as the noun bahar 'fever' in (39). The latter noun also serves as a coverb within a lag-type LVC. puk^h 'hunger' can occur in such a construction,

whereby it does not inflect for gender and number. The roots sərdi 'cold' and gərmi 'hot' can also participate in the possessive construction, as we saw in (37) above.

- (39) uski būni pɛra bahar si 3.SG.OBL very bad.M.SG fever.M.SG NPR.3.SG 'He/She had a very bad fever.'
- (40) uski puk^h si 3.SG.OBL hunger.F.SG NPR.3.SG 'He/She had hunger.'

In relation to the above illustrations, I pose the following question: are the roots behaving as nouns or adjectives within the possessive construction? How can this be shown empirically? I claim that they are all nouns within the possessive construction, regardless of whether the root is an uninflecting adjective or an inflecting adjective. I show this via the behaviour of the root puk^h 'hunger'. For example, in (40) puk^h 'hunger' does not inflect according to the gender and number of the subject, whereas it does in (34). The following generalisations are made: if the root of an inflecting denominal adjective does not inflect for gender and number in a given structure/construction then it is a noun. In contrast, if the root does inflect for number and gender in a given structure/construction then it is behaving as an inflecting adjective.

We can also identify whether the roots are adjectives or nouns via the case marking on the subjects of the possessive construction. For example, the subject of the inflecting predicative adjective puk^h 'hunger' in (38-b) is in the unmarked plain case. In contrast, the subject of the noun puk^h 'hunger' in the possessive construction in (40) takes the oblique case marker -ki. For the uninflecting adjectives sardi 'cold' and garmi 'hot', the case marking on the subject can identify their word class within the possessive construction. For example, sardi and garmi do not trigger a plain case subject within the possessive construction, rather they trigger the oblique case marker -ki, as illustrated in (41). The latter example also shows that the plain case subject induces an ungrammatical sentence.

(41) a. *o/uski gərmi si
3.SG.PLN/3.SG.OBL hot NPR.3.SG
'He/She was hot.'

b. *o/uski sərdi si $3. {\rm SG.PLN}/3. {\rm SG.OBL~cold~NPR.} 3. {\rm SG}$ 'He/She was cold.'

6.3.1.2 Morphosyntactic Properties of the Coverb

The above illustrations raise an important question related to the status of the coverb, which is: how do the coverbs puk^h 'hunger', sardi 'cold', and garmi 'hot' behave when they are part of the LVC? That is, do they behave as adjectives or

nouns and how can this be shown? I argue that all members of the noun-adjective class behave as nouns when part of the LVC. I do this by employing the number and gender agreement and case marking feature as a diagnostic, which independent of the LVC differentiates the nouns from adjectives. As well as the latter, I compare the behaviour of the noun-adjective class of coverbs with an adjectival coverb and a nominal coverb. The agreement and case diagnostic is summarised in (42).

- (42) a. Adjectival predication: plain case subject complement + inflecting adjective + number & gender Inflection + BE-AUX.
 - b. Possessive construction: oblique case subject complement + noun + BE-auxiliary.

The noun-adjective class behave as nouns within the LVC, rather than adjectives, which is borne out from the behaviour of adjectival coverbs and nominal coverbs. Nominal coverbs do not inflect for person and number within the LVC, while inflecting adjectival coverb do inflect for gender and number. For example in (43) the adjectival coverb suwa 'red' of the LVC suwa kar 'to dye', lit. 'red do' takes the masculine form in agreement with the masculine object tfila 'shawl', while in (43-b) it takes its feminine form in agreement with the object tgərsi 'jumper'.

- (43) a. me tfila suwa kəṭ-a si 1.SG.PLN shawl.M.SG red.M.SG do.-M.SG NPR.3.SG 'I dyed the shawl red.'
 - b. me dərsi suwi kət-i si 1.SG.PLN jumper.F.SG red.F.SG do-F.SG NPR.3.SG 'I dyed the jumper red.'

In comparison, the noun-adjective member puk^h 'hunger' does not change its form according to the subject complement within the LVC, as predicted for an inflecting adjective. Rather, puk^h behaves as a nominal complement in that the LV agrees with it in gender and number. For example, attached to the LV lag is the feminine singular inflection -i, which is in agreement with the feminine singular nominal puk^h . Based on this data point alone, it can be argued that the coverb is behaving as a nominal, rather than the derived adjectival form. The latter point can be further illustrated by comparing a nominal coverb such as ninder 'sleep' in (45) and the coverb puk^h in (44). They both do not inflect for gender and number, rather the LV agrees with them in gender and number.

- (44) uski puk^h lag-i si 3.SG.OBL hunger.F.SG hurt-F.SG NPR.3.SG 'He/She got hungry.'
- (45) usman-ki nındər aı si Usman.M.SG-OBL sleep.F.SG come.F.SG NPR.3.SG 'Usman got sleep.'

The preceding sections claim that sardi 'cold' and garmi 'hot' behave as nouns within the possessive construction because of the case marking on the subject. Similarly, it is claimed that coverbs also behave as nouns within the LVC; the sentence requires the subject to be marked by the oblique case marker -ki. Also, the agreement patterning provides evidence in support of the coverbs behaving as nouns rather than adjectives. For example, the LV agrees with the nominal coverbs in gender and number, as illustrated in (46) for the LVC sardi lag 'to get cold', lit. 'cold hurt' and in (47) for the LVC garmi lag 'to get hot', lit. 'hot hurt'.

- (46) uski sərdi lag-i si 3.SG.OBL cold.F.SG hurt-F.SG NPR.3.SG 'He/She got cold.'
- (47) uski gərmi lag-i si 3.SG.OBL hot.F.SG hurt-F.SG NPR.3.SG 'He/She got hot.'

In respect of plural marking, neither of the coverbs have the ability to mark for plurality, as the LVC meaning is lost, illustrated in (48). That is, the literal meaning of lag 'to hurt' is interpreted and as a result the coverb puk^h 'hunger' no longer contributes to the verbal predicate. Rather it is treated as a complement of the MV lag 'to hurt'. Consequently, the sentence in (48) is deemed as semantically infelicitous due to the thematic conditions of the MV. It seems that the MV requires a concrete object, which puk^h 'hunger' does not meet.

(48) #miki pukh-a lag-ija sən 1.SG.OBL hunger-F.PL hurt-F.PL NPR.3.PL 'The hungers hurt me (Impossible: 'I got hunger.').'

The set of nouns within this class do not have the ability to be modified by an adjective independent of the LVC. In contrast, certain adjectives can appear as though they are modifying the coverb. However, I argue in these cases the adjective is an adverb modifying the entire LVC. For example, in (49) the adjective bari 'big' modifies the entire LVC and the meaning is restricted to 'really'. Similarly, the adjective dedi 'strong' in (50) modifies the entire LVC with the meaning 'extremely' rather than the adjectival meaning. The following generalisation can be made: if an adjective such as bari/a 'big' is permitted in modifying the nominal within the LVC then it gives rise to an adverbial reading.

- (49) miki bari puk^h lag-i si 1.SG.OBL big.F.SG hunger.F.SG hurt-F.SG NPR.3.SG 'I got really hungry.'
- (50) miki dədi gərmi lag-i si 1.SG.OBL strong.F.SG hot.F.SG hurt-F.SG NPR.3.SG 'I was extremely hot.' (Impossible: 'I got severe heat.')

The demonstrative pronoun, however cannot determine the nominal coverbs, as the LVC meaning is lost altogether. For example the meaning we see in (51), (52), and (53) is that of the MV-complement structure meaning. The literal meaning of hurting is interpreted, rather than the semantic light meaning of being hurt by a non-agentive physiological, bodily act. Therefore the nominal coverbs puk^h 'hunger', $g_{\theta}rmi$ 'hot', and $s_{\theta}rdi$ 'cold' no longer contribute to the meaning of the verbal predicate, but rather behave as a nominal complement. The change in the meaning from an LVC to an MV-complement structure causes an infelicitous sentence due to the thematic conditions of the MV.

- (51) #miki e puk^h lag-i si 1.SG.OBL DEM.PROX.SG hunger.F.SG hurt-F.SG NPR.3.SG 'This hunger hurt me.' (Impossible: 'I got hunger.')
- (52) #miki e gərmi lag-i si 1.SG.OBL DEM.PROX.SG hot.F.SG hurt-F.SG NPR.3.SG 'This hot hurt me.' (Impossible: 'I got hot.')
- (53) #miki e sərdi lag-i si 1.SG.OBL DEM.PROX.SG hot.F.SG hurt-F.SG NPR.3.SG 'This cold hurt me.' (Impossible: 'I got cold.')

That is, the MV lag 'to hurt' requires a concrete object, for instance the concrete object tabel 'table' in (54) does not induce an infelicitous meaning.

(54) miki e tabəl lag-a si 1.SG.OBL DEM.PROX.SG table.M.SG hurt-M.SG NPR.3.SG 'I got hurt by this table.'

6.3.1.3 Syntactic Flexibility of LVC

Table 6.7 provides an overview of the syntactic flexibility of each lag-type LVC, which resembles the syntactic flexibility of an MV-complement structure. For example, the coverb and LV can easily be separated by an adverb without intervening with the meaning of the LVC, as shown in (55-b), in which the adverb $k \ni l$ 'yesterday' can be moved from its canonical position in (55-a) to between the coverb puk^h 'hunger' and the LV lag 'to hurt'.

- (55) a. miki kəl puk^h lag-i si 1.SG.OBL yesterday fever.F.SG hurt-F.SG NPR.3.SG 'I got hungry yesterday.'
 - b. miki puk^h kəl lag-i si 1.SG.OBL fever.M.SG yesterday hurt-F.SG NPR.3.SG 'I got hungry yesterday.'

Similarly, the coverb can be fronted away from the LV without interfering with the meaning of the LVC, as in (56).

(56) puk^h mīki lag-i si hunger.F.SG 1.SG.OBL hurt-F.SG NPR.3.SG 'I got hungry.'

The ability of the LVC to be separated by the syntactic operations of fronting and insertion show that the LVC's syntactic flexibility is the same as that of the MV-complement structure. However, as we saw in the agentive LV chapters, the nominal coverb and complement part in their interaction with the ability to participate in pronominalisation and their ability to be questioned. A nominal coverb cannot be substituted by a pronoun. For example the pronoun o in the second clause of (58) is substituted for its antecedent puk^h 'hunger' (see (55-a) above), which causes the meaning of the LVC to be lost. That is, the degree of being hurt by a non-agentive, non-physical physiological, bodily act associated with the LV meaning is no longer interpreted. Rather, the interpreted meaning is that of the MV, which is pain caused by something physical. Consequently, the substituted pronoun is interpreted as a complement, rather than contributing to the verbal predicate. This can be seen for the LVC puk^h lag 'to get hunger', lit. 'hunger hurt' in (58), which is uttered in the context of (57). Due to the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV lag 'to hurt'.

- (57) Context: A protester discusses that after a hunger strike protest they feel hungry. They utter (58) to the journalist.
- #miki pəte kε o-ja si miki o
 1.SG.OBL know what become-SG.M NPR.3.SG 1.SG.OBL 3.SG.PLN
 lag-i si
 hurt-F.SG NPR.3.SG
 'You know what happened to me? It hurt me.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. The MV meaning of lag 'to hurt' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (59) for the LVC puk^h lag 'to get hunger', lit. 'hunger hurt'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (59) a. uski k ϵ lag-a si 3.SG.OBL what hurt-M.SG NPR.3.SG 'What hurt him/her?"
 - b. #puk^h hunger.F.SG 'Hunger.'

6.3.2 The Class of Nouns

6.3.2.1 Morphosyntactic Properties Independent of & within the LVC

The largest class of coverbs that form an LVC with the LV lag 'to hurt' are nouns independent of the LVC. They can be further categorised as the following: (i) count nouns, (ii) non-count, singular nouns, and (iii) non-count, plural nouns. The coverbs can assign case marking independent of the LVC, such as the genitive case -ni in (60), and the locative case -e in (61) and (62). In contrast, all nouns in this class fail to inflect for the oblique case marker due to the DOM rules postulated in Chapter 2. I showed that non-count singular nouns do not receive the oblique case marker -ki because such nouns in Potwari are low on the animacy hierarchy.

- (60) miki ulti-ni bo ei si 1.SG.OBL vomit.F.SG-GEN.F.SG smell.F.SG come.F.SG NPR.3.SG 'I smelt vomit.'
- (61) o niki kuri bahar-e nal mər-i gi
 DEM.DIST.SG small.F.SG girl.F.SG fever.M.SG-LOC with die-NFN go.F.SG
 si
 NPR.3.SG
 'That little girl died of fever.'
- (62) o niki kuri petfəs-e nal mər-i DEM.DIST.SG small.F.SG girl.F.SG diarrhoea.M.PL-LOC with die-NFN gi si go.F.SG NPR.3.SG 'That little girl died from diarrhoea.'

In respect of agreement marking, independent of the LVC a MV agrees with a noun in number and gender. For example, in (63) *ulti* 'vomit' is a feminine singular noun, hence the MV *ka* 'to eat' inflects for the feminine agreement marking *-i*, in agreement with *ulti* 'vomit'.

(63) sami ulti kəd-i si Sami.F.SG.PLN vomit.F.SG eat-F.SG NPR.3.SG 'Sami ate the vomit.'

Similarly, the LV and BE-auxiliary agrees with the nominal coverbs in gender and number, as in example (64) and (65) below. In the latter example, the LV lag 'to hurt' agrees in number and gender with the nominal ulti 'vomit'. In the former example, the LV agrees in number and gender with the nominal petfor 'diarrhoea'.

(64) miki petfəs lag-e sən 1.SG.OBL diarrhoea.M.PL hurt-M.PL NPR.3.PL 'I got diarrhoea.' (65) usman-ki ulti lag-i si
Usman-M.SG.OBL vomit.F.SG hurt-F.SG NPR.3.SG
'Usman vomited.'

The class of nouns vary in their ability to mark for plurality independent of the LVC. The noun irki 'hiccup' is a count noun that can mark for plurality independent of the LVC, as well as when part of the LVC. For example (66) shows that irki can stand as a singular noun (66), while (67) shows that it marks for plurality via the overt plural marker -a.

- usman dər-i ga-ja si dəla uski irki-ni
 Usman fear-NFN go-M.SG NPR.3.SG when 3.SG.OBL hiccup.F.SG-F.SG.GEN
 vas ei jɛ
 noise.M.SG come.F.SG PRS.3.SG
 'Usman got scared when he heard the sound of the hiccup.'
- (67) is-nija ırki-a bəs ni o ni
 3.SG.PROX.PLN-F.PL.GEN hiccup.F.PL stop NEG become IMPF.F.SG
 ja
 PRS.3.SG
 'His/Her hiccups will not stop.'

We find the same behaviour within the LVC too. For example *irki* can occur in its singular form (68-a) as well as having the ability to mark for plurality when serving as a coverb (68-b). The plural form of the coverb does not interfere with the LVC meaning, rather it gives rise to a pluractionality reading.

- (68) a. miki irki lag-i si 1.SG.OBL hiccup.F.SG hurt-F.SG NPR.3.SG 'I got a hiccup.'
 - b. mīki īrki-a lag-ija sən 1.SG.OBL hiccup.F-PL hurt-F.PL NPR.3.PL 'I got hiccups.'

The remaining nouns within this class: ulti 'vomit', bahar 'fever', $k \ni \tilde{\eta}^h$ ', and $t \ni re$ 'thirst' do not mark for plurality independent of the LVC and thus do not within the LVC, with the exception of ulti 'vomit'. The latter coverb has the ability to mark of plurality despite its inability to mark for plurality independent of the LVC, which can be seen by comparing (69-a) and (69-b). These data question the generalisation postulated above, which is that if a noun cannot take a plural marker independent of the LVC then it will not take a plural marker within the LVC. I argue that if a noun such as ulti 'vomit' can take a plural marker within the LVC then it is a pluractionality marker, whereby it is pluralising the event of vomiting rather than amount of vomits. All other canonical non-count singular nouns support the following generalisation; if the noun does not have the ability to pluralise independent of the LVC then it also does pluralise within the LVC.

- (69) a. *me ulti-a tək-ija sən balti vıtf 1.SG.PLN vomit-F.PL see-F.PL NPR.3.PL bin.F.SG in 'I saw vomits in the bin.'
 - b. usman-ki ult-ija lag-ija sən Usman.M.SG-OBL vomit-F.PL hurt-F.PL NPR.3.PL 'Usman vomited.'

In respect of determination, the following nouns can be determined by a demonstrative pronoun independent of the LVC: ulti 'vomit', bahar 'fever', $k \ni \tilde{y}^h$ ', and \underline{tre} . For example in (70) the noun bahar 'fever' is determined by the demonstrative pronoun is 'this', while ulti 'vomit' is determined by the demonstrative e 'this' in (71).

- (70) me is bahar-e nal mər-i da sa 1.SG.PLN DEM.PROX.SG fever.M.SG-LOC with die-NFN go NPR.1.SG 'I will die with this fever.'
- (71) e ulti sa:f kar DEM.PROX.SG vomit.F.SG clean do 'Clean this vomit!'

However such nouns when serving as a coverb cannot be determined, as the LVC meaning is affected. That is, the literal meaning of *lag* 'hurt' is interpreted, rather than the LV meaning of being hurt by a non-agentive, non-physical bodily act. The latter is borne out form the data presented in (72-a) and (72-b).

(72)a. #mıki bahar lag-a 1.SG.OBL DEM.PROX.SG/DEM.PROX.SG fever.M.SG hurt-M.SG si NPR.3.SG 'I got hurt by this fever.' (Impossible: 'I got a fever.') #mıki ulti lag-i 1.SG.OBL DEM.PROX.SG/DEM.PROX.SG vomit.F.SG hurt-F.SG si NPR.3.SG 'I got hurt by this vomit.' (Impossible: 'I vomited.')

The nouns $petf ext{-}s$ 'diarrhoea' and irki 'hiccup' independent of the LVC are deemed as semantically infelicitous when determined by the demonstrative e 'this', as illustrated in (73) and (74). For this reason, it is redundant to investigate their interaction with determination in the LVC.

(73) #me is Irki nal mər-i da sa
1.SG.PLN DEM.PROX.SG hiccup.M.SG.LOC with die-NFN go NPR.1.SG
'I will die with this hiccup.'

(74) #me ine petfəs-e nal mər-i da sa 1.SG.PLN DEM.PROX.PL diarrhoea.M.PL.LOC with die-NFN go NPR.1.SG 'I will die with these diarrhoea.'

The nominals vary in their behaviour with adjectival modification within and independent of the LVC. For example, the nominal $k \ni n g^h$ 'cough' in (75-a) cannot be modified by the adjective $k \ni n g^i$ 'dirty' or $p \in ri$ 'bad'. In contrast, the adjective $p \in ri$ can modify the coverb when part of the LVC, illustrated in (75-b).

- (75) a. #pεri/kəndi kəῆ^h dirty.F.SG/bad.F.SG cough.F.SG 'A dirty/bad cough.'
 - b. sara-ki iţni pɛri kəỹʰ lag-i si Sara.F.SG.PLN very bad.F.SG cough.F.SG hurt-F.SG NPR.3.SG 'Sara got such a bad cough.'

In contrast, the adjective $k \ni n \not d i$ 'dirty' in (75-b) when modifying the coverb $k \ni \tilde{\eta}^h$ affects the LVC meaning. That is, the MV-complement structure meaning is interpreted. Due to the thematic conditions of the MV lag 'hurt', the sentence is semantically unacceptable.

(76) #sara-ki kəndi kəŋ̄^h lag-i si Sara.F.SG.PLN dirty.F.SG cough.F.SG hurt-F.SG NPR.3.SG 'Sara got hurt by a dirty cough.' (Impossible: Sara got such a dirty cough.')

The noun *ulti* 'vomit' in (77-a) can be modified by the adjective suwa/i 'red' and $p\varepsilon ri$ 'bad' in (77-b), without affecting the LVC meaning. Independent of the LVC, the noun *ulti* can also be modified by the adjective suwi 'red' (77-c).

- (77) a. usman-ki suwi ulti lag-i ε
 Usman.M.SG-OBL red.F.SG vomit.F.SG hurt-F.SG PRS.3.SG
 'Usman vomited red vomit.'
 - b. usman-ki itni peri ulti lag-i si UsmanM.SG-OBL very bad.F.SG vomit.F.SG hurt-F.SG NPR.3.SG 'Usman did really bad vomit.'
 - c. me suwi ulti tək-i si balti vıtf 1.SG.PLN red.F.SG vomit.F.SG see-F.SG NPR.3.SG bin.F.SG in 'I saw red vomit in the bin.'

Interestingly adjectives such as bari/a 'big' and dadi/a 'strong' when modifying coverbs in the LVC $ka\tilde{\eta}^h$ lag 'to cough', lit. 'cough hurt' and tre lag 'to get thirst', lit. 'thirst hurt' modify the state of being thirsty and the event of coughing, rather than the coverb itself. That is, the modifying adjectives give rise to adverbial modification of the LVC. Similar results have also been shown for Persian by Megerdoomian (2012, 197), in which the adjective $test{hessabi}$ 'awesome' when modifying the coverb $test{vyolon}$ 'violin' of the LVC $test{vyolon}$ $test{vyolon}$ zaed 'to play violin', lit. 'violin hit' modifies the event of

playing a violin rather than the coverb itself.

6.3.2.2 Syntactic Flexibility

The syntactic flexibility results of these LVCs pattern the same as the previously investigated nominal coverbs. For example all the coverbs can be fronted away from their canonical position (adjacent to the LV) to the front of the sentence, without inducing a grammatically incorrect sentence or intervening with the LVC meaning. The latter can be seen in example (78) for the LVC ulti lag 'to vomit', lit. 'vomit hurt' and (79) for the LVC petfos lag 'to get diarrhoea.diarrhoea hurt'.

- (78) ulti usman-ki lag-i si vomit.F.SG Usman.M.SG-OBL hurt-F.SG NPR.3.SG 'Usman vomited.'
- (79) petfəs usman-ki lag-e sən diarrhoea.M.PL Usman.M.SG-OBL hurt-M.PL NPR.3.PL 'Usman got diarrhoea.'

Similarly, the LVC components can be separated by an adverb such as $k \ni l$ 'tomorrow', without causing an ungrammatical sentence or forcing the LVC meaning to that of an MV-complement meaning. Take as an example $petf \ni s \mid lag$ 'to get diarrhoea', lit. 'diarrhoea hurt' in (80) and $ulti \mid lag$ 'to vomit', lit. 'vomit hurt' in (81).

- (80) miki petfəs kəl lag-e sən 1.SG.OBL diarrhoea yesterday hurt-M.PL NPR.3.PL 'I got diarrhoea yesterday.'
- (81) usman-ki ulti kəl lag-i si Usman.M.SG-OBL vomit.F.SG yesterday hurt-F.SG NPR.3.SG 'Usman vomited yesterday.'

All the nominals fail to be questioned or participate in pronominalisation. For example the pronoun o in the second clause of (83) is substituted for its antecedent ulti 'vomit' (see LVC in (65) above), which causes the meaning of the LVC to be lost. That is, the degree of being hurt by a non-agentive, non-physical physiological, bodily act associated with the LV meaning is no longer interpreted. Rather, the interpreted meaning is that of the MV, which is pain caused by something physical. Consequently, the substituted pronoun is interpreted as a complement, rather than contributing to the verbal predicate. This can be seen for the LVC puk^h lag 'to get hunger', lit. 'hunger hurt' in (58), which is uttered in context of (57). Due to the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV lag 'to hurt'.

(82) Context: A patient discusses that after a meal they vomit. The patient

utters (83) to their psychologist.

(83) #miki pəte kε o-ja si miki o
1.SG.OBL know what become-SG.M NPR.3.SG 1.SG.OBL DEM.PROX,SG
lag-i si
hurt-F.SG NPR.3.SG
'You know what happened to me? That hurt me.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. The MV meaning of *lag* 'to hurt' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (84) for the LVC *ulti lag* 'to vomit', lit. 'vomit hurt'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of the MV.

- (84) a. uski kε lag-a si 3.SG.OBL what hurt-M.SG NPR.3.SG 'What hurt him/her?'
 - b. #ulti vomit.F.SG 'Vomit.'

6.3.2.3 Summary

The data presented above provides clear evidence that the roots serving as coverbs are nominals, which exhibit certain nominal properties. For example, one of the coverbs that inflect for overt plural marking independent of the LVC can also inflect for plural marking within the LVC, which gives rise to a pluractionality reading. Similarly, a subset of coverbs can be modified by a restricted set of adjectives without intervening with the LVC meaning. Also, the agreement patterning of the LVC is identical to the MV-complement structure, with the LV agreeing with the coverb in number and gender. However, regardless of their complement-like behaviour within the LVC, the nominal coverbs fail be determined by a demonstrative pronoun, as it causes the LVC to lose its meaning to the MV-complement structure. The syntactic flexibility properties of the coverbs and complements are overlapping, though the pronominalisation and question-formation differentiates the two categories. It is therefore argued that the nominal coverbs and complements are distinct in their morphosyntactic properties. I now move onto providing a similar investigation of complex predicates consisting of the LV e 'to come'.

6.4 Light Verb e 'to come'

It is assumed in environments such as (85-a) that e 'to come' is an LV. For example, the LVC in (85-a) consists of two components; the verb e 'to come' and the coverb $u \not t r u$ 'choke'. It appears that e takes on typical characteristics of an LV inflecting for the past tense suffixes that agree with the nominal coverb $u \not t r u$ 'choke' and it semantically contributes very little in comparison its lexical verb analogue in (85-b). That is, the coverb is the component that holds the main predicational content.

(85) a. uski utgu e-ja si
3.SG.OBL choke.M.SG come-M.SG NPR.3.SG
'He/She choked.'
b. o e-ja si
3.SG.PLN come-M.SG NPR.3.SG
'He came.'

Intuitively, the LV e 'to come' does not behave as a full lexical verb in respect of its semantic contribution to the LVC. It can be suggested that the LV meaning is related to a physiological bodily processor occurring non-agentively. While, the literal meaning is to enter a place physically (agentively). I captured the non-agentive meaning component of the LV e 'to come' via the agentivity diagnostics in section 2. I also showed that the case marking of the subject is restricted the oblique case marker -ki. This ties in with Butt's (1995) observation in Urdu that LVs are employed to differentiate non-volitional or volitional eventualities.

In line with the aims of the present study, the subsequent sections provide an in-depth analysis of the syntactic and semantic properties of the e-type complex predicates.

6.4.1 Morphosyntactic Properties

6.4.1.1 Coverbs Independent of LVC

In a similar manner to the previous LVs, the category diagnostics are employed in aid of categorising the part-of-speech the coverbs belong to independent of the LVC. It is shown in this section that all the coverbs independent and within the LVC are nouns. The nouns can be further categorised as non-count singular nouns based on their inability to be modified by a numeral and their inability to have a plural form. The membership of these coverbs independent of the LVC is less varied than the *lag*-type LVCs. Table 6.8 provides an overview of the morphosyntactic properties exhibited by the nominals.

The interaction of the coverbs with the morphosyntactic properties is provided in

Table 6.8: Word Class of Coverbs in e-Type LVCs

Coverbal Element	Word Class
nitf 'sneeze'	Non-Count Singular Noun
dəkar 'burp'	Non-Count Singular Noun
$p = r \sin a$ 'sweat'	Non-Count Singular Noun
<i>pi∫av</i> 'urine'	Non-Count Singular Noun
utru 'choke'	Non-Count Singular Noun
rõn 'cry'	Non-Count Singular Noun
sas 'sigh'	Non-Count Singular Noun
nındər 'sleep'	Non-Count Singular Noun

table 6.9^3 below. The check marks (\checkmark) show that the coverbal element passes the diagnostic tools listed on the first row, while the cross marks (\checkmark) show that the coverbal element fails to pass these diagnostic tools.

Table 6.9: Word Class Properties of Coverbs Independent of e-Type LVCs

Coverbal Element	LOC/GEN	DEM	OBL CASE	AGR	ADJ	PL
pərsina 'sweat'	✓	✓	Х	√	✓	Х
<i>pi∫av</i> 'urine'	✓	✓	X	✓	✓	X
dəkar 'burp'	✓	X	X	✓	X	X
nitf 'sneeze'	✓	X	×	✓	X	✓
sas 'sigh'	✓	X	X	✓	X	X
utru 'choke'	✓	X	×	✓	X	X
rõn 'cry'	✓	X	X	✓	X	X
nındər 'sleep'	✓	X	X	1	X	X

All the roots can receive the locative and/or genitive case independent of the LVC. For instance, dəkar 'burp' in (86) can take the locative case, while, uţru 'choke' in (87), sas 'sigh' in (88), and nındər 'sleep' in (89) are shown to take the genitive case marking.

- (86) aman-ni dəkar-e kolu bo atf ni Amaan.M.SG-GEN.F.SG burp.M.SG-LOC from smell.F.SG come IMPF.F.SG jɛ
 PRS.3.SG
 'Amaan's burp smells.'
- (87) sara-ki utru-na vas e-ja si Sara.F.SG-OBL choke.M.SG-GEN.M.SG noise.M.SG come-M.SG NPR.3.SG 'Sara heard the sound of choking.'
- (88) miki upru sas-na vas e-ja si 1.SG.PLN upstairs sigh.M.SG-GEN.M.SG sound.M.SG come-M.SG NPR.3.SG 'I heard the sound of a sigh from upstairs.'

³Key: LOC/GEN: ability to take genitive/locative case, DEM: determination by a demonstrative pronoun, OBL: ability to take oblique case, AGR: coverb and LV agreement, ADJ: adjectival modification, and PL: plural marking.

(89) nındər-e-nija goli-a sleep-F.PL-GEN.F.PL table.F.PL 'Sleeping tablets.'

The nouns independent of the LVC do not exhibit all nounhood characteristics, which can be seen in the adjectival column in table 6.9. For example, sas 'sigh' and $u\underline{t}\underline{r}u$ 'choke' are viewed as semantically unacceptable when they take a modifying adjective, illustrated in (90) and (91) below.

- (90) #sara-ki bara utru-na vas e-ja
 Sara.F.SG-OBL big.M.SG choke.M.SG-GEN.M.SG noise.M.SG come-M.SG
 si
 NPR.3.SG
 'Sara heard the sound of a big choke.'
- (91) #miki bara sas-na vas e-ja si 1.SG.PLN big.M.SG sigh.M.SG-GEN.M.SG sound.M.SG come-M.SG NPR.3.SG 'I heard the sound of a big sigh.'

In contrast, adjectival modification is semantically felicitous with the nominal pifav 'urine'. For example, it can be modified by the adjective suwa 'red' in (92).

(92) suwa pi∫av red.M.SG urine.M.SG 'Red urine.'

In respect of determination, only two of the nouns independent of the LVC can be determined by a demonstrative pronoun: (i) pifav 'urine' and (ii) parsina 'sweat', which can be seen in (93) and (94) below.

- (93) e pi∫av kus-na ε
 DEM.PROX.SG urine.M.SG who-GEN.M.SG PRS.3.SG
 'Whose is this urine?'
- (94) e pərsma kutu atf na ε DEM.PROX.SG sweat.M.SG where come IMPF.F.SG PRS.3.SG 'Where is this sweat coming from?'

In terms of plurality, only the noun nx 'sneeze' has the ability to take the plural marker -a independent of the LVC, shown in (95).

(95) sara nitf-a pasənd kar ni jε Sara sneeze-F.PL like do IMPF.F.SG PRS.3.SG 'Sara likes sneezes.'

6.4.1.2 Coverbs

The present section is dedicated to investigating to what degree the nominal coverbs behave as nominal complements, in respect of their morphosyntactic

properties. The results are summarised in table $6.10.^4$ The check marks (\checkmark) show that the coverbal element exhibits the morphosyntactic properties listed in the first row, while the cross marks (\checkmark) show that the coverbal element fails to exhibit such properties.

Coverbal Element	LV	LVC Meaning	OBL	DEM	AGR	ADJ	PL
pərsina 'sweat'	e	'to sweat'	-	Х	✓	X	_
<i>pi∫av</i> 'urine'	e	'to urinate'	-	X	✓	1	-
dəkar 'burp'	e	'to burp'	-	-	✓	-	-
sas 'sigh'	e	'to sigh'	-	-	✓	-	-
nif 'sneeze	e	'to sneeze'	-	-	✓	1	✓
utru 'choke'	e	'to choke'	-	-	✓	✓	-
nındər 'sleep'	e	'to sleep'	-	-	✓	-	-
rõn 'cry'	e	'to cry'	-	-	✓	-	-

Table 6.10: Morphosyntactic Properties of Coverbs within e-Type LVCs

The results are relative to each nominal coverb, though some generalisations are borne out from the data. For instance, the LV e 'to come' agrees with all coverbs in number and gender. The latter can be seen in (96), in which the feminine inflection marking -i is conflated with the LV e 'to come' due to coarticulatory reasons. Independent of the LVC, the coverb nitf is categorised as a feminine count noun. Similarly, the masculine agreement marker -ja is inflected on the LV in agreement with the masculine singular coverb parsina 'sweat', as illustrated in (97).

- (96) uski nrtf er si 3.SG.OBL sneeze.F.SG come.F.SG NPR.3.SG 'He/She sneezed.'
- (97) uski pərsma e-ja si 3.SG.OBL sweat.M.SG come-M.SG NPR.3.SG 'He/She sweated.'

Determination was shown to be restricted (in the preceding section) to pifav 'urine' and parsina 'sweat' nouns independent of the LVC. However, when serving as a coverb, they cannot be determined by a demonstrative. For example, in (98-a) and (98-b) the demonstrative e 'this' induces the literal MV meaning of 'to come', rather than the LV meaning of a physiological bodily processor occurring non-agentively. The nominals pifav 'urine' and parsina 'sweat' do not meet the thematic conditions of the MV e 'to come', as it requires a physical object. For this reason, the sentences are deemed as semantically infelicitous.

⁴Key: OBL: ability to take oblique case, DEM: determination by a demonstrative pronoun, AGR: coverb and LV agreement, ADJ: adjectival modification, and PL: plural marking.

b. #mrki e pərsma e-ja si 1.SG.OBL DEM.PROX.SG sweat.M.SG come-M.SG NPR.3.SG 'This sweat came to me.' (Impossible: 'I sweated sweat.')

Plurality within the LVC is dependent on whether the noun has the ability to take plural marking independent of the LVC. The preceding section shows that the nominal *ntf* 'sneeze' can mark for plurality. Interestingly, the ability to mark for plurality continues within the LVC. However, rather than marking the entity of sneezes, it marks the number of eventualities. That is, the plural marking gives rise to a pluractionality reading, as illustrated in (99) below.

(99) ama:n-ki dəs nıtf-a ei-a sən Amaan.M.SG-OBL ten sneeze.F-PL come-F.PL NPR.3.PL 'Amaan sneezed ten times.'

The data results in table 6.10 shows that only pifav 'urine' and parsina 'sweat' can be modified by an adjective. These nouns can also be modified within the LVC too. The latter can be seen in (100) for the nominal coverb pifav 'urine', in which we see that the modifying adjectives nika/suwa 'small/red' can modify the nominal without intervening with the LVC meaning.

(100) usman-ki nīka/suwa pī∫ab e-ja si Usman.M.SG-OBL small.M.SG/red.M.SG urine.M.SG come-M.SG NPR.3.SG 'Usman did a small urine./Usman did a red urine.'

An unanticipated finding is that adjectival modification is not restricted to those coverbs that can be modified by an adjective independent of the LVC. For example, the coverb nuff and untru 'choke' cannot be modified by an adjective independent of the LVC, as illustrated in (101) below and (90) above. The two can be modified within the LVC, whilst retaining the meaning of the LVC, illustrated in (102) and (103).

- #usman bari nutf-e kulu dər na
 Usman.M.SG.PLN big.F.SG sneeze.F.SG-LOC from fear IMPF.M.SG

 ε
 PRS.3.SG.
 'Usman is scared of a big sneeze.'
- (102) ama:n-ki iṭni bari nɪʧ eɪ jɛ Amaan.M.SG-OBL such big.F.SG sneeze.F.SG come.F.SG PRS.3.SG 'Amaan did such a big sneeze.'
- (103) uski itna bara uttu e-ja si 3.SG.OBL such big.M.SG choke.M.SG come-M.SG NPR.3.SG 'He choked a big choke.'

The coverb *pərsına* 'sweat' displays reverse results, for instance, it can be modified by an adjective independent of the LVC. However, it cannot take a

modifier when serving as a coverb. The contrast between the complement and coverb behaviour with adjectival modification is shown in (104).

- (104) a. me suwa pərsma pit-a si 1.SG.PLN red.M.SG sweat.M.SG drink-M.SG NPR.3.SG 'I drank red sweat.'
 - b. #usman-ki suwa pərsma e-ja si Usman.M.SG-OBL red.M.SG sweat.M.SG come.M.SG NPR.3.SG 'Usman sweated red sweat.'

6.4.2 Syntactic Flexibility

The idiosyncratic behaviour of the nominal coverb in respect of its morphosyntactic properties shows in itself that it is distinct from nominal complements. In contrast, there is considerably less variation amongst the syntactic flexibility properties between nominal complements and coverbs. For example, all the coverbs can be fronted away from the LV, without affecting the LVC meaning, as illustrated for $u\underline{t}\underline{r}u$ 'choke' and persina 'sweat' in (106).

- (105) utru sara-ki e-ja si choke.M.SG Sara.F.SG-OBL come-M.SG NPR.3.SG 'Sara choked.'
- (106) pərsina usman-ki e-ja si sweat.M.SG Usman.M.SG-OBL come.M.SG NPR.3.SG 'Usman sweated.'

The results of the adverb insertion diagnostic is more varied in comparison to the agentive LVs. The adverb $k \ni l$ 'tomorrow/yesterday' cannot be placed in between all e-type LVCs, whereas the mar-type, kar-type, and lag-type LVCs all permit separation by an adverb. Table 6.11 shows that only two coverbs allow separation by the adverb $k \ni l$ without the sentence being deemed as unacceptable: (i) pi fav e 'to urinate', lit. 'urine come', illustrated in (107) and (ii) $rrnd \ni re$ 'to sleep', lit. 'sleep come', illustrated in (108).

- (107) usman-ki pi∫av kəl e-ja si Usman.M.SG-OBL urine.M.SG yesterday come-M.SG NPR.3.SG 'Usman urinated yesterday.'
- (108) usman-ki nındər kəl ei si Usman.M.SG-OBL sleep.F.SG yesterday come.F.SG NPR.3.SG 'Usman got sleep yesterday.'

The remaining LVCs do not permit the adverb to intrude between the coverb and LV, such as $sas\ e$ 'to sigh', lit. 'sigh come' in (109), as the intended LVC meaning is lost entirely. The literal MV reading of e 'come' is interpreted, rather than the LV meaning of a physiological bodily processor, occurring non-agentively. For the same

reasons discussed in the preceding section, the sentence is deemed as semantically odd because of the non-physical nature of the nominal sas 'sigh'.

(109) #ami-ki sas kəl e-ja si mum.F.SG-OBL sigh.M.SG yesterday come-M.SG NPR.3.SG 'Mum sighed yesterday.'

However the adverb can occur at the beginning of the sentence, as in (110), without intervening with the LVC meaning. The latter highlights the tight unit of the two components within such LVCs.

(110) kəl ami-ki sas e-ja si yesterday mum.F.SG-OBL sigh come-M.SG NPR.3.SG 'Mum sighed yesterday.'

The nominal coverbs do not participate in pronominalisation, as the intended LVC meaning being lost entirely. For example the pronoun o in the second clause of (112) is substituted for its antecedent pifav 'urine' (see LVC in (100) above), which interferes with the LVC meaning. The LV meaning of a physiological bodily processor occurring non-agentively is lost. The nominal coverb no longer contributes to the verbal predicate meaning and the MV meaning of e 'to come' is interpreted. This can be seen for the LVC pifav e 'to urinate', lit. 'urine come' in (112), which is uttered in context of (111). Due to the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV e 'to come'. The latter requires a physical object, as the approximate meaning of e 'to come' is 'to enter' physically (agentively).

- (111) Context: A patient discusses that immediately after drinking water they urinate. The patient utters (112) to their physician.
- (112) #miki pəte kε o-ja si miki o 1.SG.OBL know what become-M.SG NPR.3.SG 1.SG.OBL DEM.DIST.SG e-ja si come-M.SG NPR.3.SG 'You know what happened to me? That came to me.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. The MV meaning of e 'to come' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (113) for the LVC $pifav\ e$ 'to urinate', lit. 'urine come'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of e (discussed above).

(113) a. uski ke e-ja si 3.SG.OBL what come-M.SG NPR.3.SG 'What came to her/him?'

b. #piʃav urine.M.SG 'Urine.'

An overview of the syntactic flexibility properties are provided in table 6.11 below.⁵ The check marks (\checkmark) show that the coverbal element can undergo the syntactic operations listed in the first row, without affecting the LVC meaning or grammaticality, while the cross marks (\checkmark) show that the coverbal element cannot undergo such movement without affecting the LVC meaning.

Coverbal Element	LV	LVC meaning	FRONT	OBJ	ADV	PRNM	Q-FOR
nındər 'sleep'	e	'to sleep'	✓	-	✓	Х	X
<i>pi∫av</i> 'urine'	e	'to urinate'	✓	-	✓	X	X
dəkar 'burp'	e	'to burp'	✓	-	X	X	X
pərsina 'sweat'	e	'to sweat'	✓	-	X	X	X
nif 'sneeze'	e	'to sneeze'	✓	-	X	X	X
utru 'choke'	e	'to choke'	✓	-	X	X	X
$r\tilde{o}n$ 'cry'	e	'to cry'	✓	-	X	X	X
sas 'sigh'	e	'to sigh'	✓	-	X	X	X

Table 6.11: Syntactic Flexibility of e-Type LVCs

6.5 Light Verb pe 'to attack'

Superficially, it seems pe 'to attack' in (114-a) forms part of an LVC. For example, the verbal predicate consists of two components, the verb pe 'to attack' and the nominal kire 'insect'. Intuitively, the LV pe 'to attack' is semantically lighter in comparison to its lexical verb analogue in (114-b). However, it is not completely void of meaning. The LV meaning can be said to be related to a non-agentive attack on the body, rather than the canonical lexical meaning of an agentive attack on something that is not necessarily restricted to the body. In contrast, the coverb is the component that holds the main predicational content, though it does not take on canonical verbal properties. Rather, it is the verb pe 'to attack' that inflects for the past tense suffixes, which are followed by the BE-auxiliary.

- (114) a. miki kire pe sən
 1.SG.OBL insect.M.PL attack.M.PL NPR.3.PL
 'I got infested.'
 - b. kəta saima-ki pi ga-ja si dog.M.SG Saima.F.SG-OBL attack.F.SG go-M.SG NPR.3.SG 'The dog attacked Saima.'

⁵Key: FRONT: fronting operation, OBJ: syntactic operation involving object movement, ADV: syntactic operation involving movement of adverb, PRNM: the ability to under go the pronominalisation operation, and Q-FOR: the ability to be questioned.

I now turn my attention to the morphosyntactic properties of the LVCs. To begin, an overview of the word class which the coverbs belong to independent of the pe-type LVCs are listed in table 6.12 below.

Table 6.12: Word Class for *pe*-Type Coverbs

Coverbal Element	Word Class
tfala 'blister'	Noun
nil 'bruise'	Noun
kira 'insect'	Noun
t fuw 'nit'	Noun
sot^h 'swelling'	Noun
faləʤ 'stroke'	Noun
mırgi 'seizure'	Noun

Table 6.13⁶ provides an overview of the morphosyntactic properties exhibited by the nominals independent of the LVC. I begin this section by providing data examples of the latter.

Table 6.13: Word Class Properties of Coverbs Independent of pe-Type LVCs

Coverbal Element	OBL	CASE	DEM	AGR	ADJ	PL
## ## fala 'blister'	✓	✓	1	✓	✓	✓
nil 'bruise'	✓	✓	✓	1	✓	✓
₫uw 'nit'	✓	✓	✓	✓	✓	✓
kira 'insect'	1	✓	✓	✓	✓	✓
sot^h 'swelling'	X	✓	✓	✓	✓	X
<i>faləd</i> ʒ 'stroke'	X	✓	X	✓	X	X
mirgi 'seizure'	X	✓	X	✓	X	X

I then go on to demonstrate whether the nominals possess the same morphosyntactic properties when serving as a coverb. Table 6.14 presents the results of the morphosyntactic properties of the coverbs.

Table 6.14: Word Class Properties of Coverbs within pe-Type LVCs

Coverbal Element	OBL CASE	DEM	AGR	ADJ	PL
nil 'bruise'	-	✓	✓	✓	√
kira 'insect'	-	X	✓	✓	X
₫uw 'nit'	-	✓	✓	✓	✓
tfala 'blister'	-	X	✓	✓	✓
sot^h 'swelling'	-	X	✓	✓	-
falə& 'stroke'	-	-	✓	-	-
mīrgi 'seizure'	-	-	✓	-	_

⁶Key: OBL: ability to take oblique case CASE: ability to take locative/genitive case, DEM: determination by a demonstrative pronoun, AGR: coverb and LV agreement, ADJ: adjectival modification, and PL: plural marking.

I finalise the behaviour of the LVC by investigating its syntactic flexibility. The results are presented in table 6.15 below⁷.

Coverbal Element	LV	LVC meaning	FRONT	ADV	PRNM	Q-FOR
tfala 'blister'	pe	'to get a blister'	✓	1	Х	X
sot^h 'swelling'	pe	'to get a swelling'	✓	✓	X	X
nil 'bruise'	pe	'to get a bruise'	\checkmark	✓	X	X
kira 'insect'	pe	'to get an insect'	✓	✓	X	X
fuw 'nit'	pe	'to get nits'	\checkmark	✓	X	X
falədz 'stroke'	pe	'to get a stroke'	✓	✓	X	X
mirqi 'seizure'	pe	'to get a seizure'	✓	✓	X	X

Table 6.15: Syntactic Flexibility in pe-Type LVCs

6.5.1 Count Nouns

6.5.1.1 Morphosyntactic Properties of Coverbs Independent of the LVC

The first class of nouns are categorised as count nouns based on their ability to be quantified by a numeral, which listed in (115).

(115) #fala 'blister', nil 'bruise', kira 'insect', and #fuw 'nit'.

For example, in (116), (117), (118), and (119) we observe that all four can be quantified. These illustrations also show that all four nouns independent of the LVC have the ability to mark for plurality, in which fala 'blister', fala 'insect', and fala 'nit' mark for plurality via the overt marker fala 'bruise' does so via null affixation. From this data set, it can also be seen that each noun in this class can be modified by an adjective, which in turn reflects their gender and number.

- (116) sara-ni ba pər tfar bare tfal-e sən Sara.F.SG-GEN.F.SG arm.F.SG on four big.M.PL blister-M.PL NPR.3.PL 'There were four big blisters on Sara's arm.'
- (117) mare bal-e vitt far kal-ija dzuw-a sən 1.GEN.SG hair-M.PL in four black-F.PL nit-F.PL NPR.3.PL 'In my hair, there were four black nits.'
- (118) me tfar suwe kir-e tək-e sən
 1.SG.PLN four red.M.PL insect-M.PL see-M.PL NPR.3.PL
 'I saw four red insects.'
- (119) sara-ni ba per tfar suwe nil sen Sara.F.SG-GEN.F.SG arm.F.SG on four red.M.PL bruise.M.PL NPR.3.PL 'There were four red bruises on Sara's arm.'

⁷Key: FRONT: fronting operation, OBJ: syntactic operation involving object movement, ADV: syntactic operation involving movement of adverb, PRNM: the ability to under go the pronominalisation operation, and Q-FOR: the ability to be questioned.

In the context of determination, the nouns have the ability to be determined by a demonstrative pronoun. They also have the ability to inflect for the oblique case marker -ki. For example, in (120) and (121) we see that the demonstrative pronoun ina 'these' can modify the -ki marked nouns kire 'insects' and fuwa 'nits'.

- (120) me ina kir-a-ki tfar tɛ bm-e vitf 1SG.PLN DEM.PROX.PL insect-M.PL.LOC-OBL pick and bin.M.SG in sət-e sən throw-M.PL NPR.3.PL 'I picked up these insects and then threw them in the bin.'
- (121) me ina tfuw-a-ki mar sa 1SG.PLN DEM.PROX.PL nit-F.PL.LOC-OBL kill NPR.1.SG 'I will kill these nits.'

Similarly, the demonstrative pronoun is 'this' can modify the -ki marked nouns fala 'blister' in (122) and nil 'bruise' in (123).

- (122) is tfal-e-ki ath na le ja DEM.PROX.SG blister.M.SG-LOC-OBL hand.M.SG NEG touch PRS.1.SG 'Do not touch this blister.'
- (123) is nil-e-ki ath na le ja DEM.PROX.SG bruise.M.SG-LOC-OBL hand NEG touch PRS.3.SG 'Do not touch this bruise.'

6.5.1.2 Morphosyntactic Properties of Coverbs within the LVC

We have seen in the previous chapters that nominal coverbs and complements are distinct in their morphosyntactic properties, with micro variations. It is only the oblique case marker that differentiates the nominal coverbs from complements in this class, as the coverbs can be modified by an adjective and determined by a demonstrative pronoun, as well having the ability to mark for plurality without straining the meaning of the LVC. The examples in (124), (126), (127), and (128) illustrate that the oblique case -ki attached to the coverbs forces a passive sentence, in which what was the subject of the LVC is now the object of the sentence and the coverbal element is the subject of the sentence. For example, in (124), the subject/agent is tfala, whereas the object/patient is uski 'he/she', hence the latter takes the oblique case marker. However, the subject/agent #fala 'blister' is also ki marked, which is at the root of the ungrammaticality. The subject is required to be in the unmarked, plain case, such as a canonical MV-complement structure, illustrated in (125). In this example, we have a passive voice, though the sentence does not result in an ungrammatical sentence because the second argument is in the unmarked plain case.

- (124) *uski tfala-ki pi ga-ja ε 3.SG.OBL blister.M.SG-OBL attack.F.SG go-M.SG NPR.3.SG 'He/She got attacked by a blister.' (Impossible: 'He/She blistered.')
- (125) uski kəta pi ga-ja si 3.SG.OBL dog.M.SG.PLN attack.F.SG go.PST.M.SG NPR.3.SG 'He/She got attacked by a dog.'

The examples in (126), (127) and (128) are ungrammatical for precisely the same reasons discussed above.

- (126) *miki nil-ki pe-ja si 1.SG.OBL bruise.M.SG-OBL attack-M.SG NPR.3.SG 'I got attacked by the bruise.' (Impossible: 'I got a bruise.')
- (127) *miki kira-ki pe-ja si 1.SG.OBL insect.M.SG-OBL attack-M.SG NPR.3.SG 'I got attacked by the insect.' (Impossible: 'I got infested.')
- (128) *mrki duwa-ki pi-ja sən 1.SG.F.OBL nit.F.PL-OBL attack-F.PL NPR.3.PL 'I got attacked the nits.' (Impossible: 'I got nits.')

For the above sentences to be grammatically correct the subject/agent must be in the unmarked plain case. However, the removal of the oblique case marker -ki results in an intransitive sentence, in which the nominal contributes to the verbal predicate rather than behaving as an unmarked direct object. That is, we have the LVC meaning, as illustrated in (129), (130), and (131).

- (129) miki ıţɛ nil pe-ja si 1.SG.OBL here bruise.M.SG attack-M.SG NPR.3.SG 'I got a bruise here.'
- (130) miki kire pe sən 1.SG.OBL insect.M.PL attack.M.PL NPR.3.PL 'I got infested.'
- (131) miki dzuw-a pi-ja sən 1.SG.OBL nit-F.PL attack-F.PL NPR.3.PL 'I got nits.'

In contrast, example (122), (133), and (123) show that the coverbs can be determined by a demonstrative pronoun, as well as having the ability to mark for plurality without affecting the meaning of the LVC or the grammaticality of the sentence.

(132) uski e tfal-e pi ge sən 3.SG.OBL DEM.PROX.SG blister-M.PL attack.F.SG go.M.PL NPR.3.PL 'He/She got these blisters.'

- (133) miki e dzuw-a pi-a sən 1.SG.F.OBL DEM.PROX.SG nit.F-PL attack.F-PL NPR.3.PL 'I got these nits.'
- (134) miki e nil pe sən 1.SG.F.OBL DEM.PROX.SG bruise.M.PL attack.M.PL NPR.3.PL 'I got these bruises.'

However, not all coverbs can be determined by a demonstrative pronoun or mark for plurality. For example, the coverb kire 'insects' in (120) cannot be determined by the demonstrative pronoun e 'this', nor inflect for plurality, without it affecting the LVC meaning. That is, the intended LV meaning of a non-agentive attack on the body is lost to the canonical lexical meaning of an agentive attack on something that is not necessarily restricted to the body. For this reason, the coverb no longer contributes to the meaning of the verbal predicate, as it is not interpreted as a nominal complement of the MV. The loss of the LV meaning is also apparent when the coverb is modified by an adjective, illustrated in (135-b).

- (135) a. mrki e kir-e pe sən
 1.SG.OBL DEM.PROX.SG insect-M.SG attack.M.PL NPR.3.PL
 'These insects attacked me.' (Impossible: 'These insects infested me.')
 - b. mrki bəre kir-e pe sən
 1.SG.OBL big.M.PL insect-M.PL attack.M.PL NPR.3.PL
 'I was attacked by big insects.' (Impossible: 'I got infested by big insects.')

In contrast, the coverbs fala 'blister' in (136), nil 'bruise' in (138), and fuw 'nit' in (138) can be modified by an adjective within the LVC, without intervening with the meaning of the LVC.

- (136) uski suwa tfala pi ga-ja ϵ 3.SG.OBL red.M.SG blister.M.SG attack.F.SG go-M.SG PRS.3.SG 'He/She got a red blister.'
- (137) miki ite damu-da nil pe-ja si 1.SG.OBL here purple-ish bruise.M.SG attack-M.SG NPR.3.SG 'I got a purplish bruise here.'
- (138) miki suwija dzuw-a pi-ja sən 1.SG.OBL red.F.PL nit-F.PL attack-F.PL NPR.3.PL 'I got red nits.'

The agreement patterning is one in which the LV agrees in gender and number of the coverb, rather than subject of the sentence. For example, in (138) the LV agrees with the feminine singular coverb dyw 'nit', while in (136) and (137) the LV agrees with the masculine singular coverbs nil 'bruise' and tfala 'blister'.

6.5.1.3 Syntactic Flexibility of LVC

In respect of the morphosyntactic properties, the data has shown that there are few differences between nominal coverbs and nominal complements. Similarly, the syntactic flexibility diagnostics, fronting and adverb insertion show that the two have almost parallel flexibility. For example, all the coverbs can be moved from their canonical position to the front of the sentence, which can be seen for the coverb *nil* 'bruise' in (139). In (139), the canonical position of the coverb *nil* 'bruise' is adjacent to the LV, whilst its movement to the front is illustrated in (139-b). The latter does not intervene with the intended LVC meaning. This illustrates that the flexibility of the LVC is akin to the MV-complement structure, as a nominal complement can also be fronted away from the MV without inducing an ungrammatical sentence or intervening with the LVC meaning.

- (139) a. miki itæ nil pe-ja si 1.SG.OBL here bruise.M.SG attack-M.SG NPR.3.SG 'I got a bruise here.'
 - b. nil miki itæ pe-ja si bruise.M.SG 1.SG.OBL here attack-M.SG NPR.3.SG 'I got a bruise here.'

The two components of the LVC also permit an adverb to enter between them, whilst retaining the intended LVC meaning. The canonical position of the time adverb pursu 'day before yesterday' is immediately after the subject of the sentence, as shown in (140-a). Though, the time adverb pursu 'day before yesterday' can be moved between the two components of the LVC \(\delta\)uwa pi 'to get nits', lit. 'nits attack', as illustrated in (140-b).

- (140) a. miki pursu dyw-a pi-ja sən 1.SG.OBL day.before.yesterday nit-F.PL attack-F.PL NPR.3.PL 'I got nits the day before yesterday.'
 - b. miki daw-a pursu pi-ja sən 1.SG.OBL nit-F.PL day.before.yesterday attack-F.PL NPR.3.PL 'I got nits the day before yesterday.'

The LVCs can be separated by the fronting and adverb insertion operations, without intervening with the meaning of the LVC. However, the LVC is not completely flexible, as neither of the LVCs can participate in pronominalisation nor can they be questioned. For example the pronoun o in the second clause of (143) is substituted for its antecedent f ala 'blister', shown in (141) below. The substitution interferes with the LVC meaning, in that the LV meaning of a non-agentive attack on the body is lost. The nominal coverb no longer contributes to the verbal predicate meaning and the MV meaning of pe 'to attack' is interpreted. This can be seen for the LVC f ala pe 'to blister', lit. 'blister attack' in (143), which is uttered in context of (142). Due to the change of meaning, the sentence is deemed as semantically odd, which

is related to the thematic conditions of the MV pe 'to attack'.

- (141) uski tfala pe-ja si 3.SG.OBL blister.M.SG attack-M.SG NPR.3.SG 'He/She got a blister.'
- (142) Context: A patient discusses that after their long walk in a pair of new shoes they got a blister. The patient utters (143) to their physician.
- #miki pəte kε o-ja si miki o
 1.SG.OBL know what become-SG.M NPR.3.SG 1.SG.OBL DEM.DIST.SG
 pe-ja si
 attack-M.SG NPR.3.SG
 'You know what happened to me? That attacked me.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. The MV meaning of pe 'to attack' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (144) for the LVC f ala pe 'to blister', lit. 'blister attack'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of pe (discussed above).

- (144) a. tuki kε pe-ja si 3.SG.OBL what attack-M.SG NPR.3.SG 'What attacked you?"
 - b. #tfala blister.M.SG 'Blister'

I now provide a morphosyntactic and syntactic flexibility analysis of the sub-class of non-count, singular nominal coverbs in the following section.

6.5.2 Non-Count Singular Nouns

6.5.2.1 Morphosyntactic Properties of Coverb Independent of LVC

The nouns listed in (145) are categorised as non-count singular nouns, as they cannot be quantified and the noun only has a singular form.

(145) so_{σ}^{th} 'swelling', falads 'stroke', and mugi 'seizure'.

It was shown in Chapter 3 that a non-count noun cannot take the oblique case marker due to the DOM rules. Similarly the non-count nouns in (145) do not inflect for oblique case marker. The latter can be seen in example (146) for the nominal *mirgi* 'seizure'.

(146) *saima mīrgi-ki tək-i si Saima.F.SG.PLN seizure.F.SG-OBL see-F.SG NPR.3.SG 'Saima saw the seizure.'

In contrast, all three nouns can take the Layer I case marker -e, shown for the noun $so_{\underline{t}}^{h}$ 'swelling' in (147).

(147) me is soth-e kulu dər ni ja 1.SG.F.PLN DEM.PROX.SG swell.M.SG-LOC from fear IMPF.F.SG PRS.1.SG 'I am scared of this swelling.'

Adjectival modification and determination by a demonstrative pronoun is restricted to $so_{\underline{t}}^{h}$ 'swelling', as illustrated in (147) above and (148) below.

(148) miki sək^ht sot^h si 1.SG.OBL severe swell.M.SG NPR.3.SG 'I had severe swelling.'

In contrast, falads 'stroke' and mugi 'seizure' do not have the ability to be modified by an adjective, such as bara 'big' in (149).

(149) #uski bara faləd si 3.SG.OBL big.M.SG stroke.M.SG NPR.3.SG 'He/She had a big stroke.'

Also they cannot be determined by a demonstrative pronoun, shown in (150) for mirgi 'seizure' and falads 'stroke' in (151). The determination and adjectival modification of such nouns induces a semantically unacceptable sentence.

- (150) #me is mīrigi kulu dər ni ja
 1.SG.PLN DEM.PROX.SG seizure.F.SG from fear IMPF.F.SG PRS.1.SG
 'I am scared of getting this seizure.'
- (151) #uski e faləd si 3.SG.OBL DEM.PROX.SG stroke.M.SG NPR.3.SG 'He/She had this stroke.'

In respect of plurality, the nouns do not pluralise either via null affixation or via overt marking, which can be seen for each noun in the following examples: (152-a). (152-b), and (152-c). This is in line with the behaviour of non-count singular nouns.

- (152) a. *me mīrigi-a kulu dər ni ja
 1.SG.PLN seizure-F.PL from fear IMPF.F.SG PRS.1.SG
 'I am scared of getting a seizures.'
 - b. *uski faləd-a sən 3.SG.OBL stroke.M.PL-PL NPR.3.PL 'He/She had strokes.'
 - c. *miki soth-a sən 1.SG.OBL swell.M.PL-PL NPR.3.PL '*I had swellings.'

Upon investigating the nominal properties, we conclude that the nouns can take the locative case marker -e and can assign for gender and number, though they do not mark for plurality. Also, determination and adjectival modification is only permitted by one nominal. The following section investigates whether the coverb exhibits such properties.

6.5.2.2 Morphosyntactic Properties of Coverb within LVC

In this class only the noun $so_{\underline{t}}^h$ 'swelling' can be modified by an adjective and determined by a demonstrative. However, when serving as a coverb, $so_{\underline{t}}^h$ 'swelling' cannot be determined by the demonstrative is 'this', as the LVC meaning is affected (153-a). Similarly, adjectival modification of the coverb affects the LVC meaning (153-b). Both examples show that the approximate LV meaning of a non-agentive attack on the body is lost and the literal MV meaning of a general physical attack is interpreted. Consequently, the nominal coverb behaves as a nominal complement rather than contributing to the verbal predicate. Due to the thematic conditions of the MV, the sentence is deemed as semantically infelicitous.

 $so\underline{t}^h$ (153)#mare pere-ki pe-ja a. 1.GEN.M.SG foot.M.SG DEM.PROX.SG swell.M.SG attack-M.SG NPR.3.SG 'This swelling attacked my foot.' (Imposible: 'My foot got swollen.') bara sot^h pe-ja 1.SG.F.OBL big.M.SG swell.M.SG attack-M.SG NPR.3.SG 'The big swelling attacked my foot.' (Impossible: 'I got a big swelling.')

The coverbs independently do not mark for the oblique case -ki or plurality therefore it is redundant in diagnosing such properties within the LVC. This leaves us with the behaviour of the coverbs with the agreement property, which is in line with the other nominal coverbs. That is, the LV agrees with the coverbs in gender and number. For example, in (154-a) and (154-b) the form of the LV is masculine singular, which also has the masculine singular inflection marker -ja attached to it. This is in agreement with the masculine singular coverbs sot_{π}^{h} 'swelling' and $falot_{\pi}^{h}$ 'stroke'. In contrast, the LV in (154-c) is in its feminine singular form and is in agreement with the nominal coverb mirgi 'seizure'.

- (154) a. mare pere-ki sogh pe-ja si 1.GEN.M.SG foot.M.SG-OBL swell.M.SG attack-M.SG NPR.3.SG 'My foot got swollen.'
 - b. mrki falədə pe-ja si 1.SG.OBL stroke.M.SG attack-M.SG NPR.3.SG 'I had a stroke.'

c. usman-ki mirgi pi si Usman.M.SG-OBL seizure.F.SG attack.F.SG NPR.3.SG 'Usman got a seizure.'

6.5.2.3 Syntactic Flexibility of LVC

The preceding section shows that the morphosyntactic properties of the LVC are distinct to that of an MV-complement structure. In contrast, the syntactic flexibility of the two are almost identical, which is in line with all other LVCs. For example, the nominal coverbs in this class can be moved from their canonical positions shown in (154-a) and (154-c) above to the front of the sentence, without intervening with the LVC meaning. The fronted coverbs are illustrated in (155-a) and (155-b) below.

- (155) a. sogh mare pere-ki pe-ja si swell.M.SG 1.GEN.M.SG foot.M.SG-OBL attack-M.SG NPR.3.SG 'My foot got swollen.'
 - b. mirgi usman-ki pi si seizure.F.SG Usman.M.SG-OBL attack.F.SG NPR.3.SG 'Usman got a seizure.'

Similarly, the two components of the LVC can be separated by the time adverb pursu 'day before yesterday' whilst retaining the LVC meaning, as illustrated in (156) and (157).

- (156) na uski mirgi pursu pi si NEG 3.SG.OBL seizure.F.SG day.before.yesterday attack.F.SG NPR.3.SG 'No, he/she got a seizure the day before yesterday.'
- na mīki soth pursu pe-ja si
 NEG 1.SG.OBL swell.M.SG day.before.yesterday attack-M.SG NPR.3.SG

 tε ũn li ge-ja ε
 and now remove.F.SG go.M.SG PRS.3.SG
 'No, I got swelling the day before yesterday and now it has gone.'

In contrast to the above flexibility, the LVCs cannot be separated by the pronominalisation operation nor can the coverbs be questioned. For example the pronoun o in the second clause of (159) is substituted for its antecedent sot_n^{th} 'swelling' (see antecedent in (154-a) above), which interferes with the LVC meaning. The LV meaning of a non-agentive attack on the body is lost. The nominal coverb no longer contributes to the verbal predicate meaning and the MV meaning of pe 'to come' is interpreted. This can be seen for the LVC sot_n^{th} pe 'to swell', lit. 'swell attack' in (159), which is uttered in context of (158). Due to the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV pe 'to attack'.

(158) Context: A runner discusses that after their fall their foot started to swell.

The patient utters (159) to their physician.

(159) #mrki pəte kε o-ja si mrki o 1.SG.OBL know what become-SG.M NPR.3.SG 1.SG.OBL DEM.DIST.SG pe-ja si attack-M.SG NPR.3.SG 'You know what happened to me? That attacked me.'

Coverbs of this class also cannot be questioned, as the separation of the components causes the LVC to lose its meaning. The MV meaning of pe 'to attack' is interpreted rather than the LV meaning. The latter is illustrated in the question-answer sequence in (160) for the LVC so_{π}^{th} pe 'to swell', lit. 'swell attack'. The change in the meaning induces a semantically infelicitous sentence due to the thematic conditions of pe (discussed above).

a. tuki kε pe-ja si
3.SG.OBL what attack-M.SG NPR.3.SG
'What attacked you?'
b. #soth
swelling.M.SG
'Swelling'

I now move onto providing a cross-the-board discussion of the three types of non-agentive LVCs, and conclude the significant data points.

6.6 Final Remarks

This chapter embarked on an in-depth investigation of 25 non-agentive LVCs consisting of LVs lag 'to hurt', e 'to come', and pe 'to attack'. I began the task of investigating their lexical semantic features, as the analysis of all three LVCs in the present chapter was rooted in their unifying lexical semantic features. I demonstrated via the agentivity diagnostics (Cruse, 1973) and the inchoative-causative alternation diagnostic (Levin & Rappaport Hovav, 1995) that all three LVCs are internally caused LVCs that are non-agentive. I also showed that they have an intransitive argument structure, whereby the sole argument is an experiencer subject that takes the oblique case marker -ki.

The morphosyntactic properties of coverbs that form part of non-agentive LVCs differ from coverbs of agentive LVCs. Many of the coverbs of the agentive LVCs were shown to be English loans. Interestingly there are no English loan coverbs in the non-agentive LVCs. However, many can be traced as cognates with Punjabi, Urdu, and Perso-Arabic roots, which is also the case for certain coverbs of the *mar*-type LVCs. Amongst the differences is that the categorisation of the coverbs is based on the behaviour with canonical parts-of-speech properties, rather than solely on the derivational behaviour of the coverbs. The coverb of non-agentive LVCs was shown to

always be nominal, whereas the agentive LV *kar* 'to do' can combine with adjectival and verbal coverbs. The morphosyntactic properties exhibited by the nominals can be seen in table 6.16 below.

Table 6.16: Morphosyntactic Properties of Nominals

NOMINAL	OBL	LOC/GEN	DEM	AGR	ADJ	PL	POSS
ulti 'vomit'	Х	✓	✓	✓	✓	Х	Х
$k \ni \widetilde{\eta}^h$ 'cough'	X	\checkmark	✓	✓	X	X	X
dərd 'pain'	X	✓	✓	✓	X	X	✓
tre 'thirst'	X	✓	✓	✓	X	X	X
sərdi 'cold'	X	✓	✓	✓	✓	X	✓
g ightarrow r introduction for the second contract of the second	X	✓	✓	✓	✓	X	✓
puk^h 'hunger'	X	✓	✓	✓	X	X	✓
bahar 'fever'	X	✓	✓	✓	X	X	✓
ırki 'hiccup'	X	✓	X	✓	X	✓	X
petfəs 'diarrhoea'	X	✓	X	✓	X	X	X
pərsina 'sweat'	Х	√	1	✓	✓	X	Х
<i>pi∫av</i> 'urine'	X	✓	✓	✓	✓	X	X
dəkar 'burp'	X	✓	X	✓	X	X	X
nif 'sneeze'	X	✓	X	✓	X	✓	X
sas 'sigh'	X	✓	X	✓	X	X	X
utru 'choke'	X	✓	X	✓	X	X	X
rõn 'cry'	X	✓	X	✓	X	X	X
nındər 'sleep'	X	✓	X	✓	X	X	X
tfala 'blister'	Х	√	√	✓	√	√	Х
nil 'bruise'	X	✓	✓	1	✓	1	X
₫uw 'nit'	X	✓	✓	✓	✓	1	X
kira 'insect'	X	✓	✓	✓	✓	1	X
sot^h 'swelling'	X	✓	✓	✓	✓	X	X
falədz 'stroke'	X	✓	X	✓	X	X	X
mirgi 'seizure'	X	✓	X	✓	X	X	X

In contrast, the interaction of the morphosyntactic properties exhibited by the nominals serving as coverbs can be seen in table 6.17 below. From these results tables it can be said that the nominal coverbs and complements do not exhibit the same morphosyntactic properties. The general pattern observed is one in which adjectival modification, determination by a demonstrative pronoun, oblique case marking, and plurality are incompatible with nominal coverbs, as such properties affect the LVC meaning or induce an ungrammatical sentence. The agreement characteristic displays different results, in that the coverb behaves like a nominal complement of an MV in the past tense. That is, the LV agrees in number and gender with the coverb.

Table 6.17: Morphosyntactic Properties of Coverbs in Non-Agentive Ly	verbs in Non-Agentive LVCs
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COVERB	LV	OBL	DEM	AGR	ADJ	PL
ırki 'hiccup'	lag	-	-	✓	-	Х
ulti 'vomit'	lag	-	X	✓	X	-
petfəs 'diarrhoea'	lag	-	-	✓	X	-
$k \ni \widetilde{\eta}^h$ 'cough'	lag	-	X	✓	X	-
tre 'thirst'	lag	-	X	✓	X	-
sərdi 'cold'	lag	-	X	✓	X	X
gərmi 'hot'	lag	-	X	✓	X	X
puk^h 'hunger'	lag	-	X	✓	X	-
bahar 'fever'	lag	-	X	✓	X	-
pərsina 'sweat'	e	-	Х	√	Х	-
<i>pi∫av</i> 'urine'	e	-	X	✓	1	-
dəkar 'burp'	e	-	-	✓	-	-
sas 'sigh'	e	-	-	✓	-	-
nif 'sneeze	e	-	-	✓	✓	✓
nındər 'sleep'	e	-	-	1	-	-
utru 'choke'	e	-	-	1	✓	-
rõn 'cry'	e	-	-	✓	-	-
<i>nil</i> 'bruise'	pe	Х	√	√	✓	✓
kira 'insect'	pe	X	✓	1	✓	✓
₫uw 'nit'	pe	X	✓	1	✓	✓
<i>ffala</i> 'blister'	pe	X	X	✓	✓	✓
soth 'swelling'	pe	-	X	✓	X	-
falədz 'stroke'	pe	-	_	✓	-	-
mirgi 'seizure'	pe	-	-	✓	-	-

Interestingly, we observe exceptions to the basic pattern, in which coverbs can exhibit certain nominal properties without them interfering with the LVC meaning or affecting the grammaticality. In comparing the plural cells of the two tables, it can be seen that four of the six nominals can also mark for plurality when serving as coverbs. The plural marking on two of the coverbs gives rise to a pluractionality reading. However not all coverbs that mark for plurality give rise to a pluractionality reading. Instead, plural marking on the remaining set of coverbs in (161) refers to the entity rather than the verbal predicate. The singular form of the coverb \(\delta uw\) 'nit' in the LVC \(\delta uw\) pe 'to get nit(s)', lit. 'nit(s) attack' has the interpretation that the person had one nit, whereas the plural marker on the coverb has the interpretation that the person had more than one nit. Contrary to the coverb pattern in Potwari and other languages such as Persian (Megerdoomian, 2012), the coverbs in (161) are not number neutral.

- (161) a. kire pe 'to get infested', lit. 'insect(s) attack'
 - b. dzuwa pe 'to get nit(s)', lit. 'nit(s) attack'
 - c. #fala pe 'to blister', lit. 'blister attack'
 - d. nil pe 'to bruise', lit. 'bruise hurt'

Similarly the class of coverbs listed in (162) were shown to have the ability to be determined by a demonstrative pronoun, without interfering with the meaning of the LVC or the grammaticality of the sentence. The type of meaning interpreted for the LVC nil pe 'to bruise', lit. 'bruise attack' is 'I got this bruise.'. Also, the meaning interpreted for kire pe 'to get infested', lit. 'insects attack' is 'these insects infested me'.

- (162) a. kire pe 'to get infested', lit. 'insects attack',
 - b. dzuwa pe 'to get nits', lit. 'nits attack'
 - c. nil pe 'to bruise', lit. 'bruise attack'.

Adjectival modification is also possible for coverbs of LVCs listed in (3). To single out an example, when the adjective suwi/a 'red' modifies the coverb kira 'insect' of the LVC kira pe 'to get infested', lit. 'insect attack', it gives rise to the meaning 'the red insect infested me'.

- (163) a. kira pe 'to get infested', lit. 'insect attack',
 - b. dzuwa pe 'to get nits', lit. 'nits attack'
 - c. nil pe, and 'to bruise', lit. 'bruise attack'
 - d. ulti lag 'to vomit', lit. 'vomit attack'

In contrast, adjectives such as bari/a 'big' and dədi/a 'strong' when modifying the coverbs listed in (4) modified the state of being hungry, thirsty, hot, cold and the event of coughing, rather than the coverb itself. That is, the modifying adjectives gave rise to adverbial modification of the LVC with meanings such as 'I got severely/really hungry/thirsty/hot/cold'. Similar results have also been shown for Persian by Megerdoomian (2012, 197), in which the adjective hessabi 'awesome' when modifying the coverb vyolon 'violin' of the LVC vyolon zaed 'to play violin', lit. 'violin hit' modifies the event of playing a violin rather than the coverb itself.

- (164) a. $k \ni \tilde{y}^h$ 'to cough', lit. 'cough hurt',
 - b. *tre lag* 'to get thirst', lit. 'thirst hurt'
 - c. sərdi lag 'to get cold', lit. 'cold hurt'
 - d. gərmi lag 'to get hot', lit. 'hot hurt'
 - e. $puk^h lag$ 'to get hunger', lit. 'hunger hurt'

Coverbs that permit modification, pluralisation, and determination are particularly interesting, as they are not restricted to the non-agentive LVCs, as we also observe such results for a class of coverbs in the *mar*-type LVCs. Further investigations are required in determining the conditions in which a coverb can be modified, determined, and/or pluralised without affecting the LVC meaning. To my knowledge such properties of coverbs have not previously been highlighted, hence it would be interesting to observe whether coverbs can also behave in this manner

in related languages, such as Urdu and Punjabi. As it stands, there is scope for an in-depth investigations of nominal coverbs, as there is little work in the way of establishing the morphosyntactic properties of nominal coverbs.

The resemblance between the syntactic flexibility of the three non-agentive LVCs is similar to that of the lexical semantic features that unifies them, as can be seen in the overview provided in table 6.18 below. All of the nominal coverbs were shown to be fronted away from the LV without inducing an ungrammatical sentence or intervening with the LVC meaning. Complex predicates formed with the LV e 'to come' are less flexible than those formed with LVs pe and lag. That is, the coverbs were shown to form a tighter unit with the LV in respect of the adverb insertion operation, with only two LVCs having the ability to be separated by an adverb, without affecting the LVC meaning. The nominal coverb and complement diverged in their interaction with pronominalisation and question formation. A typical nominal complement can be substituted by a pronoun, whereas the nominal coverbs within the 25 LVCs cannot be substituted by a pronoun as the LVC meaning is lost. Similarly, nominal complements can be questioned, however the nominal coverbs cannot be questioned. The latter behaviour is identical to the nouns (as well as verbs and adjectives) serving as coverbs in the agentive LVCs. Based on these facts, it can be said that the e-type LVCs are almost inseparable, while the remaining complex predicates are separable. However, such classifications are based on a restricted set of syntactic operations. Further research is required in developing tests that diagnose the syntactic relation between the LV and coverb, such as the diagnostic tools employed by Kearns (1988/2002) in the context of LVs in English.

COVERB	LV	LVC MEANING	FRONT	ADV	PRNM	Q-FOR
ırki 'hiccup'	lag	'to hiccup'	✓	1	Х	Х
ulti 'vomit'	lag	'to vomit'	✓	✓	X	X
petfəs 'diarrhoea'	lag	'to get diarrhoea'	✓	1	X	X
$k \ni \widetilde{\eta}^h$ 'cough'	lag	'to get a cough'	✓	1	X	X
tre 'thirst'	lag	'to get thirsty'	✓	1	X	X
sərdi 'cold'	lag	'to get cold'	✓	1	X	X
gərmi 'hot'	lag	'to get hot'	✓	1	X	X
puk^h 'hunger'	lag	'to get hungry	✓	1	X	X
bahar 'fever'	lag	'to get a fever'	\checkmark	✓	X	X
<i>nil</i> 'bruise'	pe	'to bruise'	√	√	Х	Х
kira 'insect'	pe	'to get infested'	✓	✓	X	X
₫uw 'nit'	pe	'to get nits'	✓	✓	X	X
tfala 'blister'	pe	'to blister'	✓	1	X	X
sot^h 'swelling'	pe	'to swell'	✓	1	X	X
falə& 'stroke'	pe	'to get a stroke'	✓	✓	X	X
mirgi 'seizure'	pe	'to get a seizure'	✓	✓	X	X
<i>pi∫av</i> 'urine'	e	'to urinate'	√	✓	Х	Х
nındər 'sleep'	e	'to sleep'	✓	1	X	X
pərsina 'sweat'	e	'to sweat'	✓	X	X	X
dəkar'burp'	e	'to burp'	✓	X	X	X
sas 'sigh'	e	'to sigh'	✓	X	X	X
nif 'sneeze	e	'to sneeze'	✓	X	X	X
utru 'choke'	e	'to choke'	✓	X	X	X
rõn 'cry'	e	'to cry'	✓	X	X	X

Table 6.18: Syntactic Flexibility in Non-Agentive LVCs

In investigating the non-agentive LVCs, our main goals were to obtain a basic distinction between the complements and coverbs, in terms of their morphosyntactic properties. I believe this chapter has achieved the latter, though the non-agentive LVs are not exhaustive. Thus, it is essential to the general understanding of LVCs in Potwari that the diagnostic tools are applied to other verbs that can serve as non-agentive LVs, such as tfar 'to climb' in (165).

(165) uski gusə tfar-ja si 3.OBL.SG anger.M.SG climb-M.SG NPR.3.SG 'He/She got anger.' (non-agentively)

The idiosyncrasies associated with morphosyntactic properties of LVCs and their degree of flexibility show that the entire LVC (i.e. containing both components) is distinct to an MV-complement structure and therefore a unifying treatment of the two in Potwari is inadequate. Butt (1995) and other scholars report essentially that the LVC is special in its syntactic and semantic behaviour to any other structure, such as the AVC. Alsina (1996) and Mohanan (1994) are in the vanguard in arguing that LVs are morphosyntactically distinct class to auxiliaries. That is, they argue in contrary to what was of one the first generalisations to have been made in the final

quarter of the last century, that LVs belong to the same category as auxiliaries (Cattell, 1984; Grimshaw & Mester, 1988). The following chapter is dedicated entirely to the auxiliary and LV debate in context of Potwari, in which I go further than presenting the descriptive facts of the LVs, by comparing them to the syntactic class of auxiliaries in Potwari. In line with the likes of Butt, Mohanan, and Alsina, I provide conclusive evidence via empirical data based on language internal diagnostics that LVs in Potwari are also a class distinct from auxiliaries.

LIGHT VERBS & AUXILIARIES

7.1 Introduction

Butt (1995) investigates two types of LVCs in Urdu: (i) the permissive LVC, illustrated in (1), and (ii) the aspectual LVC, which is illustrated in (2), which she compares to an MV-complement structure, labelled as the instructive, shown in (3).

- (1) anjum-nei adnaan-ko us-kii gaarii
 Anjum.F.SG-ERG Adnan.M.SG-DAT 3.SG-GEN.F.SG car.F.SG-NOM
 calaa-ne dii
 drive-INF.OBL give.PRF.F.SG
 'Anjum let Adnan drive his car.'
- (2) anjum-ne xat lik^h li-yaa Anjum.F.SG-ERG letter.M.SG-NOM write take-PRF.M.SG 'Anjum wrote a letter (completely).'
- (3) anjum-ne saddaf-ko haar banaa-ne
 Anjum.F.SG-ERG Saddaf.F.SG-DAT necklace.M-NOM make-.INFOBL
 di-yaa
 give-PRF.M.SG
 'Anjum let Saddaf make a necklace.'

In comparing the permissive to the instructive, Butt shows that the two differ in their morphosyntactic properties, but are the same in respect of their scrambling abilities (i.e. syntactic flexibility). For example, it is shown that the permissive LV can be scrambled away relatively freely from the coverb. In the case of the aspectual LV, it exhibits a tighter relation with the coverb than the permissive LV, and thus cannot be scrambled away from the coverb. The Urdu aspectual LVCs are shown to be distinct to MV-complement structures but identical to AVCs. That is, the syntactic flexibility of an aspectual LVC mirrors that of an AVC, as the auxiliary also cannot be scrambled away from the MV.

A natural question raised in regard to this data point, is whether the aspectual LV is merely a sub-type of an auxiliary, as argued by the likes of Cattell (1984), Hook

(1974) and Grimshaw & Mester (1988). Butt (1995) addresses the latter question by providing conclusive evidence based on language internal diagnostics that clearly differentiate the two in respect of their morphosyntactic properties. Butt (1995) and other scholars report essentially that the LVC is special in its syntactic and semantic behaviour to any other structure (i.e. an AVC and an MV-complement structure). In this chapter, we address the research question in (4). The basic comparison between the LVCs and MV-complement structures in the present study shows that it is also clear that the two structures are distinct in Potwari.

(4) Do LVs constitute a syntactically distinct class to auxiliaries in Potwari, and can this be diagnosed by syntactic/morphological diagnostics?

Let us first return to the point made in the preceding three chapters regarding the semantic content of the LV. Cattell (1984) and Grimshaw & Mester (1988) view the LV as being completely void of all semantic meaning and merely having a functional role within the LVC, parallel to that of an auxiliary. That is, the LVs are said to not contribute any semantic content. Cattell (1984) and Grimshaw & Mester's (1988) view of LVs constituting the same class as auxiliaries has mainly been from a diachronic perspective. To be specific, it is based on the historical development of auxiliaries rooted in the grammaticalization theory. Earlier research, in grammaticalization, analysed aspectual LVCs as a rare example of the gradual emergence of aspectual meaning (also referred to as "aspectogenesis"). According to Hook (1974), the LVs exhibit a degree of semantic bleaching, having lost contentful lexical meaning but acquiring 'functional' grammatical meaning. This apparent emerging ability of LVs to mark perfectivity distinctions led first Hook (1974) (Hook, 1991, 1993; Hook & Pardeshi, 2001), followed by Hopper & Traugott (1993) to conclude that a subset of all LVs are developing functional properties as an intermediary between those of full verbs and auxiliaries. Hook's work was based on the LV vs. simple verb distinction mapping on to the perfective and imperfective aspects exhibited in Hindi/Urdu. The minimal pair in (5) exemplifies the latter. For example, the complex predicate formed with the LV le 'to take' in (5-a) is in the perfective aspect, whereas the simple verb denotes an imperfective aspect.

- (5) a. mãi-ne das baje aap-ko fon karmv li-yaalv I.SG-ERG 10 o'clock you-DAT phone.M.SG make take-M.SG 'I telephoned you at 10 o'clock.' (and we actually spoke)
 - b. mãi-ne das baje aap-ko fon ki-yaamv
 I.SG-ERG 10 o'clock you-DAT phone.M.SG make-M.SG
 'I telephoned you at 10 o'clock.' (the phone rang with no answer)

Poornima & Painter (2010, 6)

According to the above claims, the consensus is then that auxiliaries can develop from MVs to functional elements, which is illustrated in Hopper & Traugott's (1993) grammaticalization cline in (6). The grammaticalization cline shows that the LV (referred to as vector verb on the cline) is an optional stage between a full verb (MV) and an auxiliary.

(6) Grammaticalization Cline:

 $full verb > (vector verb)^1 > auxiliary > clitic > affix$

Hopper & Traugott (1993, 108)

However, this was the view of the final quarter of the last century, which since has progressed substantially in the way of showing via diachronic and synchronic evidence that LVs are in fact syntactically distinct categories to auxiliaries. Alsina (2006), Butt & Lahiri (2013), amongst others (Butt, 1995; Butt & Geuder, 2001) are in the vanguard of advocating their syntactic independence. Butt & Lahiri (2013) present in their paper substantial evidence drawn from a diachronic investigation of the two syntactic classes in Indo-Aryan and claim the LV is a variant of an MV and the LV is historically "a dead end". That is, the life of a LV does not pass through the process of the grammaticalization stages. They show LVs in Urdu have been employed in the same manner for thousands of years and therefore, they view LVs as stable and having a low probability of being subject to reanalysis or restructuring. This extensive work over the last decade has led Hopper & Traugott (2003) to revise their view to stating that it is not clear that auxiliaries developed from LVs. Not all scholars have taken such a stance, for instance Roberts & Roussou (2003) embark on evidence that shows English modal auxiliaries have developed form LVs, however it seems this view has failed to materialise. While others, such as Bowern (2008), agree that LVs are not a necessary step for the development from MVs to auxiliaries, though do not make any concrete claim on whether LVs can develop further down the grammaticalization cline into auxiliaries and inflections².

In the context of Potwari, it is clear from the preceding chapters that LVs contribute less semantic content in comparison to the MV analogues. However, we do not deduce from this that the LVs are completely void of semantic content. On the contrary, we saw that LVs contribute lexical semantic information. For instance, the preceding chapters have demonstrated that there is an agentivity vs. experiencer split introduced by the action of the LVC. The LVs mar 'to hit' and kar 'to do' were categorised as agentive LVs. The agentivity component was show to be apparent in the case marking the LVs assign to the subject; the agentive LVs require an ergative or plain case subject. In Chapter 6, the LVs pe 'to attack', e 'to come', lag 'to hurt',

¹The term *vector verb* is akin to the term LV, which comes from the Slavic tradition, and has been employed in South Asian languages, such as Masica (1976).

²My investigation and thoughts on this matter are however restricted, though no doubt an avenue I believe to be necessary to re-visit, in the context of the synchronic data presented in this thesis.

and o 'to become' were categorised as non-agentive LVCs that have an identical argument structure: intransitive with the sole argument being an experiencer. All three LVs are restricted to the oblique case marking on the subject, which was shown to give rise to what is known in the Indo-Aryan literature as an experiencer subject.

I begin to dissect the research question in a similar manner to the argumentation presented for the differences between the LVCs and MV-complement structures. I provide conclusive evidence via empirical data based on language internal diagnostics, that the LVs in Potwari are also heterogeneous with tense/aspect auxiliaries, in respect of their syntactic and semantic properties. We use syntactic operations partly inspired by Butt and Geuder's (1991) syntactic operations employed in context of Urdu. The diagnostic tools are derived from the core syntactic and semantic properties of LVCs in Potwari. I employ the following diagnostic tools: (i) ability to combine with a non-verbal category, (ii) type of case marking on the subject, (iii) ability to take a non-finite marker, (iv) ability to be fronted away from the MV, and (v) ability to be separated by a time adverb.

The organisation of the present chapter is as follows. Section 2 begins by revisiting the two BE-auxiliaries and the three aspectual auxiliaries I established in Chapter 2. I go further into their morphosyntactic properties, by first establishing a verbal template that shows their rigidity in their syntactic positions - we observe that the auxiliaries are not interchangeable in their slots within the verbal template. This section then moves away from the word order of the verbal template to the inflectional marking, in which it is shown that the aspectual auxiliaries and LVs are identical in their inflections, whereas the tense auxiliaries are distinct from LVs and aspectual auxiliaries. Section 7.3 presents the language-dependent criteria of differentiating LVs from auxiliaries. The subsequent four sections encompass the application of the diagnostic tools in the context of the verb o 'to become'. We show that the Potwari o can be an MV in section 3, an auxiliary in section 4, a non-agentive LV in section 5, as well as an aspectual LV in section 6, which is similar to the verb ho 'to become' in Hindi-Urdu, as it can too be an MV, an auxiliary, and an LV. It seems o 'to become' has a diachronic link to the Hindi-Urdu ho 'to become'.

7.2 Structure of Verbal Group

Defining what it means to be an auxiliary is the first and critical stage towards addressing whether an LV constitutes a syntactically distinct class to an auxiliary. With this comes, further complications, as auxiliaries look very different from language to language, and consequently vaguely definable. Nevertheless, researchers do agree that auxiliaries in some manner position the event of the MV in the context to the speech or reference time. Anderson (2006, 5) states that there

'...probably cannot be, any specific, language-independent formal criteria that can be used to determine the characterization of any given element as a lexical verb or an auxiliary verb'. For example, in certain languages, auxiliaries can carry all morphological information relating to a predicate such as person, number, and tense/aspect/modality, while in other languages, auxiliaries carry less information, or the information is split between the auxiliary and MV. Chapter 2 establishes two tense auxiliaries and two aspect auxiliaries, which can be seen in table 7.1 in their masculine singular third person form.

Table 7.1: Auxiliaries

Auxiliary Type	Form
Non-Present BE-Auxiliary	si
Present BE-Auxiliary	3
Existential Perfect	raja
Resultative/Existential Perfect	gaja
Imperfective	na

7.2.1 Word Order

The verbal complex in Potwari is very rigid and hence why each slot for an MV, an LV, or an auxiliary can be predicted. I propose the template in (7).

(7) Verbal Template:

Main Verb Light Verb Imperfective BE-Auxiliary Perfect

A simple intransitive sentence always consists of an MV, such as *dor* 'to run', and a BE-auxiliary, such as the non-present BE-auxiliary *si* form. This can be seen in (8) below. In the past tense the verb inflects for number and gender of the subject or object, which is realised in the form of a suffix, shown in (8-b). In the future tense the verb appears in its root form, illustrated in (8-a) (see Chapter 2 for agreement patterns).

- (8) a. firo:za dor si
 Feroza.F.SG.PLN run NPR.3.SG
 'Feroza will run.'
 - b. firo:za dor-i si
 Feroza.F.SG.PLN run-F.SG NPR.3.SG
 'Feroza ran.'

The slots between an MV and a BE-auxiliary are dedicated to a possible LV and a chain of auxiliaries consisting of the imperfective or the perfect auxiliaries. Example

- (9) exemplifies the latter. We see the MV dor in (9-a) and lata:r in (9-b), followed by the imperfective auxiliary ni/na and the non-present BE-auxiliary si.
- (9) a. o dor ni/na si 3.SG.PLN run IMPF.F.SG/M.SG NPR.3.SG 'She/He is running.'
 - b. o mīki ləta:r ni/na si 3.SG.PLN 1.SG.OBL massage IMPF.F.SG/M.SG NPR.3.SG 'She/He massaged him/her.'

Example (9) differs to (10) in respect of the auxiliary slot between the MV and the BE-auxiliary. We have the perfect existential auxiliary ga 'to go' (10-a) and the perfect existential auxiliary ri 'to stay' (10-b), rather than the imperfective auxiliary.

- (10) a. e mətfəl mıki kıţni vari bır-i
 DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN
 ga-ja si
 PRF-M.SG NPR.3.SG
 'That mosquito had bit me (so) many times.'
 - b. sara kıtni vari o filəm tək-i Sara.F.SG.PLN many time DEM.DIST.SG film.F.SG watch-NFN ri jɛ PRF.F.SG PRS.3.SG 'Sarah has watched that film so many times.'

The LV's position is immediately after the MV. For example in (11), we see the MV slot is filled by the LVC containing the nominal coverb $d\partial kar$ 'burp' in (11-a) and $m\partial fi:n$ 'machine' in (11-b). The LV slot in both sentences is taken by mar 'hit', which is followed by the the non-present BE-auxiliary -si

- (11) a. us dəkar mar-ja si 3.SG.ERG burp.M.SG hit-M.SG NPR.3.SG 'He/She burped.'
 - b. us carpit-e-ki mə∫in mar-i si 3.SG.ERG carpet.M.SG-LOC-OBL vacuum.F.SG hit-F.SG NPR.3.SG 'He/she vacuumed the carpet.'

A chain of auxiliaries in (12-a) and (12-b) follow the LV mar 'to hit', namely the imperfective ni/na and the non-present BE-auxiliary si.

- (12) a. o carpit-e-ki məʃin mar ni/na 3.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG hit IMPF.F.SG/M.SG si NPR.3.SG 'She/He was vacuuming the carpet.'
 - b. o dəkar mar ni/na si 3.SG.PLN burp.M.SG hit IMPF.F.SG/M.SG NPR.3.SG 'She/He was burping.'

Similarly, in (13) a chain of auxiliaries also follows the LV mar 'hit', which are comprised of the resultative perfect auxiliary gi, and the non-present BE-auxiliary si.

(13) mare atf ni-o pəlɛ sara kəmr-e-ki
1.SG.GEN come.PST IMPF-NOML first Sara.F.SG.PLN room.M.SG-LOC-OBL
məʃin mar-i gi si
vacuum.F.SG hit-NFN PRF.F.SG NPR.3.SG
'Before my arrival, Sarah had vacuumed the room.'

The above data looks to the canonical positions within the verbal group template. I state above that the predictability of the slots is related to the fact the elements are syntactically tight. That is, each slot does not permit any other component. For instance, the MV cannot occur within the aspectual auxiliary slot allocated to the imperfective and perfect auxiliaries, and vice versa. The latter can be seen in (14-a) and (14-b). Here, the perfect auxiliaries ga and ri precede the MV bir 'to bite' and tirdet birdet bir

- (14) a. *e mətfəl miki kitni vari ga-ja
 DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time PRF-M.SG
 bir-i si
 bite-NFN NPR.3.SG
 'That mosquito had bit me (so) many times.'
 - b. *sara kıtni vari o filəm ri
 Sara.F.SG.PLN many time DEM.DIST.SG film.F.SG PRF.F.SG
 tək-i jɛ
 watch-NFN PRS.3.SG
 'Sarah has watched that film so many times.'
 - c. *o miki ni/na ləta:r si 3.SG.PLN 1.SG.OBL IMPF.F.SG/M.SG massage.M.SG NPR.3.SG 'She/He massaged him/her.'

Similarly, the BE-auxiliary cannot occur within the MV slot, as it results in an ungrammatical sentence, illustrated in (15).

(15) *firo:za si dor Feroza.F.SG.PLN NPR.3.SG run 'Feroza will run.'

Also as a comparison, data in (16) shows that the order of auxiliaries within the AVC cannot be altered. For example, the perfect auxiliaries cannot occur within the BE-auxiliary slot. That is, they cannot follow the BE-auxiliary, illustrated in (16-a)

and (16-b). The same results can be found when the imperfective auxiliary ni/na follows the BE-auxiliary, rather than preceding it. The latter word order results in an ungrammatical sentence, such as (16-c).

- (16)a. *e mıki kıtni vari bır-i mətfəl DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN ga-ja PRS.3.SG PRF-M.SG 'This mosquito has bit me (so) many times.' b. *sara kıtni vari o filəm tək-i jε ſі Sara many time that film.F.SG watch-NFN PRS.3.SG PRF.F.SG 'Sarah has watched that film so many times.'
 - c. *o dor si ni/na 3.SG.PLN run NPR.3.SG IMPF.F.SG/M.SG 'She/He is running.'

A natural and more relevant question in relation to the LV and auxiliary debate is the interchangeability of the two classes. That is, are auxiliaries and LVs interchangeable in their positioning within the verbal group? Butt & Geuder (2001, 331) observe that Urdu auxiliaries and LVs do not compete for the same positional slot within the positioning of the verbal complex. For example, in (17-a) we find the canonical word order within the verbal group, whereby the LV is followed by the progressive auxiliary. However, when the progressive auxiliary rah-aa and LV ga are reversed, as in (17-b), the sentence results in an ungrammatical sentence.

- (17) a. bAcca so jaa rah-aa hε child.m.sg.nom sleep go PROG-M.sg be.PRS.3.sg 'The child is going to sleep.'
 - b. *bAcca so rah ga-ja hɛ child.M.SG.NOM sleep PROG go-PRF.M.SG be.PRS.3.SG 'The child is going to sleep.'

Butt & Geuder (2001, 331)

The interchangeability of the LV and auxiliary is impossible in Potwari too; the LV cannot occur within the aspectual auxiliary slot or within the BE-auxiliary position, as it results in an ungrammatical sentence. This can be seen by comparing (18) with (19). The latter observation shows that the two classes do not compete for the same positional slot.

(18) o carpit-e-ki məʃin mar ni/na
3.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG hit IMPF.F.SG/M.SG
si
NPR.3SG
'She/He was vacuuming the carpet.'

(19) *o carpit-e-ki məʃin ni/na mar 3.SG.PLN carpet.M.SG-LOC-OBL vacuum.F.SG IMPF.F.SG/M.SG hit si NPR.3.SG 'She/He was vacuuming the carpet.'

To summarise, the word order observations show that regardless of whether the component is an auxiliary, an LV, or an MV, they still cannot be moved from their positional slots and thus it can be said that each verb class does not compete for the same positional slot. In context of the auxiliary and LV debate, it can be generalised that any component that follows the LV will always be an auxiliary, and the LV itself always precedes the auxiliary. Also, we observe that only one LV is possible per clause, whereas more than one auxiliary is possible per clause. The latter observations show that auxiliaries and LVs do behave differently. However, the argumentation for showing they are syntactically distinct classes is still in its infancy stage, as the claim cannot not be made solely on the above observations. Thus, I provide further evidence by investigating their behaviour via the syntactic operations presented in section 7.3. Prior to section 7.3, I turn to inflectional marking and agreement patterns of auxiliaries and LVs.

7.2.2 Inflectional Marking

The BE-auxiliaries inflect for person and number. In contrast, the aspectual auxiliaries inflect for gender and number (see verbal paradigms in Chapter 2). The LV agreement patterns mirror those of the aspectual auxiliaries, rather than the BE-auxiliaries, as illustrated in (20). The verbal paradigm shows that the LV inflects for number and gender. It does not inflect for person marking, which is identical to the verbal paradigm of an MV (see Chapter)

(20) Agreement patterns of an LV

PERSON	SG M	PL M	SG F	PL F
1	-ja	-e	-i	-ija
2	-ja	-e	-i	-ija
3	-ja	-e	- <i>i</i>	-ija

7.3 Diagnostic Tools

We see from the preceding section that the aspectual auxiliaries, such as the aspectual gi in (21-a) and LVs, such as mar 'to hit' in (21-b) are identical in their inflectional paradigms. They also both have lexical verb analogues. In contrast, the tense auxiliaries were shown to be distinct in their inflectional marking to aspectual auxiliaries and LVs and they do not have lexical verb analogues. Naturally, this data

point raises questions in regard to whether the LV is merely a type of auxiliary, rather than constituting its own syntactic class. This section presents language-dependent formal criteria with the aim to show that LVs and auxiliaries are indeed syntactically distinct classes.

- (21) a. e mətfəl miki kitni vari bir-i
 DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN
 ga-ja si
 PRF-M.SG NPR.3.SG
 'That mosquito had bit me (so) many times.'
 - b. us dəkar mar-ja si 3.SG.ERG burp.M.SG hit-M.SG NPR.3.SG 'He/She burped.'

Diagnostic tools that distinguish LVs from auxiliaries differ from language to language, therefore it is language internal diagnostics that can really differentiate the two syntactic classes (Butt, 2010). Butt (2010) and Butt & Lahiri (2013) develop general diagnostic tools that differentiate LVs from auxiliaries cross-linguistically, which are listed in (22). The lexical semantic property described in (22-a) is exemplified in the preceding chapters, in which we observe that LVs kar 'to do', mar 'to hit' form part of agentive LVCs, whereas lag 'to hurt', e 'to come', and pe 'to attack' form part of non-agentive LVCs. The preceding chapters also show the differences between an LV and its MV analogue.

(22) Cross-linguistic properties of LVs & auxiliaries

- a. LVs are always form identical to their lexical verb analogue, while auxiliaries are not (they are usually just form identical at the initial stage of reanalysis from verb to auxiliary).
- b. LVs possess subtle lexical semantic differences in terms of combinatorial possibilities with MVs hence the restrictions between LV and coverb combinations. In contrast, auxiliaries are not restricted in the same manner.
- c. LVs always span the entire verbal paradigm, while auxiliaries appear with just one tense/aspect form.
- d. LVs do not display a defective paradigm.

More specifically than the properties summarised in (22), Butt & Geuder (2001, 325) propose language internal diagnostics, which prove that LVs in Urdu constitute a syntactic class that is distinct from auxiliaries. The diagnostics are derived from the different syntactic behaviours displayed by both members of the LV class and the auxiliary class. The two categories behave differently in regard to the following syntactic characteristics: (i) case marking, (ii) word order, (iii) reduplication, and (iv) topicalization. Butt & Geuder (2001) show that the LV can be topicalized away

from the MV, while an auxiliary cannot be topicalized from its position (adjacent to the MV). In Butt (1995), we observe a comparison between aspectual LVCs and AVCs, which shows that the two constructions are identical in their syntactic composition. That is, they form very tight units with no separation permitted. Despite the latter, she goes on to show that they are in fact distinct in their morphosyntactic properties.

In this section, I provide conclusive evidence via empirical data based on language internal diagnostics, that the LVs in Potwari are also heterogeneous with tense/aspect auxiliaries, in respect of their syntactic and semantic properties. I employ syntactic operations partly inspired by Butt and Geuder's work on Urdu. The diagnostic tools are derived from the core syntactic and semantic properties in Potwari. I begin by introducing the theoretical motivations of the syntactic diagnostic tools. The following diagnostic tools are employed: (i) ability to combine with a non-verbal category, (ii) ability to assign case marking, (iii) ability to take a non-finite marker, (iv) ability to be fronted away from the MV, and (v) ability to be separated by a time adverb. The pertinent facts are summarised in (23).

(23) Auxiliary vs. Light Verb Diagnostic Tools

- a. Non-Verbal Category: All LVs have multiple categories as coverbs. That is, they all allow non-verbal coverbs. In contrast, auxiliaries do not occur with all syntactic classes.
- b. Non-Finite Maker: LVs have the ability to take the non-finite marker, whereas auxiliaries do not.
- c. Case Marking: LVs always appear with the same case marking on the subject, while auxiliaries do not.
- d. Fronting: Coverbs can be fronted away from LVs, whereas the MV cannot be fronted away from auxiliaries.
- e. Adverb Insertion: An adverb can separate the coverb and LV, while an MV and auxiliary cannot be separated by an adverb.

An overview of the results can be seen in table 7.2. The check marks (\checkmark) show that the LV passes the morphosyntactic properties described in the first column. In contrast, the cross marks (\divideontimes) show that the auxiliaries do not pass these morphosyntactic properties.

Table 7.2: Auxiliaries vs. LVs

Diagnostic Tools	Auxiliaries	LVs
Non-Verbal Category	Х	✓
Non-Finite Marker	X	✓
Case Marking	X	✓
Fronting	X	✓
Adverb Insertion	X	1

7.3.1 Non-Verbal Category

It was demonstrated in the previous chapters that in Potwari, the LVC contains two components, the LV and coverb, in which the coverb can be a noun, verb or an adjective. I went on to conclude that the LVCs in Potwari, at large consist of nominal coverbs³. That is, the following five LVs (i) mar 'hit', (ii) kar 'do', (iii) e 'come', (iv) lag 'hurt', and (v) pe 'to attack' can combine with a nominal coverb. The examples in (24) exemplify this for each LVC, in which we see the nominal coverb pis 'fart' with the LV mar 'to hit' in (24-a), the nominal coverb rindər 'sleep' with the LV e 'to come' in (24-b), and the nominal coverb ulti 'vomit' with the LV kar 'to do in (24-c). Similarly, the nominal coverb bahar 'fever' can be seen with the LV lag 'to hurt' in (24-d), and the nominal coverb kire 'insects' can be seen with the LV pe 'to attack' in (24-e).

- (24) a. us pis mar-i si 3.SG.ERG fart.F.SG hit-F.SG NPR.3.SG 'He/She farted.'
 - b. uski nmdər er si 3.SG.OBL sleep.F.SG come.F.SG NPR.3.SG 'He/She got sleepy.'
 - c. us ulti kət-i si 3.SG.ERG vomit.F.SG do-F.SG NPR.3.SG 'He/She vomited.'
 - d. uski bahar lag-a si 3.SG.OBL fever.M.SG hurt-M.SG NPR.3.SG 'He/She got a fever.'
 - e. uski kire pe sən
 3.SG.OBL insect.M.PL attack.M.PL NPR.3.PL
 'He/She got nits.'

In comparing the LVCs to MV-complement structures in Chapter 3, I established that the components of an MV-complement structure can also consist of a nominal, adjectival, and verbal complement. For example, in (25-a), the MV-complement structure consists of the nominal complement pijala 'cup' and the MV pan 'to break'. In (25-b), we have the verbal complement dor 'to run' of the MV ak^h 'to ask'. Example (25-c) illustrates the adjectival complement kuf 'happy' of the MV o 'to become'.

(25) a. sara pijala pən-ja si Sara.F.SG.PLN cup.M.SG break-M.SG NPR.3.SG 'Sara broke the cup.'

³I claim all the above coverbs are nouns independent and within the LVC via the nounhood diagnostics presented in Chapter 3. The nounhood diagnostics are derived from canonical behaviours of nouns in Potwari.

- b. me uski akh-ja si dor $1.SG.PLN\ 3.SG.OBL\ ask-M.SG\ NPR.3.SG\ run$ 'I asked her/him to run.'
- c. usman ku∫ o-i ge-ja si Usman.M.SG.PLN happy become-NFN go-M.SG NPR.3.SG 'Usman became happy.'

The natural question raised at this point is whether an AVC can consist of a non-verbal component? I argue that in Potwari AVCs do differ to LVCs and MV-complement structures in that they do not comprise of a nominal component within a non-possessive AVC. To recap, the possessive construction is compromised of an experiencer argument, a nominal root and the BE-auxiliary si or ε , illustrated in (26).

(26) miki bahar si/ ϵ 1.SG.OBL fever.M.SG NPR.3.SG/PRS.3.SG 'I have a fever.'

The have possessive construction is restricted to only the BE-auxiliaries. That is, it does not involve the aspectual auxiliaries. Its structure is summarised in (27) below.

(27) Possessive construction: oblique case subject complement + noun + BE-auxiliary.

It seems the tense auxiliaries have a wider distribution in comparison to the aspectual auxiliaries. I continue to employ the non-verbal category property as a way of differentiating the aspecutual auxiliaries from LVs. Also, it must be noted this diagnostic is not completely redundant in differentiating the BE-auxiliaries from LVs because they combine with a small class of specific nouns to form a possessive construction. For example, the construction does not permit the nominal dəkar 'burp', as it induces an ungrammatical sentence.

(28) *o dəkar si 3.SG.PLN burp.M.SG NPR.3.SG 'He/She had burping.'

AVCs can contain a lexical item that corresponds to a verb or adjective. For example, we see in (29-a) that the AVC consists of the intransitive verb dor 'to run', followed by the imperfective auxiliary ni/na, and the non-present BE-auxiliary si. Similarly in (29-b) the AVC consists of the adjective bara 'big' and the non-present BE-auxiliary si.

(29) a. o dor ni/na si 3.SG.PLN run IMPF.F.SG/M.SG NPR.3.SG 'She/He is running.' b. o bara si 3.SG.PLN big.M.SG NPR.3.SG 'He was big.'

7.3.2 Non-Finite Maker -i

Recall the non-finite marker -i introduced in Chapter 2, which was shown to attach to an MV if a finite auxiliary follows it, such as an aspectual auxiliary. For example, in (30) the resultative perfect ga-ja carries the finite information. Therefore, the MV bir 'to bite' is treated as non-finite, which is realised in the form of the non-finite marking suffix -i.

(30) e matfəl miki kitni vari bir-i ga-ja DEM,PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG ε PRS.3.SG 'That mosquito has bit me (so) many times.'

In a similar manner to the MV, the non-finite marker can also be attached to an LV when the resultative auxiliary ga-ja follows it, as illustrated in (31). Here we see the non-finite marker -i is attached to the LV mar 'hit', as it is the resultative aspectual auxiliary ga-ja that carries the finite properties.

(31) o kıţni vari dəkar mar-i ga-ja si 1.SG.PLN many time burp.M.SG hit-NFN PRF-M.SG NPR.3.SG 'He had burped so many times.'

In contrast, an auxiliary does not have the ability to take the non-finite marker, as it is always finite. That is, the tense auxiliaries always inflect for person, and number, whereas the aspectual auxiliaries always inflect for gender and number. The word order in (30) and (31) maps onto the verbal predicate template presented in (7). In both these examples, the non-finite marker -i is attached to the MV in (30) and the LV in (31) prior to the perfect and BE-auxiliary. This can be said to mark the boundary between an MV or an LV and the auxiliaries. The behaviour displayed by the auxiliaries and LVs with the non-finite marker furthers the difference between the two classes.

7.3.3 Case Marking

In Chapter 2, I established that the canonical case alignment system is two-way split intransitivity, which refers to the fact that a sole argument of an intransitive verb can either be treated as an A or O. In contrast, it was shown that the third person subject pronouns in the past tense do not exhibit the canonical two-way split intransitivity pattern, rather they exhibit a three-way split. The examples below illustrate this. In example (32-a) we have the plain case subject pronoun o, the

oblique case subject pronoun in (32-b) and the ergative case subject pronoun in (32-c).

- (32) a. o dor-i si 3.SG.PLN run-F.SG NPR.3.SG 'She ran.'
 - b. uski peta si 3.SG.OBL know NPR.3.SG 'He/She knew.'
 - c. us dəkar mar-ja si 3.SG.ERG burp.M.SG hit-M.SG NPR.3.SG 'He/She burped.'

In short, I argued that the three-way split shown in (32-a), (32-b), and (32-c) is not random but rather conditioned by two properties (i) tense and (ii) a verb's lexical semantics, as illustrated in table 7.3 (repeated for convenience from Chapter 2).

Third Person Pronoun	Verb Type	Tense
Plain Case o:	Agentive/Non-Agentive MVs & LVs	Past & Non-Past
Ergative Case us :	TR Agentive MVs	Past
	INTR/TR Agentive mar-type & kar-type LVCs	Past
Oblique Case $uski$:	Experiencer Subjects	Past & Non-Past
	Psych Predicates	Past & Non-Past
	Non-Agentive IVs	Past & Non-Past

Table 7.3: The Three-Way Split: Conditions

In light of the above, we pose the following question: how does the three way third person pronoun split support the argument that LVs are heterogeneous with auxiliaries? The above data, answers this question, as it shows that a BE-auxiliary can appear with all case types. To single out an example, take the minimal pair in (33), in which both examples comprise of an LVC that contains the same coverb ulti 'vomit'. In (33-a), it forms an LVC with the LV kar 'to do', while in (33-b), it forms an LVC with the LV lag 'to hurt'. In the latter example we see the oblique case subject, whereas in the former we see the ergative case subject. This is in line with the observations made in the previous chapters. That is, non-agentive LVs lag 'to hurt', e 'to come' and pe 'to attack' require an oblique case when they inflect for either the past or the non-past. While, the agentive LVs kar 'to do' and mar 'to hit' require the ergative case (in the third person subject) us when they inflect for the past tense.

- (33) a. us ulti kəṭ-i si 3.SG.ERG vomit.F.SG do-F.SG NPR.3.SG 'He/She vomited (agentively).'
 - b. uski ulti lag-i si 3.SG.OBL vomit.F.SG hurt-F.SG NPR.3.SG 'He/She vomited (non-agentively).'

The data set (32) shows that despite the different auxiliaries employed, the case markings remain unchanged. That is, auxiliaries can appear with different case marking on the subject. In contrast, the LV can only appear with a subject that has the same case marking. For example, the two LVs kar 'to do' and lag 'to hurt' cannot replace one another without inducing an ungrammatical sentence. That is, the LV lag is incompatible with the ergative case, as illustrated in (34-a). While, the LV kar 'to do' is incompatible with the oblique case, as shown in (34-b).

(34) a. *us ulti lag-i si
3.SG.ERG vomit.F.SG hurt-F.SG NPR.3.SG
'He/She vomited (non-agentively).'
b. *uski ulti kəţ-i si
3.SG.OBL vomit.F.SG do-F.SG NPR.3.SG
'He/She vomited (agentively).'

These data provide evidence that LVs and auxiliaries are distinct syntactic classes, whereby the latter can combine with different case marked subjects, whereas the former can only appear with the same case marked subject. The minimal pair in (35) furthers this, in that the non-agentive LVC and the agentive LVC contain the same coverb $d\partial kar$ 'burp. Similarly, we see that the LV determines the case marking on the subject, as the non-agentive LV e 'to come' is incompatible with the ergative (35-a), whereas the agentive LV is incompatible with the oblique case (35-b).

(35) a. us/*uski dəkar mar-ja si 3.SG.ERG/3.SG.OBL burp.M hit-M.SG NPR.3.SG 'He/She burped.'
b. uski/*us dəkar e-ja si 3.SG.OBL/3.SG.ERG burp.M come-M.SG NPR.3.SG 'He/She burped.'

The Potwari data is similar to its sister language Urdu, in that, the LV determines case marking on the subject (Butt & Geuder, 2001, 330). For example, the verb lik^h 'to write' in Urdu-Hindi canonically takes an ergative subject, when it inflects for the perfect aspect, independent of the auxiliary employed. This can be seen by contrasting example (36) and example (37). In (36), the auxiliaries he or thaa are not present, while in (37) they are. Regardless of whether the auxiliaries are present or not, the subject is still ergative case marked. The examples also show that the nominative case is not permissible on the subject as it forces an ungrammatical sentence.

(36) us-ne/*vo xat likh-aa 3.SG-ERG/NOM letter.M.SG.NOM write-PERF.M.SG 'He wrote a letter.'

(37) us-ne/*vo xat likh-aa
3.SG-ERG/-NOM letter.M.SG.NOM write-PERF.M.SG
(he/thaa)
(BE.PRS.3.SG/BE.PST.SG.M)
'He wrote (has/had written) a letter.'

Butt & Geuder (2001, 330)

The above data shows that the auxiliary cannot then determine the case marking on the subject of lik^h 'to write'. In contrast to (36) and (37), example (38) and (39) show that in Urdu the LV can determine the case marking on the subject. In Urdu, for example, when LVs such as par 'to fall' and lii 'to take' are employed with the verb lik^h 'to write' in the perfect aspect, the result is that the subject takes on a different case marking. In (38) the subject takes the nominative case -vo, rather than the expected ergative case. This is because the LV par 'to fall' requires a nominative case. In contrast, in (39) the LV lii 'to take' determines the ergative case marker -ne. In both examples the auxiliary aa remains the same. Thus it is evident that Butt and Geuder's (2001) data shows that LVs and auxiliaries can be differentiated based on their interaction with case marking.

- (38) *us-ne/vo xat likh par-aa 3.SG-ERG/NOM letter.M.SG.NOM write fall-PERF.M.SG 'He fell to writing a letter.'
- (39) us-ne/*vo xat likh lii-yaa 3.SG-ERG/NOM letter.M.SG.NOM write take-PERF.M.SG 'He wrote a letter (completely).'

Butt & Geuder (2001, 330)

7.3.4 Fronting

The fronting diagnostic is identical to the diagnostic employed in investigating whether the syntactic flexibility of the LVCs and MV-complement structures is identical. In Chapter 3, I showed that two structures are almost identical in their syntactic flexibility. It was concluded that only the question formation operation differentiates coverbs from complements and that all coverbs can be fronted away from an LV without inducing an ungrammatical sentence or intervening with the LVC meaning. The latter is exemplified in (40-a) for the LVC pis max 'to fart', lit 'fart come'. (40-a) shows the canonical position of the LV max, while (40) shows that the coverb pis can be fronted, without affecting the meaning or grammaticality of the LVC.

(40) a. us pis mar-i si 3.SG.ERG fart.F.SG hit-F.SG NPR.3.SG 'He/She farted.'

b. pis us mar-i si fart.F.SG 3.SG.ERG hit-F.SG NPR.3.SG 'He/She farted.'

This generalisation characterises one of the core syntactic properties of an LVC in Potwari. Hence, it qualifies as a diagnostic tool in differentiating LVs from auxiliaries. In contrast, the lexical item of an AVC cannot be fronted away from an auxiliary or a cluster of auxiliaries. To single out an example, the AVC in (41-a) shows the canonical position of the MV dor 'to run' is prior to the BE- auxiliary si. While in example (41-b), it is fronted away from the BE-auxiliary, which induces an ungrammatical sentence.

(41) a. o dor si
3.SG.PLN run NPR.3.SG
'He/She will run.'
b. *dor o si
run 3.SG.PLN NPR.3.SG

'He/She will run.'

The data shows not only that the two categories can be distinguished on their interaction with fronting, but also that the auxiliary and MV are contained in a syntactically tighter unit than the LV and coverb. In a similar manner, Butt and Geuder (2001) employ the same diagnostic in differentiating the auxiliaries and LVs in Urdu, which they refer to as topicalization.⁴. Regardless of the terminology employed, the same results are found in Urdu. For instance, in (42-a) below, the MV so 'sleep' can be fronted away from the LV ga 'go', without inducing an ungrammatical sentence. However, an MV cannot be topicalized away from an auxiliary, in the case of example (42-b), so 'sleep' cannot be fronted away from the cluster of auxiliaries (rah he). Hence it is deemed as an ungrammatical sentence.

- (42) a. so to bacca ga-ya sleep TOP child.M.SG.NOM go-PRF.M.SG 'The child has gone to sleep.'
 - b. *so to bacca rah-a he sleep TOP child.M.SG.NOM PROG-M.SG BE.PRS.3.SG 'The child is sleeping.'

Butt & Geuder (2001, 332)

⁴Butt & Geuder (2001) do not disambiguate whether the term "topicalization" refers to merely syntactic flexibility between the MV and the LV, or whether it also affects the pragmatic information of the sentence. To avoid ambiguity, I employ the term "Fronting" rather than "topicalization" in Potwari, as my investigation is restricted to syntactic flexibility and not the pragmatics of the sentence

7.3.5 Adverb Insertion

The adverb insertion diagnostic is part of the syntactic flexibility diagnostic set that investigates the degree of flexibility within the LVC. Again, similar to the fronting diagnostic, the idea behind the adverb insertion diagnostic is oriented around separability of the two components within the LVC. The canonical position of an adverb is pre-verbal, as in (43-a). An adverb such as $k \ni l$ 'tomorrow' can also be placed in between the coverb and LV, without change in the basic sentential meaning, as in example (43-b) below.

- (43) a. me kəl bruf mar-ja si 1.SG.PLN yesterday brush.M.SG hit-M.SG NPR.3.SG 'He/She brushed yesterday.'
 - b. me bruf kəl mar-ja si 1.SG.PLN brush.M.SG yesterday hit-M.SG NPR.3.SG 'He/She brushed yesterday.'

The behaviour of auxiliaries and LVs display asymmetrical results. For example, (44-a) shows the canonical positioning of the adverb $k\partial l$ 'yesterday', while in (44-b) the adverb is placed between the two components of the AVC; the MV dor 'run' and the non-present BE-auxiliary si. The latter positioning of the adverb induces an ungrammatical sentence, which is in direct contrast to the behaviour we see between the coverb and LV.

- (44) a. o kəl dor-i/ja si $3. {\rm SG.PLN~yesterday~run-F.SG/M.SG~NPR.} 3. {\rm SG.PLN~yesterday.'}$
 - b. *o dor-i/ja kəl si 3.SG.PLN run-F.SG/M.SG yesterday NPR.3.SG 'He/She ran yesterday.'

The remainder of this chapter is dedicated to the application of these diagnostic tools.

7.4 The Lexical Verb o 'to become'

The form of o 'to become' seems to have a diachronic link to the Hindi-Urdu ho 'to be'. The Hindi-Urdu verb ho is an MV, an auxiliary, and an LV (Poornima & Painter, 2010). We claim that the Potwari o is also an MV, an auxiliary, and an LV. The three categories are presented in context of the syntactic diagnostic tools which distinguish each category. The data in this section provides empirical evidence that supports the claim that LVs and auxiliaries are syntactically distinct classes.

The MV o 'to become' has already been shown to behave as an MV in respect to the syntactic flexibility properties. This was in context of comparing the syntactic

flexibility of the MV-complement structures to the LVCs in Chapter 3. The MV o 'to become' was shown to take an adjectival complement, such as *bara* 'big' in (45-a) and *suwa* 'red' in (45-b). We can also observe in these examples that o 'to become' occurs in the position of a canonical MV. That is, it follows a complement and precedes the non-present BE-auxiliary si^5 .

- (45) a. o bara o si 3.SG.M.PLN big.M.SG become NPR.3.SG 'He will become big.'
 - b. tfila suwa o si scarf.M.SG red.M.SG become NPR.3.SG 'The scarf will become red.'

In comparing the syntactic flexibility of the MV-complement structures to the LVCs, it was demonstrated that the adjectival complement can be fronted away from its MV o 'to become'. I also showed that an adverb can be placed between the two components of the LVC without inducing an ungrammatical sentence. These two properties are characteristic of MVs and LVs⁶. However, in this section I go further than the syntactic flexibility properties of the MV and show that it can determine case, have a nominal complement, and take the infinitive marker -i. Also, the syntactic flexibility results are briefly re-illustrated.

7.4.1 Non-Verbal Category & Non-Finite Marker -i

We claim in section 7.2 that an LV can be preceded by a nominal (i.e. the nominal coverb), whereas a tense/aspect auxiliary in Potwari cannot be preceded by a noun, unless it is part of a possessive construction. That is, independent of the latter construction, an AVC cannot consist of a predicate in which the main predication is derived from a noun, whereas an LVC can. The lexical verbs in Potwari can combine with a variety of predicates, for instance the lexical verb o 'become' can follow an adjective, as well as a noun. This is illustrated in (46), in which the adjectival complement bara 'big' precedes the MV o 'to become'.

uñ tε usman bara o-i ga-ja ε now and Usman.M.SG.PLN big.M.SG become-NFN go-M.SG PRS.3.SG 'And now Usman has become big!'

Similarly, a nominal complement can precede the MV o 'to become', such as sara 'Sara' in (47-a) and usman 'Usman' in (47-b).

⁵Interestingly, o 'become' as a lexical verb cannot follow any of the four LVs, as the meaning changes to an epistemic modality meaning, whereby the o is categorised as a modal auxiliary. This is line with the generalisation that an auxiliary always follows an LV (see Section 7.5 for the modal o).

⁶See previous chapters on the differences between MVs and LVs.

- (47) a. sara o-i gi si
 Sara.F.SG.PLN become-NFN go.F.SG NPR.3.SG
 'Sara had been.'
 - b. usman o-i ga-ja si Usman.M.SG.PLN become-NFN go-M.SG NPR.3.SG 'Sara had been.'

The above examples also show that o 'to become' has the ability to take the non-finite -i, which is characteristic of MVs and LVs and not of auxiliaries. For example, we see in (46), (47-a), and (47-b) that the non-finite marker is attached to the MV o 'to become', as it is the verb 'to go' which carries the finite information.

7.4.2 Case Marking

In (48), we observe that the lexical verb appears with the plain case subject pronoun in the future tense, rather than the oblique subject pronoun. Similarly in the past tense, o cannot appear with the ergative case or the oblique case, as illustrated in (49). The incompatibility with the MV o 'to become' and the ergative and oblique case reinforces that it determines case marking on the subject.

- (48) o/*uski bari o-i da si 3.SG.PLN/OBL big.F.SG become-NFN go NPR.3.SG 'She will become big.'
- (49) o/*us/*uski bari o-i gi j ϵ 3.SG.PLN/OBL/ERG big.F.SG become-NFN go.F.SG PRS.3.SG 'She became big.'

7.4.3 Fronting

The motivation behind the fronting diagnostic is related to the syntactic flexibility diagnostic tools presented in Chapter 3, which aim to establish the status of the coverb. The fronting diagnostic shows that the coverbal element of an LVC can be fronted away from the LVC without inducing an ungrammatical sentence or intervening with the LVC meaning. Similarly, the adjectival complement bara 'big' can be moved from its canonical position without causing ungrammaticality or losing the meaning of the MV-complement. This shows that the MV o 'to become' does not behave as an auxiliary, because the main predicate of an AVC cannot be fronted without causing an ungrammatical sentence.

- (50) a. sara bari o si Sara.F.SG.PLN big.F.SG become NPR.3.SG 'Sara will become big.'
 - b. bari sara o si big.f.sg Sara.f.sg.pln become npr.3.sg 'Sara will become big.'

7.4.4 Adverb Insertion

The adverb insertion operation aims to separate the adjectival complement suwa 'red' from the lexical o to test whether the two components can still retain the verbal meaning. By contrasting example (51-a) and (51-b), we can see that the adverb k > 0 'tomorrow' can occur between the adjective suwa and the lexical o 'become' without affecting the meaning of the verb.

- (51) a. tfila kəl suwa o si shawl.M.SG tomorrow red.M.SG become NPR.3.SG 'The scarf will become red tomorrow.'
 - b. tfila suwa kəl o si shawl.M.SG red.M.SG tomorrow become NPR.3.SG 'The scarf will become red tomorrow.'

The same results are found with the adjective bari 'big'. For example, the adverb $k \ni l$ 'tomorrow' can be moved from its canonical position shown in (52-a) to between the adjective bari and o 'become' in (52-b) without affecting the meaning of the verb. This reinforces o's status as an MV rather than an auxiliary. This is because the two components of an AVC cannot be separated by an adverb as it induces an ungrammatical sentence.

- (52) a. təkja sara kəl bari o si watch Sara.F.SG tomorrow big.F.SG become NPR.3.SG 'Watchout, Sara will become big tomorrow!'
 - b. təkja sara bari kəl o si watch Sara.F.SG big.F.SG tomorrow become NPR.3.SG 'Watch, Sara will become big tomorrow!'

7.4.5 Summary

The above data has shown that the verb o 'to become' is not an auxiliary because it can determine case marking on the subject, can combine with a main predicate that is a nominal, and it can take the non-finite marker -i. The syntactic flexibility properties are also distinct to that of an auxiliary. We saw that the complement can be fronted away from o 'to become' and a time adverb can be placed between the complement and o 'to become'. The properties of o 'to become' are identical to an LV, however it is shown in Chapter 4 that the o 'to become' in such an environment is not an LV but rather an MV. For example, the adjective that combines with o 'to become' in (52-a) is a complement of the verb rather than a coverbal element contributing to the meaning of the verbal predicate. Sulgar (2012, 587-588) introduces tests to distinguish copula constructions (AVCs) and complex predicates (LVCs) comprised of the Hindi $h\varepsilon/ho$ 'to be'. The coordination test shows that the nominal coverb of ho-type LVCs cannot be coordinated, while coordination is

possible in copula constructions (Raza, 2011). Whether such tests can be applied to Potwari is a matter worthy of further research, but which goes beyond the scope of this study.

7.5 The Modal o 'to become'

I argue that the third construction in which we find the verb o 'to become' is an epistemic modal. Its positioning is similar to that of an aspectual auxiliary, for example it follows the LV mar in (53) and the LV lag 'to hurt' in (54), while it precedes the non-present BE-auxiliary si.

- (53) us pis mar-i o si 3.SG.ERG fart.F.SG hit-NFN become NPR.3.SG 'He/She must have farted.'
- (54) uski ulti lag-i o si 3.SG.OBL vomit.F.SG hurt-NFN become NPR.3.SG 'He/She must have vomitted.'

The word order generalisation made in Section 2.1 is true for the modal auxiliary o, which is that an auxiliary always follows an LV and can co-occur with more than one auxiliary. For example, in (53) and (54), we see the modal o and the non-present BE-auxiliary si.

7.5.1 Non-Verbal Category & Non-Finite Marker -i

The main predicate combining with the modal o can be a verb, such as p
otin t to know' in (55-a). In contrast, a nominal predicate such as ulti 'vomit' cannot be the main predicate, as illustrated in (55-b). The latter reinforces that independent of the possessive construction, the main predicate of an AVC cannot be a nominal.

- (55) a. uski peta o si 3.SG.OBL know become NPR.3.SG 'He/She must know.'
 - b. *uski ulti o si 3.SG.obl vomit.F.SG become NPR.3.SG 'He/She must have vomited.'

The modal's interaction with the non-finite marker -i also reveals its behaviour to be similar to that of an auxiliary. I demonstrated above that the non-finite marker is attached to an MV or an LV when preceding an aspectual auxiliary, as it is the auxiliaries that carry the finite information. We see in (56) that the non-finite marker is incompatible with the modal, as the modal carries the finite the

 $^{^{7}}$ In Chapter 4, I demonstrated that pota 'to know' meets the morphosyntactic properties of a canonical verb - refer to Chapter 4 for the data examples.

information.

(56) *uski pəṭa o-i ga-ja si 3.SG.OBL know become-NFN PRF-M.SG NPR.3.SG 'He/She must know.'

Furthermore, we see that the modal o always follows the main predicate and therefore occurs after the non-finite -i boundary.

7.5.2 Case Marking

One of the characteristics that differentiate LVs from auxiliaries is that the former appear with the same case marked subject, whereas the latter can appear with subjects that are marked with a plain case, ergative case, or an oblique case. The modal o at a first glance appears to only occur with the oblique case, as illustrated in (55-a). Here, the single argument is the third person oblique case pronoun uski, as is the sole argument of the lag-type 'hurt' and e-type 'come' LVCs, shown in (57) and (58) below.

- (57) uski ulti lag-i o si 3.SG.OBL vomit.F.SG hurt-F.SG become NPR.3.SG 'He/She must have vomitted.'
- (58) uski pi∫av e-ja o si 3.SG.OBL urine.M.SG come-M.SG become NPR.3.SG 'He/She must have unrinated.'

However, in example (59) and (60) we see that the modal o is also compatible with the ergative case and the plain case (61).

- (59) us ulti kəṭ-i o si 3.SG.ERG vomit.F.SG do-F.SG become NPR.3.SG 'He/She must have vomited.'
- (60) us pis mar-i o si 3.SG.ERG fart.F.SG hit-F.SG become NPR.3.SG 'He/She must have farted.'
- (61) o gi o si
 3.SG.PLN go.F.SG become NPR.3.SG
 'She must have gone.'

7.5.3 Fronting

The main predicate $p \not= t a$ 'to know' cannot be fronted away from the modal o, as it results in an ungrammatical sentence.

- (62) a. uski peta o si 3.SG.OBL know become NPR.3.SG 'He/She must know.'
 - b. *pəṭa uski o si know 3.SG.OBL become NPR.3.SG 'He/She must know.'

The results of the above data sets are in line with the behaviour of a tense/aspect auxiliary. That is, a main predicate of an AVC cannot be separated from an auxiliary via the fronting operation, as it results in an ungrammatical sentence.

7.5.4 Adverb Insertion

Independent of the adverb insertion diagnostic, the adverb $k \ni l$ 'yesterday/tomorrow' is not permitted within an epistemic sentence, as illustrated in (63). Hence, the adverb insertion test is not employed in context of the modal o.

(63) *sara-ki kəl pəta o si Sara-F.SG.OBL tomorrow/yesterday know become NPR.3.SG 'Sara must know tomorrow/yesterday.'

7.5.5 Summary

The above results have shown that the verb o 'to become' behaves as an auxiliary, as it cannot (i) combine with a main predicate that is a nominal, (ii) take the non-finite marker -i, and (iii) it can appear with all case marked subjects (plain, ergative, and oblique case). The syntactic flexibility properties are also distinct to that of an LV. We saw that the main predicate cannot be fronted away from o 'to become' without the sentence becoming ungrammatical. The properties of the modal are in direct contrast to an LV.

7.6 The LV o 'to become'

In this section I show that o 'to become' can also behave as an LV. In (64) we observe that the LV o 'to become' follows the noun item $g_{\theta}vsi$ 'constipation', which occurs in the position of a lexical verb, and together the two form an LVC. We also see that the LV o 'to become' precedes the present tense BE-auxiliary, as predicted within the verbal template.

(64) ami-ki/aba-ki gəvsi o-i jε mum-F.SG.OBL/dad-M.SG.OBL constipation.F.SG become-F.SG PRS.3.SG 'Mum/dad got constipation.'

In a typical LVC, the coverb (regardless of its category; adjective, noun, or verb) contains the main predicational content, which intuitively can be seen in (64). In

contrast, the LV determines agreement patterns by inflecting for the past tense suffix inflections, appears with the same case marking on the subject, always has a lexical verb corresponding to it, and can contribute other lexical semantic features, such as agentivity. Section 7.4 exemplifies the lexical verb analogue o 'to become'.

7.6.1 Argument Structure

The o-type LVCs project one argument structure type: intransitive $\langle Experiencer \rangle$, which is identical to the non-agentive LVCs presented in Chapter 6. Similar to these, the subject takes the oblique case marker -ki, which can also be identified in (64). Table 7.4 lists further examples.

Coverbal Element	LV	LVC meaning	Intr/Tr	Arguments
∫vgr 'sugar'	0	'to get diabetes'	Intr	$\langle Experiencer \rangle$
dərd 'pain'	0	'to get pain'	Intr	$\langle Experiencer \rangle$
təklif 'pain'	0	'to get pain'	Intr	$\langle Experiencer \rangle$
gəvsi 'constipation'	0	'to get constipation'	Intr	$\langle Experiencer \rangle$

Table 7.4: Argument Structure of o-Type LVCs

Empirical data stipulated from the morphosyntactic diagnostic tools also supports its LV status. The non-verbal predicate diagnostic shows that the LV o 'to become' can occur with a main predicate that is a nominal. The case marking diagnostic shows that o behaves as an LV because it only has the ability to appear with one type of case marking on the subject. The syntactic flexibility diagnostics show that the coverb can be fronted away from the LV o 'to become' and the two components can be separated by a time adverb without inducing an ungrammatical sentence or interfering with the meaning of the LVC. Similar to the previous chapters, the status of the nominal coverb is also investigated. We show that a nominal complement can participate in pronominalisation, however a nominal coverb cannot. The latter patterns with all nominal coverbs investigated in Chapter 4, 5 and 6.

7.6.2 Case Marking

In line with the behaviour of other Potwari LVs, the LV o 'to become' is restricted to the same case marking on the subject, which is borne out from the data in (65) and (66). In example (65), we see that the oblique case pronoun uski is acceptable with the LV o 'to become' in the future tense. In contrast, the plain case, third person subject pronoun o 'he/she' is incompatible with the LV o in the future tense, hence it induces an ungrammatical sentence.

(65) uski/*o dərd o si 3.SG.OBL/PLN pain become NPR.3.SG 'She will get pain.' Furthermore, in the past tense, the ergative case pronoun as well as the plain case pronoun induce an ungrammatical sentence (66), as they are not compatible with the LV o 'to become'. In contrast, the oblique case is also compatible in the past tense. These data provide evidence in support of the LV membership, as the LV o requires the oblique case in all environments.

(66) uski/*us/*o dərd o-ja si 3.SG.OBL./ERG/PLN pain become-M.SG NPR.3.SG 'He/She got pain.'

7.6.3 Non-Verbal Category & Non-Finite Marker -i

One of the distinguishing characteristics amongst auxiliaries and LVs is the ability to take the non-finite marker -i. The LV o 'to become' can take the non-finite marker, as illustrated in (67) and (68).

- (67) ami-ki təklif o-i jε mum-SG.F.OBL pain.F.SG become-F.SG PRS.3.SG. 'Mum got pain.'
- (68) ami-ki $\int vgr$ o-i gi j ϵ mum-SG.F.OBL sugar.F.SG become-F.SG go.F.SG PRS.3.SG 'Mum got diabetes.'

The LVCs in (67) and (68) above are comprised of the nominal coverbs fuga 'diabetes' and faklif 'pain'. Similarly, the coverb gavsi 'constipation' in (64) above is also a nominal coverb. In the sections that follow, it is shown that all coverbs that form an LVC with the LV o 'to become' are nouns via the nounhood tests.

7.6.3.1 Coverb Word Class Independent of LVC

The word classes of the coverbs are listed in table 7.5.

Table 7.5: Word Class for o-Type Coverbs

Coverbal Element	Word Class
<i>∫vgr</i> 'sugar'	Non-Count Singular Noun
dərd 'pain'	Non-Count Singular Noun
<i>təklif</i> 'pain'	Non-Count Singular Noun
g = v s i 'constipation'	Non-Count Singular Noun

I categorise the coverbs in table 7.5 as nouns by employing the morphosyntactic properties of canonical nouns as diagnostic tools (see Chapter 3). The interaction of the coverbs with the nounhood properties are summarised in table 7.6 below.

X

/

Coverbal Element LOC/GEN OBL DEM ADJ AGR PLPOSS ∫vqr 'sugar' / X X dərd 'pain' ✓ X X X

X

X

/

/

təklif 'pain'

qəvsi 'constipation'

Table 7.6: Morphosyntactic Properties of Coverbs Independent of o-Type LVCs

All four roots can take the locative case marker independent of the LVC, as shown in example (69), (70), (71), and (72). We see that each noun takes the Layer I locative case marker -e, followed by the case Layer III postposition kulu 'from'. Due to the DOM rules postulated in Chapter 2, these nominals do not take the oblique case marker -ki as they are non-count singular nouns.

- (69) me us təklif-e kulu bari dər ni
 1.SG.F.PLN DEM.DIST.SG pain.F.SG-LOC from big.F.SG fear IMPF.F.SG
 ja
 PRS.1.SG.
 'I am really scared of that pain.'
- (70) me us dərd-e kulu bari dər ni
 1.SG.F.PLN DEM.DIST.SG pain.M.SG-LOC from big.F.SG fear IMPF.F.SG
 ja
 PRS.1.SG
 'I am really scared of that pain.'
- (71) me is gəvsi kulu bari dər 1.SG.F.PLN DEM.PROX.SG constipation.F.SG.LOC from big.F.SG fear ni ja IMPF.F.SG PRS.1.SG 'I am really scared of (getting) constipation.'
- (72) me is ∫ugr-e kulu bari dər ni
 1.SG.F.PLN DEM.DIST.SG sugar.M.SG-LOC from big.F.SG fear IMPF.F.SG
 ja
 PRS.1.SG
 'I am really scared of (getting) diabetes .'

The nouns can also be determined by a demonstrative, such as us 'that' in (69) and (70), and is 'this' in (71) and (72). Furthermore, three out of the four coverbs can be modified by the adjective independent of the LVC. Take as an example $g_{\theta}vsi$ in (73), which can be modified by the adjective peri 'bad'.

(73) miki būni peri/*pera gəvsi si 1.SG.F.OBL lots bad.SG.F/SG.M constipation.F.SG NPR.3.SG 'I had really bad constipation.'

While $d \operatorname{ard}$ 'pain' cannot be modified by an adjective, as the sentence is deemed as semantically infelicitous (74).

(74) #miki būni pera/*peri dərd si 1.SG.F.OBL lots bad.M.SG/F.SG pain.M.SG NPR.3.SG 'I had really bad pain.'

The nouns təklif 'pain', fogr 'sugar', and gəvsi 'constipation' are all feminine singular nouns, which is reflected in the adjective that modifies them. For example, the feminine singular adjective peri 'bad' modifies gəvsi 'constipation' in (73) above, without causing an ungrammatical sentence. In contrast, the modifying masculine singular adjective pera 'bad' induces an ungrammatical sentence (73). The reverse is shown for the nominal dərd 'pain' in example (74) above, as it is a masculine singular noun. Hence the nominal can be modified by the masculine singular adjective pera 'bad' without inducing an ungrammatical sentence, while the feminine singular form peri 'bad' does induce an ungrammatical sentence. The latter observation shows that despite the semantic oddity induced by adjectival modification, the noun does assign gender and number. This is evident in the ungrammaticality caused by the modifying masculine singular adjective and the grammaticality of the modifying feminine singular adjective.

Only təklif 'pain' can mark for plurality independent of the LVC, which is via the overt plural marker -a, illustrated in (75-a). The remaining three nominals do not have the ability to take a plural marker. To single out an example, (75-b) shows the inability of the nominal dərd 'pain' to mark for plurality.

- (75) a. pitfle sal miki bũni təklif-a sən last year 1.SG.OBL lots pain-F.PL NPR.3.PL 'Last year, I had lots of pains.'
 - b. *pitfle sal miki bũni dərd-e sən last year 1.SG.OBL lots pain-F.PL NPR.3.PL 'Last year, I had lots of pains.'

Also in all the above illustrations (excluding the examples where the nouns take the locative case), the nouns occur in the possessive construction. To recap, the latter is comprised of an experiencer argument marked by the oblique case, a nominal root, and the BE-auxiliary si or ε .

7.6.3.2 Morphosyntactic Properties of Coverb

It is shown that the main predicates of the o-type LVCs are nouns independent of the LVC. The data is also in support of categorising o 'to become' as an LV. For example, the main predicate that combines with o 'to become' can be a nominal; it can take the non-finite marker -i, and it only appears with one type of case marking on the subject. Similarly, in section 7.4, we see that the lexical verb o 'to become' takes the non-finite marker -i, determines case marking on the subject, and takes a nominal complement. The natural question at this stage of the analysis is whether the o 'to become' in environments such as (67) and (68) is a lexical verb rather than

an LV. It is claimed in the present section that o 'to become' in such environments is an LV rather an MV. That is, the nominal coverbs are not nominal complements but rather are part of the verbal predicate. The data illustrations below are dedicated to showing that the nominal coverb is morphosyntactically distinct to a nominal complement.

In respect of the agreement property, the nominals behave as a canonical nominal complement. In (76-a), the feminine singular agreement suffix -i on the LV is in agreement with the feminine, singular noun g = v s i 'constipation'. While in (76-b), the masculine, singular inflectional marker -j a is attached to the LV in agreement with the masculine, singular noun d = v d 'pain'. The agreement inflections are not in agreement with the subject complement, as in (76-a) the complement is masculine, while the agreement inflection is feminine. We see the reverse in (76-b), that is, the subject complement is feminine and the agreement inflection is masculine.

- (76) a. aba-ki gəvsi o-i gi jε dad.M.SG-OBL constipation.F.SG become-F.SG go.F.SG PRS.3.SG 'Dad got constipation.'
 - b. ami-ki rṛɛ dərd o-ja si mum-OBL here pain.M.SG become-M.SG NPR.3.SG 'Mum got pain here.'

I show that, independent of the LVC, only *toklif* 'pain' in (75-a) can be pluralised, whereas the other nominals do not inflect for plurality. Hence, the plural test is only applied to the coverb *toklif* 'pain', in which we see that it cannot take a plural marker (77). The latter induces an ungrammatical sentence.

(77) *miki təklif-e o-ie sən 1.SG.OBL pain-F.PL become-F.PL NPR.3.PL 'Last year, I had lots of pains.'

The coverbs cannot be modified by an adjective or determined by a demonstrative. To single out an example, the nominal coverb g = v s i 'constipation' cannot be determined by the demonstrative i s 'this' in (78), as it induces an ungrammatical sentence.

(78) *ami-ki gəvsi o-i gi jε mum.F.SG-OBL constipation.F.SG become-F.SG go.F.SG PRS.3.SG 'Mum got constipation.'

7.6.4 Syntactic Flexibility

The observation made for all nominal coverbs investigated in Chapter 4, 5, and 6 is that nominal coverbs and complements are almost identical in their syntactic flexibility. I now go on to show that the latter also holds for this set of nominal coverbs via (i) fronting and (ii) adverb insertion. To further the argument that the o

'to become' is an LV, we employ the pronominalisation test. The syntactic flexibility results are summarised in table 7.7.

Coverbal Element	LV	LVC meaning	FRONT	ADV	PRNM
<i>∫vgr</i> 'sugar'	0	'to get diabetes'	✓	√	X
dərd 'pain'	o	'to get pain'	✓	✓	X
təklif 'pain'	o	'to get pain'	✓	✓	X
$g \partial v si$ 'constipation'	o	'to get constipation'	✓	✓	X

Table 7.7: Syntactic Flexibility in o-Type LVCs

7.6.4.1 Fronting

The fronting diagnostic is related to the syntactic flexibility diagnostic tools presented in Chapter 3, which aim to establish the status of the coverb. The data from the o-type LVCs patterns with the behaviour of LVCs, in that the nominal coverbs can be fronted away from the LV o 'become' without causing ungrammaticality or intervening with the LVC meaning. The latter can be seen by comparing example (79-a) and (79-b), in which we see that the coverb gəvsi 'constipation' of the LVC gəvsi o 'to get constipation', lit. 'constipation come' is fronted

- (79) a. ami-ki gəvsi o-i jε mum.F.SG-OBL constipation.F.SG become-F.SG PRS.3.SG 'Mum got constipation.'
 - b. gəvsi ami-ki o-i jε constipation.F.SG mum.F.SG-OBL become-SG.F PRS.3.SG 'Mum got constipation.'

The fronting diagnostic shows that o 'to become' cannot be categorised as an auxiliary, as the main predicated of an AVC cannot be fronted without inducing an ungrammatical sentence.

7.6.4.2 Adverb Insertion

Similar to the fronting diagnostic, the adverb insertion also patterns with the behaviour of LVCs rather than that of the AVCs. For example, an adverb can be placed in between the coverb and LV components of the LVC gəvsi o 'to get constipation', lit. 'constipation become' in (80), without causing an ungrammatical sentence.

(80) ami-ki gəvsi pursu o-i
mum.F.SG-OBL constipation.F.SG day.before.yesterday become-F.SG
jε
PRS.3.SG
'Mum got constipation the day before yesterday.'

7.6.4.3 Pronominalisation

A nominal coverb cannot be substituted by a pronoun. For example the pronoun o in the second clause is substituted for its antecedant dard 'pain' (see (76-b) above), which causes the meaning of the LVC to be lost. That is, the LV takes on its lexical verb meaning and the substituted pronoun is interpreted as its complement, rather than contributing to the verbal predicate. This can be seen for the LVC dard o 'to get pain', lit. 'pain become' in (82), which is uttered in context of (81). Due to the change of meaning, the sentence is deemed as semantically odd, which is related to the thematic conditions of the MV o 'to become'.

- (81) Context: A patient discusses what happened when they returned home from the hospital. The patient utters (82) to their general practice doctor.
- (82) #miki pəte kε o-ja si miki o 1.SG.OBL know what become-SG.M NPR.3.SG 1.SG.OBL DEM.DIST.SG o-ja si become-M.SG NPR.3.SG 'You know what happened to me? I got that.'

7.6.5 Summary

The verb o 'to become' behaves as an LV because it can only appear with the case marking on the subject, can take the non-finite marker -i, and it can combine with a main predicate that is a nominal. It is clear that the nominals do not retain their nounhood properties when part of the LVC. They cannot be (i) determined by a demonstrative, (ii) modified by an adjective, or (iii) mark for plurality. However, they are not entirely void of their nounhood behaviour when part of the LVC; they agree with the LV in gender and number. Nevertheless, they are not categorised as a nominal complement. The syntactic flexibility properties are also distinct to that of an AVC, as the main predicate can be fronted away from o 'to become' and a time adverb can enter between the two LVC components without inducing an ungrammatical sentence or interfering with the meaning of the LVC. In contrast, the main predicate of an AVC cannot be fronted nor can an adverb enter between the two components of an AVC.

7.7 The Aspectual LV $o_{\text{\tiny asp}}$ 'to become'

We now turn to the aspectual LV, which is labelled as $o_{\rm asp}$ 'to become', as it denotes an inchoative aspect. The inchoative aspect is a grammatical aspect, referring to the beginning of an action or state (Payne, 2011; Smith, 1999, 2009). The LV $o_{\rm asp}$ 'to become' is the inchoative counterpart of the inchoative-causative alternation presented in Chapter 4, on the investigation of the LV kar 'to do'.

To recap, seven of the 19 kar-type LVCs participate in the inchoative-causative alternation, expressed via the equipollent alternation. Equipollent alternations are both derived from the same stem which express the basic situation, but through different affixes, auxiliary verbs, or different stem modifications (Haspelmath, 1993, 102). The LV kar 'to do' expresses the causation component, whereas the LV o_{asp} 'to become' expresses the inchoative aspect. For example, the agent argument us 'he/she' of the LVC $k \not = tam$ kar 'to finish', lit. 'do finish' in (83-b) is the causer of the 'finishing' eventuality. In contrast, in the inchoative counterpart the LV o_{asp} 'to become' is present, which excludes a causer of the eventuality, as its viewed as occurring spontaneously, (83-a). In both examples, the coverb $k \not = tam$ 'finish' remains the same.

- (83) a. mara kəm kətəm o-i ge-ja ε
 1.SG.GEN work.M.SG finish become-NFN go-M.SG PRS.3.SG
 'My work has fininshed.'
 - b. us didenal kəm kətəm kət-a si 3.SG.ERG deliberately work.M.sg finish do-M.SG NPR.3.SG 'He/She finished the work delberately.'

The seven inchoative-causative alternations are repeated in table 7.8 from Chapter 4 (for convenience).

Causative kar 'to do'	Inchoative o_{asp} 'to become'
kətəm kar 'finish do'	kətəm o 'finish become'
bənd kar 'close do'	b ightarrow n d o 'close become'
bəs kar 'stop do'	bəs o 'stop become'
<i>furu kar</i> 'start do'	$\int u r u \ o$ 'start become'
$fup^h kar$ 'silent do'	$fup^h \ o$ 'silent become'
sa:f kar 'clean do'	sa:f o 'clean become'
kətəl kar 'kill do'	kətəl o 'kill become'

Table 7.8: Inchoative-Causative Alternation

The following sections drawn on evidence that support the category of the LV o_{asp} 'to become'. For example, the case marking, non-finite marker, the type of coverb, fronting, and adverb insertion diagnostics support the claim that o_{asp} 'to become' is an LV.

7.7.1 Non-Verbal Category & Non-Finite Marker -i

In Chapter 4 the coverbal elements of the *kar*-type LVCs can vary from verbs to nouns to adjectives independent of the LVC. The coverbs that participate in the inchoative-causative alternation of the causative counterparts were categorised as nouns, adjectives, or verbs, by employing the morphosyntactic properties derived from the behaviour of canonical verbs and adjectives. Hence, the coverbs in the

inchoative counterparts are also nominal, adjectival, and verbal coverb. Table 7.9 provides a summary of these categories⁸.

Table 7.9:	Word C	Class of	Coverb	Independent	of the	$O {\rm asp}$	'to	become'	LVCs
------------	--------	----------	--------	-------------	--------	---------------	-----	---------	------

Coverb	Word Class
<i>furu</i> 'to start'	Verb
fup^h 'to quieten'	Verb
bənd 'to close'	Adjective
sa:f 'to clean'	Adjective
kətəm 'to finish'	Verb
bəs 'stop'	Noun
k ot j t ot l 'murder'	Noun

The fact that o_{asp} 'to become' can combine with a nominal coverb is pertinent in the auxiliary and LV debate, as it supports its status as a LV. An illustration of the latter can be seen in (84), in which the nominal coverb is $k \not= t o l$ 'murder'.

Similarly, in respect of the non-finite marker diagnostic tool, the LV o_{asp} 'to become' behaves as an LV. For example, in (84) above, we see that it has the ability to take the non-finite marker -i.

7.7.2 Case Marking

(85) o/*us/*uski friz o-i gi j
$$\epsilon$$
 3.SG.PLN/ERG/OBL freeze become-NFN go.F.SG PRS.3.SG 'She froze.'

Therefore, it can be said that the behaviour of the LV o_{asp} 'to become' is in line with the behaviour of other Potwari LVs, as it is restricted to a plain case marked subject.

⁸Refer to Chapter 4, in which the coverbs are classified as nouns, verbs, and adjectives based on their morphosyntactic properties.

7.7.3 Fronting

The predicates listed in table 7.8 that form an LVC with the LV o_{asp} 'to become' can be fronted away from the LV without causing an ungrammatical sentence or intervening with the meaning of the LVC. For example, in (86-b) the canonical position of the main predicate bend 'close' precedes o_{asp} 'to become', while it can also be fronted away from the LV o_{asp} 'to become', as in (86-b). The intended LVC meaning 'to close' is retained as is the grammaticality of the sentence. The latter reinforces the argument that the LV o_{asp} 'to become' does not behave as an auxiliary, because the main predicate of an AVC cannot be fronted without causing an ungrammatical sentence.

- (86) a. $\int a \cdot p^h$ bend o-i gi si shop.F.SG close become-NFN go.F.SG NPR.3SG 'The shop had closed.'
 - b. bənd $\int a:p^h$ o-i gi si na close shop.F.SG become-NFN go.F.SG NPR.3SG TOP 'The shop had closed.'

7.7.4 Adverb Insertion

The adverb insertion diagnostic also shows that the LV o_{asp} 'to become' behaves as a typical LV. For example, the canonical position of the adverb $k \ni l$ 'tomorrow' is in the post subject position, as shown in (87-a). However, the adverb is flexible in its positioning and can enter between the coverb $k \ni t \ni m$ 'finish' and LV o_{asp} 'to become', without inducing an ungrammatical sentence or intervening with the intended LVC meaning, as illustrated in (87-b). The latter is characteristic of LVCs rather and therefore further supports the claim that o_{asp} 'to become' is an LV rather than an auxiliary.

- (87) a. kəl kəm kətəm o si tomorrow work.M.SG finish become NPR.3.SG 'The work will finish tomorrow.'
 - b. kəm kətəm kəl o si work.M.SG finish tomorrow become NPR.3.SG 'The work will finish tomorrow.'

7.7.5 Summary

The above data provides evidence in support of categorising o_{asp} 'to become' as an LV via case marking, non-finite marker, the type of coverb, fronting, and adverb insertion diagnostic tools.

7.8 Concluding Remarks

7.8.1 Summary

It has been shown from language after language that auxiliaries and LVs are syntactically distinct classes, This chapter embarked on the challenge of confirming that Potwari supports the viewpoint that the two are syntactically distinct classes. LVs were shown to (i) combine with a non-verbal category, whereas the aspectual auxiliaries were shown to not combine with a non-verbal category, (ii) appear with the same case marking on the subject, while auxiliaries did not, and (iii) have the ability to take the non-finite marker, whereas auxiliaries did not. The syntactic relation between an LV and a coverb was also shown to be distinct from the relation of an MV and an auxiliary. The coverbs can be fronted away from LVs, whereas the MV cannot be fronted away from auxiliaries. Similarly, an adverb was shown to separate the coverb and LV, while it could not enter between the MV and auxiliary. The latter demonstrates that AVCs form a very tight syntactic unit in comparison to the LVC components, which are evidently syntactically flexible.

This dataset is arguably too small both in overall size, as is the number of diagnostic tools for formulating strong conclusions about the distribution of LVs and auxiliaries in Potwari, as the application of the diagnostic tools was restricted to the verb o 'to become'. With that said, it did demonstrate that LVs and auxiliaries are distinct. The results are summarised in table 7.10 for all four categories. The check marks (\checkmark) show that the given category i.e. the lexical verb, the auxiliary and LV exhibits the morphosyntactic properties described in the first column. In contrast, the cross marks (\Chi) show that the given category does not exhibit these morphosyntactic properties.

Table 7.10: The os with the Auxiliary & LV Diagnostics

Tool Lexical Verb Modal Auxiliary Aspectual LV Non-Agent

Diagnostic Tool	Lexical Verb	Modal Auxiliary	Aspectual LV	Non-Agentive LV
Non-Verbal Category	✓	Х	Х	✓
Non-Finite Marker	✓	X	✓	✓
Case Marking	✓	×	✓	✓
Fronting	✓	×	✓	✓
Adverb Insertion	✓	-	✓	✓

7.8.2 Further Research

In undertaking this research, our main goals were to obtain a basic empirical distinction between auxiliaries and LVs, in terms of both their syntactic and semantic properties. I believe this chapter has achieved the latter, though it is essential to the auxiliary and LV debate that the diagnostic tools are applied to other verbs that can be auxiliaries, MVs, and LVs. To list a few, gi (Ga) 'to go' was shown to be

a perfect auxiliary in Chapter 2, which is otherwise a lexical verb, as illustrated in (88-a).

(88) a. o gi si
3.SG.PLN go.F.SG NPR.3.SG
'She went.'

b. o ikh mmte vrtf si gi si 3.SG.PLN one minute in sleep go.F.SG NPR.3.SG 'She fell asleep in one minute.'

The LVusage of gi 'to go' can be seen in (88-b), in which it forms a complex predicate with coverbal element si 'sleep'. The latter LVC is also found in sister languages such as Urdu-Hindi and Punjabi.

(89) e mətfəl miki kitni vari bir-i ga-ja
DEM.PROX.SG mosquito.M.SG 1.SG.OBL many time bite-NFN PRF-M.SG
si
NPR.3.SG
'That mosquito had bit me (so) many times.'

Similarly, we have seen that the lexical verb re 'to stay' in (90) is in other environments an existential perfect auxiliary, as seen in (91). Like gi 'to go', ri appears to also have a LV usage, as illustrated in (92), in which the coverb is ja:d 'memory'. Further research is required on showing empirically how the perfect auxiliaries differ from the LV usage.

- (90) saima bedi-ne ka:r ri si Saima.F.SG.PLN grandmother-GEN.M.SG house.M.SG stay.F.SG NPR.3.SG 'Saima stayed at her grandma's house.'
- (91) sara kıţni vari o filəm tək-i ri
 Sara.F.SG.PLN many time DEM.DIST.SG film watch-NFN PRF.F.SG
 jɛ
 PRS.3.SG
 'Sarah has watched that film so many times.'
- (92) uski o gal ja:d ri si 3.SG.OBL DEM.DIST.SG thing.F.SG memory.F.SG stay.F.SG NPR.3.SG 'He/She remembered that thing.'

Ongoing research shows that the LVs can co-occur with a nominal predicate, such as ja:d 'memory' and that they are restricted to one case marking on the subject. However they do not have the ability to inflect for the non-finite marker. Also the syntactic flexibility of these LVCs is tighter than the LVCs investigated in this thesis, in that the coverbal element cannot be fronted away from the LV nor can an adverb separate the two components. This raises questions on whether the so-called LV usages in (88-b) and (92) are true LVs like their cognates in Urdu-Hindi or whether

they are merely a sub-type of an aspectual auxiliary. Similar results are also found in Urdu, in that the AVCs and the aspectual LVCs are shown to be both syntactically tight units via scrambling tests (Butt, 1995).

A natural progression of this work is to also analyse the aspect of the LVCs. Butt (1995, 115) notes that aspectual features such as completion and inception (also referred to as inchoative) are 'an integral part of complex predicate formation and the determination of case marking on the subject' (Akhtar, 2000; Bashir, 1993; DeLancey, 1986; Ramchand, 1990; Singh, 1990)). That is, what types of aspectual information do Potwari LVs contribute to the clause? LVs such as par 'to fall' in Urdu-Hindi encode inception, while LVs such as le 'to take' and dga 'to go' encode notion completion (Butt, 1995, 119). The latter is a well attested phenomena within the complex predicate literature (Butt, 1995; Singh, 1990, 1994, 1998; Hook, 1974, 1991, 1993). Singh (1990) argues that LVs in Urdu are markers of telicity and that the particular role of LVs is to focus on the different stages of a telic event. The LV ca 'to go' in Potwari is also a testament to this phenomena, as it too encodes the notion of completion. This is borne out from its acceptability with the adverbial in x time in $(88-b)^9$. The notion of inception categorises the LV o_{asp} 'become', however no serious diagnostic tools are employed in showing empirically the notion of inception. The diagnostics applied for inceptive LVs in Urdu by Butt (1995) would be an ideal place to start for Potwari¹⁰.

Also, what is of equal interest is that the LV pe 'to attack' illustrated in (93-a) (shown in Chapter 6) can function as a modal auxiliary, which is illustrated in (93-c). The data raises many questions, including whether they are in fact the same verb. Another question is related to the case marking diagnostic; the modal pe only appears with an oblique case marked subject¹¹, which is shown to be characteristic of LVs. In contrast, the modal pe 'to become' appeared with different case marked subjects. Does this then question the reliability of the case marking diagnostic or are the differences related to the syntactic structure of the the modal pe? It seems that the diagnostic tools that differentiate LVs from auxiliaries are dependent on the verb type. A full investigation into the different types of auxiliaries and LVs is required, to develop further distinctions between the two classes.

 $^{^{9}}$ Atelic and Telic events can be tested via the well celebrated adverbial telicity tests (Dowty, 1979), The idea behind the *in x time* adverbial is to make an explicit reference to the end point of the eventuality. Thus, if the *in x time* adverbial can modify the evenutality and the sentence is deemd as acceptable, then it has an endpoint. However, if the adverbial leads to a contradiction, then it is there is no endpoint.

¹⁰The following diagnostics are employed: (i) the LV cannot occur in the subordinate clause of a given sentence, (ii) the LV cannot combine with a a stative, such as *know*, and (iii) aspectual LVs cannot be negated.

 $^{^{11}}$ The oblique case marker -ki can mark experiencer subject that include modal verbs - see Chapter 2.

- (93) a. mīki kire pe sən
 1.SG.OBL insect.M.PL attack.M.PL NPR.3.PL
 'I got infested.'
 - b. o miki pe si 3.SG.PLN 1.SG.OBL attach NPR.3.SG 'He will attack me.'
 - c. saddaf-ki wapəs da na pe si Saddaf.F.SG-OBL back go IMPF.M.SG MOD NPR.3.SG 'Saddaf will have to go back.'

Furthermore, the above illustrations raise questions regarding the argument structure; in (93-b) we have the plain case subject pronoun, whereas in the LVC sentence (93-b), we have the oblique case pronoun. We have repeatedly pointed out in this chapter that LVs always appear with the same case marked subject, however we have not addressed which component of the LVC is determining the case marking on the subject. Is it the coverb or the LV, or do they both determine the case marking? Under the assumption that the lexical verb and LV have the exact same argument structure i.e. they have the same lexical entry, it can be said that it is the coverb that is determining the case marking on the subject and therefore can explain the different case marking we find in (93-a) and (93-b). However, if one assumes that the lexical verb and LV have a distinct argument structure i.e a distinct lexical entry, then it can be argued that the LV determines the case marking on the subject. Whether, the coverb, the LV, or both determine the argument structure of the LVC in Potwari is a matter worthy of further research, but which goes beyond the scope of this study.

On a final note, efforts in this chapter were made to reevaluate the claims and potentially revalidate the important contributions made by the likes of Butt (1995), Butt & Geuder (2001), Butt & Lahiri (2013), and Mohanan (1994) but with limited empirical data from the understudied language Potwari.

CONCLUDING REMARKS

In this final chapter, I first summarise the contents of the thesis in section 8.1. I then discuss its major results, particularly in the context of areas for future research in section 8.2.

8.1 Summary

The thesis was divided into eight chapters, in which the first was dedicated to introducing the issues within the complex predicate literature, with a particular focus on light verb constructions (LVCs) and auxiliary verb constructions (AVCs). The main observation made in Chapter 1 was related to the challenges LVCs present for theories of syntax and semantics because of their dual nature. It has been proven difficult to class light verbs (LVs) with function words, such as auxiliaries or with full lexical verbs. Hence certain linguists have either classified LVCs as main verb-complement structures (MV-complement structures), while others have said LVs are the same as auxiliaries. On the contrary, this thesis argued that LVCs are morphosyntactically distinct to MV-complement structures and AVCs, in line with the likes of Megerdoomian (2012), Butt (1995), and others (Alsina, 1997; Butt & Geuder, 2001; Butt & Lahiri, 2013; Mohanan, 1994).

Chapter 2 provided the necessary syntactic and morphological properties to form the basis of developing the language internal diagnostic tools, with the focus on three morphosyntactic properties: (i) word order, (ii) tense/aspect system, and (iii) case system. It was established that Potwari nouns and pronouns canonically distinguish four cases in non-past environments: (i) plain, (ii) oblique, (iii) genitive, and (iv) locative. Additionally, the ergative case was shown to be restricted to the past, third person subject pronoun. The canonical alignment system was shown to be two-way split intransitivity. A three-way split intransitivity alignment was proposed to account for the third-person ergative subject pronouns in the past tense. I also showed that Potwari distinguishes the past, present, and future tense periphrastically via the non-present BE-auxiliary si and the present BE-auxiliary

 ε . The aspectual system is shown to be made up of the imperfective auxiliary na, the resultative/existential perfect auxiliary ga, and the existential perfect auxiliary re. The canonical word order is fairly flexible, with SOV established as the neutral work order, though there are instances of word order freezing. It was shown that Potwari manifests the classic properties of Indo-Aryan languages, from the classic three layering case system (Masica, 1991) and the double case phenomenon (Plank, 1995) to differential object marking (DOM).

Chapter 3 introduced the theoretical motivations behind the diagnostic tools employed in establishing the status of the coverb and the LV. The sets of diagnostic tools were derived from the morphosyntactic properties (syntactic flexibility, derivational, and inflectional properties) of Potwari nouns, verbs, and adjectives.

The subsequent three chapters encompassed the application of the diagnostic tools. The chapters were organised according to the lexical semantic features exhibited by the LVs. Chapter 4 provided an in-depth investigation of the agentive LV kar 'to do', as did Chapter 5 for the agentive LV mar 'to hit'. In contrast, Chapter 6 investigated the non-agentive LVs lag 'to hurt', e 'to come', and pe 'to attack'. In each chapter, the similarities and differences between the LVCs and MV-complement structures were established. It was argued that coverbs are morphosyntactically distinct to complements.

In Chapter 7, it was argued via empirical data based on language internal diagnostics, that the LVs in Potwari are syntactically distinct from auxiliaries. The distinctions were made by applying the diagnostics to the MV, auxiliary, and LV o 'to become',

8.2 Main Results & Future Research

The coverbs independent of the LVC were categorised as (i) verbs, (ii) adjectives, or (iii) nouns. The categorisation was based on their morphosyntactic properties. An overview of the types of LVCs investigated can be seen in table 8.1. The table also shows the type of coverbs that combined with the seven LVs. The N + V complex predicates formed the largest class with a total of 55 LVCs. The adjectival and verbal class of coverbs formed smaller classes, with a total of ten V + V complex predicates and five Adj + V complex predicates. The LV kar 'to do', and the LV o_{asp} 'to become' are the only two that form a complex predicate with a verbal and an adjectival coverb. All the LVs can combine with a nominal coverb, with the exception of the LV o_{asp} 'to become'.

8.2.1 Nominal, Verbal, & Adjectival Coverbs

Investigations into the status of coverbs and LVs in natural languages particularly amongst those of the South Asian languages, have revealed a huge body of

	kar	Oasp	mar	lag	e	pe	o	Total
Coverb-Type	'to do'	'to become'	'to hit'	'to hurt'	'to come'	'to attack'	'to become'	LVCs
Nominal	11	0	15	10	8	7	4	55
Adjectival	3	2	0	0	0	0	0	5
Verbal	5	5	0	0	0	0	0	10
Total	19	7	15	10	8	7	4	70

Table 8.1: Coverb + Light Verb Combinations

discussions and empirical evidence about how the LVC is morphosyntactically and semantically manifested. This study has investigated the nature of Potwari LVCs in respect of their syntactic and semantic properties. I argued that the nominal coverbs are morphosyntactically distinct to nominal complements, which can be seen by comparing the result tables presented in Appendix A. The interaction of the morphosyntactic properties exhibited by the nominals serving as coverbs can be seen in table A.2. In contrast, the behaviour of the nominals independent of an LVC is shown in table A.1.

The general pattern observed is one in which adjectival modification, determination by a demonstrative pronoun, oblique case marking and plurality are incompatible with nominal coverbs, as such properties affect the LVC meaning or induce an ungrammatical sentence. In respect of the agreement property, the coverbs behave as a nominal complement; the LV agrees in gender and number of the nominal coverb. The syntactic relation between an LV and a coverb was shown to be identical to the relation of an MV and a complement, in respect of the fronting, adverb insertion, and object movement operations. However the two structures behaved differently with question formation and pronominalisation. Coverbs cannot be questioned or substituted by a pronoun, whereas complements can participate in pronominalisation and be questioned.

It appears the type of detailed analysis provided in the present study has not been the focus of attention amongst the complex predicate literature of South Asian languages. The closest work cited throughout the thesis has been Megerdoomian's (2012) study of nominal coverbs in Persian. She provides substantial evidence supporting the argument that nominal coverbs and complements are in fact distinct. Her argumentation is based on language internal diagnostics derived from the morphosyntactic behaviour of canonical nouns. To mention a few, nominal complements can be questioned, whereas nominal coverbs cannot be. In respect of adjectival modification, the two categories behave differently: adjectival modification of coverbs led to an adverbial modification, while a complement was shown to modify without an adverbial interpretation. Similarly, nominal coverbs do not mark for plurality, whereas nominal complements can. The investigation demonstrated differences in respect of case; the two were shown to give rise to distinct case-assignment. The coverbs were shown to co-occur with a non-specific

object, which confirmed Megerdoomian's (2012) pre-theoretical claim that if nominal coverbs belongs to the syntactic class of nominal complements then we would not expect to find the two nominals co-occurring within one given clause.

Megerdoomian (2012) does not note any variation amongst the behaviour of nominal coverbs. Interestingly, we observe exceptions to the general pattern, in which coverbs can exhibit certain nominal properties without them interfering with the LVC meaning or affecting the grammaticality of the sentence. In comparing the plural cells of the two tables in Appendix A, it can be seen that four of the 22 nominals can also mark for plurality when serving as coverbs. The plural form of the coverbs gives rise to a pluractional reading. However not all coverbs that mark for plurality give rise to a pluractional reading. Instead plural marking on the remaining set of coverbs in (1) refers to the entity rather than the verbal predicate. For example, the singular form of the coverb \(\frac{1}{2}\)uw 'nit' in the LVC \(\frac{1}{2}\)uw \(pe\) 'to get nit(s)', lit. 'nit(s) attack' has the interpretation that the person has one nit, whereas the plural marker on the coverb has the interpretation that the person has more than one nit. Contrary to the coverb pattern in Potwari and other languages like Persian (Megerdoomian, 2012), such coverbs are not number neutral.

- (1) a. kire pe 'to get infested', lit. 'insect(s) attack'
 - b. \(\dag{z}uwa \) pe 'to get \(\text{nit}(s)', \) lit. '\(\text{nit}(s) \) attack'
 - c. #fala pe 'to blister', lit. 'blister attack'
 - d. *nil pe* 'to bruise', lit. 'bruise hurt'

Similarly the class of coverbs listed in (2) were shown to have the ability to be determined by a demonstrative pronoun, without interfering with the meaning of the LVC or the grammaticality of the sentence. The type of meaning interpreted for the LVC nil pe 'to bruise', lit. 'bruise attack' is 'I got this bruise.'. Also, the meaning interpreted for kire pe 'to get infested', lit. 'insects attack' is 'these insects infested me'.

- (2) a. kire pe 'to get infested', lit. 'insects attack'
 - b. dzuwa pe 'to get nits', lit. 'nits attack'
 - c. nil pe 'to bruise', lit. 'bruise attack'
 - d. məfi:n mar 'to vacuum', lit. 'machine hit'
 - e. $k\tilde{a}\eta a \ mar$ 'to comb', lit. 'comb hit'
 - f. brusmar 'to brush', lit. 'brush hit',
 - g. pent mar 'to paint', lit. 'paint hit'
 - h. $l
 i t^h mar$ 'to kick', lit. 'leg hit'
 - i. $ak^h mar$ 'to wink', lit. 'eye hit'

Adjectival modification is also possible for coverbs of LVCs listed in (3). To single out an example, when the adjective suwi/a 'red' modifies the coverb kira 'insect' of

the LVC kira pe 'to get infested', lit. 'insect hit', it gives rise to the meaning 'the red insect infested me'.

- (3) a. kira pe 'to get infested', lit. 'insect hit'
 - b. dzuwa pe 'to get nits', lit. 'nits attack'
 - c. nil pe 'to bruise', lit. 'bruise attack'
 - d. ulti lag 'to vomit', lit. 'vomit attack'
 - e. məfin mar 'to vacuum', lit. 'machine hit'
 - f. $k\tilde{a}\eta a \ mar$ 'to comb', lit. 'comb hit'
 - g. bruf mar 'to brush', lit. 'brush hit'
 - h. pent mar 'to paint', lit. 'paint hit'
 - i. nitf mar 'to sneeze', lit. 'sneeze hit'
 - j. pis mar 'to fart', lit. 'fart hit'
 - k. dəkar mar 'to burp', lit. 'burp hit'

In contrast, adjectives such as bari/a 'big' and $d\partial di/a$ 'strong' when modifying the coverbs listed in (4) modified the state of being hungry, thirsty, hot, cold and the event of coughing, rather than the coverb itself. The modifying adjectives gave rise to adverbial modification of the LVC with meanings such as 'I got severely/really hungry/thirsty/hot/cold'. Similar results have also been shown for Persian by Megerdoomian (2012, 197), in which the adjective hessabi 'awesome' when modifying the coverb vyolon 'violin' of the LVC vyolon violin' to play violin', lit. 'violin hit' modifies the event of playing a violin rather than the coverb itself.

- (4) a. $k \ni \tilde{\eta}^h$ 'to cough', lit. 'cough hurt',
 - b. tre lag 'to get thirst', lit. 'thirst hurt'
 - c. sərdi lag 'to get cold', lit. 'cold hurt'
 - d. gərmi lag 'to get hot', lit. 'hot hurt'
 - e. $puk^h laq$ 'to get hunger', lit. 'hunger hurt'

Further investigations are required in determining the conditions in which a coverb can be modified, determined, and/or pluralised without affecting the LVC meaning. Whether this is related to the internal properties of the nouns or whether it is related to the internal properties of the entire LVC, or both, is certainly a matter worthy of further research, but which goes beyond the scope of this study. To my knowledge such properties of coverbs have not previously been highlighted for related languages. It would be interesting to investigate whether such type of coverbs behave the same in Potwari's sister languages Urdu and Punjabi, and other language relatives, such as Persian.

Complex predicates are also formed with verbal and adjectival coverbs, albeit a considerably small class in comparison to the nominal coverbs. Little variation was shown to be apparent between the behaviour of Adj/V + V complex predicates

and Adj/V complement + V structures. The main similarities between adjectival coverbs and complements are as follows. Both occur in their root form, can be fronted, be separated by an adverb, and are positioned pre-verbally, although the two classes behaved differently with the object-movement, question formation operations, and the two have distinct argument structures. The positioning of verbal coverbs and complements differentiated one from the other, as did the question formation operation. The coverbs cannot be questioned, whereas complements can be questioned. In contrast, the coverbs and complements can be fronted away from the verbal predicate and an adverb can enter between an MV and its complement and an LV and a coverb.

It can be argued that the little variation observed is related to the small number of coverbs investigated. Hence it is important to provide a more nuanced picture of all types of adjectival and verbal coverbs. Since almost all of the Potwari LVs forming a complex predicate with a nominal are investigated, it can be said that nominal coverbs broadly represent the different types of LVs (see table A.2). In contrast, the same cannot be said for the adjectival and verb coverbs. That is, they are not necessarily representative of all adjectival and verbal coverbs because they are shown to combine with seven LVs, of which only two are investigated in this study, namely the LV kar 'to do' and the aspectual o_{asp} 'to become'. To be specific, adjectival and verbal coverbs can also combine with the following five LVs, namely de 'to give', re 'to stay', le 'to take', and rek^h 'to put', and dga 'to go'.

8.2.2 Auxiliaries & Light Verbs

I embarked on the challenge of confirming that Potwari supports the viewpoint that auxiliaries and LVs are syntactically distinct classes. LVs were shown to (i) combine with a non-verbal category, whereas the aspectual auxiliaries were shown to not combine with a non-verbal category, (ii) appear with the same case marking on the subject, while auxiliaries did not, and (iii) have the ability to take the non-finite marker, whereas auxiliaries did not. The syntactic relation between an LV and a coverb was also shown to be distinct from the relation of an MV and an auxiliary. The coverbs can be fronted away from LVs, whereas the MV cannot be fronted away from auxiliaries. Similarly, an adverb was shown to separate the coverb and LV, while it could not enter between the MV and auxiliary. The latter demonstrates that AVCs form a very tight syntactic unit in comparison to the LVC components, which are evidently syntactically flexible.

It is essential to the auxiliary and LV debate that the diagnostic tools are applied to other verbs that can be auxiliaries, MVs, and LVs. The perfect auxiliary da 'to go' and re 'to stay' can also function as a lexical verb and an LV. Ongoing research shows that da 'to go' and re 'to stay' can co-occur with a nominal predicate and that they are restricted to one case marking on the subject. However, they do not

have the ability to inflect for the non-finite marker. Also, the syntactic flexibility of these LVCs is tighter than the LVCs investigated in this thesis. The coverbal element cannot be fronted away from the LV nor can an adverb separate the two components. Similarly, in Urdu the AVCs and the aspectual LVCs are shown to be both syntactically tight units via scrambling tests (Butt, 1995). This raises questions on whether the so-called LV usages are true LVs like their cognates in Urdu-Hindi or whether they are merely an aspectual auxiliary. Further research is required on showing empirically how these perfect auxiliaries differ from their LV usages.

8.2.3 Lexical Semantics & Argument Structure

A central question within the complex predicate literature is related to formalising the intuition that LVs are semantically bleached/defective in comparison to MVs. Various theoretical approaches have addressed this question, though there has been little formalism of the "light" intuition in the way of South Asian languages. Generally, the argument structure approaches are in the vanguard, as they capture the idea that both the LV and the coverbal element jointly contribute to the predication power of the LVC, which are represented in various formal architectures (Alsina, 1993; Butt, 1995; Mohanan, 1994). Grimshaw & Mester (1988) and Rosen (1989) have attempted to do so by proposing that LVs are light because they have either a completely empty or merely an incomplete argument structure and thus LVs need to hook onto the argument structure of another predicate i.e. the coverb. Alsina (1993) views LVs as incomplete predicates that must combine with 'another argument taking predicate in order to be syntactically well formed' (c.f. Butt (1995); Alsina (1993)).

Butt (1995, 143-144) elaborates on the incomplete predicate phenomena, by proposing that at a-structure of the LV there is a transparent event. A transparent Event (ET) requires combination with the a-structure of another predicate and triggers Event or Argument Fusion. That is, the a-structure of the LV is fused with the argument structure of the co-verbal element. By using Jackendoff's (1990) model of Lexical Conceptual Structure (LCS), Butt goes on to argue that complex predicate formation in Urdu is best analysed as a merger operation on LCS. In employing Jackendoff's (1990) distinction between the Thematic Tier (roles Agent, Theme, Location, Goal, Source, Route) and the Action Tier (the roles Actor, Undergoer, Patient, and Beneficiary), Butt (1995) proposes that the two Tiers can provide the right mechanism to reflect the intuition that the LV is semantically bleached compared to its MV analogue.

The Thematic Tier essentially encodes the meaning of the verb and is headed by a function, such as CS 'cause', followed by other functions depending on the verb. One of the issues we come against in applying Butt's analysis is that her analysis for Urdu is based on verbal coverbs, whereas the majority of the coverbal elements

are nominals in Potwari: (fart), (vomit), (fever), (vacuum), (hand), (help), and (memory). It is a difficult task to map on functions that are canonically employed to capture the semantics of a verb. The precise meanings and truth conditions of the functions are not found in Butt's or Jackendoff's (1990) work. To facilitate a formal analysis, it is vital to understand the definitions and truth conditions/values of the functions, which could be facilitated via a compositional analysis.

With that said, we do not reject the claim that the coverb contributes to the argument structure. A natural progression of the present study is to examine the morphosyntactic and semantic contributions of the coverb. semantic features of the LVC in this thesis was a small scale analysis and in no manner accountable for all types of combinations of coverbs and LVs in Potwari. Nevertheless, it can facilitate an answer to a long standing question surrounding the compatibility of a given LV and coverb. An overview of the lexical semantic features and the argument structure for LVCs is presented in table 8.2 (see overleaf). It is evident that there is an agentivity vs. experiencer subject divide and that the two require certain syntactic conditions in which a given coverb can be compatible. The complex predicates formed with the non-agentive LVs e, 'come', lag 'to hurt', pe 'to attack, and o 'to become' were shown to be internally caused and to require an oblique case, which gave rise to an experiencer subject. In contrast, agentive LVs were shown to only be compatible with an ergative or a plain case, giving rise to an agentive subject. They were also categorised as internally caused or externally caused LVCs.

Under the argument structure viewpoint, the coverb and the LV both contribute to the argument structure. Intuitively there must be a morphosyntactic and a semantic component of the coverbs that allows them to combine with non-agentive LVs, agentive LVs, or even both, as well as the case markings associated with them. To single out a nominal coverb namely, mirgi 'seizure', which combines with the LV pe 'to attack', though more crucially it cannot combine with any of the other six LVs investigated. The coverb mcrigi 'seizure' denotes an involuntary bodily processor, which is why it can be said to be compatible with only the oblique case, giving rise to an experiencer subject, and consequently compatible with the LV pe 'to attack'.

I am not alone in raising the question regarding the semantic properties of the coverb that constrain combinatorial possibilities of coverbs and LVs. In fact, the question is one that has been posed over and over again, with the first serious discussion and analysis on the semantic constraints in combinatory possibilities of N + V complex predicate formations, made in an on-going study by Ahmed & Butt (2011) on Urdu. Their aim is twofold: (i) investigate possible constraints of the combinatory possibilities and (ii) establish semantic noun classes of the nominal coverbs. In following Levin & Rappaport Hovav's (1995) assumption that semantic classes can be identified by their syntactic structures, they establish the

Table 8.2: Argument Structure & Lexical Semantics of All LVCs

LV	Argument Structures	Lexical Semantics	Subject Case
1. <i>kar</i> 'to do':	$\langle Agent \rangle$	Agentive	PLN/ERG
		Internally Caused	
	$\langle Agent, Patient \rangle$	Agentive	PLN/ERG
		Externally Caused	
		Alternating or Non-Alternating	
	$\langle Agent, Theme \rangle$	Agentive	PLN/ERG
		Externally Caused	
		Non-Alternating	
2. o_{asp} 'to become'	$\langle Patient \rangle$	Internally Caused	PLN
3. mar 'to hit':	$\langle Agent \rangle$	Agentive	PLN/ERG
5. mai 00 mi .	(1190110)	Internally Caused	I EN/ ERG
	$\langle Agent, Patient \rangle$	Agentive	PLN/ERG
	\11gc110,1 \actic1c1	Activity	I EN/ ERG
		Non-Alternating	
	$\langle Agent, Recipient \rangle$	Agentive	PLN/ERG
	(11gent), 1tectipient)	Activity	I EN/ ERG
		Non-Alternating	
4. lag 'to hurt':	$\langle Experiencer \rangle$	Non-Agentive,	OBL
, and the second	,	Experiencer Subject	
		Internally Caused	
5. <i>e</i> 'to come':	$\langle Experiencer \rangle$	Non-Agentive	OBL
	,	Experiencer Subject	
		Internally Caused	
6. pe 'to attack':	$\langle Experiencer \rangle$	Non-Agentive	OBL
-	, • ,	Experiencer Subject	
		Internally Caused	
7. o 'to become'	$\langle Eaxperiencer \rangle$	Non-Agentive	OBL
	,	Experiencer Subject	
		Internally Caused	

semantic constraints of the coverbs by identifying the basis of the morphosyntactic environments the predicates occur in.

By doing this, they established three distinct noun classes (class A, class B, and class C) based on the interaction of 45 LVCs (extracted from a corpus) with the following three types of LVs: (i) kar, (ii) ho 'to become', and (iii) $h\varepsilon$ 'to be'. To exemplify briefly, they highlighted that all three LVs can combine with the psych noun jad 'memory', as illustrated in (5), (6), and (7). They demonstrated that the subject must be ergative case marked when the noun jad 'memory' is combined with the LV kar 'to do', which together has the interpretation of an agentive, deliberate remembering, illustrated in (5). In contrast, jad 'memory' in (6) combines with the LV $h\varepsilon$ 'to be', which has the interpretation that Nadya is already in the state of remembering the story. While in (7) jad 'memory' is combined with the LV hu 'to become', which has a stative meaning rather than the eventive meaning.

(5) nadya-ne kahani jad k-i Nadya.F.SG-ERG story.F.SG.NOM memory do-PERF.F.SG 'Nadya remembered a/the story.' (lit.: 'Nadya did memory of the story.')

- (6) nadya-ko kahani jad hε Nadya.F.SG-DAT story.F.SG.NOM memory be-PERF.3.SG 'Nadya remembers/knows a/the story.' (lit.: 'Memory of the story is at Nadya.')
- (7) nadya-ko kahani jad hu-i Nadya.F.SG-DAT story.F.SG.NOM memory BE.PART-PERF.F.SG 'Nadya came to remember a/the story.' (lit.: 'Memory of the story became to be at Nadya.')

Ahmed & Butt (2011, 306)

A summary of Ahmed & Butt's (2011) results can be seen in table 8.3 below. The check marks (\checkmark) show that the given noun type listed in the first column can combine with the LVs listed on the first row. The cross marks (\checkmark) show that the noun type cannot combine with the LVs due to morphosyntactic constraints. Class A nouns are comprised of psych nouns, which were shown to have the widest distribution, as they can combine with all three LVCs, as we see for the psych noun jad 'memory' above. In contrast, they showed eventive nouns cannot combine with LVs that give rise to a dative subject because they presuppose agentivity. That is, eventive nouns such as construction are incompatible with the LVs hu 'to become' and $h\varepsilon$ 'to be', as they give rise to a dative subject. It was also shown that nouns such as 'wait' and 'tolerance' cannot combine with the LV hu 'to become' due to the subject being too agentive for the dative subject, which typically requires an undergoer/patient/experiencer. Ahmed & Butt (2011, 308-9) concluded, pre-theoretically, the following semantic factors of the nouns that affect their ability/inability to combine with three LVs: eventive vs. statitivity of the nouns, and the agentivity vs. experience of the action.

Table 8.3: Three Distinct Noun Classes in Urdu

Class Type	Noun Type	kar 'to do'	hu 'to become'	$h\varepsilon$ 'to be'
Class A:	Psych - 'remember'	✓	✓	√
Class B:	Eventive - 'construction'	✓	X	X
Class C:	'wait'/'acceptance'/'tolerance'	✓	✓	X

Adapted from: Ahmed & Butt (2011)

A natural avenue I believe to be necessary in fully understanding Potwari LVCs is an investigation of whether the 55 nominal coverb based LVC combinations are determined by the syntactic and lexical item properties of the coverbal element. Also, whether similar semantic classes can emerge and perhaps identify the semantic constraints of the combinatory possibilities. In a preliminary investigation on all the possible combinations between the nominal coverbs and the seven LVs investigated, we observe that three coverbs *ulti* 'vomit', *sas* 'sigh', and *dəkar* 'burp' can combine with both oblique marked experiencer subjects and ergative/plain case marked

agentive subjects. Current research is addressing which component of these LVCs determines the case marking on the subject; is it solely the LV, the coverb, or both? One of the assumptions made in this thesis is that LVs appear with the same case marking. Based on the ability of the three coverbs to combine with the oblique cased marked subjects and the ergative/plain case marked subjects, the same assumption cannot be made for coverbs. In fact these constructions show that the LV determines the case marking on the subject, as the case marking changes according to the LV. With that said, there must be a morphosyntactic and/or semantic property of the coverbs ulti 'vomit', sas 'sigh', and dəkar 'burp' that allows them to combine with both syntactic structures (agentive and experiencer), as the other 52 nominal coverbs are only compatible with an oblique case marked subject or an ergative/plain case subject. Also it seems evident in (8) that the nominal coverb ja:d 'memory' is determining the genitive case on the object. Furthermore, the MVs serving as nonagentive LVs were shown to all have distinct argument structures. In contrast, the non-agentive LVCs were shown to project one type of argument structure. These data points indicate that the coverb must also contribute to the argument structure of the LVC.

(8) me bedzi-ni ja:d kar ni sa 1.SG.PLN granddad-GEN.F.SG memory.F.SG do IMPF.F.SG NPR.1.SG 'I was remembering granddad.'

It is observed that a set of eight nominal coverbs can combine with the LV kar 'to do' and the LV o_{asp} 'to become', which is not related to agentivity vs. experiencer subject split, but rather to the inchoative-causative alternation. The kar 'to do' forms the causative counterpart, while LV o_{asp} 'to become' forms the inchoative counterpart. These compatibilities are merely suggestive and, of course, the question regarding whether they are determined by the syntactic and lexical item properties of the coverbal element is one to be returned to.

A natural progression of this work is to also analyse the aspect of Potwari LVCs, as it is described as an integral part of complex predicate formation and the determination of case marking on the subject (Akhtar, 2000; Bashir, 1993; Butt, 1995; DeLancey, 1986; Ramchand, 1990; Singh, 1990). Butt (1995), in line with Singh (1990, 1994, 1998) argues that in addition to having an agentivity component, LVs also contribute aspectual information to the clause in that they focus on the particular points of an event, such as inception, duration or, completion. It has been proposed that the Urdu-Hindi LV par 'to fall' emphasises the initial stage of the event, while LVs such as \$\dar{g}aa\$ 'to go', \$de\$ 'to give', and \$lai\$ 'to take' focus on the final point of the event(Butt, 1995; Hook, 1974, 1991, 1993; Singh, 1990, 1994, 1998). The aspectual distinction is not necessarily exhibited in related languages; Akhtar (2000) observes that Punjabi is not sensitive to this distinction. In Potwari, the notion of inception can categorise one of Potwari LVs, namely the LV \$\omega\$ asp 'to become', though

it is not a feature of the other LVs. As a preview, it seems Potwari LVs do not make the same aspectual distinction as Urdu, although further investigations are required in claiming whether the LVs focus on the inception, duration, or completion of a given event. It also appears that the aspectual information of a given LVC is not solely determined by the LV, but also by the coverb.

8.2.4 Final Remarks

In undertaking this research, our main goals were to obtain a basic empirical distinction between LVCs and MV-complement structures and between LVCs and AVCs, in respect of both their syntactic and semantic properties. Efforts were made to reevaluate the claims and revalidate the important contributions made by the likes of Butt (1995), Megerdoomian (2012), and others, but with empirical data from the understudied language Potwari. Despite remaining problems, such as those cited in this chapter, and the restrictions on productivity for the three types of constructions, I believe the present study has achieved its main goals.

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RESULT TABLES

Table A.1¹ provides an overview of the 55 nominals, in respect of their behaviour with the six canonical nounhood properties. In contrast, table A.2 provides a cross-the-board view of the interaction of the coverbs with the five canonical nominal properties. The two tables are presented on pages 356-357. The check marks (\checkmark) indicate that the given nominal exhibits the morphosyntactic properties listed on the first row. The cross marks (\checkmark) symbolise the inability of the nominals to possess these properties.

¹Key: OBL: ability to take oblique case marker -ki, GEN: ability to take genitive case, LOC: ability to take locative case, ADJ: adjectival modification, AGR: MV-complement agreement and LV-coverb agreement, PL: plural marking, DEM: determination by a demonstrative pronoun, and DERV: ability to participate in a derivational process associated with nouns.

Nominal	OBL	LOC/GEN	DEM	AGR	ADJ	PL	POSS	DERV
1. fawər 'shower'	/	/	/	/	/	/	Х	_
2. pəmp 'pump'	1	1	1	1	1	1	Х	-
3. fon 'telephone'	1	1	1	1	1	1	Х	_
4. ulti 'vomit'	X	✓	1	1	1	X	X	_
5. gusə 'anger'	X	✓	X	X	X	X	X	/
6. kətəl 'murder'	X	X	X	X	X	X	X	✓
								-
7. bəs 'stop'	X	Х	Х	Х	Х	X	Х	Х
8. mədəd 'help'	X	Х	Х	Х	X	X	Х	Х
9. puf 'push'	X	X	Х	X	Х	X	X	Х
10. malə∫ 'massage'	X	X	X	X	X	X	X	X
11. ja:d 'memory'	Х	Х	Х	Х	1	1	1	Х
12. məfin 'vacuum'	1	/	1	1	1	1	Х	_
$\frac{12. \ k\tilde{a}\eta a \text{ 'comb'}}{13. \ k\tilde{a}\eta a \text{ 'comb'}}$	1	✓	1	/	1	1	X	_
$\frac{13. \text{ kaya comb}}{14. \text{ log'}}$	/	✓	/	✓	1	1	X	_
14. <i>lət</i> leg								-
$15. \ ak^h \text{ 'eye'}$	/	1	/	/	1	1	Х	-
16. bruf 'brush'	✓	✓	1	1	✓	✓	X	-
17. ath 'hand'	✓	✓	1	1	✓	√	X	
18. tar 'wire'	1	1	1	1	1	1	Х	-
19. tekst 'text'	Х	/	1	1	1	1	Х	-
20. pent 'paint'	X	1	1	1	1	Х	X	-
21. pis 'fart'	X	✓	Х	/	X	1	X	_
22. nitf 'sneeze'	X	✓	X	✓	X	1	X	
								-
23. dəkar 'burp'	X	√	Х	/	Х	X	Х	-
24. sas 'sigh'	X	1	X	1	Х	X	Х	-
25. #ut 'lie'	X	✓	X	X	X	X	X	✓
26. #ali 'jump'	X	X	X	1	X	X	X	-
27. ulti 'vomit'	Х	/	1	1	1	X	Х	_
28. $k \ni \tilde{\eta}^h$ 'cough'	X	1	1	1	X	X	X	_
29. dərd 'pain'	X	✓	Х	/	X	X	1	_
30. tre 'thirst'	X	✓	<i>'</i>	✓	X	X	X	
					<i>'</i>	✓		-
31. sərdi 'cold'	X	/	1	1			1	-
32. gərmi 'hot'	X	√	/	/	√	1	1	-
33. puk^h 'hunger'	X	✓	✓	1	X	X	✓	-
34. bahar 'fever'	X	✓	1	✓	X	X	✓	-
35. <i>irki</i> 'hiccup'	Х	1	Х	1	Х	1	Х	-
36. petfəs 'diarrhoea'	Х	/	Х	1	Х	Х	Х	-
37. pərsina 'sweat'	X	/	/	/	1	X	Х	_
38. pifav 'urine'	X		/	✓	1	X	X	_
		V		_				-
39. dəkar 'burp'	X	/	Х	/	Х	X	Х	-
40. nitf 'sneeze'	X	1	X	1	Х	1	Х	-
41. sas 'sigh'	X	1	X	✓	Х	X	Х	-
42. utru 'choke'	X	✓	Х	1	X	X	Х	-
43. nindər 'sleep'	Х	/	Х	1	X	Х	Х	
44. <i>rõn</i> 'cry'	Х	1	Х	/	Х	Х	Х	-
45. #fala 'blister'	· /	/	/	/		<i>'</i>	X	
46. <i>nil</i> 'bruise'	/	/	/	1	/	1	X	-
47. \(\dag{d}uw \) 'nit'	/	/	1	1	1	1	Х	-
48. kira 'insect'	✓	√	/	/	/	1	Х	-
49. soth 'swelling'	X	✓	/	✓	✓	X	X	
50. faləd 'stroke'	X	1	Х	1	Х	Х	Х	_
51. mirgi 'seizure'	Х	✓	Х	/	Х	Х	Х	_
52. fvgr 'sugar'		✓	/	/			✓	
	X					X		-
53. dərd 'pain'	Х	/	/	/	X	X	1	-
54. təklif 'pain'	Х	/	/	/	1	1	/	-
55. gəvsi 'constipation'	X	/	/	/	/	X	/	l _

Table A.1: Overview of Noun Properties

Coverb	LV	OBL	DEM	AGR	ADJ	PL
1. ulti 'vomit'	kar 'to do'	Х	Х	1	1	X
2. fawər 'shower'	kar 'to do'	Х	Х	1	X	Х
3. pəmp 'pump'	kar 'to do'	Х	Х	Х	X	Х
4. fən 'telephone'	kar 'to do'	Х	Х	Х	X	Х
5. gusə 'anger'	kar 'to do'	-	-	1	-	-
6. kətəl 'murder'	kar 'to do'	-	-	1	-	-
7. bəs 'stop'	kar 'to do'	-	-	1	-	-
8. mədəd 'help'	kar 'to do'	-	-	1	-	-
9. <i>pu</i> ∫ 'push'	kar 'to do'	-	-	1	-	-
10. malə∫ 'massage'	kar 'to do'	-	-	1	-	-
11. <i>ja:d</i> 'memory'	kar 'to do'	-	-	1	X	X
12. <i>mə∫i:n</i> 'vacuum'	mar 'to hit'	X	1	1	1	Х
13. $k\tilde{a}\eta a$ 'comb'	mar 'to hit'	Х	1	1	1	Х
14. $let^{\hat{h}}$ 'leg'	mar 'to hit'	Х	1	1	X	1
$15. \ ak^h \text{ 'eye'}$	mar 'to hit'	Х	1	1	X	X
16. bru∫ 'brush'	mar 'to hit'	Х	1	1	Х	Х
17. $a_{\underline{t}}^{h}$ 'hand'	mar 'to hit'	Х	X	1	X	Х
18. θar 'wire'	mar 'to hit'	Х	X	1	Х	X
19. tekst 'text'	mar 'to hit'	-	X	1	Х	Х
20. pent 'paint'	mar 'to hit' '	-	1	1	1	-
21. pis 'fart'	mar 'to hit'	-	-	1	1	1
22. nitf 'sneeze'	mar 'to hit'	-	-	1	1	1
23. dəkar 'burp'	mar 'to hit'	-	-	1	1	-
24. vasi 'yawn'	mar 'to hit'	-	-	1	✓	-
25. #ut 'lie'	mar 'to hit'	-	-	1	-	-
26. #ali 'jump'	mar 'to hit'	-	-	1	-	-
27. <i>irki</i> 'hiccup'	lag 'to hurt'	-	-	1	-	Х
28. ulti 'vomit'	lag 'to hurt'	-	X	1	X	-
29. dərd 'pain'	lag 'to hurt'	-	X	1	X	-
30. petfəs 'diarrhoea'	lag 'to hurt'	-	-	1	Х	-
31. $k \ni \tilde{\eta}^h$ 'cough'	lag 'to hurt'	-	X	1	Х	-
32. tre 'thirst'	lag 'to hurt'	-	X	1	Х	-
33. sərdi 'cold'	lag 'to hurt'	-	X	1	Х	X
34. gərmi 'hot'	lag 'to hurt'	-	X	1	X	X
35. puk^h 'hunger'	lag 'to hurt'	-	X	1	X	-
36. bahar 'fever'	lag 'to hurt'	-	X	✓	X	-
37. pərsina 'sweat'	e 'to come'	-	X	1	Х	-
38. <i>pi∫av</i> 'urine'	e 'to come'	-	X	1	✓	-
39. dəkar 'burp'	e 'to come'	-	-	1	-	-
40. sas 'sigh'	e 'to come'	-	-	1	-	-
41. nitf 'sneeze	e 'to come'	-	-	1	-	1
42. nındər 'sleep'	e 'to come'	-	-	1	-	-
43. utru 'choke'	e 'to come'	-	-	1	-	-
44. <i>rõn</i> 'cry'	e 'to come'	_	-	1	-	-
45. #ala 'blister'	pe 'to attack'	Х	Х	✓	1	✓
46. nil 'bruise'	pe 'to attack'	Х	1	1	1	1
47. kira 'insect'	pe 'to attack'	Х	1	1	1	1
48. <i>&uw</i> 'nit'	pe 'to attack'	Х	1	✓	1	1
49. soth 'swelling'	pe 'to attack'	-	X	1	Х	-
50. faləd 'stroke'	pe 'to attack'	-	-	✓	-	-
51. mirgi 'seizure'	pe 'to attack'	-	-	✓	-	-

Table A.2: Overview of Nominal Coverb Properties