

**Categorization of Light Verbs in Bangla, Hindi, Malayalam:  
a Study in First Phase Syntax**

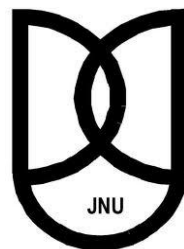
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**DOCTOR OF PHILOSOPHY**

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Dated: 31<sup>st</sup> of October, 2016

## CERTIFICATE

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Dated : 31<sup>st</sup> of October, 2016

This thesis titled "**Categorization of Light Verbs in Bangla, Hindi, Malayalam: A Study in the First Phase Syntax**" submitted by me for the award of the degree of Doctor of Philosophy, is an original work and has not been submitted so far in part or in full, for any other degree or diploma of any University or Institute.

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## **DEDICATION**

I dedicate this thesis to my adorable daughter, Miss Mishika Paul, who has sacrificed many of her precious moments, which she could otherwise have enjoyed and cherished with me, as she gave me time enough to complete my Ph.D. work.

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## List of Abbreviations

[B]	=	Bangla
[H]	=	Hindi
[M]	=	Malayalam
‘+dur’	=	durative process
‘+init’	=	‘+ initiation’ feature
‘+proc’	=	‘+process’ feature
‘+res’	=	‘+result’ feature
‘init P’	=	initiation phase
‘proc P’	=	process phase
‘res P’	=	result phase
1p	=	first person
3p	=	third person
acc	=	accusative case
cop	=	copula
dat	=	dative case
def	=	definite marker
emp	=	emphatic particle
erg	=	ergative case
gen	=	genitive case
infv	=	infinitive
init <sub>source</sub>	=	initiation source
init <sub>vol</sub>	=	initiation volitional
init	=	initiator
loc	=	locative case
LV	=	light verb
mas	=	masculine
MV	=	main verb
N_V	=	noun_verb
neg	=	negative marker
nom	=	nominative case
PARTCL	=	particle

PP	=	prepositional phrase
perf	=	perfective aspect
proc <sub>dur</sub>	=	process durative
proc <sub>dynam</sub>	=	process dynamic
prog	=	progressive aspect
prst	=	present tense
pst	=	past tense
quant	=	quantity
res <sub>affct</sub>	=	result affected
res <sub>attn</sub>	=	result attained
res	=	resultee
rh-g	=	rhetic ground
rh-p	=	rhetic path
sg	=	singular
undr	=	undergoer
V_V	=	verb_verb

# Chapter 1

## *Introduction: Light verbs and Complex predicates*

The domain of ‘light verbs’ has fascinated linguists for long, with respect to their argument structure configuration, semantic roles, the process, the degree of grammaticalisation of main verbs used as light verbs, their productivity and so on. The argument structure of light verbs in itself is a major concern among the scholars till today, and different people have given different opinions regarding this. Opinions have varied and ranged the argument structure of light verbs from having a reduced structure to having nil arguments.

The thesis focuses on mainly one of the issues in the complex predicate literature: the degree to which light verbs’ structural properties differ their main verb counterparts in three languages—Bangladesh, Hindi and Malayalam. It argues that the syntactically relevant properties of light verbs are not always smaller or lighter, but often heavier and bigger, than their main verb counterparts, a fact that becomes evident when complex predicates are analysed within the framework of *Event Structure Decomposition (ESD)* advanced by Gillian Ramchand (2008). This model enables us to probe into the depths of the structural configuration of light verbs, taking into account their syntactic and semantic roles individually at the interface levels and their interaction with one another, which also shows their dependence upon one another.

The thesis, thus, questions some of the long held beliefs regarding the issue of light verbs and brings into focus the issue that ‘light verbs’ should not be treated as grammaticalised or semantically bleached elements, rather they often have extrasemantic roles, some of which are not present in the main verb usages. In fact, they should not be clubbed together with the main verbs, but should be treated and grouped as a separate class or sub-class of verbs, or

what Butt (2001) refers to as a ‘semi-class’ of verbs, having certain functional usages or feature roles rather than just contentful meanings.

This chapter presents an introduction to the major issues and concerns that the thesis aims to explore in detail. Section 1.1 of this chapter presents an overview on complex predicate construction in the three languages under consideration in this thesis, that is Hindi, Bangla and Malayalam. In section 1.2, we discuss Ramchand’s (2008) proposals, and how V\_V type and N\_V type of complex predicates are analysed based on it. Finally in 1.3, we will present a brief outline about the thesis and its presentation.

## **1.1 COMPLEX PREDICATES IN HINDI, BANGLA AND MALAYALAM**

Complex predicate constructions are those in which two or more predicates, by mutual sharing of semantic features, syntactically combine to form monoclausal constructions so as to semantically describe a single unified event with a unified argument structure, in a lexically complex verbal form. Such constructions comprise of a 'lower' predicate and a 'higher' predicate, in which the former, the 'host element', may be a noun, an adjective, a verb, a preposition, or particle that describes the event. The higher predicate, on the other hand, is necessarily a verb – known as a ‘light verb’ – which bears the tense-aspect-mood markers.

Based on the type of lower predicate that the light verb combines with, complex predicate constructions are of two types, namely, compound verbs and conjunct verbs (Abbi, 1992). Verbs formed with two verbal elements such as V\_V type are known as compound verbs, whereas predicates which take a non-verbal element as their lower predicate and a verbal element as their higher then these complex predicates are called N\_V constructions or conjunct verbs.

For instance, the sentence [1] in Bangla show conjunct verb, and sentence [2] compound verb formations, respectively. Here in [1], ‘*dukkho*’ or ‘sad’ is the nominal which combines with the light verb ‘*pelo*’ or ‘get’ to form ‘*dukkho pelo*’ or ‘became sad’. Similarly, in [2], the

lower predicate is a verb ‘*kheye*’ or ‘eat’ which combines with the light verb ‘*nilo*’ or ‘take’ to form the compound verb ‘*kheye nilo*’.

1. ram baba-r kOthā-e dukkho pe-l-o [B]

ram father-gen word-on sad get-pst-3p

Ram felt bad on his father’s words.

2. bera1 puro dudh-ta khe-ye ni-l-o [B]

cat whole milk-def eat-partcl take-pst-3p

A cat drank the whole milk.

For example, the light verb ‘do’ combines with nominals such as ‘*swagātām ceydu*’ in Malayalam, which means ‘to welcome’ and can also combine with a verb such as ‘*phenk diya*’ in Hindi, which means ‘threw away’. There are other light verbs like ‘fall’ which can combine with only verbs such as ‘*bhenge poreche*’ in Bangla, which means ‘to break down’.

In conjunct verb constructions, the lower predicate can be a noun or an adjective. In an N\_V predicate, the noun bears no grammatical relation to other elements in the sentence, and functions as an integral part of the complex predicate, determining the number of arguments to be taken as well their theta-roles and postpositions. The class of complex predicates that has been referred to as the ‘conjunct’ verbs by Abbi (2002), and as ‘composite’ verbs by Dasgupta (2012).

When the lower predicate is a verbal form or participle, it is referred to as a converb. In the example [3], the higher predicate ‘*phel*’, meaning ‘throw’ in Bangla, bearing the tense, is the light verb while the lower predicate, ‘*kheye*’ – a verb -, meaning ‘to eat’, describing the event of eating, is the converb. Converbs (Abbi, 1991) are generally the modifiers of verbs and thus are said to have adverbial functions in the complex predicate constructions.

3. ram a: m-ta khe-ye phel-l-o [B]

ram mango-def eat-PARTCL throw-pst-3p.s

Ram ate up the mango.

4. sita paalu kud-ichu kalann-u. [M]

Sita milk drink-pst discard-pst

Sita drank up the milk.

Thus, ‘light verbs’, also known as Vector verbs, are those verbal elements which are semantically said to be light and tend to combine with some of the other lexical items, from the syntactic category of nouns, adjectives, verbs, adverbs, pre/post-positions or particles to form complex predicates, where the meaning of the formed predicate is derived from the meanings of both the two elements involved in the predication. The complex predicates act similar to endocentric compounds, where the meaning of the formed lexical item, comes from the inherent meanings of the items, participating in the construction. Depending upon the type of lexical item it combines with, there are two different types of complex predicates, namely, the conjunct verbs and the compound verbs (Abbi & Gopalakrishnan, 1991; Abbi, 2004; Butt, 1993, 2003, 2005; Butt & Geuder, 2001).

Light verbs in compound verbs are generally referred to as ‘explicators’ (Abbi, 1991), for, in these constructions they give specified meanings and modify the semantics of the main verb accordingly. Abbi and Gopalakrishnan (1992), exploring the light verb constructions known in the typological literature as ‘explicate compound verbs’ (Abbi, 1991) identified different types of functions that ‘explicators’ of the compound complex predicates take part in such as imparting aspectual, attitudinal, and adverbial and various specific shades of meanings to the clause. Abbi (2004) reports that studies on explicators in various languages has shown that they actually belong to a closed set, with limited members in it, and their characteristic behaviour across languages have made scholars to identify them as grammatical elements. Though delexicalised, explicators are marked for transitivity, and also, vitally, determine the case markings of their arguments. One of the essential features of these explicators is that their preverbs come with various participle markers, such as past participles, conjunctive

participles, etc. For her, these participles along with the explicators are components of ‘manner’, determining the manner in which the event described takes place. As such, semantic compatibility between explicators and participles is required to enable them to occur together with a main verb in a given clause to describe the event in question.

These light verbs, known as the higher predicate in the complex predicate constructions, are said to be delexicalised counterparts of their homophonous main verbs; tend to contribute some semantics to the core meaning of the new predicate; and is generally vested with carrying the agreement markers on them. The primary meaning of the complex predicate is thus, based on the meaning of the other lexical item, or the lower predicate, that the light verb is combined with and structurally they always follow the lower predicates. It must also be noted that there must be certain sort of semantic congruency between the light verb and its lower predicate, for every light verb in the grammar does not combine with every lexical item available in a given language, not does, a particular lexical item can combine with each of the available light verbs in the language. Only certain lexical items are allowed to take a couple or a small class of the light verbs as their vector predicate in the grammar, or in some cases the restriction is to such a great extent that the combination of one light verb with just one lexical item is permitted.

Crosslinguistic studies on light verbs in various languages have justified and proven the above stated facts to be true. Moreover, it has also been discovered that only a certain limited number of verbs enter into such combinations and come with these properties, while other verbs in the languages do not. More specifically, most light verbs have cognates across the languages, or at least across their neighbouring languages and language families. The most common light verb in the conjunct verb construction in Bangla and probably in most Indo-Aryan languages is ‘*kOra*’, ‘do’ verb, and shows the highest degree of productivity in combining with loan words, to form complex predicates, followed by ‘*holo*’, ‘be’ verb. Abbi (1992) has shown that there are cognates of light verbs such as ‘*throw*’, which is the most productive, ‘*keep*’, ‘*take*’, ‘*fall*’, etc, contributing same or similar semantics to the explicator compound constructions. Also there are light verbs, which function as the higher predicate in both the two types of complex predicates, such as ‘*rise*’ and ‘*fall*’ in Bangla, the cognates of which are ‘*otha*’ and ‘*pOra*’, respectively, while there are light verbs such as the ones stated



above, along with many others, which either take part in conjunct verb formations or in compound verb constructions

With regard to the argument structure of light verbs and that of the complex predicates they form, there is also considerable debate in the generative literature. Grimshaw and Mester (1988) state that the argument structure of light verbs is empty, but the coverbs or the preverbs have arguments, which they transfer to the light verbs. This is so because the coverbs and preverbs are unable to assign case and theta-roles to their arguments, and so for satisfying case-filter and theta-criterion, argument transfer takes place in complex predicate constructions.

On the other hand, in Bowers (2004) and Butt (1995), it has been claimed that light verbs have a reduced argument structure such that they have arguments but have no roles to assign to them, and can therefore pair with nominal and adjectival (which have semantic roles to assign but lack arguments to which they can assign them). In conjunct verb constructions, these non-verbal heads combine with light verbs to form complex predicates, in which the arguments are provided by the light verbs and semantic roles are assigned to them by the non-verbal heads for the fulfillment of the theta-criteria. Thus, such complex constructions arise due to structural asymmetries, to sort out the argument-assigning difficulties of the coverbs or preverbs, giving overt realization of the implied argument-assigning capabilities of the light verbs. However, functionally, (Butt, 2003) states that light verbs provide further information to the main predication or “*modulate*” (Butt, 2003) the information structure, in a manner not brought about by either main verbs or modals and auxiliaries.

Others such as Paul (2004) have claimed that in compound verbs, the argument structure of the complex predicate is determined primarily by the argument structure of the main verb (V1). But, the argument structure of V2 alters or modifies the argument structure of the resultant compound verb in certain cases, when a particular main verb combines or unifies with a light verb. Thus the argument structure of predicates is semantically conditioned and the light verbs argument structure plays a vital role in contributing to the argument structure of the explicator compound verb, which makes it different from that of the main verb, therefore lending a different semantics to the resultant compound verb. In fact, Paul (2009)

states that it is important for the main verb and the light verb to be semantically compatible to unify to form a compound verb. Paul (2004) shows that the semantics of the V2 – the light verb – plays a significant role in determining the argument structure of the complex predicate.

Bhattacharya (2002) counters Butt (2001) that light verbs do not participate in the grammaticalisation process, showing that auxiliaries in Hindi, Bangla, and in a couple of Dravidian languages seem to be grammaticalised light verbs. However, they throw light on two important findings regarding light verbs, which are important for the present thesis. They show that light verbs form an outer shell of the verbal extended projection and are aspectual because auxiliaries involve aspect and light verbs grammaticalise to form such auxiliaries, thus light verbs must also have aspectual functions. Thus, the structure of a complex predicate according to Bhattacharya and Babu (2002) is vP – Asp P.

In connection to the aspectual features on light verbs, Paul (2004) shows that it is the V2 in such complex predicates that not just carries aspect but also introduces focus on the V1 event in a discourse, changing the event type of the resultant complex predicate. The resultant event of the formed complex predicate is a new and a different one compared to its V1 associate.

Dasgupta (2012) claims that the transitivity of the complex predicate is dependent on the ‘light verb’ that takes a nominal to form the complex predicates. According to him, certain Bangla light verbs, such as ‘*kOra*’, necessarily take ‘*experiencer subjects*’ compared to others, and the presence of such experiencer subjects throw enough light on the fact that these light verbs that take non-verbal elements behave differently compared to those that take verbal elements.

Similar to these, there are various ongoing debates in the literature providing several contrasting issues on the process of how and why light verbs alter the argument structure of their main verb counterparts and how is the new argument structure of the complex predicate determined as also what is the actual function of the light verbs in such constructions. These

are the views that we are certainly going to examine so as to figure out that the light verbs do have their own argument structure or not.

### **1.1.1 Bangla Complex Predicates**

In relation to complex predicates, significant areas have been worked upon with useful findings in Bangla. One of the leading contributors, Paul (2004) accounts for a concrete factor responsible for the alternation in the semantics of the main verb in a complex predicate. The triggering factor is the semantics of the V2 which not only changes the meaning of the resultant complex predicate, but often alters the argument structure of the main verb. Since argument structure is dependent on the semantics of the complex predicate, therefore modification in the meaning of the resultant complex predicate also might and often does modify the argument structure of the same. Also she states that the syntactic behaviour of this new complex predicate might be different from its V1.

Other significant works on Bangla Complex Predicates have been done by Dasgupta (2012), where he shows that light verbs do contribute to bring forth certain aspectual properties of the event, beside projecting transitivity. While Bhattacharya (2002) supports that light verbs are actually grammaticalised elements in the language, with regards to their changing into auxiliaries.

The above studies throw enough light on the fact that the light verbs in such complex predicates are not simply 'light'. They have a number of functions – both semantic and structural – when they combine with verbal / non-verbal elements to form complex predicates. However, the debate remains unsolved even here as to whether light verbs are in the grammaticalisation cline and or whether they form a separate class of their own.

### **1.1.2 V\_V Predicates and Their Cognates**

We will first have a look at the list of the verbs that have light verb usage to form V\_V complex predicate in the three languages and see whether we have light verbs cognates,

which combine with main verbs to form verb-verb complex predicate constructions. The table 1.1 gives a detailed picture.

The table shows that there are at least three verbs, namely, ‘keep’, ‘go’ and ‘give’ that are used as light verbs in V\_V predicates in the three languages. Also, at least four verbs have light verb usages in the two indo-Aryan languages of Hindi and Bangla, such as ‘rise’, ‘fall’, etc. Apart from these, there are other verbs which actively take part as light verbs to form V\_V complex predicates in the languages.

Table 1.1: List Of Light Verbs, Forming V\_V Predicates

Light verb	English
<i>rakhlo</i> (B) <i>rakkha</i> (H) <i>vāčču</i> (M)	‘to keep’
<i>gElo</i> (B) <i>dzana</i> (H) <i>pooyi</i> (M)	‘to go’
<i>dilo</i> (B) <i>diya</i> (H) <i>koduttu</i> (M)	‘to give’
<i>nilo</i> (B) <i>liya</i> (H)	‘to take’
<i>uthlo</i> (B) <i>uthna</i> (H)	‘to rise’
<i>ashlo</i> (B) <i>ana</i> (H)	‘to come’
<i>porlo</i> (B) <i>giRna</i> (H)	‘to fall’

<i>phello</i> (B)	‘to throw’
<i>dekhlo</i> (B)	‘to see’
<i>dubna</i> (H)	‘to drown’
<i>maRna</i> (H)	‘to beat’
<i>pOhOcna</i> (H)	‘to reach’
<i>pəRna</i> (H)	‘to lay’
<i>bEthna</i> (H)	‘to sit’
<i>kalannu</i> (M)	‘to discard’
<i>karinnu</i> .(M)	‘to complete’
<i>parannu</i> (M)	‘to say’
<i>talli</i> (M)	‘to push’
<i>tuDangi</i> (M)	‘to start’
<i>unDa:ki</i> (M)	‘to make’

### 1.1.3 N\_V Predicates And Their Cognates

The other major type of complex predicates formed by the ‘light verbs’ in our languages, specially in the languages spoken in the south east Asia is the N\_V type, where the light verb takes a non-verbal such as a nominal, adjectival elements to form the complex predicate. This class of complex predicates has been referred to by various terms in literature such as the ‘conjunct’ verbs (Abbi, 1992), the ‘composite’ verbs (Dasgupta, 2012). The three languages of Hindi, Bangla and Malayalam productively make use of this combination to create new complex predicates often. Among the light verb that select nominal elements , the verb ‘do’ is the most productive, for it can combine with any noun, taken from any language, to form a new N\_V predicate in the given language and the novel predicate so formed is widely used by the concerned speech communities.

Some of the verbs of the light verb category that form V\_V predicates in the languages under consideration, also select nominals and other non-verbal elements to form N/A\_V type of predicates. Also there are a number of other verbs of the light verb category, who exclusively combine with nominals only. The N\_V complex predicates often have nouns combining with light verbs in our languages. These nominals are often mistaken to be the direct objects of the verbs. Therefore, it is often necessary to distinguish between direct objects of a main verb and the nominals of such composite complex predicates. Pantcheva (2009) states that certain noun non-verbals exhibit properties of direct objects but are distinct from real arguments, and draws upon syntactic-semantic differences between them. For example, direct objects might first appear in the spec res or spec proc but noun non-verbals always first appear in the rhemes. Various tests, such as scrambling, presence of another object, etc, have been proposed in the literature, based on which some of them are being used here in order to identify the specific role of the nominal in a given construction.

We will here examine the event structure of these non-verb – light verb pair of complex predicates or N\_V predicates and determine the categorical features of the so – called ‘light verbs’, and see whether the assumptions made earlier can be co-related with the evidence here. We can see that the verbs like ‘give’, ‘do’ function as light verbs in all the three languages of Bangla, Hindi Malayalam, whereas, verbs like ‘beat’, ‘be’, ‘feel’ in Hindi and Bangla, and verbs like ‘keep’ in Hindi and Malayalam.

Since we have cognate light verbs found across language families, our aim is to find out whether these cognates project same event structure across languages families when they form composite (or conjunct) complex predicates and also whether they come with the same categorical features in the lexicon. If they show the same feature set, then what do they actually signify and are they related to one another in the universal grammar, which might be responsible for their similar behavior across languages and language families. The ‘light verbs’, those take ‘non-verbals’ as their polar elements, in these three languages, can be illustrated in the table 1.2.

Table 1.2 : Light verbs forming N\_V predicates

<i>Light Verbs</i>	<i>English</i>	<i>Example</i>	<i>Meaning</i>
<i>deoa</i> (B) <i>dena</i> (H) <i>koduttu</i> (M)	To Give	<i>kOtha deoa</i> <i>bag diya</i> <i>kaRuki koduttu</i>	promised crowed washed
<i>kOra</i> (B) <i>kəRna</i> (H) <i>ceydu</i> (M)	To Do	<i>proshongsha korechilen</i> <i>mədzbur kiya</i> <i>svagətəm ceydu</i>	praised forced welcomed
<i>rəkkha</i> (H) <i>veccu</i> (M)	To Keep	<i>nədzər rəkkha</i> <i>occa veccu</i>	kept a watch made noise
<i>marə</i> (B) <i>maRna</i> (H)	To Beat	<i>pOket mereche</i> <i>gəppe maRna</i>	pickpocketed chated
<i>hOwə</i> (B) <i>hona</i> (H)	To Be	<i>bomi hoyeche</i> <i>dərd hua</i>	vomited got pain
<i>lena</i> (H) <i>vangi</i> (M)	To Take	<i>mol li:</i> <i>kadam vangi</i>	purchased borrowed
<i>laga</i> (B) <i>lagna</i> (H)	To Feel	<i>gOrom legeche</i> <i>gərmi ləgi</i>	felt hot
<i>lana</i> (H)	To Bring	<i>ənkə laya</i>	scored
<i>məčaya</i> (H)	To Spread	<i>bhəgdər məčaya</i>	created fuss
<i>otha</i> (B)	To Rise	<i>hecki uthlo</i>	hiccupped
<i>parannu</i> (M)	To Say	<i>para:ti paraṅṅu</i>	complained
<i>pOra</i> (B)	To Fall	<i>bOrof poreche</i>	snowed
<i>pəRna</i> (H)	To Lay	<i>gərmi pərti</i>	gets hot
<i>pawə</i> (B)	To Get	<i>khide pechilo</i>	got hungry
<i>ana</i> (H)	To Come	<i>pyar aya</i>	felt love
<i>khawə</i> (B)	To Eat	<i>bOkə khelo</i>	got scolded

<i>konDu</i> (M)	To Contain	<i>pangka konDu</i>	participated
<i>kuTTi</i> (M)	To Gather	<i>vaRakka kuTTi</i>	quarreled
<i>dhOra</i> (B)	To Hold	<i>ga:n dhOreche</i>	started singing
<i>aayi</i> (M)	To Become	<i>mənəssil a:yi</i>	understood

## 1.2 THE THEORETICAL FRAMEWORK OF EVENT STRUCTURE DECOMPOSITION OF RAMCHAND (2008)

The research literature in generative syntax has always engaged with the debate as to whether meanings are semantic-conceptual in nature or are derived from the structural configurations in which lexical items take part in. Ramchand's model makes a break-through by proposing a framework that takes into account both sets of views and further puts them at par with one another, for one cannot function on its own without the presence of the other. She shows that both the structural configuration of verbal heads and lexical items, along with the semantic relationship or rather semantic dependence on one another in the configuration enables us to study the verb meanings.

The theories are all based on the concept that there happens to be a functional projection or a functional structure, below the verbal / lexical heads, which plays a crucial role in coordinating the two meanings – structural and conceptual. In this respect, we need to mention the frameworks put forth by Hale and Keyser (1999) and Levin and Rappaport Hovav (1995), preceded by Larson (1988) – all of which constitute foundation on which the present framework has been built upon. Accordingly this section first presents in Section 1.2.1, a brief overview of these foundational developments before proceeding in section 1.2.3 to describe Ramchand's analysis of complex predicates in particular.

### 1.2.1 Event Structure Decomposition: The Foundations

Larson (1988, 1990) was the first to propose that the double object construction and the simple dative form are derived from a unique underlying structure. As is well known, Larson



proposes VP-shells, where the higher VP selects for the lower VP and this lower VP actually contains the two objects as its specifier and complement. He argues that ditransitive predicates involve a VP shell structure to involve head-to-head movement, where the verb from the lower V substitutes into the higher V, thus assigning Case and theta-roles to the two NPs in the lower shell first, and then to the third, the external argument, after substitution.

Larson uses VP shells to develop an analysis of dative shift that builds up arguments for the syntactic involvement of the decomposed verbal projections he has posited. Dative shift he argues, results from the use of a rule of VP-passive. PASSIVE absorbs the case assigned to the indirect object and also results into the demotion of the theta-role of the direct object. This triggers NP movement to subject position while the suppressed subject  $\theta$ -role is optionally realized by the adjunct phrase. This is in a special way referred to as the ‘*Argument Demotion*’, which is stated by Larson (1988: 352) as:

“If  $\alpha$  is the  $\theta$ -role assigned by X’, then  $\alpha$  may be assigned (up to optionality) to an adjunct of X’.”

Therefore, the direct object gets realized as the V’ adjunct, the indirect object undergoes NP movement to the outer VP subject position and the verb raises from the V-head of the inner shell to that of the outer VP shell.

Hale and Keyser (1993) build on Larson’s insights, and give primacy to the notion of a pre-syntactic ‘*lexical conceptual structure*’. According to ‘*lexical conceptual structure*’, a lexical entry has two levels of descriptions, namely, first, the syntactic description, and secondly, the lexical-semantic description. The lexical – semantic description provides meaning to the root word while the syntactic description states the theta-roles, the linear positioning of the arguments , etc.

Hale & Keyser (1993) claimed that the argument structure of a verb is syntactically defined and represented. and their approach explains why there are few semantic role types. An individual lexical category (N, V, etc.) is constrained to project syntactic structures using just the syntactic notions of specifier and complement because these syntactic structures are

associated with coarse-grained semantic notions. The syntactic positions in these structures correspond to semantic roles.

Based on two fundamental relations of an argument structure, namely, the Head-Complement relation and the Specifier-Head relation, four possible lexical structural configurations seem to be projected, which are neutral such that they can project for any lexical category, N, V, A, P, and are language-dependent. Further, they also show that these predicates undergo the derivational process of ‘conflation’, a special type of incorporation, in which the phonological component of a complement (or of the head of a complement) replaces the empty component of the governing head, which selects the complement.

According to Hale and Keyser (1999), argument structure can be of mainly 4 types, namely the head alone type, basic monadic type, basic dyadic type and composite dyadic type. The ‘Head alone’ types are ones where the structure permits the presence of only the head or the lexical category only, with no specifier or complement positions available. E.g. , any nominal element such as *‘shelf’*, *‘saddle’*. The ‘basic monadic’ types are ones where the structure permits the presence of the head and its complement. E.g., in English, *‘made trouble’*. Basic dyadic types are those where the structure permits the presence of the head, along with the internal arguments, its specifier and its complement. For example, in English, locatum and location verbs like *‘the books on the shelf’*. Composite dyadic types are those where the structure permits the head to appear with a specifier, without the presence of a complement, such that the head has a property to appear as a complement to another head ‘h\*’, as in English deadjectival verbs such as *‘reddden’*, *‘lengthen’*.

### **1.2.2 Event Structure Decomposition (First Phase Syntax): Ramchand (2008)**

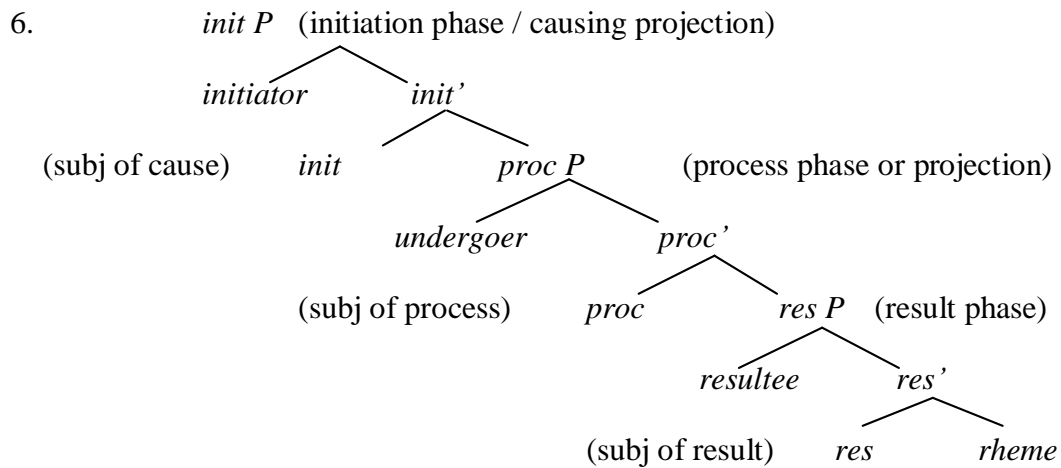
Continuing in the Hale and Keyser tradition, Ramchand (2008) claims that the semantic information “*comes from the interpretation of the syntactic structures that the verbs participate in*”, such that the morpho-syntactic aspects and lexico-semantic features are put in one conjugated framework so as to decompose the verbal stem into its eventual and aspectual configuration. The basic assumption happens to be that every verbal item comes

with certain inherent semantic features, based on which they behave differently and can be grouped into separate categories. These features are initiation (+init), process (+proc), result (+res) and verbs inherently come with a combination of some or all of these features. The framework, in detail, will be discussed and we will see how the model is supposed to function, what were the tests proposed in this framework, their results; and are they sufficient enough to continue with the framework as it has been advanced or are there some constraints with its operations.

The main event of the verb is mainly decomposed into three sub-events, each in turn describing and contributing to its own semantic domain as well as that of the main event. The three sub-events are, namely, the initiation sub-event, the process sub-event and the result sub-event, each represented on its own projection, ordered in a hierarchical relation, such that the required lower projection is first constructed and the next higher one is embedded above it. Each of the projections are structured with a head, taking two argument positions, namely the ‘specifier’ and the ‘complement’, thus forming two structural relations, the specifier-head and the head-complement relations (Hale & Keyser, 1998) keeping in accordance with the basic framework of predicational argument structural relations.

The specifier positions are filled by the ‘subjects’ of the concerned sub-event while that of the complement by the immediate lower projection or the sub-eventual phrase, which provides meaning to the sub-event in question. Beside the three sub-eventual phases, there is another element named ‘Rheme’ that shows up in the structure. This is sort of a special position, serving as the complement of the eventive heads, in certain cases, either when the immediately next lower level phase cannot be projected on the tree or when the result phase takes a complement necessarily.

Rhemes tend to co-describe the predicational head it combines with and can be either DPs/NPs, APs or PPs. The diagrammatic structure as advanced in the framework (Ramchand, 2008) is illustrated in [6].



One of the crucial aspects of this model is that it aims to draw a close connection between phrase structure and compositional semantics, having a constrained and restricted set of primitives, known as categorial features. The framework hypothesises that certain semantically abstract notions such as ‘event structure’, ‘predications’, ‘part-whole structure’, ‘telicity’, ‘scalarmity’, etc. are part of the structural semantics, configured as central to the computational system of the language. This enables us to separate out the semantic features that are structurally associated from those that have purely conceptual bases.

Thus, in the event structure decomposition framework, a single verbal stem is decomposed into separate parts, which are structured together for the semantic interpretation of the same from its decomposed syntactic configuration. As stated by Levin and Hovav (1995), predicate decomposition is essential, for verbs can be related to each other based on the decompositional structure that they share, being of the same category, -- “*verbs belonging to the same semantic class have common substructures in their decomposition.*” Such a decomposition quite naturally has consequences for the conceptualisation of thematic/semantic roles.

Unlike Hale and Keyser, where six to seven major thematic roles are distinguished and are assigned to the specifier and complements of lexical configurations, but also in contrast to Levin and Hovav approach, where thematic roles do not figure, Ramchand's proposals rely primarily on the semantic interpretation of verbs and the semantic roles that a verb and its

arguments participate in. The difference between the three approaches is described briefly below.

The external arguments are the ones that are identified as *initiators* in Ramchandian framework. Ramchand's proposal for an *init(iator)* theta role is in keeping with the understanding advanced by Hale & Keyser (2000), as it denotes the causer or the one responsible for causing an event to happen/begin. 'Init' arguments may be volitional/non-volitional, agentive/non-agentive, instrumentals, abstract causers or sources. It is an initiator's inherent properties that are responsible for its coming into existence.

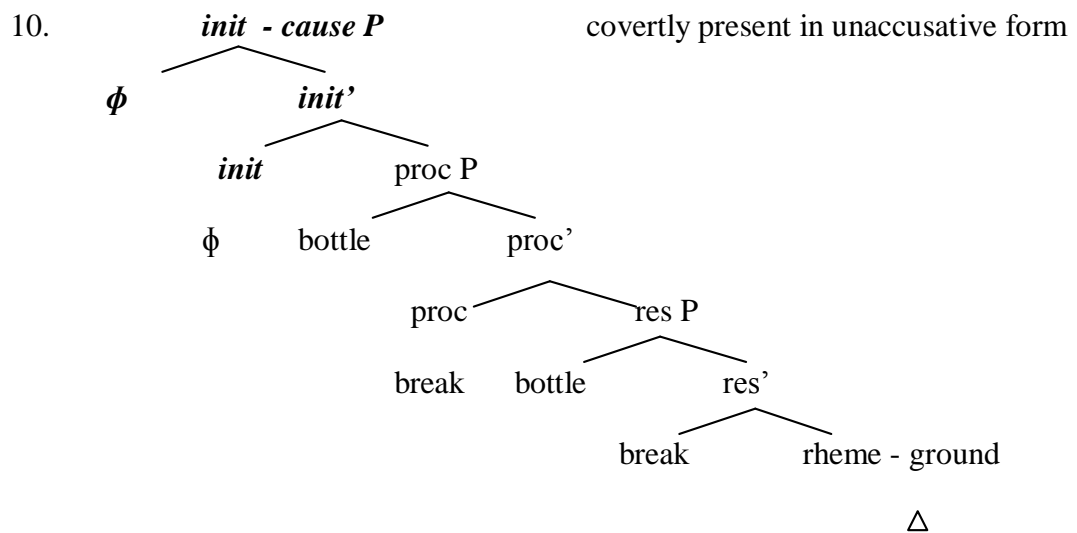
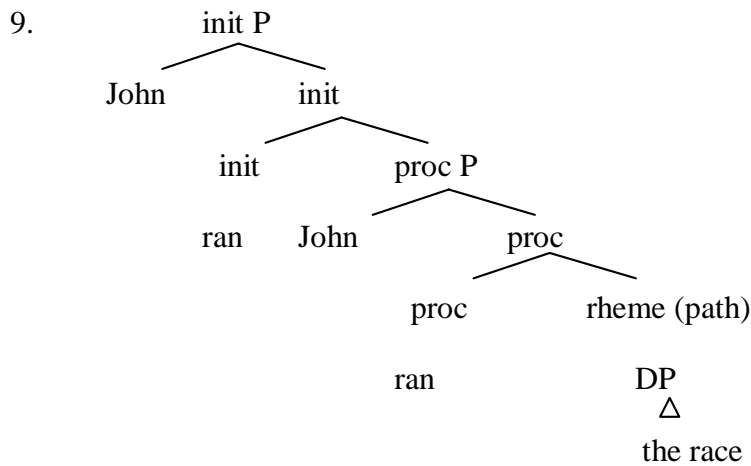
Ramchand argues for a process that involves 'structure building' as opposed to lexical subtraction or addition preferred in earlier approaches. We might say that the direction of causative alternation is transitivization, similar to that of Hale and Keyser (1998), in which they favor derivation from intransitive to transitive forms because according to them it is the intransitive that represents the simplest structure. This is in sharp contrast to the analysis of Levin and Rappaport-Hovav (1995), who argue in favor of the detransitivisation.

In Ramchand (2008), non-alternating verbs, irrespective of transitive or intransitive, have an overt init head, blocking the projection of a further causal head, while alternating verbs have a *null lexical cause head* in the initiation head position, being realized overtly in transitive versions only. As such for an intransitive verb, without the +init feature, when requires a causal event, then the null causational initiation head will be constructed above the already available decomposed structure. Thus where the sole argument of the unergatives identifies init necessarily, the unaccusatives do not identify init head at all.

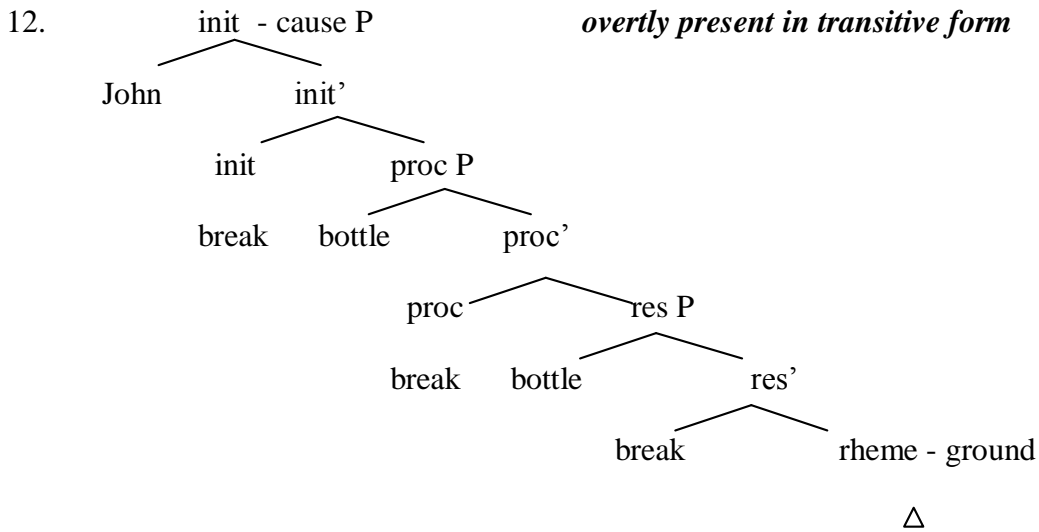
For example in [7], the verb 'run' – an unergative – seems to come with the features of [+init, +proc] and therefore projects two sub-eventive phases, with two head positions and two specifiers. The heads are identified by 'run' and the sole argument, 'John', is selected in the two spec positions, functioning as the INITIATOR and the UNDERGOER. The structure for [7] is illustrated as in [9].

- 7. John ran the race. / run: [init, proc]
- 8. The bottle broke. / break: [proc, res]

On the other hand, for an alternating verb like ‘break’– an unaccusative as in [8] –the verb comes with a null init head, that remains covertly present in the structure. The verb ‘break’ projects and identifies the two heads – that of [+proc] and [+res]. The internal argument, ‘the bottle’ functions as the UNDERGOER of the action as well as the RESULTEE. The structure of [8] is as in [10].



11. John broke the bottle./ break: [init, proc, res]



The same verb ‘break’ when transitivises, the causational init head is merged and embedded above the available decomposed structure – that is embedded above the proc phase – and creates the init head position, which the verb ‘break’ now identifies owing to its causational feature. The specifier position of init head is the site when the external argument, for example, ‘John’ as in [11] is selected. These are the subjects with abstract causes compared to the subjects with expected actions as in unergatives. The diagrammatic representation of [11] is shown in [12].

The internal argument of transitives and the only argument of the unaccusatives (Levin & Hovav, 1995; Hale & Keyser, 1998) can be merged in either or both of two positions in Ramchand's framework, -- the ‘undergoer’ and the ‘resultee’ -- in contrast to just one position in other models. If the internal argument gets affected as the result of the action, it is merged at the specifier position of the result head, as the ‘resultee’. Also if the same internal argument suffers or undergoes the action described by the verb then it must ‘raising’ to the specifier of process head as the ‘undergoer’. For Ramchand, such ‘raising’ involves copying and re-merger, whereby the DP in the specifier position of ResP is copied and that copy is merged into the specifier of procP.

Ramchand further typologises this complement position into two categories of rhemes – rhemes of path or process and rhemes of result or location - making a distinction between the conflation<sup>1</sup> into the process head or into the result head. For example, in [13], the verb ‘dance’ selects a complement ‘a jig’, which specifies a kind of dance that was danced. The predicate thus, indicates a process of dancing that has been danced. Thus, the DP, ‘a jig’ becomes the rheme-path, along which the action takes place. On the other hand, in [14], the verb ‘jump’ selects a complement ‘into the field’, which specifies not the process of the action but a location – a ground – where the action ends, as a result of the event. Thus the PP ‘into the field’ is the rheme – ground.

13. *Mary danced a jig.*

14. *Katherine jumped into the field.*

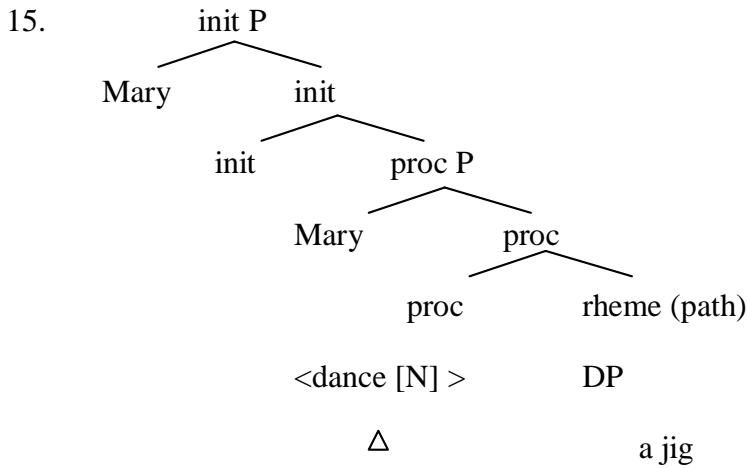
The internal arguments in this decomposed framework as such have one position where they can be selected – the rhematic head. The diagrammatic representation of [13] is as in [15], where the external argument ‘Mary’ is selected as the specifier of proc head then it is copied and merged in the spec of init head. The verb ‘dance’ – a conflation verb in Hale and Keyser (2000) approach is first selected as the proc head which then is copied and merged as the init head. The DP complement ‘a jig’ is selected as the rhematic path.

This rheme can further be decomposed as in [16]. The conflation verb ‘dance’ has a nominal eminent underassociated in the proc head. This nominal feature of the conflation verb ‘dance’ is visible within the decomposed rheme, where ‘dance’ is selected as the noun, the rhematic head, and the DP ‘a jig’ as the complement of this N. higher up the tree, when ‘dance’ needs to be selected as the ‘verb’ as in proc head, its nominal feature gets underassociated as [N] at the proc head as shown in [15].

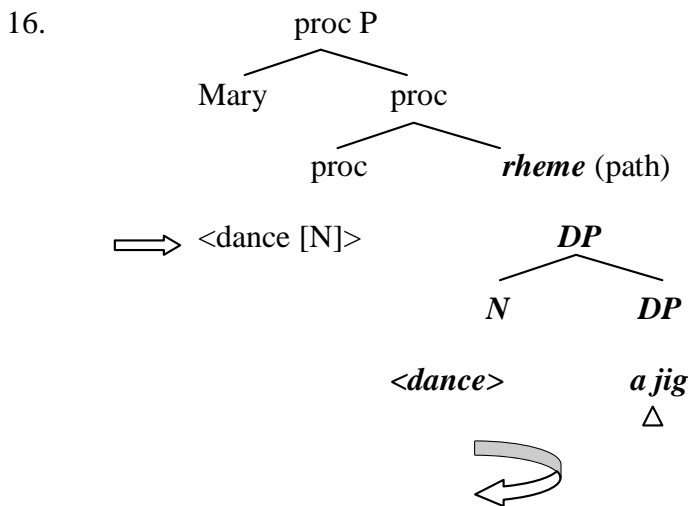
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<sup>1</sup> The term ‘conflation’ has been used by Ramchand (2008) in her analysis, following Hale and Keyser (2000) ’s concept of conflation . [Ramchand (2008), pg 103]





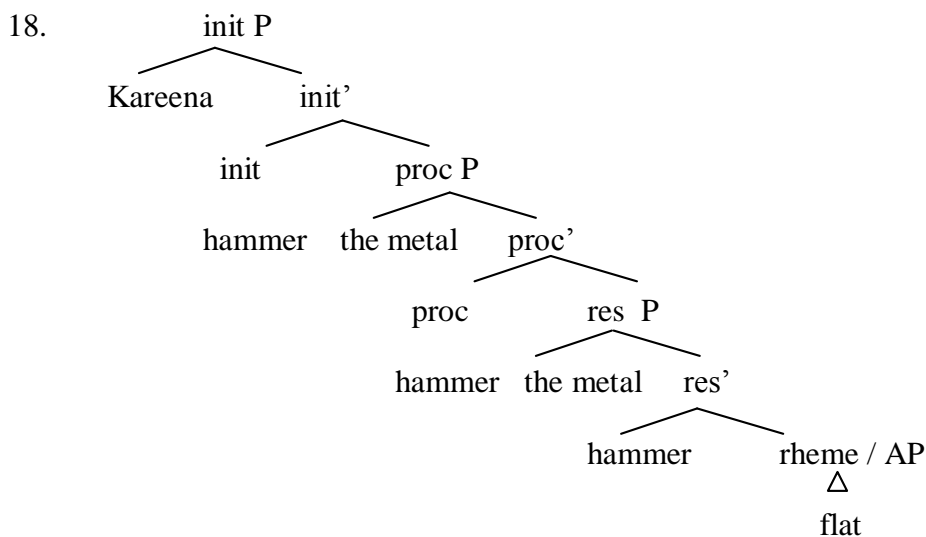
The decomposed rhematic structure would look like [16]:



Resultative and depictive secondary phrases, which in Levin and Hovav (1995) are used to distinguish between the two types of intransitives, are also decomposed in the event structure framework, such that though they are rhematic constituents, they are categorized into different types, with different categorial featured objects, that they are predicated of. The two broad types are *path resultatives*, and the *result resultatives*. In these constructions, the result of the action becomes more specific and the direct object gets affected as a consequence of its functioning as the subject of the resultative predicate.

The *path resultatives* are formed of process phases, unifying homomorphically with some bounded path, either of PP or of AP type. For example, [18] show AP bounded path, with the property feature, such that the secondary predicate, ‘flat’ is selected by the ‘rheme of res’. The derivation of [17] is shown in [18]. The other type of resultatives is the *result resultatives*, whose res head have static predicational properties. Examples of such kind are as in [19].

17. Kareena hammered the metal flat.



19. Kareena hammered the metal into pieces.

The result resultatives are of two types -*indirect resultatives*, and *direct resultatives*. The indirect resultatives consist of a causative event structure, having two temporarily independent events joined into one as in [20]. Indirect ones are formed when unselected objects in unergatives, which is the subject of the resultative phrases, are *resultees*.

20. Mary sneezed the napkin off the table.

21. John broke the bottle open.

The *direct resultatives* are those where there is a single event structure formed when two temporarily dependent events are joined into one as in [21]. The direct ones when the selected objects in (transitives and) unaccusative verbs, are of the *undergoer-resultee* category. Whereas, the classification in Lenin and Hovav (1995), on the other hand, is based on the differing semantic interpretations that arise with and without the resultatives and the NPs they are predicated of in the syntactic configurations.

### 1.2.3 Ramchand (2008) on Complex Predicates

#### 1.2.3.1 Ramchand on V\_V predicates

Ramchand (2008) show that completive complex predicates or the V\_V type predicates differ from their simple form counterparts with respect to the type of interpretation that they give. The simple forms are to a certain extent aspectually ambiguous between giving accomplishment readings and activity readings for many speakers, as in sentence [22] below, while the V\_V complex predicates, with a main verb, followed by the light verb, gives resultative readings necessarily, as in [23]. According to her, the light verb brings into the telic interpretation to the complex predicate, resulting into the accomplishment readings of the same.

22. *bon cithi-ta likh-l-o* [B]  
 sister letter-def write-pst-3p  
 Sister wrote the letter.

23. *bon cithi-ta likh-e phel-l-o* [B]  
 sister letter-def write-partcl throw-pst-3p  
 Sister wrote the letter completely.

In such predicates, the main verb, which conveys the concrete lexical content, in Indic languages is expressed in the result phrase of the decomposition model, for it describes the

final achieved state of the action. While the light verb, the tensed verb, which conveys abstract-general meanings, describes the event (or the result of the event) of the action and hence the process, thus projects at *proc* head. It not only selects res P, which gives the telicity but also as in their main verb usage, can take *init* phrase or the cause projection as the process requires an initiator of the action. Thus, it is the light verbs in the completive V\_V predicates that identifies the two heads of [+init, +proc] while the main verb identifies the [+res] head.

Thus, ‘light verbs’, propelling V\_V complex predicate constructions, are said to select the [+res] categorical feature, which, however, underassociates and is identified, instead, by the main verb. We might state that owing to this, the description of the final state achieved or the accomplishment of the event is reflected by the main verb, the non-finite verb, and it is the light verb that helps the main verb attain the final state. The light verbs, however, act on the process of the event and so identifies the ‘+proc’ feature, which selects the ‘res P’. Also if the process of the event needs to be initiated by an agent, the LV brings in the ‘+init’ feature, identifying the ‘init’ head itself.

Thus, in the Bangla sentence [23], the main verb ‘*written*’ identifies the res head as it describes the final state of the action. The perfect participle morpheme on the verb ‘*write*’ indicates the description of the result state of the action that the main verb, here, ‘*write*’ denotes. Since the light verb denotes telicity, it also bears some [+res] feature, therefore the light verb, here, ‘*throw*’ on one hand identifies the *proc* head, because it is the one that is tensed. Thus it indicates the process of the event and also selects for the *res* phase. If the light verb has a causational feature, that is if it is transitive in nature, it will also identify the *init* head, which then will be embedded above the *proc* phase.

According to the analysis, the use of the light verbs, in case of such V\_V predicates is similar to the use of simple verbs in these languages. The only difference being that the [+res] feature of the simple verbs is identified by themselves in the decomposition but in case of light verbs, the [+res] feature is underassociated and instead identified by the participle of the main verb in V\_V predicates. Thus such complex predicates are based on the principle of Underassociation, such that both the main verb and the light verb must ‘Agree’ with respect to the type of categorical features that they have.

According to the principle of UNDERASSOCIATION, a particular feature of a lexical item, say for example, a light verb can remain underassociated on it, that is, not identified overtly in the derivation, if this particular feature is separately identified by any other lexical item in the derivation. In the example [23], the [+res] feature of the light verb remains underassociated, because it is identified by the main verb of the V\_V complex predicate.

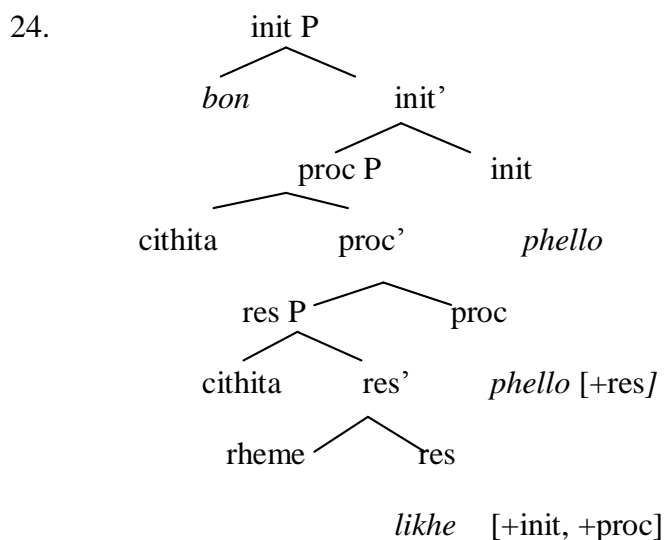
Similarly, the main verb ‘write’ in its full verb use, comes with the features of [+init, +proc, +res], out of which it identifies the [+res] feature itself. The two other features, [+init] and [+proc], remains underassociated on it as they are identified by the light verb in the derivation. Thus the event decomposition model for V\_V complex predicates in Indic languages, for sentence [23] above would be as in [24]. The principle of underassociation as stated in Ramchand (2008) is as follows.

UNDERASSOCIATION: [Ramchand, 2008; pg 148]

*If a lexical item contains an underassociated category feature,*

*(i) that feature must be independently identified within the phase and linked to the underassociated feature by Agree;*

*(ii) the two category features so linked must unify their lexical encyclopedic content.*



Thus, we might say that if the full verb comes with ‘+res’ feature in the grammar of a language, as in the case of the Bangla main verb ‘*phello*’, then in its light verb usage, that ‘+res’ feature seems to get underassociated and the ‘res’ feature in the configuration, that is, the res head is identified by the main verb of the V\_V predicate instead as in this case, ‘*likhe*’.

Ramchand (2008) states that the constructions give accomplishment readings but the meaning of the predicate is distributed over two parts in these complex predicate constructions. However, according to her, the light verbs, similar to particles<sup>2</sup> in other languages such as in English, Germanic, etc is very bleached and abstract in its meaning. Thus, light verbs in these constructions have general meanings and are a direct result of the underassociation.

### 1.2.3.2 Ramchand on N\_V predicates

Apart from V\_V predicate types, Ramchand also deals with N\_V type of predicates in these languages. In these constructions, there is just one verb, the simple verb form, but in its light verb usage (not in its full verb usage). The light verb, being the sole verb in these constructions, is the one that is responsible for the processing of the action, therefore projects the *proc* phase, identifying the *proc* head. If the light verb brings in the telic interpretation, which it is believed to be, it also selects the *res* phase, itself identifying the *res* head. Finally if the N\_V predicate requires an external argument, a cause head, the *init* phase will be embedded above the *proc* phase in the derivation.

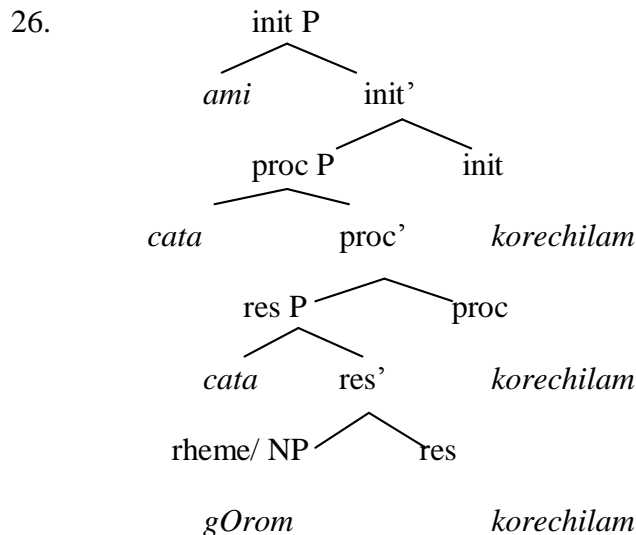
Thus, in a sentence like [25], the verb ‘*do*’ functions as the light verb, taking a nominal element, ‘*hot*’ or ‘*gOrom*’ in Bangla to form N\_V predicates. Here, the light verb seems to identify the three feature heads of [+init, +proc, +res], therefore projects the three phases, beginning from the lowest one - the *res* phase and subsequently embedding *proc* above *res* and *init* above *proc* phase. The external argument, ‘I’ is merged at the spec-init, since it is the one that initiates the action. The internal argument, ‘tea’ or ‘*ca*’ is the one that undergoes the process of heating and is also the one that is heated up – the result of the action, hence the

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<sup>2</sup> Ramchand (2008) studies the verb-particle constructions of English and other Germanic languages, showing that the particles that follow verb are also ‘light’ in semantics, having abstract general meanings and exhibit similar properties compared to light verb constructions in Indic languages.

one affected as the result of heating. So ‘tea’ is both the undergoer as well as the resultee of the event. finally we have the nominal element of the N\_V predicate, ‘hot’ which is merged at the rheme – ground, as it is the available vacant slot, that can project an NP. The derivation of [25] is illustrated in [26].

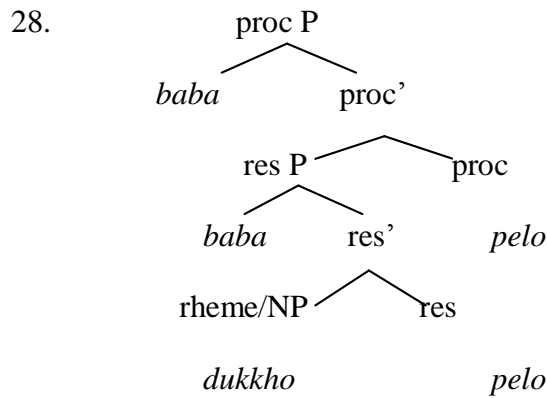
25. *ami ca-ta gOrom kor-echi-lam* [B]  
 1p.s tea hot (n) do-perf-pst.1P  
 I warmed the tea up.



on the other hand, in a sentence like [27], the verb ‘get’ functions as the light verb, taking a nominal element, ‘sadness’ to form N\_V predicates. Here, the light verb identifies the feature heads of [+proc, +res], therefore projects two phases. There is no external argument, hence no cause head is projected. The internal argument, ‘baba’ is the one that is the undergoer as well as the resultee of the event. The nominal element of the N\_V predicate, ‘sadness’ is merged at the rheme – ground, where an NP can be projected. The derivation of [27] is illustrated in [28].

27. (*kOtha-ta shune*) *baba dukkho pe-lo* [B]  
 (word-def hear-inf). *baba sadness get-pst.3p*

Having heard those words, Baba felt sad.



#### 1.2.4 Investigating Light verbs in Ramchand's framework

In German linguistics, a common term for the phenomenon of light verbs as stated by Cinkova (2009) is “Funktionsverbgefüge”. It is a fact that is universally debated upon that light verbs in complex predicate constructions retain relatively very little descriptive content as compared to their main verb usage in a language. Since the light verbs interact very closely with the lexical semantics and category of their complement – the lower predicate-, they observe selectional criteria with regards to the nature or kind of lower predicates they take. Light verbs require their lower predicate to belong to certain restricted grammatical categories -- for example, particular light verbs select for a verb as their lower predicates; others take nouns, and yet other take adjectives, etc. The choice is language dependent and more importantly, verb dependent in most cases, for some light verbs may combine with both nouns and adjectives, others may combine with verbs and nouns, while yet others might only take verbs.

According to Butt (2003), light verbs are identical to their main verb counterparts in form, which makes it is easier to believe that they are ‘counterparts’ to the main verbal form in the grammar. However, Butt argues that light verbs are in fact, a different set of grammatical



elements, forming a semi-lexical syntactic class, with restricted set of entities, specified for specialized functions in the language. Light verbs show distinct syntactic and phonological characteristics as compared to their main verbs, which invariably leads to their distinct semantic behavior in the grammar. She examines several languages, citing examples to show how specific tests, explains the necessity to consider light verbs as distinct lexical items, or verbs, different from lexical main verbs, which makes her group them into a separate class of verbs.

As such, light verbs not only bear grammatical markings on themselves, but also tend to determine other semantic functions such as the volitional/non-volitional agentive action, perfectivity, and several other manner components, in the complex predicate. Usually, the light verbs bring about a telic interpretation of the event in question and undergo partial to full reduplication, as in most South Asian languages (Butt, 2003; Abbi, 1992).

A major strand in the analysis of light verb constructions in the typological literature is the hypothesis that light verbs are the bleached counterparts of lexical full verbs, and have come into being as a result of the process of grammaticalisation and internal reconstruction. Butt (2003) tends to disagree with these views for if light verbs are in the grammaticalisation cline, then grammaticalisation should also have had phonological and morphological effects, leading to a loss of form-identity, with the lexical full verbs. She points out with examples that light verb constructions are highly stable in the grammar once they appear and do not change into any other form. Further diachronic studies have reported the stable availability of light verb use in the languages from pre-historic times to the modern ages. In fact, Butt (2003) reports that the use of light verbs gained importance simultaneously with the fall in the usage of preverbs. Thus, there are reasons enough to believe that these light verbs have some other source or some other explanation to account for their availability in the grammar.

Another puzzle in the analysis of light verbs is the fact that both language-internally as well as cross linguistically, they group into a class. If the core meaning or the ‘mould’ of the lexical full verb is said to contribute to the meaning of the light verb in ECV constructions, then in principle, every full verb should have a light verb counterpart, in which the core meaning of the former should have been retained as its semantics. Since this does not hold

true, such an analysis cannot be the reason behind the semantics of the light verbs, and further weakens the claims of grammaticalisation and bleaching processes.

Bowern (2004) cites several works, which have stated that light verbs are somewhat mid-way in the grammaticalisation cline and will in the future end up into something else. But he disagrees with them stating that diachronic studies have shown that the number of light verbs have remained the same, which would not have been possible, if the above statements were correct. Despite the fact that there are different sources for preverbs, belonging from major word classes, light verb complex predicates end up with having uniform functions. Complex predicate constructions and light verbs found across language families have neither a common historical source of origin nor common traceable path of development. We need to identify the single universal function that these light verbs have, which will group them together into a single class.

In this thesis, I propose to provide universal answers to the following questions about the class of light verbs available crosslinguistically. With regards to the fact that cognates of light verbs found in different languages function similarly, contributing similar or related semantic specifications to complex predicates, I wish to explore the following questions.

- What possible explanations for the cross-linguistic similarity of light verbs can be accounted for, based on the different types of roles (or sub-roles) and categorical features that they inherently come with? How and to what extent do light verbs differ from their so-called main verb counterparts based on these factors, if they are? What leads to these differences and what do they actually signify? To what extent do the similar lists of light verbs in different languages reflect something common about their universal semantics or universal grammaticalisation patterns?
- Light verbs in some languages are reported to have reduced argument structure in complex predicates, compared to their main verbs, while in others, they do not. In the latter, the main verb's argument structure is retained, and the entire argument structure is provided to the complex predicate so formed, with the lower

predicate also contributing the semantic roles to the formed predicate. Is this true that light verbs in different languages have different degrees of specification of their argument structure? How can these variations hold true? If not, how can we determine the argument structure of complex predicates, and of the light verbs, in the given model?

- Are the light verbs are actually just the bleached counterparts of their main verbs, Or are they separate lexical entries, with specified functions to perform on a universal basis? Also, if the core meaning or the mould of the full verb contributes to the semantics of its light verb counterpart, then why not every individual full verb's mould, does the same, giving the light verb counterpart in each case? If not, then are light verbs actually in the process of grammaticalisation?
- Is a categorization for all the different types of light verbs found in these three languages, possible? What are the possible criteria that bring about the classification of such structures? Is this triggered by the semantic or the syntactic contributions of the light verbs to the clause or by a combination of both of these taken together?
- In every language, the number of light verbs is highly restricted and defined, or rather pre-defined. Any full verb from the grammar cannot be randomly selected and used as a light verb in a language, for the grammatical and semantic properties associated with light verbs cannot be attributed to those full verbs, even if the speaker desires to do so. Then, are light verbs a separate grammatical/syntactic class of verbs, the members of which, though homophonous with some elements of the full verb class, are limited, being a closed class, and specified in the universal grammar and are vested with such properties and functions only? If not, why don't all verbs semantically lighten in the grammar?

I will explore the two semantic and syntactic aspects of light verbs in two Indo-Aryan languages, Bangla and Hindi, and one Dravidian language, Malayalam, making use of the theoretical resources provided by the Event Structure Decomposition model advanced by

Ramchand (2008). The framework decomposes the Hale and Keyser's verbal projections further into its finer parts and identifies the argument structure of the verbs, based on roles and sub-roles that they play in a given construction. This enables us to probe into the depth of the verb's semantics, modeled on a syntactic tree structure, to figure out the inherent and acquired properties associated with light verbs, in contrast to lexical full verbs, in a given grammatical system.

Ramchand (2008) provides us with a platform, using which we can study the finer semantic roles of the verbs involved in complex predicate constructions. The decomposing of the major phases, according to semantic properties, facilitate us with two uses: first, enables us identify the finer semantic and categorial features of the verbal stems and second, helps us study the semantic roles – the sub-eventive roles - that the concerned DP/NP is associated with in a given instance.

The study will also look into the issue as to why there are different kinds of light verbs with regards to which elements they select or combine with. It will help us figure out the differences in the nature of light verbs as to why some of them only select verbal elements; why some others select non-verbal only and why do others can select both the types.

We will very closely examine the categorial features, that Ramchand (2008) advances in the ESD, of the light verbs in these three languages and analyse whether the light verb's categorial feature sets are different – in a way, richer or lighter – from their main verb counterparts in the concerned languages. This will enable us to find out the exact status of light verb with regards to their homophonous main verbs in these languages and also see whether they emerge as grammaticalised elements, being semantically bleached or have reduced arguments – or as Butt (2003) claims, these light verbs emerge as a class of their own, with a semi-lexical status, in our languages.

### 1.3 OUTLINE OF THE DISSERTATION

The thesis contains seven chapters, each dealing with separate yet coherent issues, which finally resolve the debate about the notion of light verbs.

*Chapter two* will show how the Ramchandian framework (2008) of ESD has been used to analyse the verbs – the main verbs as well as the light verbs of the complex predicate constructions. We will also look into the various functions of the light verbs in V\_V and N\_V types of complex predicates.

*Chapter three* will discuss one of the categories of light verbs that we have identified in our analysis. It is the category into which most of the light verbs in all the three languages of Bangla, Hindi and Malayalam are found.

*Chapter four* will further discuss the other types of light verbs, indicating how each category is different from the other based on the different combination sets of categorical features.

*Chapter five* aims to redefine the ESD model of Ramchand (2008) to make it suitable for analyzing and classifying the entire class of light verbs into different categories in the three languages under consideration in this thesis. We also examine how this refined framework relates the First Phase Syntax with other clausal systems.

*Chapter six* of the thesis presents the conclusion by collectively summarizing the findings of the thesis and by showing how the research in this thesis is significant towards laying down a platform in the field of light verbs.

## Chapter 2

### *Using the ESD framework*

In the present chapter, we will examine how the Ramchandian framework of Event Structure Decomposition will be helpful in analyzing categorical feature sets of the light verbs, so as to probe deeper, in order to classify them, if possible, into types and secondly, to examine their differences with their main verbal counterparts available in the three languages under consideration in the thesis. As such, Ramchand (2008) might also enable us to answer the question as to what type of unique combination of categorical features of these verbs is responsible for the general and abstract semantics, not found in other full verbs.

The chapter is divided into the following sections: in section 2.1, we will look at the various tests advanced in Ramchand (2008) in relation to First Phase Structure when analyzing the Germanic and Indic languages and then we will adapt some of them for analyzing the verbal phrases of the various complex predicates in the three languages of Bangla, Hindi and Malayalam. In section 2.2, we take a brief glimpse at the generalizations about the presence of the three sub-phases, based on the tests discussed in the earlier section. In section 2.3, further, we look at the analysis of a sample verb, namely, the verb *'bring'*, based on which pattern all the verb under consideration in the three languages have been examined. While in section 2.4, we study the various functions of polar and vector elements in complex predicates construction and their specific roles in the grammar. Finally in section 2.5 we conclude by stating that the ESD framework has helped us in differentiating the semantic features of light verbs from their main verb uses.

#### **2.1 TESTS ADAPTED FROM THE FRAMEWORK**

In the thesis, the analysis of the verbal stems of both the light verbs and their main verb counterparts would be done to figure out the argument structure in each case. Therefore, a detailed analysis of sub-eventive roles of the verbs had to be conducted. For doing so, certain

tests have been adopted directly from the framework, as given in Ramchand (2008) , while some others have been designed and framed, based on the theoretical issues discussed, upon which the framework is built.

There are basically four sub-roles positions, which NP/DPs can occupy in this framework, namely the three sub-eventive role positions, - the ‘initiator’, the ‘undergoer’ and the ‘resultee’; and the position of the ‘rheme’. Therefore, it needs to be decided what are the sub-eventive role/s that the given NP/DPs hold in a given sentence. To do this, we had to determine the presence of the various sub-eventive phases as well, in each case.

As claimed in the framework, all verbs, except the statives, come with the process sub-phase. So going by the proposal, we stick to the fact that every non-stative verb will come with a [+proc] feature inherently, thus has the process sub-phase. The other tests are discussed below. Test one and test two will determine the type of phases that the verbs project.

After having determined the type of phases, the next step is to figure the argument roles (or sub-roles) that these verbs have. The DP/NPs that the verbs take have more than one structural position to occupy. Therefore, it is important to figure out the roles / sub-roles that these NP/DPs have as arguments of the given verbs. In relation to this, we need to test two important things, namely, whether the NP/DP has the argument role of a resultee, an undergoer or is a rhematic element. Further, using the following two tests, test three and four, we will figure out the position of the concerned NP/DP.

### **2.1.1 Presence of the ‘initiator’ sub-role**

To determine whether the concerned verbal event requires an initiator to initiate the process of the event, the adverbial test was conducted. The adverbial words, such as ‘purposely’ and/ or ‘intuitively’ were used with the given sentence to check for the grammaticality judgments of the same. These words are ‘*jenebujhe / jeshune / ichchekore*’ in Bangla, ‘*janbuhjke*’ in Hindi and ‘*mānāpurvām*’ in Malayalam. If the sentence, containing the verb, is grammatical with the use of ‘*purposely*’ or ‘*intentionally*’, the verb comes with the ‘initiator’ sub-role, hence it marks the presence of the ‘initiation phase’. Therefore, we can state that,

- ⇨ √ Purposely + clause → **presence** of initiator sub-role  
 ⇨ \* Purposely + clause → **absence** of initiator sub-role

For example, in sentence [1], the sole DP, ‘*amar kajta*’ cannot occupy the subject position of the initiation phase, for the sentence gets ruled out when we insert ‘*ichchekore*’ as in [2]. But if we replace the intransitive verb, ‘be’, with the transitive verbs ‘do’, the sentence is grammatical as in [3] and [4].

1. ama-r kaj-ta ho-eche. [B]  
     p.s-gen work-def be-perf.3p  
     My work has been done.
2. \*ichche-kor-e ama-r kaj-ta ho-eche. [B]  
     will-do-perf 1p.s-gen work-def be-perf.3p  
     Purposely my work has been done (got done by itself).
3. ichche-kor-e ora ama-r kaj-ta kor-echil-o. [B]  
     will-do-perf 3p.pl 1p.s-gen work-def do-pst.perf.3p  
     Purposely they did my work.
4. mənəpurvəm jaan virunnugaRde swagətəm cey-du. [M]  
     Willingly 1p.s guest-pl welcome do-pst  
     Purposely, I welcomed the guests.

### 2.1.2 Presence of process sub-event vs presence of the result sub-event

Having determined the initiation phase, the next important step is to check whether the verb also projects a result phase, along with the pre-determined process phase or not. To do this, we use the adverbial tests, the ‘*for an hour / within an hour*’ test. If the sentences are grammatical when we use the adverbial ‘within an hour’ phrase, then the verb takes the ‘result phase’. On the other hand, if the sentences get ruled out with the ‘within an hour’ test, but they are grammatical with the ‘for an hour test, then, the verbs do not take the result phase. Therefore, it stands like the following:



⇒ √ for an hour + clause → absence of result sub-phrase  
 \* within an hour + clause

⇒ √ within an hour + clause → presence of result sub-phrase

For example, as in sentence [5], the sentence is grammatical if we use the phrase ‘within an hour’ with it, but it becomes ungrammatical if we use the ‘for an hour’ test, as in [6]. Therefore, the verb, ‘*khide paoa*’, ‘being hungry’ reflects the presence of a ‘result phase’.

5. ghumi-ye otha-r Ek ghOnta-r moddhe ama-r khide pe-chi-lo.[+res][B]  
 sleep-partcl wake-gen one hour-gen within 1p.s-gen hunger get-1p.s.perf.pst  
 I felt hungry within an hour after having woke up (from sleep).

6. \*/? ama-r Ek ghOnta-r jonno khide pe-chil-o. [B]  
 1p.s-gen one hour-gen for hunger get-perf.pst-1p  
 I was hungry for one hour.

### 2.1.3 Differentiating between the bounded Proc phases and the Result phases

In certain cases, when the result phase is not present, and the ‘initiation’ sub-role is occupied by the external argument of the verb, the question arises as to where would the internal argument project – whether it has the argument role of an ‘undergoer’ or it is a resultee of the ‘res’ head. According to Ramchand (2008), “the class of creation verbs is.....ambiguous between a reading in which the verb simply describes the process of an individuated UNDERGOER argument.....or a completive verb with a DP object.....describing the ‘result’.” (Ramchand, 2008; pg 76). Therefore, it is essential to distinguish between result sub-phases and bounded proc sub-phases.

According to Ramchand (2008), certain [+init, +proc] verbs which are of the accomplishment nature have duration along with boundedness. “This is because temporal boundedness in my system can arise from bounded paths in the complement position of the proc head” (Ramchand, 2008; pg 85). There are verbs which are ambiguous between being of either the

[+init, +proc] type , with pure activity reading or [+init, +proc, +res] type with punctual reading, as in the case of English ‘jump’, where [7] gives an activity interpretation, with Path PPs and [8] gives a punctual interpretation, with locative Place PPs.

7. Katherine jumped into the field.
8. Katherine jumped in the field.

In our diagnostics, we will use three tests to conform about the nature of such verbs. We will first test the verb using the adverbial ‘for an hour’ and ‘within an hour’. If the sentences are grammatical with both these tests then, we will check to see whether there is a durative reading possible in the sentences with the adverbial ‘ within an hour’ phrase.

If the event has ‘durative’ reading, then the verb has a time-span or a length of time that it takes to enable the processing of the event to happen or occur. Such verbs have ‘a bounded proc’, because the event would require some stretch of duration for completing it, along the ‘rhetic path’. Thus, those verbs can be said to have ‘bounded proc paths’ or ‘bounded proc phases’ and we can identify these verbs as having a [+dur proc] feature. We can also say that the process as such can identify two types of events – one that has the dynamic process can be called as [+proc<sub>dynm</sub>] and the other that involves or requires a stretch of time to make the event happen, can be called as [+proc<sub>dur</sub>].

For example, in [9], the verb ‘built’ gives a durative reading with the ‘within a hour’ phrase. Thus, the event of ‘built a house’ is of the bounded proc category, with the verb ‘built’ being of the [+init, +proc<sub>dur</sub>] type.

If the event does not give ‘durative’ readings with the ‘within an hour’ phrases, then the verb has a pure result phase. In the example [10], the event of ‘performing the puja’ does not have the durative reading with the ‘within an hour’ phrase. Therefore, the verb ‘do’ is of the pure res type, with the categorial features of [+proc, +res] inherent in it.

This difference between the two types can be represented below as :

- - dur, + tel → pure res phase.
- + dur, + tel → bounded proc phase / [+proc<sub>dur proc</sub>] phase (no res phase).

9. kaku Ek bOchor-er moddhe Ek-ta bari kor-echi-lo [B]  
 uncle one year-gen within one-def home do-pst.perf.3P  
 Uncle built a house within a year. [+dur proc, +tel]

10. du ghOnta-r moddhe pujo-ta hoy-echi-lo. [B]  
 two hours-gen within puja-def be-pst.perf.3P  
 The puja was performed (done) within 2 hours. [-dur proc, +tel]

#### 2.1.4 Differentiating between the resultee sub-role and the rhematic ground objects

On the other hand, when the result phase is present, then we need to figure out whether the internal arguments of the verbs would have the sub-role of a ‘resultee’ or would occupy the rhematic ground position in such configurations. To determine this, we need to test the given sentences with a ‘locational stative PP’ such as ‘on the ground’, ‘in the home and the like phrases, which have a ground location.

If the sentences are grammatical when we insert the locational stative PP after the DP, the internal argument, but before the verbal stem, then the DP in question might have the ‘resultee’ or the ‘undergoer’ or both the two sub-roles and the stative PP will necessarily be in the head of rhematic ground. But if the sentence is ungrammatical or unacceptable, then the DP will be the ‘rheme of result’. The following can be illustrated as below:

- ⇒ √ DP + PP locational stative + verb → DP is the ‘resultee’ or/and ‘undergoer’
- ⇒ \* DP + PP locational stative + verb → DP is the ‘rheme’ of ground

For example, in sentence [11a], the external argument '*mEdəṁ*' is the 'initiator' of the event. The other two DPs, namely, '*rajesh*' and '*thəppər*' will have to be tested as having which of the sub-roles in [11a], when we insert the locational stative PP, '*klas me*' between the verb '*maRa*' and the last DP '*thəppər*', the sentence is unacceptable. Thus, it is the DP, '*thəppər*' which is in the 'rheme' of ground and not the PP inserted. This can be confirmed with sentence [11b], where the stative PP is placed before the DP '*thəppər*' and the sentence is grammatical.

This grammatical sentence also shows that the DP '*rajesh*' proceeds the PP '*klas me*' and has the sub-role(s) of a 'resultee' and/or 'undergoer' (although, as per the interpretation of the speakers, it is the DP '*mEdəṁ*' who is the 'undergoer' of the verb 'slapped').

11. a. ? *mEdəṁ-ne*      *rajesh-ko*      *thəppər* (n)      *klas-me*      *maR-a*  
[rh-g]      [H]  
*madam-erg*      *rajesh-acc*      *slap*      *class-loc*      *beat-pst.3p*  
 Madam slapped Rajesh in the class.

11. b. *mEdəṁ-ne* *rajesh-ko*      *klas-me*      *thəppər* (n)      *maR-a*.  
[rh-g]      [H]  
*madam-erg*      *rajesh-acc*      *class-loc*      *slap*      *beat-pst.3p*  
 Madam slapped Rajesh in the class.

12.      *lərk-a*      *get*      *pər*      *gir* (v)      *gə-ya*      [rh-g]      [H]  
*boy-sg.mas*      *gate*      *at*      *fall*      *go-pst.mas.sg*  
 The boy fell down / slipped at the gate.

The above tests enable us to determine the presence of the type of the phrases that the verbs come with, as well as the roles or sub-roles of the DPs that the verbs take and finally, the content of the 'rhematic' phase, if any. Having figured out the required tests, we need to outline the generalized issues, which would enable us to proceed with the verb analysis.

### 2.1.5 Diagnostics for ‘+res’ feature

Apart from these tests discussed and referred to so far for determining the event structure of predicates, there are two important diagnostics, which prove that a given predicate has a [ + res ] feature. They provide sufficient evidence that the complex predicates in the table 2.1 have the [+res] feature in their event structure.

- I. Punctual readings: all verbs/predicates having [+proc, +res] features will have punctual readings/interpretations.

The diagnostics say that when a single predicate (lexical item) identifies both ‘proc’ and ‘res’, the event expressed is ‘punctual’. Thus any V\_V predicate having punctual readings will necessarily project the two features of – [+ proc] and [+ res], for example, the ones given in the table 2.1. Irrespective of whether their main verb counterparts or the main verbal elements of the V\_V predicates, by themselves, identify and project the features, these V\_V predicates do identify the ‘res’ head essentially.

Table 2.1: V\_V predicates have punctual readings

Predicates	Language	Meaning in English
<i>‘cilla uthna’</i>	Hindi	Shouted suddenly
<i>‘ceciye uthechilo’</i>	Bangla	
<i>‘pore uthechilo’</i>	Bangla	Just completed studying
<i>‘ga uthi’</i>	Hindi	Suddenly sang up
<i>geye uthechilo’</i>	Bangla	
<i>‘jhum uthi’</i>	Hindi	Suddenly danced up
<i>mariccu pooyi</i>	Malayalam	Passed away
<i>paranjnu pooyi</i>	Malayalam	Suddenly spoke about it
<i>dhuke porechilam</i>	Bangla	Entered / came in by mistake
<i>‘pore gEche’</i>	Bangla	fell down
<i>ja gira</i>	Hindi	

- II. Grammatical with locational stative PPs, occupying rheme: V\_V predicates projecting the ‘res’ phase will take stative locational PPs in their rhemes.

Another diagnostics say that the predicates that have [+res] feature in their event structure will take simple locational state prepositions as the rhematic complement of ‘res’ to describe the final state. PPs denoting static locations should be able to appear in the complement position of ‘res P’. The predicates, which are being claimed here to have the V\_V predicates can be tested for the presence of the [+res] feature by inserting such simple locational PPs in the sentences having these predicates, to check their grammaticality. If the sentences are grammatical, they project the ‘res’ phase, and if they do not, then there are no ‘res’ phases in them, possibly.

Sentences [13a] – [13e] show that they are grammatical with the use of locational PPs, therefore, these predicates project ‘res’ phase in the Event Structure Decomposition (ESD) framework, having their rhematic positions occupied by the locational PPs.

13. a. *arsola-ta dekh-e rOma baranda-e ceci-ye uth-echi-lo.* [B]  
 cockroach-def seen-infv roma verandah-loc shout-partcl rise-pst.perf-3p  
 Having seen the cockroach Roma shouted up on the verandah.
13. b. *cuhe-ko dekh kər sita get pər cilla uth-i.* [H]  
 rat-acc seen having sita gate on shout rise-pst  
 Having seen the rat, Sita shouted up at the gate.
13. c. *khəbər sun-te hi shila ro:d pər ga uth-i.* [H]  
 news heard-of emp shila road on sang rise-pst  
 Having heard the news, Shiela sang up on the road itself.
13. d. *?shila-ne get pər gana ga-ya tha.* [H]  
 ?shila-erg gate on song sing-pst cop.pst  
 Shiela sang the song at the gate.

13. e. shila-ne get pər khəre khəre gana ga-ya tha. [H]  
 shila-erg gate on standing standing song sing-pst cop.pst  
 Shiela sang the song while standing at the gate.

## 2.2 GENERALIZATIONS

The generalizations are based on the tests discussed above and will provide a brief overview about the steps of analysis and conclusions about the argument structure configuration of the verbs, along the lines of Event Structure Decomposition. These generalisations can briefly be stated from (a) to (e) as given below:

- a. If the sentences are grammatical with the adverbial phrases ‘purposely’ or ‘intuitively’, then the ‘initiation’ phase or init P is present.
- b. If the sentences are ungrammatical with ‘for an hour’ phrases but grammatical with ‘within/in an hour’ phrases, then the ‘result’ phase or the res P is present.
- c. If the sentences are grammatical with both ‘for an hour’ phrases and ‘within/in an hour’ phrases, then we check for the [+/- durative] interpretation of the event, in the sentences with the ‘within an hour’ phrases.
  - i. If the event is ‘minus (-) durative’ with the presence of the ‘within an hour’ phrase, then the verb has a pure result phase.
  - ii. If the event is ‘plus (+) durative’ with the presence of the ‘within an hour’ phrase, then the verb has a bounded process phase or [+ proc<sub>dur</sub>] phase and not a result phase at all (Ramchand, 2008).

The ‘durative’ reading of the event will show that the event requires some duration to complete the process of the event, along some path, ‘the rhematic path’. Because this path is ‘bounded’ in nature, so it is grammatical with the ‘within an hour’ phrase. The ‘bounded path’ permits the ‘telic’ interpretation, so these sentences are grammatical.

The grammaticality of the sentences with the presence of ‘within an hour’ phrase does not entail the presence of ‘result phase’. Certain verbs take ‘within an hour’ phrase because they have the ‘bounded path’ processes. Therefore, in these cases, it is necessary to figure out the ‘durative aspect’ of the event concerned. For details on ‘bounded phase’, refer to Ramchand (2008).

- d. Irrespective of whether the ‘initiation’ phase is present or not, if the ‘result phase’ of the verbs is derived, that is, if the res P are present, then ‘process phase’ has to be present. An ‘initiated’ action, without ‘undergoing’ a process, cannot give the ‘result’.
  
- e. Even, if the ‘initiation phase’ and the ‘result phase’ are not present, but if the verb is dynamic or non-stative in nature, the process phase or proc P will be present. The minimum requirement is that all dynamic verbs come with the [+proc] feature in the languages. (Ramchand, 2008).

The generalizations discussed above from (a) to (e) are illustrated in table 2. 2 below.

Table 2.2 : GENERALISATIONS

<b>Grammatical with</b>	<b>Feature present</b>	
‘purposely’ or ‘intuitively’ phrases	+ initiation	
‘For an hour’ phrases	+ process	
‘Within an hour’ phrases	+ result	
	If ‘+ durative’	+ (bounded )process or [+ proc <sub>dur</sub> proc]
	If ‘- durative’	+ result
A dynamic verb	+ process	



## 2.3 ANALYSES OF VERBS

We will here, take a sample verb, namely, '*lana*' (Hindi) or the verb '*bring*', and see how we have determined the argument structure and the eventive roles and sub-roles of the verb and how will they be represented on the ESD framework. Below we will see how the tests and the generalizations have been used to deduce the configuration and the event structure of the verb '*bring*' in Hindi.

### 2.3.1 The verb '*lana*' (bring) in Hindi : '*main verb*' and '*light verb*' usages

The verb '*bring*' in Hindi functions as a main verb and also has light verb usage in N\_V type of complex predicate constructions. First, we will figure out the argument structure of the main verb '*lana*' in Hindi and then we will move on to the argument structure of the light verb '*lana*'.

#### 2.3.1.1 As A Main Verb

The main verb usage of the verb '*lana*' can be seen in the basic sentence [14]. Now we analyze this sentence using the discussed tests above and figure out its configuration. In [15], we test the sentence with the adverbial phrase '*purposely*' and find that the sentence is grammatical. Therefore, it has the '*initiator*' sub-role, and hence, comes with the '*initiation*' sub-phase. The role positions are marked in bold letters while the test phrases are in italics in all the sentences.

14. mE-ne                    seb                    la-ya                    tha.                    [H]  
1P.sg.mas-erg            apple                    bring-pst.mas.sg      cop.mas.sg  
I brought the apple.

15. mE-ne                    janbujhke    seb                    la-ya                    tha. [init]      [H]  
1P.sg.mas-erg    purposely    apple                    bring-pst.mas.sg      cop.mas.sg  
Purposely, I brought the apple.

Then we test the sentences with the '*for an hour*' phrase as in sentence [16], which is judged as ungrammatical. However, when we test the same with the '*within an hour*' phrase as in [17], the sentence turns out to be grammatical. Therefore, we can conclude that the verb

'*lana*' comes with the [+res] feature and hence will project the 'result' sub-phase. Further, going by generalization (d), we can say that the verb also has the [+proc] feature.

16. \* mE-ne ek ghante-ke liye seb la-ya tha. [H]  
 1P.sg.mas-erg one hour-dat for apple bring-pst.mas.sg cop.mas.sg  
 I brought the apple for 1 hour.

17. mE-ne ek ghante me seb la-ya tha. [-dur proc,+tel]  
 1P.s.mas-erg one hour within apple bring-pst.mas.s cop.mas.s [H]  
 I brought apple within 1 hour.

Now, having found out the phase projections of '*lana*', we can now figure out the role positions which are associated with it. In sentence [18], we have the evidence of the presence of the 'initiator' sub-role, hence, the external argument, the '*mEne*' DP will be the subject of '*init*' head. Since, the 'res' phase is present, therefore we have to use test 4, to figure out whether the internal DP, '*seb*' will have the sub-role(s) or will be in the 'rheme-ground'. To do this, we have inserted the ground PP phrase '*thore thore karke*', between the verb and the DP in [18], and see that it is less preferred by the speakers compared to [19], where, the ground PP phrase is inserted before the DP and makes it perfectly grammatical in the language, having the canonical word-order. Therefore, the DP '*seb*' is the 'rheme' of ground.

18. ? mE-ne seb thore thore karke la-ye the. [Rh-g] [H]  
 1P.s.mas-erg apple installments do-partcl bring-pst.mas.s cop.mas.s  
 I brought the apples in installments.

19. mE-ne thore thore karke seb la-ye the. [Rh-g] [H]  
 1P.s.mas-erg installments do- prtpartcl apple bring-pst.mas.s cop.mas.s  
 I brought the apples in installments.

To sum up, the main verb '*lana*' projects with the three features of [+init], [+proc] and [+res], and takes an 'initiator', the DP, '*mEne*' (the external argument), who also happens to be the

‘undergoer’, as per the native speakers’ interpretation of ‘doing or undertaking the action of bringing’; along with a ‘rhetic DP’, the ‘*seb*’ (the internal argument). As such, the main verb ‘*lana*’, in Hindi, comes with the event structure of the type [ +init, +proc, +res ].

### 2.3.1.2 As A Light Verb

‘*lana*’ as a light verb combines with a number of nominal elements. One such noun is ‘*ənkħ*’, meaning ‘number’, which forms a N\_V predicate when it combines with the light verb ‘*lana*’. The meaning of this N\_V predicate is ‘to score’. The basic sentence for this predicate in Hindi would be as given in [20].

20.    **ħhai**    **əcħe**    **ənkħ(n)**    **la-ya**                    **ħe.**    [+proc, +res]            [H]  
           brother   good    number   bring-perf.mas.sg   cop.sg  
           Brother has scored good marks.

To test the predicate for the ‘initiation’ sub-phase, we use ‘purposely’ with the sentence and find that the sentence turns out to be odd, and is marked as ungrammatical (unacceptable by some speakers) as in [21]. That is, ‘scoring good marks’ cannot be done purposely. Therefore, the predicate does not require the ‘initiation’ of the event/ action and as such, does not project the ‘init’ phase, so there is no ‘init’ subject as well. As far as the test 2 is concerned, that is testing with ‘for / within an hour’ phrases, we see that the sentence is unacceptable (ungrammatical) with the ‘for an hour’ phrase but is grammatical with the ‘within an hour phrase’ as in sentence [23] and [24], respectively.

Therefore, the ‘res’ sub-phase is projected. And as such, the ‘proc’ phase also happens to be present, owing to the final resultant phase. Thus, the N\_V predicate ‘*ənkħ lana*’ in Hindi, projects the [+proc] and [+res] sub-phases.

21.    \***ħhai**    **janbujħke**    **əcħa**    **ənkħ(n)**    **la-ya**                    **ħe.**            [H]  
           brother   purposely   good    number   bring-perf.mas.sg   cop.sg  
           Purposely brother has scored good marks.

22.     **bhai janbujhke khərap      əŋkh (n) la-ya                      he.                      [H]**  
brother purposely bad                      number bring-perf.mas.sg cop.sg  
Intentionally brother has scored bad marks.
23.     **?/\* bhai ek sa:l-ke liye əccha əŋkh(n) la-ya                      tha.                      [H]**  
brother one year-dat for good number bring-perf.mas.sg cop.sg  
Brother had scored good marks for 1 year.
24.     **mehnat kərke ek məhine-me hi bhai accha əŋkh**  
hard work by doing one month-loc emph brother good number  
  
**la-ya                      he.                      [-dur proc]                      [H]**  
bring-perf.mas.sg cop.sg  
Brother has scored good marks within 1 month (of hard work).

Now, there are two DPs that the predicate takes, namely, '*bhai*' and '*əŋkh*'. To decide upon their role positions, we analyze them with test 4 and see that the ground PP '*kəksħa me*' when inserted before the second DP marks the sentence as grammatical, so the second DP will occupy the 'rhematic ground' position. And the first DP, '*bhai*', as per the interpretations, 'undergoes the action/event of scoring marks', that is, he is 'the experience of the event'. Thus, has the 'undergoer' sub-role.

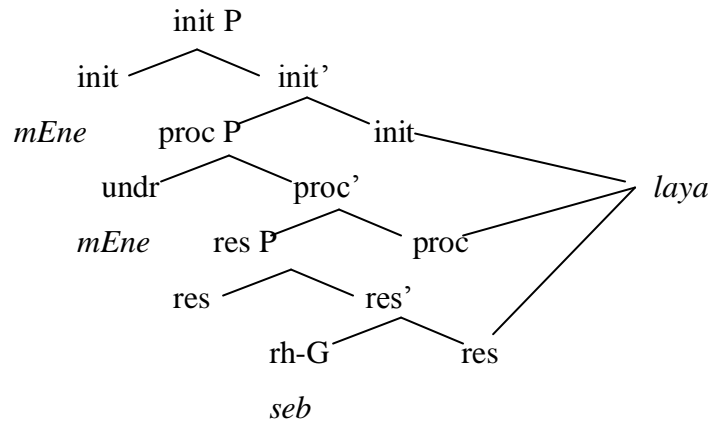
25.     **bhai kəksħa-me əccha əŋkh (n) la-ya                      he.                      [Rh-g]                      [H]**  
brother class-loc good marks bring-perf.mas.sg cop.sg  
Brother has scored good marks in the class.

Thus, the Event Structure Decomposition of '*lana*' as a main verb and in the light verb usage, forming N\_V type predicate, can be represented as in 26 (a) and 27 (a), respectively, and configured as in 26 (b) and 27 (b) respectively :

26.     (a).    **MV                      :**                      '*lana*'  
                    Event structure:                      [+init, +proc, +res]  
                    Sub-roles/positions:                      'init', 'undr', 'rh-g'

(b). mEne **seb** laye the. (I brought the apples.)

[H]

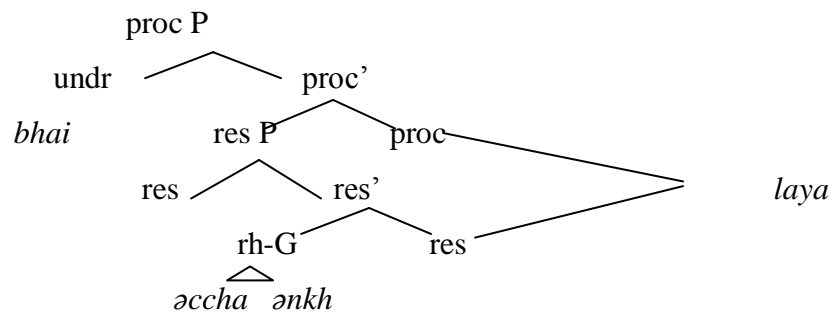


27. (a). LV: 'lana' in N\_V COMPLEX PREDICATE

Event structure: [+proc, +res]

Sub-roles/positions: 'undr', 'rh-g'

(b). bhai əccha ank(n) laya he. (Brother has scored good marks.) [H]



Following the above analysis, the other verbs, discussed in the thesis, have also been analyzed and then their event structure configurations have been discussed and pursued accordingly in rest of the chapters.

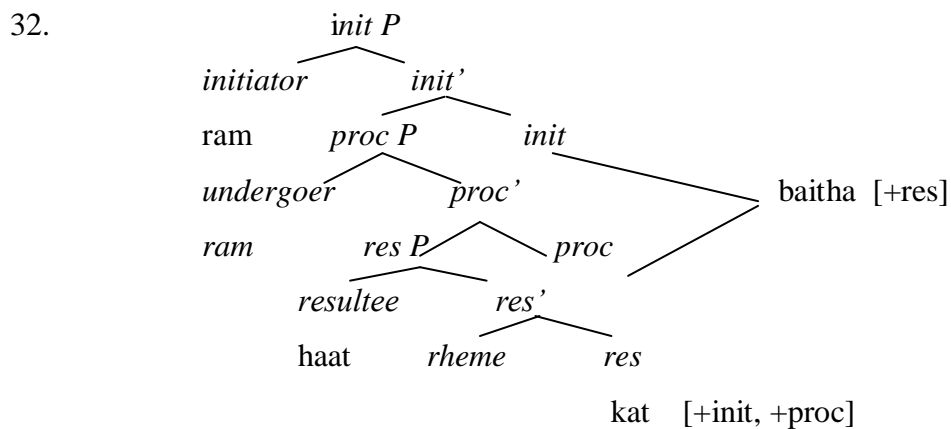
Similarly, as far as the structural representation of V\_V predicates is concerned, such as those in [28], [29] and [30], in Bangla, Hindi, Malayalam, respectively, in the first phase syntax, would look like in [32].

28. ruma bio-ta por-e (v) phel-ech-e [B]  
 ruma book-def read-PARTCL throw-pst-3P  
 Ruma read up the book.

29. ram gusse-me haat kat (v) bai-tha. [H]  
 ram anger-loc hand cut sit-3p.s.mas  
 Getting mad, ram cut up his hand.

30. jaan erutu erutti (v) karinn-u [M]  
 1p.s letter write-pst make-pst  
 I wrote up the letter.

31. ram haat kat (v) bai-tha. [H]  
 ram hand cut sit-3p.s.mas  
 ram cut up his hand.



Ramchand (2008) states that the presence of the light verbs in V\_V type of complex predicates bring in a telic interpretation of the event concerned. Thus, ‘light verbs’, propelling

V\_V complex predicate constructions, are said to select the [+res] categorical feature, which, however, underassociates and is identified, instead, by the main verb. Owing to this, the description of the final state achieved or the accomplishment of the event is reflected by the main verb, the non-finite verb, and it is the light verb that helps the main verb attain the final state. The light verbs, however, act on the process of the event and so identifies the '+proc' feature, which selects the 'res P'. Also if the process of the event needs to be initiated by an agent, the LV brings in the '+init' feature, identifying the 'init' head itself.

Now, since the main verb of such V\_V predicates identifies the 'res' head, the question that arises then is whether all main verbs, that enter into such complex predicate constructions, always inherently come with the '+res' feature. If not, then how do main verbs, with '- res' feature, identify the 'res' head? Furthermore, given that the lexical encyclopedic content of the verbs used as 'light verbs' are said to be more general and abstract, that is, in Ramchand's terms *'fairly underspecified for conceptual content'*, the question arises as to what type of unique combination of categorical features of these verbs is responsible for the general and abstract semantics, not found in other full verbs. Chapters 3 and 4 explore these issues in detail, but to give a sense of the direction that we shall proceed in, let us consider first the case of N\_V predicates.

## **2.4 FUNCTIONS OF THE VECTOR AND POLAR ELEMENTS OF THE N\_V PREDICATES**

### **2.4.1 Functions of the nominal element in N\_V predicates**

#### *2.4.1.1 Conceptual-intentional content of the CPs*

It has always been a debatable issue when determining which of the two elements of a complex predicate determines the semantics of the predicate so formed and similarly, in discussing the features of light verbs in composite verbs, it is very essential to see whether the light verbs, which is being claimed to come with a defined set of semantic features, also carry the semantic content of the predicates. When examining predicates of this kind, it is interesting to note that instead of the light verb, it is the non-verbal elements of such composite predicates that actually lend its meaningful content to the predicate so formed.

Keeping the pre-verbal element constant, if we change the light verb, then we see that the core conceptual meaning of the predicate does not change but instead the semantic attributes of the predicates change. For example, in [33] the composite verb ‘*Opoman hOwa*’ means ‘to undergo an insult’ whereas in (34) ‘*Opoman kOra*’ means ‘to inflict the insult on someone else’, in this case on ‘his brother’. It means the experiencer subject in (33) becomes an agentive subject in (34) and also the intransitive predicate in (33) with the same non-verbal element ‘*Opoman*’ changes to a transitive predicate in (34), for the light verb ‘*hOwa*’ does not take another argument, in addition to the experiencer subject ‘*ramer*’, as can be seen in (35).

33. ram-er Opoman ho-echil-o. [B]

ram-gen insult be-pst-3p.s

Ram was insulted.

34. ram bhai-ke Opoman kor-echil-o. [B]

ram brother-acc insult do-pst-3p.s

Ram insulted his brother.

35. \* ram-er bhai-ke Opoman ho-echil-o. [B]

ram-gen brother-dat insult be-pst-3p.s

Ram insulted (his) brother.

36. bon ama-ke thappor mer-ech-e. [B]

sister 1p.s-acc slap beat-prst.perf-3p.s

Sister has slapped me.





formed with the light verb ‘*paoa*’ (get) allows quantifier extraction but the light verb ‘*hOwa*’ (be) does not as in [40]. Also, following Bhatt (2003) and Richa (2009), in both Bangla, and Hindi, if the predicate is unaccusative, then the imperfective participles of such predicates can occur with or without the genitive marker on the agent, but necessarily requires it if the predicate is unergative, as in [41] – [45], where [41] and [42] are ungrammatical as the complex predicate has the light verb ‘*hOwa*’ (be), while [43] - [44] and [45] are grammatical , having the light verbs ‘*kOra*’ (do) and ‘*paoa*’ (get), respectively.

38. Ondhokar-e bacca-ta bhOy pe-chil-o ektu [B]

darkness-loc child-def afraid get-pst.3p.s quant

The child was afraid in darkness a little.

39. pOra-r somay bacca-ta-r khide pe-chil-o ektu kintu

kichu bOle-ni [B]

study-gen time child-def-gen hunger get-pst.3p.S quant but  
some tell.3p.-neg

While studying the child was hungry little but didn’t say anything.

40. \*or kOtha-ta sun-e ama-r sOndheo ho-chchil-o ektu [B]

his word-def hear-loc 1P.s-gen doubt be-pst.prog-1P quant

Having heard his words, I was being doubtful a little.

41. \*ram sOndheo hoy-eche. [B]

ram doubt be-pst.3P.sg

Ram is doubtful.

42. \*ram səndhe hua. [H]  
 ram doubt be-pst.3P.sg  
 Ram is doubtful.
43. ram səndhe kar raha he. [H]  
 ram doubt do prst.mas 3P.sg  
 Ram is doubtful.
44. ram sOndheo kor-eche. [B]  
 ram doubt do-pst.3P.sg  
 Ram doubts.
45. ram kOsto pe-yche. [B]  
 ram effort get-pst.3P.sg  
 Ram felt hurt.

Since, the light verb ‘*kOra*’ exhibits unaccusative traits, the predicate it forms might take two arguments, when used as a transitive verb. Possibly owing to this, Dasgupta (2012) claims that Bangla is one such language that has default light verbs, similar to what Hook (1993) proposes. And by default the very presence of the light verbs use of ‘*kOra*’ and ‘*paoa*’ bring in unaccusative features in the composite complex predicates so formed, whereas that of the light verbs ‘*hOwa*’ the sense of unergativity or pure intransitivity.

Thus the predicates that behave like unaccusatives, such as ‘*kOra*’, ‘*paoa*’, will not have the *external arguments*, thus, accordingly their ‘initiator’ subject positions should not be occupied by any NP/DP. But on interpreting sentences with such predicates we intuitively feel that the subject ‘*ram*’ as in [43] – [45] not only experienced or underwent the process of doubting or

feeling hurt, but also might have initiated the process willingly, knowing that he has to undergo the feeling as a result of it. It is necessary to initiate the process of doubting, etc, in order to actually doubt or go through the event of doubting.

Now this enables us to strongly consider the presence of a sub-initiation phase within the main initiation phase, which we have named as the ‘intentional-volitional init’ phase. The fact that the subject will occupy the initiator position can be proved if sentences, with such light verbs are tested using the adverbial phrase ‘intentionally’, which then shows that there was some kind of volitional motive on part of the agent or subject to initiate the action of vomiting, in spite of the fact that, in reality, he might not be having the tendency of vomiting or forcing, as seen in [46] - [48], respectively.

46.   bhai       ichchekore               bOmi       kor-echil-o.               [B]

brother   intentionally           vomits       *do*-pst-3p.sg

Intentionally brother vomited.

47.   shila-ne           janbujhke       radha-ko   møjbur   ki-ya.               [H]

Sheela-erg   intentionally   radha-acc   force       do-pst.3p

Purposely Sheela forced Radha.

48.   mənəpurvəm   jaan   virunnugaRde   swagətəm               cey-du               [M]

purposely   1P.sg   guests               welcome               do-pst.

Purposely, I welcomed the guests.

Not only this, irrespective of the light verb or the complex composite predicate being of the unaccusative type or of the unergative type, most of them give grammatically correct interpretable sentences when tested with the adverbial phrase ‘intentionally’. Thus, the claim in Ramchand (2008) that only the external arguments can only occupy the subject of

initiation cannot be validated here, as the subjects of an unaccusative complex predicate such as ‘*bomi kOra*’ as in [49] or ‘*khide paoa*’ as in [51] have their subjects initiating those actions intentionally and willingly, making their subjects the ‘intentional initiators’. Therefore, we can state that the initiator sub-role in a given semantic verbal decomposition can be identified equally by even the internal arguments, besides the external arguments, as can be seen in [52] – [57].

49. khəbər-tə ke-ye bhai bomi kor-echil-o. [+init<sub>vol</sub>, +proc, +res] [B]  
 food-def eat-partcl brother vomit do-pst-3p.sg  
 Brother vomited after having eaten the food.

50. khəbər-tə khe-ye bhai-r bomi hoy-echil-o.[+init, +proc, +res]  
 food-def eat-partcl brother-gen vomit be-pst-3p.sg [B]  
 Brother had vomiting after having eaten the food.

51. khəbər-tə dekh-e bhai-r khide pe-echil-o.[+init, +proc, +res]  
 food-def see-partcl brother-gen hunger get-pst-3p.sg  
 [B]  
 Brother was hungry after having seen the food.

52. us-ne janbujhke baba-ko khus ki-ya [+init<sub>vol</sub>,+proc,+res]  
 3p.s-erg intentionally father-acc happy do-pst.3P [H]  
 Purposely he made father happy.

53. mE janbujhke khus hu-a [+init<sub>vol</sub>,+proc,+res] [H]  
 1p.sg intentionally happy be-pst.1P  
 Purposely I became happy.

54. bari kena-r jonno baba khub kOsto kor-echil-o. [+init<sub>vol</sub>,+proc,+res]  
house buy-indf forfather lots pain do-pst-3p.sg [B]  
For buying the house, father did lots of effort.
55. bari kena-r jonno baba-r khub kOsto hoy-echil-o. [ +proc, +res]  
house buy-indf for father lots pain be-pst-3p.sg [B]  
For buying the house, father suffered a lot.
56. bari kena-r jonno baba khub kOsto pe-ec<sup>h</sup>il-o. [ +proc, +res]  
house buy-indf for father lots pain get-pst-3p.sg [B]  
For buying the house, father got lots of pain.
57. mənəpurvəm rajū telephon cey-du [+init<sub>vol</sub>,+proc,+res] [M]  
purposely rajū telephon do-pst  
Purposely, Raju telephoned.

From the above analysis, it seems that the light verbs when combine with the nonverbal elements to form complex predicates of the composite type, they classify the predicates into two categories of unaccusative verbs and unergative verbs. Therefore it can be stated that the light verbs come with features that automatically classify the predicates so formed into one of the two categories or it might also be the fact that some of the light verbs by default are unaccusatives while other are unergatives, such as ‘*hOwa*’ (B) or ‘*hona*’ (H), ‘to be’. Secondly, the initiator sub-role can be identified by any subject of a predicate, without the distinction of being an internal or an external argument of a given predicate.

#### 2.4.2.2 Agentivity / causativity of the predicate

Similar to what we have seen in the earlier section (presence of external argument), we see that light verbs can determine the agentivity or can decide whether the causer of the event should be highlighted in a given sentence or not. Light verbs have agent-selection properties, as has been pointed out by Folli et al. (2004), accordingly to whom if the sentences are grammatical with the agentive adverbial ‘intentionally’, when the non-verbal element is changed keeping the light verb constant, then light verbs essentially select agents.

We see that in [58] and [59], even if we change the non-verbal element, the same light verb ‘*maRa*’ gives grammatical sentences with the adverbial ‘*intentionally*’. In both these sentences the volitional-intentional agent is the noun, ‘sister’, which performs the action of blinking the eye or that of the slapping. However, in sentence [60] when we use the light verb ‘*khaoa*’, keeping the non-verbal element same as in [59], the sentence stands the adverbial ‘intentionally’ test but there happens to be a shift in the agentivity in the sentence. The earlier subject ‘sister’, who performed the function of the agent, now becomes the patient and an undergoer and the role of the agent is assumed by another argument, ‘father’.

58. bon ichchekore cokh mer-ech-e. [B]

sister intentionally eye beat-pst.perf-3p

Intentionally sister blinked (at me).

59. bon ichchekore cOr-ta mereche. [B]

sister intentionally slap-def beat-pst.perf-3p

Intentionally sister slapped (me).

60. bon ichchekore baba-r kache cOr-ta khe-ch-e. [B]

sister intentionally father-gen near slap-def beat-pst.perf-3p

Intentionally sister got slapped by father.

61. us-ne hum-e janbujhke bOhut kəst di-ye the. [H]  
 3P.s-erg 2p.pl-acc intentionally much pain give-pst.3p.s.hon cop  
 Intentionally he had given us lots of pain.

62. ghər bənanate səməy baba-ne janbujhke bOhut kəst ki-ye the. [H]  
 home build-infv time father-acc intentionally much pain be-pst.3p.s cop  
 Intentionally father was pained on having heard this news.

Similarly, in Hindi, we see that the although there is the same non-verbal element ‘*kəst*’ in both [61] and [62], but change in the light verbs bring about a change or shift in the agentivity, for in [61] the subject ‘*usne*’ is not only the ‘volitional initiator’, the agent if ‘*kəst dena*’, but also the ‘undergoer of the action, and the object DP, ‘*həme*’ is the affected resultee’ while in [62], the sole subject DP identifies all the three eventive roles.

On the other hand, if we change the light verb keeping the non-verbal element constant as in [63] and [64], then we see that the grammaticality judgments change. Sentence [63] means the agent was purposely cooling down the tea, which was probably hot. But the same non-verbal element ‘*thənda*’ in [64] fails to give grammatical sentence with the light verb ‘*pOra*’, because ‘*pOra*’ is a light verb, which does not have intentional or volitional agentive properties.

63. ami ichchekore ca-ta thanda kor-chi-lam. [B]  
 1P.s intentionally tea-def cool do-prst.prog-1P.s  
 Intentionally, I was cooling the tea.

64. \* dilli-te ichchekore thanda por-echil-o. [B]  
 delhi-loc intentionally cool fall-pst.perf.3p  
 Intentionally winter set in Delhi.



65.    ? tOkhon           ama-r           ichchekore       thanda lag-chil-o.           [B]  
           then            1P.s-gen           intentionally    cool    feel-pst.prog-3P

Intentionally I was feeling cold at that time.

[I was pretending that I was seriously feeling cold and wanted to fulfill my motive by doing so.]

From the above data, it seems that certain light verbs have volitional agentive feature which gets projected (interpreted) by default. To be more specific about the agent selection properties of the light verbs, it can be stated that light verbs actually bring in the interpretation of the volitional agents, which have the sense of purposely carrying out the given event.

#### 2.4.2.3 *Light verbs specify the ‘spec’ elements*

We saw that LVs can predict / determine the presence of the external arguments by classifying composite (or conjunct) CPs into the two categories of unaccusatives and unergatives. In relation to this, we have seen that there is unaccusative CPs whose nominals or NPs, though should not identify the initiator sub-role, because they do not have external arguments, yet these CPs are grammatically interpreted as having a volitional-agent or cause of the event, such as in [66]:

66.    ram    ichchekore    kOsto kor-ech-e.    [+init<sub>vol</sub>, +proc, +res]    [B]  
           ram    intentionally    effort    do-pst.perf-3P.s

Ram intentionally made efforts.

which means that there should be an *init<sub>vol</sub>* sub-phase, the subject position of which is occupied by ‘ram’, who is also an ‘undergoer’ of the event.

We have another CP or complex predicate of the composite type as in [67] where, the predicate, ‘*bhOy korchilo*’, being unaccusative does not have the subject of the ‘*init<sub>vol</sub>*’ sub-phase filled with the ‘*amar*’ NP. We might say, here, that it is the non-verbal element, ‘*bhOy*’ does not take the volitional agent, but in the earlier example, the non-verbal element ‘*kOsto*’ did, for the light verb in both the cases is same, that is ‘*korlo*’.

67. \*ama-r ichchekore bhOy kor-chil-o. [B]

1P.s-gen intentionally fear do-pst.prog-1P

Intentionally I was feeling afraid.

However, the above prediction cannot be held for a longer time, for in [68] – [70] we have the same non-verbal element ‘*bhOy*’ which is a part of an unaccusative CP and still the ‘*init<sub>vol</sub>*’ subject position in each of them are occupied by the NP ‘*ram*’. The reason for this is probably the presence of the LVs – ‘*peche*’, ‘*diyeché*’ etc in [68] – [70] when combine with ‘*bhOy*’ triggers a copy of the NP, ‘*ram*’, to move from its position to merge in the spec of ‘*init<sub>vol</sub>*’ phase.

68. ram ichchekore bhOy pe-chil-o. [B]

ram intentionally fear get-pst.perf-3P

Intentionally Ram got frightened.

69. ram ichchekore bhOy di-echil-o. [B]

ram intentionally fear give-pst.perf-3P

Intentionally Ram made (us) afraid.

70. ram ichchekore bhOy khe-chil-o. [B]

ram intentionally fear eat-pst.perf-3P

Intentionally Ram got frightened.

So definitely it is not the non-verbal elements ‘*bhOy*’ that rules out sentence [67]. At this point we might say that in [67] it is not so that the light verb ‘*korlo*’ do not permit ‘intentionally’ but it does in [66]. On the other hand, it can be stated that similar to [66], also in [67] the ‘init<sub>vol</sub>’ sub-phase is projected but the light verb ‘*korlo*’ in [67] faces certain limitations owing to which the subject of [+init<sub>vol</sub>] could not be identified by the ‘*amar*’ NP. Similar to ‘*bhOy koreche*’, we have ‘*lOjja koreche*’, as in [71] in Bangla, which behaves similarly.

71. \*rita-r ichchekore lOjja kor-ech-e. [B]  
 rita-gen intentionally shame do-pst.perf-3P  
 Intentionally Rita felt ashamed.

Predicates like ‘*bhOy*’, ‘*lOjja*’, etc are abstract nominals, indicating feelings which requires coming from within the self and is difficult to be forcefully generated. The light verb ‘*korlo*’ when combines with such abstract NPs, indicating abstract feelings, restricts the subject NP/DP of the given case from identifying the spec of ‘init<sub>vol</sub>’. However, other LVs freely permit the interpretation, though the semantics of such sentences requires additional effort on part of the reader to interpret them, taking longer time than usual. This means that it even if a particular phase or sub-phase is projected, it is the LV of the complex predicate that decides whether the spec of the given phase or sub-phase, here, that of the ‘init<sub>vol</sub>’, would be filled or not. That is to say, light verbs that combine with the non-verbal elements seem to determine the sub-eventive roles that the specific NP/DPs would have in a given construction.

#### 2.4.2.4 *Light verbs determine the Argument structure of the CPs*

LVs not only determine the sub-eventive roles of the NPs in a complex predicate construction but also the argument structure of the CP as such. By argument structure, we mean the categorical feature specification of the CP is determined by the LVs that take non-verbal elements to form composite CPs. Depending upon the light verbs that enter into combination to form composite or conjunct complex predicates, we can predict the set of categorical

features for a given N\_V predicate. Not only this, light verbs can be classified into groups, depending upon the type of categorical features they project.

In sentence [72] – [73], we see that, ‘do’ is the LV, that combines with the non-verbal element ‘*thanda*’ to mean ‘cooling down’. When we apply the various adverbial tests, it shows that the N\_V, ‘*thanda kOra*’ or ‘*thānda kiya*’, cooling down; ‘*gOrom kOra*’ or ‘*gārām kiya*, warming up, in Bangla and Hindi, respectively, project the event structure of the [+init<sub>vol</sub>, +proc, +res], but keeping the non-verbal element constant, when we change the LV, we see a difference and a change in the feature projection of the CP. In [74] – [75], the light verb ‘be’ has a similar set of event features, that is [+init, +proc, +res] . The difference between the two feature set seems to be the presence of the [+init<sub>vol</sub>] feature, which is present in [72] – [73], with the light verb ‘do’ and there is the simple ‘init’ feature, without the ‘volitional element’, that is present in [74 - 75], with the light verb ‘be’.

72.    ma       ca-ta     thanda    kor-ech-e.     [+init<sub>vol</sub>, +proc, +res]     [B]  
       mother tea-def cool       do-pst.perf-3P  
       Mother has cooled down the tea.

73.    ma-ne       cae-ko     thānda   kiy-a.       [+init<sub>vol</sub>, +proc, +res]     [H]  
       mother-erg tea-acc cool     do-pst.perf-3P.s  
       Mother cooled down the tea.

74.    ma-r           ca-ta     thanda   ho-ech-e.     [+init, +proc, +res]     [B]  
       mother-gen tea-def cool     be-pst.perf-3P  
       Mother’s tea has cooled down.

75.     ma-ki       cae    thəndi   hu-i.        [+init, +proc, +res]        [H]  
           mother-acc tea-def cool    be-pst.perf-3P  
           Mother's tea has cooled down.
76.     dilli-te     thanda por-ech-e.        [+proc, +res]        [B]  
           delhi-loc   cool    fall-pst.perf-3P  
           Winter has set in in Delhi.
77.     ama-r        thanda     lag-chil-o     [+init, +proc]        [B]  
           1P.s-gen   cool        feel-pst.prog-1P  
           I was feeling cold.

Once again, in [76], when we take a different LV, say, 'fall' and combine it with the same non-verbal element, 'thanda', the event structure of the N\_V predicate so formed, that is of 'thanda poreche', winter set in, reduces to [+proc, +res]. This N\_V does not project the [+ini]' feature in any form. On the other hand, in [77], the light verb 'feel' combines to give the event structure of [+init, +proc] for felt cold. What we can see that with the change in the light verb, not only the predicate changes, but also does the event structure or the categorical feature combinations of the predicate.

Therefore, we can state and claim that it is the LV that actually determines the argument structure of the composite CPs. In fact, it would be more appropriate to state that the light verbs come in the lexicon, with a specified set of categorical or semantic features, which they give or tend to lend to the N\_V predicates they form. Thus, the categorical features of the light verb determine the event structure of the complex predicate of the N\_V type. Therefore, LVs have a definite set of categorical features and are not devoid of an argument structure, as was thought of previously.

## **2.5 CONCLUSION**

In this chapter, we have seen that the Event Structure Decomposition advanced by Ramchand (2008) enables us to analyse the various types of complex predicates in the three Indian languages and helps us to figure out the structural differences between the main verbs and the complex predicates formed using the light verb counterpart of those main verbs.

In the next chapters we aim to see whether such an examination into the minute structural details and differences help us to categorise the available light verbs into distinct types and whether such categorization is universally found across language boundaries and across language families or whether the categorization of light verb is language-specific.

## Chapter 3

### *The Lexical Typology of Light Verbs*

While examining the event structure of light verbs in various N\_V and V\_V complex predicates, it was found that not all light verbs come with the same set of categorial feature combinations. That is to say, different light verbs have different set of categorial features that they inherently seem to come up with in the lexicon. And this is uniquely found in all the three languages under examination here. It is therefore, important to see how light verbs and their cognates exhibit same feature combinations across languages.

Some light verbs are seen to come with all the three categorial features that of [+ init, + proc, + res] such as the light verbs 'give', 'go', 'say' as in examples [1] – [3] in the three languages of Hindi, Bangla and Malayalam, respectively. All of these light verbs seem to exhibit the three categorial features in all the three languages.

1. mE-ne khilona tor di-ya [H]

1P.S-erg toy break.pst give-pst.S

I broke the toy.

2. ami bari phir-e ge-ch-i [B]

1P.S home turn-partcl go-perf.pst-1P

I have returned home.

3. əvən billi-ne ciitta paraŋŋ-u [M]  
 He bill-acc abuse say-pst  
 He abused Bill.

Similarly, there are other light verbs such as *'fall'*, which show a different set of categorial feature combinations. *'fall'* is a light verb, which seems to come in the lexicon with the two features of [+ proc, + res], as can be seen in [4], in the Bangla V\_V predicate *'pichiye poreche'* or 'to lay behind'.

4. ram sOba-r theke pichi-ye por-ech-e [B]  
 ram all-gen from behind-partcl fall-pst-perf-3P  
 Ram has gone behind from (compared) to others

This chapter will examine the detailed analysis of those light verbs that might share same semantic features when they combine with different verbal and non-verbal predicates. We will look at this group or class of verbs to know their semantic or categorial properties (features) and how they can be clubbed under one type. These light verbs form complex predicates of both the N\_V type and of the V\_V type. We will also see whether this grouping of light verbs is possible across the different language boundaries.

We might, then, be in a position to figure out the semantics of light verbs, and we will also see whether the unique combination of such categorial features is somewhere close to being universal a criteria, that is, if the cognates of light verbs, found in the three languages under consideration, show similar traits, with regards to feature roles or sub-roles.

As such, in section one of this chapter we will look at the various light verbs that form V\_V type of complex predicates. In section two we will look at the various light verbs forming



N\_V predicates and section three will present the findings by stating the semantic features of the light verbs analysed in this chapter.

### 3.1 LIGHT VERBS FORMING V\_V PREDICATES

To study the event structure of V\_V type of complex predicates, we will examine the categorial features of some sample verbs such as ‘rise’, ‘go’, and ‘beat’. The light verbs that form V\_V predicates in these languages are listed below in table 3.1.

Table 3.1 : Sample V\_V predicates using same light verbs

Verbs	Hindi	Bangla	Malayalam
‘rise’	ga uthi jhum uthi cilla uthi	ge utheche kende utheche pore utheche	N. A.
‘fall’	ja gira le gira	bhenge poreche pichiye poreche eshe poreche	N. A.
‘go’	gir gəya a: gəya	ghumiye gEche eshe gEche	unDaaki po:i oDi po:i
‘beat’	likh ma:Ra	N. A.	N. A.

#### 3.1.1 The verb ‘rise’

##### 3.1.1.1 As a main verb

To figure out the categorial features of ‘rise’ as a main verb, we begin with checking out the ‘initiation’ feature. For this, adverbial words like ‘*ichche-kor-e*’ in Bangla, ‘*janbuhjke*’ in Hindi are used with the sentences having the verb ‘rise’ to see their grammaticality. We see that, as in sentences [5] - [6], when the concerned adverbial words are used, the sentences get ruled out and are marked ‘ungrammatical’ by the speakers, for here, the main verb ‘rise’ does

not have the ‘init’ feature, thus, not allowing the presence of the ‘init volitional’ sub-eventive phase. However, going by the First Phase, the DPs ‘sun’ and ‘tornado’ would rise from some default source position, owing to which the event of ‘rising up’ must have an ‘initiating source’ or a [+init<sub>source</sub>] feature.

5. \* janbujhke bhəvər uth-a tha. [H]

purposely tornado rise-pst cop.pst

Purposely, the tornado had risen.

6. \* jenesune shurjo uth-ech-e . [B]

purposely sun rise-prst.perf.3p

Purposely the sun rose.

To test the presence of ‘process’ and ‘result’ phases, we used the adverbial ‘within an hour’ and ‘for an hour’ phrases with the sentences, having the main verbs, to judge their grammaticality. It can be seen that in both - Hindi and Bangla - sentences with ‘rise’ as a main verb, the sentences are grammatical with both -- the ‘for’ phrase, as in [7] and [9], and the ‘within’ phrase, as in [8] and [10], respectively. Therefore, going by the generalizations in chapter 2, we need to find out whether the sentences with the ‘within’ phrases have durative interpretations. As we can see, in [8] and [10], the sentences in both the languages are interpreted as [+durative process], therefore, the main verb ‘rise’ has a bounded path of process and not a result sub-phase, at least in the two Indo-Aryan languages, being studied here. Based on this we can say that the main verb ‘rise’ has [+ proc, - res] features.

The event of ‘*bhəvər uthna*’ in [8] or ‘*shurjo utheche*’ in [10] has ‘durative’ reading of the process sub-phase, because it involves longer time-span that the DPs take to enable the processing of the event occur in each case. The ‘rising’ process of the sun in [10] involves a stretch of time which is very much essential for the process to take place. Such verbs are thus said to have ‘durative process’ or ‘a bounded proc’, because the events require some stretch

of duration for their completion. Thus, these verbs have a ‘bounded proc phases’ and we can identify these verbs has having a [+dur proc] feature.

7. aaj ek ghānte-ke liye bhāvər uth-a tha. [H]

today one hour-dat for tornado rise-pst cop.pst

Today, the tornado had risen for 1 hr.

8. badal gərajne-ke ek ghānte-ke bhitər bhāvər uth-a tha. [+dur proc]

cloud thunder-dat one hour-dat within tornado rise-pst cop.pst [H]

The tornado had risen within 1 hr of thundering.

9. du minite-r jonno shurjo uth-ech-e. [B]

two minute-gen for sun rise-prst.perf.3p

For two minutes the sun rose.

10. du minite-r moddhe shurjo uth-ech-e. [+dur proc] [B]

two minute-gen within sun rise-prst.perf.3p

Within two minutes the sun rose.

We also find that the use of the predicates is ungrammatical with ‘purposely’ phrases as in [11a] – [11b], so we can say that there is no ‘initiation’ as such. But this interpretation of verbs like ‘rise’ will be wrong because ‘rise’ is a verb which requires its process to be initiate, without which the process cannot take place. Therefore in the absence of volitional initiation, there must be an inherent source initiation, which will trigger the process of ‘rising’ that of ‘smoke’ as in [11b] or of ‘the start of storm’ as in [11a]. Therefore, such verbs have [+init<sub>source</sub>] feature.



### 3.1.1.2 *As a light verb*

From table 4.1 above, we take some V\_V predicates, where ‘rise’ is used as a light verb and using the same tests with the base sentences having such complex predicate, we find out their event structure. The V\_V predicate ‘*ga uthi*’ in Hindi or ‘*ge utheche*’ in Bangla project the ‘init volitional’ sub-phase, because these sentences with such verbs are grammatical with adverbial phrases ‘purposely’ as in [13]. However, they are ungrammatical with ‘for’ phrases as in [14] and [15] but grammatical with ‘within’ phrases, as in [16] and [17]. Therefore, they project the ‘res sub-phase’. The presence of both [+init] phase and that of [+res] phase entails the presence of the [+proc] phase, which however, is of the dynamic type.

13. shila janbujhke ga uth-i thi. [H]

shiela purposely sang rise-pst.f cop.pst.f

Purposely, Shiela sang up.

14. \* shila dās minətke liye ga uth-i thi. [H]

shila ten minute for sang rise-pst.f cop.pst.f

Shiela sang for ten minutes.

15. ? shila dos miniter jonno ge uth-echi-lo. [B]

shila ten minute for sang rise-pst.perf-3p

Shiela sang for ten minutes.

16. shila do minət me hi ga uth-i thi. [H]

shila two minute in emph sang rise-pst.f cop.pst.f

Shiela sang within two minutes.

17. shila du minite-r moddhe ge uth-echi-lo. [B]

shila two minute within sang rise-pst.perf-3p

Shiela sang within two minutes.

Thus, the event structure of the predicates ‘*ga uthi*’ in Hindi or ‘*ge uthече*’ in Bangla is: [+init<sub>vol</sub>, +proc, +res] type. Similarly, if we take other predicates, having ‘rise’ as a light verb, but with different ‘main verb’ elements, we see that even these predicates have the event structure of [+init<sub>vol</sub>, +proc, +res] type. For example, in predicates like ‘*jhum uthi*’ in Hindi or ‘*heshe uthечи*’, ‘*pore uthечи*’ in Bangla, the sentences with these V\_V predicates stand the ‘purposely’ test and the ‘within an hour’ test, with [-durative process] readings, but get ruled out by the ‘for an hour’ tests, as can be seen from [18] – [20] for ‘*jhum uthi*’ in Hindi, [21] – [23] for ‘*heshe uthечи*’ and [24] – [26] for ‘*pore uthечи*’ in Bangla.

In sentences like [20] where the event gives [-durative process] readings with ‘within an hour’ phrases, we find that the main event ‘*jhum uthna*’ happens as a result of the earlier event, ‘*khābar sunna*’. The main event, ‘*jhum uthna*’ does not take a duration or a stretch of time for the event to take place. But on the contrary, the event happens right away, within fraction of seconds. Therefore, we definitely have a process of the event but that process does not require any duration of time for its occurrence. Instead happens instantly. So such process can be called as [-dur proc] or [+proc<sub>dynm</sub>] which stands for ‘process dynamic’, meaning the event has an inherent dynamic property of a process feature.

18.   janbujhke    shiela   sābke    samne   jhum uth-i.   [+init]    [H]  
purposely     shiela   everybody   before   dance rise-pst.f.sg

Purposely, Shiela danced up before everybody.

19.   khābār sun-te    hi shila do sekend ke liye (?dus minātke liye) jhum  
uth-i            thi.    [H]  
news listen-partc emph shiela two seconds for (?ten minutes for ) dance  
rise-pst.f         cop.pst.f

Having heard the news, Shiela danced up for two seconds (?ten minutes).

20. khəbər sun-te hi do sekend ke bhitər shila jhum uth-i.  
 [-dur proc] [H]  
 news listen-partc enph two seconds within shila dance rise-  
 pst.f.sg  
 Shiela danced up within 2 seconds of having heard the news.
21. ?chOrata shune du miniter jonno bon heshe uthe-chi-lo. [B]  
 poem heard two minute for sister laughter rise-pst.perf.3p  
 Having heard the poem, sister burst into laughter for two minutes.
22. chOra-ta shone-r ek minite-r moddhe bon heshe uth-echi-lo[B]  
 poem-def heard-gen one minute within sister laughter rise-  
 pst.perf.3p  
 Within a minute of having heard the poem, sister burst into laughter.
23. chOra-ta shune bon ichchekore/ jenebujhe heshe uth-echi-lo. [B]  
 poem-def heard sister purposely/intentionally laughter rise-pst.perf.3p  
 Having heard the poem, purposely/intentionally sister laughed at.

It must be noted here that in sentence [23], the meaning of ‘*ichchekore*’ goes beyond the meaning of ‘*purposely*’, and seems closer to ‘*volitionally*’, for the sentence means that ‘the poem was not such that it could be laughed at, but the speaker, out of some hidden intention, pretended so and laughed at the poem heard’. Similarly, in [24] the sentence seems slightly odd with ‘*purposely*’ or ‘*ichchekore*’, but becomes fine if we insert ‘*derikore*’ or ‘*do late*’, as in [25], for here, the action of completing the reading of the book was delayed with a specific intention and it was pretended that the action or the event took longer than the expected duration to end or complete. As such, ‘*purposely*’, does not have the sense of deception but ‘*volitionally*’ does.

24. ? ami ichchekore boi-ta pore uth-ech-i [B]  
 I purposely book-def read rise-pst.perf-1p.  
 Purposely I completed reading the book.
25. ami jenebujhe derikore boi-ta pore uth-ech-i [B]  
 I intentionally/purposely late book-def reading rise-pst.perf-1p.  
 Intentionally / Purposely I completed reading the book late.
26. \* ami Ek minite-r jonno boi-ta por-e uth-ech-i [B]  
 I one minute-gen for book-def read-partcl rise-pst.perf-1p.  
 I completed reading the book for a minute.
27. ami Ek minite-r moddhe boi-ta por-e uth-ech-i. [B]  
 I one minute-gen within book-def read-partcl rise-pst.perf-1p  
 I completed reading the book within a minute.

Therefore, when the verb ‘rise’ as a light verb is combined with other main verbs to form V\_V predicates, the resultant predicate will have the [+init<sub>vol</sub>, +proc, +res] features, with the external arguments, ‘initiating’ and sometimes ‘undergoing’ the concerned process of event. The event structure of such V\_V predicates is of :

[+ init<sub>vol</sub>, + proc, + res] type

The comparison of the event structure of ‘rise’ as a main verb with that of the V\_V, with ‘rise’ as a light verb shows that there is an additional sub-phase of [+res], when in the V\_V predicates, with ‘rise’ as a light verb. It might be claimed the additional sub-phase might have come from the main verbs of such V\_V predicates, that is, from the event structure of ‘gana’



in [13], ‘*jhumna*’ in [18], *hasha*’ in [24], and so on. Therefore, in the next section we move on to analyse the event structure of some of these main verbal elements, used as ‘main verbs’ in sentences.

### 3.1.1.3 USED MAIN VERBS: ‘*gana*’ (to sing) in Hindi and ‘*hasha*’ (to laugh) in Bangla

The event structure of the main verb, ‘sing’, shows that the verb ‘*gana*’ in Hindi and ‘*hasha*’ in Bangla project the [+init<sub>vol</sub>] phase, sentences being grammatical with ‘purposely’ as in [28] and [31] and [+proc] sub-phase, for they are grammatical with both ‘for’ and ‘within’ phrases as in [29] and [32], and [30] and [33], with durative interpretations. Hence, the ‘res sub-event’ is absent and thus, the main verb ‘sing’ comes with the [+init<sub>vol</sub>, +proc] categorial features.

28. shila-ne janbujhke gana gəya tha. [+init] [H]

shiela-erg purposely sang song cop.pst

Purposely, Shiela sang the song.

29. shila-ne du minət ke liye gana gəya tha [H]

shiela-erg two minutes dat for sang song cop.pst.

Shiela sang the song for two minutes.

30. mEdəmke cəle janeke do minətke əndər shilane (dubara) gana gəya. [H]

madam walk go two minute within shiela (again) song sang

[+dur proc]

Shiela sang song within two minutes of Madam’s leaving. (she did it again.)

31. chOra-ta shun-e bon ichchekore heshe-chi-lo. [B]

poem-def heard-of sister purposely laugh-pst.perf-3p

Having heard the poem, purposely sister laughed.

32. chOra-ta shun-e bon du minite-r jonno khub hesh-echi-lo. [B]  
 poem-def listen-of sister two minute-gen for very laugh-pst.perf-3p  
 Having heard the poem, sister laughed a lot for two minutes.
33. sinemata shuru hoa-r du minite-r moddhe bon hash-chi-lo. [+dur proc]  
 flim start being-of two minute-gen within sister laugh-pst.perf-3p  
 Within two minutes of the film, sister was laughing. [B]

The main verbs, ‘to sing’ and ‘to laugh’ thus project the features of [+init<sub>vol</sub>, +proc]. These main verbs when combine with light verb ‘rise’ in the two Indo-Aryan languages of Hindi and Bangla, then the resultant V\_V complex predicate project the categorial features of [+init<sub>vol</sub>, +proc, +res] as we have seen in section 3.1.1.2 above.

The [+init<sub>vol</sub>] feature of the resultant V\_V predicate thus comes from the event structure of the main verbs such as ‘sing’ because the main verb counterpart of the light verb ‘rise’ do not have [+init<sub>vol</sub>] feature . Note that there is still an additional [+res ] feature in the resultant V\_V predicates with ‘rise’ as a light verb. The question is where this [+res ] feature comes from in such V\_V complex predicates like ‘ga uthi’ in Hindi or ‘pore utheche’ in Bangla, for neither the main verbal elements ‘gana’ [H] or ‘pOra’ [B] nor the main verb counterpart of the light verb ‘rise’ has the [+res] features in either of the two Indo-Aryan languages of Hindi and Bangla.

### 3.1.2 The verb ‘go’

Having studied ‘rise’ and ‘fall’ in detail, we now proceed to study the event structure of the verb ‘go’. The verb ‘go’ is important because beside being used in the two Indo – Aryan languages of Hindi and Bangla, it is also used in Malayalam.

### 3.1.2.1 *As a main verb*

The sentences with ‘go’ as a main verb, are grammatical with all the three phrases, ‘purposely’, ‘within an hour’ and ‘for an hour’ and the sentence with the ‘within an hour phrase’ has ‘non-durative’ readings, as can be seen from [34] – [36] for Malayalam and from [37] – [39] for Hindi. Therefore the event structure of the main verb ‘go’ is:

[+init<sub>vol</sub>, +proc, +res] type

34. mənəpurvəm rəmən purəttu pooyi [+init] [M]  
 purposely raman out gone  
 Purposely Raman went out.

35. rəmən oru mənikoora-atheku purəttu pooyi [M]  
 Raman one hour-for out gone  
 Raman went out for 1 hour.

36. rəmən uru mənikoora-inullil purəttu pooyi [-dur proc] [M]  
 raman one hour-within out gone  
 Raman went out within 1 hour.

37. rəma ghər gəi he. [+init<sub>vol</sub>+proc, +res] [H]  
 rama home gone cop.prst.  
 Rama has gone home.

38. rəma ek ghənte ke liye ghər gəi he [H]  
 rama one hour for home gone cop.prst  
 Rama has gone home for 1 hr.

39. phon ane ke ek ghante ke bhitər rəma ghər gəi thi [H]  
 phone receive one hour within rama home gone cop.pst  
 Rama had gone home within 1 hr after she received the call. [-dur proc]

### 3.1.2.2 As a light verb

The light verb ‘go’ also productively combines with a number of main verbal elements to form V\_V complex predicates in these three languages. In the Malayalam predicate, ‘*paraṅṅu pooyi*’, ‘said up’, or ‘*koduttu pooyi*’, ‘gave up’ there is the same sense of ‘happened to say or give by mistake or unwillingly’, being referred to earlier. Also, interestingly, the sentences with these predicates become ungrammatical when said with ‘purposely’ and ‘for an hour/minute’ phrases, but are grammatical with the ‘within’ phrases, with a non-durative reading. Thus, even these predicates project only the [+proc] and [+res] features, as can be seen from [40] – [42] :

40. \* mənəpurvəm rəmən karyəm paraṅṅu pooyi [M]  
 purposely raman matter said go.pst  
 Purposely, raman spoke up about the matter.
41. \* rəmən oru mənikoor-atheku karyəm paraṅṅu pooyi [M]  
 raman one minute-for matter said go.pst  
 Raman spoke about the matter for 10 minutes.
42. (poli:s-inDe iDi-konDa) patta minitnullil rəmən karyəm paraṅṅu pooyi  
 (police-of being beaten up) ten minute-within raman matter said go.pst  
 Raman spoke up about the matter within 10 minutes (of having got beaten  
 by police). [M]

However, there must be a default source position for the process or the event to be initiated or begin, and this default source, from where the action begins, brings in [+init<sub>source</sub>] feature in these V\_V predicates. Thus, certain Malayalam predicates, with the light verb ‘go’ like ‘*paraṅṅu pooyi*’ (said up), ‘*mariccu pooyi*’ (died away), ‘*oDi pooyi*’ (ran away), ‘*koduttu pooyi*’ (gave up) have the event structure of the :

[ + init<sub>source</sub>, + proc, + res ] type.

But there are other V\_V complex predicates in Malayalam, with the same light verb ‘go’, which does only project the [+init<sub>source</sub>, + proc] features, for the sentences which contain such predicates are marked as ungrammatical with all the three phrases of ‘purposely’, ‘for an hour’ and ‘within an hour’. But since they are non-stative, so they do have some kind of process of event, however small or insignificant its duration is. Some of the predicates of the type: [ +init<sub>source</sub>, + proc ] are :

‘*veevichu pooyi*’ (over-cooked up), ‘*uNdakki pooyi*’ (made up), ‘*peedichu pooyi*’ (frightened up), etc as in [43]-[44].

43.     *rəmən chooru veevichu pooyi*   [+init<sub>source</sub>, +proc ] [M]  
           *raman rice cooked go.pst*  
           Raman cooked up the rice.

44.     *naan upma uNdakki po:yi*   [ +init<sub>source</sub>, +proc ] [M]  
           I upma made go.pst  
           I made the upma (by mistake).

However, sentences with these predicates and ‘purposely’ if interpreted as ‘pretending to have done the action by mistake’, then their readings get better. This once again brings us to

the question of ‘intentions’ and ‘deceptions’ on the part of the undergoer, being discussed earlier, in V\_V predicates, with ‘rise’ as light verbs.

Turning back to the two Indo-Aryan languages, Hindi and Bangla, V\_V predicates with light verbs ‘go’ seem to have the event structure of :

[+init<sub>vol</sub>, +proc, +res] type,

as can be seen from [45] – [49], but even here, some of the predicates when interpreted with ‘purposely’ phrase, has the ‘intentional – deceptional’ sense, while others not. Some of those predicates which reflect the ‘intentional – deceptional’ sense are:

‘gir gəya’ [H] – ‘pore gEche’ [B] -> fell down

‘a: gəya’ [H] – ‘eshe gEche’ [B] -> came / reached in

‘le gəya’ [H] – ‘niye gEche’ [B] -> took away

45. bəndər səb kha gə-ya. [+init, +proc, +res] [H]  
monkey everything ate go-pst  
Monkey ate up everything.

46. ləRka gir(v) gə-ya. [+init, +proc, +res] [H]  
boy fell go-pst  
The boy fell down.

47. ləRka aa gə-ya he. [+init, +proc, +res] [H]  
 boy come go-pst cop  
 The boy has come/arrived.
48. poolish čortake ni-ye gE-čhe [+init, +proc, +res] [B]  
 police thieves-ac took-partcl go-pst  
 The police took away the thieves.
49. bačča-ra pali-ye gE-čhe. [+init, +proc, +res] [B]  
 children-pl ran-partcl go-pst  
 Children ran away.

Here we might take the case of Hindi, '*gir gəya*' (fall go) or fell down, where the main verb '*fall*' has only the two features of [+proc, +res]. However, the main verb counterpart of the light verb 'go', as we saw above, comes with all the sub-eventive features of [+init, +proc, +res]. The complex V\_V predicate that is formed by the combination of the two Vs – '*fall*' and 'go' now has all the three features of [+init, +proc, +res]. Therefore, we might say that the [+init] feature which is there in the complex V\_V predicate 'fall go' or 'fell down' is owing to the light verb 'go', which has the feature of [+init] then. The light verb 'go' similar to other light verbs, identifies the proc head and selects the res head, therefore we might claim that the light verb 'go' also has the features of [+proc, +res].

As a result then the light verb 'go' which combines with different main verbs in Hindi, Bangla and Malayalam then might come with the three sub-eventive features of [+init, +proc, +res].

### 3.1.3 The verb to 'beat'

There are other verbs, which show differences with the event structure of the main verb and that of the V\_V, with its light verb counterpart.

#### 3.1.3.1 As a main verb

The event structure of the main verbs 'maRa' (beat), for example, as in [50], in Hindi has the categorial features of :

Main verb:                    [+ init<sub>vol</sub>, + proc]

50.            shiela-ne   aadmi-ko   maR-a                    [+init, +proc]                    [H]  
                 Sheila-nom   man-acc   hit-pst  
                 Sheila hit the man.

#### 3.1.3.2 As a light verb

But, such main verbs, when functioning as light verbs, combine with other main verbs, forming V\_V predicates as in [51], then the event structure of the so formed predicate has :

V\_V predicate:            [+ init<sub>vol</sub>, + proc, +res]

51.            us-ne   khæt   likh   maR-a                    [+init<sub>vol</sub>,+proc,+res]   [H]  
                 he-erg   letter   write   bear-pst  
                 He dashed off a letter.

As in the cases of verbs discussed above, even here we see an additional feature of [+res] in the new V\_V predicate, and the occurrence of this feature forces us to examine the event structure of those verbs, which function as the polar elements combining with the above light verbs in V\_V predicates. We see that these main verbs of the V\_V predicates, when used as the sole verb in a sentence, projects the event structure of :



Main verbs: ‘write’, ‘read’ :: [+init, +proc]

52. mE-ne kahani likh-i thi. [+init<sub>vol</sub>, +proc] [H]  
I-erg story write-pst cop-pst  
I wrote a story .

Here, the [+res] feature of the V\_V predicate ‘*likh maRa*’ or ‘dashed off’ in Hindi must definitely come from the light verb ‘beat’ in the languages. Therefore, the light verb ‘beat’ has the feature of [+res] which is selected by the proc head on the projection, therefore, we might say that the verb being dynamic and by its function of selecting the res phase, the light verb comes with the categorial features of [+proc, +res].

As far as the [+init] feature is concerned, the main verb counterpart of the verb ‘beat’ has the [+init<sub>vol</sub>] feature, and the V\_V in [51] also has the [+init<sub>vol</sub>] feature, which is identified by none other than the light verb ‘beat’ on the projection. Therefore, we might say that the light verb is not devoid of the [+init] feature. As such we can claim that the light verb ‘beat’ has the three features of [+init, +proc, +res].

### 3.1.4 Categorial-Semantic features : of light verbs in V\_V predicates

In V\_V predicates, it can thus be claimed that the ‘light verbs’ inherently has the [+res] feature which gets reflected in the complex predicates and that therefore these light verbs cannot be considered to be semantically bleached elements the analysis provides enough ground to claim that the ‘light verbs’ inherently have and come specified with at least the two base features of the theory - [+proc] and [+res], without exception. This is because they are non-stative in nature and invariably, have modificational attributes, providing additional semantic interpretations of the same event. Also, they are mainly responsible for the punctual readings of the event concerned. Therefore, the presence of these two features of [+proc] and [+res] seem obligatory in any light verb across languages.

Besides, some of the ‘light verbs’ also have a specific type of [+init] feature, along with the [+proc] and [+res] features, that has been referred to as the ‘intentional – deceptional’ type of [+init], which is responsible for the intentional reading of the sentences, as seen above, with predicates having the light verbs ‘*rise*’, ‘*fall*’ etc. Thus, generalizing the results based on the analysis of the data above, it seems that some of the ‘light verbs’ that form V\_V complex predicates also inherently come with the [+init<sub>vol</sub>] feature as well.

However, there are also some light verbs in Malayalam, Bangla and Hindi, for which no significant difference between the event structure of a light verb, and that of the main verb use of a verb can be made out. These are discussed in the next sub-section.

### **3.1.5 ‘Light’ verbs of Class A: forming V\_V predicates**

Based on the Event Structure Decomposition (ESD) analysis of various V\_V predicates in Hindi, Bangla and Malayalam, it can be stated that why I call Class A ‘light verbs’, which combine with other verbal elements to form V\_V type of complex predicates, can be clubbed in a group as they exhibit similar traits across languages. These light verbs show the presence of all the three features of [+init, +proc, +res].

These verbs come with the three semantic-categorial features of ‘initiation’, ‘process’ and ‘result’. Table 3.2 gives a list of light verbs that come under this category.

Table 3.2: Class A type of LVs

<b>Verb</b>	<b>As main verb counterparts</b>	<b>In V_V predicates</b>	<b>Light verbs</b>
To throw	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To give	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To take	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To keep	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To come	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To go	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i> <i>+init<sub>source</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To see	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To rise	<i>+init<sub>source</sub>, +proc</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To reach	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To make	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To sit	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To discard	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To complete	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To say	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To push	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>
To start	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>	<i>+init<sub>vol</sub>, +proc, +res</i>

The table shows that a light verb when combines with a main verb to form V\_V predicates, we see that the categorial features of the light verbs, and not that of the main verb involved in the V\_V predicate, getting projected as the categorial features of the V\_V predicate so formed. for example, if we take a light verb like ‘to take’ or ‘to go’ - both having the categorial features of [+init<sub>vol</sub>+ proc , +res] and combine them with a common main verb, for example, ‘to sleep, which has the categorial feature of [+init<sub>source</sub>, +proc], as in [53], then we see that the V\_V predicate they form project the features of the light verbs only , that is , [+init<sub>vol</sub>, + proc , +res], as in [54] – [55].

In other words, we can say that the verb, ‘to sleep’ when used as the sole verb as in [53] projects the event structure of [+init<sub>source</sub>, +proc], but when it is used as the main verb to form a V\_V predicate with ‘take’ as a light verb as in [54] or ‘go’ as a light verb as in [55], the event structure of the V\_V predicate so formed has the [+init<sub>vol</sub>+ proc , +res] features. Therefore, both the light verbs - ‘take’ and ‘go’ – definitely comes with the categorial features of [+init<sub>vol</sub>] as well as [ +res] - for both these features are absent in the main verb ‘to sleep’, as seen in [53].

53.   ami   ek   ghOnta-r   jonno   ghumi-ye-chi-lam   [+init<sub>source</sub>, +proc]   [B]  
       1P.s   one hour-gen   for   sleep-partcl-pst-1P  
       I slept for one hour.
54.   ami   ghumi-ye   ni-yechi-lam   [+init<sub>vol</sub>, +proc, +res] [B]  
       1P.s   sleep-partcl   take-pst-1P  
       I had a sleep. (I took a sleep.)
55.   ami   ghumi-ye   gE-chi-lam   [+init<sub>vol</sub>, +proc, +res] [B]  
       1P.s   sleep-partcl   go-pst-1P  
       I slept. (I felt asleep.)

This is what we see in case of all light verbs forming V\_V type of complex predicates in the languages under consideration here in this thesis. Thus we can say that it is the categorial

features of the light verbs that is getting projected as the categorial features of the V\_V predicates.

### 3.2 LIGHT VERBS FORMING N\_V PREDICATES

There are three light verbs, namely, ‘to do’, ‘to give’ and ‘to take’, found in all the three languages here and all of them uniformly project the same event structure of [+ init, + proc, + res].

#### 3.2.1 The verb ‘do’

For example, to figure out the event structure of the light verb ‘do’, we test the sentence with the N\_V predicate, like ‘*swagətəm ceydu*’, ‘welcomed’, with the adverbial ‘intentionally’ phrase, which is grammatical, signifying the presence of [+ init<sub>vol</sub>] feature. Then, when tested with the adverbial ‘for an hour’ and ‘within an hour’ phrases, both the sentences are grammatical as can be seen in [57] – [58]; however, the interpretation of the sentence with the ‘within an hour’ phrase in [58] is [- durative process], which predicts that along with the [+ proc] feature, this N\_V also has the [+ res] feature as seen in [57], [59] and [60] for Malayalam, Bangla and Hindi, respectively.

56.     $\text{ɲa:n}$     $\text{virunnugaRde}$     $\text{swagətəm}$     $\text{cey-du}$ .   [+ init<sub>vol</sub>, + proc, + res]   [M]  
       1P.S   guest.pl           welcome   do-pst  
       I welcomed the guests .

57.     $\text{ɲa:n}$     $\text{oru}$     $\text{maNiko:rateku}$     $\text{virunnugaRde}$     $\text{swagətəm}$     $\text{cey-du}$ .   [M]  
       1P.S   one   hour-for           guest.pl           welcome   do-pst  
       I welcomed the guests for an hour.

58.    ja:n oru maNiko:rinullil virunnugaRde swagətəm cey-du. [-dur proc]  
       1P.S one hour-within guest.pl welcome do-pst [M]  
       I welcomed the guests in /within 1 hour.
59.    sinema dEkha-r jonno bhai ama-e baddho kor-echil-o [B]  
       cinema see-gen for brother 1P.s-to force do-pst.perf-3P  
       Brother forced me to see the movie.
60.    shiela-ne meri səhayəta ki [H]  
       shiela-erg 1p.s-gen help do.pst.3P  
       Sheela helped me.

### 3.2.2 The verb ‘rise’

In the analysis here, the verbs with a particular meaning has been treated as one lexical item and if the same phonological word is present in the lexicon but with a different meaning, it is listed as a separate entry in the grammar and the two occurrences of the word / verb with the two different semantics make them homophonous.

The verb, ‘*uthlo*’, in the sense of ‘rise’ means ‘to go up’, which is implied when we say ‘the sun is rising’ or ‘the curtain is rising’. Here they mean the internal argument or the subject DP is undergoing the process of ‘going up’. ‘Going up’ means the DP naturally, without the requirement of an agent, will move up to a higher level from its original / default position in space. This can be seen in sentences like [61] – [62]. On analyzing the event structure of the main verb ‘rise’, in the given sense, using the tests being mentioned, we find that ‘rise’ seems to have a non-volitional but default source point (or position) of initiation, from which the DP/NP will start the event of moving upwards, thus having a [+ init] feature of the ‘source’ type. The event of ‘rising’ progresses, over a length of time or duration, to make the event

noticeable, identifying the [+ proc] feature. The event of ‘rising’, in these cases do not have the [+res] feature, as their rhematic path is bound. Thus, the main verb ‘rise’ seems to project the features of :

[+init<sub>source</sub>, + proc]

61. shurjo uth-ech-e. [B]

sun rise-prst.perf-3P

The sun has risen.

62. dhua uth røha tha. [H]

smoke rise prog.M cop.pst.M

the smoke was coming out. (The smoke was rising.)

On the other hand ‘*uthlo*’ in the sense of ‘*gache utha*’ as in [63] has the sense of ‘getting up’ from the source position or location in space. The difference between this usage of ‘*uthlo*’ compared to its earlier one is that here, there is an agent, which undergoes the process of ‘moving up’ intentionally within a fraction of seconds or minutes. The event structure of this ‘rise’ has volitional initiation, to initiate the upward trend, thus having a [+ init] feature of the ‘volitional’ type. The event of ‘rising’ is sudden and happens instantly, with a visible telic point, when the event ends, and also brings on a desired change or affectedness as a result of the event, thus identifying the [+ proc] and [+ res] features. Thus, the main verb ‘rise’ seems to project the features of :

[+init<sub>vol</sub>, + proc, +res]

63. (piara-ta dekhei) bhai gach-e uthe-chil-o [B]

(guava-def see.pst-emp) brother tree-loc climb-pst.perf-3P

Having seen the guava, brother climbed the tree.

64. (ma-ko dekhte hi) bacca kursi-se uth-a [H]  
 (mother-acc see-infv emp) child chair-from get-.pst.3P.M.S  
 Having seen his mother, the child got up from the chair.

Though both the two sub-groups imply the sense of progressing towards an upward direction, yet there are subtle semantic differences between the two groups. When the former use means, ‘going up’, it is also ‘non-agentive’, whereas the latter use means ‘getting up’, which is ‘agentive’ essentially. This latter sense of ‘getting up’ in Bangla and Hindi stands for a number of English verbs such as ‘to get up’, ‘to climb’, ‘to raise’, etc. This is also captured by the difference in the categorial features set between them, for the earlier group - has [+init<sub>source</sub>, +proc], while the latter group has [+init<sub>vol</sub>, +proc, +res].

Here, we might claim that they are homophonous because they have semantic differences and as well as differences with regard to their event structure. However, owing to their limitations in the sense of both means – ‘having an upward trend of motion’, we might claim that they are the two sub-groups of ‘*uthlo*’, as the cover term. Determining the exact nature of ‘*uthlo*’ is beyond the scope of this dissertation.

What is clear is that N\_LV predicates formed by ‘*uthlo*’ in Bangla such as ‘*jOr utheche*’, ‘to become feverish’, ‘*bEtha utheche*’, ‘start paining’, ‘*rag utheche*’, ‘to become angry’, ‘*hecki utheche*’, ‘to hiccup’, etc, the light verb has the sense of ‘go up’ or ‘rise up’, when interpreted by the native speakers. None of the native speakers interpret the ‘*uthlo*’ in these predicates as ‘getting up’ or ‘raise’ or ‘climb’.

Therefore, we consider the event structure of ‘go up’, as a ,main verb, for ‘*uthlo*’ i.e. has the event structure of [+init<sub>source</sub>, +proc]. Whereas the event structure of ‘*uthlo*’ as a light verb has the categorial features of [+init<sub>vol</sub>, +proc, +res], while that of the main verb has [+init, +proc]. This once again shows that ‘*uthlo*’ as a light verb cannot be considered to be semantically bleached or grammaticalised counterpart of ‘*uthlo*’ as a main verb.



### 3.2.3 'Light' Verbs of Class A: Forming N\_V Predicates

The light verbs that belong to class A group have all the three major eventive features of 'initiation', 'process' and 'result'. Since they come with the major semantic features of a verb, they seem to function like any other main verb in the languages and must have important role to play in the grammar. Within class A, further, light verbs can be divided based on the presence of the specific type of 'initiation' feature - whether it is of the 'volitional' type or of the 'simple' or 'default' type.

Class A : [+ init, + proc, + res] type

In table 3.3, we can see the light verbs, in the three languages of Hindi, Bangla and Malayalam, with examples of the N\_V predicates they form.

3.3: Class A type of light verbs forming N\_V predicates

Light verb	Bangla	Hindi	Malayalam
To do	<i>kOsto koreche</i> (made efforts)	<i>məjbūr kiya</i> (forced)	<i>swagətəm ceydu</i> (welcomed)
To give	<i>lOjja diyechē</i> (make someone ashamed)	<i>bhashān diya</i> (lectured)	<i>kadəm koduttu</i> (lend)
To take	<i>dhar niyechē</i> (borrow)	<i>mol li:</i> (purchased)	<i>kadəm vangī</i> (borrow)
To keep	<i>mone rekhechi</i> (remember)	<i>yaad rākhkha</i> (remember)	<i>occa veccu</i> (shouted)
to gather	----	----	<i>vaTTam kutti</i> (made arrangements)
To beat	<i>cokh mereche</i> (blinked)	<i>thəppər maRa</i> (slapped)	----
To eat	<i>cOr kheche</i> (got slapped)	----	----
To say	----	----	<i>para:ti paraṇṇu</i>

			(complain)
To bring	----	<i>ənk laya</i> (scored)	----
To come	----	<i>pyar əya</i> (loved)	----
To rise	<i>rag uthechilo</i> (got angry)	----	----
To hold	<i>haal dhoreche</i> (take responsibilities)	----	----

When comparing the categorial-semantic features of a light verb with its main verb use, we see significant differences between them. For example, in case of the verb ‘do’, the main verb use of ‘do’ show the main verb ‘do’ comes with the categorial features of [+init<sub>vol</sub>, +proc] while the light verb use of ‘do’ show that the light verb ‘do’ has the [+init<sub>vol</sub>, +proc, +res] categorial – semantic features, as can be seen in the table 3.4 below. This is seen with respect to verbs such as ‘to beat’, ‘to go up’ or ‘rise’.

On the other hand, there are other verbs like ‘give’, ‘take’, ‘throw’, ‘hold’, which in their main verb use as well as in their light verb use show same categorial semantic features that of [+init<sub>vol</sub>, +proc, +res] as can be seen in table 3.4. The table 3.4 shows in detail the significant differences in the categorial feature sets between a main verb and its light verb counterpart.

Note that some of the light verbs have in their [+res] feature, an additional feature mentioned that of ‘affect’. This is a special kind of [+res] phase identified in our analysis, which will be discussed in detail in chapter 5.

### 3.4: Comparison of the event structure between MV and its LV counterpart

<i>Verb</i>	<i>Main verb</i>	<i>Light verb</i>
To do	+ <i>init<sub>vob</sub></i> , + <i>proc</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>
To give	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>
To take	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>
To keep	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>
to gather	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>
To beat	+ <i>init<sub>vob</sub></i> , + <i>proc</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res<sub>affect</sub></i> <sup>1</sup>
To eat	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res<sub>affect</sub></i>
To say	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To bring	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To come	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To go up (rise) To get up (rise/raise)	+ <i>init</i> , + <i>proc</i> + <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res<sub>affect</sub></i>
To hold	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res</i>	+ <i>init<sub>vob</sub></i> , + <i>proc</i> , + <i>res<sub>affect</sub></i>

### 3.3 CONCLUSION

Having studied the event structure of various main verbs and that of some of the complex predicates, it becomes clear that there is a significant difference between the event structure of a given ‘main verb’ and its ‘light verb’ counterpart of these main verbs, if any. At this juncture, based on the above data and the findings, it will be justified to state that the so-called ‘light verbs’ have their own event structure, which have been, to a certain extent,

<sup>1</sup> The ‘res-affect’ feature will be discussed in chapter 5 in detail.

figured out. The crucial fact that comes forth here is that the ‘light verb’ counterparts often have additional categorial features, which are not present in their main verb usages. Then it is questionable to consider ‘light verbs’ as grammaticalised or semantically bleached elements of the ‘main verbs’. In fact, the very presence of additional features, sometimes [+res] and often the [+init<sub>vol</sub>] features, in the light verbs provides evidence that they can no longer be claimed as ‘semantically reduced’ verbs. On the contrary, they should be considered as ‘a class of verbs’ specified with ‘grammatical functions’ to perform in our languages, cross-linguistically.

Thus, we can move a step ahead to state that our languages have certain homophonous verbs, with different set of semantic – categorial features and syntactic – grammatical functions and the two groups of these homophonous verbs should be treated differently. The so-named ‘light verbs’ actually come with a feature specification and play significant role in determining the argument structure of complex predicates across languages, belonging to different language families.

## Chapter 4

### *Light Verbs and their Classification*

In the previous chapter, the class of light verbs we examined was a class whose categorial – semantic feature set consists of [ + init, + proc, + res]; let us call them Class A type. In this chapter, we will now examine other light verbs in these three languages, that have the categorial–semantic feature set consisting of different feature combinations.

Section one will look into Class B type of light verbs, section two will show the feature set for Class B type of light verb, section three will show the Class C types of light verbs, section four will examine Class D type of light verbs. In section five, we will examine the differences in categorial feature sets with regard to the light verbs and their main verb counterparts in all the four classes of light verbs and finally in section six we will conclude by stating the different classes of light verbs with their feature sets.

#### **4.1 CLASS B TYPE OF LIGHT VERBS**

##### **4.1.1 Light verbs forming N\_V/V\_V predicates**

In the table [4.1] , we see the light verbs that combine with the non-verbals to form N\_V type of CPs and with verbal elements to form V\_V type of CPs in the three languages, under consideration here. To be specific, we will study the light verbs ---- ‘fall’, ‘lay’, ‘get’ in the discussion to analyse the event structure of these verbs in detail.

Table 4.1 : Sample N/V\_V predicates using same light verbs

Light Verbs	N_V predicate	V_V predicate	Language
'become'	<i>mənəssil a:yi</i> (understood)	N.A.	Malayalam
'to be'	<i>dərd hua</i> (got hurt)	N. A.	Hindi
	<i>khusi hoyeche</i> (became happy)	N. A.	Bangla
'fall'	<i>bOrof poreche</i> (snowed)	bhenge poreche (broke down) ja gira (fell down)	Bangla
	N. A.		Hindi
'lay'	<i>bərf pəRti</i> (snowed)	N.A.	Hindi
'get'	<i>khusi milna</i> (be happy)	N.A.	Hindi
	<i>khide peche</i> (am hungry)	khuje peche (found out) phire peche (got back)	Bangla

#### 4.1.2 The verb '*fall*'

##### 4.1.2.1 As a main verb

To examine the categorial features of the verb '*fall*', we use the same tests we have done earlier. The sentences with '*fall*' as a main verb are marked as ungrammatical when tested with '*purposely*' as well as with 'for a month/hour' phrases, but are grammatical with 'within an hour' phrases as can be seen from [1] – [3]. Therefore, as per the generalizations, the main verb '*fall*' project the [+ proc] and [+ res] features. The event structure of '*fall*' is:

[ + proc, + res ] type

- \**ye əmrudh janbujhke peRh se gira tha.* [H]  
 this guava purposely tree from fall-pst cop-pst  
 This guava fell from the tree purposely.

2. \*ye əmrudh ek məhine keliye peRh se gira tha [H]  
 this guava one month for tree from fall-pst cop-pst  
 The guava fell for 1 month.
3. pək janeke ek hafte kebhitər əmrudh gira tha. [H]  
 ripe being one week within guava fall-pst cop.pst  
 The guava fell within a month of ripening.

#### 4.1.2.2 As light verbs in V\_V predicates

As far as the event structure of V\_V predicates with *'fall'* as a light verb is concerned, interesting facts come to the forefront, when we change the main verbs, keeping the light verb, *'fall'* constant. Based on the event structure analysis, these V\_V predicates can be grouped into two categories.

Predicates like *'bheng-e porche'* (broke down), *'jhore poreche'* (fell down), *'dhoshe poreche'* (collapsed) in Bangla and *'ja gira'* (fell down), *'mar giraya'* (beat down) in Hindi are marked as ungrammatical when tested with 'purposely' as well as with 'for a month/hour' phrases, but are grammatical with 'within an hour' phrases as can be seen from [4] – [6], for *'bheng-e porche'* (broke down) in Bangla and from [7] – [9] for *'ja gira'* (fell down) in Hindi. The generalizations show that these V\_V predicates, having the light verb *'fall'* project event structure with [+ proc] and [+ res] features, similar to that of the main verb 'fall'. That is, they are of the [ + proc, + res ] types.

4. \*ichchekore chat-ta bheng-e por-che. [B]  
 purposely roof-def break-partcl fall-prst.prog  
 Purposely, the roof is breaking down.

5. \*du ghOnta-r jonno chat-ta bheng-e por-che. [B]  
 two hours-gen for roof-def break-partcl fall-prst.prog  
 The roof is breaking down for two hours.
6. du ghOnta-r moddhe chat-ta bheng-e porche. [B]  
 two hours-gen within roof-def break-partcl fall-prst.prog  
 The roof is breaking down within two hours.
7. ?bacca janbhujke pani me ja gir-a [H]  
 child purposely water in go fall-pst  
 ? Purposely / *Intentionally*, the child fell into the water.
8. \*bacca dus minət keliye pani me ja gir-a [H]  
 child ten minutes for water in go fall-pst  
 The child fell into the water for ten minutes.
9. bacca dus minət me hi pani me ja gir-a [H]  
 child ten minutes within emp water in go fall-pst  
 The child fell into the water within ten minutes.

However, if we analyze sentences like [7] closely, interpretations of such sentences give useful insights into their event structure. If we try to interpret these sentences with ‘purposely’ readings, they seem to be odd. On the contrary, speakers preferred interpreting these sentences with ‘deceptively’, instead of ‘purposely’, making the same sentence sound perfectly grammatical with proper semantic and pragmatic inferences.



This is probably due to the fact that the very sense of ‘intentionally’ brings in the sense of ‘deception’ on the part of the ‘undergoer’ of the process or the event. This is a similar case as we saw with sentence, in chapter 3, earlier, with ‘rise’ as a ‘light verb’.

Similarly if we take other predicates like ‘*dhuke porechilam*’, (entered into) ‘*eshe porechi*’ (came / reached in) in Bangla or ‘*le gira*’ (fell down with someone) as in Hindi, we see the same interpretations with the judgments. Sentences like [10] essentially mean ‘the action happened or took place’ by mistake, because of which the sense of ‘purposely’ is not compatible with these sentences. But when we associate these sentences with ‘intentionally’, as in [11], the interpretations get reflected in a better way, only because with this, comes the additional sense of ‘deception’.

Therefore, such predicates, beside having ‘[ + proc ]’ and ‘[ + res ]’ features, also project the ‘[ + init ]’ feature – an ‘init’ with an volitional semantics and refer to this as [ + init<sub>vol</sub> ]. Then, the event structure of these V\_V predicates would be :

[+ init<sub>volitional</sub> , + proc, + res] type.

10. am-ra bhul-kore hOll-e dhuk-e por-echi-lam [B]  
 we-pl mistake-did hall-loc enter-partcl fall-pst.perf-1P.pl  
 By mistake we went into the hall.

11. am-ra ichchekore hOlle dhuk-e porechi-lam.[+ init<sub>vol</sub>, + proc, + res]  
 we-pl intentionally hall-loc enter-partcl fall-pst.perf-1P.pl [B]  
 Intentionally, we went into the hall.

12. am-ra ichchekore taratari esh-e por-echi. [+ init<sub>vol</sub>, + proc , + res]  
 we-pl intentionally quickly come-partcl fall-pst.perf [B]  
 Intentionally, we have arrived before time.

13. ram janbhujke bhai-ko le gir-a [+ init<sub>vol</sub>, + proc, + res]  
 ram intentionally brother-acc take fell-pst.m.s [H]  
 Intentionally, Ram fell down with his brother.
14. bhai ne janbhujke ləRko-ko maR gir-a-ya. [+ init<sub>vol</sub>, + proc], + res]  
 brother-erg intentionally boy-acc beat beat-caus-pst  
 Intentionally, brother beat the boy down. [H]

However, not all V\_V predicates with *'fall'* light verbs take 'intentionally' such as '*bheng-e porche*' in Bangla, which means 'broke down'.

From the above analysis, it seems prominent that there are two categories of predicates, with *'fall'* as a 'light verb', namely, one without the '*init*' feature at all, and the other, with an '[+ init<sub>vol</sub>]', along with [+ proc] and [+ res] features. They are categorized as in [15]:

15. The two category of predicates are:
- (a) [+ proc, + res] type
- (b) [+ init<sub>volitional</sub>, + proc, + res] type

#### 4.1.2.3 Used as MAIN VERBS: '*asha*' or 'to come' [B] and '*lena*' or 'to take' [H]

So when we compare the event structure of main verb *'fall'* with that of the V\_V predicate with light verb *'fall'*, we find that in one of the types of such V\_V predicates have exactly the same combination of categorial features, as in [15 (a)]. However, in the second group, in [15(b)], there is an additional [+init<sub>vol</sub>] feature, which is not present in the main verb *'fall'*. Therefore, we move on to check whether this [+ init<sub>vol</sub>] feature of [15 (b)] comes from the 'main verbal' elements of such V\_V's, which combine to form such complex predicates.

For this, we will analyze the event structure of the main verb ‘*asha*’, ‘*to come*’, in Bangla , and ‘*lena*’, ‘*to take*’, in Hindi. We find that sentences with both these predicates are grammatical with the use of ‘purposely’, ‘for an hour’ phrases and also with ‘within an hour phrases’; and the ‘within an hour’ phrases have ‘non-durative’ interpretations. Sentences from [16] – [18] and from [19] – [21], refer to the above descriptions, for ‘*asha*’ in Bangla and ‘*lena*’ in Hindi, respectively. Thus, the event structure of both the predicates - ‘*lena*’ and ‘*asha*’ is:

[+ init<sub>vol</sub>, + proc, + res] type.

16.    ichchekore ram bari ash-che.                    [+init<sub>vol</sub>,+ proc,+ res]             [B]  
         purposely    ram home come-prog.prst  
         Purposely, Ram is coming home.
  
17.    du ghOnta-r jonno    ram bari esh-echi-lo/ ash-che.                    [B]  
         two hour-gen for      ram home come-pst.perf.3p / come-prog.prst  
         Ram is coming home for two hours.
  
18.    du ghOnta-r moddhe ram bari ash-che.                    [-dur]             [B]  
         two hour-gen within ram home come-prst.prog  
         Ram is coming home within 2 hours.
  
19.    mE-ne janbujhke sita se    kitab li-ya.    [+init<sub>vol</sub>, +proc,+ res]             [H]  
         I-erg    purposely sita from book took-pst  
         Purposely I took the book from Sita.

20. mEne sita se ek ghānte keliya kitab li-ya. [H]

I-erg sita from one hour for book took-pst

I took the book from Sita for 1 hr.

21. (bet lōganeke ) dus mināṭke bhitār hi mE-ne sita-se kitab li-ya tha. [H]

(bet doing of) ten minutes within only I-erg sita-form book take-pst cop.pst

I took the book from Sita within 10 minutes (of doing bet). [-dur proc]

These predicates with the [+init<sub>volitional</sub>] feature do not bring in the sense of ‘deception’ on the part of the ‘undergoer’. Thus, it seems to be the fact that the light verb ‘*fall*’ does project the [+init<sub>unintentional</sub>] feature, with a deception meaning, which means to pretend to do the action ‘mistakenly’ or ‘unintentionally’ or ‘accidentally’. The doer/agent undergoes the action intentionally and voluntarily but pretending that it was done by mistake by him. The main verbs that the light verb ‘*fall*’ combines with, therefore, do not lend their [+init<sub>vol</sub>] feature to the V\_V predicate as the semantics of these main verbs do not have the accidental or deception meaning in it.

Therefore, the event structure of the light verb ‘*fall*’ probably seems to be of two types, namely as in [22]:

22. (a) [+proc, +res] type

(b) [+init<sub>accidentally</sub>, +proc, +res] type

### 4.1.3 The verb ‘*get*’

#### 4.1.3.1 As a main verb

To examine the categorial features of the verb ‘*get*’ we use the same tests we have done for the preceding light verbs. The sentences with ‘*get*’ as a main verb are marked as ungrammatical when tested with ‘*purposely*’ but are grammatical with ‘for a month/hour’

phrases as well as grammatical with 'within an hour' phrases as can be seen from [23] – [27]. As both 'for-phrases' and 'within-phrases' are grammatical, we will now examine whether the 'within-phrases' have a durative semantics, which is indeed the case. As has been discussed in chapter 2, the 'within-phrase' has [-dur proc] semantics, therefore, as per the generalizations<sup>1</sup>, the main verb 'get' projects the [+ proc, + res] features. The event structure of '*get*' is:

[ + proc, + res ] type

23.    bhai maine pe-lo. [B]  
        bother salary get-pst.3p  
        brother got salary.
24.    \*bhai jenesune maine pe-lo. [B]  
        brother purposely salary get-pst.3p  
        purposely brother got salary.
25.    bhai du mashe-r jonno maine pe-lo. [B]  
        brother two month-gen for salary get-pst.3p  
        brother got salary for two months.
26.    bhai du masher moddhe maine pe-chilo. [B]  
        brother two month-gen within salary get-pst.perf.3p  
        brother got salary within two months.

---

<sup>1</sup> Refer to the section on generalizations in chapter 2 for details.

27. \* bhai ko janbujhke pEise mile [H]  
 brother-acc intentionally money got  
 My brother got the money intentionally .

#### 4.1.3.2 *As light verbs in N\_V predicates*

This light verb does not seem to take any verbal element when they form complex predicates but they take nominal elements to form N\_V type of complex predicates. They necessarily project the ‘process’ and the ‘result’ phases, as can be seen in case of the N\_LV predicate ‘*shanti mila*’, ‘be relaxed’ in Hindi. Both the sentences, one with the ‘for an hour/minute’ phrase, in [30] and the other with ‘within a section/an hour’ phrase in [29] are grammatical with this predicate and the latter, [29], has a non-durative interpretation, predicating the [+res] feature. Thus predicates of this kind and the light verbs of these predicates come with the categorial features of [+proc, +res], as can be seen in [28] – [30] for Hindi and [31] – [33] for Bangla.

28. \*mujhe janbujhke shanti mil-i thi. [H]  
 1P.S intentionally peace get-f cop.pst.f  
 Intentionally I was relaxed.

29. pani pine-ke do sekend-ke bhitər hi mujhe bOhot shanti mil-i  
 thi [-dur] [H]  
 water drink.infv-acc two second-acc in emp 1P.S much peace get-f  
 cop.pst.f  
 Within two seconds of having drunk water, I was relaxed a lot.

30. pani pin-e-ke baad do minət keliye mujhe shanty mil-i thi  
 water drink.infv-acc after two minutes for 1P.S peace get-f cop.pst.f  
 After having drunk water, I was relaxed for two minutes. [H]
31. mujhe shanti mil-i thi [ + proc , + res] [H]  
 1P.S peace get-f cop.pst.f  
 I was relaxed.
32. ama-r khide pe-chil-o. [+ proc, + res] [B]  
 1P.s-gen hunger get-pst.perf-1P  
 I was hungry.
33. dilli-te bOruf por-ech-e. [+ proc, + res] [B]  
 delhi-loc snow fall-pst.perf.3P  
 It snowed in Delhi.

Therefore, the event structure of the light verb ‘*get*’, as in N\_V complex predicates is:

[ + proc, + res ] type

#### 4.1.4 Categorical-Semantic features : of light verbs in N\_V and V\_V predicates

The light verbs belonging to this group, therefore projects the two categorial features of [+ proc, + res], definitely. Even in CLASS A type, the light verbs necessarily projected these two features, at least. Therefore, we can say that the semantic features of [ + proc ] and that of [ + res ] are the ones that are definitely inherently part of any light verb’s semantics.

However, with regards to the light verb ‘*fall*’ here, we see a different trait. There seems to be actually two different types of the light verb ‘*fall*’ – one with the [ + proc , + res ] features

and the other with [+ *init* <sub>accidentally</sub> , + *proc* , + *res*] features, which is indeed an additional semantic feature found on the light verb ‘*fall*’ with verbs like ‘*dhuke porechilam*’, in Bangla, meaning ‘to enter into’ and ‘*maR giraya*’ in Hindi which means ‘to beat down’.

Apart from this exceptional case, all the other light verbs that we have analysed here project the semantic categorial features of the type [ + *proc* , + *res* ].

#### 4.2 FEATURE SET OF CLASS B TYPE OF LIGHT VERBS

These verbs come with the two semantic-categorial features of ‘process’ and ‘result’. However, these light verbs do not have the ‘initiation’ feature. Therefore it is not brought about by the light verbs, as can be seen when analyzing the verbs above. Being durative predicates, these light verbs have the [+ *proc* ] feature. since the V\_V predicates in which they function as the vector element have the [+ *res*] feature and the polar element of those predicates do not have the *res* feature, it seems plausible that it is the [+ *res*] feature of the light verbs of this category that get reflected in the V\_V. Table 4.2 gives a list of light verbs, that come under this category.

Table 4.2: CLASS B type of LVs

Verb	As Main verb counterparts	In V_V predicate	In N_V predicate	Light verb
To fall	+ <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>accidental</sub> + <i>proc</i> , + <i>res</i> + <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>
To lay	+ <i>init</i> <sub>vob</sub> + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	N.A.	+ <i>proc</i> , + <i>res</i> <i>affect</i>
To be	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>
To get	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>
To become	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>	+ <i>proc</i> , + <i>res</i> <sub><i>affect</i></sub>



It is interesting to note that the event structure of the light verb and that of its main verb counterpart do not show much difference in most cases. Only in case of the verb ‘rise’ and ‘fall’ there are differences. The event structure of the light verb ‘rise’ has the additional ‘[ + res ]’ feature, while the main verb does not. While the event structure of ‘fall’ has the [+ initiation<sub>accidental</sub>] feature therefore, in its light verb use, this questions the claim that light verbs have reduced event structure.

Thus, those light verbs that belong to class B group have the two of the three major eventive features, namely the ‘process’ and the ‘result’. This group does not have the ‘initiation’ feature and as such does not project the ‘initiation’ phase in the First Phase configuration, with the exception of a special type of light verb ‘fall’. That such light verbs, when combine with non-verbals, give ungrammaticality when tested with adverbial ‘intentionally’, as in [28], that is why they do not project the ‘initiation’ phase.

The list of light verbs, as available, and that come with the feature combinations of [+ proc, + res] type across language boundaries is given in table 4.3. The gaps, in various boxes, in the table, do not mean that the specific LVs are not available in the particular language. There can be non-verbals that combine with the LVs to form N\_V predicates, which need further exploration.

4.3: Class B type of light verbs

Light verb	Bangla	Hindi	Malayalam
To become	N.A.	N.A.	<i>mānāssil a:yi</i> (understood)
to be	<i>dārd hua</i> (got hurt)	<i>khusi hoyeche</i> (became happy)	N. A.
To fall	ja gira (fell down) le gira (fell down)	bhenge poreche (broke down) pichiye poreche (lagging behind) eshe poreche (dropped in or came up)	N. A.

		<i>bOrof poreche</i> (snowed)	
To lay	<i>bərf pərti</i> (snowed)	N.A.	N.A.
To get	khushi milna (be happy)	khide peche (am hungry) khuje peche (found out) phire peche (got back)	N. A.

### 4.3 CLASS C TYPE OF LIGHT VERBS

These types of light verbs have the semantic - categorial features of 'initiation' and 'process'. They are basically light verbs which reflect durative events and do not project or inherently come with the 'result' feature. The initiation feature of these light verbs is of the 'volitional' type only. Similar to the earlier predicates discussed, the light verbs of this type when combines with non-verbals, to form complex predicates, they stand the adverbial 'intentionally' test, as they have the [+ init<sub>vol</sub>] feature. Also, they are not only grammatical with the adverbial 'for an hour' test as in [35] but also with the 'within an hour' test, with 'durative' interpretation of the event as in [36], thus projecting the [+ proc] feature, going by the generalizations in chapter 2.

Thus, such LVs when form N\_LV predicates, such as '*bhəgdər məca-ya*', 'created fuss' in Hindi, as in [34], project the event structure of [+ init<sub>vol</sub>, + proc], which the light verbs of this type seems to inherently come with in the lexicon.

34. bE1-ne bhəgdər məca-ya. [+ init<sub>vol</sub>, + proc ] [H]

ox-erg fuss spread-pst.m.3P

The ox created fuss.

35. bE1-ne ek minət ke liye bhəgdər məca-ya. [H]

ox-erg one minute for fuss spread-pst.m.3P

The ox created fuss for 1 minute.

36. bEl-ne ek ghante me hi bhagdər mēca-ya. [+dur, +tel] [H]  
 ox-erg one minute in emp fuss spread-pst.m.3P  
 The ox created fuss in 1 hr.

Class C type of light verbs, thus, forms a smallest<sup>2</sup> group of light verbs amongst the four types that we have found, with just one member, that is ‘to spread’ in one of the languages, that is in Hindi. However, it does not mean that there are no possibilities for other light verbs to enter into this Class C type of light verbs. Certainly, there can be a handful of more light verbs in our languages which belong to this group of light verbs. Interestingly, Malayalam data, as far as has been collected and analyzed in this thesis, does not show any light verb in Malayalam that can be classed into Class C type. The light verbs of this class, as found, in the three languages, are as in table 4.4.

4.4: Class C type of light verbs

Light verb	Bangla	Hindi	Malayalam
To spread	----	shor mēca-ya (made noise) dhoom mēca-ya (made fun)	----

#### 4.4 CLASS D TYPE OF LIGHT VERBS

This type of light verbs has just one type of semantic - categorial features, that of the ‘process’. They are basically light verbs which reflect durative events and do not project either the ‘initiation or the ‘result’ feature. Similar to Class B and Class C types, the light verbs of this type combines with non-verbals, to form complex predicates. Also, they are not only grammatical with the adverbial ‘for an hour’ test but also with the ‘within an hour’ test, with ‘durative’ interpretation of the event as in [37], thus projecting the [+ proc] feature only, going by the generalizations in chapter 2.

<sup>2</sup> I would appreciate in case the readers figure out some more light verbs belonging to CLASS C type of light verbs.

Thus, such LVs when form N\_LV predicates, such as ‘*birokto legechilo*’, ‘got irritated’, in Bangla as in [37] project the event structure of [+ proc]. Table 4.5 shows the light verb that belongs to this class.

37.   ama-r      birokto    leg-echil-o.                   [+ init, + proc]                   [B]  
       1P.s-gen   irritation   feel-pst.perf-1P  
       I got irritated.

Table 4.5: Class D type of light verbs

Light verb	Bangla	Hindi	Malayalam
To feel	gOrom lagchilo (feeling hot)	gəRmi ləgi (felt hot)	-----

Similar to Class C type of light verbs, even in this, we could identify only one verb, but from both the two Indo-Aryan languages under consideration here in this thesis. However, there can be other light verbs belonging to this category also.

#### 4.5 DIFFERENTIATING BETWEEN VERBS USED AS ‘MAIN VERBS’ AND AS ‘LIGHT VERBS’

The light verbs that can be classified into the three individual groups or types can be discussed as follows. We have seen that the light verbs and their cognates are available across languages, in most cases, having the same major semantic – categorial features. The three types of light verbs have been illustrated in detail above and a brief summary of it can be seen in table [4.6].

Thus, the entire class of light verbs can be classified into the three major categories, with these semantic-categorial feature combinations – namely, as in [38]:

38. *Classes of light verbs:*

- Class A : [+ init, + proc, + res] verbs
- Class B : [+ proc, + res] verbs
- Class C : [+ init, + proc] verbs
- Class D: [+ proc] verbs

From the Class A type of LVs, we take the light verb ‘beat’, which comes with the categorial features of [+ init, + proc, + res]. For example, in a N\_LV type, when ‘beat’ combines with non-verbal elements such as ‘*thəppər*’, ‘*slap*’ in Hindi to form ‘*thəppər maRa*’, meaning ‘slapped’ as in [45] or ‘*cokh*’, ‘eye’, as in Bangla to form ‘*cokh mereche*’, meaning ‘blinked’ as in [42], they project all the three eventive phases, when tested using the adverbial phrases, as in [42] – [44]. On the other hand, the main verb use of ‘beat’ in [39] seem to project only the two eventive phases of ‘initiation’ and ‘process’, as analysed in [40] – [41].

39. cor-ta-ke mer-ech-e. [+ init , + proc ] [B]  
 thief-def-acc beat-pst.perf-3P  
 The police beat the thieves.

40. pulish Ek ghOnta-r jonno cor-ta-ke mer-echil-o / mar-chil-o. [B]  
 police one hour-gen for thief-def-acc beat-pst.perf-3P / beat-pst.prog-3P  
 The police beat / was beating the thieves for 1 hr.

41. thana-e ni-e ja-oa-r Ek ghOnta-r moddhe pulish  
 cor-ta-ke mer-echil-o/ mar-chil-o. [+dur, +tel] [B]  
 police station-loc take-partcl go-infv-gen one hour-gen in police  
 thief-def-acc beat-pst.perf-3P / beat-pst.prog-3P  
 The police beat the thieves within 1 hour of having taken to the police station.
42. bon ama-ke cokh mer-ech-e. [ + init , + proc , + res ] [B]  
 sister 1P.s-acc eye beat-pst.perf-3P  
 Sister blinked at me.
43. ?/\* bon Ek ghOnta-r jonno ama-ke cokh mar-lo. [B]  
 sister one hour-gen for I-acc eye beat-pst  
 Sister blinked for one hour.
44. bon Ek ghOnta-r moddhe ama-ke cokh mer-ech-e. [-dur proc] [B]  
 sister one hour-gen within I-acc eye beat-pst.perf-3p  
 Sister blinked within 1 hr.
45. mEdəm-ne rajesh-ko thəppər maR-a. [ + init , + proc , + res ] [H]  
 madam-erg rajesh-acc slap beat-pst  
 Madam slapped Rajesh.

What we see is that the main verb ‘beat’ has the event structure of [ + init , + proc ] but the light verb ‘beat’, of N\_LV type of predicates, has an additional feature of [ + res], to project the event structure of [ + init, + proc, + res] .

Similarly, if we take another light verb, say, *'fall'*, of the Class B type, we find two things. First, the event structure of the main verb *'fall'* is [+ proc, + res ] as seen in [1] – [3]. But when *'fall'* combines with as nominal, for example, *'bOrof'*, 'ice', in Bangla to form *'bOrof poreche'*, meaning 'snowed', the event structure of the predicate though remains same, but an additional semantic feature of 'affectedness' of the DP comes into the picture. The [+ res] feature, is not only interpreted as '+ telic' but the DP, Delhi, as a result of snowing, can be interpreted as the sufferer of 'snowing' and has been affected by it, as in [46]. However, in [47], the result of 'fruit falling' does not bring in the sense of affectedness of the DP, which undergoes the event of having been fallen.

46. dilli-te bOrof por-ech-e. [+ proc , + res affected] [B]  
 delhi-loc snow fall-pst.perf-3P  
 It snowed in Delhi.

47. phOl-ta gach theke por-ech-e. [+ proc , + res nonaffectedness] [B]  
 fruit-def tree from fall-pst.perf-3P  
 The fruit fell from the tree.

Secondly, with V\_V predicates like *'bheng-e porche'* (broke down), in Bangla, the light verb *'fall'* shows an additional '[ + init accidental] (or an '[ + init unintentional ] ) feature, which is otherwise not found either when *'fall'* is used as a main verb or when used as a light verb with any of the N\_V predicates or some of the V\_V predicates as in [4] – [6].

The additional categorial feature in case of 'beat' and an additional semantic sense of 'affectedness' of the 'DP-resultee' and 'the deception of the DP-agent' in case of *'fall'* implies that the light verbs cannot be considered to be semantically reduced compared to their main verb counterparts.

In fact, they seem to have semantics which are not part of the event structure of the main verbs. In addition to the above verbs discussed, we can compare the semantics and categorial features of all the verbs in the three languages, under consideration and see the pattern of differences and similarities between the various verbs in their two uses.

The table 4.6 shows that here are differences in the categorial feature sets between a main verb and its light verb counterpart in all the three different types of light verbs that we have figured out in the present analysis.

4.6: Comparison of the event structure between MV and it LV counterpart

<i>Verb</i>	<i>Main verb</i>	<i>Light verb</i>
<b>CLASS A type</b>	----	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To do	+ <i>init</i> <sub>vob</sub> + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>
To give	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>
To take	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>
To keep	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>
to gather	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>
To beat	+ <i>init</i> <sub>vob</sub> + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i> <sub>affect</sub>
To eat	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i> <sub>affect</sub>
To say	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To bring	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To come	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> , + <i>proc</i> , + <i>res</i>
To go up	+ <i>init</i> , + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i> <sub>affect</sub>
To get up	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	
To hold	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> , + <i>res</i> <sub>affect</sub>



<b>CLASS B type</b>	----	+ <i>proc</i> , + <i>res</i>
To be	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i> <i>affect</i>
To lay	+ <i>init</i> <i>vob</i> , + <i>proc</i>	+ <i>proc</i> , + <i>res</i>
To become	+ <i>init</i> <i>vob</i> , + <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i> <i>affect</i>
To fall	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i> <i>affect</i>
To get	+ <i>proc</i> , + <i>res</i>	+ <i>proc</i> , + <i>res</i>
<b>CLASS C type</b>	----	+ <i>init</i> , + <i>proc</i>
To spread	----	+ <i>init</i> <i>vob</i> , + <i>proc</i>
<b>CLASS D type</b>	----	+ <i>proc</i>
To feel	----	+ <i>proc</i>

From the table 4.6, we can see that in case of verbs like ‘*take*’, ‘*give*’, etc it can be seen that the main verbs have more or same categorial and semantic features compared to their LV counterparts. However with regards to verbs like ‘*do*’, ‘*go up*’, ‘*fall*’, ‘*beat*’, etc we find that it is the LV, which takes a non-verbal element, forming a composite CP, has categorial and / or semantic features, which are not present in their MV counterparts. This straightaway questions the long held belief of semantic bleaching and of the reduced argument structure of the light verbs.

Also, when determining the categorial features of MVs or main verb counterparts of the light verbs in question, using the tests, it has been found that some of the lexical MVs have more than one meaning in the languages. That is to say, these languages have a number of homophonous main verbs – the identification of which are same, making them sound / appear as the same lexical item.

However, if they have different meaning in the languages, they have been dealt with separately and listed down as separate verbs, only because they are homophonous main verbs. Here we have diverted from what Ramchand (2008) states when framing the ESD framework, only in order to retain the concept of ‘homophonous’ verbs, such as the light verb ‘*uthlo*<sup>3</sup>’ in Bangla, which means ‘*to rise*’ as well as ‘*to raise*’. This is done, for according to her, ‘every lexical item’ come with a specified set of categorial features, which would then eliminate the presence of such ‘homophonous’ elements from our lexicon.

However, with regards to Class C and Class D types, the case seems to be different. We do not have homophonous main verbs of these light verbs, such as we are unable to compare the categorial features of these light verbs with their homophonous main verbs like we did for Class A type and Class B type. It could be that the light verbs of these two types are totally grammaticalised elements, with no trace of their main verb counterparts in the languages under consideration.

#### **4.6 CONCLUSION**

We have seen in this chapter that beside Class A type of light verbs, (examined in chapter 3), there are two more classes of light verbs, namely, Class B type, with the categorial feature set of [ + proc , + res ]; Class C type with categorial feature set of [ + init , + proc ] and Class D type with categorial feature of [+proc]. Though the numbers of light verbs that belong to these classes are very few in number, but they definitely show different characteristic features compared to Class A type of light verbs.

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<sup>3</sup> Refer to section 3.1.1 in chapter 3 for details.

Also, contrary to the held belief, from the analysis of the structural and semantic features of the light verbs in this thesis, we have seen that the light verbs have a unique event structure of their own and therefore, Class A and Class B types cannot be considered as semantically bleached or as grammaticalised elements. With regard to Class C and Class D types, however, they can be called as completely grammaticalised elements, owing to the absence of their homophonous main verb counterparts in the languages under consideration.

## Chapter 5

### *Restructuring the Event Structure Decomposition framework*

The Event Structure Decomposition framework, as proposed by Ramchand (2008), has indeed helped us in determining the categorical features of different light verbs as well as grouping them into separate distinct classes. However, in doing so, we had to re-decompose the First Phase Model, so that it rightly predicts the event structure and the various sub-eventive roles within the framework. While doing so, we have further decomposed the three sub-eventive phases, namely - the *initiation* sub-phase, the *process* sub-phase and the *result* sub-phase. This finer decomposition helped us to correctly resolve the long debated question as to whether the light verbs are actually semantically bleached counterparts of their main verb usages in our languages.

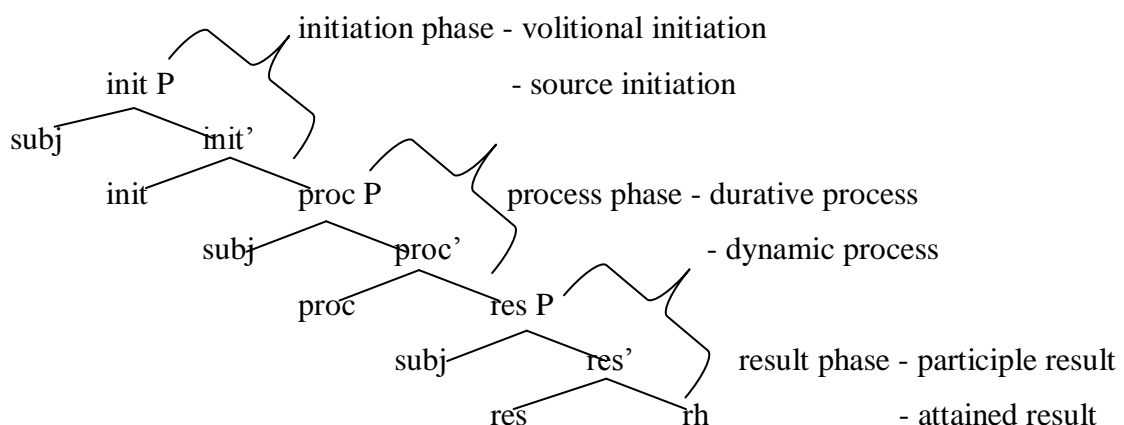
In the present chapter, we will look into the question of the restructuring the First Phase Syntax framework. For this purpose, the chapter has been divided into major sections: section one shows a finer decomposition of the event structure, which would enable us to clearly predict the underlying semantic roles of the verbal stems; and section two deals with reframing of the ESD model; section three will address the finer semantic issues, pertaining to the presence of 'light verbs', certain 'participles' and main verbs, all of which combine together to form complex predicates of the V\_V type in the grammar of our languages, thus, trying to provide a breakthrough in this regard; section four will show the relationship of ESD with other clausal systems; section five will address certain critical issues that comes to the forefront in this research and section six concludes that a finer decomposition of the ESD is possible and essential to answer some crucial facts concerning light verbs.

## 5.1 EVENT STRUCTURE DECOMPOSITION: A FINER ANALYSIS

The proposed finer decomposition of the framework is at two major levels - one, at the level of ‘*initiation*’ sub-phase and the other at the ‘*result*’ sub-phase. The other phase, that is the process sub-phase will also be decomposed into a finer one but at a minor level. From chapters three and four, we have seen that within the initiation phase, there seems to be two sub-phases, namely, the ‘*initiation volitional*’ sub-phase and the ‘*initiation source*’ sub-phase.

On the other hand, the analysis of light verbs in the V\_V type of complex predicates in these chapters shows that the ‘*res*’ head in the framework cannot accommodate two semantic features of participle result and the final or attained result, because of which the result phase is decomposed into two sub-phases, namely, the ‘*participle result*’ and the ‘*attained result*’ sub-phases. The proc phase or the process phase has been decomposed into a ‘*durative process*’ phase, because the process of the event requires a particular time-period for its activity to take place; while the other, is the basic ‘*dynamic process*’ sub-phase, as per the original framework, without much modification. Figure 5.1 shows the phases that have been decomposed further, keeping the basics of the framework intact.

Figure 5.1: Proposed decomposition of the phases



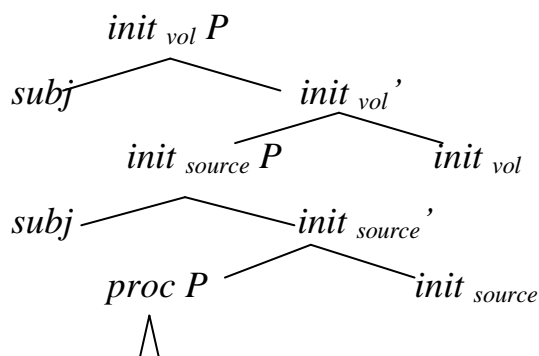
### 5.1.1 The ‘initiation’ phase

This decomposition seems to be important because there are certain intransitive verbs, which are unaccusatives, but qualify the adverbial ‘*intentionally*’ test, which means that the subject DP of these verbs possess the *initiation* role and, as such, must occupy the *spec* of some initiation phase. Therefore, these verbs have the semantic attribute of intentionally initiating an event. Therefore, not only the external arguments, but also internal arguments do occupy the *spec* of *initiation*.

However, there are other verbs, having external arguments, which will by default, occupy the *init spec*. This type of *init* can be said to project, irrespective of whether the subject DP has an intention of initiating it. Therefore, we term such *init* phases as *default initiations* or *source initiations* or ‘*init<sub>source</sub>*’. Apart from this *source initiation* phase, there seems to be another type of *init* phase, which the head of which is identified when the verb is volitional in nature and the concerned event has been intentionally done by the agent, especially, with an intended goal or motive behind it, such as in ‘*comke otha*’, ‘to get surprised’ or ‘*rege otha*’, ‘to get angry’ in Bangla. Such type of initiations are being termed as *intentional* or *volitional initiations* or ‘*init<sub>vol</sub>*’.

In the present analysis, I propose that the ‘*source sub-initiation*’ phase or the [+*init<sub>source</sub>*] is the one that gets embedded on the *proc* phase and it is the ‘*volitional sub-initiation*’ phase or ‘*init<sub>vol</sub>*’ that is embedded on top of the ‘*source sub-initiation*’ phase. This can be illustrated as follows in figure [5.2] below.

Figure 5.2: Decomposed initiation phase



The reason for the above structuring is that there are verbs which qualify the test for ‘initiation source’ but do not take ‘initiation volitional’ such as, ‘*veevichu pooyi*’, ‘*marriccu pooyi*’ in Malayalam, ‘*bhenge poreche*’, ‘*jhore poreche*’ in Bangla. But there are verbs which if qualify the ‘volitional initiation’ test, then they necessarily also qualify for the ‘source initiation’, such as ‘*kha liya*’, ‘to eat up’, ‘*bhaag gāya*’, ‘to run away’ as in Hindi; ‘*ge utheche*’, ‘to sing up’, ‘*heshe utheche*’, ‘to laugh at’ a in Bangla. Therefore, it can be said that those verbs which have a starting point or source of initiation, can only volitionally initiate the event, else fails in doing so.

Therefore, only when the verb merges in the head of [+*init source* ], can a copy of the verb be made and merged in the head of [+*init vol*] in case the head of [+*init source* ] is not filled by the verb, then the copy of the verb cannot be made to be merged in the [+*init vol*] position, owing to which such verbs fail to take the test of adverbial ‘intentional.’ In other words, the presence of [+*init vol* ] sub-phase implies that there is an [+*init source* ] sub-phase. However, the vice-versa does not imply.

### 5.1.2 The ‘result’ phase

The result phase, which reflects the end-point of the event, is constituted of two core semantic properties or roles, namely, the completion of the process of the event, yielding a result, which we can term as the ‘*participle result*’; and the other is that of the resultant state or the final state of the event attained, which is here being referred to as the ‘*attained result*’. On decomposing the result phase into the two types, we can figure out the type of result state of the event in question, and also analyze whether the verbs inherit both the resulting properties, or one of the two decomposed properties; and what are their restrictions, if any.

This decomposition of the result phase in the ESD framework was important because there are events which simply end the process stage only to introduce the result and does not say anything about the type of result or the change that has actually taken place. For example, in verbs like ‘*khechi*’, ‘eaten’ ; ‘*phelechi*’, ‘threw’ as in Bangla or ‘*diya*’, ‘gave’; ‘*bOla*’, ‘told’. The result phase of these verbs simply indicate that the process of the action has come to an

end, that is to say, the event has finished or completed, giving a result state of the action. Such a property of the verb is captured by what we are referring to as the ‘*result participle*’ phase or the [+res<sub>partcpl</sub>].

This sub-phase introduces the telic sense, which signifies that the process has reached an endpoint and ceases to continue any more. Therefore, this sub-phase can be termed as the *telicity introducer* overtly. Owing to this phase, any verb, which has the [+res<sub>partcpl</sub>] feature, will automatically be telic in nature and unless and until a verb is telic, a visible change or affectedness brought about by the event is not possible. Thus, the very presence of [+res<sub>partcpl</sub>] sub-phase is essential, even if the lower [+res<sub>attained</sub>] sub-phase is not present, if the verb has a res feature. This telicity introducer sub-res phase is the essential res phase, which will select the [+res<sub>attained</sub>] sub-phase, when required.

The head of this phase is either identified by the participle markers or perfective participles, if any in the languages, or can also be identified by the verb also, in the absence of the former. For example, in Bangla V\_V complex predicates, we have an overt participle, which remains attached to the main verbal stem, the ‘-ye’ or ‘-e’, such as in ‘*khe-ye phelechi*’, ‘has eaten’; ‘*por-e gEchi*’, ‘has fallen down’. In these cases, the participle or the conjunctive<sup>1</sup> participles, ‘-ye’ identify the head of [+res<sub>partcpl</sub>]. In languages such as Bangla, if the overt participle is present morphologically, then it will be identified by the [+res<sub>partcpl</sub>], else it will be identified by the verb itself.

On the other hand, there are verbs, whose result properties indicate some actual, visible change in shape, in location or in state of being, which is captured by the lower result phase, namely, the ‘*attained result*’ or [+res<sub>attained</sub>] phase. Here, the resultant state or the final state of the event will get identified, indicating the actual result that has been achieved by the event. It elaborates and describes the final achieved state or result of the event, the change or the affectedness of the DP, in detail. Some examples of such complex predicates are ‘*kete*

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<sup>1</sup> As they have been termed in the literature, as in Gopalakrishnan and Abbi (2002), etc.



*phelechi* , ‘cut up’; *cole gEche* , ‘has left’ , as in Bangla or main verbs like *‘toRna*’, ‘to tear’ as in Hindi.

### 5.1.3 Test for ‘attained result’ sub-phase

The presence of ‘attained result’ phase can be tested using the ‘made himself suffer’ test, according to which the ‘undergoer’ of the event, as the result of the event gets affected and becomes the sufferer, then the phase is present. If a predicate qualifies for the ‘res – participle’ phase, then that predicate needs to be tested with the phrase, ‘the NP – undergoer made himself suffer’ due to the event that has taken place. One single instance of the event, if makes the undergoer the sufferer then the ‘attained result’ phase is projected. The test is illustrated in [1], with examples in [2] – [4].

1. ‘the NP – undergoer made himself suffer’: having undertaken the action or the event, the NP/DP, which is the undergoer of the event, has to make himself the sufferer or affected as a result of the event

OR

as a result of the event, the NP/DP, which is the undergoer of the event would, by default, become the sufferer or affected by the event.

2. kOsto kor-e ram nije-ke Oshushto kor-e phel-ech-e. [B]  
effort do-partcl ram self-acc ill do-partcl throw-pst.perf-3P  
Having laboured hard, Ram made himself ill / fell ill.

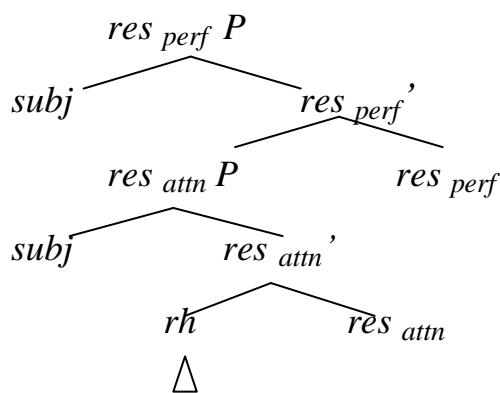
3. jOr hoy-e ram-ke kahil kor-e diy-ech-e [B]  
fever be-partcl ram-acc ill do-partcl give-pst.perf-3P  
Having been feverish, Ram became ill / weak.

4. \*khide pe-ye bhai nije-ke Oshushto kor-e phel-ech-e. [B]  
hunger get-partcl brother self-acc ill do-partcl throw-pst.perf-3P  
Having got hungry, Ram made himself ill .

The predicate ‘laboured’ and ‘being feverish’ stand the test but ‘got hungry’ in [4] does not. Therefore ‘laboured’ and ‘being feverish’ are predicated that project the ‘attained result’ phase while ‘got hungry’ in [4] does not. In the predicate ‘laboured’ or ‘*kOsto kOra*’, the undergoer ‘*ram*’ made himself the sufferer as a result of the action ‘*kOsto kOra*’, while the predicate ‘being feverish’ or ‘*jOr hoyeche*’ automatically makes the undergoer the sufferer in [3].

The structure of the decomposed result phase would be as in figure 5.3

Figure: 5.3: Decomposed result phase



Based on the decomposition of the result phase, we see that since the head of the ‘*result participle*’ sub-phase is occupied by the participle ‘-ye’ or ‘-e’, overtly in Bangla and covertly in languages like Hindi, the head, therefore, not being empty in [5] does not allow the light verb ‘*niyeche*’ to come down to identify the [+res<sub>attained</sub>] head, because of the filled intermittent head. Therefore, the [+res] feature of the LV ‘*niyeche*’ in [5] remains underassociated.

Similarly, since the [+res<sub>partc</sub>] head is not empty, the main verb, ‘*khe-*’ cannot move up to identify its categorical features of [+init] and [+proc], both of which, therefore, remain underassociated. Therefore, we can reason out why certain categorical features remain underassociated and why not others, when configuring the event structure of complex predicates.

5. am-ra aam-ta khe-ye ni-ech-i [B]  
 1P-pl mango-def eat-partcl take-pst.perf-1P  
 We have eaten the mango.

Also, it should be noted that if the [+res<sub>attained</sub>] is present, then the [+res<sub>partcpl</sub>] will automatically be present, for only if the process yields (or introduces) a result, then there can be the attained state of the result which will affect or be visible on the state of or location or shape of the DP in question. Further, if the head of [+res<sub>attained</sub>] is filled or occupied by a verb, then a copy of it will be made and it will get merged in the head of [+res<sub>partcpl</sub>], provided, there is no overt participle attached to the main verb, morphologically.

In case, there is an overt participle, and then it will invariably occupy the [+res<sub>partcpl</sub>] head and then a copy of the element in [+res<sub>attained</sub>] will not be made or merged in the head of [+res<sub>partcpl</sub>]. This means the presence of [+res<sub>attained</sub>] implies the presence of [+res<sub>partcpl</sub>] but the presence of [+res<sub>partcpl</sub>] does not imply the presence of [+res<sub>attained</sub>] sub-phase.

#### 5.1.4 The process phase

As mentioned in section 2.1.3 of chapter 2, certain verbs are ambiguous between having a ‘res’ phase, that is of [+init, +proc, +res] type with punctual reading or a ‘pure proc’ phase, that is of the [+init, +proc] type, with pure activity reading. Ramchand (2008) also validates this by stating that there is an “ambiguous between a reading in which the verb simply describes the process of an individuated UNDERGOER argument.....or a completive verb with a DP object.....describing the ‘result’ ” (Ramchand, 2008; pg 76).

Thus, we saw it was essential to distinguish between ‘result’ phases and ‘bounded proc’ phases or ‘pure proc’ phases. We saw that certain [+init, +proc] verbs which have accomplishment interpretations, such as ‘do’, ‘make’, etc requires a duration for the process of the event to complete. This is what Ramchand (2008) referred to as “temporal boundedness” in her system that arise from bounded paths in the complement position of the proc head (Ramchand, 2008; pg 85).

In order to resolve this, in our diagnostics, in section 2.1.3 of chapter 2, we checked to see whether there is a durative reading possible in the sentences with the adverbial ‘within an hour’ phrase. If the event has a ‘durative’ reading, then the process of the event has a time – span or a certain length of time that it essentially requires for the processing of the event to take place. Thus, we see that such verbs have ‘a bounded proc’, because the process of the event of these verbs requires a stretch of duration for completing its process.

For example, in [7], the verb ‘built’ gives a durative interpretation of the process of ‘built’ with the ‘within an hour’ phrase. Thus, the event of ‘building a house’ requires some time for the entire process to happen. We can identify verbs of this type as having a [+dur proc] feature or a [+proc durative] or [+ proc<sub>dur</sub>] feature. These are the verbs that are said to have ‘bounded proc paths’ or ‘bounded proc phases’ in our analysis and are of the [+init, +proc<sub>dur</sub>] type.

On the other hand, we find that if the event does not give ‘durative’ readings with the ‘within an hour’ phrases, then the verb has a process, which happens instantly as a result of a preceding event in the context. These are verbs which involve a process of action by their default nature of being a verb of action. Since every verb is by default dynamic, irrespective of whether they require time-span for their occurrence, every verb projects the default ‘proc’ phase which we can term as the [+proc dynamic] phase.

Thus, every verb by its very nature of existence will have the [+proc dynamic] or [+proc<sub>dynam</sub>] feature necessarily, for example, the verb ‘stand’ in [6] has at least the [+proc<sub>dynam</sub>] feature in the ESD framework.

6. He is standing.

Thus, a ‘pure result’ type of verbs, such as ‘jump’, will project the [+proc<sub>dynam</sub>] feature or phase. In the example [8], the event of ‘performing the puja’ does not have the durative reading with the ‘within an hour’ phrase. Therefore, the verb ‘do’ is of the ‘*pure res*’ type, with the categorical features of [+proc<sub>dynam</sub>, +res] inherent in it.

7. kaku Ek bOchor-er moddhe Ek-ta bari kor-echi-lo [B]  
 uncle one year-gen within one-def home do-pst.perf.3P  
 Uncle built (or do) a house within a year. [+init<sub>vol</sub>, +proc<sub>dur</sub>]
8. du ghOnta-r moddhe pujo-ta hoy-echi-lo. [B]  
 two hours-gen within puja-def be-pst.perf.3P  
 The puja was performed (done) within 2 hours. [+proc<sub>dynam</sub>, +res]

Based on this distinction, we can also say that the process phase in the ESD framework can be decomposed into two types – one that has the dynamic kind of process can be called as [+proc<sub>dynam</sub>] like the verb ‘jump’ or the Bangla verb ‘*hOwa*’ or ‘to be’, as in [8] and the other that involves or requires a stretch of time to make the event happen, can be called as [+proc<sub>dur</sub>], such as the creation verbs like ‘bake’ , ‘built’ or the Bangla verb ‘*kOra*’ or ‘to do’, as in [7].

The two types of ‘process’ phases can be represented below as in [9]:

9. proc phase ::
- ➔ - durative readings with ‘within an hour’ phrases ➔ [+proc<sub>dynam</sub>] feature -> pure res phase.
  - ➔ + durative readings with ‘within an hour’ phrases ➔ [+proc<sub>dur</sub>] -> bounded proc phase.

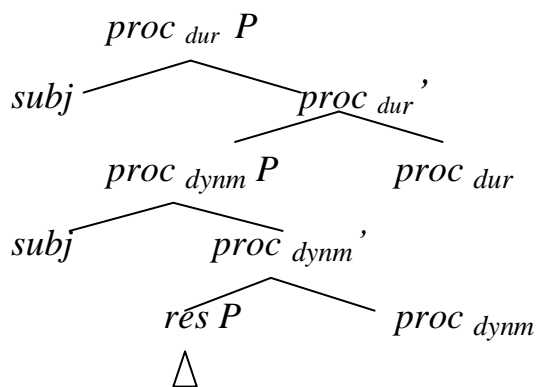
It must be noted that the [+ proc<sub>dynam</sub>] feature is present in all non-stative verbs but the [+ proc<sub>dur</sub>] feature is present in selected verbs only. As such, it is the [+ proc<sub>dur</sub>] phase that selects the [+ proc<sub>dynam</sub>] phase, as illustrated in figure [5.4]. Thus, every dynamic verb will first identify the head of [+ proc<sub>dynam</sub>] phase and then only if the particular verb has the durative reading in its process activity, then the higher [+ proc<sub>dur</sub>] phase will be projected and the concerned verb will be merged in the head of [+ proc<sub>dur</sub>] phase. If the verb do not

have the durative reading in its process activity, then the [+ proc<sub>dur</sub>] phase will not be projected at all.

Thus, we can say that every verb that is [+ proc<sub>dur</sub>] will also be [+ proc<sub>dynam</sub>], such as ‘to beat’. But a verb which is [+ proc<sub>dynam</sub>] need not always also be [+ proc<sub>dur</sub>], such as ‘to scold up’, ‘to tear up’. These verbs involve a process which do not require a longer stretch of time for their completion but can be completed within a fraction of seconds, as in the verb ‘scolded’ or fallen down’. Thus these verbs being dynamic predicates, will have the [+ proc<sub>dynam</sub>] feature and therefore project only the [+ proc<sub>dynam</sub>] sub-phase and not the [+ proc<sub>dur</sub>] sub-phase.

The structure of the decomposed process phase would be as in figure [5.4]

Figure: 5.4: Decomposed process phase



In case of verb like ‘kOra’ or ‘do’ in Bangla as in [7], since the [+ proc<sub>dur</sub>] feature therefore it is definite that such a verb will also have the [+ proc<sub>dynam</sub>] feature present in its structure. Therefore, when we project the structure of ‘do’ or ‘kOra’ as in [7], then the verb ‘kOra’ will first appear in the head of [+ proc<sub>dynam</sub>] phase and then it will be copied and merged in the head of [+ proc<sub>dur</sub>] phase.

However, in case of verbs like ‘hOwa’ in Bangla or ‘to be’ as in [8], since this verb do not have the durative reading in its process activity, therefore the higher proc phase, that is, the [+ proc<sub>dur</sub>] phase for this verb will not be projected. Only the [+ proc<sub>dynam</sub>] phase will be projected and the head of the [+ proc<sub>dynam</sub>] phase will be identified by ‘hOwa’ as a result of the verb being copied from the head of a result phase and merged into the head of this [+ proc<sub>dynam</sub>] phase.

## 5.2 THE MODIFIED ESD FRAMEWORK

The modified Event Structure Decomposition thus, comprises of six different sub-phases, indicating six semantic features, with six different feature heads and semantic roles. Each of the sub-phases are essentially valuable, for based on this, the finer semantic differences between various main verbs and between a main verb and its claimed light verb counterpart can be figured out easily, accordingly differentiated. The various phases and sub-phases of the modified framework are discussed hereunder.

The volitional sub-initiation phase is present when the event has the possibility of being volitionally initiated by the agent or the initiator only. For example, ‘*eshe porechi*’, ‘came in’; ‘*cole gEchi*’, ‘went off’ as in Bangla, ‘*cilla uti*’, ‘screamed’; ‘*rakh diya*’, ‘kept’ as in Hindi, ‘*eettu parajnu*’, ‘confessed’; ‘*pangka konDu*’, ‘participated’ as in Malayalam. Not all verbs come with this type of initiation, for even if they have an initiation phase, their events cannot be volitionally initiated at all, ‘*uthe porechi*’, ‘*jege gEchi*’ or ‘woke up’ in Bangla, ‘*jag gaya*’ or ‘woke up’; ‘*mār gaya*’ or ‘died’ in Hindi. The DP that volitionally initiates the event or the process is called the ‘volitional initiator’ and occupies the subject position of the ‘initiation<sub>volitional</sub>’ sub-phase.

On the other hand, the source sub-initiation phase is present when there is any kind of initiating point to begin the action. They might be agentive or non-agentive, but should have an essential abstract source or point from which the process can actually begin. Most verbs, having a process, and stative verbs will automatically have a source point from which the process of action can be initiated. The DP that indicates the source initiation will occupy the

subject position of the ‘initiation<sub>source</sub>’ sub-phase and is called the ‘source initiator’. For example, complex predicates like ‘*jege gEchi*’ or ‘woke up’ in Bangla ; ‘*jag gāya*’ or ‘woke up’ in Hindi.

With regards to the process sub-phases, all dynamic verbs will have the [+ proc<sub>dynam</sub>] feature , hence the [+ proc<sub>dynam</sub>] phase will be projected. The DP internal argument will become the subject of this [+ proc<sub>dynam</sub>] phase and can be termed as the ‘dynamic undergoer’. Such as the verbs like ‘*eshe porechi*’, ‘came in’; ‘*cole gEchi*’, ‘went off ’ as in Bangla, ‘*cilla uthi*’, ‘screamed’; ‘*rakh diya*’, ‘kept’ as in Hindi, ‘*eettu parannu*’, ‘confessed’ as in Malayalam. The concept of this process sub-phase remains the same as in the original framework of Ramchand (2008).

The other sub-phase of process is the one which obligatorily requires some duration for the processing of the event to take place and as such is termed as the [+ proc<sub>dur</sub>] phase . The DP that undergoes this process sub-phase is the ‘undergoer durative’ which is the subject of this ‘proc<sub>dur</sub>’ sub-phase. Verbs like Bangla ‘*banao*’, ‘to built’, ‘*kOra*’, ‘to do’ etc has the [+ proc<sub>dur</sub>] feature and therefore also projects the ‘proc<sub>dur</sub>’ phase . However, these verbs will also project the ‘proc<sub>dynam</sub>’ phase as these verbs are by default dynamic in nature. Therefore they identify both the two sub-phases of process.

As far as the ‘participle’ sub-result phase is concerned, the verb that stands the ‘within an hour’ test, has the [+res] feature, so it will necessarily have the ‘participle result phase, for this brings in the telic feature of the verb, overtly. Thus, the verb or the participle that indicates the completion of the action or functions as the conjunctive particle, joining the main verb with the light verb to form complex predicates, will identify the head and the DP that finishes or completes the process of action and ends it, will be the subject of ‘participle result’ and is termed as the ‘resultee introducer’.

For example, ‘*eshe porechi*’, ‘came in’; ‘*cole gEchi*’, ‘went off ’ as in Bangla, ‘*cilla uthi*’, ‘screamed’; ‘*rakh diya*’, ‘kept’ as in Hindi, ‘*eettu parannu*’, ‘confessed’; ‘*vəTTəm kutti*’,



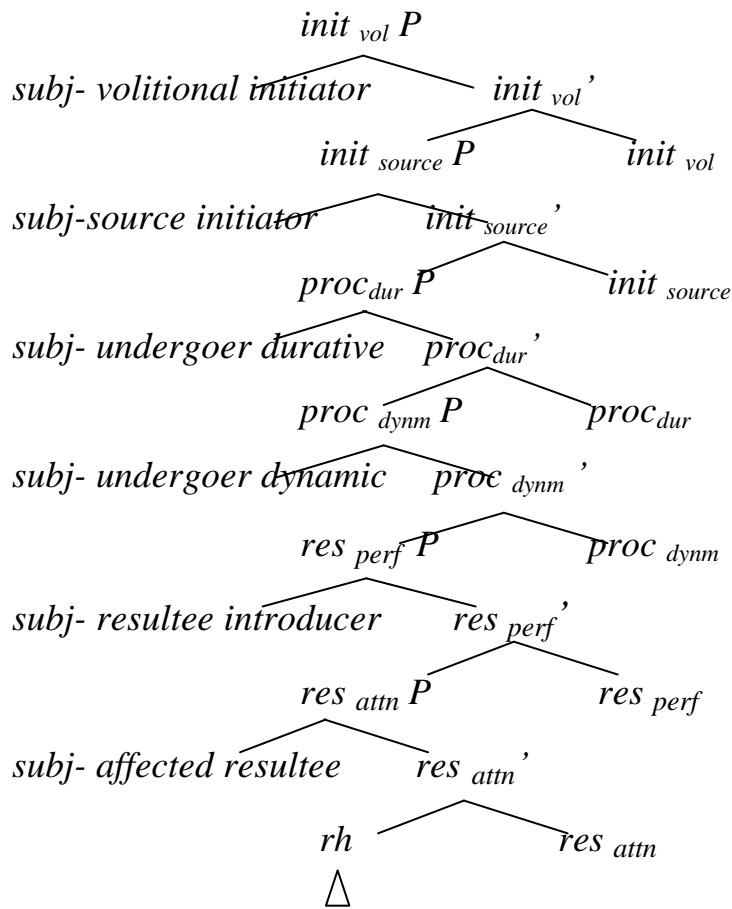
‘made arrangements’ as in Malayalam. Out of these predicates, *cilla uthi*, ‘screamed’ in Hindi, *eettu parannu*, ‘confessed’ in Malayalam are those which do not have the next lower result sub-phase. That is, they do not seem to project the affectedness result phase, for, in *cilla uthi*, there seems to be no desired or attained result of ‘screaming’ nor does so in case of ‘confessing about something or to someone’ in *eettu parannu*. Therefore, the lowest phase in their event structure is [+res<sub>partc</sub>].

If the event results to bring about a desired change or there happens to be an attained change in some respect, as a result of the eventive process and the change is reflected in the form of an ‘affected DP’, then the verb is said to have the [+res<sub>attained</sub>] feature, while the DP that is affected as a result of the process of action or the event and suffers a desired change with respect to location, state or position, etc, will be the ‘affected resultee’, occupying the subject position of the ‘attained’ sub-result phase.

The presence or absence of this attained sub-result phase is based partly on the interpretation of the event and partly on encyclopedic knowledge of the speakers and can also be validated using the ‘made himself suffer’ test. For example, *eshe porechi*, ‘came in’; *cole gEchi*, ‘went off’ as in Bangla,; *phekh diya*, ‘threw away’, *lOuta diya*, ‘returned’ as in Hindi, *kadām vangi*, ‘borrowed’; *vəTTəṁ kutti*, ‘made arrangements’ as in Malayalam.

The modified Event structure, as it is aimed to function in the SOV languages, such as those of the present work like Bangla, Hindi and Malayalam, is as illustrated in figure [5.5] below.

Figure 5.5: Modified ESD framework



This restructuring or re-decomposing the major phases, according to semantic properties, enable us to identify the finer semantic and categorical features of the verbal stems as well as the semantic roles that the concerned DP/NP is associated with in a given instance. This restructuring has proved beneficial in not only evaluating some of the issues concerning the light verbs, here, but has also been efficient enough in establishing some of the claims being talked about in the beginning of the thesis.

Thus, we see that the Event Structure Decomposition, thus, reframed or restructured, can rightly predict the semantic roles and sub-roles of various verbal stems and also capture the inner finer semantic features, which enables us to differentiate between the various light verbs, classifying them into separate categories.

In the next section, we will see how the restructuring of the Event Structure Decomposition helped us in validating the major concerns about the class of ‘light verbs’ in the universal grammar.

### 5.3 V\_V COMPLEX PREDICATES IN THE MODIFIED ESD FRAMEWORK

In the modified Event Structure Decomposition framework, the finer semantic interpretation of the event structure of each verbal stem, both main verbs and light verbs, can easily be accommodated. For example, the event structure of a V\_V complex predicate as in ‘*bhenge phelechi*’, ‘broke’; ‘*thele diyechi*’, ‘pushed in’ in Bangla, ‘*gir gaya*’, ‘fell down’; ‘*majbur kiya*’, ‘forced’ in Hindi can be illustrated and represented, as in [12].

Here, as in [10], the V\_V predicate, ‘*bhenge phelechi*’, ‘broke’, has the categorical features of [+init<sub>vol</sub>, +init<sub>source</sub>, +proc<sub>dynam</sub>, +res<sub>partc</sub>, +res<sub>attn</sub>]. It has the [+res] feature, as it stands the ‘within an minute’ test and has both the initiational properties or features, as it qualifies both the initiational tests that of ‘volitionality’ and ‘source’, so the subject DP, ‘*ami*’ identifies the subject position of both the sub-initiation phases – [+init<sub>vol</sub>], [+init<sub>source</sub>].

The verb, thus unquestionably, has the process of breaking, which is dynamic in nature, and so ‘*ami*’ is also the DP that undergoes the process of ‘breaking’ the glass, so it is the ‘undergoer dynamic’ as well and also the ‘resultee introducer’ as it is the one who ends the process of breaking or completing the event, brings in the telic point in the event.

Thus, the same DP, ‘*ami*’, identifies the subject position of four sub-phases, namely that of [+init<sub>vol</sub>, +init<sub>source</sub>, +proc<sub>dynam</sub>, +res<sub>partc</sub>]. However, it is the object DP, the ‘glass’, that actually reflects the affectedness of the event or process and is thus, the ‘affected resultee’, the subject of the [+res<sub>attn</sub>] sub-phase. Here, the rhematic phase remains empty, as none of the elements are required to identify the rheme.

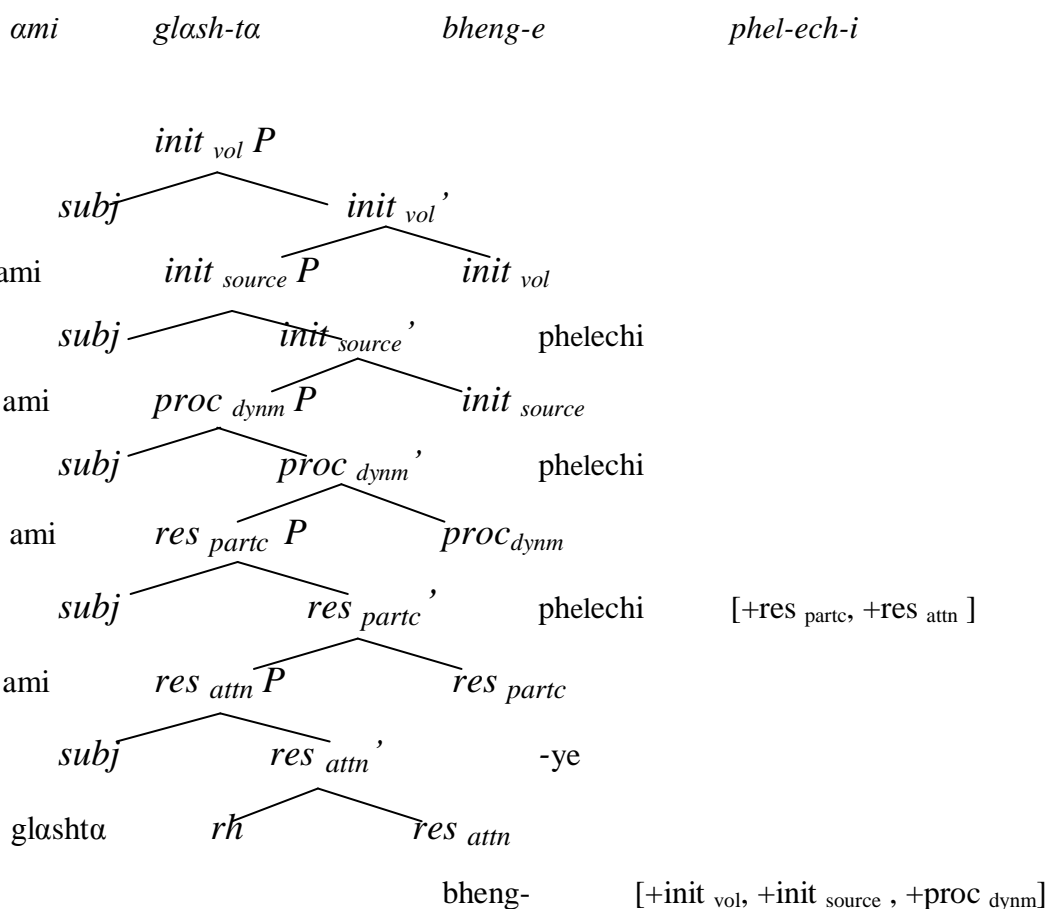
10.	ami	glash-ta	bheng-e	phel-ech-i	[B]
	1P.s	glass-def	break-partc	throw-pst.perf-1p.s	
	I have broken the glass.				

11.      ləRka gir      gəya.                      [H]

boy   fall   pst-3P.s.M

The boy fell down.

12.      The event structure representation of V\_V ‘*bhenge phelechi*’ of  
Bangla:

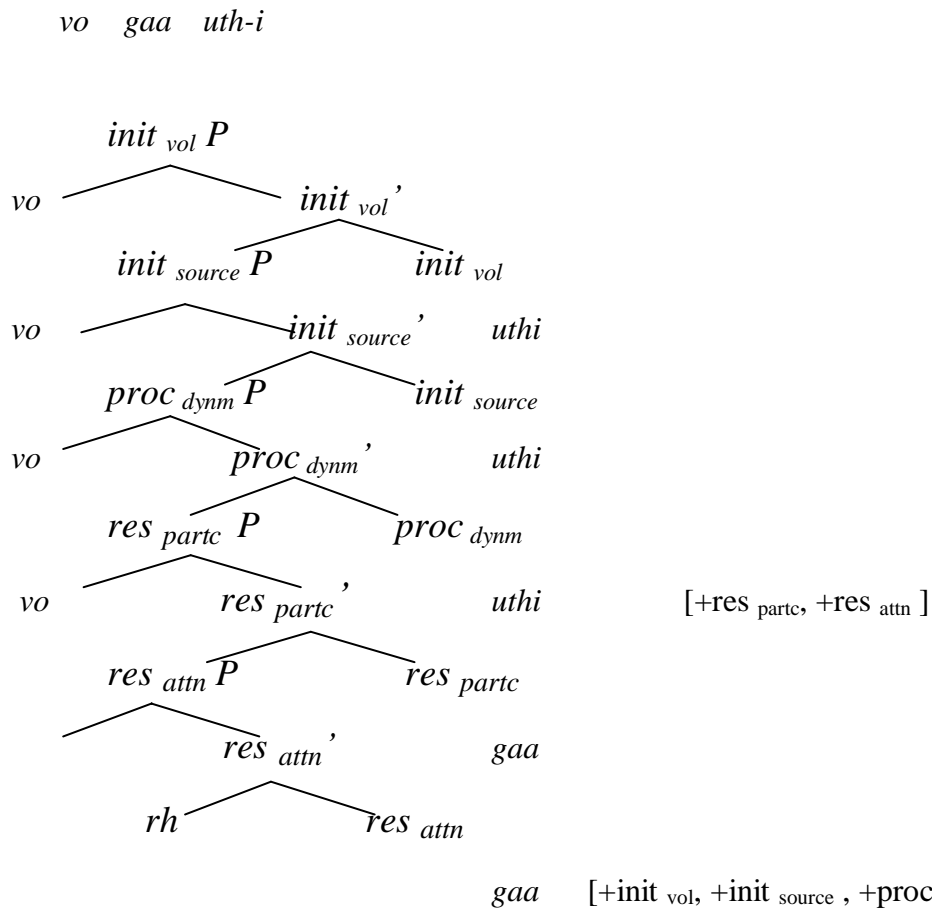


Similarly, if we take another predicate such as ‘*ga: uth-i*’ in Hindi, meaning ‘burst out singing’, as in [13], or ‘*kheye nieche*’, in Bangla, meaning ‘ate up’, as in [15], the predicate projects all the five phases, namely, [+init<sub>vol</sub>, +init<sub>source</sub>, +proc<sub>dynm</sub>, +res<sub>partc</sub>, +res<sub>attn</sub>], where the main verb ‘*ga*’ identifies the head of [+init<sub>vol</sub>, +init<sub>source</sub>, +proc<sub>dynm</sub>] and the

light verb that of the [+res<sub>partc</sub> and +res<sub>attn</sub>], other features remaining underassociated for both verbs. The structural configuration of [13] is shown in [14].

13. *vo gaa uth-i:* [H]  
 3P.s sing rise-pst.3P.s.M.  
 She burst out singing.

14. The event structure representation of V\_V ‘*ga uthi*’ of Hindi:



Here in [14], The DP ‘*vo*’ identifies the subject position of four sub-phases, namely that of [+init<sub>vol</sub>], [+init<sub>source</sub>], [+proc<sub>dynm</sub>], [+res<sub>partc</sub>]. The subject of [+res<sub>attn</sub>] sub-phase, along with the rhematic phase, remains empty, as they will not be identified by any element.

15. *ram aam-ta khe-ye ni-ech-e* [B]  
 ram mango-def eat-PARTCL take-pst.3p.s.  
 Ram ate up the mango.

#### 5.4 CRITICAL ISSUES TO BE NOTED

In the reframed ESD model, certain points need a special attention. It has been noted in the tests and analysis done in Chapters 2, 3, and 4 that four critical issues have come to the forefront.

- a. The fact that only external arguments can have the ‘initiator’ role seems questionable. Nothing has been explicitly been spoken about whether internal arguments can or cannot become initiators.

We have seen in our analysis that there are internal arguments, also, those stand the adverbial ‘volitional’ test and become the ‘volitional initiators’ as in Chapters 3 and 4. Thus, not only external arguments but also internal arguments can have the initiator roles. For example, in case of the verb ‘*uthlo*’ or ‘rise’, the internal argument DP, say ‘the sun’ is also the initiator.

- b. The perfective participle in Bangla, ‘-ye’ or ‘-e’ has a [+ *res*] feature and along with the main verb, it also identifies a head of a sub-result phase. Such participles identify the head of the [+ *res partic*] sub-phase. In the absence of such participles, the head is realized by the verb. This [+ *res partic*] phase then selects for the [+ *res atm*] phase. Ramchand (2008) does not identify the head that identifies such conjunctive participles in the ESD framework.
- c. The subject position of a phase (or a sub-phase) can remain empty. It is not obligatory that if the phase is present in a given event structure, then the subject role has to be identified by a DP. But, it is mandatory that if the phase is configured, then the head of the concerned phase has to be identified by one of the verbal elements or a particle or a participle that is part of the complex verb or predicate, as seen in [15], for sentence [13] above.
- d. The presence of [+ *res atm*] phase entails the presence of [+ *res partic*] phase, but not vice-versa. And the presence of [+ *init vol*] phase entails the presence of [+ *init source*] phase but not vice-versa.

Keeping in mind, these four essential points, it will be convenient to apply the modified Event Structure Decomposition framework with ease. Analyzing the two major types of complex predicates, namely, N\_V type and V\_V type separately has indeed helped in re-defining the framework from two different perspectives and then using them together to modify the framework to be suitable for analyzing all other predicate types.

## 5.5 FIRST PHASE SYNTAX AND CLAUSAL SYNTAX

Having seen the different classes of light verbs and their categorial feature combinations, we now know that certain modifications of the ESD framework is essential to accommodate the range of light verbs available in other Indian languages. Adverbs become one of the integral parts when analyzing the light verbs. Thus we need to define their structural position in relation to first phase syntax.

Adverbs have highly been explored by various scholars. Noteworthy amongst them is the famous work by Cinque (1999) on adverbs being on the functional sequence, more specifically in the specifier of various phrases. In the present work, we are, therefore, interested in illustrating the structural position of adverbs in the first phase syntax, and to determine the relation of adverbs with the verbal decomposition.

In relation to adverbs, Chatterji (1926) talked about two types of indeclinables in Bangla, such as ‘-iye’ and ‘-ile’, out of which the former represents the succession of actions one after the other and is used as an adverbial gerund. On the other hand, Abbi (1991) in connection to reduplication strategies in South Asian languages, states that in many languages, the reduplicated adverb indicates manner and sometimes cause, as in [16]. Here ‘*becte becte*’, in Hindi, meaning ‘while selling’, is verbal in nature and adverbial in function, owing to which it has been named as Reduplicated Verbal Adverbs, and is grammatically imperfect.

16. vo pan becte becte bol-a [H]  
 He betel sell.imp sell.imp tell-pst.3p.s  
 He told while selling the betel.

Importantly, such reduplicated verbal adverbs scope over the process of the concerned action and signify the completion of the action.

We also know that negative adverbs are never the elements that block head movement, which has also been justified by Cinque (1999) and many others. It is, in fact, a noted aspect that adverbs do not block head movement of various verbal forms as has been stated by Cinque (1999), Bobaljik (1994) and others.

Besides, Cinque (1999) talks of subject-oriented adverbs, such as ‘*intentionally*’, which when passivise, change the orientation of the modals - whichever DP is in the subject position, the adverb adjacent to it, scopes over it. He also states that ‘well’ – manner adverbs is in the spec of Voice P. Following Cinque (1999), we might say that the first phase syntax is itself on the functional sequence and various adverbs are merged or locally introduced within sub-phases for scoping over the relevant DPs for specific interpretations.

Ramchand (2008) assumes “that *init P* denotes some predicate over events” (Ramchand, 2008; pg 217). According to her, the *First phase* is a domain of pure event structuring. It is the *Asp P* which combines with *init P* to bind and establish a relationship of the event variable with *TP*. It is *Asp P* that selects the *vP*, which in turn selects the *init P*.

Further, as has been referred to in the literature that the *vP* domain introduces the ‘causing event’ and the VP, the ‘resultant state’ of the event and that the subject position of *vP* is occupied by the ‘external argument’ of the verb and that of the VP by the ‘internal arguments’ (Arad, 1998). The theta-role of the external agent would be assigned by the little ‘v’ in the higher domain, while that of the internal arguments would be part of the lexical properties of the verbal root.

Therefore the purpose of introducing little v into the configuration of the first phase syntax seems mainly to provide an explanation to the internal semantics of verbs. The presence of the little *vP* is required so that the external argument is motivated to raise to the *spec vP*.

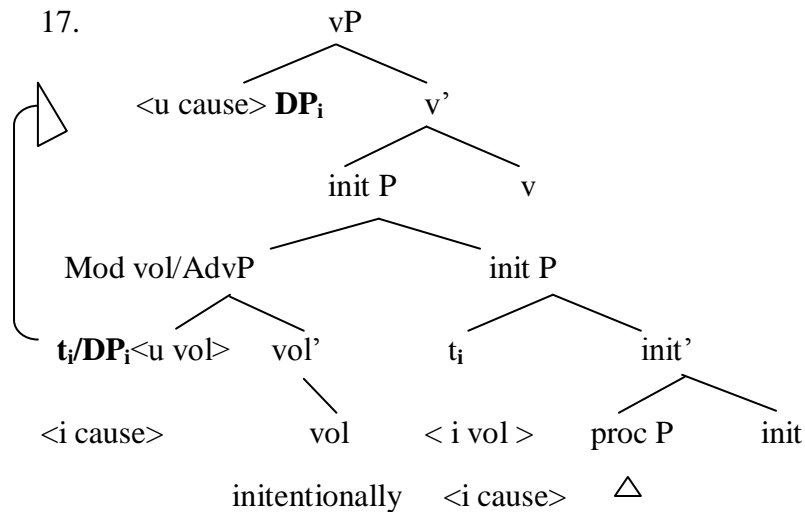


Also, since the little *v* is a functional element and comes with an abstract semantics, it must have specific but general semantic content, because of which it can occur with verbs, initiating agentive or eventive roles, by the external argument. This is the causation phase, which is overtly present when the verb is agentive and requires an abstract semantics to get reflected in the form of an external argument, as in transitives.

I thus, assume that *vP* represents the ‘cause’ of the event or of the predicate. Therefore I consider ‘little *v*’ to be the ‘*cause introducer*’ and the external arguments of the event raise from the ‘*initiator*’ positions to the *spec vP*. Thus when the DP has the [+init<sub>vol</sub>] feature and occupies the *spec* of ‘init<sub>vol</sub>’, then because it is the causing agent, this DP, which is the ‘external argument’ of the event, raises to the *spec vP*, as in [17]. If the DP is in the *spec* of ‘init<sub>source</sub>’, and happens to be the ‘internal argument’ of the event, and does not rise to *spec* of ‘init<sub>vol</sub>’, then it will also never raise to the *spec vP*.

We can also say that the DP initiator beside having the [i volition] feature on it, if an external argument, will also have the [i cause] feature on it. This [i cause] feature needs to agree with a [u cause] feature, which is present in the *spec vP* as in [17]. Therefore, this external argument DP initiator raises from *spec Mod-vol Adv P* to the *spec vP*, to agree with the [u cause] feature there. However, in case the DP initiator would have been an internal argument, it would not have the [i cause] feature, therefore feature checking with [u cause] in *spec vP* would not be required. Hence, no raising would take place to the *spec vP*.

Adverbs, since they are present in the specifier of functional heads, are competitors to DPs. Following Cinque (1999) and others, I presume that adverbs or AdvPs are generated in special DP-related positions – unique specifier positions of a concerned functional head that are present owing to adjunction of the concerned sub-phase to which the particular adverb is related in the decomposition framework. For example, the adverbs ‘intentionally’, or ‘willingly’ or ‘mistakenly’, categorized by Cinque (1999) under the Mod – volitional head, seems to scope over the DP present in the ‘*spec init*’, as in [17].



In case of such a structural configuration, the *Adv P, Mod* – volition phrase projects in the spec of the higher *init P*. The adverbial head ‘vol’ is occupied by the adverb ‘intentionally’ while the spec position is empty. It, however has the [u volition] feature which probes to locate a suitable goal for its checking. The DP in the spec of lower *init P*, that the initiator DP seems to have a [i volition] feature which raises to spec *Mod - Vol* for feature checking. Thus feature checking having taken place, the derivation, then moves further ahead for relevant operations to be done.

We can say that the *Adv P, intentionally*, being in the *spec* of *init P*, scopes over the DP, which is the initiator of the event and gives it the intentional reading with respect to the given sub-event. The *Adv P* also do not pose any blocking for the movement of heads in the languages under consideration, mainly because these three are head-final languages and the *Adv P* precedes the concerned heads in these languages. Also since adverbs never block head movements so even in head initial languages such a structural configuration would not pose a problem for derivations or head movements.

Similarly, there are other adverbs that seem to interact with different such sub-events under the ESD framework, such as ‘slowly slowly’, ‘quickly’, etc. It seems that these adverbs scope over the process of the concerned event, thus, they are closely related to the *proc* sub-event. Similar to the volitional type of adverbs, I propose that in the structural configuration, the Adverbs of the celerative kind projects in the spec of the higher *proc P*. The adverbial head

‘cel’ is occupied by the adverbs such as ‘slowly slowly’ while the spec position has the [u manner] feature which probes to find an appropriate goal for its checking.

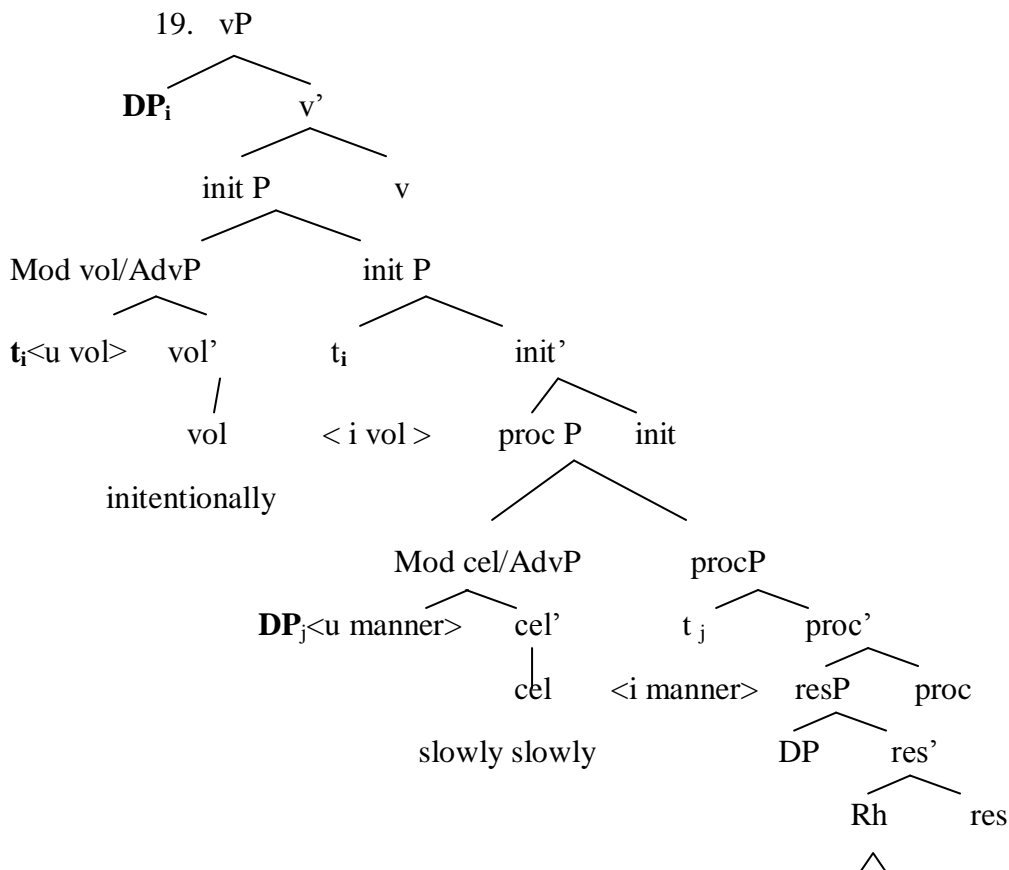
The DP in the spec of lower *proc P*, that the undergoer DP seems to have a [i manner] feature which raises to the spec Asp - celerative phrase for feature checking. Thus, feature checking takes place in the *proc* phase as in [19]. Also, as the ‘external argument’, the *DP initiator*, has the [u vol] feature on it when in spec of initiation phase, so the DP initiator moves to the *spec* of *Mod-vol Adv P*, and then further raises to *spec vP*, for realizing the [cause] feature there, along with theta-roles, etc.

Thus, for a Bangla sentence like [18], the structural projection would be as in [19].

18. ichchekore ami dhire shuste kapor-ta chir-e phel-ech-i. [B]

Intentionally 1p.s slowly slowly cloth-def tear-partcl throw-pst.perf-1p

Intentionally I slowly slowly tore up the cloth.



Likewise, there are other manner adverbs, which can be projected in proc adjoined positions, but depending upon their functional scope with relation to the sub-eventive process, their position on the functional sequence would be determined. That is to say if an adverb precedes celerative type , then it will be projected above it on the functional sequence and in case it follows, then the projection of that adverb would be lower than the other. The one that is more closely associated with the concerned sub-event, will remain closer to it compared to the others.

Thus, we have the little  $vP$  , which is the cause introducer in an event, selecting the VP, which is the verbal stem, decomposed in the First Phase Syntax. Thus the verbal stem or VP gets a finer decomposed structure under the present analysis and we are also able to establish a relationship with this First Phase Syntax with adverbial clauses.

## 5.6 CONCLUSION

Thus we see that the Event Structure Decomposition of Ramchand (2008) can be finely decomposed, with each of the three phases of the ESD framework being decomposed into atleast two more finer sub-phases.

The claim that the Event Structure Decomposition, thus, reframed or restructured, can rightly predict the semantic roles and sub-roles of various verbal stems and also capture the inner finer semantic features, which enables us to differentiate between the various light verbs, classifying them into separate categories. This restructuring has proved beneficial in not only evaluating some of the issues and claims concerning the light verbs, here, but has also been efficient enough in establishing some of the objectives being talked about in the beginning of the thesis.

## CHAPTER 6

### *CONCLUSION*

The present thesis has enabled us to explore some of the cross-linguistic concerns about the much debated topic – that is, on the nature, function and existence of light verbs in our languages. Abbi and Gopalakrishnan (1991) states that only a certain limited number of light verbs are to be found in the grammar of a particular language and not every verb will function as a light verb in a given language. They also illustrate that the productivity with which these light verbs combine also vary, for some light verbs like ‘do’ are heavily productive across languages and language families while there are some light verbs which combine with only one or a couple of lexical items only.

The thesis had given us ample opportunities to explore such universal statements of facts about the concept of light verbs, being discussed so much in the literature and also highly debated upon. The questions on light verbs that were examined and analysed under the Ramchandian (2008) framework and their findings are hereby summed up in this concluding chapter of this thesis.

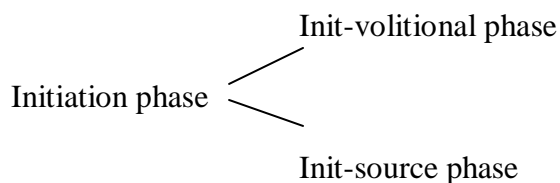
Section one will show that the Event Structure Decomposition framework of Ramchand (2008) can be refined further. Section two will validate Butt (2001)’s claim that light verbs are not grammaticalised elements but form a class of their own. Section three will state the three broad categories of the light verbs and their feature specifications. Section four will show that it is the light verb that selects the main verb and not vice-versa. Section five will present the findings of the thesis in short, highlighting them.

## 6.1 REDEFINING THE ESD FRAMEWORK OF RAMCHAND (2008)

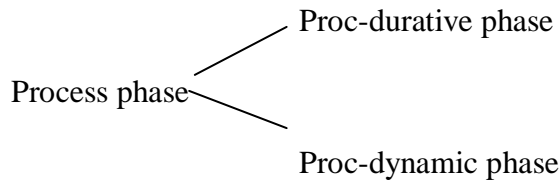
While examining the structure of light verbs and while differentiating between light verbs and their main verb counterparts in the three languages under consideration in this thesis, it was found that the Ramchandian ESD framework (2008) could be further analysed and can be finer decomposed. With this aim, an attempt has been made to give a better and a more refined analysis of the event structure.

The refined ESD was further more decomposed because it was required when analyzing certain light verbs and their semantics. That such finer decomposition could only enable us to actually understand the meanings that the light verbs inherently come with paved the path for the refined analysis of the framework.

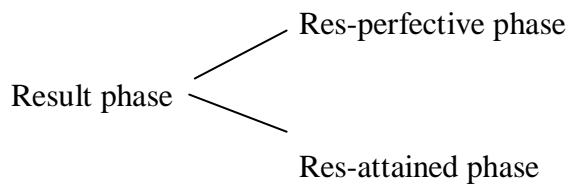
In the refined ESD, all the three phases, namely, the initiation phase ; the process phase; and the result phase – the one that is selected by the proc phase – have been further decomposed into two sub-phases each. The initiation phase has been decomposed into the following two sub-phases, namely, ‘init-volitional’ sub-phase and ‘init-source’ sub-phase, only to identify the nature of initiation on part of the verb, whether the verb initiates from a ‘source-point’ owing to its very nature or requires an agent to ‘volitionally’ initiate the action.



Similarly, the process phase has been divided up further into two sub-phases, namely, the ‘process-durative’ sub-phase and ‘process-dynamic’ sub-phase, where the ‘proc-durative’ indicates the duration or the time period required for an action or the event and the ‘proc-dynamic’ signifies the default dynamic nature of verbs.



Similarly, the result phase has been divided up further into two sub-phases, namely, the ‘result perfective’ sub-phase and ‘result-affected’ sub-phase, where the ‘res-perfective’ indicates the completion of an action or the event and the ‘res-attained’ signifies the affectedness if brought about by the verb in question.



The refined ESD framework is illustrated in figure 6.2 and can be compared with the Ramchand (2008)’s ESD framework illustrated in figure 6.1.

Figure 6.1: Ramchandian (2008) ESD Framework

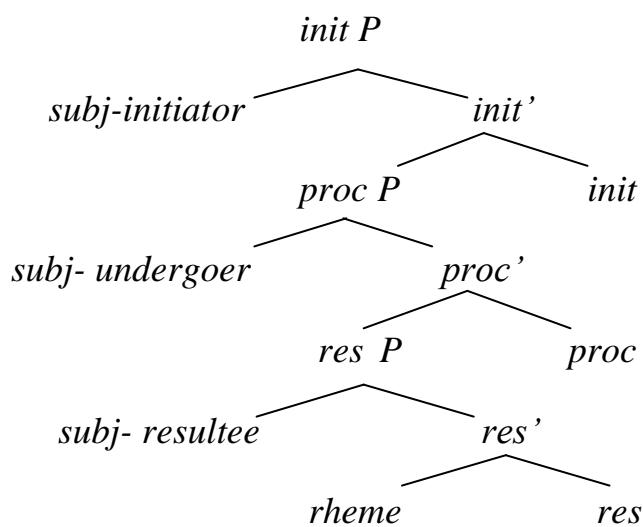
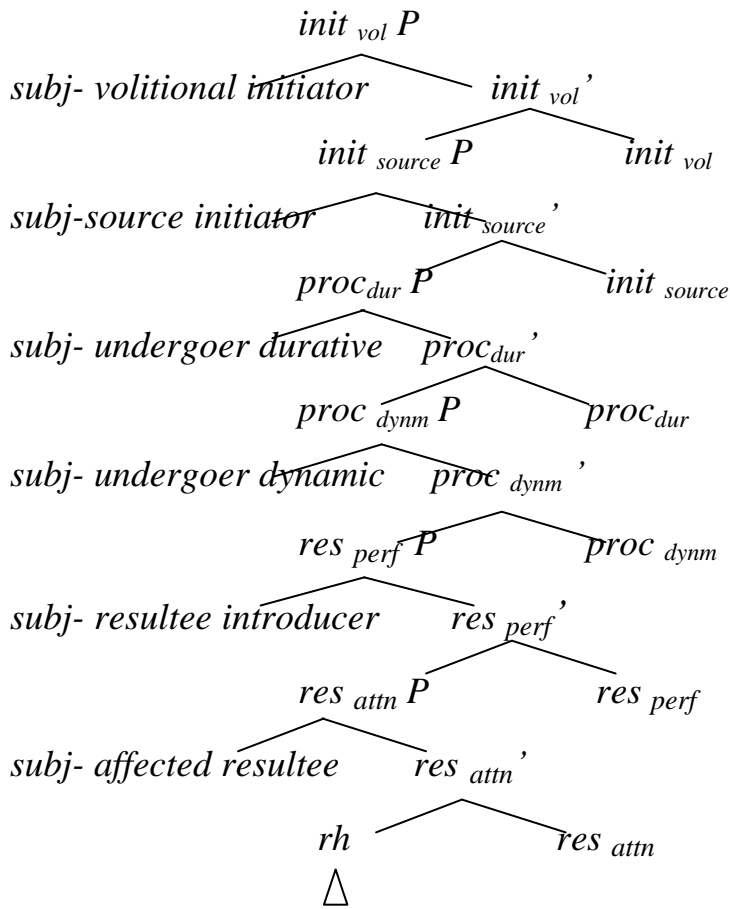


Figure 6.2 : Refined ESD Framework



## 6.2 NOT GRAMMATICALISED ELEMENTS BUT IS A CLASS OF ITS OWN

Light verbs cannot be considered to be semantically bleached counterparts of the main verbs or that they have reduced argument structure compared to their main verb counterparts in the languages but in contrary, these light verbs are semantically and syntactically richer verbs in the grammar.

According to Butt (2003) light verbs have restricted set of entities, specified for specialized functions in the language, different from lexical main verbs, which makes Butt (2003) group them into a separate class of verbs. Even Abbi (2004) states that ‘explicators’ - a term given



to 'light verbs' forming V\_V kind of complex predicates – across languages belong to a highly restricted number. She further states that not every verb in a language can behave like a light verb. Thus this closed set of elements seems to be the result of the process of grammaticalisation and these light verbs are grammaticalised elements, being semantically bleached and syntactically reduced argument structure.

In connection to this, we can quote Kume (2011) who in her doctoral thesis on light verbs states that “the lexical meanings of the items which grammaticalize must be general”. She says that only verbs whose meanings are more general in the languages such as ‘say’, ‘move’, ‘go’ are likely to be grammaticalised, whereas the verbs with more specific meanings, such as ‘writhe’, ‘whisper’, etc do not. Even Ramchand (2008) states that light verbs found in complex predicate constructions in the Indic languages are the ones that have “fairly general meanings”. Even Cinkova (2009) shows a similar line of thought when discussing about the types of verbs that grammaticalise. According to her, “grammaticalizing verbs must have a fairly general meaning. the best crosslinguistic instance is the auxiliary verb to be, followed by *to become* and *to have*.”

However Kume (2011) states that grammaticalisation is a process in which semantic bleaching takes place at a later stage but shift in meaning can be seen in an early stage, “as in the case of the English imperative let us” (Kume, 2011; pg 41). This shift in meaning takes place from more concrete lexical meanings to a more abstract grammatical meaning. This change in meaning happens as a result of pragmatic and discourse oriented requirements in the languages. Hopper and Traugott (2003) also states that grammaticalisation takes place owing to a number of pragmatic factors and inferences in specified contexts in the grammar.

Hopper and Traugott (2003) also suggest that in the process of grammaticalisation, beside semantic bleaching, semantic and pragmatic enrichment also takes place. Kume (2011) also says that new meanings get added in the courses of grammaticalisation while the original lexical meanings remain. This happens, according to him, due to pragmatic inferences that takes place when these light verbs are used in specified local contexts. In connection to this, we also have Cinkova (2009), who states that new semantic components get added to a

lexeme which undergoes the forces of grammaticalisation, for in her opinion “instead of just being deprived of a part of its original meaning, the lexical verb acquires an additional, more abstract meaning that is reserved for the verb’s occurrence in LVCs.” She also states that the main verbs change their stylistic value functioning as light verbs.

Further Abbi and Gopalakrishnan, 1991) when describing about ‘explicators’ in various South Asian languages, mentions that these ‘explicators’ or the light verbs in V\_V type of complex predicates, reflect different types of meanings of the complex predicates. These explicators reflect various “aspectual, attitudinal and adverbial” (Abbi, 1991; pg 163-170) functions in such compound verbs. Butt (2003) in this regard states that light verbs are the ones that modulate the entire event and project the semantic notions like that of benefaction, suddenness, etc. Also Ramchand (2008) illustrates that the light verbs contribute to the overall argument structure of the complex predicates and it is the light verb only that also provides ‘entailment properties’ (Ramchand, 2008) such as case markings on the DPs, and not by the main verb of the V\_V complex predicates. She also shows in her analysis that light verbs bring in additional arguments in the structure which were previously absent in the main verb’s argument structure. In [2] the light verb ‘give’ brings in the goal argument which is not present in [1] where the light verb is also absent.

1.     ami   ram-ke  citthi-ta  likh-echi-lam                         [B]  
          i-nom ram-acc letter-def  write-pst.perf-1P  
          I wrote a letter to Ram.                                 [Ramchand, 2008; pg 157]

2.     ami   ram-ke  citthi-ta  likh-e     di-lam                         [B]  
          i-nom ram-acc letter-def  write-partcl  give-pst.1P  
          I wrote up a letter for Ram.

However, Butt (2003) disagrees with the views of grammaticalisation for if these were actually grammaticalised elements then according to her they would have been phonologically and morphologically grammaticalised as well, which is not the case in the languages. She also points out with examples that light verbs are highly stable in the grammar once they appear and do not change into any other form. Bovern (2004) also states that diachronically the number of light verbs have remained the same, which would not have been if light verbs were grammaticalised elements. Ramchand (2008), in reference to Butt and Lahiri (2005)'s historical investigation of light verbs, states that the light verb function of a lexical verb can be seen alongside the main verb usage in the languages for over thousands of years in a very stable way.

The analysis of data in the thesis disagrees with the views on grammaticalisation of light verbs, with regards to the notions of semantic bleaching and reduced argument structure of light verbs, as there are instances which proves that the light verbs are neither semantically nor syntactically bleached counterparts of the main verbs, as we can see from the table 6.2 itself, where the main verbs 'do' and 'beat' do not have the 'result' feature in them but the light verb use of the verbs 'do' and 'beat' shows the presence of the '+ result' feature. As such, we can claim that light verbs are neither semantically bleached nor syntactically reduced forms of the main verbs in the languages.

Also there seems to be no fixed duration within which a main verb might starts functioning as a light verb in a language or that a light verb might start functioning as an auxiliary, etc. as can be seen in Butt (2003), Bovern (2004), Lahiri (2005), Ramchand (2008). So we cannot claim for certain say that every light verb in the three languages under consideration in this thesis – namely, Hindi, Bangla, Malayalam – have been grammaticalised from their main verb counterparts.

But there seems to be two classes of light verbs, namely Class C and Class D type of light verbs, which might have been grammaticalised in the languages sometime in the past. Class C type of light verb has the semantic-categorial features of [+init, +proc] and we could find only one member in this type, namely, the light verb '*mācana*' in Hindi, meaning 'to spread'.

Similarly, we have Class D type of light verb, with just one semantic-categorial feature that of [+proc], and even in this class we could identify just one member that is the light verb 'feel' or '*laglo*' in Bangla. Interestingly, the light verbs of both these classes seem to combine with nominals to form N\_V type of complex predicates only. Secondly, these light verbs do not have their main verb counterparts in the languages, thus we could not compare the semantic-categorial differences of these light verbs with their main verb counterparts. Owing to this, we cannot say whether they have been semantically bleached and / or reduced in their argument structure, as this was beyond the scope of this research work.

Moreover, in the absence of their main verb counterparts in the languages, in the present scenario, we can consider these light verbs are grammaticalised elements but how far they have been grammaticalised or to what extent they have been grammaticalised demands an in-depth enquiry of these light verbs, an area beyond the scope of this thesis.

However, the presence of the light verbs in our languages has other reasons and explanations also to account for their availability. Mukhopadhyay et.al.(2012) states that when polar verbs, that is to say, main verbs cannot always express the specifications necessary in a discourse, the speakers are bounds to use the vectors i.e the light verbs, along with the main verbs, to cover up the requirement of the context. Abbi (2004) states that her 'explicators' are found in languages for discourse oriented purposes. Kume (2011) also states that when lexical items are constrained to be used in pragmatic contexts, these items acquire certain syntactic and morphological functions in the languages.

Therefore, we might say that when main verbs feel restricted and limited in expressing the desired sense, it is the light verb that comes to its rescue. The light verbs associate with it and fulfill the requirement of the social discourse. Thus, beside the structural and semantic properties, features and functions of the light verbs, they also exhibit pragmatic inferences at the discourse level. These are reasons enough to account for their existence in the grammar of our languages.

### 6.3 CATEGORIES OF LIGHT VERBS

We see that light verbs actually emerge as a class of verbs, with an identity of their own, having a unique set of categorial features, which mark them distinctly different from their homophonous main verbs in our languages. Thus, Butt (2003) was correct in her claim that they are a different set of grammatical elements, forming a semi-lexical syntactic class. Thus, the refined ESD model helped us not only to identify the separate feature sets for the ‘main verbs’ and their ‘light verb’ counterparts, but also brings forth the universal characteristics of the class of light verbs.

The entire semi-lexical class of light verbs can broadly be categorized into two major types, namely, as in table [6.1]. There are basically two types of light verbs according to the ESD framework – one which has all the three basic categorial features of [+initiation, + process, +result] and has been labeled as the Class A type of light verbs. Typical members of this type are the verbs ‘give’, ‘take’, ‘come’, ‘go’, etc. The other type of light verb is the one which has two of the three categorial features, that of the – [+process, +result]. This category of light verbs do not seem to come with the [+initiation] feature at all in the languages. This group of light verbs is labeled as Class B type of light verbs.

Besides, there are two more types of light verbs, which have a slightly different character in the grammar. The members of these two classes are highly limited and importantly they only associate with nominals to form N\_V type of complex predicates. We have named them as Class C type and Class D type of light verbs. Class C type has the two features of [+initiation, +process] while Class D type has just one feature that of the [+process].

## 6.1 Classification Of Light Verbs

TYPES	FEATURE SPECIFICATIONS	EXAMPLES
CLASS A	+ INIT, +PROC, + RES	GIVE, TAKE, THROW, SAY
CLASS B	+PROC, + RES	FALL, GET, LAY
CLASS C	+ INIT, +PROC	SPREAD
CLASS D	+PROC	FEEL

Even cross-linguistically, these light verbs show that they have the same categorical features, at least in as far as the three languages we are examining here. Across languages and language families these light verbs come with the same set of categorical features and thus have same semantic and syntactic parameters.

Light verbs also show significant differences from their main verb counterparts in these languages as has been illustrated in chapters 4 and 5. For example, the main verbs ‘do’ and ‘beat’ will only have the two features of [+initiation, +process] but the light verb usages of the same verbs have the additional feature of [+result], along with the two features of [+initiation, +process], that is to say the light verbs ‘do’ and ‘beat’ belong to Class A type of light verbs, with the presence of all the three features of [+initiation, +process, +result], as can be seen in table 6.2.

## 6.2 Differentiating Main Verbs And Light Verbs

<i>Verb</i>	<i>Main verb</i>	<i>Light verb</i>
To do	+ <i>init</i> <sub>vob</sub> + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> + <i>res</i>
To beat	+ <i>init</i> <sub>vob</sub> + <i>proc</i>	+ <i>init</i> <sub>vob</sub> + <i>proc</i> + <i>res</i> <sub>affect</sub>

Thus the categorization of light verbs into different types is based on both their semantic as well as syntactic contributions to the event structure under the framework of Event Structure Decomposition of Ramchand (2008).

#### **6.4 SELECTIONAL RESTRICTIONS OF THE LIGHT VERBS**

The presence of light verbs in a complex predicate gives a telic interpretation of the event, that is to say, light verbs are seen to be telic by default. Even Ramchand (2008) states that light verbs in such constructions are responsible for bringing in telicity. This telic nature of the light verbs are projected by the ‘+result’ feature of the event structure decomposition framework. Thus, we might say that all the major light verbs inherently come with the ‘+res’ categorical feature, with the exceptions of only a selected category of light verbs, that is, Class C and Class D types. It is not the main verbs that have the +res feature always, but the participle attached to main verbs, has the encyclopedic content/semantics of a result state.

However, the categorical feature set of all the light verbs are not the same. They show different feature combinations owing to which they associate differently with different main verbs in the languages. We might say that the light verbs are highly selective with respect to which kind of a main verb they will associate with to form a V\_V complex predicate. They show selectional restrictions, based on the categorical feature set, with respect to which main verbs they combine with.

In case of the main verb ‘scold’ or ‘bOka’ in Bangla, we find that it has all the three categorical features, similar to Class A type. When forming a V\_V predicate, this main verb cannot combine with all the available light verbs in Bangla to form V\_V complex predicates. It can combine with certain limited light verbs only, for example, with light verbs ‘throw’, ‘give’, as in [3-4] – both of which belong to Class A type of light verbs. There is no instance of this main verb ‘scold’ to combine with a light verb that belongs to either Class B or C or D type. For example, the main verb ‘scold’ cannot combine with a light verb belonging to Class B type, such as ‘fall’, as in [5].

3.     ami     bhai-ke     bOk-e     diy-ech-i     [B]  
1p.nom brother-acc scold-PARTCL give-pst.perf-1P  
I scolded up my brother.
4.     ami     bhai-ke     bhulkore     bOk-e     phelechi     [B]  
1p.nom brother-acc by mistake scold-PARTCL throw-pst.perf-1P  
I scolded up my brother by mistake.
5.     \*ami     bhai-ke     bOk-e     por-ech-i     [B]  
1p.nom brother-acc scold-PARTCL fall-pst.perf-1P  
I scolded up my brother.
6.     ami     mach-ta     khe-ye     niy-ech-i     [B]  
1p.nom fish-def eat-PARTCL take-pst.perf-1P  
I ate up the fish.
7.     ami     mach-ta     khe-ye     phel-ech-i     [B]  
1p.nom fish-def eat-PARTCL throw-pst.perf-1P  
I finished (ate) up the fish.
8.     \*ami     mach-ta     khe-ye     por-ech-i     [B]  
1p.nom fish-def eat-PARTCL take-pst.perf-1P  
I ate up the fish.



Similarly, we can take the other lexical verb ‘eat’, which is used in Bangla as a main verb, having the categorical features of Class A type – that is, - ‘+initiation, +process, +result’. This main verb ‘eat’ combines with the light verbs ‘take’, ‘give’, ‘throw’, ‘see’ – all of which belong to Class A type of light verbs, as we can see from [6]-[7]. But the main verb ‘eat’ cannot combine with the light verb ‘fall’, which belongs to Class B type of light verbs, as in [8]. The table 6.3 shows the light verbs and their category with which the main verb ‘eat’ can combine with and the differences in meanings in each case.

Table 6.3 Restricted Combinations With Main Verb ‘Eat’

Light verb	Class type	V_V formed (Bangla)	V_V meanings
Throw	Class A	keye phelechi	Finished up
Take	Class A	kheye niyechi	Ate up
Give	Class A	kheye diyechi	Ate up for somebody
See	Class A	kheye dekhechi	Tasted
Rise	Class A	kheye uthechi	Finished eating right now
Keep	Class A	kheye rekhechi	Eaten it up (earlier)
Fall	Class B	*kheye porechi	*
Get	Class B	*kheye pechi	*

Thus, we can say that the main verbs ‘scold’ and ‘eat’ combine with a light verb with which its categorical features match.

Therefore, we might say that it is the light verbs that decides whether to associate with a particular main verb or not in a given case, to form a complex predicates and one of the essential requirement for the light verb is to see whether the categorical features it has are available also on the main verb or not. If the categorical features on the main verb do not match with those that are present on the light verb, then the light verb do not select the main verb. Therefore feature matching and agreement between the features of the light verb with that of the main verb is essential for forming a V\_V type of complex predicates. Therefore there are syntactic selectional restrictions available on the light verbs. The table 6.4 shows the light verbs and their category with which some of the main verbs can combine with and the selectional restrictions.

Table 6.4 Selectional Restrictions

Main verbs	Light verbs	Classes of LVs	Examples in Bangla	Meanings of the examples
Wash	Give	Class A	dhuye diyechi	Washed it up (for someone)
	Throw	Class A	dhuye phelechi	Cleaned it (already)
	Keep	Class A	dhuye rekhechi	Completed cleaning up
	fall	Class B	dhuye porechi	*
Say/tell	Give	Class A	bole diyechi	Told
	Keep	Class A	bole rekhechi	Informed
	Throw	Class A	bole phelechi	Told by mistake
	Rise	Class A	bole uthechi	Told loudly
	Fall	Class B	bole porechi	*

In fact, we see that categorical features of these main verbs, such as ‘eat’, ‘scold’, ‘say’, ‘wash’, etc match with all the light verbs of Class A type. However, it cannot combine with all the light verbs of this Class A, but only with a couple of selected light verbs of Class A type. Therefore there are pragmatic selectional restrictions operating also on part of the light verbs, in addition to syntactic selectional restrictions, to associate with a particular main verb.

It has been noted that there must be a semantic as well as syntactic matching or agreement between the light verb and the other predicate it combines with to form a complex predicate because every light verb in a grammar does not combine with every lexical item available in a given language.

Cinkova (2009) states that the word combination of main verbs and light verbs form a complex whole which is not always control by regular syntax but there are lexical restriction that operate on such word combination. This also validates what Abbi (2004) states that there must be semantic compatibility between the ‘explicators’ or ‘light verbs of V\_V predicates’ and the main verbs to enable them to occur together in a given clause to describe the same event in question.

## **6.5 MAJOR FINDINGS**

The major findings of the thesis can thus be stated here in brief. One of the issues were to highlight the uniqueness of the category of light verbs which is actually a semi – class of verbs, having its own lexical identity and function in the languages cross-linguistically. We therefore, have the :

### ***(a) Emergence of ‘light verbs’ as a unique class:***

- a. Light verbs do have a universal semantics which makes them behave the same across languages and language families.

- b. Light verbs do not have reduced argument structure; neither do Light verbs have bleached semantics,
- c. Light verbs constitute a class of their own and have a semi-lexical status in the universal grammar as claimed by Butt (2001); they are not the result of grammaticalisation process.
- d. Light verbs can be categorized into separate groups or classes, having different combination of categorical features.
- e. Light verbs have selectional restrictions with regards to which main verbs they will associate with the grammar.

**(b) Refined ESD:**

Secondly, the Ramchandian (2008) framework of the Event Structure Decomposition can further be decomposed into a still finer framework suitable for, at least, analyzing the Indian languages, in a much better way.

Each of the three phases of the ESD framework has been decomposed into two sub-phases, which enables us to actually examine the structure of verbs by probing deeper into their semantic-syntactic roles and features.

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