

# Desire Predicate *icche* in Bangla

An Individual-level and Stage-level Dichotomy

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by

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(January 2025)

To Ma and Baba

## Statement of Originality

I, Debadatta Roychowdhury registered on 25.09.2019 do hereby declare that this thesis entitled “Desire Predicate *icche* in Bangla: An Individual-level and Stage-level Dichotomy” contains literature survey and original research work done by the undersigned candidates as part of Doctoral studies.

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# Preface

## Introduction

Desire predicates are a broad category of expressions relating to human wants, wishes, and desires that have long captivated linguists and semantic theorists. Desire predicates serve as linguistic tools for people to express their intentions and desires, making them a crucial part of human communication. The study of desire predicates has received much attention in linguistics, still, most of the research done so far has concentrated on Indo-European languages, leaving a large gap in our understanding of these constructs in non-Indo-European languages. In this study, we focus on desire predicates in the Bangla language context.

This thesis seeks to investigate the meaning concerning capacity of Bangla desire predicate *icche* with a focus on its distribution in different structural compositions. More specifically, the work is concerned about the way desire predicate *icche* remains crucial in categorizing its content either as individual-level or as stage-level phenomena. We will concentrate on the role of the desire predicate *icche* both alone and in conjunction with the light verbs *ach-* ‘have/exists’ forming *icche ache* meaning ‘the desire exists’, *hO-* ‘happen’ and *kOr-* ‘do’, forming *icche hOwa* ‘the desire happens/occurs’ and *icche kOra* ‘the desire happens/occurs’. To attain this research objective, the current work investigates various constraints imposed by the contexts of its occurrences. This, in turn, has enhanced our understanding of compositionality in general and the roles of relevant linguistic/conceptual intensions in particular.

Theorizing the contribution of a verbal predicate in a language is challenging because of the underlying conceptual intricacies. These intricacies have bearings not only on the meaning and the usage patterns but also on the structure. When we talk about verbal predicate

constructions and their significance in the language, it should be noted that the studies on ‘desire predicates’ in Bangla (Bengali) remain a bit drifted with very little exploration. In this thesis, the major avenue of interest revolves around the predicate *icche* because it has four separate occurrences in Bangla. Each occurrence implies a semantic anomaly in the sense of desire communicated. The predicate *icche* can occur independently in a sentence and also combines with the light verbs *ach-* ‘have/exists’, *hO-* ‘happen’, and *kOr-* ‘do’ forming a complex predicate construction. The examples below show the occurrences.

- (1) Source: Tagore, R. (1941). *Sesher Kobita, Bichitra*.

Background: The context is about a conversation between Amit and Labanya. While conversing, Amit in order to describe himself mentions his friend Sobhonlaal and says that he is an eminent researcher and his work is to explore the past and bring out the history, but Amit desires to establish the path of the future. Amit says the following to Labanya

*amar icche bhobiSSOt-er pOth sriSTi kOr-a<sup>1</sup>*  
 I.GEN desire future-GEN path.ACC create do-SBJV

‘It is my desire that I create the path of future.’

- (2) Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023

Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club.

Lionel Messi says the following sentence.

*Onek kichu jeta-r icche ach-e*  
 many things.ACC win.GER-GEN desire have.PRS-3

---

<sup>1</sup> According to traditional grammar of Bangla, -a suffix is added with a verbal root to derive a verbal noun (Chattopadhyay, 1939). Because of being infinite, derived verbal nouns are useful in expressing the sense of subjunctivity.

‘I have a desire to win a lot more in my life.

- (3) Background: The sentence below is borrowed from a conversation between Shrish and his friend Bipin. They are talking about their interest in music and while discussing that Shrish says the following sentence.

*ajkal*            *majhe majhe*    *kobita-e*        *Sur*            *bOSa- te*    *icche*  
nowadays    sometimes    poems-LOC    melody.ACC    put-INF    desire  
*kOr-e*  
do.PRS-3

‘Nowadays, sometimes, the desire to put melody in poems happens or occurs to me.’

- (4) Source: Newspaper – Bangla News 24. Date – 10<sup>th</sup> December 2022

Section: Lifestyle desk

Background: This section concentrates on lifestyle health. They talk about how can we consume sweets and still keep a check on our health and weight.

*miSTi*            *dekh-le-i*            *khe-te*        *icche*        *hO-e*  
sweets.ACC    see-COND-EMPH    eat-INF    desire    happen.PRS-3

‘The desire of eating sweets happens to me whenever I see it.’

As mentioned above, the current work investigates various constraints imposed by the contexts of its occurrences and the significant context where these predicates behave differently is the spatiotemporal context. This heterogeneity among the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra* has raised the research objectives of this thesis.

## Research Objectives

The principle objective of this work is to investigate the meaning construing capacities of desire predicates in Bangla while focusing on the predicate *icche* and its interaction with light verbs. Since the act of desiring involves a wide range of interpretations, relevant from the

viewpoint of spatiotemporal constituencies, compositional factor needs to be explored to identify the lexical interdependencies. These objectives are central to understanding the semantic heterogeneity involved in the desire predicate. The examples presented in this section highlight key challenges in understanding how the combination of *icche* with light verbs like *hOwa* and *kOra* introduces semantic shifts, especially when temporal adverbs are incorporated. A semantic anomaly is generated by the predicate *icche* while appearing as the first member of a construction with light verbs *ach-* ‘exists/have’, *hO-* ‘happen’, and *kOr-* ‘do’. The semantic complexity arises when temporal modifications such as *majhe majhe* ‘sometimes’, are introduced into these constructions. The sentences in (1-4) are modified with temporal adverbs in (5-8). Let us observe the situation in (5-6) where *icche* and *icche ache* are paired with the temporal adverb *majhe majhe* ‘sometimes’

(5) \* *amar majhe majhe icche bhobiSSOt-er pOth sriSti kOr-a*  
 I.GEN sometimes desire future-GEN path.ACC establish do-SBJV

(6) \* *Onek kichu jeta-r majhe majhe icche ach-e*  
 many things.ACC win.GER-GEN sometimes desire have.PRS-3

Examples (5) and (6) show how incongruent the temporal adverbs are to the semantics of *icche*, when used in isolation or with the light verb *ache*. This indicates a semantic anomaly when temporal adverbs like *majhe majhe* ‘sometimes’ are applied. On the other hand, examples (7)–(8) show that while occurring in a complex predicate construction with the light verbs *hOwa* ‘happen’ and *kOra* ‘do’, *icche* can accommodate temporal modifications. Consider the following:

(7) *miSTi dekh-le-i majhe majhe khe-te icche hO-e*  
 sweets.ACC see-COND-EMPH sometimes eat-INF desire happen.PRS-3

‘Sometimes, the desire of eating sweets happens to me whenever I see it.’

(8) *amar*            *majhe majhe*    *bhari*            *icche*            *kOr-e*            *oi*  
 I.GEN            sometimes        strongly        desire            do-PRS.3        that  
*pahar-Ta*            *par*            *hoye*            *col-e*            *ja-i*  
 mountain-CLF.ACC    cross            over.INF        leave.INF        go-PRS.1

‘Sometimes, the strong desire of going beyond the mountain by crossing it occurs to me.’

The predicate *icche* in all its occurrences holds exclusivity in Bangla and the heterogeneity is observed both at the syntactic (clausal) level and the semantic level. The problem can only have a conclusive solution when we establish the intrinsic semantics of the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. This exploration leads the thesis to answer the following research questions:

- (a) How does the meaning potential of *icche* (with the light verbs) vary across the contexts?
- (b) How and what types of contextual constraints are interacting with each other in curving out the senses of individual and stage-level interpretations in *icche*, *icche ache*, *icche hOwa* and *icche kOra*?

## Methodology

### *Data Collection*

To answer the aforementioned questions of this thesis, data is collected from (i) the standard conventional sources as well as from (ii) the conversational discourses. The standard conventional sources include soft and hard copies of texts whereas the conversational resources are collected from real-time interactions. The primary sources of the data are as follows:

Table I: Sources of the data employed in the thesis

Sources:	
	a. Digital Sources (i) Bichitra Corpus (ii) Newspapers
	b. Books and journals.

Additionally, we have conducted a series of linguistic tests to investigate and to understand how these predicates behave syntactically and semantically. The primary tests involved:

- Temporal modifications test
- Clausal embeddability test

The collected test results are then used for further exploration.

### Representation of Data

The data gathered from these sources is presented in a structured schema comprising four layers as shown below:

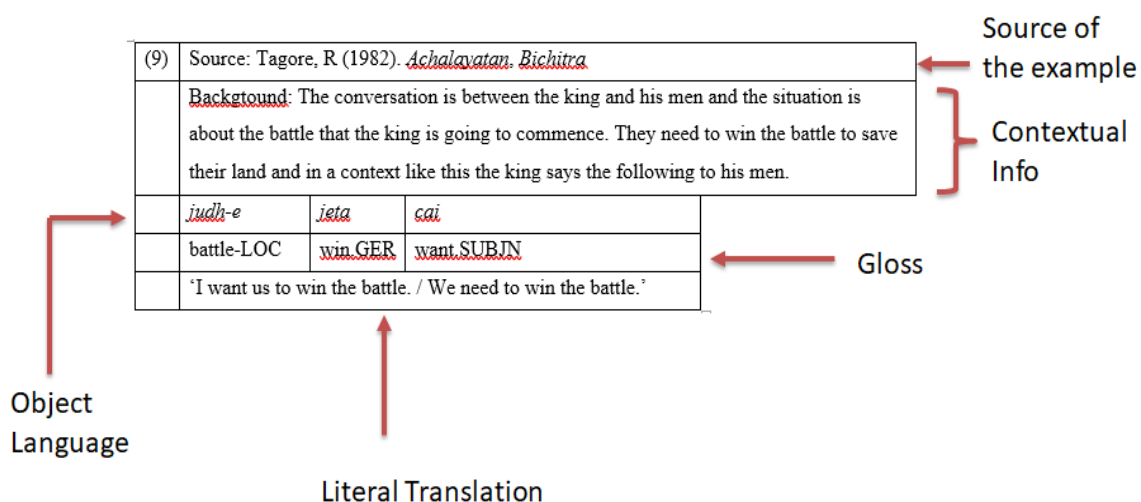


Figure I: Data Representation

We expressed the data, gathered from digital sources, in a schema that is divided into four layers: (i) Source, (ii) Background (iii) Object language and (iv) Gloss. For data extracted from the Corpus, the source indicates the title of the book, the author’s name and the year of publication. For data sourced from newspapers, the source specifies the name of the newspaper and the date of publication. Similarly, for data obtained from research papers, the source indicates the author’s name(s), and the year of publication. The background describes the context. In data representation, we have followed the interlinear Leipzig Glossing Rules developed jointly by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology and by the Department of Linguistics of the University of Leipzig. In the thesis, we have used (\*) to represent ungrammaticality, and (?) or (??) to represent inconsistent data. In certain situations, we have used (✓) to represent correctness or applicability. Throughout the thesis instead of IPA, we have incorporated the following technique for the representation of the data. This work emphasizes the syntactic and semantic aspects and aims to analyze the constructs from these two perspectives. We have not used the IPA as phonology and phonetics don’t play a major role in our study. The Table II below represents the framework of symbols and sounds adapted. In the table below we have represented the symbols that we have incorporated in the thesis for the respective sounds while transcribing the other Bangla phonemes using the English alphabets in smaller cases following the standard practices of the current times.

Table II: The framework of symbols and sounds adapted

<b>Symbols</b>	<b>Sounds</b>
E, O	æ, ɔ
S	ʃ
M	Nasalization
N	ŋ
T, D	t, d

## Overview of the chapters

The thesis presents itself in six chapters. Chapter 1 lays the groundwork by investigating the lexical expression of desire through predicates such as *icche* and *cawa*, while also addressing the challenges posed by temporal adverbs like *majhe majhe* ‘sometimes’, which can create semantic anomalies.

Building on this foundation, Chapter 2 reviews the literature on desire predicate and complex predicate structures. This chapter discusses concepts like ‘individual-level and stage-level predicates’, ‘event semantics’, and ‘interval semantics’. These three notions form the core of our analysis. The debate heavily relies on complex predicate structures, notably nouns and verbs in conjunct verb forms.

Chapter 3 concentrates on the distribution of the predicate *icche* in Bangla; the situation where it occurs as a lexical predicate in isolation and the situation where the predicate takes the shape of a conjunct verb by occurring with the light verbs *ach-*, *hO-*, and *kOr-*. The chapter also incorporates a cross-linguistic viewpoint while indulging itself in a comparative study with the desire predicates of Odia and Hindi. Clausal and lexical level dependencies are discussed in detail; *icche* in isolation implies selection restriction towards a particular clausal complement structure and *icche* with the light verbs *ach-*, *hO-* and *kOr-* exerts different clausal dependencies.

Chapter 4 provides an explanation and analysis of the structure in which contents are contained. We explain the structural innards of *icche* when it occurs independently and when it appears with the light verbs. From a syntactic standpoint, we discuss the argument structure of the predicates and the theta-assigning power of the light verbs. Although from a semantic perspective, the meaning construing capacities of the light verbs in composition with the host

noun *icche* adds a new meaning in the entire eventuality of desire. This phenomenon builds up the basis of our investigation outlined in Chapter 5.

Chapter 5 contains discussions on the interval and subinterval properties of *icche ache*, *icche hOwa*, and *icche kOra* in the spatiotemporal context. Then the chapter establishes the bifurcation of the meaning potential of the predicate *icche* (with the light verbs) into individual and stage-level interpretations. The ‘individual and stage-level’ phenomena are the framework within which the semantic composition of *icche*, *icche ache*, *icche hOwa*, and *icche kOra* is developed.

Finally, Chapter 6 provides an overview of the entire work concerning the structural and semantic insights, and temporal and aspectual properties. The findings of the work are mentioned with the future scope.

# Abbreviations

**PRS** – Present

**GER** – Gerund

**PST** – Past

**ACC** – Accusative

**NOM** – Nominative

**GEN** – Genitive

**CLF** – Classifier

**INF** – Infinitive

**ERG** – Ergative

**FUT** – Future

**HAB** – Habitual

**SG** – Singular

**PL** – Plural

**COMP** – Complementizer

**SBJV**- Subjunctive

**COND**- Conditional

**EMPH**- Emphatic

**PRT**- Particle

**INF**- Infinitive

**DAT**- Dative

**CONT**- Continuous

**PRF**-Perfect

**CAUS**-Causative

**PRT**-Particle

**EMPH**-Emphatic

**COP**-Copula

**GER**- Gerund

**NEG**- Negative

**M**- Masculine

**F**- Feminine

**SBJ**- Subject

# Typological Conventions

Language data from contemporary Bangla are transcribed following the standard rules of the Punyashlok. If an example from contemporary Bangla appears within the running text, it is italicized for emphasis. The Leipzig Glossing Rules are adhered to when representing linguistic data, ensuring consistency and clarity. When presenting secondary linguistic data, this thesis remains faithful to the original sources and follows the typographical conventions used by the respective authors. Logical symbols and notations are based on conventions commonly adopted in relevant linguistic literature, ensuring alignment with established academic practices.

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# Chapter 1

## 1. Introduction

This thesis seeks to investigate the meaning construing capacity of Bangla desire predicate *icche* with a focus on its distribution in different structural compositions. More specifically, the work is concerned about the way desire predicate *icche* remains crucial in categorizing its content either as individual-level or as stage-level phenomena. To attain this research objective, the current work investigates various constraints imposed by the contexts of its occurrences. This, in turn, has enhanced our understanding of compositionality in general and the roles of relevant linguistic/conceptual intentions in particular.

### 1.1 On desire predicates: The case of Bangla

Theorizing the contribution of a verbal predicate in a language is challenging because of the underlying conceptual intricacies. These intricacies have bearings not only on the meaning and the usage patterns but also on the structure.

The studies on ‘desire predicates’ in Bangla remain a bit drifted with little exploration. In Bangla, the sense of desire is conveyed through various linguistic elements. These elements show some impelling empirical phenomena with some potential theoretical significance. In English, for example, there are three primary desire predicates *desire*, *wish*, and *want* which explicate the sense of a desire. In a first look, it may appear that these three lexical items mean the same thing and are used interchangeably; but any native speaker of the language would say that there are significant differences between *desire*, *wish* and *want*. The examples (1-3) become important over here:

- (1) John wished that Stephaney was with him.
- (2) I wish I could go with them.

(3) \*I desire I could go with them.

In (1) the use of the verb *wished* indicates that the speaker expresses a desire for an unreal or hypothetical situation. It typically implies that the desired event (Stephaney being with John) is unlikely or impossible, making this sentence an expression of unattainable desire. With this note, if we look at (2) we will see that *wish* again signals that this desire is likely unachievable. Speaker by using 'could' in the subordinate clause adds a sense of hypothetical impossibility. What is interesting here is the sentence becomes ungrammatical, as soon as we use the verb *desire*, as mentioned in (3). The sentence (3) violates the syntactic/semantic rules by attempting to use it in the same structure as *wish*. This cemented our earlier observation that while both verbs express desire, they function differently syntactically and semantically. Thus, to understand the verb *desire* explicitly we will now look at the following example, (4-6):

(4) I desire work that involves farming or agriculture.

(5) I want you to be there immediately.

(6) \*I desire /wish you to be there immediately.

A review of the English language confirms the fact that the verb *desire* is used with the direct object. This is very much evident in (4), as the speaker expresses a more concrete and realistic desire for a specific type of employment. In example (5) *want* encompasses an implicit connotation of necessity or obligation; hence, substituting *want* with *desire* or *wish* in a formulation such as (6) results in a dissonant interpretation of desire.

In Bangla desire can be expressed lexically by employing desire predicates which occur as a complex predicate or as a single predicate. It is also communicated functionally by certain structural paradigms carrying the force of desire. The notion of desire conveyed via the lexical and structural means affects the structure and the meaning construals of the matrix sentence of which the desire predicates are part of. This leads to the following two concerns

for the current investigation (i) the structural and the meaning related complexities internal to desire predicates and (ii) The roles of other contextual factors co-constituting the sense of desire through the semantic composition.

## **1.2 Socio-historical Genesis of Bangla**

The Indo-Aryan group of the Indo-Iranian branch of the Indo-European language family includes the Bengali language. Over 210 million people speak Bengali as their first or second language; of these, about 100 million live in Bangladesh and approximately 85 million speak it in India, mostly in the states of West Bengal, Assam, and Tripura. It is one of the languages officially recognized by the Indian Constitution and Bangladesh. There is general agreement that in the distant past Oriya, Assamese, and Bengali formed a single branch, from which Oriya split off first and Assamese later. This explains, among other things, why speakers of Oriya and Assamese also claim the Charyapadas, or Buddhist mystic songs, as their ancient works of literature and language. The Bengali linguists Suniti Kumar Chatterji (1926) and Sukumar Sen(1960) proposed that the spoken language Magahi *Prakrit* gave rise to the written language Magahi *Apabhramsha* in the tenth century CE. A rival theory was put forth by the Bengali scholar Muhammad Shahidullah and his adherents, who proposed that the language originated in the 7th century CE and evolved from spoken and written *Gauda* (which was also a *Prakrit* and an *Apabhramsha*, respectively). When Chatterji (1926) studied early 20th-century dictionaries in the 1960s and 1970s, he concluded that about half of the vocabulary in Bengali was made up of native words (that is, naturally modified Sanskrit words, corrupted forms of Sanskrit words, and loanwords from non-Indo-European languages), roughly 45% was made up of unmodified Sanskrit words, and the remaining portion was made up of foreign words. Persian dominated the last group and gave rise to certain grammatical forms. According to more recent research, Bengali speakers' preference for colloquial language may be the primary reason for the rise in the usage of both native and

foreign words. In Bengali, there are two main speech patterns: the *Chaltibhasa*, or modern or colloquial speech, and the *Sadhubhasa*, or elegant or refined speech. The language of the early Bengali poetry works had a significant influence on the former. It was standardized in the 19th century as the language for literature as well as the suitable medium for interpersonal and professional communications. *Sadhubhasa* was not the language of everyday communication, even though it was occasionally used for speeches. Linguist Prabhat Ranjan Sarkar (1989) categorizes Bangla into 12 categories based on the dialects; Madhya Rarhi dialect, Kanthi dialect, Kolkata dialect, Shantipuriya (Nadia) dialect, Shershahabadia dialect (Maldah, Jangipuri), Barendri dialect, Rangapuriya dialect, Sylheti dialect, Dhakiya (Bikrampur) dialect, Jashore dialect, Barisal dialect, and Chattal (Chittagong) dialect.

Bengali (Bangla) is an IA (Indo-Aryan) language and IA languages fall under the South Asian Languages. ‘Linguistic geography’ would be an appropriate term for the synchronic study of distributions, but it has come to mean ‘dialect geography’, which is the detailed mapping of (primarily phonetic and lexical) variables within a single language community, in many linguistic areas.

Having established the linguistic and cultural diversity here, the thesis is now in a position to explore how desire is expressed in Bangla through specific lexical and grammatical patterns. The following section deals with the various lexical elements used to express desire, such as the predicates *icche* (desire) and *cawa* (want).

### **1.3 Explicating the different forms of expressing desire: lexical elements**

Desire predicates, which encompass a wide array of expressions related to human wants, wishes, and desires, have long captivated the interest of linguists and semantic theorists. These predicates serve as linguistic vehicles through which individuals convey their intentions and desires, making them a fundamental facet of human communication. While the

study of desire predicates has been a central focus in linguistics, much of the existing research has primarily revolved around Indo-European languages, leaving a substantial gap in our understanding of these constructs in non-Indo-European languages. In Bangla, we have two extensively used predicates that signify the sense of desire; *icche* ‘desire’ and *cawa* ‘want’. We can observe the sentences shown below in (7) – (9).

(7) Source: Bhattacharya (2013)

*amar icche je o aj aS-uk*  
 I.GEN desire that.COMP s/he today come-SBJV  
 ‘It is my desire that he comes today.’

(8) Source: *ibid*

*ami cai je tumi aj amar bari*  
 I.NOM want that.COMP you.NOM today I.GEN house.LOC  
*aS-o*  
 come.SBJV  
 ‘I want that you come to my house tonight.’

(9) Source: Tagore, R (1982). *Achalayatan, Bichitra*

Background: The conversation is between the king and his men and the situation is about the battle that the king is going to commence. They need to win the battle to save their land and in a context like this the king says the following to his men.

*juddh-e jeta cai*  
 battle-LOC win.GER want  
 ‘I want us to win the battle. / We need to win the battle.’

The differences in the senses of desire are evident in the above examples. In (7) and (8) the predicates *icche* and *cai* occur in a context where both of them express the speaker’s desire

for someone to come with the subjunctive forms *aSuk* and *aSo* respectively. Example (9) portrays the sense of need or an obligation through the occurrence of *cai*, where the speaker expresses a collective desire to win a battle. Substituting *cai* with *icche* would be inappropriate. This particular expression is rightfully captured in (9a).

- (9a)    *(amader) juddh-e        jeta        cai*  
           (we)        battle-LOC    win.GER    want.  
           We need to win the battle.’

The predicate *icche* also combines with the light verbs *ach-* ‘have’, *kOr-* ‘do’, and *hO-* ‘happen’ and forms complex predicate constructions traditionally known as conjunct verbs. The examples below show the occurrences.

- (10)    Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023  
           Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club. Lionel Messi says the following sentence.

- Onek        kichu        jeta-r        icche        ach-e*  
 many        things.ACC    win.GER-GEN    desire        have.PRS-3  
 ‘I have a desire to win a lot more in my life.’

- (11)    Source: Tagore, R. (1943). *Chirokumar Sabha, Bichitra*

Background: The sentence below is borrowed from a conversation between Shrish and his friend Bipin. They are talking about their interest in music and while discussing Shrish says the following sentence.

- ajkal        majhe majhe        kobita-e        Sur        bOSa- te        icche*  
 nowadays    sometimes        poems-LOC    melody.ACC    put-INF        desire

*kOr-e*

do-PRS.3

‘Nowadays, sometimes, the desire to put melody in poems happens or occurs to me.’

(12) Source: Newspaper – Bangla News 24. Date – 10<sup>th</sup> December 2022

Section: Lifestyle desk

Background: This section concentrates on lifestyle health. They talk about how can we consume sweets and still keep a check on our health and weight.

*miSTi*      *dekh-le-i*      *khe-te*      *icche*      *hO-e*

sweets.ACC    see-COND-EMPH    eat-INF    desire    happen.PRS-3

‘The desire of eating sweets happens to me whenever I see it.’

In addition to this, Bangla also has instances where certain desiderative adverbs carry the sense of desire when employed in a sentence. The adverbs *icche kore* ‘intentionally doing something’ and *icchemOto* ‘according to one’s desire’ bear the desiderative force and we can observe examples (13-14) that substantiate this understanding.

(13) Source: Tagore, R. (1945). *Poritran, Bichitra*.

Background: The plot describes a situation where one of the ministers of the king is assumed to be a part of a conspiracy and he intentionally has caused someone to tie his hands and legs.

*bhOgobOt*      *icche kore*      *hat-pa*      *badh-i-ech-e*

Bhogobot.NOM    intentionally    hands and legs. ACC    tie-CAUS-PRF-PRS-3

‘Bhogobot has intentionally caused (someone) to tie his hands and legs.’

(14) Source: Newspaper – ZEE 24 Ghonta. Date/Time -7<sup>th</sup> December 2017, 11:11 pm.

Background: This section concentrates on the affairs of the State. Frequent power

cuts have caused a major problem for the State and hence the State government declares the following.

*icche*      *mOto*              *lodSeding*      *ar*              *col-b-e*      *na*  
 desire      according to      power cuts      anymore      go-FUT-3      NEG

‘Frequent power cuts according to one’s desire shall not be entertained anymore.’

In (13) the desiderative adverb *icche kore* adds a layer of intentionality to the event that indicates the action of tying hands and legs was not accidental but done purposefully. On the other hand, in example (14) the predicate *icchemOto* is used in a context where the State government is declaring that arbitrary power cuts, which might have been initiated at will, will no longer tolerated. Both examples (13-14) illustrate the use of *icche kore* and *icchemOto* as adverbial constructions in Bangla that expresses intentionality and actions based on personal desires.

In Bangla, *jEno*<sup>2</sup> can also explicate the sense of desire. The element *jEno* carries the force of a desire in particular contexts, as observed in (15).

(15) Source: Tagore, R. (2012). *Bhairober Boli, Bichitra*.

Background: The context describes a situation where the king’s empire and his people are threatened by another ruler and a huntsman says the following sentence addressing the prince who should sit on the throne and exercise his kingly powers.

*jEno*              *phire*              *eSe*              *amader*              *juboraj-ke*              *dekhi*  
 as if.PRT              return.INF              come.INF              our              prince-ACC              see

*SinghaSon-e*

throne-LOC

‘On returning back, I wish to see our prince on the throne.’

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<sup>2</sup> The element *jEno* in Bangla is majorly used incorporating the sense of ‘as if’, but there are instances as seen in the sentence (15) where the sense of *jEno* is breached and it implies a desiderative force.

In the example, *jEno* exerts a strong sense of desire or wish. Here the speaker is expressing a desire to see their prince seated on the throne. The use of *jEno* adds a sense of earnest longing or hopefulness to the statement, making it clear that the speaker strongly desires this outcome.

This section has discussed the lexical elements of Bangla used in conveying the sense of desire. The sense of desire is primarily expressed by the predicates *icche* ‘desire’ and *cai* ‘want’. The predicate *icche* occurs in isolation and also in conjunction with the light verbs *ach-*, *hO-* and *kOr-*, forming *icche ache*, *icche hOwa* and *icche kOra*. Bangla shows features where desiderative adverbs like *icche kore* ‘intentionally doing something’ and *icchemOto* ‘according to one’s desire’ are used to express desire. We also mention that in Bangla the element *jEno* carries the force of a desire in particular contexts. In contrast to these lexical substantive realizations of desire, we will look at the grammatical ways for expressing desire in Bangla.

#### **1.4 The Grammatical Patterns for Expressing Desire**

So far, we have witnessed the distribution of the lexical elements that exert the sense of desire in Bangla. Desire can be expressed through specific grammatical constructions like (i) simple future tense and (ii) conditional structures, such as the combination of an ‘if’ clause and the past habitual form of the verb. The following examples will illustrate this:

(16) Source: Tagore, R. (1996). *Sangeetchinta, Bichitra*.

Background: The following sentence is taken from a speech which was addressed to the students of Presidency. Rabindranath Tagore delivered a speech about the contributions of Bangladesh in the field of music and how they were very independent and brave in securing their own music. Tagore said that Bangladesh embracing their music and culture.

*amar gan ami gai-b-o*  
 I.GEN music.ACC I.NOM sing-FUT-1

‘I will sing my song.’

(17) Source: Newspaper – ZEE 24 Ghonta. Date/Time -7<sup>th</sup> November 2020

Background: After the demise of the celebrated actor Irfan Khan, his wife says the following sentence which concerns her desires towards her husband.

*SeSbar-er mOto irfan o chele babil-er SOnge*  
 last time-GEN like Irfan and son Babil-GEN with  
*jodi uttorbOng-er tistapar je-te par-t-am*  
 if North Bengal.GEN Tistapar.LOC go-INF can-PST.HAB-1

‘I wish I could go to Teestapar in North Bengal with Irfan and our son Babil for the last time,’

The context in (16) explains a speech by Rabindranath Tagore where he said that Bangladesh fought for their own culture and was brave enough to build their music. Thereby as a united nation, they said that they would sing their independent music and that is what they desired. The use of future tense here directly translates the speaker’s desire into an intended action. Example (17) expresses a desire which indicates that the speaker wishes for something that is no longer possible. The grammatical construction, which shows the conjunction of the ‘if’ clause with the past habitual form of the verb, highlights how Bangla can convey unattainable desires.

As observed above, the elements responsible for expressing desire in Bangla are projected in the language through lexical and grammatical ways. The Table 1 summarizes the lexical and the grammatical factors.

Table 1: Desire expressed in Bangla

<b>Desire in Bangla</b>	
<i>Lexical incorporation</i>	(i) Verbal predicates like <i>icche</i> and <i>cawa</i> (ii) Adverbials like <i>icchemOto</i> and <i>icche kore</i> (iii) The element <i>jEno</i> in certain contexts.
<i>Grammatical constructions</i>	(iv) Simple future tense (v) Conjunction of 'if' clause with the past habitual form of the verb.

## 1.5 Research Objectives

The objectives of this research are to explore the way desire is fabricated with the lexical expression *icche* (along with the light verbs) in different contexts. The research explores the meaning construing capacities of the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra* in Bangla. Since the act of desiring involve wide range of interpretations, relevant from the viewpoint of spatiotemporal constituencies, compositional factors need to be explored to identify the lexical interdependencies. These objectives are central to understanding the semantic heterogeneity involved in the desire predicate. The examples presented in this section highlight key challenges in understanding how the combination of *icche* with light verbs like *hOwa* and *kOra* introduces semantic shifts, especially when temporal adverbs are incorporated. Examples (18) - (21) indicate the standard usage of *icche* in isolation or with light verbs:

(18) Source: Tagore, R. (1941). *Sesher Kobita, Bichitra*.

Background: The context is about a conversation between Amit and Labanya. While conversing, Amit in order to describe himself mentions his friend Sobhonlaal and

says that he is an eminent researcher and his work is to explore the past and bring out the history, but Amit desires to establish the path of future. Amit says the following to Labanya

*amar icche bhobiSSOt-er pOth sriSTi kOr-a<sup>3</sup>*  
 I.GEN desire future-GEN path.ACC create do-SBJV

‘It is my desire that I will create the path of future.’

(19) Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023

Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club. Lionel Messi says the following sentence.

*Onek kichu jeta-r icche ach-e*  
 many things.ACC win.GER-GEN desire have.PRS-3

‘I have a desire to win a lot more in my life.’

(20) Source: Newspaper – Bangla News 24. Date – 10<sup>th</sup> December 2022

Section : Lifestyle desk

Background: This section concentrates on lifestyle health. They talk about how can we consume sweets and still keep a check on our health and weight.

*miSTi dekh-le-i khe-te icche hO-e*  
 sweets.ACC see-COND-EMPH eat-INF desire happen.PRS-3

‘The desire of eating sweets happens to me whenever I see it.’

(21) Source: Tagore, R. (1941). *Dakghor, Bichitra*

Background: The situation describes a conversation between Amol and his uncle

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<sup>3</sup> According to traditional grammar of Bangla, -a suffix is added with a verbal root to derive a verbal noun (Chattopadhyay, 1939). Because of being infinite, derived verbal nouns are useful in expressing the sense of subjunctivity.

Madhob Dutta. Due to some disease Amol is not allowed to step outside, but feels like seeing the world outside. Amol says the following to his uncle.

<i>amar</i>	<i>bhari</i>	<i>icche</i>	<i>kOr-e</i>	<i>oi</i>	<i>pahar-Ta</i>
I.GEN	strongly	desire	do-PRS.3	that.DET	mountain-CLF.ACC
<i>par</i>	<i>hoye</i>	<i>col-e</i>	<i>ja-i</i>		
cross	over-INF	leave-INF	go-PRS.1		

‘The strong desire of going beyond the mountain by crossing it occurs to me.’

However, a semantic anomaly is generated by the predicate *icche* neighboring with the light verbs *ach-*, ‘exists/have’, *hO-* ‘happen’ and *kOr-* ‘do’. The semantic complexity arises when temporal modifications such as *majhe majhe* ‘sometimes’, are introduced into these constructions. The above sentences in (18-21) are modified with temporal adverbs in (22-25). Let us observe the situation in (22-23) where *icche* and *icche ache* are paired with with the temporal adverb *majhe majhe* ‘sometimes’

- (22) \* *amar majhe majhe icche bhobiSSOt-er pOth sriSti kOr-a*  
 I.GEN sometimes desire future-GEN path.ACC establish do-SBJV
- (23) \* *Onek kichu jeta-r majhe majhe icche ach-e*  
 many things.ACC win.GER-GEN sometimes desire have.PRS-3

Examples (22) and (23) reveal how the addition of temporal adverbs can disturb the syntactic construction of *icche*, when used in isolation or with the light verb *ache*. This indicates a semantic anomaly when temporal adverbs like *majhe majhe* ‘sometimes’ are applied. On the other hand (24) – (25) indicates that when *icche* occurs in a complex predicate construction with the light verbs *hOwa* ‘happen’ and *kOra* ‘do’ can accommodate temporal modifications. Consider the example.

(24) *miSTi*            *dekh-le-i*                    *majhe majhe*    *khe-te*    *icche*    *hO-e*  
sweets.ACC    see-COND-EMPH    sometimes    eat-INF    desire    happen.PRS-3

‘Sometimes, the desire of eating sweets happens to me whenever I see it

(25) *amar*            *majhe majhe*    *bhari*            *icche*            *kOr-e*            *oi*  
I.GEN            sometimes            strongly            desire            do-PRS.3            that.DET

*pahar-Ta*                    *par*            *hoye*            *col-e*            *ja-i*  
mountain-CLF.ACC    cross            over.INF    leave.INF            go-PRS.1

‘Sometimes, the strong desire of going beyond the mountain by crossing it occurs to me.’

The predicate *icche* in all its occurrences holds exclusivity in Bangla and the heterogeneity is observed both at the levels of structure and meaning. The problem can only have a conclusive solution when we unpack meanings intrinsic to the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. The objectives discussed, so far, lead us to the following section on the research questions of the thesis.

### 1.5.1 Research Questions

On the basis of the research objectives set forth in section 1.5, the following questions will be investigated:

- (a) How does the meaning potential of *icche* (with the light verbs) vary across the contexts?
- (b) How and what types of contextual constraints are interacting with each other in curving out the senses of individual and stage-level interpretations in *icche*, *icche ache*, *icche hOwa* and *icche kOra*?

To answer the research questions, a method of investigation is designed and followed to reach the objectives of this thesis. Section 1.6 is devoted to the description of this methodology.

## 1.6 Methodology

### 1.6.1 Data Collection

To attain the objective of this thesis, data is collected from (i) the standard conventional sources as well as from (ii) the conversational discourses. The standard conventional sources include soft and hard copies of texts whereas the conversational resources are collected from real-time interactions. The primary sources of the data are as follows:

Table 2: Sources of the data employed in the thesis

Sources:	
	a. Digital Sources (i) Bichitra Corpus (ii) Newspapers
	b. Books and journals.

Additionally, we have conducted a series of linguistic tests to investigate and to understand how these predicates behave syntactically and semantically. The primary tests involved:

- Temporal modifications test
- Clausal embeddability test

The collected test results are then used for further exploration.

### 1.6.2 Representation of Data

The data gathered from these sources is presented in a structured schema comprising four layers as shown below:

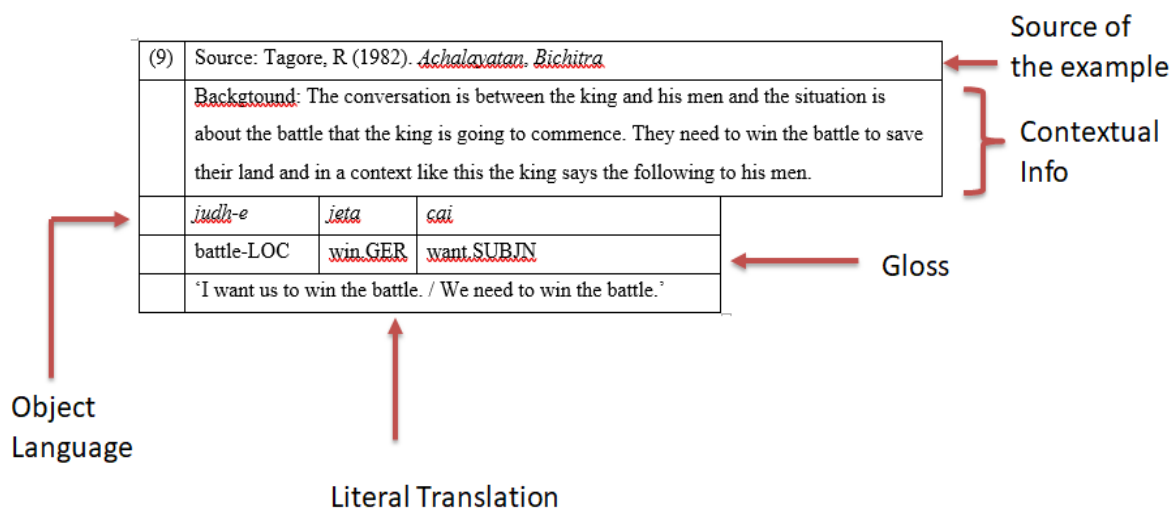


Figure 1: Data Representation

We expressed the data, gathered from digital sources, in a schema that is divided into four layers: (i) Source, (ii) Background (iii) Object language, and (iv) Gloss. For data extracted from the Corpus, the source indicates the title of the book, the author's name and the year of publication. For data sourced from newspapers, the source specifies the name of the newspaper and the date of publication. Similarly, for data obtained from research papers, the source indicates the title of the paper, the author's name(s), and the year of publication. The background describes the context. In data representation, we have followed the interlinear Leipzig Glossing Rules developed jointly by the Department of Linguistics of the Max Planck Institute for Evolutionary Anthropology and by the Department of Linguistics of the University of Leipzig. In the thesis, we have used (\*) to represent ungrammaticality, (?) or (??) to represent inconsistent data. In certain situations, we have used (✓) to represent correctness or applicability. Throughout the thesis instead of IPA, we have incorporated the following technique for the representation of the data. This work emphasizes the syntactic and semantic aspects and aims to analyze the constructs from these two perspectives. We have not used the IPA as phonology and phonetics don't play a major role in our study. The Table 3 below represents the framework of symbols and sounds adapted. In the table we have

represented the symbols that we have incorporated in the thesis for the respective sounds while transcribing the other Bangla phonemes using the English alphabet in smaller cases following the standard practices of the current times.

Table 3: The framework of symbols and sounds adapted

Symbols	Sounds
E, O	æ, ɔ
S	ʃ
M	Nasalization
N	ŋ
T, D	t, d

## 1.7 Overview of the chapters

The thesis presents itself in six chapters. The current chapter, i.e. Chapter 1 lays the groundwork by investigating the lexical expression of desire through predicates such as *icche* and *cawa*, while also addressing the challenges posed by temporal adverbs like *majhe majhe* (sometimes), which can create semantic anomalies.

Building on this foundation, Chapter 2 reviews the literature on desire predicate and complex predicate structures. This chapter discusses concepts like ‘individual-level and stage-level predicates’, ‘event semantics’, and ‘interval semantics’. These three notions form the core of our analysis. The debate heavily relies on complex predicate structures, notably nouns and verbs in conjunct verb forms.

Chapter 3 concentrates on the distribution of the predicate *icche* in Bangla; the situation where it occurs as a lexical predicate in isolation and the situation where the predicate takes the shape of a conjunct verb by occurring with the light verbs *ache*, *hOwa*, and *kOra*. The chapter also incorporates a cross-linguistic viewpoint while indulging itself in a comparative study with the desire predicates of Odia and Hindi. Clausal and lexical level dependencies are

discussed in detail; *icche* in isolation implies selection restriction towards a particular clausal complement structure and *icche* with the light verbs *ache*, *hOwa* and *kOra* exerts different clausal dependencies.

Chapter 4 provides an explanation and analysis of the structure in which contents are contained. We explain the structural innards of *icche* when it occurs independently and when it appears with the light verbs. From a syntactic standpoint, we discuss the argument structure of the predicates and the theta-assigning power of the light verbs. Although from a semantic perspective, the meaning construing capacities of the light verbs in composition with the host noun *icche* adds a new meaning in the entire eventuality of desire. This phenomenon builds up the basis of our investigation outlined in Chapter 5.

Chapter 5 contains discussions on the interval and subinterval properties of *icche ache*, *icche hOwa*, and *icche kOra* in the spatiotemporal context. Then the chapter establishes the bifurcation of the meaning potential of the predicate *icche* (with the light verbs) into individual and stage-level interpretations. The ‘individual and stage-level’ phenomena are the framework within which the semantic composition of *icche*, *icche ache*, *icche hOwa*, and *icche kOra* is developed.

Finally, Chapter 6 provides an overview of the entire work concerning the structural and semantic insights, and temporal and aspectual properties. The findings of the work are mentioned with the future scope.

# Chapter 2

## 2. Literature review

### 2.1 Desire predicate and the situation of complex predicates

In the context of South Asian languages, research on ‘Desire predicates’ has largely remained drifted. Bangla for instance shows very little work that involves a thorough understanding of the lexical and structural patterns of communicating desire. Earlier, the works (Heim, 1992; Villalta, 2008; Harner, 2016; Portner & Rubinstein, 2020) on desire predicates like *wish*, *want*, and *hope* have been analyzed from a standpoint of ‘modality’ and ‘possible world semantics’. In this thesis, we aim to scrutinize these constructs through the lenses of ‘complex predicate constructions’, ‘lexical aspect of verbs and situation class’, and the paradigm of ‘individual-level and stage-level predicates’.

The thesis focuses on four predicates: *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. The aforementioned predicates except *icche* belong to the class of complex predicates. To be more precise the predicates *icche ache*, *icche hOwa*, and *icche kOra* are conjunct verbs, or N+V complex forms. Under this situation, we will first concentrate on the discussion of complex predicates and then get into the concepts of conjunct or composite verb formations. One of the main linguistic characteristics of languages in South Asia is the phenomenon of complex predicate (Masica, 1978). According to Dasgupta (1989), Chatterjee (2014), Davison (2005), Butt and Ramchand (2005), and Butt (2010), complex predicates can be divided into two categories: conjunct or composite verbs (Non V + V) and compound verbs (V+V). When constructing compound verbs, a verb is usually combined with another verb, and when constructing conjunct verbs, a nonverb is combined with a verb. The conjunct verb formations involve the occurrence of a light verb with a noun, adjective, or adposition. Butt (1995) established three criteria to identify complex predicates; (i) Complex predicates

can be formed morphologically (lexically) based on South Asian Languages like Hindi and Urdu and he also viewed from a cross-linguistic perspective that complex predicates can be formed syntactically following certain constructions in Romance languages and the Japanese *suru* ‘do’ complex constructions. (ii) The argument structure is complex signifying co-predication (two or more semantic heads contribute to it). (iii) The grammatical functional structure is that of a simple predicate (there is only a single subject and no embedding). In this thesis, we intend to confine our discussion only to the lexically formed complex predicates like (26), (27) and (28) predominantly employed in South Asian Languages. In complex predicate construction the main verb carries the semantic load and the light verb is responsible for grammatical and aspectual functions. The argument structure of the complex predicates in (26), (27) and (28) is explained below.

(26) Source: .Butt and Geuder (2001)

<i>niinaa-ne</i>	<i>kahaani-par</i>	<i>dhyaan</i>	<i>dii-yaa</i>
Nina.F-ERG	story.F.SG-on	attention.M.SG.NOM	give-PERF.M.SG
'Nina paid attention to the story.'			

(27)	<i>naadyaa-ne</i>	<i>khat</i>	<i>likh</i>	<i>dii-yaa</i>
	Nadya.F-ERG	letter.M.NOM	write	give-PERF.M.SG
'Nadya wrote a letter completely.'				

(28)	<i>Onimes</i>	<i>orun-ke</i>	<i>Sotti-Ta</i>	<i>bol-e</i>	<i>di-l-o</i>
	Animesh.NOM	Arun-ACC	truth-CLF.ACC	say-INF	give-PST-3
'Animesh told the truth to Arun.'					

In example (26) the light verb *diiyaa* ‘give’ is semantically bleached and it occurs in conjunction with *dhyaan* ‘attention’, creating a sense of ‘paid attention’. In examples (27) and (28), the light verb conveys the sense of the completion of the event described by the main verb. In complex predicate constructions, the concept of co-predication is used, which

indicates that the predicative power of the complex predicate is jointly determined by both of its constituent elements—that is, by the main and the light verb. The main verb determines the argument structure of the resultant construction. The main verb *dhyaan* ‘attention’ in (26) has two arguments the agent (who paid attention) and the theme (on what the attention is being paid). The main verb *likh* ‘write’ in (27) has two arguments the agent (who writes) and the theme (what is written). In (28) the main verb *bOla* ‘saying’ has the agent (who said) argument, the patient argument (to whom it is said) and the theme argument *Sotti* ‘the truth’ (what is said). Light verbs in conjunction with the main verb are responsible for giving the theta role to the subject and aspectual functions, in both the above examples the light verbs exert the sense of completion.

Interestingly from a semantic standpoint, Butt and Geuder (2001) have argued that complex predicate constructions are doubly headed structures: which means in complex verb construction the full verb and the light verb forms a single unit and the light verbs in many respect patterns with fully lexical elements light verbs, though being lexically defective, are not completely empty elements. The light verb signifies a special type of lexical meaning which consists in a modulation of the event description provided by the full verb that it is in a construction with. Follow the example (29) below.

(29) Source: .Butt and Geuder (2001)

*naadyaa-ne yaasiin-ko xat likh-ne dii-yaa*  
 Nadya.F-ERG Yassin.M-DAT letter write-Infl.OBL give-Perf.M.Sg  
 ‘Nadya let Yassin write a/the letter.’

Butt and Geuder (2001) have discussed the semi-lexical status of light verbs. The semi lexical status of the light verb depends on particular context. In (29) the event describes an event of writing and the light verb here signifies the sense of ‘let’ i.e. give permission to write. The subject Nadya gives permission to Yassin to write the letter and hence the verb

*diyaa* is not completely devoid of its semantic contribution. The semi-lexical property of light verbs is vital in our thesis because in chapter 5 we have shown how the semantics of the light verbs *ache*, *hOwa* and *kOra* adds the lexical meaning in conjunction with the predicate *icche*.

## **2.2 The light verb hypothesis and the role of the light verbs in complex predicate constructions**

The term ‘light verbs’ was first used by Jespersen (1927) to describe the English verbs in V+NP structures: for example ‘take’ a sneak, ‘take’ a drive, ‘take’ a walk, ‘take’ a plunge or like ‘give’ a sign, ‘give’ a ring, etc etc. Jespersen (1927) argued that the intuition behind the term ‘light’ is that although these constructions respect the standard verb complement schema in English, the verb ‘take’, ‘give’, etc cannot be said to be predicating fully. This means one does not actually physically take ‘a plunge’ but rather one ‘plunges’. The verbs therefore seem to be more of a verbal licenser for nouns. The functional category *v* in the Minimalist Program represents the light verb (LV), projecting a *vP* and choosing a lexical predicative category (VP, AP, or NP) as its complement. It has been suggested (Hale & Keyser, 1993; Chomsky, 1995; Carnie, 2007) that verbs that assign agentive theta roles consist of two parts; the verbal root and the light verb. Carnie (2007) argued that light verbs are essentially auxiliaries because they head their own VP and light verbs are part of the complex that surfaces as a simple verb in English. Carnie (2007) has adopted the light verb element as small ‘*v*’ following Chomsky (1995). Several scholars have suggested that in English agentive verbs are bimorphemic. There is a verb root that signifies the lexical meaning of the word and there exists a light verb that roughly means ‘cause’. So according to Carnie (2007) a verb like ‘clean’ means ‘to cause to be clean’. He even explains that a verb like ‘clean’ is composed of the little *v* meaning ‘cause’ (CAUSE) that assigns the theta role and takes a VP as a complement and the lexical root  $\sqrt{\text{clean}}$ , which takes the theme as a complement. The

syntactic representation of the sentence ‘Ryan cleaned the window’, shown below in Figure 2, contains a vP dominating a VP. In order to create the verb ‘clean’ out of CAUSE and  $\sqrt{\text{clean}}$ , we get to observe a head movement of the V into the v category.

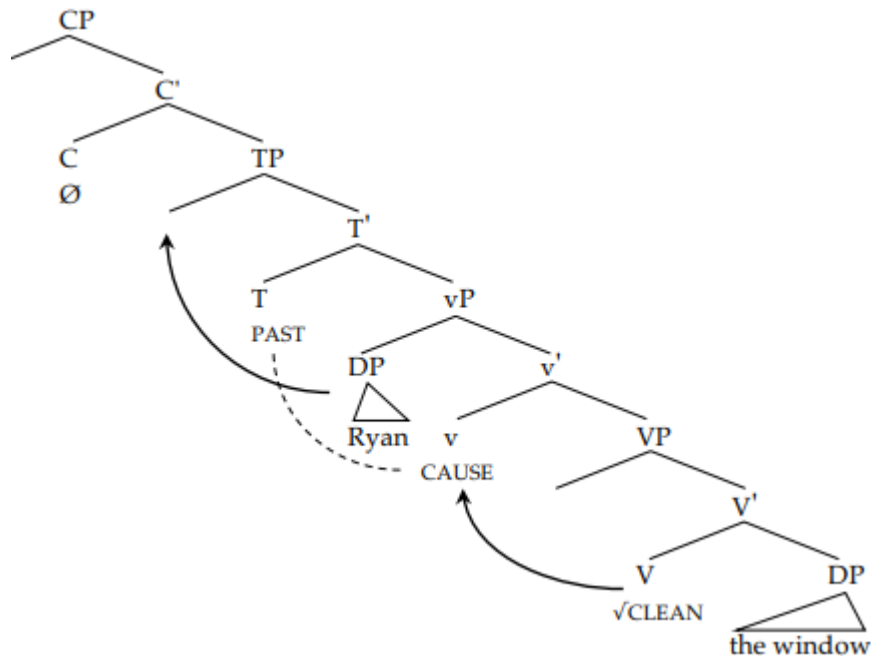


Figure 2: The paradigm of the ‘light verb’ (Carnie, 2007)

The issue of the presence of complex predicates in South Asian languages is generally well-defined. One specific kind of complex predicate in theoretical linguistics that hasn't received as much attention is when noun and verb constructions—also referred to as N+V conjunct or composite verbs are involved. Dasgupta (2012) investigated the role of *hOwa* ‘become’ and *kOra* ‘do’, the two most used light verbs in conjunct verb constructions, in the context of transitivity and intransitivity. He argued that Bangla has the transitive composite (conjunct) verb featuring *kOra* like *ranna kOra*, ‘to cook’, *Seddho kOra* ‘to boil’, *nOSTo kOra* ‘to spoil’, *mEramOt kOra* ‘to repair’, *bikri kOra* ‘to sell’, *amdani kOra* ‘to import’, *rOptani kOra* ‘to export’, *birokto kOra* ‘to irritate’, *greptar kOra* ‘to arrest’, *bondi kOra* ‘to imprison’. The intransitive counterpart is represented by the light verb *hOwa* in composite verbs like *ranna hOwa* ‘to be cooked’, *Seddho hOwa* ‘to boil’, *nOSTo hOwa* ‘to spoil’,

*mEramOt hOwa* ‘to get repaired’, *bikri hOwa* ‘to be sold’, *amdani hOwa* ‘to be imported’, *rOptani hOwa* ‘to be exported’, *birokto hOwa* ‘to get irritated’, *greptar hOwa* ‘to be arrested’, *bondi hOwa* ‘to be taken prisoner. Apart from the regular composite verbs that use the light verb *kOra* ‘to do’ to mark their agents in the nominative and their patients in the accusative, Dasgupta (2012) states that Bangla also has composite verbs that use the same light verb *kOra*, but they are unique in that they create experiencer subject constructions. Experiencer subjects receive genitive inflection, which we observe in the examples below.

(30) Source: Dasgupta (2012)

*ram-er bhOy kor-ch-e*  
 Ram.GEN fear do-CONT.PRS-3  
 ‘Ram feels afraid.’

(31) Source: Dasgupta (2012)

*SEm-er sinema dekh-te icche kor-ch-e*  
 Shyam.GEN cinema.ACC watch-INF desire do-CONT.PRS-3  
 ‘Shyam feels like watching a movie’.

Chatterjee (2014) adds a new theory in the literature of complex predicates. She investigated a two-part complex verb construction versus a three-part complex verb construction. In a two-part complex verb, the verb acts as a ‘helping verb’. In a three-part complex verb the ‘helping verbs’ are semantically bleached and they are in perfective participle forms and the third element is the light verb that carries the tense, person, and aspect inflection and affects the construction’s aktionsart and often provides an additional semantic sense. According to Chatterjee(2014), example (32) incorporates a two-part complex verb (V+do) structure. The bilingual three-part complex verb (V+do+V) structure is shown in a sentence (33).

(32) Source: Chatterjee(2014)

*o ritayon-ra SiphT kor-ech-e (V+do)*

oh Ritayon-PL shift do-PFV.PTCP

‘Oh Ritayon and folks have shifted.’

(33) Source: Chatterjee(2014)

*o ritayon-ra SiphT kor-e gE-ch-e (V+do+V)*

oh Ritayon-PL shift do-PFV.PTCP go-PFV-3P

‘Oh Ritayon and folks have shifted (completely).’

In example (33) the helping verb carries the inflection of perfective participle and the light (also termed as vector) verb *gEche* ‘go’ does not add any extra meaning of going to the construction but affects the aktionsart by adding telicity to the predicate. Chatterjee(2014) claims that light verbs like *gEche* ‘go’ and *pheleche* ‘throw’ lose their lexical meanings completely and only affect the construction’s aktionsart. The Table 4 below, which was compiled by Chatterjee(2014), lists the pertinent parallels and discrepancies between the helping verb and the vector, or light verb.

Table 4: Similarities and differences between helping verbs and vector verbs by Chatterjee (2014)

	<b>Helping Verbs</b>	<b>Vector Verbs</b>
<b>Similarities</b>	Carry inflection for tense, person and aspect	
<b>Differences</b>	Perform a verbalizing function	Alter the aspect and/or semantics of the construction
	Append to bare forms	Append to perfective forms
	Append to nouns, adjectives and verbs.	Append only to verbs.
	Class of 2, ‘do’ and ‘be’	Class of 12 to 16 verbs
	Append to native and non- native elements; native elements are always nouns or adjectives.	Append to only native verbs.

Many linguists agree with the fact that in significant instances of complex predicate constructions, the meaning-bearing abilities of the verbs are bleached in order to get transformed into the corresponding light verb. Ghosh (2014) argued the verb *dewa*, which means ‘to give’, sheds its basic meaning when it appears in complex predicate constructions. The basic meaning of the verb *dewa* is obscured in the conjunct verb construction in example (34) and the compound verb construction in example (35).

(34) Source: Ghosh (2014)

<i>jhi</i>	<i>ghOr-Ta</i>	<i>jhaMT</i>	<i>di-cch--e</i>
maid.NOM	room-CLF.ACC	sweep	give-CONT-PRS-3

‘The maid is sweeping the room.’

(35) Source: Ghosh (2014)

<i>chele-Ta</i>	<i>jOl-e</i>	<i>jhaMp</i>	<i>di-l-o</i>
boy-CLF.NOM	water-LOC	jump	give-PST-3

‘The boy dived into the water.’

Davison (2005) and Butt (2010) preached a different view and they strongly claimed that the aspectual property of the N+V composite verbs follows from the specification of the V involved. Davison (2005) shares an example from Hindi, where a strident aspectual difference is carried by the light verb. In example (36) the difference is created by the verbs of the N+V composite forms; *aa-na* ‘come’ and *kar-na* ‘do’. We can also create a sentence like (37), where we can drop the third element *gayii* ‘go’ and we have *yaad aaii*. The aspectual difference still remains the same because it is created by the light verbs *aa-na* and *kar-na*.

(36) Source: Davison (2005)

<i>aur</i>	<i>us-see</i>	<i>mujhe</i>	<i>bahut-sii</i>	<i>baateM</i>	<i>yaad</i>	<i>aa</i>
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and 3s-from I-DAT many-such matter-PL memory come  
*gayii thiiN jinheeN main yaad nahi kar-ti*  
 go-PF were which-DAT I.NOM memory no do-IMPF

‘From that I remember many things which I do not want to recall/think about.’

(37) Source: Davison (2005)

*aur us-see mujhe bahut-sii baateM yaad aaii*  
 and 3s-from I-DAT many-such matter-PL memory come  
*jinheeN main yaad nahi kar-ti thiiN*  
 which-DAT I.NOM memory no do-IMPF were

‘From that I remember many things which I do not want to recall/think about.’

The sentence contrasts two versions of ‘remember’, the dative subject version with *aa-naa* ‘come’, and the nominative/ergative subject with *kar-naa* ‘do’. The light verb *aa-naa* ‘come’ with *yaad* ‘memory’ compositionally creates a literal meaning like ‘the memory has come’ after hearing something. The dative subject version signifies an involuntary process instigated by another event *us-see* ‘from that’, and leading immediately to a resulting state of remembering. This version carries the properties of an ‘achievement’. Achievement verbs describes eventuality that takes place instantaneously and are punctual. The eventuality of remembering conveyed by the form *yaad aa-naa* describes an instantaneous initiation of the state. The subject instantly remembers something from another event denoted by *us-see* in example (36). Contrarily, the nominative/ergative version is more an ‘accomplishment’, focusing on a process which takes some time. The complex form *yaad kar-tii* with the negative exerts a sense that the subject does not want to recall/think about the thing and a flavour of volition is implied. Accomplishments verbs are durational and here the subject avoided remembering the thing for a considerable amount of time. Even in Bangla, we can have similar situation like (37) where the light verbs creates the aspectual difference as

observed in (38). The verb *mone pOra* ‘remember’ brings the non-volitional interpretation and *mone kOra* ‘think’ brings the volitional interpretation. The difference is created by the light verbs *pOra* and *kOra*.

- (38) *onu-r*      *kOtha*      *Sun-e*      *amar*      *ghOTona-Ta*      *mon-e*  
 Anu-GEN    words.ACC    listen-INF    I.GEN    incident-CLF.ACC    mind-LOC  
*por-l-o*      *jeTa*      *ami*      *konodin*    *mon-e*      *kor-i*      *ni*  
 fall-PST-3    which      I.NOM      someday    mind-LOC    do.PRS-1    NEG  
 ‘After hearing Anu’s words I remembered many incidents, which I do not recall or think about.’

It is argued (Jespersen, 1927; Butt & Geuder, 2001; Butt & Ramchand, 2005) that the light verbs hold a semi-lexical status. The verbs are not entirely devoid of semantic predicative content. The verbs seem to neither retain their full semantic predicational content, nor are semantically completely empty. Observe the following:

- (39) *iSwOr*      *tader-ke*      *ObhiSap*      *di-ech-e*  
 God.NOM      them-ACC      curse.ACC      give-PRF.PRS-3  
 ‘God has cursed (gave curse) them.’

In the example (39) below the verb ‘give’ is not used in the sense of ‘giving money to someone’, but is used in the sense of a prayer or invocation for harm or injury to come upon one.

### 2.3 Light verbs and the situation types

We concur with the assertions and theories of the linguists that light verbs, particularly in the context of South Asian languages, are accountable for the attribution of the lexical or situational aspect. The fundamental study on verbs and situation types by Vendler (1957) immediately springs to mind when we consider the lexical aspect. He defined four situation

aspects namely; states, activities, accomplishments, and achievements. Smith (1991) expands on the list by adding the situation type ‘semelfactives’. He used the temporal characteristics of each situation type to define it.

‘State’ verbs such as, ‘be’, ‘know’, ‘have’ , ‘love’ and others enable the speaker to see a situation as having a steady nature devoid of internal phases or changes over time. The following sentences don't explain if the subject's tastes changed or if something else occurred.

(40) Andrew loved to play tennis. **(State)**

(41) Dorothy loved baking. **(State)**

‘Dynamic’ verbs correlate to different dynamic situation types; they can be ‘durative/punctual’ or ‘telic/atelic’. One possible distinction with dynamic situation type is between ‘events’ and ‘processes’. In the matter of ‘events’, the speaker views the situation as a whole as seen in (42). ‘Processes’ has the interval structure of a dynamic situation. It can be branched into several types for example ‘inchoatives’ and ‘resultative’. ‘Inchoatives’ are processes that define the beginning of a new state or a change of state, observed in examples (43) and (44). ‘Resultative’ has a final point of completion i.e. the end of the process, evident from example (45).

(42) The factory blew up. **(Event)**

(43) The chocolate melted. **(Process: inchoative)**

(44) The room turned red. **(Process: inchoative)**

(45) John built the house. **(Process: resultative)**

Two significant distinctions that underlie these dynamic situation types are ‘durative’ and ‘punctual’. ‘Durative’ signifies a verb which describes a situation or a process which generally lasts for a period of time. While ‘punctual’ describes an event that is instantaneous and involves no time. Examples (46) and (47) convey the contrast.

(46) Mary knocked the door. **(Punctual)**

(47) Peter slept. **(Durative)**

According to Smith (1991), ‘Semelfactive’ verbs define verbs like ‘cough’ and other similar verbs like ‘flash’, ‘knock’, ‘shoot’, ‘sneeze’ and ‘blink’. Semelfactives are instantaneous atelic events. When a Semelfactive verb is used with a temporal adverb or an expression of time, it is interpreted as an ‘iterative verb’. The ‘iterative’ aspect means something that has been repeated, the duration has not changed, it is performed again and again. Follow the examples below.

(48) Emanuel coughed. **(Semelfactive)**

(49) Emanuel coughed. several times / throughout the night. **(Semelfactive: iterative)**

‘Accomplishment’ verbs don’t have a determined beginning, but there is a specific end point and it is well defined when the action is completed. Examples of accomplishment verbs are ‘run a mile’, ‘draw a circle’, ‘walk to school’, ‘paint a picture’, ‘grow up’ and others.

(50) Peter learned Chinese. **(Accomplishment)**

(51) Mark is painting a picture. **(Accomplishment)**

‘Achievement’ verbs also have well-defined point but the achievement verbs differ from accomplishment in the sense that former is punctual and the latter is durational. Examples of achievement verbs are ‘recognize’, ‘find’, ‘stop’, ‘reach the top’, ‘win the race’, and others.

(52) Mary has found a solution. **(Achievement)**

(53) India won the match. **(Achievement)**

Smith (1991) identifies three semantic categories or features: [static], [telic], and [duration], which we have described and Table 5 gives us an overview of the five situation types.

Table 5: Five situation types with three semantic categories identified by Smith (1991)

<b>Situations</b>	<b>Static</b>	<b>Durative</b>	<b>Telic</b>
States	[+]	[+]	n.a
Activity	[-]	[+]	[-]
Accomplishment	[-]	[+]	[+]
Semelfactive	[-]	[-]	[-]
Achievement	[-]	[-]	[+]

## 2.4 Lexical aspect interacting with temporal adverbs

In the above section the introductory definition of each situation types are explained. In this section we will know the interaction of the temporal adverbs with the situation types. Each of the five situation types covered in the previous section has distinctive temporal requirements. The temporal structure of a verb includes its lexical aspect, also known as *Aktionsart*. Dynamic situations involve temporal activity and change, while states involve a period of undifferentiated time. Our understanding of telicity—derived from the Greek word *telos*, which means ‘goal’ is based on characteristics such as ‘culmination’, ‘natural end point’, and ‘set terminal end point’.

Vendler classified states and achievements as belonging to one category and activities and accomplishments as belonging to another because progressive tenses are not allowed in the first two categories but are allowed in the second pair. He also observed that achievement and accomplishment have certain commonality as in they can occur with time adverbial ‘in’ (such as ‘in an hour’), which activities and state verbs lack.

Dowty (1979) developed certain linguistic test regarding each situation type. The simple present of activities and performances convey a frequentative or habitual meaning (John paints pictures) in a way that state verbs does not. State verbs cannot occur with adverbs like ‘deliberately’ and ‘carefully’ and cannot appear in pseudo-cleft constructions. As state verbs

are devoid of agency, therefore adverbs like ‘deliberately’ occurs with action verbs. Even adjectives like ‘carefully’ cannot sit with a state verb because a sentence like (54) below will not be appropriate. Accomplishment verbs can take adverbial prepositional phrases like ‘in’ and ‘for’ as there is a specific end point and it is well defined when the action is completed. For the same reason achievement verbs can pair with ‘in’ adverb. Activity verbs can only occur with ‘for’ phrases. The interaction is conveyed by the examples below.

- (54) \*John loved Mary carefully **(state verbs with adverb like carefully)**
- (55) \* what Peter did was know the language **(state verb in pseudo-cleft constructions)**
- (56) \* Peter deliberately know the language. **(state verb with adverbs)**
- (57) John baked the cake in an hour. **(accomplishment verb with ‘in’ adverbial)**
- (58) \* Mary walked in an hour. **(activity verb with ‘in’ adverbial)**
- (59) Mary walked for an hour. **(activity verb with ‘for’ adverbial)**
- (60) Mary found the solution in an hour. **(achievement verb with ‘in’ adverb)**
- (61) \* Mary found the solution for an hour. **(achievement verb with ‘for’ adverb)**

Dowty (1979) designed certain interesting entailment patterns for the situation types. The entailment pattern of activity verbs with ‘for’ phrases differs from those of accomplishment verbs under the same condition. If John walked for an hour, then, at any time during that hour it was true that John walked. But if John painted a picture for an hour, then it is not the case

that he painted the picture at any time during that hour. According to Dowty (1979) the difference in the entailment can be stated as, ‘if  $\Phi$  is an activity verb, then  $x \Phi ed$  for  $y$  time entails that at any time during  $y$ ,  $x \Phi ed$  was true. This is known as subinterval property. If  $\Phi$  is an accomplishment verb, then  $x \Phi ed$  for  $y$  time does not entail that  $x \Phi ed$  was true during any time within  $y$  at all’. Like accomplishment verbs, achievement verbs are no sensitive to the subinterval property. The entailment can be stated as ‘if  $\Phi$  is an accomplishment verb, then  $x \Phi ed$  in  $y$  time entails  $x$  was  $\Phi ing$  during  $y$  time’. In case of achievement verbs ‘if  $\Phi$  is an achievement verb, then  $x \Phi ed$  in  $y$  time does not entail  $x$  was  $\Phi ing$  during  $y$  time.’ Dowty (1979) represented these specific features of each situation type in the form of a table, which can be observed below in Table (6), where ‘OK’= sentence is grammatical, semantically normal, ‘bad’= the sentence is ungrammatical, semantically anomalous, ‘d.n.a’= the test does not apply to verbs of this class.

Table 6: Distinctive features of the situation types by Dowty (1979)

Criterion	States	Activities	Accomplishments	Achievements
1. Meets not stative tests.	no	yes	yes	?
2. Habitual interpretation in simple present tense	no	yes	yes	yes
3. $\Phi$ for an hour, spend an hour $\Phi ing$ :	OK	OK	OK	bad
4. $\Phi in$ an hour, take an hour to $\Phi$ :	bad	bad	OK	OK
5. $\Phi$ for an hour entails $\Phi$ at all times in the hour:	yes	yes	no	d.n.a
6. $x$ is $\Phi ing$ entails $x$ has $\Phi ed$ :	d.n.a	yes	no	d.n.a
7. Complement of ‘stop’:	OK	OK	OK	bad
8. Complement of ‘finish’ :	bad	bad	OK	bad
9. Ambiguity with ‘almost’:	no	no	yes	no
10. $x \Phi ed$ in an hour entails $x$ was $\Phi ing$ during that hour:	d.n.a	d.n.a	yes	no
11. Occurs with ‘studiously’, ‘carefully’ etc.	bad	OK	OK	bad

Mourelatos (1978) argued that the verbal classification done by Vendler (1957) and Kenny (1963) is too narrowly conceived as they fail to conquer the intricacies of certain verbs. There are verbs and verb uses that are classifiable neither as activities nor performances<sup>4</sup>. Mourelatos disagrees with Vendler's analysis of terming the verb 'saw' in a sentence 'I saw him run' as a state verb. Mourelatos argues that we cannot paraphrase 'I saw him run' as 'I was in a state of visual awareness of him running.' The force of the meaning 'I saw' in 'I saw him run' does not signify the state of the subject but to record a 'sighting' or 'seeing'. According to Mourelatos the accurate category for verbs like 'saw' in a sentence should be 'event'. Event is the right classification for the focal point referent not only to sentences similar to 'I saw him run', it holds as well for all sentences referring to performances. Event in its simple term is the topic-neutral<sup>5</sup> category. If there is a performance A, there also exists an Event A. Natural events can be broken down into topic-neutral 'developments', which according to Vendler are accomplishments; and topic-neutral punctual occurrences (i.e., various starts, resumptions, split-second events, stoppings, and climaxes), which are Vendler's achievements. The topic-neutral equivalent of 'state' doesn't require its own term; it is simply 'state' in the broadest and most well-known sense. The topic-neutral equivalent of activity is 'processes', a term used in the literature. An intermediate generic term like 'occurrences' would be the topic-neutral equivalent of actions; the term 'situations' would be made up of both states and occurrences. Mourelatos (1978) proposed the generalized trichotomy in the form of a Figure 3.

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<sup>4</sup> The term 'performances' have been borrowed from Kenny (1963) who used this term to signify both activities and accomplishments. Kenny's and Vendler's classification of situation types is almost similar except Kenny classifies activities and accomplishments as performances and he classifies verbs into states, activity and performances.

<sup>5</sup> The term 'topic-neutral' is used for expressions that indicate nothing about the subject matter, for example 'inside' indicates place, and so is not topic-neutral.

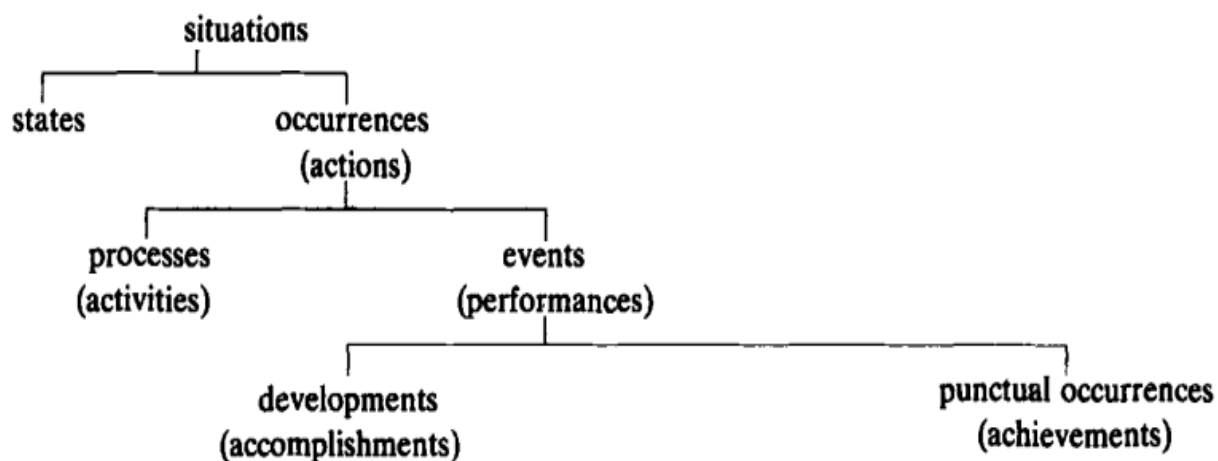


Figure 3: Mourelatos's (1978) classification of the situation types

Filip (2012) provided precise guidelines for understanding the various situation types. According to her there are three basic aspectually relevant concepts—(i) change of state, (ii) end, limit, and boundary, and (iii) temporal extent—recur, in one form or another, in almost all lexical aspect taxonomies and theoretical frameworks. They are adequate for differentiating between the four primary classes: process, state, prolonged event, and momentary event. Change plays the most significant role in explaining the differences among the aspectual class. Change in this context means the way different aspectual class (situation types) changes over time. Since state verbs entail no change, there is no limit or end and there is a natural semantic harmony between stativity and atelicity. Dynamic eventualities entail some change, but not all dynamic eventualities entail telicity. Temporal extent creates a dichotomy between verbs that denote what is conceptualized as punctual or momentaneous transition from one state of affairs to another. She summarizes the distinctive features of the situation types via these three parameters in Table 7.

Table 7: Filip’s (2012) parameters for the distinction of the situation types

<b>Aspectual Class</b>				
		Change	End/Boundary	Temporal extent
<b>Atelic</b>	state	-	-	+
	process	+	-	+
<b>Telic</b>	event protracted	+	+	+
	momentaneous	+	+	-

Dölling (2014) initiated a sortal distinction in the eventuality structure and argued that it is a hierarchy generated by the subsort relation between sets of eventualities. He proposed the term ‘occurrences’ for events that show dynamicity and states which do not display any dynamicity. What both sorts of eventuality have in common, however, is that their members take a time longer than an instant. Events are generally enveloped by spatiotemporal entities with participants; opinions differ over the precise ontological status of the states. Following Dowty (1979) all researchers agree that sentences describing states have the strict subinterval property. That is, if a state description is true of a time interval, it is also true of all parts of the interval. Thus states hold at every instant during their time period. This property singles out states from all other eventualities. Dölling (2014) makes fine grained distinction within state verbs. He distinguished state verbs into (i) episodic states i.e. state verbs are autonomous or self-supporting in a way, and (ii) habitual states, which, roughly, represent a habit, disposition or ability ‘to do something’ and, in this sense, are nonautonomous. A sentence like ‘John was drunk’ describes an episodic state of John and something like ‘John was a drinker’ conveys the habitual state of John’s drinking alcohol regularly. Figure 4 conveys the sortal eventuality distinction argued by Dölling (2014). He kept the cover term as ‘eventuality’ which is branched into ‘points’ (non durative) and ‘happenings’ (durative). Points are further divided into ‘boundaries’ and ‘moments’. Boundaries are intrinsically instantaneous and moments are not intrinsically instantaneous. ‘Happenings’ are divided into

‘states’ and ‘occurrences’, where states are further branched into ‘habitual’ states and ‘episodic’ states. Furthermore, occurrences branched between ‘processes’ (predominantly atelic) and ‘events’ (telic). Lastly, events are distinguished between ‘episodes’ which are non-resultative and ‘changes’ as resultative.

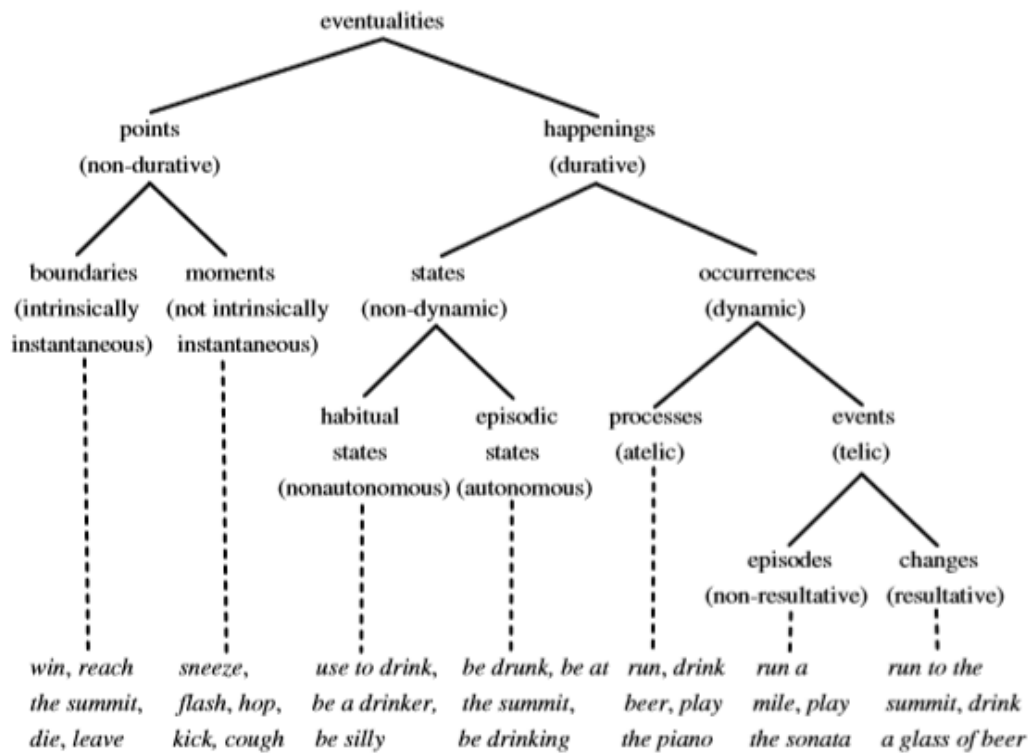


Figure 4: Dölling (2014) Sortal structure of eventualities

We have come to the last aspect of our discussions on lexical aspect, where we address the fuzzy areas behind these parameters of the situation types. Dowty (1979) upheld certain gray areas regarding the aspectual class and he argued that state verbs are the most puzzling of the aspectual classes. Their ontological status is much hazier than that of other classes of verbs and their relation to temporal notions is puzzling. Dowty correctly observes that state verbs can have progressive aspect to describe a contingent or temporary condition of some individual. Example (62) cannot have the progressive aspect as the acceptability of the state verb ‘lie’ in the the progressive depends on the degree to which the referent of its subject-NP

is moveable. Hence the situation expressed in (62) is less likely to occur in a progressive aspect, in contrast to the progressive account of the situation listed in (63).

(62) Source : Dowty (1979)

? New Orleans is lying at the mouth of the Mississippi.

(63) Source : Dowty (1979)

The socks are lying under the bed.

Dowty (1977; 1979) proposes to split state verbs into interval states and momentary states. The state verbs can appear in progressive forms. He rightfully mentions Carlson's (1977) stage-level state predicates to classify them. They include both state and dynamic predicates, and they convey the transient characteristics of individuals. Contrarily, momentary states such as possessing blue eyes, intelligence, belief, and knowledge are inconsistent with the progressive and align with Carlson's (1977) individual-level state predicates. They convey 'a temporal' qualities that are generally steady, hold onto people for a significant portion of their lives, and are generally more or less permanent.

## **2.5 Individual-level and stage-level predicates: lumps of thoughts**

### ***2.5.1 Carlson's 'sortal' distinction***

We now delve into the concept of individual-level and stage-level predicate which is also one of the major core areas on the basis of which we have formulated the analysis. The notion of the individual-level and stage-level predicates first received attention in the works of Carlson (1977; 1989). He argued that 'states' and 'properties' are predicated of different 'sorts of things'. An individual is composed of its stages i.e. spatiotemporally bounded portion of an individual's existence. Carlson defined that 'stages' are not simply things that are; they are things that happen. The 'states' and 'properties' are predicated of different sorts of things. An individual, Jake, is composed of a set of Jake-stages, or temporally bound

portions of Jake's existence. Let's say the stage when Jake is in his office, the stage when he is in London for his research, the stage when he was married and etc. These stages of Jake are tied by a single thing and which according to Carlson is the 'individual' Jake. Carlson argues 'states' are predicated of individuals, but stages of individuals. The stages aren't things that are, stages denotes things that happen. Let us consider two sentences, which will help us understanding the concepts more clearly.

(64) Source: Carlson (1977)

Zippy is intelligent.

(65) Source: Carlson (1977)

Zippy ran.

In example (64) the predicate intelligent denotes a permanent property of the individual Zippy and hence the extension of the predicate intelligent will be a set of individuals and the formal individual-level representation of (64) will be read as (66); the property intelligent is predicated of the individual Zippy. The individual Zippy can have permanent properties and those properties will only have the individual Zippy as its argument. Hence in (66 a) we have the property 'intelligent' and we receive a final notation. This gives us a characteristic reading.

(66)  $\lambda P. P(\text{Zippy})$

(66 a) INTELLIGENT (Zippy)

In case of example (65) the predicate run is a stage-level predicate; conveys a stage of Zippy where (when) he ran. The predicate RUN will have a set of stages in its extension. The formal stage-level interpretation of (65) will explicate a reading shown in (67); there is an existence of a stage of the individual Zippy and the realization function R that holds between

stages and individual. Hence  $R(y^s, z)$  means that  $y^s$  is the stage of the individual  $z$  and run is predicated of the stages of the individual  $z$ .

(67)  $\lambda P. \exists y^s [R(y^s, z) \wedge P(y^s)]$

(67 a)  $\exists y^s [R(y^s, z) \wedge \text{RUN}(y^s)]$

Carlson assumed a distinction regarding the behavior of individual-level and stage-level in the context of ‘bare plural subjects’. In case of a bare plural subject the individual-level predicate only gives a generic reading and stage-level predicates generally admit both generic and existential reading. The sentence in (68) with the individual-level predicate conveys a general characteristic reading of the firemen and in (69) the stage-level predicate exerts an additional existential reading exerting the meaning that there exist a stage of a firemen when they are available.

(68) Source:Carlson (1977)

A firemen is altruistic. **(only generic)**

(69) Source:Carlson (1977)

A firemen is available. **(existential/ generic)**

It has been suggested by Carlson (1977) that predicates may be undetermined between the two readings. Carlson’s argument can be explained through the examples (70-73) below.

(70) Source:Carlson (1977)

John smoked grass.

(71) **Gen** (smoke grass) (john)

(72) Source:Carlson (1977)

John drank whiskey.

(73) **Gen** (drink whiskey) (john)

For instance, (70)-(72) can identify a specific past event or circumstance in which John engaged in the activities of smoking grass or drinking whisky, or they can identify a specific persistent attribute or habit that an individual named John formerly possessed (i.e., John was a person who smoked grass or drank whisky habitually – again, the past tense suggests that John might no longer be alive, or that he has given up these permanent habits for some other reason: for example, John smoked grass habitually in the 1970s, prior to meeting his future wife, for example). Carlson even argues that all predicates which apply to stages of individuals ‘can be made to apply to individuals (to have generic readings).’ He posits a special generic operator **Gen** which is a function transforming stage level predicates into homophonic habitual individual level predicates. Like (71) and (73) gives the habitual individual-reading of (70) and (72) respectively.

He defined two more generalizations regarding this individual and stage-level distinction i.e. individual level predicates does not allow spatiotemporal modifications whereas, stage-level predicates can accommodate spatiotemporal flavorings. Moreover individual-level predicates cannot act as a complement of a perception verb, but stage-level predicate can occur as a complement of perception verbs. Observe the examples. The individual-level predicate in (74) cannot appear as a perception report but the stage-level predicate in (75) can appear.

(74) \* John saw Mary intelligent.

(75) John saw Mary drunk.

### ***2.5.2 Diesing’s syntactic difference between ILP and SLP***

Diesing (1988) argued that the distinction between individual-level predicate (ILP) and stage-level predicate (SLP) is syntactic, relying solely on the syntax. The subjects of individual-level predicates are base generated in the outer position i.e. the spec of IP and the subjects of stage-level predicates are base generated inside the VP i.e. the inner position and may

optionally raised to the spec of IP. He provided evidence for his assertion by stating that according to Carlson (1977) individual-level predicates will always have a generic reading and that is the very reason a bare plural subject NP will appear in the restrictive clause i.e. the specifier position of IP. As stage-level predicates can convey both existential and generic reading hence bare plural subject NP can appear either in the nuclear scope i.e. the spec of VP or in the restrictive clause i.e. the spec of IP. The difference between the two predicates can thus be characterized as a difference in the availability of the two subject positions. The stage-level predicates have the option of having the subject in either the inner or outer subject position, while the individual-level predicates can have the subject only in the outer position. According to Diesing (1988) the configuration for individual-level predicates is shown in Figure 5, and the configuration for stage-level predicates is shown in Figures 6 and 7.

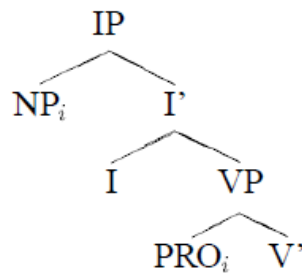


Figure 5: subject position for I-level predicates following Diesing (1988)

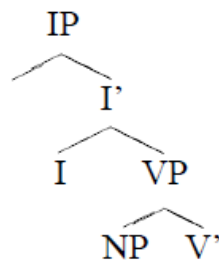


Figure 6: Base subject position in S-level predicates following Diesing (1988)

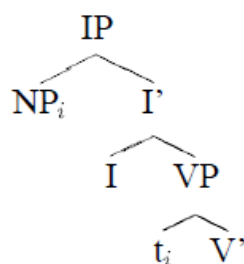


Figure 7: Adjusted subject position in S-level predicates following Diesing (1988)

### 2.5.3 Kratzer's proposal on extra argument

Equivalent to Carlson (1977), Kratzer (1995) observes that, unlike individual-level predicates, stage-level predicates essentially require an association with a point in space and time. A sentence like the one in (76) conveys an eventuality and is therefore should be spatiotemporally anchored and we can also have a modified version of (76) with spatiotemporal modification like 'Manon was dancing in the auditorium in the afternoon'. On the contrary a sentence like (77) cannot be situated spatiotemporally.

(76) Source: Kratzer (1995)

Manon was dancing. (SLP)

(77) Source: Kratzer (1995)

Manon was a dancer. (ILP)

According to Kratzer, the relationship to space and time is what distinguishes stage-level predicates from individual-level predicates and is considered to be the primary semantic uniqueness. Stage-level predicates, as opposed to individual-level predicates, are more likely to accept temporal and locative modification. Kratzer (1995) proposed that the stage-level predicates are 'Davidsonian' in that they have an extra argument position for events or spatiotemporal location. Individual-level predicates lack this position. The exact nature of the Davidsonian argument assumed by Kratzer remains in question. Kratzer uses an 'l', apparently borrowed from Barwise and Perry (1983), as a variable ranging over

spatiotemporal locations. Barwise and Perry (1983) used the variable ‘l’ to define locative argument. The choice of representing both space and time in a single argument has the consequence of predicting that spatial and temporal modifiers should be uniformly acceptable with the entire set of stage-level predicates. Kratzer says that the extra Davidsonian argument will be treated as an external argument. Observe the examples below.

(78) Source: Kratzer (1995)

Manon is dancing on the lawn. (SLP)

(79) Logical form: [dancing (Manon, l) & on the lawn (l)]

(80) Source: Kratzer (1995)

Manon is dancing this morning. (SLP)

(81) Logical Form: [dancing (Manon, l) & this morning (l)]

(82) Source: Kratzer (1995)

Manon is a dancer. (ILP)

(83) Logical form: dancer (Manon)

The logical form of the sentence (78) shall be represented as (79), sentence (80) has its logical form in (81) and the sentence in (82) is represented as (83). The predicate ‘dancing’ is a stage-level predicate. It has a Davidsonian argument that appears in the form of a variable. The locative modifier ‘on the lawn’ and the temporal modifier ‘this morning’ takes another occurrence of the same variable as their argument. On the other hand ‘dancer’ is an individual-level predicate and normally lacks a Davidsonian argument and hence cannot be modified by locatives.

Kratzer (1995) claim that in the logical formulations provided in the aforementioned logical forms has a variable ranging over spatiotemporal locations is represented as ‘l’. A spatiotemporal location can be defined as a space-time chunk. The logical representations of

(78) and (80) contain free occurrences of the variable ‘*i*’ in (79) and (81). When sentences appear as parts of more complex constructions, these free occurrences of ‘*i*’ may become bound by quantifiers. They may also be supplied with a value by the context of use. Along this discussion Kratzer introduces the feature of ‘when’ clause regarding the individual and stage-level distinction. The following sentences and their logical forms must be followed in order for us to comprehend the significance of the conditional ‘when’ conditional.

(84) Source: Kratzer (1995)

\* when Mary knows French she knows it well. (ILP)

(85) Logical Form: \*Always [knows (Mary, French)]

[knows well (Mary, French)]

(86) Source: Kratzer (1995)

when Mary speaks French she speaks it well. (SLP)

(87) Logical Form: Always<sub>1</sub> [speaks (Mary, French, *i*)]

[speaks well (Mary, French, *i*)]

The antecedents of conditional restrict the domain of some operator. In the above examples, the ‘when’ clause in the antecedent restricts the non-overt operator ‘always’. The sentence in (84) is ungrammatical but (86) is grammatical. Kratzer assumes that as individual-level predicates do not introduce extra davidsonian argument, hence no variable can be bound by ‘always’ and this makes (84) ungrammatical. Stage-level predicates carry the extra variable and hence it can be bound by ‘always’ and we can have a grammatical construction like (86). Kratzer (1995) with this discussion brings the law about the prohibition against vacuous quantification which says that for every quantifier *Q*, there must be a variable *x*, such that *Q* binds an occurrence of *x* in both its restrictive clause and nuclear scope.

#### 2.5.4 Chierchia on ‘Gen’ operator

Chierchia (1995) discusses the distinction between individual and stage-level predicate by claiming that individual-level predicates are permanent and stable properties of an individual. They are the ‘generic’ sentences. Stage-level predicates are transient and episodic properties. He claims that individual-level predicates are aspectually stative bearing typical features of a state verb. The only statives that are stage level are adjectives that express transient or episodic qualities (like being drunk or being sick). He supports his claim with the help of two examples given below. The sentence in (88) conveys a stage-level interpretation where the individual’s drunk state occurred in the last month. In (89) the property of tall is a permanent feature of the individual and hence similar adverbial modification like (89) cannot occur.

(88) Source: Chierchia (1995)

John was drunk last month. (SLP)

(89) Source: Chierchia (1995)

?? John was tall last month. (ILP)

Chierchia’s (1995) basic proposal is the introduction of the ‘Gen’ (generic) operator regarding the analysis of individual-level predicates. He proposes that individual-level predicates are a sort of predicate that can appear only within the scope of a generic quantifier. In this account, every predicate has a Davidsonian argument. The story is that individual-level predicates have an abstract habitual morpheme ‘Hab’ in the lexicon. This morpheme carries the feature [+Q], which must be locally licensed by the generic operator Gen which is a phonologically null Q-adverb. The Gen operator occur in generic sentences whose interpretation is fairly close to sentences with ‘always’ like Q-adverbs. One consequence of this analysis is that ordinary individual-level predicates are interpreted as involving generic quantification over situations in which the subject is present. A sentence like ‘John knows French’ represented below in example (90) is interpreted as a claim that in general a situation

involving John will be a situation in which John knows Latin. The formal representation is shown below in (91). The variable *s* is Davidsonian and (91) is thus taken to express a generalization over situations in which John appears

(90) Source : Chierchia (1995)

John knows Latin (ILP)

(91) Gen *s* [in' (j,s)] [knows' (j,L,s)]

The semantics of 'Gen' should convey the sense that whenever a property holds generically of an individual, in all stereotypical cases that property holds for a substantial part of the existence of that individual. Individual-level property bears an interpretation like 'once a P, tendentially always a P'. Hence individual-level predicates are simply predicates that must co-occur with 'Gen' like quantificational adverb. On the other side, stage-level predicates are free to occur or not occur with 'Gen'. Individual-level predicates have no natural non-generic uses. Chierchia assumed that the habitual morpheme 'Hab' carries the [+Q] feature which is responsible for introducing the 'Gen' in its local environment. Individual-level predicates have this morpheme inherently in the lexicon. Hence these predicates will have direct association with the feature [+Q] which requires the presence of 'Gen' in their immediate environment for local licensing. He hence argued that structure of a VP headed by an individual-level predicate based on this hypothesis should be represented like the following structure shown in Figure 8.

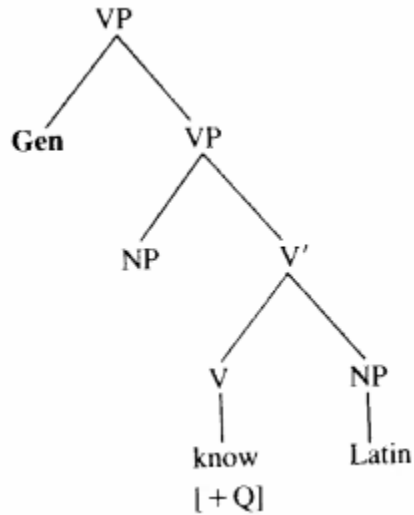


Figure 8: Individual-level predicate with the ‘Gen’ feature following Chierchia (1995)

## 2.6 Conclusion

This chapter emphasizes the concepts of ‘complex predicate constructions’, ‘lexical aspect of verbs and situation class’, and the paradigm of ‘individual-level and stage-level predicates’. In section 2.1 we have discussed the situation of complex predicate constructions in SALS (South Asian Languages). As this thesis predominantly concentrates on predicates like *icche*, *icche ache*, *icche hOwa* and *icche kOra*, a detailed overview on complex predicate constructions is extremely significant for our current work. The argument structures of the lexically formed complex predicates are discussed. We understand the semi lexical status of the light verbs which depends on contexts. The semi-lexical property of light verbs is vital in our thesis because in chapter 5 we have shown how the semantics of the light verbs *ache*, *hOwa* and *kOra* adds the lexical meaning in conjunction with the predicate *icche*. Section 2.2 concentrates on the light verb hypothesis and the significance of the light verbs in complex predicate constructions of SALS. We argued about the interaction between light verbs and aspect. This was further explained in Section 2.3 which review the concept of ‘situation types’. Different views on situation types are shared. Whenever we bring the topic of lexical aspect or situation type, temporality plays a pivotal role and Section 2.4 focuses on

this issue. Situation types are considered further in terms of temporality and while doing that we get the idea that state verbs are the fuzzy areas behind this parameters of situation types. This puzzling nature of stative predicates builds a foundation for analyzing predicates like *icche*, *icche ache*, *icche hOwa* and *icche kOra* in chapter 5. Section 2.5 emphasizes the concept of individual-level and stage-level predicates. The concept of individual-level and stage-level predicates plays a crucial part in the thesis, because the compositional semantics of these predicates are analyzed following this. In chapter 5, we will understand how this semantic concept of individual and stage-level is connected with the sense of desire conveyed by the predicates *icche*, *icche ache*, *icche hOwa* and *icche kOra*.

# Chapter 3

## 3. Data and distribution of the predicates

### 3.1 The occurrences of the desire predicate *icche* (with the light verbs)

As discussed in previous chapters, *icche* in Bangla serves as a verbal noun that conveys the notion of ‘wish’ or ‘desire’. If we look etymologically, this can be traced back to the Sanskrit verb root *icch-* (इच्छति) which means ‘he desires’. The predicate *icche* in Bangla has evolved as a lexical predicate. In MIA, as Chatterjee (1926) points out, it has past-tense derivatives like *icchilo*, which represent the notion of a completed desire or wish, effectively translating to ‘wished’ or ‘desired’. This form exemplifies how Bangla morpho-syntactically adapts verbal nouns to express temporality, making *icchilo* a finite verb that situates the act of desiring in the past, such as *gOmon icchilo* ‘desired to go’ or *mOron icchila* ‘desired to die’

Being developed as a verbal noun *icche* projects its intrinsic semantic structures to the sentential level. This in turn obviates its characteristics distribution across different sentential patterns. The idiosyncratic natures of these patterns can be contrasted with other desire predicates of Bangla to show, how their behaviors differ from each other.

(92) Source: Bhattacharya (2013)

<i>amar</i>	<i>icche</i>	<i>je</i>	<i>o</i>	<i>aj</i>	<i>aS-uk</i>
I.GEN	desire	that.COMP	s/he	today	come-SBJV

‘It is my desire that he comes today.’

(93) Source: *ibid.*

<i>ami</i>	<i>cai</i>	<i>je</i>	<i>tumi</i>	<i>aj</i>	<i>rat-e</i>	<i>amar</i>	<i>bari</i>
I.NOM	want	that.COMP	you	today	night-at	I.GEN	home

*aS-O*

come-SBJV

‘It is my desire that he comes today.’

In spite of being identified as a desire predicate, *icche* and *cai* differ from each other in terms of certain grammatical features: (i) in the case of *icche* the person of desire is marked with a genitive case marker in the matrix clause, whereas *cai* takes an agent being marked with the nominative case in the matrix clause. (ii) The predicate *icche* as a desire is used as a verbal noun in contrast to *cai* which is a verb. Moreover, if we look at the following examples certain other features will become evident.

(94) *ami tomake cai*  
I.NOM you.ACC want  
‘I want you.’

(95) \**amar tomake icche*  
I.GEN you.ACC desire  
‘I desire you.’

The grammatical status of *cai* is that of a verb and the grammatical category of *icche* describes it as a verbal noun. The verb *cai* can bear a direct object whereas *icche* cannot include a direct object and this dichotomy is explained below through examples (94) and (95) respectively. This property is not only limited to the occurrence of *icche*, the predicates *icche ache*, *icche hOwa* and *icche kOra* cannot include direct object as well. We will observe this as the work proceeds.

When the predicate *icche* occurs as a lexical predicate in a sentence it selects a subjunctive as seen in (92). Bangla has subjunctive markers such as [-uk] and [-io]<sup>6</sup> for third person and second person respectively. The predicate *icche* in conjunction with *ache*

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<sup>6</sup> According to Rayhan (2016), the marker [-io] from NB (New Bangla) is used as both future imperative and subjunctive in CB (Contemporary Bangla) in different contexts. Evident in sentences like *tumi kajTa koro* ‘You do the work’ or *tumi amake boiTa dio* ‘please give me the book’.

constrains the grammatical behaviour of the verb appearing in the embedded phrase. Consider the following.

(96) Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023

Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club. Lionel Messi says the following sentence.

*Onek kichu jeta-r icche ach-e*  
many thing.ACC win.GER-GEN desire have.PRS-3

‘I have a desire to win a lot more in my life.’

(97) Background: After a long break, two childhood friends reunited and are now successful professionals. During their conversation, one of the friends mentioned the following while discussing their goals and dreams.

*amar ebar Ek-Ta gari ken-a-r icche ach-e*  
I.GEN now one-CLF car.ACC buy-GER-GEN desire have.PRS-3

‘Now I have a desire to buy a car.’

The predicate *icche* conjoining with the light verb *ache* in the complex predicate of type N+V, i.e. *icche ache* as in (96) and (97) licenses the gerunds *jeta* and *kena* that is taking the genitive case in the embedded phrases.

The predicate *icche* occurs with the light verbs *hO-* ‘happen’ and *kOr-* ‘do’, forming complex verbal constructions like *icche hOwa* ‘the desire happens or occurs’ and *icche kOra* ‘the desire occurs’. In conjunct verb construction, the light verbs *hOwa* and *kOra* are very productive as they occur with almost all the nouns expressing mental attitudes. When *hOwa* and *kOra* conjoin with the predicate *icche*, selectional restrictions on the clausal complements are imposed. The situation can be observed below through examples (98-101).

(98) Background: The speaker feels unsatisfied in her work at the moment. Her manager bothers her nearly every other day with additional shifts. She says the following sentence in frustration because she believes that the extra hours are not assisting her in learning anything new.

*amar cakri-Ta chere di-te icche hO-e*  
 I.GEN job-CLF.ACC leave-INF give-INF desire happen.PRS-3

‘The desire to leave the job is happening / occurring to me.’

(99) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

*onu-r sikkim ja-wa-r icche hO-e*  
 Anu-GEN sikkim.LOC go-GER-GEN desire happen.PRS-3

‘The desire to visit Sikkim happen/occurs to Anu.’

(100) Background: same as (98)

*amar cakri-Ta chere di-te icche kOr-e*  
 I.GEN job-CLF.ACC leave-INF give-INF desire do.PRS-3

‘The desire to leave the job is happening/occurring to me.’

(101) Background: same as (99)

\* *onu-r sikkim ja-wa-r icche kOr-e*  
 Anu-GEN sikkim.LOC go-GER-GEN desire happen.PRS-3

The data represented in (98)-(101), shows the selectional restrictions, imposed by the predicates *icche hOwa* and *icche kOra*; in the case of *icche hOwa* (i) infinitival clausal complements and (ii) genitive-gerundive constructions are licensed. In contrast, *icche kOra* licenses the infinitival clausal compliment only.

Besides the straight and strident distinction, there are a few other subtle intricacies regarding the distribution of the desire predicates. The predicates *icche hOwa* and *icche kOra* can also appear as a main predicate in the matrix clause and take a subjunctive in the embedded clause similar to the predicate *icche*. There lies a difference in the nature of the subjunctive that the predicates select in their embedded clausal complement.

(102) Source: (Roychowdhury, Ghosh, & Karmakar, 2023)

Background: The speaker feels unsatisfied in her work at the moment. Her manager bothers her nearly every other day with additional shifts. She says the following sentence in frustration because she believes that the extra hours are not assisting her in learning anything new.

*amar<sub>k</sub> icche ami<sub>k</sub> cakri-Ta chere di*  
 I.GEN desire I.NOM job-CLF leave.INF give.SBJV.1

‘It is my desire that I leave this job.’

(103) Source: *ibid*

Background: Anil is a stellar academician and his real passion lies in research. For some experience, he does a job and conducts studies at the same time. Anil’s mother is aware that the work is quite time-consuming and does not pay well. He is unable to focus entirely on his research projects because of time constraints. She thinks Anil should leave the job and concentrate solely on his research.

*amar<sub>k</sub> icche Onil<sub>i</sub> cakri-Ta chere di-k*  
 I.GEN desire Anil.NOM job-CLF leave.INF give.SBJV.3

‘It is my desire that Anil leaves this job.’

(104) Source: *ibid*

Background: same as (102)

<i>amar<sub>k</sub></i>	<i>icche</i>	<i>hO-e</i>	<i>ami<sub>k</sub></i>	<i>cakri-Ta</i>	<i>chere</i>
I.GEN	desire	happen.PRS-3	I.NOM	job-CLF	leave.INF

*di*

give.SBJV.1

‘The desire to leave the job happens/occurs to me’

(105) Background: same as (102)

<i>amar<sub>k</sub></i>	<i>icche</i>	<i>kOr-e</i>	<i>ami<sub>k</sub></i>	<i>cakri-Ta</i>	<i>chere</i>
I.GEN	desire	do.PRS-3	I.NOM	job-CLF	leave.INF

*di*

give.SBJV.1

‘The desire to leave the job happens/occurs to me’

(106) Source: *ibid*

Background: same as (103)

* <i>amar<sub>k</sub></i>	<i>icche</i>	<i>hO-e</i>	<i>Onil<sub>i</sub></i>	<i>cakri-Ta</i>	<i>chere</i>	<i>di-k</i>
I.GEN	desire	happen-PRS.3	Anil.NOM	job-CLF	leave	give.SBJV.3

(107) Background: same as (103)

* <i>amar<sub>k</sub></i>	<i>icche</i>	<i>kOr-e</i>	<i>Onil<sub>i</sub></i>	<i>cakri-Ta</i>	<i>chere</i>	<i>di-k</i>
I.GEN	desire	do-PRS.3	Anil.NOM	job-CLF	leave	give.SBJV.3

The predicate *icche* can appear in constructions where the subject of the matrix clause and the subject of the embedded clause are similar as observed in (102) and where the subjects are not co-indexed (not similar) like (103). The issue pertains to the occurrence of the predicates *icche hOwa* and *icche kOra*, as they are well-fitted when the subjects of the matrix and the embedded clause are co-indexed, as evident in (104) and (105). Contrarily (106) and (107) are not well-formed where the subject of the matrix clause and the subject of the embedded clause are not co-indexed. The problem arises when the [-uk] marker of the subjunctive

appears in the subordinate clause. If we notice minutely then we can say that the [-uk] marker occurs when the subject of the embedded clause is not the same as the subject of the matrix clause.

The examples discussed above explain the theory that in Bangla the presence and the absence of the light verbs with the desire predicate *icche* incorporate different embedded clausal complements. Interestingly, the light verbs *ach-*, *hO-*, and *kOr-* are selective towards particular clausal endings. The selection restriction towards specific clausal complement endings is primarily based on syntactic reasons. The subtle differences between the natures of the subjunctives explained through examples (102-107) can have pragmatic reasonings. We have represented these clausal dependencies through Table 8 below.

Table 8: The embeddability properties of *icche* (with the light verbs)

<b>Predicate</b>	<b>Light verbs</b>	<b>Clausal complements</b>
<i>icche</i>	X	Subjunctive (all forms)
<i>icche</i>	<i>ache</i>	Gerunds in genitive case
<i>icche</i>	<i>hOwa</i>	Infinitival Gerund in genitive case
<i>icche</i>	<i>kOra</i>	Infinitival

### 3.2 Impersonal construction and cross-linguistic evidence

An important observation that should be noted before proceeding further is the situation of ‘impersonal structure’. The occurrences of the predicate *icche* (with the light verbs) consume the impersonal structure in Bangla. The sentences above represent a specific pattern that conforms to the fact that the subject in all the instances carries a genitive inflection and the verb takes a neutral form. The structure resembles the pattern of an impersonal construction. According to Thompson (2004) and Smith (2009), an impersonal structure is defined in a purely semantic sense and can be applied to any sentence that does not have an agent as a

subject. In an impersonal structure, the verb is always in the third person form, and if the logical subject is present, then it is always in the genitive. Similarly, in Bangla, the occurrences of the predicate *icche* show no active interpretation. Among the light verbs *ach-*, *hO-*, and *kOr-*, the volitional/active reading is generated by the verb *kOr-*. In the case of *icche*, the volitional or the active interpretation is not feasible as observed in (108). Therefore, desire can only be felt or experienced and the subject remains in genitive and the main verb in third person neutral form.

(108) Background: The speaker feels unsatisfied in her work at the moment. Her manager bothers her nearly every other day with additional shifts. She says the following sentence in frustration because she believes that the extra hours are not assisting her in learning anything new.

\* *ami cakri-Ta chere di-te icche kOr-i*  
 I.NOM job-CLF.ACC leave.INF give-INF desire do.PRS.1

The occurrence of *icche* ‘desire’ with the light verbs can be termed as an impersonal complex predicate among all the other (complex) conjunct verb formations. Other conjunct verbs *biSSaS kOra* ‘to believe’, *bhOy kOra* ‘to fear’, *rag kOra* ‘to be angry’ etc imply active/passive distinction. In the pairs below the first one conveys the active and the second defines the derived passives.

(109a) Source: Newspaper- Barta 24. Date– 22 February2022

Section: International desk.

Background: The president of Ukraine Volodymyr Zelenskyy while addressing his nation utters the following sentence.

*amra kauke bhOy kor-i na*  
 we.NOM.PL anyone.ACC fear do.PRS-1 NEG

‘We fear nobody.’

- (109b) *amader kauke bhOy hO-e na*  
we.GEN.PL anyone.ACC fear happen.PRS-3 NEG

‘Fear of anyone is not happening to us.’

- (110a) Source: Tagore, R. (1943). *Chirokumar Sabha, Bichitra*

Background: In a conversation between two people Rashik and Akshay, when Aksha complimented Rashik on looking graceful Rashik replied sarcastically and said the following sentence.

*bibahito loke-ra dekh-e mone-mone rag kOr-e*  
married men-PL.NOM see-INF mind.LOC-mind.LOC anger do.PRS-3

‘On seeing me the anger happens/occurs inside the mind of the married men.’

- (110b) *bibahito loke-der dekh-e mone-mone rag*  
married men-PL.GEN see-INF inside.LOC-inside.LOC anger  
*hO-e*

happen.PRS-3

‘On seeing me the anger happens/occurs inside the mind of the married men.’

- (111a) Source: Tagore, R. (1941). *Raja , Bichitra*

Background: There has been a fight between the kings and after the battle the citizens say the following sentence.

*ora keu kauke biSSaS kOr-e na*  
they.NOM someone.NOM anyone.ACC believe do.PRS-3 no.NEG

‘Trust on each other doesn’t happen/occur to them.’

- (111b) *oder karur opor karur biSSaS hO-e na*  
they.GEN anyone on anyone believe happen.PRS-3 NEG

‘Trust on each other doesn’t happen/occur to them’

At this juncture, it is vital to observe the situation in the neighboring languages. We have considered Odia and Hindi and therefore we intend to observe the patterns of the desire predicate with the light verbs. We consider the distribution of the desire predicates in Odia first and then in Hindi.

(112) *ram-rO iccha Onil skul ja-u* (Odia)

Ram-GEN desire Anil.NOM school.LOC go-SUBJV

‘It is Ram’s desire (that) Anil should go to school.’

(113) *madhu-rO skul jiba-ku iccha hu-e* (Odia)

Madhu-GEN school.LOC go-ACC desire happen.PRS-3

‘The desire to go to school happens/occurs to Madhu.’

(114) *madhu skul jiba-ku iccha kar-e* (Odia)

Madhu.NOM school.LOC go-ACC desire do.PRS-3

‘The desire to go to school happens/occurs to Madhu.’

(115) *madhu-rO skul jiba-ku iccha ach-i* (Odia)

Madhu-GEN school.LOC go-ACC desire have.PRS-3

‘Anu has a desire to go to school.’

Like Bangla, in Odia when the desire predicate *iccha* occurs independently in a sentence (112), it selects the subjunctive as the neighboring clausal complement as previously stated. But there are strident differences; In Odia, the situation of desire predicate *iccha* (with the light verbs) doesn’t imply impersonal construction always. Odia offers an interesting difference in comparison to Bangla by preserving the nominative subject for the *iccha kar* in example (114). The complex constructions *iccha hue* ‘the desire happens’ in (113) and *iccha achi* ‘have or possess the desire’ in (115) occur in the neutral form and the subject consumes the genitive inflection. The clausal dependencies of the light verbs also show contrasting

features in Odia, the predicates *icche hu-e*, *icche kar-e* and *icche ach-i* occur in constructions (113-115), where the clausal complement endings get the accusative case marker *ku*.

We now delve into Hindi and observe the situation. The cross-linguistic evidence helps us to gain one significant aspect which is, in Oriya and Hindi desire predicate *iccha* are not ‘impersonals’ i.e. they explicate active construction depending on the light verbs. Let us observe the Hindi sentences.

- (116) *ram-ki iccha hai ki anil skul ja-e* (Hindi)  
 ram-GEN desire be.PRES that Anil.Nom school.LOC go-SUBJV  
 ‘It is Ram’s desire (that) Anil should go to school.’

- (117) *nileS-ko skul ja-ne-ki iccha ho-t-i hai* (Hindi)  
 Nilesh-DAT school.LOC go-GER-GEN desire happen-HAB-F be.PRS  
 ‘The desire to go to school happens/occurs to Nilesh.’

- (118) *anu-ki skul ja-ne-ki iccha hai* (Hindi)  
 anu-GEN school.LOC go-GER-GEN desire be.PRS  
 ‘Anu has a desire for going to school.’

- (119) *main skul ja-ne-ki iccha rakh-t-i hu* (Hindi)  
 I.NOM school.LOC go-GER-GEN desire keep-HAB-F be.PRS.1  
 ‘I have (kept) a desire to go to school.’

In (116) the predicate *iccha* occurs with the copula and embeds the subjunctive. In Hindi there is no incorporation of the conjunct *icche karna* ‘to desire’; they always employ *iccha hona* ‘happening of desire’ with dative subject, as evident in (117). We witness another light verb construction which is *iccha rakhna* ‘keeping of desire’ with the nominative subject in (119). In Hindi, all the complex constructions like *iccha ho-* (117), *iccha hai-* (118), and *iccha rakh-* (119) embed clausal complement where the verb in the embedded clause is marked in the genitive case.

### 3.3 Conclusion

The chapter reveals primarily the various ‘impersonal’ occurrences of the predicate *icche* independently and with the light verbs *ach-* ‘have’, *hO-* ‘happen’, and *kOr-* ‘do’. In the process we witness certain interesting rules based on the clausal complement dependencies; the presence and the absence of the light verbs select different clausal complement endings. A narrower perspective shows that the presence of the light verbs *ach-*, *hO-*, and *kOr-* conveys selection restriction towards their embedded clausal structures. The evidences of Odia and Hindi unveil the cross-linguistic structural similarities and dissimilarities with Bangla. The thesis aims to address the structural and semantic complexities of the desire predicate *icche* along with the light verbs. The work is not led by any typological cross-linguistic motivation; we initiated a glimpse of cross-linguistic evidence in this chapter for observing the structural patterns of the two neighboring languages Odia and Hindi. In the following chapters, we delve into establishing the intricacies of the predicates via the syntactic structures and the semantics.

## Chapter 4

### 4. Syntactic intricacies of the desire predicate

#### 4.1 Reanalyzing impersonals and specifying ‘true impersonals’ in Bangla

In the preceding chapter, we have discussed that the predicate *icche*, in isolation and with the light verbs, reflects impersonal construction in Bangla. In an impersonal voice, the event/situation reported by the speaker remains central. In Bangla impersonal voice, *icche* and *icche hOwa/kOra* mainly prefers a subject marked with *SoSThi bibhOkti-* which is associated with the concept of *Sombondho pOd* i.e. genitive case (Chatterji, The Origin and Development of the Bengali Language , 1926). It is also worth noting that the verb, in an impersonal voice, is not sensitive to the person of the subject. It takes the third-person neutral form.

The current chapter focuses on the syntactic nuances of the desire predicate *icche*. The following section, distinguishes genuine impersonal constructions from passive ones, emphasizing the differences. Constructions like *icche ache*, *icche hOwa*, and *icche kOra* are classified as true impersonal, setting them apart from conventional passives or impersonal.

According to Thompson (2004) and Smith (2009), an impersonal structure is defined semantically and is applied to any sentence that does not have the subject, which is marked with the agent as its theta role. In an impersonal structure, the verb is always in the third person form, and if the logical subject is present, then it is always in the genitive. Klaiman (1994) suggests that in active voice the action notionally devolves the agential role upon the subject. In passive voice, the action devolves the central role of the object from a non-dynamic standpoint by raising the object to the subject position. The subject of a sentence in passive voice is assigned patient as its theta role. In passives, the verb is portrayed as

signifying the state of being acted upon or suffering the effects of action. It is also argued that the impersonal passive is the one that alters the mapping of a nominal to the subject relation in a basic intransitive structure. The literature developed by Siewierska (1984), Keenan (1985), Klaiman (1994), Vikner (1995), Blevins (2003), and Hofherr (2017) distinguishes two types of passives: either broadly as (i) subject-less passives and (ii) the passive forms of intransitive verbs. Impersonal verb forms suppress the syntactic expression of the logical subject but do not promote the logical object to the grammatical subject. In the context of Bangla, Klaiman (1994) explains impersonals through the following examples below.

(120) Source: Klaiman (1994)

*Se okhan-e bOS-e*  
 he.NOM there.LOC sit.PRS-3  
 ‘He sits there.’

(121) Source: *ibid*

*okhan-e bOSa ja-e*  
 there.LOC sit.NMIZ go.PRS-3  
 ‘(literally) It is sat there/It can be sat there.’

According to Klaiman (1994), in example (121) the omission of the core argument which is the subject of an intransitive in (120), results in a marked construction in (121). In example (121) the basic verb is nominalized and it is followed by a finite form of the verb – *ja* ‘go’. The result is a structure in which the subject is suppressed, or we can call this a subject-less clause.

Bangla encounters a variety of subtleties when it comes to passives and impersonal constructions, and Klaiman's theory on these two instances falls short of addressing these irregularities. Klaiman in the above scenario shows the omission of the core argument in example (121). She argues that the basic verb is nominalized and followed by the finite form

of the verb *ja* ‘go’. Contrary to Klaiman’s claim, we assert that the impersonal passive form of (120) will be *or okhane bOsa hOye*, which is different from (121). We need to argue on the derivation shown above in (120) and (121), and the first reason for that is semantic sense of (121) is completely unrelated to the active form in (120). The finite form *ja* in (121) doesn’t imply the event ‘go’, if the sentence is evaluated independently then *ja* explicates the sense of a permission or possibility. The derivation of (121) from (120) hence is a result of semantic conflict. The sentence (120) may be used in a situation where someone regularly sits in one spot every day out of habit. For (121) we can imagine an instance where, during a conversation between two people, person ‘A’ gestures to a location and informs person ‘B’ that it is a place where people can sit, so we are allowed to sit there as well. According to the rule, derivation from an active to passive should and must preserve the core semantic of the main sentence.

Hence the nature of impersonal structures in Bangla diverges significantly from the European languages. An impersonal construction in Bangla in certain situations should involve the subject, the subject marked with genitive inflection, and the object. The mechanism of the passivization of an intransitive verb is not how we conceptualize impersonals in Bangla. According to Dasgupta (2006), impersonal forms in Bangla have corresponding personal counterparts. Notably, Bangla lacks strict numbers or gender agreements. An impersonal verb lacks such agreement, manifesting in an unmarked form – typically in the third person and a neutral form. Dasgupta illustrates this point through two examples, incorporating the personal form in (122) and the impersonal form in (123).

(122) Source: Dasgupta (2006)

<i>ami</i>	<i>bhOy</i>	<i>kor-b-o</i>	<i>na</i>
I.NOM	fear	do-FUT-1	NEG

‘I won’t fear.’

(123) Source: *ibid*

*amar bhOy kor-b-e na*  
I.GEN fear do-FUT-3 NEG

‘I won’t feel scared.’

Furthermore, Dasgupta (2006) posits that sentences in Bangla classified as passive are essentially impersonal, with their active counterparts being considered personal. Bangla exhibits a common practice in passive constructions where the logical subject is either suppressed or introduced by the postposition *dara* meaning 'by.' Observe below.

(124) Source: Thompson (2004)

*tara cor-Ta-ke dhor-l-o*  
they.NOM thief-CLF-ACC catch-PST-3

‘They caught the thief.’

(125) Source: *ibid*

*(tader dara cor-Ta-ke dhOra ho-l-o*  
they.GEN by thief-CLF-ACC catch happen.PST-3

‘The thief was caught by them.’

For instance, in (124), the subject is in the nominative and serves as the volitional agent, while the corresponding passive form in (125) includes the subject marked by the postposition *dara*, and notably, there is a change in the verb form, realized as *hOwa* meaning 'happen.' This nuanced analysis sheds light on the intricacies of impersonal structures in Bangla, offering valuable insights into the language's syntactic and semantic features.

We propose that Bangla exhibits two constructions: (i) ‘passives’ or ‘impersonal passives’ which are derived from the active or personal counterpart and (ii) ‘true impersonals’ which bear impersonal structures by default and have no active or personal

counterpart.). The occurrences of the desire predicate are ‘true impersonals’ as they are documented in the language with the subject having the genitive case and the main verb in the third person form and they don’t have an active interpretation. The true impersonal construction of the desiderative predicates compels us to think about a vital aspect of the verb *kOr* ‘do’. The verb *kOr* meaning ‘do’ carries the sense of volitionality and presupposes an agent subject. This sense of volitionality is somehow blurred in the context of *icche* ‘desire’ when it occurs as the light verb *kOr* where the sense of occurrence<sup>7</sup> (the desire occurs to the subject) is introduced. We can observe examples (126) and (127) below where in the former the verb *kOr* is the main verb and in the latter, it is employed as a light verb with the predicate *icche*. In (126) the main verb *kOr* preserves the literal sense of volition and also, we receive a nominative subject. When it occurs as a light verb in (127), *kOr* shows semantic bleaching and it implies the sense of happening or occurrence.

(126) *onu*            *roj*            *SOkale*    *gan*    *kOr-e*  
 Anu.NOM    everyday    morning    music    do.PRS-3  
 ‘Anu does (practice) her music every day in the morning.’

(127) *onu-r*            *skul-e*            *je-te*            *icche*            *kOr-e*  
 Anu-GEN    school-LOC    go-INF            desire            do.PRS-3  
 ‘The desire of going to school happens or occurs to Anu.’

The incorporation of the desire predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOr* conveys ‘true impersonal’<sup>8</sup> constructions in Bangla. True impersonal forms are those that exist in the language without any active interpretation; that is, in any given context, the subject in true impersonals will carry the genitive inflection and the verb will remain in the

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<sup>7</sup>There are two other emotive complex predicates like *OSukh kOr* ‘occurring of an illness’ and *bAetha kOr* ‘occurring of a pain’, where the ‘do’ verb *kOr* loses the volitional sense and conveys the sense of an occurrence with the genitive subject and the impersonal form of the verb.

<sup>8</sup> Bangla includes true impersonal verbs like *dOrkar* ‘need’, *uchit* ‘should’ where the subject gets the genitive case and the verb in the neutral form.

third-person neutral form. In Bangla, true impersonals are not created by passivizing an intransitive verb; rather the presence of the subject is necessary which is interpreted as an experiencer. When *icche ache*, *icche hOwa*, and *icche kOra* are examined closely to reveal the true impersonal nature, we discover that the verb *kOra* ‘do’, when used as a light verb, loses its volitional/active sense and is understood as an occurrence, explaining a sense in which the subject is the experiencer and the desire occurs to the subject. This feature of the light verb *kOra* is observed in other complex predicate constructions where we receive an interpretation of an occurrence or a happening. This analysis conforms to the claim that *kOra* as a light verb can signify true impersonals in conjunction with certain mental attitude predicates.

#### 4.2 The lexical structure of *icche* as a predicate

The bare verb or the lexical predicate *icche* when occurs independently in a sentence, takes *holo/hOe* (copula) ‘is’ which according to vast literature acts as an ‘Identity function’<sup>9</sup>. Following Heim & Kratzer(1998), copulas are semantically vacuous. In the context of copulative constructions, Thompson (2004) argued that the concept of zero verbs is observed in Bangla. In simple present tense, the verb can be omitted because it is understood. The copula *holo/hOye* is not obligatory in Bangla, but it is covertly expressed in a sentence. Ferguson (1967) mentions three characteristics of these copulative or zero verb sentences: (i) no verb can be supplied to replace it in the normal verb position without a change in basic meaning, (ii) it is negated by the negative copula, and (iii) it is invariably present tense or

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<sup>9</sup> According to the literature on type semantics by Heim and Kratzer (1998), Champollion (2020), and many others, ‘Identity Function’ defines a function that returns whatever it takes in as input. For example in (a) Susan is kind, the copula it will take a function of type  $\langle e,t \rangle$  and will return that same function, resulting the type of ‘is’ as  $\langle \langle e,t \rangle, \langle e,t \rangle \rangle$ . So the semantics of **[[is]]** =  $\lambda P.P$ .

tense less in meaning. He said that the main verb is always in the present tense and is covertly stated. The examples below (128-130) convey the copulative constructions: (128) and (129) are relational sentences, whereas (130) reflect a defining sentence where the Banyan tree is defined.

(128) *rahul (holo) amar mama-r chele*  
 Rahul.NOM (is-COP) I.GEN uncle.GEN son  
 ‘Rahul is my maternal uncle’s son.’

(129) Source: Thompson (2004)  
*SujOn amar bhai (hO-e)*  
 Sujon.NOM I-GEN brother (is.COP.PRS-3)  
 ‘Sujon is my brother.’

(130) Source: *ibid*  
*bOtgach (holo) edeS-e SObceye bOro gach*  
 Banyan tree.NOM (is-COP) this country-LOC the most big tree  
 ‘The Banyan tree is the biggest tree in this country.’

The lexical predicate *icche* occurs in a copulative construction as observed in examples (131) and (132) below. In this particular context, the copula *holo* is implied and this cannot be replaced by any other verb. The default copula form *holo* is implied in the context where the subject of the matrix clause and the subject of the embedded clause are not co-indexed. The tense implied in these constructions is present tense.

(131) Source: (Roychowdhury, Ghosh, & Karmakar, 2023)

Background: Meghna has a divine voice, and even without formal vocal

training, she was able to sing brilliantly from a very young age. Her mother is very appreciative of this and she desires to see her daughter develop her talent with the right coaching.

*amar icche (holo) meghna gan Sikh-uk*  
 I.GEN desire (is-COP) Meghna.NOM music learn-SBJV.3

‘It is my desire that Meghna learn music’.

(132) Source: *ibid*

Background: Anil is a stellar academician and his real passion lies in research. For some experience, he does a job and conducts studies at the same time. Anil’s mother is aware that the work is quite time-consuming and does not pay well. He is unable to focus entirely on his research projects because of time constraints. She thinks Anil should leave the job and concentrate solely on his research.

*amar icche (holo) Onil cakri-Ta chere di-k*  
 I.GEN desire (is-COP) anil.NOM job-CLF.ACC leave.INF give.SBJV.3

‘It is my desire that Anil leave this job.’

There is a difference between the aforementioned sentences (128-130) and sentences in (131) and (132). In sentences (128-130) the copula which is implied, acts as the main verbal predicate, but in (131) and (132) the main predicate is *icche* which occurs with its argument structure. Hence it will be structurally unfair to identify (131) and (132) as verbless sentences. The copula present in sentences (131) and (132) conveys the present tense and in Bangla we utter these sentences without explicitly mentioning the copula and as mentioned above it signifies no semantic contribution. The copula that signifies an identity function is semantically vacuous.

### 4.3 The structural interpretations of *icche* with *ach- / hO- / kOr-*

We will start with *icche ache* and observe the structural algorithm. According to Thompson (2004), one of the elementary uses of *ache* in Bangla is as an auxiliary. The element *ach-* is predominantly used in a variety of impersonal constructions with no or indefinite grammatical subjects, but it can also be used with definite subjects, including proper names and pronouns. In the examples below (133) and (134), *ache* occurs with an indefinite subject and with a definite subject respectively. There are existential uses of the element *ache* in Bangla observed in example (135).

(133) Source: Thompson (2004)

*Tebil-er opor boi ach-e*  
table-GEN above books.ACC is/be.PRS-3  
'There are books on the table.'

(134) Source: ibid

*boi-Ti Tebil-er opor ach-e*  
book-CLF.ACC table-GEN above is/be.PRS-3  
'The book is on the table.'

(135) Source: ibid

*amar du-Ti bhai ach-e*  
I.GEN two-CLF brothers have.PRS.3  
'I have two brothers.'

In Bangla *ache* can also be conjoined with mental attitude predicates and in that context it behaves as a light verb. We have noun and verb constructions when the noun represents a mental state and the verb occurs as *ache* 'have'. The conjunct forms like *biSSaS ache* 'have faith', *bhOy ache* 'have fear', *aSa ache* 'have hope', and similar forms are extensively used in Bangla. Similarly, *ache* can also occur with *icche* forming the conjunct *icche ache* where

*ache* acts as a light verb and the main predicate is reflected by *icche*. Observe the examples below where we have exemplified the conjunct complex forms with the light verb *ache*.

(136) Source: Newspaper-Bangla News 24.Date–10 March 2024

Section: Sports desk

Background: During a match, Australian Cricketer Nathan Lyon says the following about his team’s confidence.

*je kono Obostha theke jO-er biSSaS ach-e*  
any situation from win-GEN belief have.PRS.3  
*Ostrelia-r*

Australia-GEN

‘Winning the match in any situation is what is believed.’

(137) Source:Newspaper-Hindustan Times.Date–31<sup>st</sup> January 2023

Background: World Health Organization regarding the emergence of Covid says the following.

*Covid niye Ekhon-o bOro bhOy ach-e*  
Covid regarding now-EMPH enough fear have.PRS.3  
‘Serious concerns about covid are still there.’

(138) Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023

Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club. Lionel Messi says the following sentence.

*Onek kichu jeta-r icche ach-e*  
many thing win.GER-GEN desire have.PRS-3

‘I have a desire to win a lot more in my life.’

The next two desiderative conjuncts that we aim to talk about are *icche hOwa* and *icche kOra*. The light verbs *hOwa* and *kOra* are the two most productive light verbs that occur with almost all mental attitude predicates. Conjunct forms like *biSSaS hOwa / kOra*, *rag hOwa / kOra*, *lOjja hOwa / kOra*, *dukkho hOwa / kOra* are very productive and extensively used in Bangla. Similar formations are *icche hOwa* and *icche kOra*. According to the literature by Dasgupta (1989) , Chatterjee(2014), Butt (2010), Butt and Ramchand (2005), the verbal system of Bangla can be divided into two types of verbs, simple verbs, and complex verbs. Like other Indo-Aryan languages, complex verbs occur abundantly in Bangla as well. These complex verbs consist of several classes of constructions which are the noun/adjective + do type (N/A+do), noun/adjective + do + verb type (N/A+do+V), and verb + verb type (V+V). The noun/adjective+ do type (N/A+do) is known as conjunct verbs and the verb+verb type (V+V) has been called as compound verbs. Observe the examples below where the three types of verbal forms are presented. In example (139) a noun and verb construction are employed, in (140) a three-part complex verb is used and in (141) a verb and verb complex form is incorporated.

(139) Source: Chatterjee(2014)

*ami oke bApar-Ta jigyeS kor-ech-i* (N+do)

I.NOM (s)he.ACC thing-CLF ask do-PERF.PRS.1

‘I have asked him/her the matter.’

(140) Source: ibid

*ami oke o-Ta jigyeS kor-e*

I.NOM (s)he.ACC thing-CLF ask do-PERF.PTCP

*ni-ech-i* (N+do+V)

take- PERF.PRS.1

‘I have asked him/her about the thing for myself (completely).’

(141) Source: *ibid*

*Se gach theke por-e gA-ch-e* (V+V)

(s)he.NOM tree.LOC from fall-PERF.PTCP go- PERF.PRS.3

‘He has fallen from the tree (completely).’

In this study, we are concerned about conjunct verb construction or noun and verb complex forms to be specific, where the first element of the complex form conveys a state with the light verbs *ach-*, *hO-*, and *kOr*. Argument structure and case play a significant role when it comes to complex predicate constructions. Davison’s work (2005) on the argument structure of complex predicates in Hindi and Urdu, helped to analyze Bangla in a similar line of thought. He dealt with constructions like *yaad karna* ‘remember do’, *yaad aana* ‘memory come’ and regarding the argument structure and case assignment, he said that in N+V constructions the noun contributes its richer information to the combination of corresponding N and V arguments while V contributes its aspectual type. Regarding the examples (142) and (143) below he claimed that the event N is the syntactic object of V, and is not raised to vP, it is not associated syntactically with the subject of vP, so the subject of N+V should have the subject semantic role assigned by V, which should be an agent if the V is a transitive activity or accomplishment verb like *kar-naa* ‘do, make’.

(142) Source: Davison (2005)

*us-nee mohan-ko bahut yaad ki-ya* (N+V)

3s-ERG Mohan-ACC much memory do-PF-MS

‘He/she remembered Mohan very much.’

(143) Source: *ibid*

*maiN-nee un-kii yaad ki* (N+V)

I-ERG 3PL-GEN-FS memory-FS do-PF-FS

‘I remembered, recalled them.’

He also argued that this is not the case as the syntactic subjects of these sentences do not refer to causative agents or events which bring about a change of state. He added that N and not V provide the experiencer interpretation of the syntactic subjects in (142) and (143). When verbs like *kar-naa* ‘do, make’ and *aa-naa* ‘come’ are used in isolation, it is not the case that their subjects are interpreted as experiencers, but this interpretation is associated with N+V combinations. But the V does add to the aspectual interpretation of N+V. The aspectual attribution of V is described by the example (144) below.

(144) Source: *ibid*

<i>aur</i>	<i>us-see</i>	<i>mujhe</i>	<i>bahut-si</i>	<i>baateeN</i>	<i>yaad</i>	<i>aa</i>
and	3s-from	I-DAT	many-rather	matter.PL	memory	come
<i>gayi</i>	<i>thiN</i>	<i>jinheeN</i>	<i>maiN</i>	<i>yaad</i>	<i>nahiN</i>	<i>kar-ti</i>
go-PF	were	which.DAT	I.NOM	memory	not	do-IMPF

‘From that, I remember many things which I do not want to recall/think about.’

In the above example (144) the sentence contrasts two versions of ‘remember’, the dative subject version with *aa-naa* ‘come’, and the nominative/ergative subject with *kar-naa* ‘do’. This contrast explains an elegant aspectual dichotomy. The dative subject version refers to an involuntary process, instigated by another event *us-see* ‘from that’, and leading immediately to a resulting state of remembering. This version has the properties of an achievement. The nominative/ergative version is more of an accomplishment, focusing on a process that takes some time. Some volition may be conveyed. It must derive correctly the respective contributions of N and V; N provides the semantic roles of the arguments, including the

syntactic subject while V accounts for the case of the subject, the event structure, and the aspectual class of the verb, and in some instances.

We have already argued in Section 4.1 that the occurrences of *icche* in Bangla conveys an impersonal construction where the subject always takes the genitive case and the verb is in third person neutral form. We know that *icche* in a complex form is conjugated with the light verbs *ach-*, *hO-* and *kOr-*, and therefore it is logically understandable that the light verbs *ache* ‘have’ and *hOwa* ‘happen’ assures the genitive case marking, but we are concerned about the light verb *kOr-* ‘do’. Dasgupta (2012) argued that the *kOra* in transitive composite verb formations like *ranna kOra* ‘to cook’, *Seddho kOra* ‘to boil’, *nOSTo kOra* ‘to spoil’, *mEramOt kOra* ‘to repair’, *bikri kOra* ‘to sell’, *amdani kOra* ‘to import’, *rOptani kOra* ‘to export’, *birokto kOra* ‘to irritate’, *greptar kOra* ‘to arrest’, *bondi kOra* ‘to imprison’ and in many others mark their agents nominative and their objects accusative. In addition to these regular composite verbs with the light verb *kOra* ‘to do’ mark their agents with nominative and their patients with accusative. However, Bangla also features composite verbs with the light verb *kOra* ‘to do’ that are unusual in that they build experiencer subject constructions and experiencers in Bangla carry genitive inflection. Observe the sentences below (145-149) where he argues that *kOra* asserts experiencers in Bangla which carry genitive inflection. He claims that many Indo-Aryan languages have nothing remotely similar to this. It is thus a parametric fact about Bangla that certain composite verbs containing the standard transitivity marker *kOra* ‘to do’ take experiencer subjects.

(145) Source: Dasgupta (2012)

<i>ram-er</i>	<i>bhOy</i>	<i>kOr-ch-e</i>
Ram-GEN	fear	do-CONT.PRS-3
‘Ram feels afraid.’		

(146) Source: ibid

*tomar lojja kOr-ch-e*  
you.GEN shame do-CONT.PRS-3

‘You are feeling ashamed.’

(147) Source: ibid

*SEmer- cinema dekh-te icche kOr-ch-e*  
Shyam-GEN cinema.ACC watch-INF desire do-CONT.PRS-3

‘Shyam feels like watching a movie.’

(148) Source: ibid

*dilip-er pran jae jae kOr-ch-e*  
Dilip-GEN life goes do-CONT.PRS-3

‘Dilip is like he’s about to lose his life.’

(149) Source: ibid

*prodip-er haMchi aS-b-o aS-b-o kOr-ch-e*  
Prodip-GEN sneeze.ACC come-FUT-3 do-CONT.PRS-3

‘Prodip is like he’s about to sneeze.’

When we deal with *icche ache*, *icche hOwa* and *icche kOra*, the impersonal form reflects experiencer subject with genitive inflection. Following a similar line of Dasgupta’s (2012) thought *kOra* marks the subject with the genitive case while giving up its agent-assigning behavior. Agreeing with Davison (2005) in these three conjunct verb constructions the N (noun) provides the experiencer interpretation of the syntactic subjects i.e. the semantic load is carried by *icche* and hence we receive experiencer subjects. The light verbs *ache*, *hOwa*, and *kOra* inserts genitive to the subjects. As Dasgupta (2012) argues, once the experiencer subject construction built around a genitive gets established in the language. Observe the examples below.

(150) Background: Anish, who works in Delhi, longs to travel home during the Durga Puja celebration every year. Sadly, the company does not offer holidays at this time of year, so he is unable to attend. In this instance, Anish's colleague says to another co-worker the following.

*amar      bari              je-te      icche      hO-e/ kOr-e*

I.GEN    home.LOC    go-INF    desire    happen.PRS-3/ do.PRS-3

‘The desire to visit home happens or occurs to me.’

(151) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

*onu-r              sikkim              ja-wa-r              icche              ach-e*

Anu-GEN    sikkim.LOC    go-GER-GEN    desire    have.PRS-3

‘Anu has a desire to go to Sikkim.’

In example (150) both *hOwa* and *kOra* can occur interchangeably and in (151) *ache* occurs in conjunction with the noun *icche*. In these examples *icche* is responsible for the semantic content of the subject by exerting the experiencer subject and the light verbs *ache*, *hOwa*, and *kOra* mark the subject with the genitive case.

#### **4.4 Summarizing the syntactic properties of the desire predicates**

The syntactic sphere revolves around the structural intricacies of the desire predicate *icche* occurring independently in a sentence and with the light verbs *ach-*, *hO-*, and *kOr*. To begin, in Section 4.1 we discuss the impersonal construction of the desire predicates and we claim that *icche*, *icche ache*, *icche hOwa* and *icche kOra* are classified as true impersonals which

we have shown are distinct from the conventional passives or impersonals. We have argued that true impersonals forms are those that exist in the language without any active interpretation; that is, in any given context, the subject in true impersonals will carry the genitive inflection and the verb will remain in the third-person neutral form. When *icche ache*, *icche hOwa*, and *icche kOra* are examined closely to reveal the true impersonal nature, we discover that the verb *kOra* ‘do’, when used as a light verb, loses its volitional/active sense and is understood as an occurrence, explaining a sense in which the subject is the experiencer and the desire occurs to the subject. In section 4.2 we delve into one of the distributions of *icche* when it occurs isolated in a copulative construction without the light verbs and we discuss the structural algorithm. In a construction like this, the predicate *icche* acts as the main lexical predicate and the copula is implied. In section 4.3 we move towards the other distribution of *icche* where it occurs in a complex form with the light verbs *ach-*, *hO-*, and *kOr* forming *icche ache*, *icche hOwa*, and *icche kOra* respectively. From a syntactic standpoint, we argue that *icche* being the host noun exerts the semantic role of the subject which is the experiencer, and the light verbs are responsible for the genitive case of the subject. Although from a semantic perspective, the meaning construing capacities of the light verbs in composition with the host noun *icche* adds a new meaning in the entire eventuality of desire. This phenomenon builds up the basis of our investigation outlined in Chapter 5.

# Chapter 5

## 5. Semantic intricacies of the desire predicate

### 5.1 Uneven distribution of the predicates in spatiotemporal contexts

In Chapter 5 we deal with the meaning potential of *icche* and how the predicates pattern in the spatiotemporal contexts. The chapter also aims to investigate the intrinsic lexical (semantic) composition of the predicates in terms of the individual-level versus the stage-level interpretation. It is already addressed in Chapter 2 under Section 2.6 that the relationship to space and time distinguishes stage-level predicates from individual-level predicates and is considered to be the primary semantic uniqueness. The predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra* behave heterogeneously. The meaning conveying capacity of each of these predicates varies along the axis of spatio-temporality. Although the predicates represent the sense of desire at a very basic level, our comprehension of the complex semantic nuances that surround them will remain elusive. One of the main findings that we want to bring to light is as follows: *icche* and *icche ache* impose restrictions on spatiotemporal modifications. On the contrary, adverbial modifications of space and time can be achieved when *icche* is combined with the light verb *hOwa* and *kOra*. Before delving into the examples it is important to mention that *icche* and *icche ache* select a particular context showing restrictions towards spatiotemporal modifications. Contrarily, *icche hOwa* and *icche kOra* behaves similarly and summons a different context with having flexibilities regarding spatiotemporal modifications.

- (152) Background: Anil is brought up by his mother alone. Anil's mother put in a lot of work to ensure that he could finish his education. They've always shared a rented home with numerous other tenants. Anish desires that one day he will purchase an apartment and

ease her mother's burdens.

*Onil<sub>k</sub>-er*      *icche*    *je*                      *o<sub>k</sub>*      *Ek-Ta*      *Epartment*  
Anil-GEN      desire    that.COMP    he      one-CLF    apartment.ACC  
*kin-b-e*  
purchase-FUT-3

‘It is Anil’s desire that one day he would purchase an apartment.’

(153) Background: Same as 152.

*Onil-er*      *Ek-Ta*      *Epartment*                      *ken-a-r*  
Anil-GEN    one-CLF    apartment.ACC      purchase-GER-GEN  
*icche*      *ach-e*  
desire      has.PRS-3

‘Anil has a desire to purchase an apartment one day.’

(154) Background: Same as 152.

\* *Onil<sub>k</sub>-er*      *majhe majhe*      *icche*    *je*                      *o<sub>k</sub>*      *Ekt-Ta*  
Anil-GEN      sometimes      desire    that.COMP    Anil      one-CLF  
*Epartment*      *kin-b-e*  
apartment.ACC    purchase-FUT-3

(155) Background: Background: Same as 152.

\* *Onil-er*      *majhe majhe*      *Epartment*                      *ken-a-r*  
Anil-GEN      sometimes      apartment.ACC    purchase-GER-GEN  
*icche*      *ach-e*  
desire      have.PRS-3

(156) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her

whenever she gets a break.

*onu-r*            *sikkim*            *je-te*            *icche*            *hO-e /kOr-e*  
Anu-GEN      Sikkim.LOC      go-INF      desire      happen.PRS-3

‘The desire to go to Sikkim happens/occurs to Anu.’

(157) Background: Same as 156.

*onu-r*                    *majhe majhe*            *sikkim*            *je-te*            *icche*  
Anu-GEN            sometimes            Sikkim.LOC      go-INF      desire  
*hO-e /kOr-e*  
happen.PRS-3

‘Sometimes, the desire to go to Sikkim happens/occurs to Anu.’

The sentences above show the uneven distribution of the predicates in temporal contexts. The predicates *icche* and *icche ache* restrict temporal modifications as observed in examples (154) and (155) respectively. On the contrary, the predicates *icche hOwa* and *icche kOra* can accommodate temporal modifications in (157). Now we will observe the behavior of the predicates in terms of locative modifiers. Examples (18) and (19) are repeated below as (158) and (160) for the sake of discussion.

(158) Source: Tagore, R. (1941). *Sesher Kobita, Bichitra*.

Background: The context is about a conversation between Amit and Labanya. While conversing, Amit in order to describe himself mentions his friend Sobhonlaal and says that he is an eminent researcher and his work is to explore the past and bring out the history, but Amit desires to establish the path of the future. Amit says the following to Labanya

*amar*            *icche*            *bhobiSSOt-er*      *pOth*            *sriSTi*      *kOr-a*  
I.GEN            desire            future-GEN      path.ACC      create      do.SBJV

‘It is my desire that I create the path of future.’

- (159) \* *amar bari-te icche bhobiSSOt-er pOth sriSTi kOr-a*  
I.GEN home-LOC desire future-GEN path.ACC create do.SBJV

(160) Source: Newspaper – Bangla News 24. Date – 7<sup>th</sup> March, 2023

Section: Sports desk.

Background: This section concentrates on sports news and updates. They publish an interview with Lionel Messi about the PSG (Paris Saint-Germain) Football club. Lionel Messi says the following sentence.

*Onek kichu jeta-r icche ach-e*  
many things win.GER-GEN desire have.PRS-3

‘I have a desire to win a lot more in my life.’

- (161) \* *Onek kichu jeta-r bari-te icche ach-e*  
many things win.GER-GEN home.LOC desire have.PRS-3

(162) Background: Background: Anu is not a big fan of dumplings. She only craves them while she is in Darjeeling because the place is well-known for its dumplings.

*onu-r Ekmatro darjeeling-e-i momo khe-te*  
Anu-GEN only Darjeeling-LOC-EMPH dumplings.ACC eat-INF  
*hO-e/ kOr-e*  
happen.PRS-3

‘Only in Darjeeling, the desire to have dumplings happens/occurs to Anu.’

The sentences above show the uneven distribution of the predicates in spatial contexts. The predicates *icche* and *icche ache* in (159) and (161) respectively cannot allow modification by the locative modifier, whereas in (162) the predicates *icche hOwa* and *icche kOra* are modified by the locative modifier.

## 5.2 Temporal interval properties of the desire predicates

In the previous section, we observed the distribution of the predicates *icche*, *icche ache*, *icche hOwa* and *icche kOra*, in terms of the spatiotemporal contexts. We have shown that *icche* and *icche ache* behave similarly i.e. they are not complying with spatiotemporal modifications. On the contrary *icche hOwa* and *icche kOra* shows similar behavior because they allow spatiotemporal modifications. Now we aim to explore the interval properties of the predicates by observing the way they pattern with other temporal adverbs. The temporal adverb *majhe* is by nature termed as ‘frequency’ adverb of time. It is crucial to see how the predicates pattern with other temporal adverbs like cardinality adverbs (i.e. ‘more than once, three times in my life’), other frequency adverbs, durational adverbs like ‘since’ adverbs and ‘for’ adverbs, in ‘when and ‘whenever p, q’ constructions, and in progressive form. These observations are crucial in determining the semantic behavior of the desire predicates in the context of conceptualizing interval and subinterval properties. Let us delve into the semantic temporal testing and observe the interaction between the predicates and the temporal modifiers.

### Frequency adverbs

The frequency adverb of time conveys how often an eventuality occurs. This helps in determining the frequency of that eventuality. We understand the frequency of occurrence of a generic event to be the number of occurrences of the event for some specific unit of time. Adverbials such as *always*, and *regularly*, are ways of expressing generic event occurring once for every unit of time where the unit is not specified. We can remain indefinite or vague about the number of repetitions for some specified unit of time by using expressions such as *a few times*, *seldom*, *occasionally*, *often*, and *frequently*. Hence in Bangla, apart from *majhe* we need to observe how the predicates pattern with another frequency adverb *praei* ‘often’. Observe the examples below.

(163) Background: Anil is brought up by his mother alone. Anil's mother put in a lot of work to ensure that he could finish his education. They've always shared a rented home with numerous other tenants. Anish desires that one day he will purchase an apartment and ease her mother's burdens.

\* *Onil<sub>k</sub>-er praei icche je o<sub>k</sub> Ek-Ta*  
 Anil-GEN often desire that.COMP Anil one-CLF  
*Epartment kin-b-e*  
 apartment.ACC purchase-FUT-3

(164) Background: Background: Same as 163.

\* *Onil-er praei Ek-Ta Epartment ken-a-r*  
 Anil-GEN often one-CLF apartment.ACC purchase-GER-GEN  
*icche ach-e*  
 desire have.PRS-3

(165) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

*onu-r praei sikkim je-te icche hO-e /kOr-e*  
 Anu-GEN often Sikkim.LOC go-INF desire happen.PRS-3

‘Often, the desire to go to Sikkim happens/occurs to Anu.’

We see a similar pattern in this scenario through examples (163-165). In sentences (163) and (164) *icche* and *icche ache* are not compatible with the frequency adverb *praei*, but in (166) we see *icche hOwa* and *icche kOra* being modified by the same frequency adverb. Example (165) conveys the sense that the eventuality of the desire to visit Sikkim often happens or occurs to Anu. Hence it is established that there exists a dichotomy between the predicates

*icche* and *icche ache* differ from the predicates *icche hOwa* and *icche kOra* in the context of the frequency adverbs. Now we need to check their patterns with other temporal adverbs. The examples below show the compatibility and incompatibility of the predicates through different temporal adverbs.

### Cardinal adverbs

Cardinal adverbs of time are specific and they specify the number of times the eventuality has occurred or has taken place. The cardinality of time includes twice, thrice, once, five or six times. Their typical use is to quantify either times or events. Let us observe the interaction between the cardinal adverbs of time and the desire predicates.

(166) Background: Anu has long-term plans to leave her current job. Her hours of work do not correspond with her pay, and the position does nothing to advance her resume. She is waiting impatiently for a suitable job offer, and she will submit her resignation request as soon as she gets it.

\* *onu<sub>k-r</sub> Ekbar icche je o<sub>k</sub> cakri-Ta chere*  
 Anu-GEN once desire that.COMP she job-CLF.ACC leave-INF  
*de-b-e*  
 give-FUT-3

(167) Background: Same as 166.

\* *onu-r Ekbar cakri-Ta chere de-wa-r icche*  
 Anu-GEN once job-CLF leave-INF give-GER-GEN desire  
*ach-e*  
 have.PRS-3

(168) Background: Anu was mistreated by a senior employee in her workplace over a project. Anu nearly completed the project by herself and submitted it to the client,

but she wasn't compensated for her efforts. She truly felt like quitting at that point.

*onu-r Ekbar cakri-Ta chere di-te icche*

Anu-GEN once job-CLF leave-INF give-INF desire

*ho-ech-il-o / kor-ech-il-o*

happen-PRF-PST-3

‘Once, the desire to leave the job has happened/occured to Anu.’

The above examples show the interaction of the cardinal adverbs with the desire predicates. In examples (166) and (167) we can observe that the cardinal adverb *Ekbar* ‘once’ doesn’t make a pair with *icche* and *icche ache*. The sense of *icche* and *icche ache* with the particular context cannot be modified with a cardinal adverbial. As said above cardinality conveys the temporal sense signifying the number of times the eventuality has occurred or has taken place. Hence cardinal adverbs cannot occur with *icche* and *icche ache* as the context in (166) and (167) reveals a long-term desire which means the subject possesses the desire (for leaving the job). When an individual possesses a desire, the semantics of possession cannot be modified by temporal adverbs like twice, thrice, once, five or six times. On the contrary, in example (168) a similar adverb can occur with *icche hOwa* and *icche kOra* conveying the desire to leave the job has occurred to the subject once. Moreover *icche hOwa* and *icche kOra* can be modified by cardinal adverbs signifying an eventuality that has occurred or taken place more than once. For example in (169) imagine a context where the subject was unnecessarily mistreated by her senior manager quite a few times and therefore the desire to leave the job has happened or occurred to the subject in all those times when she was ill-treated by her manager.

(169) *onu-r Ek-dubar cakri-Ta chere di-te icche*

Anu-GEN once or twice job-CLF leave give-INF desire

*ho-ech-il-o / kor-ech-il-o*

happen-PRF-PST-3

‘Once or twice, the desire to leave the job has happened/occured to Anu.’

Contrarily, *icche* and *icche ache* denoting a stable long-term desire for something cannot be modified by cardinal adverbs signifying an eventuality that has occurred or taken place once (as shown in 166 and 167) or even more than once (shown in 170) below having the same context as (166).

(170) Background: Same as 166.

\* *onu-r*      *Ek-dubar*      *cakri-Ta*      *chere*      *de-wa-r*      *icche*  
Anu-GEN    once or twice    job-CLF    leave.INF    give-GER-GEN    desire  
*ach-e*  
have-PRS.3

### **Durational adverbs- ‘for’ adverbs**

Durative adverbial phrases indicate the duration of the described event by specifying the length of time that it is asserted to take. It can be specific like for three days or for a week or we can be vague about the duration of time like for a long time, for a long period, etc. Hence if we say specifically ‘for three hours’, it means that there is a 3-hour period such that at each instant (always) in that period the eventuality holds or occurs.

(171) Background: Anil has been employed for a considerable amount of time by a global corporation, and he was just promoted. Since owning a car would make his daily transportation easier, he has always desired to purchase one.

*Onil<sub>k</sub>-er*      *Onekdiner*      *icche*      *ok*      *Ek-Ta*      *gari.*      *kin-b-e*  
Anil-GEN    for a long time    desire    he    one-CLF    car.ACC    buy-FUT-3  
‘For a long time, it has been Anil’s desire to buy a car.’

(172) Background: Same as 171.

*Onil-er Onekdin dhore Ek-Ta gari ken-a-r icche*  
Anil-GEN long time for one-CLF car.ACC buy-GER-GEN desire  
*ach-e*  
have.PRS-3

‘For a long time, it has been Anil’s desire to buy a car.’

(173) Background: Anu’s exam was over last month and she is quite bored sitting at home because all her friends have been travelling and she feels like going for a holiday somewhere far away.

*onu-r onekdin dhore kothao ghur-te je-te*  
Anu-GEN long time for somewhere travel-INF go-INF  
*icche ho-cch-e/kor-ch-e*  
desire happen-CONT.PRS-3

‘For a long time, the desire to go somewhere is happening to Anu.’

In examples (171) and (172) the subject for a long time (here the time is unspecified) possesses a desire of buying a car. In (173) for a long time the desire to go somewhere happens or occurs to the subject and in this temporal context the predicates *icche*, *icche ache*, *icche hOwa* and *icche kOra* are compatible.

### **Durational adverbs – ‘since’ adverbs**

Adverbs like ‘since forever’, and ‘since childhood’ carry the sense of a state which is ‘extended till now’. These types of adverbs have a starting point in the past that is continued till the time of utterance. These adverbials of time describe a prolonged unbroken state.

(174) Background: Anil is brought up by his mother alone. Anil's mother put in a lot of work to ensure that he could finish his education. They've always shared a

rented home with numerous other tenants. Anish desires that one day he will purchase an apartment and ease her mother's burdens.

*Onil<sub>k</sub>-er choTo theke icche je o<sub>k</sub> Ek-Ta*  
 Anil-GEN childhood since desire that.COMP he one-CLF  
*Epartment kin-b-e*  
 apartment.ACC buy-FUT-3

‘Since childhood, it is Anil’s desire that he will buy an apartment.’

(175) Background: same as 174.

*Onil-er choTo theke Ek-Ta Epartment ken-a-r*  
 Anil-GEN childhood since one-CLF apartment.ACC buy-GER-GEN  
*icche ach-e*  
 desire have.PRS-3

‘Since childhood, Anil has had a desire to buy an apartment.’

(176) Background: Same as 173.

*onu-r gOto maS theke kothao ghur-te je-te*  
 Anu-GEN last month since somewhere travel-INF go-INF  
*icche ho-cch-e/ kor-cch-e*  
 desire happen-CONT.PRS-3

‘Since last month, the desire to go somewhere is happening to Anu.’

In examples (174) and (175) ever since the subject realized his mother’s struggle in the rented place the subject carried the desire to buy an apartment for his mother hence *icche* and *icche ache* allow the adverbial modification. Sentence (176) conveys the sense that since last month the desire to go somewhere is happening or occurring to the subject, as her exams are over.

### In ‘when/whenever p q’ construction

‘When/whenever p q’ constructions are the subordinate temporal clauses. They are the most vital test applied in the individual-level and stage-level dichotomy. When-conditionals are sentences where the when-clause does not set a topic time, as in ‘When I was a kid,’, but rather serves as a protasis (i.e. the subordinate clause of a conditional sentence). According to Chierchia (1995) and Kratzer (1995), if a predicate considered as individual-level appears in a when clause, would end by denoting a transient property, and then it would be classified as stage-level. In a sentence like, ‘When John worked as an intern, he was intelligent’ the individual-level predicate ‘intelligent’ turns into a stage-level predicate because it denotes a transient property of John. Let us now observe how the desire predicates *icche* (with the light verbs) behaves in this context.

(177) Background: Anu’s ancestral home is in Doars (North Bengal) and monsoon there is very beautiful. Whenever the season of rain arrives, she feels like going to her native place.

<i>*jOkhoni</i>	<i>bOrSa</i>	<i>aSe</i>	<i>tOkhoni</i>	<i>onu<sub>k</sub>-r</i>	<i>icche</i>	<i>je</i>
whenever	monsoon.ACC	arrives	then	Anu-GEN	desire	that.COMP
<i>o<sub>k</sub></i>	<i>jOlpaiguri</i>	<i>ja-e</i>				
s (he)	Jalpaiguri.LOC	go-SUBJV				

(178) Background: Same as 177.

<i>*jOkhoni</i>	<i>bOrSa</i>	<i>aSe</i>	<i>tOkhoni</i>	<i>onu-r</i>	<i>jOlpaiguri</i>
whenever	monsoon.ACC	arrives	then	Anu-GEN	Jalpaiguri.LOC
<i>ja-wa-r</i>	<i>icche</i>	<i>ach-e</i>			
go-GER-GEN	desire	have.PRS-3			

(179) Background: Same as 177.

<i>jOkhoni</i>	<i>bOrSa</i>	<i>aSe</i>	<i>tOkhoni</i>	<i>onu-r</i>	<i>jOlpaiguri</i>	<i>je-te</i>
whenever	monsoon.ACC	arrives	then	Anu-GEN	Jalpaiguri	go-INF
<i>icche</i>	<i>hO-e/ kOr-e</i>					
desire	happen.PRS-3					

‘Whenever the season of monsoon arrives, the desire to go Jalpaiguri (her native place) happens/occurs to Anu.’

The predicates *icche* and *icche ache* convey the desire for something exists in the individual and it is a permanent emotional property. Quite expectedly a context of the ‘when’ clause that indicates a stage and induces a momentary reading, hence *icche* and *icche ache* as shown in (177) and (178) cannot occur. On the contrary in (179) *icche hOwa* and *icche kOra* can occur in a when clause where the desire (for something) happens or occurs to the subject when monsoon arrives. .

### **Progressive aspect test**

The predicates *icche* and *icche ache* are not sensitive to the progressive aspect test. On the contrary, *icche hOwa* and *icche kOra* are sensitive to the tests which can contribute aspectually. In the example below *icche hOwa* and *icche kOra* take the progressive form to convey the sense that the desire is happening or occurring to the subject in the present moment.

(180) Background: Mary is not a big fan of dumplings. She only craves them while she is in Darjeeling because the place is well known for its dumplings.

<i>mary-r</i>	<i>darjeeling-e</i>	<i>eSe</i>	<i>momo</i>	<i>khe-te</i>
Mary-GEN	Darjeeling-LOC	come	dumplings.ACC	eat-INF
<i>icche</i>	<i>ho-cch-e/ kor-ch-e</i>			
desire	happen-CONT.PRS-3			

‘In Darjeeling the desire to have dumplings is happening / occurring to Mary now.’

Table 9 presents a chart that illustrates the spatiotemporal patterns of the desire predicates. The chart indicates that the predicates *icche* and *icche ache* can only be modified by the durational adverbs of time. Durational temporal adverbs such as ‘since forever’, ‘for a long time’, and ‘since childhood’ convey the idea of an ‘extended now’, in which there is no discontinuity and the beginning point of a state is extended to the moment of utterance. The predicates *icche* and *icche ache* function as a homogeneous state that is not limited by time. Conversely, the predicate *icche hOwa* and *icche kOra* can be modified by spatial and temporal modifiers; therefore, it exhibits characteristics of a non-homogenous state and can, therefore, be bounded by a certain amount of time.

Table 9: Spatiotemporal modifications and the desire predicates

<b>Temporal modifiers</b>	<i>icche</i>	<i>icche ache</i>	<i>icche hOwa / kOra</i>
Cardinal adverbs	✗	✗	✓
Frequency adverbs	✗	✗	✓
when(ever) p q constructions	✗	✗	✓
Since adverbs	✓	✓	✓
For adverbs	✓	✓	✓
<b>Progressive aspect test</b>	n.a	n.a	✓
<b>Locative modifiers</b>	✗	✗	✓

### 5. 3 Gappy state: (non)subinterval properties of the predicates

This section concentrates on investigating the first objective of our work which is determining the interval and subinterval properties of *icche*, *icche ache*, *icche hOwa* and *icche kOra*. In the previous section, we have shown the locative and temporal distribution of the predicates, which are tests crucial for determining individual-level and stage-level predicates. This spatiotemporal patterning of the predicates shows certain interesting aspects regarding stative (desire) predicates in Bangla- the existence of ‘gappy’ and ‘non-gappy’

states. As seen above the predicates *icche hOwa* and *icche kOra* incorporate ‘gaps’ on a timeline while occurring with frequency adverbs like *majhe majhe* ‘sometimes’ and *praei* ‘often’. These temporal adverbials also indicate certain interval properties of the predicates. Therefore, before delving into the properties of ‘gaps’ and ‘non-gaps’ in a state we need to understand concepts like stative verb phrases, subinterval verb phrases, and nonstative, nonsubinterval verb phrases proposed by Bennett and Partee (2004). They divided verbs into three categories, according to the literature; stative verb phrases, subinterval verb phrases, and nonstative, nonsubinterval verb phrases.

**Stative** verb phrases are verb phrases that do not take the progressive form. Verb phrases like ‘be happy’, ‘love Marry’, and ‘believe that Mary walks’ – are purely stative.

**Subinterval** verb phrases have the property that if they are the main verb phrase of a sentence which is true at some interval of time ‘I’, then the sentence is true at every subinterval of ‘I’ including every moment of time in ‘I’. Examples of subinterval verb phrases are: walk, breathe, walk in the park, and push a cart.

**Nonstative, non-subinterval** verb phrases are neither stative nor subinterval. Examples are ‘die’, ‘build a house’, ‘catch a fish’, ‘walk to Rome’, etc. Since they take the progressive form, they are nonstative. They are also non-subinterval. In a situation like ‘walk to Rome’, if it took an hour to walk to Rome then one did not walk to Rome within the first thirty minutes of the hour.

The next important argument revolves around the domain of the state verbs and their (non) subinterval properties. In temporal logic, different temporal elements or temporal adverbs as said above incorporate certain temporal properties. We will first define the concepts of subinterval and non-subinterval properties. Bennett and Partee (2004), claimed that if the main verb phrase of a sentence is true at some interval of time ‘I’, then the sentence

is true at every subinterval of 'I' including every moment of time in 'I'. State verbs convey subinterval properties. The concept of non-subinterval property explains that if the main verb phrase of a sentence which is true at some interval of time 'I', then the sentence need not be true at every subinterval of 'I' including every moment of time in 'I'. Since they take the progressive form, they are nonstative. They are also non-subinterval. In a situation like 'walk to Rome', if it took an hour to walk to Rome then one did not walk to Rome within the first thirty minutes of the hour. According to Bennett and Partee (2004) and Dowty (1977) truth values should be assigned to sentences relative to intervals of time rather than to moments of time i.e. a sentence is true for an interval of time if and only if it is true at every moment in that interval. Dowty (1977) also argues that there are sentences that fail to follow this paradigm and he initiated further discussions with achievement verbs. A sentence like 'John built the house' in exactly the interval of time 'I' do not follow that John built a house at every (or even at any) moment of time within the interval 'I', even though he did not build a house in any subinterval of 'I'. He reserved the terms 'wholistic' and 'non-subinterval' for achievement verbs. Dowty (1977) also comments on activity verbs and says that one can truthfully be said to have spent an hour at activities such as reading, working on mathematical problems, or playing the piano even though one did not engage in the activity at literally every moment within that hour.

According to Rescher and Urquhart (1971) many or most types of human activities can be characterized as processes of suitable sorts- walking, reading, eating, etc. It is fairly interesting to distinguish different types of temporal patterns involved. Suppose that a particular process or activity takes place in a certain interval of time. Then this process or activity can be the following types.

(i) Homogenous: The kind of activity or process that can go on at all times throughout the interval. Bathing oneself or flying a plane or riding a horse are homogeneous processes,

meaning the man who engages in these activities throughout an interval of time will engage in them during all subintervals.

(ii) Majoritative: An activity or process that can go on at most times throughout the interval. Writing a letter, for example, or working on a mathematical problem, or doing a crossword puzzle are activities that represent processes of this sort. It can be said to have spent a certain hour at these activities without having spent every second of that hour at them.

(iii) Occasional: An activity that can go on at some times throughout the interval. Situations like growing up or drinking wine or conversing on the telephone can be considered as occasional activities.

(iv) Wholistic: An activity that relates to the structure of the interval as a whole, with the result that if the process consumes a certain interval it cannot possibly transpire during any subinterval thereof. Activities like baking a cake or flying from New York to Los Angeles can be taken into consideration.

In Section 5.2 we have observed the spatiotemporal patterns of the desire predicate *icche*, *icche ache*, *icche hOwa* and *icche kOra*. These spatiotemporal modifications have initiated certain interesting aspect of state verbs in Bangla. The sense of ‘gappy’ and ‘non-gappy’ state in Bangla is the most significant aspect that has arisen from the temporal patterns of the predicates. The main query that now arises is how a state (of desire) communicates a sense of ‘gaps’. When the predicate *icche hOwa* and *icche kOra* appears with the frequency adverbs *majhe majhe* ‘sometimes’ and *praei* ‘often’, it conveys a ‘gappy state’ as observed in the above examples (157) and (165) repeated here as (181) and (182).

(181) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never

lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

*onu-r*                    *majhe majhe*    *sikkim*                    *je-te*                    *icche*  
 Anu-GEN                    sometimes                    Sikkim.LOC                    go-INF                    desire  
*hO-e /kOr-e*  
 happen.PRS-3

‘Sometimes, the desire to go to Sikkim happens/occurs to Anu.’

(182) Background: Same as 181.

*onu-r*                    *praei*                    *sikkim*                    *je-te*                    *icche*                    *hO-e /kOr-e*  
 Anu-GEN                    often                    Sikkim.LOC                    go-INF                    desire                    happen.PRS-3

‘Often, the desire to go to Sikkim happens/occurs to Anu.’

On the contrary, the predicates *icche* and *icche ache* don’t reflect any sense of discontinuity or ‘gaps’ as they cannot occur with frequency adverbs. They denote a sense of prolonged state by patterning with temporal adverbs like *choTo theke* ‘since childhood’ conveying that a state that persists indefinitely. The examples (174) and (175) are repeated here as (183) and (184) respectively.

(183) Background: Anil is brought up by his mother alone. Anil's mother put in a lot of work to ensure that he could finish his education. They've always shared a rented home with numerous other tenants. Anish desires that one day he will purchase an apartment and ease her mother's burdens.

*Onil<sub>k</sub>-er*                    *choTo*                    *theke*                    *icche*                    *je*                    *o<sub>k</sub>*                    *Ek-Ta*  
 Anil-GEN                    childhood                    since                    desire                    that.COMP                    he                    one-CLF  
*Epartment*                    *kin-b-e*  
 apartment                    buy-FUT-3

‘Since childhood, it is Anil’s desire that he will buy an apartment.’

(184) Background: Same as 183.

*Onil-er choTo theke Ek-Ta Epartment ken-a-r*  
 Anil-GEN childhood since one-CLF apartment.ACC buy-GER-GEN  
*icche ach-e*  
 desire have-PRS.3

‘Since childhood, Anil has a desire to buy an apartment.’

According to Vendler (1957) all stative verbs last for an indefinite period of time i.e. they show no change of phase (**q**) over a period of time (**t**). In examples (183) and (184), the subject’s desire to purchase an apartment has been present ever since he realized that his mother had sacrificed half of her life by staying in a rented place in a very small space. As a result, there is no break or discontinuity between the beginning and the end of her desire. Here, the subject either carries or possesses the desire. The sense of the state verb defined here is the Vendlerian state. According to Vendler (1957) states last for an indefinite period of time i.e. they show no change of phase (**q**) over a period of time (**t**). Somewhat like the Figure 9 below.

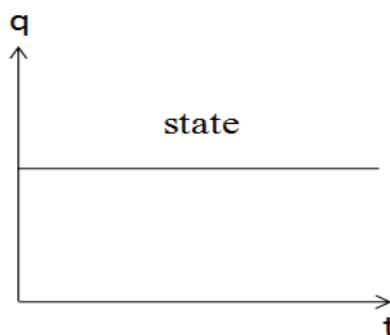


Figure 9: Vendlerian state

The subject in (181) and (182) frequently desires to visit her ancestor’s place in Sikkim, a gappy sense, or ‘gaps’ or ‘discontinuity’ in the state, is indicated when the frequency adverbs

occur with the predicate. As we can see in the context of *icche hOwa/ kOra*, the significance lies in a state's discontinuity and implied 'gaps'. Hence in Bangla, the implication of *icche hOwa* and *icche kOra* conveys that state verbs are capable of being 'broken' and they contend that context drives this aspect of gapping. We can conceptualize the 'gappy' state through Figure 10 below.

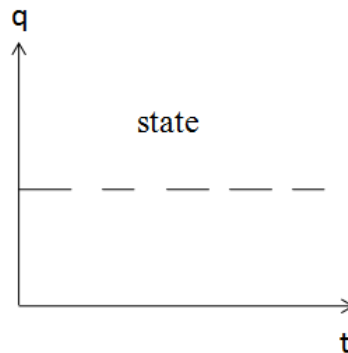


Figure 10: Gappy states

It has been suggested by Gabbay and Moracsik (1980) that there are two special classes of verbs that do not entail change of phase over time, they look like stative verbs but they denote 'gaps' in a timeline. One of these is the class of verbs describing position, for example, 'sit', 'stand', 'lie', etc. The other class is the verbs of attention er, 'watch', 'look', 'wait', and 'hope'. A sentence like (185) below, does not exclude John stepping away for a few seconds.

(185) Source: Gabbay and Moracsik (1980)

John watched for fires from the tower.

Gabbay and Moracsik (1980) considered the state of being sick and said it is not true that any two states of sickness add up to a state of sickness. 'If someone is sick over a period of time, then he is in that state also over most if not all of the parts of the state. According to them, verbs like these can be 'broken'. If we consider the state of being 'sick' imagine a context where the patient is in a coma, meaning the person will remain in a prolonged state of

deep unconsciousness. In a situation like this, the state will hold for an indefinite amount of time with no gaps. Therefore, the gaps and non-gaps defined by Gabbay and Moracsik (1980) are somewhat context-dependent. Our aim is to go by interpretations that are not context-dependent, but are lexical stative predicates. Therefore we concentrate on the lexical elements like *icche hOwa* and *icche kOra* which implies gaps.

After understanding the concept of subinterval and non-subinterval properties we now need to determine the interval properties of *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. We can gather from examples (181) and (182) that *icche hOwa* and *icche kOra* exerts ‘gaps’ or discontinuities and thereby they are non-subinterval. In examples (183) and (184) the sense of gappy state conveys that if a state holds for an interval of time then it is not the case that it holds for every moment of time in that interval. If the desire that happens or occurs to the subject holds for an interval of time then it is not the case that it holds for every moment of time in that interval. Conflictingly, in (183) and (184) above the predicates *icche* and *icche ache* implies no gaps and hence they exert subinterval properties. If the state holds for an interval of time then it holds for the entire interval and in all the subintervals. If the desire that the subject possesses holds for an interval of time then it holds for the entire interval (for every subinterval and every moment of time). As *icche* and *icche ache* signifies no ‘gaps’ and cannot be ‘broken’, it is therefore a prolonged state.

#### **5.4 Formalization of gappy and non-gappy states through intervals and subintervals**

We have reached the stage where we can provide a mathematical formalization for gappy states and non-gappy states. We will now introduce the components of interval semantics with the help of which we will formalize the gappy and non-gappy states. Implicating temporal (interval) logic in the language is a well-discussed area. In interval logic, the

moment is conceptualized as the intersection of two adjacent intervals. In interval maths the way in a number line we measure time by dividing the number line into equal intervals, in a similar way in a horizontal line representing time we can point to the three main areas of temporal attribution in speech i.e. the present, past, and future. Reichenbach (1947) introduces terms like ‘speech time’ (ST) which is the time of the utterance i.e. the present moment, the ‘event time’ (ET) the time when the event takes place and the ‘reference time’ (RT) which is as same as the ‘topic time’ (TT) termed by Klein (1994) means the time which the sentence is about. Observe the figures below (12-14), signifying a timeline denoting the present time, past time, and future time. Here we are following the paradigm defined by Bennett and Partee (2004), where ‘ $p$ ’ is the present moment or time of utterance.

### Simple present

A sentence like ‘she works in a bank’ is true at a time  $p$  iff  $p$  is the present moment or the time of utterance. In the figure below, the time  $p$  is the time representing the present moment or the time of utterance and the sentence is true at  $p$

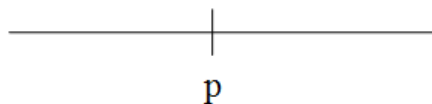


Figure 11: Timeline denoting present time

### Simple past

A sentence like ‘she worked in a bank’ is true at a time  $p$  if and only if there exists a time  $t$  such that  $t < p$  and ‘she works in a bank’ is true at  $t$ . In the figure below  $t$  is the time that precedes the utterance time  $p$  and the sentence is true at  $t$ .

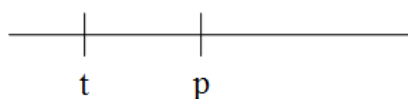


Figure 12: Timeline denoting past time

## Simple future

A sentence like ‘she will work in a bank’ is true at time  $p$  if and only if there exists a time  $t$  such that  $p < t$  and ‘she works in a bank’ is true at  $t$ . In the figure below  $t$  is the time which is after the utterance time  $p$  and the sentence is true at  $t$ .

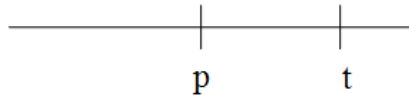


Figure 13: Timeline denoting future time

The present, past, and future are the fundamental and elementary aspects of temporality in language. Things get a bit complex when we talk about temporal intervals and try to find the truth/falsity of a sentence based on that. As mentioned above Bennett and Partee (2004) and Dowty (1977) talk about the interval-based approach and they defined the concept of time and intervals, while doing that they argued that to give an adequate analysis of tense and aspect a sentence should be judged relative to intervals and not moments of time. According to them, it is not reasonable to judge a sentence like ‘John builds a house’ in terms of moments. There is a little plausibility in thinking that ‘John builds a house’ is true at a moment of time when he completes the house i.e. the moment he drives in the last nail. If someone says ‘John built a house last month’ we don’t ask which day or at which specific time he did it.

According to Bennett and Partee (2004) frequency temporal adverbials like ‘sometimes’ and ‘often’, cannot occur with state verbs but in Bangla, we have shown above in examples (181) and (182) that adverbs like *majhe majhe* ‘sometimes’ and *praei* ‘often’ they can occur with *icche hOwa* and *icche kOra* ‘the desire happens/occurs’. We are going to analyze these frequency adverbs in terms of temporal intervals. In examples (181) and (182) the desire happens to the subject sometimes i.e. if the desire that happens is true in an interval (I) then it

does not necessarily happens at every subinterval (I') present in that interval. From the examples below we would try to derive the idea of intervals and subintervals through temporal adverbs in association with desire predicates.

(186) Background: The subject has been diagnosed with diabetes and one of the major symptoms of it is having hunger pangs (feeling of extreme hunger).

*amar dupurbela-e kichukkhon pOr pOr kichu khe-te icche*  
 I.GEN afternoon.LOC sometime after something eat-INF desire  
*hO-e/ kOr-e*  
 happen.PRS-3

‘In the afternoon, the desire to eat something happens or occurs to me after every few minutes.’

In example (186) we have two temporal modifications; one is *dupurbelae* ‘in the afternoon’ and the second one is *kichukkhon pOr pOr* ‘after every few minutes’. We have an interval and then we have subintervals within that interval. The temporal modifier *dupurbelae* ‘in the afternoon’ is the interval and with that interval there are subintervals. We need to incorporate *kichukkhon pOr pOr* ‘after every few minutes’ that represents some of the subintervals at which the desire of the subject happens. Through Figure 14 below we can explain the ‘gappy’ property in a timeline.

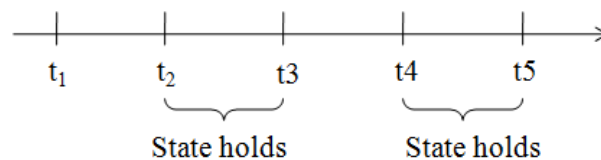


Figure 14: The gappy property shown through interval and subintervals

We have represented the intervals as t1, t2, t3, t4, and t5. Now the sense of *kichukkhon pOr pOr* ‘after every few minutes’ conveys that if a state holds for an interval of time then it is not the case that it holds for every subinterval in that interval. If an interval I contains

subintervals, then the state holds for some subintervals (I'). In Figure 14, the state holds for [t2, t3], [t4, t5]. The state does not hold at [t1, t2] and [t3, t4]. The formalization of *kichukkhon pOr pOr* signifying gaps is exemplified below in (187). The formal notation in (187) also conveys the semantics of a gappy state<sup>10</sup>.

$$(187) \text{ [[kichukkhon pOr pOr]]}^{m,g,I} = \lambda P_{\langle i,t \rangle} . \lambda I_{\langle i \rangle} . \exists I'_{\langle i \rangle} [I' \subset I \wedge |I'| < |I| \wedge P(I')]$$

The meaning of these temporal elements will carry some flavor of intervals and subintervals on which they incorporate quantification. Hence the interval properties of temporal adverbials that signify gaps like *kichukkhon pOr pOr* ‘after every few minutes’ *majhe majhe* ‘sometimes’, *praei* ‘often’, signify ‘existential’ quantification over the subintervals (I') as it bears the non-subinterval property. The formalization in (187) reads as, the temporal adverb that carries the sense of gaps takes a proposition (P) and an interval (I), so for some subintervals (I') present in I and I' is the subset of I and the cardinality of |I'| is less than |I| and P is true in I'.

The ‘gaps’ indicated by the predicate *icche hOwa* and *icche kOra* are understood to exert a concept of a ‘broken’ or ‘discontinuous’ state. The predicates can also reflect continuous temporal properties i.e. there can be contexts where the subject experiences a continuous desire that happens at all times. Follow the example below.

(188) Background: Megha is very creative and passionate about her work. She has a curious mind and she always desires to learn something new and be better and better in her field of work.

<i>megha-r</i>	<i>SObSomOy</i>	<i>notun</i>	<i>kichu</i>	<i>Sikh-te</i>	<i>icche</i>	<i>hO-e /kOr-e</i>
Megha-GEN	always	new	thing.ACC	learn-INF	desire	happen.PRS-3

<sup>10</sup>The frequency adverb *praei* ‘often’ will have a similar formal notation.

‘The desire to learn something new always happens or occurs to Megha.’

The subject in (188) experiences a constant desire to learn something new always. The use of *sObsomOy* creates the impression of a continuous state, meaning that the desire happens at all times. Thus, when an adverbial such as *sObsomOy* modifies the predicate *icche hOwa* and *icche kOra*, it brings a reading of a state that occurs in every instant of time within an interval. If the state holds for an interval of time then it occurs for the entire interval (for every moment of time in that interval). Hence as observed *icche hOwa* and *icche kOra* imbibe properties of both non-gaps and gaps in a timeline. The interest still revolves around the gappy nature of the stative predicates as a state verb implying gaps is a new aspect that we have observed and investigating the reason is vital.

The predicate *icche* and *icche ache* on the other hand implies no gap and as said above in Section 5.3 conveys a prolonged state as seen in examples (183) and (184). Temporal adverbs like *choto theke* ‘since childhood’, and *Onekdin dhore* ‘for a long time’ convey a prolonged state where the subject carries or possesses the desire. The formalization of *Onekdin dhore* ‘for a long time’ signifying non-gaps is exemplified below in (189). The formal notation in (189) also conveys the semantics of a non-gappy state that holds for adverbials like *choto theke* ‘since childhood’.

$$(189) [[Onekdin dhore]]^{m.g.I} = \lambda P_{\langle i,t \rangle} . \lambda I_{\langle i \rangle} . \forall I'_{\langle i \rangle} [I' \subseteq I \wedge |I'| = |I| \wedge P(I')]$$

This non-gap state of *icche* and *icche ache* triggers a universal quantification and the non-gappy sense and hence the adverb *Onekdin dhore* ‘for a long time’ takes a proposition (P) and an interval (I), so for all subintervals (I') in I and I' is the improper subset of I and the cardinality of |I'| is same as |I| and P is true in I'.

Bennett and Partee (2004) claimed that the state cannot have a progressive aspect. In the above section, we have already established the fact that the desiderative predicates *icche*

*hOwa* and *icche kOra* can accommodate frequency adverbs and can also bear the progressive aspect. Observe the example below where *icche hOwa* and *kOra* allows a temporal adverb and take the progressive form.

(190) Background: Background: Mary is not a big fan of dumplings. She only craves them while she is in Darjeeling because the place is well-known for its dumplings.

<i>mary-r</i>	<i>darjeeling-e</i>	<i>eSe</i>	<i>Ekhon</i>	<i>momo</i>	<i>khe-te</i>
Mary-GEN	Darjeeling-LOC	come	now	dumplings.ACC	eat-INF
<i>icche</i>	<i>ho-cch-e/kor-ch-e</i>				
desire	happen-CONT.PRS-3				

‘In Darjeeling, the desire to have dumplings is happening/occurring to Mary now.’

In the above examples we say that these state verbs in Bangla take the progressive form and in a sentence (190) the verb is modified by the temporal element *Ekhon* ‘now’. In a timeline ‘now’ and the progressive form signifies a moment i.e. the present moment which is the time of utterance. So the sentence (190) holds true at I if I is the present moment of time and there exists an interval (I’) such that I is in the interval (I’) and the sentence is true at (I). Figure (15) explains the interval reading by the temporal modification and (190) shows the formalization of the temporal element *Ekhon* ‘now’.

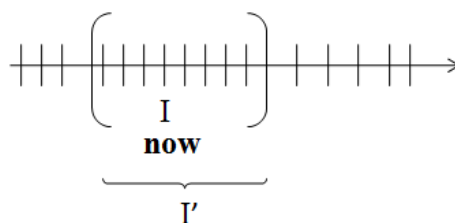


Figure 15: Bangla state verbs in progressive

(191)  $[[Ekhon]]^{m,g,I} = \lambda P_{\langle i,t \rangle}. \lambda I'_{\langle i \rangle}. \exists I_{\langle i \rangle} [\text{now}(I) \wedge I \in I' \wedge P(I)]$

The temporal adverb *Ekhon* ‘now’ takes a proposition (P) and an interval (I’), there exists a moment of time (I) which is the present moment, and the moment of time (I) is in the interval (I’) and P is true in (I).

### 5.5 The state of desire exists versus the state of desire occurs: understanding the semantics

The above discussions on the dichotomies of the predicates trigger a problem area that denotes the lexical composition of the predicates *icche*, *icche ache* versus *icche hOwa* and *icche kOra*. The (in)compatibility of the temporal adverbials in terms of these aforementioned desire predicates is the result of a cause. It triggers a basic semantic difference between the predicates *icche*, *icche ache* versus *icche hOwa* and *icche kOra*. Observe the examples (152) and (153) repeated here as (192) and (193) and example (156) as (194) below.

(192) Background: Anil is brought up by his mother alone. Anil's mother put in a lot of work to ensure that he could finish his education. They've always shared a rented home with numerous other tenants. Anish desires that one day he will purchase an apartment and ease her mother's burdens.

*Onil<sub>k</sub>-er icche je ok Ek-Ta Epartment*  
 Anil-GEN desire that.COMP he one-CLF apartment.ACC

*kin-b-e*

purchase-FUT-3

‘It is Anil’s desire that one day he would purchase an apartment.’

(193) Background: Background: Same as 192.

*Onil-er Ek-Ta Epartment ken-a-r icche*  
 Anil-GEN one- CLF apartment.ACC purchase-GER-GEN desire  
*ach-e*  
 has.PRS-3

‘Anil has a desire to purchase an apartment one day.’

(194) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

*onu-r sikkim je-te icche hO-e /kOr-e*  
 Anu-GEN Sikkim.LOC go-INF desire happen.PRS-3

‘The desire to go to Sikkim happens/occurs to Anu.’

The aforementioned examples demonstrate how the two forms of expression; *icche* and *icche ache* versus *icche hOwa* and *icche kOra* convey different meanings. Specifically, the former expresses the existence of a desire while the latter indicates that the desire happens / occurs to the subject. The difference can only be attributed by showing the composition of the predicate *icche* and the light verbs *hOwa* and *kOra*. In the current scrutiny, the light verb's presence and absence is extremely crucial as they will help us understand the compositional semantics of *icche hOwa/kOra*.

As light verbs play a significant role in our study we need to look at the meaning-bearing capacities of the light verbs from a semantic standpoint. As mentioned in Chapter (2), in the context of South Asian languages, the issue of complex predicates is largely well-defined. One particular type of complex predicate that has received less attention is when noun and verb constructions (also known as N+V complex verbs) are involved. In South Asian languages complex predicates have majorly been analyzed as a single unit, hence we have not

witnessed works concentrating on the compositional nature of complex predicates in the context of formal semantics. The scholarly works of Dasgupta (1989), Chatterjee(2014), Davison (2005), Butt and Ramchand (2005), and Butt (2010), defined complex predicates from a syntactic viewpoint. In compound verb construction typically, a verb is combined with another verb, and in the case of conjunct verbs a nonverb is combined with a verb. The conjunct verb formations involve the occurrence of a light verb with a noun, adjective, or adposition. The common element in VV and NV constructions is the presence of the light verb. Butt and Ramchand (2005), and Butt (2010) argued that in VV constructions light verbs are characterized in via aspectual terms like perfectivity, or inception/completion. In Butt and Ramchand (2005) the semantics of light verbs that are discussed in the above-mentioned works in the context of VV constructions convey the meaning of ‘let’ type and ‘result’ type. Consider the following examples.

(195) The Let Type

Source: Butt and Ramchand (2005)

<i>anjUm-ne</i>	<i>sAddAf=ko</i>	<i>xAt</i>	<i>lik<sup>h</sup>-ne</i>
Anjum.F=ERG	Saddaf.F=ACC	letter.M.NOM	write-INF.OBL

*di-ya*

give-PERF.M.SG

‘Anjum let Saddaf write a letter.’

(196) The Result Type

Source: Butt and Ramchand (2005)

<i>nadya-ne</i>	<i>xAt</i>	<i>lik<sup>h</sup></i>	<i>li-ya</i>
Nadya.F-ERG	letter.M.NOM	write	take-PERF.M.SG

‘Nadya wrote a letter (completely).’

(197) The Result Type (Bangla)

Source: Butt and Ramchand (2005)

*ruma*            *ci<sup>h</sup>i-ta*            *lik<sup>h</sup>-e*            *p<sup>h</sup>ello*  
Ruma.NOM    letter-CLF    write-PERF PART    throw.3.PST

‘Ruma wrote the letter completely.’

According to Butt and Ramchand (2005), the examples above describe the meaning potential of the light verbs discussed in the mentioned works. In example (195) the light verb with the main predicate conveys the meaning of ‘write-let’. In (196) and (197) the semantics of the light verb conveys a sense of completion, hence a result type. According to Butt and Geuder (2001), there are two important and critical points that we should take into account when discussing the semantics of complex predicates: First, we should address how the light verb construction should be interpreted; and second, how the semantic contribution of the light verb is taken care of. When we come to the semantic composition of the predicates *icche*, *icche ache* versus *icche hOwa* and *icche kOra*, we will focus on these two points. In conjunct verb constructions, the semantics of the light verbs in terms of noun and verb complex predication explicate different situations.

The predicates *icche* and *icche ache* are used in the sense that either the subject possesses the desire or the desire exists. Contrarily, *icche hOwa* and *icche kOra* are used to communicate the sense that the desire (for something) happens or occurs to the subject. The works on complex predicates as mentioned in Chapter 2 have extensively been from the perspective of situation type and temporality. In this thesis, we aim to add another aspect, namely the composition of the light verbs with the individual-level and stage-level dichotomy. We claim that *icche* and *icche ache* imply restriction towards spatiotemporal modifications and hence they are individual-level predicates, whereas, *icche hOwa* and *icche kOra* allow spatiotemporal modifications and are therefore categorized a stage-level

predicates. The next section of our analysis will concentrate on this factor and the compositional semantics.

## **5.6 Analyzing Bangla desire predicates in terms of the individual-level and stage-level dichotomy**

As mentioned in Chapter 2 the major distinction between individual and stage-level dichotomy is their respective behaviours in the contexts of spatiotemporal modifications. Individual-level predicates are permanent properties of individuals i.e. they are not sensitive to time and space. Stage-level predicates are things that happen and hence they are modified by space and time. Before delving into the intricacies of Bangla we need to have an idea about some of the works done in other languages regarding state verbs in the line of individual-level (henceforth, ILP) and stage-level (henceforth, SLP) distinctions. The works done so far (Carlson G. N., 1977; Stump, 1985; Diesing, 1988; Kratzer, 1995) preached the concept that individual-level predicates and stage-level predicates revolve around the copular constructions. Even the work of Gonzalez -Vilbazo & Remberger (2005) concentrates on the two copular constructions of Spanish ‘ser’ and ‘estar’ and establishes the stage and individual level distinction. Stage-level predicates were also discussed in the context of absolute constructions in Spanish (Hernanz, 1991; Aparicio, 1992; Fernandez Leborans, 1995). A decent portion of work has been done based on the copular verbs in some languages. Gonzalez -Vilbazo & Remberger (2005) regarding the Spanish copular verbs argued that the SLP/ILP-distinction seems to find its overt realization. The use of the Spanish verb ‘ser’ is usually connected to ILP characteristics, the use of ‘estar’ to the SLP phenomenon. Spanish uses ‘ser’ when the intended interpretation is ILP and ‘estar’ if the interpretation is SLP. The relevance of the two Spanish copulas ‘ser’ and ‘estar’ for the SLP/ILP distinction can be shown by the following examples. In example (198) the presence of ‘ser’ copula triggers the individual-level reading and in (199) the verb ‘esta’ reflects the stage-level sense.

(198) Source: Gonzalez-Vilbazo & Remberger (2005)

*ana es inteligente.* (ILP/ser) (Spanish)

Ana.NOM is-SER intelligent

‘Ana is intelligent.’

(199) Source: Gonzalez-Vilbazo & Remberger (2005)

*ana esta borracha.* (SLP/estar) (Spanish)

Ana.NOM is-estar drunk

‘Ana is drunk.’

They have proposed a minimalist account for the differences in semantic and syntactic behavior of ‘ser/estar’. They assumed an implicitly realized event argument for both SLPs and ILPs, which characterizes the spatiotemporal reference of the situation or eventuality expressed by the predicate. Gonzalez Vilbazo & Remberger’s (2005) work conveyed a syntactic perspective regarding tackling the structural position of the copulas.

According to Grinsell, Bochnak, Kennedy, & Yu, (2011), in Washo a linguistic isolate of the Lake Tahoe region of California and Nevada, copulas come in two forms one with a k- prefix and one without: k’eʔi ‘it is’, and ʔeʔi ‘it is’. They have discussed a possible morpho-syntactic explanation of the distribution of the prefix with a semantic explanation that the presence of the k- prefix tracks individual-level copular predications, while the absence tracks stage-level copular predications.

(200) Source: Grinsell, Bochnak, Kennedy, & Yu, (2011)

*tim rinu-waʃsilew k-ʔ-eʔ-i* (Washo)

Tim.NOM Reno-from K-3.SBJ-COP-IPFV

‘Tim is from Reno’.

(201) Source: Grinsell, Bochnak, Kennedy, & Yu, (2011)

*tim rinu-a ʔ-eʔ-i (Washo)*  
 Tim.NOM Reno-LOC 3.SBJ-COP-IPFV

‘Tim is in Reno’.

In example (200) the predicate ‘from Reno’ is an individual-level property, and Tim’s being from Reno is a time-stable property of his. Contrastingly, in (201), the predicate ‘in Reno’ is a stage-level property. They argued that k-marked copula corresponds with a stative interpretation of predicate. Their work aimed at presenting the pronominal paradigm of Washo with respect to copular constructions. Washo has a morpheme k- that transforms a stage-level copula into an individual-level copula.

The novelty of this work therefore aims to shed light on a new perspective i.e. to investigate how light verbs and their semantic influence in a conjunct verb construction reflects the dichotomy between individual-level and stage-level stative predicates. One vital distinction that stands as a significant criterion is the existential interpretation of the subject. As mentioned in Chapter 2 under Section 1.6, according to Carlson (1977) and Kratzer (1995), the basic language universal tests for differentiating between the individual and stage levels comply with the locative and temporal modifiers. This concept’s central thesis holds that the slice or zone of time and space in which an eventuality occurs is referred to as a stage-level predicate. In order to distinguish between the two and get a more conclusive result we must run the bare plural NP test. Stage-level predicates explain both the generic and existential reading in the context of "bare plural" subjects, whereas individual-level predicates only allow for the generic reading. In Bangla, examples (202-203) describe the circumstances.

(202) *meye-der icche tara likh-te ar por-te Sikh-b-e*  
 girl-PL desire they write-INF and read-INF learn-FUT-3

‘Girls desire that they will learn how to read and write’. (generic)

- (203) *deS-er chele meye-der moddhe Onek kichu jan-a-r*  
country-GEN boys girl-PL within many things know-GER-GEN  
*icche ach-e*  
desire have.PRS-3

‘The boys and girls of our country possess a desire to know many things.’ (generic)

- (204) *meye-der lekha pOra Sikh-te icche hO-e / kOr-e*  
girl-PL read and write learn-INF desire happen.PRS-3

‘There exist girls who desire to learn how to read and write’. (existential reading)

‘Girls desire that they will learn how to read and write’. (generic)

Stage-level predicates explain both the generic and existential reading in the context of "bare plural" subjects, whereas individual-level predicates only allow for the generic reading. In Bangla, examples (202-204) describe the circumstances. The term *icche* and *icche ache* in (202) and (203) can only refer to generic reading in the sense that girls (generally) have an innate desire to learn how to read and write. In (204) the predicate *icche hOwa* or *icche kOra* exerts a generic and existential reading. The existential reading provides support for a scenario in which there exist large sections of women whose lives are hindered in a country for social and educational reasons. At this stage, they feel that learning to read and write will improve their circumstances in life. Therefore, *icche hOwa* uses existential reading to convey the sense that there exist girls and that there are stages at which they experience the desire to learn to read and write. Yao (2010) claims that there are significant limitations to the indefinite subject NP test for the distinction between the individual and stage-level. According to him, an indefinite NP can only occur with an individual-level predicate if it can be construed as a kind or generic reading. Conversely, stage-level predicates are always

possible when the NP is indefinite. The predicates *icche*, *icche ache*, *icche hOwa* and *icche kOra* agree with this situation. To support our assertion that *icche* and *icche ache* are individual-level predicates while *icche hOwa* and *icche kOra* are stage-level predicates, we have carried out the language universal tests. As previously stated, the primary differentiation lies in the spatiotemporal adjustments, which suggest the inherent distinctions between the two predicates. Let us now move to the semantic composition of the predicates *icche*, *icche ache*, *icche hOwa* and *icche kOra*. It is important to understand the implications of the sentences mentioned below.

(205) Source: (Roychowdhury, Ghosh, & Karmakar, 2023)

Background: Meghna has a divine voice, and even without formal vocal training, she was able to sing brilliantly from a very young age. Her mother is very appreciative of this and she desires to see her daughter develop her talent with the right coaching.

*rita-r icche meghna gan Sikh-uk*

Rita-GEN desire Meghna.NOM music.ACC learn-SBJV.3

‘It is Rita’s desire that Meghna (her daughter) learns music.’

(206) Background: From an early age, Meghna has been captivated by music.

She even has a good voice without any formal vocal training. She possesses a desire for learning music with proper training.

*meghna-r gan Sekh-a-r icche ach-e*

Meghna-GEN music.ACC learn-GER-GEN desire have.PRS-3

‘I have a desire to learn music.’

As mentioned in Section 5.5 the difference between the way The way the sense of desire is communicated through the employment of the predicates *icche* and *icche ache*, and the sense of desire imposed by *icche hOwa* and *icche kOra* is different. In case of the former, the

individual possessess the desire for something. In the above examples (205) and (206) as an emotional property, the desire (for learning music) exists within the individuals. This gives us an individual-level interpretation of the predicates. An individual is composed of physical properties and likewise, they equally possess emotional/ mental state properties like anger, sadness, desire, shame, etc. These mental state properties are installed within the individuals, they exit and quite similarly *icche* and *icche ache* when occurs in a sentence conveying this sense of existence of desire. We can now delve into the semantic compositional tree for sentence (205) shown below in Figure 16. The node-by-node interpretation of the tree is given below from (a-d).

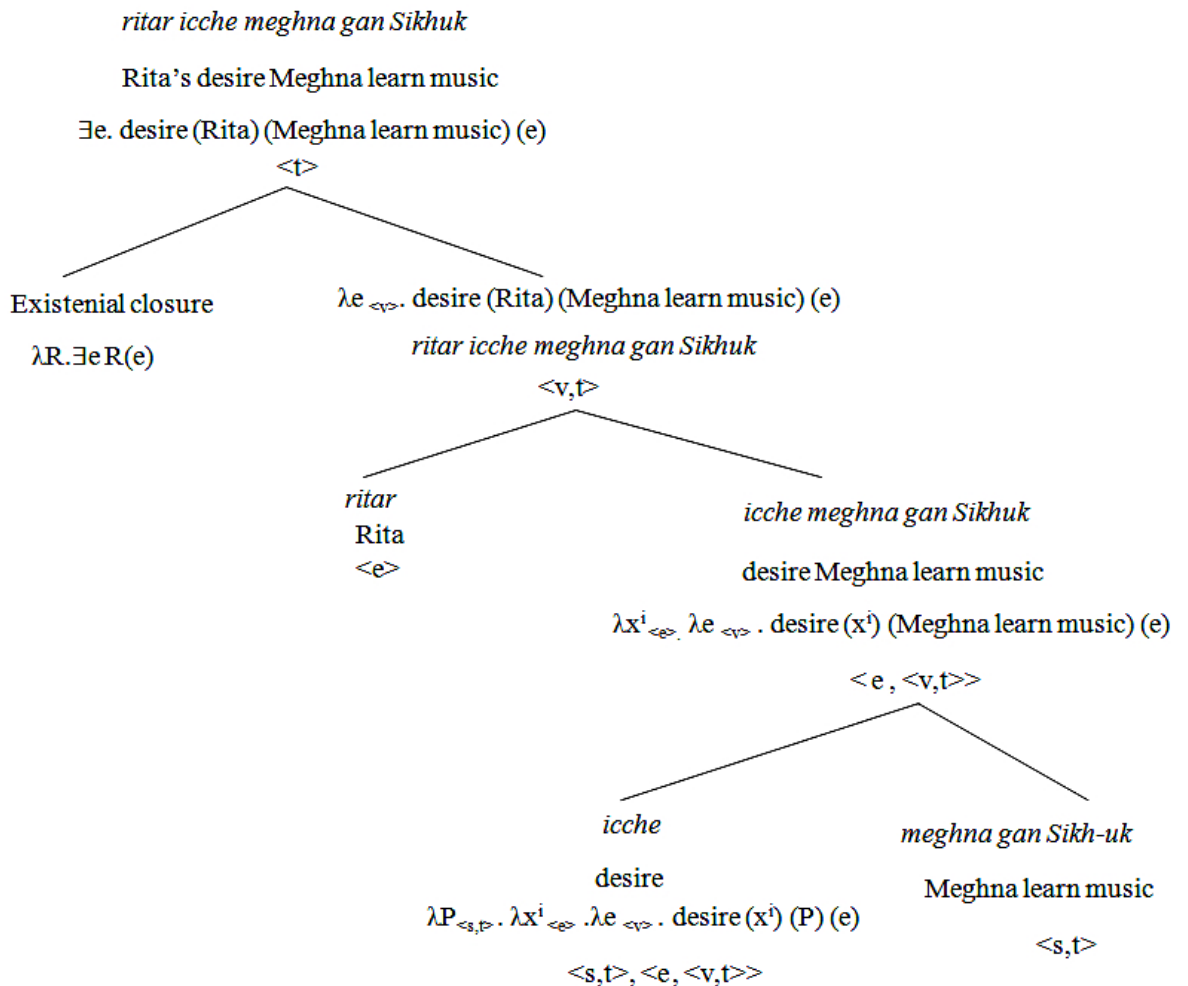


Figure 16: The syntactic-semantic composition of *icche* as an individual-level predicate

(a)  $[[icche]]^{m,g} = \lambda p_{\langle s, t \rangle}. \lambda x^i_{\langle e \rangle}. \lambda e_{\langle v \rangle}. \text{desire}(x^i)(p)(e)$

The predicate *icche* takes the proposition  $p$  of type  $\langle s,t \rangle$ , the individual level subject  $x^i$  (the superscript ‘i’ is for the individual level subject) of type  $\langle e \rangle$  and the eventuality variable  $e$  of type  $\langle v \rangle$ . It returns true iff the desire towards  $p$  is possessed by the individual level subject  $x^i$ .

(b)  $[[icche\ meghna\ gan\ Sikhuk]]^{m,g} = \lambda x^i \langle e \rangle. \lambda e \langle v \rangle. \text{desire}(x^i) (\text{Meghna learn music}) (e)$

By functional application  $p$  of type  $\langle s,t \rangle$  receives *Meghna gan Sikhuk* ‘Meghna learn music’ as its value.

(c)  $[[ritar\ icche\ meghna\ gan\ Sikhuk]]^{m,g} = \lambda e \langle v \rangle. \text{desire}(\text{Rita}) (\text{Meghna learn music}) (e)$

The individual level subject ‘Rita’ is composed with the resultant form and we are left with the unsaturated eventuality variable  $e$ .

(d)  $[[ritar\ icche\ meghna\ gan\ Sikhuk]]^{m,g} = \exists e. \text{desire}(\text{Rita}) (\text{Meghna learn music}) (e)$

The eventuality of type  $\langle v,t \rangle$  is closed by the existential closure to form  $\langle t \rangle$  and we get the sentential interpretation that read as; there exist an eventuality of desire possessed by the individual level subject Rita and Rita desires that Meghna learn music.

The semantic compositional tree for sentence (206) is shown in Figure (17). The node by node interpretation of the tree is given below (e-j)

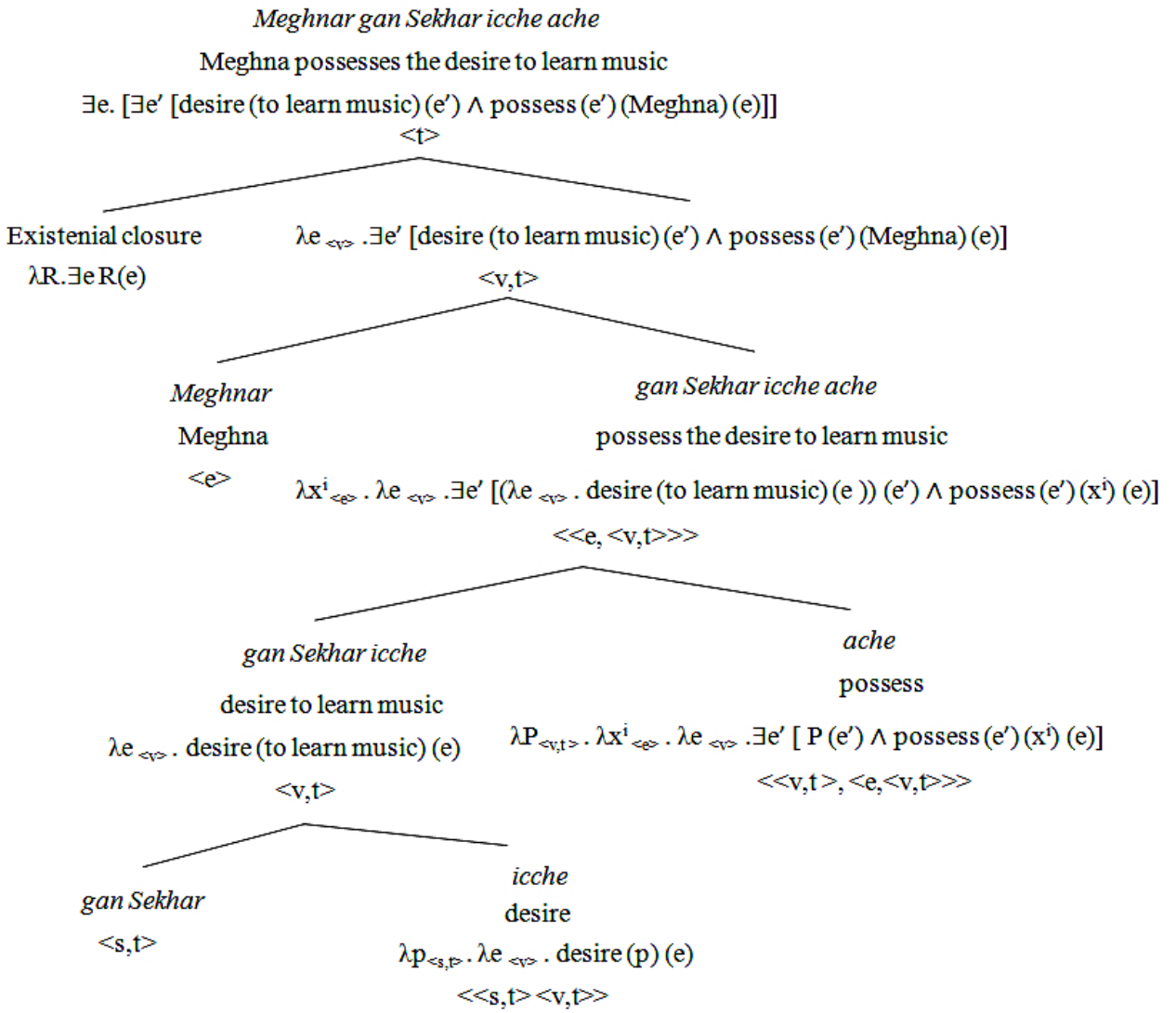


Figure 17: The syntactic-semantic composition of *icche ache* as an individual-level predicate.

(e)  $[[icche]]^{m,g} = \lambda p_{\langle s, t \rangle} . \lambda e_{\langle v \rangle} . \text{desire (p) (e)}$

The predicate *icche* takes the proposition  $p$  of type  $\langle s, t \rangle$  and the eventuality variable  $e$  of type  $\langle v \rangle$ . It returns true iff  $e$  is the eventuality of desire towards the proposition  $p$ .

(f)  $[[gan Sekhar icche]]^{m,g} = \lambda e_{\langle v \rangle} . \text{desire (to learn music) (e)}$

By functional application  $p$  of type  $\langle s, t \rangle$  is saturated when it receives *gan Sekhar* ‘to learn music’ as its value. We receive the interpretation that reads as; the eventuality of desire is to learn music, which is of type  $\langle v, t \rangle$ .

(g)  $[[ache]]^{m,g} = \lambda P_{\langle v, t \rangle} . \lambda x^i_{\langle e \rangle} . \lambda e_{\langle v \rangle} . \exists e' [P (e') \wedge \text{possess (e')} (x^i) (e)]$

The formal definition of ‘possess’ as a dyadic predicate is  $\lambda y. \lambda x^i. \lambda e. \text{Possess (y) (x}^i) (e)$ . The notation means if  $e$  is the eventuality of possessing then there is a possessor ( $x^i$ ) and

possessee (y) and y is possessed by the individual-level subject  $x^i$ . In our semantics for *icche ache*, when *ache* occurs with *icche* it generates the meaning that the desire for something is possessed by the individual level subject. The thing which is possessed by the individual level subject is the eventuality of desire (to learn music). In the node (g), to achieve the interpretation ‘the desire for something is possessed’ by the individual, *ache* ‘possess’ takes *gan Sekhar icche* ‘desire to learn music’ as a compliment. Therefore, *ache* takes the proposition P of type  $\langle v,t \rangle$ , individual level subject  $x^i$  of type  $\langle e \rangle$  and the eventuality variable e of type  $\langle v \rangle$ . It returns true iff e is the eventuality of possessing and there exist an  $e'$  such that  $e'$  is predicated of P and  $e'$  is possessed by the individual level subject  $x^i$ .

$$(h) [[gan\ Sekhar\ icche\ ache]]^{m,g} = \lambda x^i_{\langle e \rangle} . \lambda e_{\langle v \rangle} . \exists e' [(\lambda e_{\langle v \rangle} . \text{desire (to learn music) (e)}) (e') \wedge \text{possess (e') (x^i) (e)}]$$

The proposition P of type  $\langle v,t \rangle$  receives *gan Sekhar icche* ‘desire to learn music’ as its value by Functional application.

$$(i) [[Meghna\ gan\ Sekhar\ icche\ ache]]^{m,g} = \lambda e_{\langle v \rangle} . \exists e' [\text{desire (to learn music) (e')} \wedge \text{possess (e') (Meghna) (e)}]$$

The individual level subject ‘Meghna’ is composed with the resultant form and we are left with the unsaturated eventuality variable (e) of type  $\langle v,t \rangle$

$$(j) [[Meghna\ gan\ Sekhar\ icche\ ache]]^{m,g} = \exists e. [\exists e' [\text{desire (to learn music) (e')} \wedge \text{possess (e') (Meghna) (e)}]]$$

The eventuality type  $\langle v,t \rangle$  is closed by the existential closure to form  $\langle t \rangle$  and we get the sentential interpretation that read as; there exist eventualities e and  $e'$  such that  $e'$  is the event of desire to learn music and e is the eventuality of possessing, where the possessee is  $e'$  that is possessed by the individual level subject Meghna.

We can now move our argument towards the stage-level sense of *icche hOwa* and *icche kOra*. The sense of desire communicated by the implication of the predicates *icche hOwa/kOra* implies an occurrence and the occurrence is about the desire for something i.e. it is the desire (for something) that occurs to the individual. Observe example (194) repeated here as (207) for the convenience of discussion.

(207) Background: Anu's ancestors are from Sikkim in northeast India. Her parents moved to Kolkata when she was very young, so she has never lived there. Now that she is a grown-up, the desire to visit her ancestral home in Sikkim happens or occurs to her whenever she gets a break.

<i>onu-r</i>	<i>sikkim</i>	<i>je-te</i>	<i>icche</i>	<i>hO-e /kOr-e</i>
Anu-GEN	Sikkim.LOC	go-INF	desire	happen.PRS-3

‘The desire to go to Sikkim happens/occurs to Anu.’

As argued in Section 4.3 of Chapter 4, Dasgupta (2012) made a point that the light verb *kOra* in Bangla sheds its volitional or agentive sense in many conjunct verb forms shown in examples (145-149). The predicate *icche kOra* is one such complex conjunct verb form where *kOra* as a light verb is semantically bleached and both *hOwa* and *kOra* in conjunction with the predicate *icche* convey the sense of an occurrence of a desire. In example (207) the desire (for visiting Sikkim) occurs to the subject Anu. In our work we have considered ‘occur’ as a dyadic predicate, conveying the semantic sense that something occurs to someone. Let us delve into the semantic compositional derivation of (207) shown below in Figure 18. The node-by-node interpretation of the tree is given below (k-p).

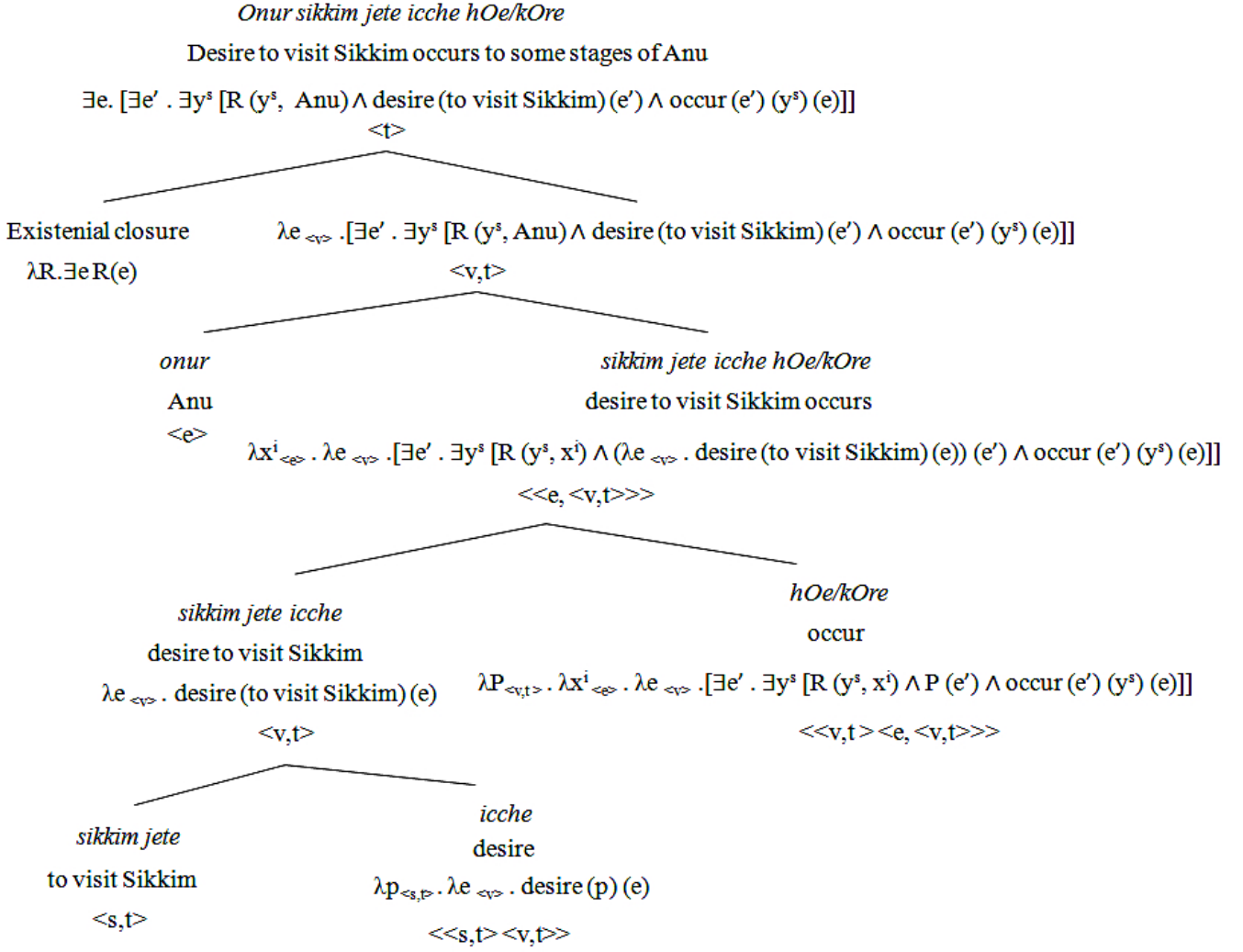


Figure 18: The syntactic-semantic composition of *icche hOe/kOre* as stage-level predicates

(k)  $[[icche]]^{m,g} = \lambda p_{\langle s, t \rangle} . \lambda e_{\langle v \rangle} . \text{desire}(p)(e)$

The predicate *icche* takes the proposition *p* of type  $\langle s, t \rangle$  and the eventuality variable *e* of type  $\langle v \rangle$ . It returns true iff *e* is the eventuality of desire is towards the proposition *p*.

(l)  $[[sikkim jete icche]]^{m,g} = \lambda e_{\langle v \rangle} . \text{desire}(\text{to visit Sikkim})(e)$

By functional application *p* of type  $\langle s, t \rangle$  is saturated when it receives *sikkim jete* ‘to visit Sikkim’ as its value. We receive the interpretation that reads as; the eventuality of desire is to visit Sikkim, which is of type  $\langle v, t \rangle$ .

(m)  $[[hoe / kOre]]^{m,g} = \lambda P_{\langle v, t \rangle} . \lambda x^i_{\langle e \rangle} . \lambda e_{\langle v \rangle} . [\exists e' . \exists y^s [R (y^s, x^i) \wedge P (e') \wedge \text{occur} (e') (y^s) (e)]]$

To achieve the interpretation that says ‘the desire for something that occurs is predicated to the stages of the individual’, *hOe/kOre* ‘occur’ needs to take *sikkim jete icche* ‘desire to visit Sikkim’ as a complement. Therefore, the formal interpretation reads as: occur takes a proposition P of type  $\langle v,t \rangle$ , an individual-level subject  $x^i$  of type  $\langle e \rangle$  and an eventuality variable e of type  $\langle v \rangle$ . It returns true iff there exist an eventuality  $e'$ , there exist stages of the individual  $y^s$  such that R is the relational function that relates stages of the individual  $y^s$  to the individual  $x^i$  and  $e'$  is predicated of P and the  $e'$  that occurs is predicated to the stages of the individual.

(n)  $[[sikkim\ jete\ icche\ hOe/kOre]]^{m,g} = \lambda x^i \langle e \rangle . \lambda e \langle v \rangle . [\exists e'. \exists y^s [R(y^s, x^i) \wedge (\lambda e \langle v \rangle . \text{desire (to visit Sikkim)})(e)) (e') \wedge \text{occur (e')} (y^s) (e)]]$

The proposition P of type  $\langle v,t \rangle$  receives *sikkim jete icche* ‘desire to visit Sikkim’ as its value by Functional application.

(o)  $[[onur\ sikkim\ jete\ icche\ hoe/kOre]]^{m,g} = \lambda e \langle v \rangle . [\exists e'. \exists y^s [R(y^s, Anu) \wedge \text{desire (to visit Sikkim)} (e') \wedge \text{occur (e')} (y^s) (e)]]$

The individual level subject Anu is composed with the resultant form and we are left with the unsaturated eventuality e of type  $\langle v,t \rangle$

(p)  $[[onur\ sikkim\ jete\ icche\ hoe/kOre]]^{m,g} = \exists e. [\exists e'. \exists y^s [R(y^s, Anu) \wedge \text{desire (to visit Sikkim)} (e') \wedge \text{occur (e')} (y^s) (e)]]$

The eventuality e of type  $\langle v,t \rangle$  is closed by the existential closure to form  $\langle t \rangle$  and we get the sentential interpretation that read as; there exist an eventuality e of occurrence, there exists eventualities e and  $e'$ , there exists stages of the individual  $y^s$ , such that R is the relational function that relates stages of the individual  $y^s$  to the individual Anu and  $e'$  is the ‘desire to visit Sikkim’ and  $e'$  occurs to the stages of the individual.

## 5.7 Conclusion

The major crux of the thesis revolves around the compositional semantics of the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. This chapter predominantly concentrates on the semantic intricacies of the predicates. The semantic dichotomy was triggered by the uneven distribution of the predicates in terms of spatiotemporality. The spatiotemporal properties of the predicates reflected their interval properties. The predicates *icche* and *icche ache* have subinterval properties. The predicates *icche hOwa* and *icche kOra* convey their gappy nature and therefore have non-subinterval properties. We have formalized the interval properties of the predicates via temporal (interval) logic. The result of the different temporal flavorings leads to analyzing the semantics of the predicates *icche*, *icche ache*, *icche hOwa*, and *icche kOra*. The semantic framework is incorporated in terms of the individual-level and stage-level dichotomy. We have shown *icche* and *icche ache* are individual-level stative predicates. Conflictingly, *icche hOwa* and *icche kOra* are stage-level stative predicates. The semantic sense of desire signified by *icche* and *icche ache* convey that the desire exists or the individual possessess the desire. In the context of *icche hOwa/kOra* the desire happens or occurs, which is predicated to the stages of the individual. To achieve this strident interpretation, the semantic compositions of the predicates are shown.

# Chapter 6

## 6. Conclusion

The study of desire predicates in Bangla, as examined in this thesis, has yielded significant insights into both the structural and semantic properties of these predicates. By focusing on the key desire predicates *icche* (desire) and its occurrences with light verbs—*icche ache*, *icche hOwa*, and *icche kOra*—the analysis has uncovered a complex interplay between semantics, and temporal structure. The desire predicates in Bangla, while superficially simple, reveal a sophisticated underlying structure that provides fertile ground for deeper linguistic inquiry.

### 6.1 Syntactic and Semantic Insights

The syntactic analysis of desire predicates has revealed that they occupy an essential position in Bangla sentence structure, functioning within a system of light verb constructions that are central to South Asian languages. The interaction of the predicates with light verbs such as *ach-* ‘have/possess’, *hO-* ‘happen’, and *kOr-* ‘to do’ shows how these verbs influence the semantic behavior of desire predicates. Specifically, the use of light verbs modifies the aspectual and temporal interpretation of the desire expressed. This research has confirmed that *icche* functions differently depending on the nature of the light verb with which it is associated. For instance, *icche ache* as a predicate indicates a state of possession of desire, while *icche hOwa* and *icche kOra* represent states where desire happens or occurs. The syntactic analysis revealed that *icche* and *icche ache* without light verbs behave as individual-level predicates, denoting more permanent or characteristic states, whereas *icche hOwa* and *icche kOra* function as stage-level predicates, expressing temporally bound states.

The study, in addition to this, demonstrated that the structure of desire predicates adheres to the broader syntactic principles observed in South Asian languages, particularly in relation to the use of complex predicates. The presence of light verbs contributes to the formation of

complex predicates, where the primary verb carries the core meaning, and the light verb adds grammatical and aspectual functions. This pattern is consistent across Bangla and other Indo-Aryan languages, further emphasizing the typological significance of these constructions.

The semantic analysis of desire predicates highlighted the nuanced meanings that emerge when these predicates are used in different contexts, particularly in combination with light verbs. While *icche* alone signifies a simple expression of desire, its combination with light verbs brings out various shades of meaning that reflect different types of desires and states of wanting. In relation to this, if we look at *icche ache*, we will see that it indicates a possessive state, suggesting that the speaker has a desire or a wish that exists as part of their internal state. In contrast, *icche hOwa* suggests that desire arises or occurs, marking it as a more transient and externally influenced experience. This research has uncovered the subtle semantic distinctions that arise when these desire predicates are temporally modified. The predicates *icche* and *icche ache* exhibit resistance to temporal modifications, consistent with their classification as individual-level predicates, which denote more stable or permanent states. On the other hand, *icche hOwa* and *icche kOra* accept temporal modifications, aligning with their stage-level status, as they denote temporally bound and contextually specific instances of desire.

Additionally, the study delved into the notion of ‘gappy’ and ‘non-gappy’ states, a concept that has added depth to the understanding of desire predicates in Bangla. It was found that *icche* and *icche ache* are associated with non-gappy states of desire, where the expression of desire is stable over time. In contrast, *icche hOwa* and *icche kOra* are gappy states, where desire is discontinuous, and signifies ‘gaps’ on a timeline. This semantic distinction is crucial for understanding how speakers of Bangla conceptualize and express desire across different contexts and temporal frameworks.

## 6.2. Temporal and Aspectual Properties

The role of temporality in the expression of desire has been another key finding of this thesis. Through detailed analysis, it was shown that desire predicates interact with time in ways that are consistent with broader linguistic theories of aspect and temporality. The interaction between desire predicates and temporal adverbs, for example, provided clear evidence of how different predicates align with specific temporal structures. The research also highlighted that while *icche* and *icche ache* resist temporal modification, reflecting their association with stable individual-level predicates, *icche hOwa* and *icche kOra* readily accept such modifications. This distinction aligns with theories of aspect in which individual-level predicates express more permanent states and stage-level predicates express temporary and transient states that are more sensitive to time and context. The distinction between gappy and non-gappy states also enhances the understanding of how temporality affects the interpretation of desire in Bangla.

In addition to the core semantic analysis, the study delved into the aspectual differences between the desire predicates, with particular attention to how the progressive aspect influences the interpretation of these predicates. Aspect, as a grammatical category, expresses how an action, event, or state unfolds over time. In the case of desire predicates, aspect plays a crucial role in determining whether the desire is viewed as a static state i.e. the state that exists or as an temporary state that happens or occurs. The progressive aspect in Bangla typically indicates an action or event that is in progress, ongoing, or unfolding at a particular moment in time. It highlights the dynamic nature of the action or event and contrasts with the simple aspect, which presents the action as a complete or static entity. When applied to desire predicates, the progressive aspect can drastically change the interpretation of desire, portraying it as something that is evolving or being experienced in real time rather than as a static internal state.

The thesis notes that, when the desire predicates *icche hOwa* or *icche kOra* are placed in the progressive aspect, they convey a sense of desire that is actively unfolding. This means that the speaker perceives the desire as something that is not only present but also developing or intensifying over time. The progressive form of *icche hOwa* and *icche kOra* could be translated as "the desire is occurring" or "the desire is happening," implying that the feeling of desire is emerging or growing within the speaker at that particular moment. This aspectual marking gives the predicates a more dynamic interpretation, emphasizing the temporality and evolving nature of the desire. In contrast, *icche* and *icche ache* are stable, representing a state of being or possession. Stative verbs and predicates typically describe situations or conditions that are static and unchanging, such as emotions, possession, or characteristics. These predicates do not normally take the progressive aspect because the concept of ongoingness or unfolding action is incompatible with their inherent stative nature. Applying the progressive aspect to a stative verb would create a semantic conflict, as it would imply that the state is somehow dynamic or in flux, which contradicts the stable, unchanging quality of the state itself. Here, *icche* and *icche ache*, expresses a steady, stable possession of desire. It implies that the speaker holds or experiences a desire as a stable part of their internal state. Since this is a non-dynamic situation, it would be semantically inappropriate to use the progressive aspect with this predicate. For instance, trying to construct a sentence like 'The desire is having' (*icche* and *icche ache* in progressive aspect) would be nonsensical, as it conflicts with the inherent meaning of *ache* (to have), which denotes a state that simply is, rather than something that happens or occurs. Therefore, they resist progressive aspectual marking because the progressive aspect, which requires dynamicity and temporal progression, does not align with the stative nature of this predicate.

This contrast between the predicates *icche* and *icche ache* versus *icche hOwa* and *icche kOra*, is significant because it highlights how aspectual choices in Bangla can influence the

perceived nature of desire. When the progressive aspect is applied to *icche hOwa* and *icche kOra*, it transforms the state of desire into an active, ongoing process, emphasizing its temporality and evolution. This makes the desire feel more immediate and unfolding, rather than static and fixed. The sense of desire communicated by *icche hOwa* and *icche kOra* implies the happening or occurrence of desire, making them stage-level stative predicates. On the other hand, *icche* and *icche ache* reinforces its interpretation as a stable, unchanging state of possession. The desire, in this case, is something that the speaker holds or possesses, without the need for temporal progression or unfolding action. This makes *icche* and *icche ache* feel more like a background state of being, a uninterrupted possession of desire that does not evolve or change over time. Therefore, the stable property of *icche* and *icche ache* makes them individual-level stative predicates.

### **6.3. Findings of the work**

One of the primary contributions of this thesis is to the study of complex predicates in South Asian languages. Complex predicates, where a light verb combines with a main verb to form a semantically complex expression, are a hallmark of many South Asian languages. The detailed analysis of desire predicates such as *icche*, *icche ache*, *icche hOwa*, and *icche kOra* within this framework has expanded the understanding of how such constructions function in Bangla. By focusing on the interaction between desire predicates and light verbs, this study has illuminated how these verbs influence both the semantic interpretation of a sentence. This contributes to a more nuanced understanding of complex predicates in Bangla and has broader implications for the study of similar constructions in other Indo-Aryan languages. The research has shown that light verbs are not merely grammatical tools for tense and aspect marking but play a significant role in shaping the meaning and function of the predicates they accompany. They add a semantic flavor in the whole eventuality from the standpoint of semantics.

This thesis makes a significant theoretical advancement by detailing the distinction between individual-level and stage-level predicates in the context of Bangla desire predicates. This distinction is central to many theories of semantics, particularly in the study of stative and dynamic predicates, and the thesis adds new depth to this discussion by applying it to the specific domain of desire predicates in Bangla. In the analysis presented in this thesis, the predicates *icche* and *icche ache* ‘possession of a desire’ are classified as individual-level predicates. These predicates represent desire as a stable, ongoing state that characterizes the individual over a relatively long period. This classification is supported by the fact that *icche* and *icche ache* resist modification by temporal adverbs. Sentences involving these predicates do not easily accept constructions that indicate temporary states that changes over time, which aligns with their status as individual-level predicates. On the other hand, the predicates *icche hOwa* and *icche kOra* ‘the occurrence of desire’ are identified as stage-level predicates. These predicates express desire as a temporary or context-bound state that can arise and subside depending on the situation. The predicates *icche hOwa* and *icche kOra* conveys the idea that the speaker's desire emerges in a particular context or at a specific moment, rather than being a continuous, unchanging state. These predicates readily accept temporal adverbs, allowing speakers to modify them with expressions like ‘at that moment” or ‘for a short time’, ‘frequentatively’, which further supports their classification as stage-level predicates.

Moreover, the study contributes to theories of aspect by exploring how aspectual choices affect the interpretation of desire predicates. Aspect, which relates to how actions or states unfold over time, plays a crucial role in determining how desire is perceived—whether as a static, stable state or as an ongoing, evolving process. The study showed that the progressive aspect in Bangla interacts with desire predicates to produce different semantic interpretations, with *icche hOwa* and *icche kOra* expressing an unfolding or evolving desire, while *icche* and *icche ache* remains a stative, non-progressive state. This interaction between aspect and

desire predicates offers insights into how languages can encode subtle differences in mental states through aspectual marking, contributing to broader discussions in linguistic theory about the relationship between aspect and meaning.

Finally, this thesis adds to the typological understanding of South Asian languages by situating Bangla within the broader context of Indo-Aryan languages. The findings show that while Bangla shares many features with other Indo-Aryan languages, it also exhibits unique characteristics in its use of light verbs and aspectual markers. This typological contribution is important for linguists interested in the diversity and commonality among South Asian languages, particularly in the domain of complex predicates and the expression of mental states. By providing a detailed analysis of one specific area of Bangla grammar, this study opens the door for further research on other areas of the language and other related languages.

#### **6.4 Future Scope**

There are several avenues for future research based on the findings of this thesis. One promising direction is a comparative study that could investigate desire predicates across other South Asian languages, such as Hindi, Odia, and Tamil. A cross-linguistic comparison would enable a deeper understanding of how syntactic and semantic properties vary among Indo-Aryan and Dravidian languages, especially in terms of the use of light verbs and the expression of mental states. South Asian languages often utilize complex predicate constructions, and this research could identify both shared features and unique aspects across languages.

Additionally, South Asian Languages (SALS) are known for their rich use of light verbs in expressing a wide range of predicates, particularly mental and emotive states. As demonstrated in this thesis, light verbs like *hOwa* and *kOra* play a significant role in determining whether a predicate is interpreted as a stage-level or individual-level predicate.

Future studies could further explore this interplay between light verbs and complex predicates in other languages, examining how light verbs interact with various predicate types beyond desire.

Another avenue for future research involves examining how stage-level and individual-level analyses can be applied more broadly to other complex predicate constructions. This research has highlighted how stage-level predicates, particularly those involving light verbs, reflect more dynamic, context-dependent meanings, whereas individual-level predicates are associated with more stable, inherent properties. A larger generalization could be developed by applying this analysis to other mental state verbs in Bangla and other related languages. Such studies could lead to a more comprehensive understanding of how different verb types interact with light verbs to form complex meanings.

Moreover, this thesis raises interesting questions about how the stage-level triggers, such as *hOwa* and *kOra*, form part of the broader linguistic mechanisms that distinguish temporary states from more permanent ones. Future research could investigate the extent to which these triggers apply across different verb types and languages, and whether similar patterns emerge in other linguistic families. The goal would be to generalize this analysis of Bangla light verbs and stage-level predicates to other linguistic contexts, offering a broader typological framework for understanding how light verbs contribute to predicate formation and meaning-making.

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Roychowdhury, D., & Karmakar, S. (2024). Desire Predicates in Bangla: Impersonal Construction and the Clausal Dependency. *International Journal of Dravidian Linguistics* (IJDL), 53 (2), 170-196.

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Roychowdhury, D. (2022). *An interplay between temporal adverbials and desire predicates in Bangla: Exploring the heterogeneity* in the Proceeding of Western Conference on Linguistics (WECOL) 2022, at California State University, USA

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## Presentations at Conferences

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