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Abstract

This paper presents a descriptive exploration of three distinct types of complex predicates in Marathi with the aim of trying to answer deeper questions about structure building and structure matching in language. In particular, we investigate for each type, the selectional relations between the main and the light verbs and the division of labor between them with respect to the lexicalization of the event structure in syntax. We show that a class of complex predicates in a language is not homogeneous and that different types of light verbs contribute different kind of information. We analyze the different patterns of Marathi complex predicates using the framework of Ramchand (2008) and Ramchand (2017), which provides an explicit decomposition of the verbal domain required to account for the composition of complex predicates.

1 Introduction

Consider the natural expressions in (1) corresponding to the English sentence ‘Mira ate up the mango’, in Bangla, Marathi, and Hindi-Urdu respectively.\(^1\)\(^2\)

\[
\begin{align*}
\text{(1) a. } & \text{Mira am=ṭa khe-e fel-l-o.} \\
& \begin{array}{l}
\text{Mira mango=Class eat-CPrt THROW-Past-3Sg} \\
\text{‘Mira ate up the mango.’ (Bangla)}
\end{array} \\
\text{b. } & \text{Mira=ne amba kha-un ṭak-l-a.} \\
& \begin{array}{l}
\text{Mira=ERG mango eat-CPrt DROP-Perf-3Sg.M} \\
\text{‘Mira ate up the mango.’ (Marathi)}
\end{array} \\
\text{c. } & \text{Mīrā=ne ām khā li-y-ā.} \\
& \begin{array}{l}
\text{Mira=ERG mango eat TAKE-Perf-3Sg.M} \\
\text{‘Mira ate up the mango.’ (Hindi-Urdu)}
\end{array}
\end{align*}
\]

\(^1\)The examples in South Asian languages are transcribed using an adapted Sanskritist romanization, i.e. retroflex consonants are represented with an underdot (ṭ, ṭ, ṇ, ḍ) while an overdot identifies the velar nasal (ṅ). Note that č and ĺ represent the Marathi dental-alveolar affricates /ts/ and /dz/ respectively.

\(^2\)The abbreviations for the glosses used are: CPrt=conjunctive participle, Class=classifier, Caus=causative, DAT=dative, ERG=ergative, F=feminine, GEN=genitive, Imperf=imperfective, Inf=infinitive, M=masculine, N=neuter, Neg=negative auxiliary, Perf=perfective, Pl=plural, Pres=present tense, Sg=singular. The verbs in their light verb use are glossed in all capital letters.
The ingredients of verbal meaning relevant for syntax are traditionally listed in terms of aktionsart, argument structure and other selected-for satellites, and case assignment. In the case of the verb phrases shown above, the domain over which these properties must be stated is not a single verbal lexical item, but a larger verbal phrasal unit. In that sense, these are ‘complex predications’, and must be distinguished from biclausal constructions on the one hand and auxiliary constructions on the other (see Butt 1995 for important early discussion).

In the case of Bangla, Hindi-Urdu, and Marathi, we find more than one verbal element within the core predicational unit—a main verb and a light verb which together determine the aspectual profile and argument frame of the resulting construction. In the case of English, we find a verb and a particle which presents some of the same issues and performs some of the same functions.

These complex predicates (hereafter CPs) that consist of a main verb and a light verb (V-V complex predicates) have been well studied in the context of South Asian languages. The studies on these constructions in languages such as Hindi-Urdu and Bangla have already established the monoclausality of these CPs using a battery of diagnostic tests (see Butt 1995 for Hindi-Urdu, Ozarkar 2014 for Marathi). Crucially, unlike auxiliary constructions which are also monoclausal, both lexical items in a CP influence the verbal domain in terms of argument structure and event semantics. In other words, what is lexicalized as a simple verb in a language like English or French can be lexicalized with multiple verbal forms in many South Asian languages. Even in those South Asian languages which use CPs, at least certain types of CPs are substitutable with a single verb. This shows that despite the differential complexity of these two predicative constructions, these are two strategies of describing or lexicalizing a single complex event in the world. For this reason, the study of complex predications is an important window into crucial aspects of verb meaning. They allow us to see and separate the different components of meaning that go into making a verbal description across languages.

Moreover, the extra elements that supplement the main verb here cannot easily be understood in terms of a straightforward addition of a single meaning with a single formative, as can be the case with adverbial modification for example. The light verbs in question are not just function words that blindly attach to any main verb construction—there are whole classes of light verbs with subtly different properties. Moreover, the two pieces of the complex predication are in a mutually selecting relationship. Not all light verbs are possible with all main verbs and vice versa, and the meaning that results depends on the properties of both pieces of the complex predicate so constructed.

An important part of the project is to understand how the components of a complex predicate work together to create a unified single description. One puzzle that emerges is related to the nature of meaning composition: If the process is strictly additive as the physical analogy to structure building suggests, what is the role of the matching and selectional factors in pairing up main verbs with light verbs in different constructions? On the other hand, if the light verb and main verb simply match each other in verbal properties, what is the value added in having two distinct pieces at all?

In this paper, we take a close descriptive look at a representative range of complex predicates in Marathi, with the aim of establishing for each subtype the division of labour between the light verb and the main verb with respect to aktionsart and event structure, and to describe the selectional relationship between the two pieces. This part of the paper is an extension of some of the empirical work already presented in Ozarkar (2014). In the second half of the paper, we present a more theoretical account of the descriptive facts in terms of the event structure decomposition proposed in Ramchand (2008), and use it to try to answer the deeper questions concerning structure building in the grammar.

The structure of the paper is as follows. At the start of section 2, we introduce the three main types of complex predicates in Marathi that will be the focus of our study. In section 2.1, we run the established diagnostics for monoclausality on these three types to confirm that they indeed are neither biclausal constructions nor auxiliary constructions. In section 2.2, we lay out the main empirical contribution of the paper which is a detailed examination of the selectional restrictions that obtain between light verb and main verb in each of the three types. In doing so, we explicitly
discuss the light verb’s contribution in relation to its properties when used as a main verb. In section 3, we take the empirical generalizations arrived at in 2 and offer a specific implementation of the process of complex predicate formation in terms of the colexicalization of a single articulated phrase structure. The articulation of the first phase is drawn from Ramchand (2008) for concreteness, and the implementation is an exercise in formalizing the differential contributions of light verb and main verb in the three types. Section 4 is the final summary and discussion of the general patterns found.

2 The Marathi Data: Three Types of CPs

The CPs ubiquitously found in South Asian languages, despite the similarities among them, differ significantly in their details. In particular, there seems to be a lot of variation in South Asian languages regarding the selectional relationships obtained within a CP. For example, in Bangla it has been reported that main verbs and light verbs tend to ‘match in transitivity’ (Dasgupta 1977, Dasgupta 1989; Paul 2003) or event structure (Ramchand 2008). In this section, we address these questions for Marathi, examining the nature of selection and event building in CPs in that language. Marathi is interesting because it has a variety of CP constructions some of which resemble the types of CPs widely discussed from Bangla (Dasgupta 1977, Paul 2003, Ramchand 2008) and Hindi-Urdu (Butt 1995). But despite the superficial similarities, Marathi CP types exhibit surprising differences that pose a challenge to simple structure building or structure matching accounts.

We focus on three distinct types of CPs from Marathi, which we call Types A, B, and C, which are all V-V complex predicates consisting of a main verb (in some nonfinite form) and a light verb which bears inflectional information for tense/aspect and agreement. In classifying these constructions, we note the properties of the main verb on its own as compared to its properties within the CP, as well as the properties of the light verb(s) when used as main verbs on their own. Note that in isolating the ingredients of the CPs in question, we take as relevant the behavior of the light verb in its main verb usage in other sentential contexts in the language. Our default assumption is that the light verb is not just a functional morpheme, but is synchronically related in some way to its main verb use. In assuming this, we are following the insights of Butt’s Generalization, given here, which points out the synchronic stability of light verbs in main verb usage argued by Butt and Lahiri (2005) for the South Asian languages.

(2) Butt’s Generalization (Butt 2003, Butt and Lahiri 2005)

Unlike auxiliaries which may become grammaticalized over time to have a purely functional use, light verbs always have a diachronically stable corresponding full or ‘heavy’ version in all the languages in which they are found.

The assumption of light verb stability is the key to comparing the properties of the complex predicate to the properties of its component parts.

The three types we isolate differ from each other on the basis of (i) the event structure of the light verb in its main verb use (telic vs. atelic), (ii) the event structure of the main verb, (iii) the nature of the participial ending on the main verb (conjunctive vs. imperfective participle), and (iv) the event structure of the resultant CP as a whole. By examining each of the three types of CPs with respect to these parameters, we try to come up with the patterns and generalizations that any syntactic account should be responsible for capturing.

In what follows, we describe the properties of each of the three types of CPs. We also demonstrate that all three types of CPs are indeed monoclausal, monoeventive constructions.

Type A

Type A CPs as exemplified in (4) are formed by telic light verbs. Here we focus on four light verbs tak DROP, bōs SIT, ́za GO and ye COME. The main verb in a CP of this type takes a conjunctive participle marker -un\(^3\) and the TAM inflection is carried by the light verb. The Type A CP as a

\(^3\)The conjunctive participle -un in Marathi also occurs on the nonfinite verbs in other multi-verb constructions, such as serial verb constructions representing a sequence of events or events related by cause-effect relationship as
whole is telic in nature (see 2.2).

(4) a. Mira=ne amba kha-un ūak-l-a  
Mira=ERG mango eat-CPrt DROP-Perf-3Sg.M  
‘Mira ate up the mango.’

b. Mira tyæ=la sobdo de-un bas-l-i  
Mira he=DAT word give-CPrt SIT-Perf-3Sg.F  
‘Mira gave her word to him (inadvertently).’

c. phandi tut-un ge-l-i  
branch break-CPrt GO-Perf-3Sg.F  
‘The branch broke away.’

d. andhar dat-un a-l-a  
darkness thicken-CPrt COME-Perf-3Sg.M  
‘The darkness fell thickly.’

Type A CPs closely correspond with the CPs most extensively discussed in other South Asian languages. Even in the literature on Marathi CPs, these CPs have been discussed more than other types of CPs (Hook and Pardeshi 2006, Pandharipande 1993, Pardeshi 2003; but see Dhongde 1984, Dhongde and Wali 2009, Ozarkar 2014 for other types of CPs in Marathi). They have also been called aspectual complex predicates (Butt 1995) and completive complex predicates (Ramchand 2008).

Type B

Type B complex predicates are similar to Type A complex predicates in their form. They are formed with the telic light verbs de GIVE and ghe TAKE and like the Type A CPs, the main verbs in Type B are also in the conjunctive participle form, as shown in (5).

(5) a. Mira=ne m=la dar ughd-un di-l-a  
Mira=ERG I=DAT door open-CPrt GIVE-Perf-3Sg.N  
‘Mira opened the door for me (so that I do not have to open it).’

b. Mira=ne ambe kha-un ghet-l-e  
Mira=ERG mangoes eat-CPrt TAKE-Perf-3Pl.M  
‘Mira ate up the mangoes (while she could/ to her satisfaction).’

To anticipate, the CPs formed by GIVE and TAKE verbs can be differentiated from Type A in that the light verb in Type B does not contribute to the telicity, but to the polarity of the ‘directedness’ of the action, as being either towards or away from the agent.

well as adverbial constructions, as the examples in (3) show:

(3) a. Mira=ne amba swaоa dhun-un, kap-un kha-l-a  
Mira=ERG mango clean wash-CPrt cut-CPrt eat-Perf-3Sg.M  
‘Mira ate the mango, after washing it clean and cutting it.’ (sequence of events)

b. Mira pay ghass-un pod-l-i  
Mira foot slip-CPrt fall-Perf-3Sg.F  
‘Having slipped, Mira fell.’ (cause–effect)

c. Mira neheml hasu-un bol-t-e  
Mira always smile-CPrt speak-Imperf-3Sg.F  
‘Mira always speaks smilingly.’ (adverbial construction)

All these constructions are however, biclausal (Ozarkar 2014:46-47).
Type C

The Type C complex predicate is formed by the telic light verb sut BE.RELEASED and the main verb in this CP is attached with the imperfective participle marker -t. The resultant CP gives the sense of sudden inception and uncontrolled continuation of the event thereafter. The resultant CP is therefore inceptive-continuative.6

(6) Mira wedya=sarkhi has-at sut-l-i
Mira mad=like laugh-Imperf BE.RELEASED Perf-3Sg.F
'Mira burst out (and continued) laughing a lot (lit. like a mad person).'

Type C differs from Types A and B in having a different form for the main verb (the imperfective participle form in this case). The resultant CP always has the same event structure, that of sudden inception followed by a continuous process, regardless of the main verb. As we will see in section 2.2 however, there are interesting selectional restrictions between the main verb and the light verb in forming this construction.

2.1 Types A, B and C are all monoclausal

Despite the formal differences between the three types of CPs in Marathi, they all share the property of building monoeventive, monoclausal constructions. In all three types of constructions, there is only one subject and the Case of the subject is determined by the light verb. Also, they are monoclausal in terms of reflexive binding and control phenomena (see Ozarkar 2014). Besides, they show mono-eventive integrity with regard to the scope of negation and the differential temporal modification. We discuss these two effects here.

2.1.1 Scope of negation

In all the types of CPs, the finite negation or the negative auxiliary in Marathi scopes over the entire V-V complex. It is not possible to negate the semantics of the light verb alone, even under focus intonation. In (7), the focus intonation on the light verb is shown by italics.

(7) a. ??tya=ne lekh lhih-l-a, pa=nh lih-un tak-l-a nahi.
    he=ERG article write-Perf-3Sg.M, but write-CPrt DROP-Perf-3Sg.M Neg.Pres
    Intended: 'He wrote the article, but didn’t write it up.'

    b. ??Mira=ne dar ughd-l-a, pa=nh ma=la ughd-un di-l-a nahi.
    Mira=ERG door open-Perf-3Sg.N but I=DAT open-CPrt GIVE-Perf-3Sg.N Neg.Pres
    Intended: 'Mira opened the door, but didn’t open it for me.'

    c. ??Mira dhaw-l-i, pa=nh dhaw-at sut-l-i nahi.
    Mira run-Perf-3Sg.F, but run-Imperf BE.RELEASED Perf-3Sg.F Neg.Pres
    Intended: 'Mira ran, but didn’t suddenly begin and continue to run.'

4 The imperfective participle -at in Marathi occurs on the main verb to indicate the imperfective aspect while the auxiliary shows the tense. Besides, the same participle also occurs on the verb in an adverbial clause to indicate simultaneity of the actions (i.e. in the sense of ‘while V-ing’). In this case, the imperfective form of the verb is often reduplicated (Ozarkar 2014:48).

5 There are also other CPs in Marathi which are similar to the Type C CPs in form. These CPs are formed by light verbs such as rah STAY, bs SIT, za GO, ye COME, cal WALK and give continuative interpretation. Like the Type C CP discussed here, these continuative CPs have their main verb in the imperfective participle form. However, unlike these, the Type C CP gives the inceptive reading in addition to the implied continuative reading. For the limitations of space and focus, we discuss only the inceptive-continuative CP while the other continuative constructions are kept out of the scope of the present investigation. (See Ozarkar 2014 for a discussion on these CPs).

6 Inception or beginning of an event is also expressed in Marathi by an aspectual verb lag ATTACH. In this case, the main verb takes the -u marker or the nonfinite form with a DATIVE case marker -la. However, this construction differs from typical complex predicates under investigation here: unlike the light verbs forming CPs, the aspectual verb lag combines with any verb, i.e. it does not display any selectional restrictions. It is for this reason, the inceptive lag-constructions are excluded from the discussion in this paper.
2.1.2 Differential modification

In a V-V CP, the two verbs together express a single event and that event can be modified by a single adverb. It is not possible to modify parts of the event denoted by the CP by different temporal or manner adverbs. We demonstrate below that two manner adverbs opposite in meaning cannot occur felicitously with a CP construction but they can occur in a biclausal construction. In a biclausal construction, the two opposite adverbs are acceptable as they modify different events expressed by different verbs, as in (9). But in a CP, they cannot be acceptable as they contradict each other by modifying the single event expressed by a CP, as in (8).

(8) a. *Mira=ne poṭkan sawkaśpāne sogle ambe kha-un ṭak-l-e.
   Mira=ERG quickly slowly all mangoes eat-CPrt DROP-Perf-3Pl.M
   ‘Mira quickly slowly ate up all the mangoes.’
   (intended: She finished quickly, but ate each mango relatively slowly.)
b. *kāngaran=ni ma=la poṭkan sawkaśpāne ḍhāḍ paḍ-un di-l-a.
   workers=ERG I=ERG quickly slowly tree fell-CPrt GIVE-Perf-3Pl.N
   ‘The workers quickly slowly felled the tree for me.’
   (intended: The tree-felling was done slowly, but the overall act of doing it for the speaker was done rather quickly/readily.)
c. *Mira poṭkan haḷuhaḷu has-oṭ suti-l-i.
   Mira quickly slowly laugh-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira quickly began (and continued) laughing slowly.’

As compared to this set, in biclausal constructions in (9), the two adverbials opposite in meaning are acceptable, since each one modifies a different event.

(9) a. Mira=ne ambe poṭkan kap-un sawkaśpāne kha-ll-e.
   Mira=ERG mangoes quickly cut-CPrt slowly eat-Perf-3Pl.M
   ‘Mira ate the mangoes slowly, having cut them quickly.’
b. Mira=ne ghāighaine Gita=la sawkaśpāne ṭāye-la saṅgit-l-a.
   Mira=ERG hurriedly Gita=DAT slowly ahead go.Inf-DAT tell-Perf-3Sg.N
   ‘Mira hurriedly told Gita to go ahead slowly.’

We thus assume that all three types of CP introduced here, are genuine complex predicates in the sense of Butt (1995), and correspond to a single vP/VP in modern minimalist terms.

2.2 Selectional relationships between the light verb and the main verb

We now turn to the empirical heart of the paper, which is a description of the combinatoric generalizations between main and light verbs. The selectional relationships obtained within the various types of Marathi CPs have not been sufficiently examined. In particular, since there is hardly any systematic study on Type B and Type C CPs, the selectional relationships within these types of CPs are virtually an unexplored territory. In this section, we discuss the selectional relations obtained within each of the three types of Marathi CPs and come up with the generalizations.

The selectional relations we discuss may be seen as necessary conditions but not sufficient for a particular V-V combination to be considered as a felicitous CP in Marathi.

Type A: Agentivity-matching and telicity-matching

The selectional relationships obtained with CPs from some other South Asian languages like Bangla have been explained previously via transitivity-matching (Dasgupta 1977, Paul 2003) and event-matching (Ramchand 2008). Under this view, it is argued that a transitive light verb can combine with only transitive main verbs and an intransitive light verb can combine with only intransitive main verbs. These are the most unmarked combinations. The support for such an analysis comes from pairs of intransitive verbs and their transitivized/causative counterparts such as the pair ‘come’ vs. ‘bring’ or ‘go’ vs. ‘send’. Systematically, the intransitive verb in such a pair can only combine with an intransitive light verb and its transitive counterpart can combine with a transitive light
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verb. This is true for Marathi as well. However, such an analysis based on gross valency-based verb classification cannot be extended to the entire set of generalizations found in Marathi (or indeed even in Bangla or other South Asian languages).

Given the Type A light verbs under consideration here, the light verb DROP is transitive while SIT, GO, and COME are intransitive. The light verb DROP combines only with transitive verbs, which is in consonance with the transitivity-matching approach. However, it does not combine with experiencer-subject verbs which take dative subjects. Purely from the valency-based approach, the experiencer-subject verbs also have two arguments but the transitive light verb DROP does not combine with them. The examples in (10) show the unacceptable CPs formed by combining DROP with main verbs awd ‘like’ and mil ‘obtain’ that require dative subjects. In addition, this light verb also does not combine with the transitivized forms of the unergative verbs such as rodv ‘make (s.o.) cry’, polw ‘make (s.o.) run’, hosaw ‘make (s.o.) laugh’, etc., as illustrated in (11).

Mira=DAT / Mira=ERG book like-CPrt DROP-Perf-3Sg.N
Intended: ‘Mira liked the book “up”.’
Mira=DAT / Mira=ERG job obtain-CPrt DROP-Perf-3Sg.F
Intended: ‘Mira obtained the job “up”.’

Mira=ERG Gita=DAT laugh-Caus-CPrt DROP-Perf-3Sg.N
Intended: ‘Mira made “up” Gita laugh.’
Mira=ERG horse=DAT run-Caus-CPrt DROP-Perf-3Sg.N
Intended: ‘Mira made “up” the horse run.’

Similarly, by the transitivity-matching approach, the intransitive light verbs COME and GO would be expected to combine with all types of intransitive main verbs. Contrary to this expectation, they combine with only unaccusative main verbs and not unergative ones as shown in (12–13). Moreover, they can combine with some experiencer/dative-subject verbs too, as in (14). In (12a) and (13a), the sentences in which the light verbs are combined with unergative main verbs, are acceptable only as biclausal serial verbs constructions expressing a sequence of events but not acceptable under complex predicate interpretation.

(12) a. Mira poh-un a-l-i.
Mira swim-CPrt COME-Perf-3Sg.F
*Mira swam.’ (CP reading)
‘Mira arrived after swimming.’ (sequence of events reading)
b. andhar dat-un a-l-a.
darkness thicken-CPrt COME-Perf-3Sg.M
‘Darkness fell thickly.’

(13) a. Mira poh-un ge-l-i.
Mira swim-CPrt GO-Perf-3Sg.F
*Mira swam.’ (CP reading)
‘Mira swam and then left.’ (sequence of events reading)
b. Mira bhįz-un ge-l-i.
Mira wet-CPrt GO-Perf-3Sg.F
‘Mira got wet (completely).’

(14) a. Mira=la tya patra=t khup ćuka adhāl-un a-l-ya.
Mira=DAT that letter=in many errors notice-CPrt COME-Perf-3Pl.F
‘Mira noticed many errors in that letter.’
Finally, the intransitive light verb SIT does not combine with any intransitive verbs\(^7\) or experiencer-subject verbs. It necessarily combines with transitive verbs.

Mira roam-CPrt SIT-Perf-3Sg.F
Intended: ‘Mira (inadvertently) roamed.’ (unergative main verb)

b. *žhad suk-un bos-l-o.
Mira=DAT book like-CPrt SIT-Perf-3Sg.N
Intended: ‘Mira (inadvertently) liked the book.’ (dative-subject main verb)

Mira=DAT money lose-CPrt SIT-Perf-3Sg.F
‘Mira (inadvertently) lost the money.’ (transitive main verb)

The generalization seems to be as follows. If the light verb is agentive or has an external cause to initiate the event, then it can combine with only those main verbs which are also agentive in nature. If a light verb does not necessarily have an external cause, then it combines with main verbs lacking an external cause. In other words, the light verbs and the main verbs they can combine with must match with each other with respect to the property of agentivity or external causation.

Another important selectional effect is found within Type A. Light verbs in Type A CPs are telic in their main verb use and they only combine with telic main verbs (to give, unsurprisingly, a telic resulting CP). For instance, the light verb tak DROP combines with de ‘give’, tod ‘break (tr.)’, ghal ‘insert’, ughad ‘open (tr.)’, kha ‘eat’, pi ‘drink’, wač ‘read’, bandh ‘build, tie’ etc. all of which are telic verbs. As the sentences in (18) show, this light verb cannot combine with atelic verbs, i.e. activity verbs.

(18) a. Mira=ne mo=la pustak de-un tak-l-o.
Mira=ERG I=DAT book give-CPrt DROP-Perf-3Sg.N
‘Mira gave away the book to me.’ (telic main verb)

b. *Mira=ne sandhyakal=i hind-un tak-l-o.
Mira=ERG evening=in roam-CPrt DROP-Perf-3Sg.N
Intended: ‘Mira roamed up in the evening.’ (atelic, intransitive main verb)

c. *Mira=ne Gita=la apadm=st nyahal-un tak-l-o.
Mira=ERG Gita=DAT head.to.toe observe-CPrt DROP-Perf-3Sg.N
Intended: ‘Mira observed Gita from head to toe.’ (atelic, intransitive main verb)

Similarly, the other light verbs bos SIT, ža GO and ye COME also combine with only telic main verbs.\(^8\) Thus, the Type A light verbs and the main verbs they combine with need to match each

\(^7\)There are two unaccusative verbs rut ‘get sunk into’ and akš ‘get stuck’ with which SIT combines, as in (15):

(15) gad i cikhla=t rut-un bos-l-i.
car mud=in get.sunk-CPrt SIT-Perf-3Sg.F
‘The car got (and stayed) stuck in the mud.’

However, this version of the light verb SIT is associated with the unaccusative use of the verb ‘sit’ as in (16):

(16) bhinti=war citra tirko bos-l-o ah-e.
wall=on picture crooked sit-Perf-3Sg.N be.Pres-3Sg
‘The painting is sitting on the wall in a crooked manner.’

\(^8\)Ozarkar (2014) treats Marathi verbs ža ‘go’ and ye ‘come’ to be achievement verbs, hence telic. This is because in Marathi these two verbs cannot combine with a durative adverbial such as ‘for X time’ and in case of their occurrence
Other in telicity. The requirement of telicity and agentivity in main verbs shows that rather than the transitivity-matching, there is more subtle event-structure matching taking place in Marathi CPs of this class.

Further, it seems that the Type A light verbs require the main verbs to satisfy both of the matching requirements. For instance, DROP does not combine with the telic unaccusative verbs such as tut ‘break (intr.)’, pet ‘be ignited’, tadak ‘crack’, because they lack the agentivity or external causation. It also does not combine with transitive, agentive verbs like nyahal ‘observe’, dhonwal ‘stir’, gadi dholak ‘push (the) car’, gadi calaw ‘drive (a) car’ and agentive unergative verbs like phir ‘turn’, dhow ‘run’, doud ‘gallop’, hind ‘roam’ because they are not telic. However, in case of verbs like wah ‘flow’, rad ‘cry’, kos ‘laugh’, it is not clear whether their combination with DROP is blocked because of their atelicity or because of their lack of external causation, as they violate both the matching requirements (they may have internal causation and are treated as unergatives therefore). We leave testing this further to future research.

Since in the Type A CPs, both light verbs and main verbs are telic, it is unsurprising that the resultant CP is also telic. The telicity of the CP can be verified by the usual diagnostic tests. Note that in (19), the CP can occur with an interval adverbial phrase like ‘in X time’, but not with a durative adverbial phrase like ‘for X time’.

(19) Mira=ne eka tasa=t / *ek tas-bhor pustak vać-un tak-l-a.
Mira=ERG one hour=in / one hour-full book read-CPt DROP-Perf-3Sg.N
‘Mira read up the book in an hour / *for an hour.’ (telic main verb)

Also in (21a–b), the occurrence of Type A CPs in the tensed imperfective/progressive construction is more marked compared to the corresponding simple verbs. If at all, the tensed imperfective construction with a CP yields shifted reading of anticipated culmination, i.e. it is anticipated that the action will reach its culmination. Such anticipatory reading is absent from a corresponding simple verb occurring in the tensed imperfective construction which, in that case, yields the regular progressive, ‘ongoing’ reading (21c–d)\(^9\).

(21) a. ?Mira pustak vać-un tak-at ah-e.
Mira book read-CPt DROP-Imperf be.Pres-3Sg
‘Mira is reading up the book.’ (anticipatory reading)

(b) ?Mira=ne pustak vać-un tak-l-a ah-e.
Mira=ERG one hour=in / one hour-full book read-CPt DROP-Perf-3Sg.N
‘Mira read up the book in an hour / *for an hour.’ (telic main verb)

The sentence in (20) is indeed acceptable, however under coercion. This sentence yields a slow-motion reading that she is breaking up a toy part by part. It also seems to imply the anticipation that soon, she will have broken the toy completely, may be even irreparably. A simple verb counterpart of this sentence does not yield this anticipatory reading. Note that the tensed imperfective construction test is not about the unacceptability of the Type A CP in it, but about the markedness of the acceptability and coercion of interpretation.

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\(^9\)An anonymous reviewer finds the following Marathi sentence acceptable with a CP in tensed imperfective form:

(20) ti khelna tod-un tak-e ah-e.
she toy break-CPt DROP-Imperf be.Pres-3Sg
‘She is breaking up a toy.’

The sentence in (20) is indeed acceptable, however under coercion. This sentence yields a slow-motion reading that she is breaking up a toy part by part. It also seems to imply the anticipation that soon, she will have broken the toy completely, may be even irreparably. A simple verb counterpart of this sentence does not yield this anticipatory reading. Note that the tensed imperfective construction test is not about the unacceptability of the Type A CP in it, but about the markedness of the acceptability and coercion of interpretation.
b. rophezuk-un ropheza-t ah-e.
   tree  dry-CPrt GO-Imperf be.Pres-3Sg
   ‘The tree is drying up.’ (anticipatory reading)

c. Mira pustak wać-at ah-e.
   Mira book  read-Imperf be.Pres-3Sg
   ‘Mira is reading the book.’

d. rophezuk-at ah-e.
   tree  dry-Imperf be.Pres-3Sg
   ‘The tree is drying.’

Moreover, the Type A CPs have restitutive reading, often in addition to the repetitive reading, when they are modified by the adverb punha ‘again’, as in (22). The possibility of restitutive reading indicates the presence of the resultant state in the CP, provided that the resultant state is reversible. This clearly shows that the Type A CPs are telic.

(22) a. Mira=ne dar punha ughd ropheza-tak-l-a.
    Mira=ERG door again open-CPrt DROP-Perf-3Sg.N
    ‘Mira opened up the door again.’ (restitutive / repetitive)

b. gocci punha suk-un ge-l-i.
   terrace again dry-CPrt GO-Perf-3Sg.F
   ‘The terrace dried up again.’ (restitutive / repetitive)

The telicity of the Type A CPs can further be ascertained by the fact that the bare plural theme of an incremental theme verb is interpreted as contextually quantized, making the whole event telic, when combined with the Type A light verbs. See that in (24b), it is implied that the theme pustak refers to some contextually specified number of books, all of which are completely read up. The same holds true in (24c), where it is implied that all of the contextually specified number of mangoes are eaten up. Such quantized reading is not necessary in a simple verb construction in (24a).

(24) a. Mira=ne pustako wać-l-i.
    Mira=ERG books read-Perf-3Pl.N
    ‘Mira read books.’

b. Mira=ne pustako wać-un tak-l-i.
    Mira=ERG books read-CPrt DROP-Perf-3Pl.N
    ‘Mira read up the books.’

c. Mira=ne ambe kha-un tak-l-e.
    Mira=ERG mangoes eat-CPrt DROP-Perf-3Pl.M
    ‘Mira ate up the mangoes.’

    Mira=ERG one hour=in / one hour-full books wać-l-i.
    ‘Mira read the books in an hour / for an hour.’

b. Mira=ne eka tasa=t / *ek tas-bh pustako wać-un tak-l-i.
    Mira=ERG one hour=in / one hour-full books wać-un tak-l-i.
    ‘Mira read up the books in an hour / for an hour.’

\[10\]The bare plural theme would make the verbal predicate atelic, but it combines with the Type A light verb like DROP. This seemingly contradicts with our claim of telicity-matching of DROP. However, it is to be noted that similar effects are not obtained in case of activity verbs. The activity verbs like run, drive a car can be made telic by combining with a bounded path such as in case of run a mile, drive a car till the corner. The Type A light verb DROP should then be able to combine with the telic verbal predicate. However, this prediction is not borne out in Marathi, as shown in (23) below. That makes us argue that the incremental theme verbs are potentially telic (despite their possible ambiguity with respect to telicity), in the way the activity verbs like run are not.

(23) *Mira=ne ek mail pol-un tak-l-a.
    Mira=ERG one mile run-CPrt DROP-Perf-3Sg.N
    Intended: ‘Mira ran up one mile.’
The telicity of the CP in (24b) is confirmed in (25b) where the CP fails to combine with a durative adverbial phrase. Note that the corresponding simple verb can combine it in (25a), though it yields terminative reading (the act of reading books was not completed, but abandoned). The theme is quantized in (25a), when the predicate combines with the interval adverbial phrase ‘in an hour’.

Type B: Agentivity-matching and directedness

The preferences of the Type B light verbs de GIVE and ghe TAKE show that here also transitivity-matching is not sufficient to predict the selectional relationships within Marathi CPs. Both the light verbs forming Type B CPs are (di)transitive in nature. However, while the light verb GIVE combines with only the transitive verbs, TAKE can also combine with unergative verbs. Both these light verbs require the main verbs to be agentive in nature. Thus, TAKE does not combine with unaccusative verbs and GIVE does not combine with experiencer-subject or other dative-subject verbs which lack agentivity (26).

(26) a. *phandi=ne tut-un  ghet-l-o.
   branch=ERG break-CPrt TAKE-Perf-3Sg.N
   Intended: ‘The branch broke (to its satisfaction / while it could).’ (unaccusative main verb)

   b. *Mira=ne mao=la pustak awd-un  di-l-o.
      Mira=ERG I=DAT book like-CPrt GIVE-Perf-3Sg.N
      Intended: ‘Mira liked the books for me.’ (experiencer-subject main verb)

These light verbs are telic in their main verb use, however, as light verbs, they can combine with both telic and atelic main verbs. As shown in (27), the light verb GIVE can combine with atelic transitive verbs like gadi cakaw ‘drive a car’, gadi dhokol ‘push a car’, and dhonol ‘stir’ while TAKE combines with atelic intransitive verbs such as poh ‘swim’, hindo ‘roam’, rd ‘cry’, has ‘laugh’, and atelic transitive verbs like nyahal ‘observe’. Thus, there is no telicity-matching in Type B CPs.

(27) a. Mira=ne mao=la gadi dhokl-un  di-l-i.
       Mira=ERG I=DAT car push-CPrt GIVE-Perf-3Sg.F
       ‘Mira pushed the car for me.’

   b. Mira=ne bharpur hindo-un  ghet-l-o.
      Mira=ERG a.lot roam-CPrt TAKE-Perf-3Sg.N
      ‘Mira roamed a lot (to her satisfaction / while she could).’

Further, the telicity of the resultant CP of Type B is determined by the main verb and not by the light verb. That is, if the main verb is atelic, then the resultant CP is also atelic. The resultant CP often has a weak sense of boundedness, but we argue that it is different from the telicity obtained in Type A CPs. We claim that this kind of boundedness is not contributed by the light verbs by building a telic event structure from an atelic main verb.

When combined with punha, the Type B CPs built from atelic main verbs lack restitutive reading (28a–c). In many cases, such as, hindo ghe ‘roam TAKE’ the combination with this adverb is even rendered infelicitous. In contrast, if the main verb is telic and has a reversible result state, then the restitutive reading (in addition to the repetitive reading) is available for the resultant CPs (28d–e). Thus, the Type B CPs are telic only if they combined with telic main verbs.

(28) a. Mira=ne mao=la gadi punha dhokl-un  di-l-i.
       Mira=ERG I=DAT car again push-CPrt GIVE-Perf-3Sg.F
       ‘Mira pushed the car for me again.’ (repetitive)
b. Mira=ne ma=la sup punha dhowl-un di-l-o.  
Mira=ERG I=DAT soup again stir-CPrt GIVE-Perf-3Sg.N  
‘Mira stirred the soup for me again.’ (repetitive)

c. Mira=ne punha poh-un ghet-l-o.  
Mira=ERG again swim-CPrt TAKE-Perf-3Sg.N  
‘Mira swam again (to her satisfaction).’ (repetitive)

d. Mira=ne ma=la dar punha ughd-un di-l-o.  
Mira=ERG I=DAT door again open-CPrt GIVE-Perf-3Sg.N  
‘Mira opened the door for me again.’ (restitutive / repetitive)

e. Mira=ne tebal punha pus-un ghet-l-o.  
Mira=ERG table again wipe-CPrt TAKE-Perf-3Sg.N  
‘Mira wiped the table again (for herself).’ (restitutive / repetitive)

Further, see that in (29a–b), the CPs with atelic main verbs occur felicitously in the tensed imperfective construction with regular progressive reading. This behavior contrasts with the Type A CPs. Recall that the Type A CPs, which are telic in nature, yield coerced ‘anticipatory’ reading in the tensed imperfective construction, as shown earlier in (21).

(29) a. Mira ma=la gadi dhakl-un de-t ah-e.  
Mira I=DAT car push-CPrt GIVE-Imperf be.Pres-3Sg  
‘Mira is pushing a car for me.’

b. Mira poh-un ghe-t ah-e.  
Mira swim-CPrt TAKE-Imperf be.Pres-3Sg  
‘Mira is swimming (to her satisfaction / while she could).’

Moreover, in contrast with the Type A CPs, the Type B CPs, do not necessarily yield ‘contextually quantized’ reading of the bare plural theme of incremental theme verbs as shown in the examples in (30). Contrast example (30b) particularly with example (24c) above. In (30b), it is not necessary to imply that Mira ate all the mangoes. In fact, there is no implication of contextually specified quantization of mangoes.

(30) a. Mira=ne ma=la kowita lih-un di-l-ya.  
Mira=ERG I=DAT poems write-CPrt GIVE-Perf-3Pl.F  
‘Mira wrote poems for me (so that I don’t have to write them).’

b. Mira=ne ambe kha-un ghet-l-e.  
Mira=ERG mangoes eat-CPrt TAKE-Perf-3Pl.M  
‘Mira ate up the mangoes (to her satisfaction).’

It is clear that the telicity of the resultant CP of this type is determined by the telicity of the main verb and not by the light verb.11 The main contribution of the Type B light verbs is not to express telicity, but to express the direction of benefaction.

The semantics of the verbs GIVE and TAKE in their main verb use encode inherent direction: GIVE encodes the direction away from the agent/causee while TAKE involves the direction towards the agent/causee. Evidently, the semantics of directionality is retained in the light use of the verbs and plays a role not only in determining the semantics of the CP, but also in constraining the kinds of main verbs the light verbs can combine with. The light verb GIVE can combine with only those transitive verbs in which the effect of the agent’s action is transferable to some other entity. Thus, this light verb cannot combine with transitive verbs like kha ‘eat’ or šik ‘learn’, as in (31).

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11The telicity of the main verb in some sense predicts the telicity of the CP in Type A as well, but crucially this is also matched by the light verb. The point is that in Type A, the light verb explicitly ‘selects’ for telic main verb complements, while in Type B the light verb is indifferent to the telicity of its main verb. To anticipate, we will implement the selection by Type A light verbs for telic complements in terms of obligatory matching of all syntactic features. In the case of Type B, the light verb will only match a specific proper subset of its features. The telicity feature will then be free to vary as a function of main verb choice.
TABLE 2 Selectional relations of the Type B light verbs.

<table>
<thead>
<tr>
<th>Light verbs</th>
<th>Main verbs</th>
</tr>
</thead>
<tbody>
<tr>
<td>all Telic, Trans., and Agentive</td>
<td>Trans.</td>
</tr>
<tr>
<td>GIVE</td>
<td>✓</td>
</tr>
<tr>
<td>TAKE</td>
<td>✓</td>
</tr>
</tbody>
</table>

(31) *Mira=ne ma=la gani sik-un di-l-a.
Mira=ERG I=DAT math learn-CPrt GIVE-Perf-3Sg.N
Intended: ‘Mira learned math for me (so that I don’t have to learn it).’

On the other hand, the light verb TAKE can combine with these verbs. In fact, among the transitive verbs, TAKE combines with those verbs which involve inward direction such as ingestion verbs or verbs of learning and perception/cognition such as kha ‘eat’, jee ‘dine’, sik ‘learn’, somoz ‘understand’, aik ‘listen’, as in (32).

(32) Mira=ne gani sik-un ghet-l-a.
Mira=ERG math learn-CPrt TAKE-Perf-3Sg.N
‘Mira learned math (for her own benefit).’

In case of some other transitive verbs such as lih ‘write’, zal ‘burn (tr.)’, etc., the light verb TAKE combines to specifically indicate the direction of the benefaction towards the agent. On the other hand, if these verbs combine with GIVE, the direction of the benefaction is specifically towards a beneficiary other than the agent. This shows that within the broad class of transitive verbs, the selectional preference of the two light verbs is determined by matching with the directedness of the action of the main verb. Further, in the case of main verbs that are underspecified for directedness, the directionality can also be imposed by the light verb. The examples in (33) below show that the main verbs underspecified for directionality indicate a clear direction in accordance with the light verb’s directedness with which they combine. In (33a), the act of writing is done by Mira for her own benefit or because writing that text down is part of her own work. In (33b), the act of writing is done on behalf of someone else.

(33) a. Mira=ne phalya=war=ca maozkur lih-un ghet-l-a.
Mira=ERG board=on=GEN text write-CPrt TAKE-Perf-3Sg.M
‘Mira wrote down the text on the board.’

b. Mira=ne ma=la phalya=war=ca maozkur lih-un di-l-a.
Mira=ERG I=DAT board=on=GEN text write-CPrt GIVE-Perf-3Sg.M
‘Mira wrote down the text on the board for me.’

The directedness-matching in Type B CPs is thus not simple transitivity matching, but some kind of semantic or event profiling matching.

Further note that, the light verb GIVE also contributes to the argument structure of the CP by additionally introducing the beneficiary argument, e.g. the ‘I’ in (27a) and (33b) above. Unlike Type A CPs in which the valency of the CP is completely determined by the valency of the main verb, in Type B CPs formed with GIVE, the light verb increases the valency of the resultant CP.

To emphasize, as this discussion shows, the Type B CPs are distinguished from Type A CPs, despite their formal similarities, because unlike in Type A CPs, the Type B light verbs do not exhibit telicity-matching. The Type B light verbs also do not add to the telicity of the CP, in fact, the (a)telicity of the CP is determined by the main verb. The main contribution of the light verbs in Type B, is therefore, not to contribute to the event structure. The light verbs in Type B, instead, contribute what we will call the ‘directedness’ of the action. And this ‘directedness’ also plays a role in selectional properties of the Type B light verbs.
Type C: Agentivity-requirement

The Type C light verb sut BE.RELEASED is a telic, punctual verb and is unaccusative in nature. Interestingly, however, as a light verb it combines with only those main verbs which are both atelic and agentive. It does not combine with atelic verbs such as dhoddhod ‘beat’, gharonigal ‘roll down’, or gadjod ‘tumble down’ because they are all non-agentive, as in (34a). It also does not combine with agentive verbs such as bas ‘sit’, dhor ‘hold’, pokad ‘catch’, or tod ‘break (tr.)’ which are telic (34b).

   heart rapidly beat-Imperf BE.RELEASED-Perf-3Sg.N
   ‘The heart started and went on to beat fast.’

   Mira sit-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira started and went on to sit down.’

Verbs like tut ‘break (intr.)’ are in fact very similar to the light verb BE.RELEASED: they are punctual and unaccusative. Yet, their combination does not form a legitimate Type C CP as seen in (35a). In (35b), we show an agentive-transitive counterpart of the unaccusative verb tut ‘break (intr.).’ However, this combination is still ungrammatical, because the transitivized verb tod ‘break (tr.)’ is telic. In (35c), we find a successful Type C construction: the main verb has a bare plural DP as its object, which makes the event of breaking iterated, and hence, atelic. It is now both agentive and atelic. In this case only, BE.RELEASED forms a CP with it.

(35) a. *kathi tut-ət sut-l-i.
   stick break-Imperf BE.RELEASED-Perf-3Sg.F
   Intended: ‘A stick began and continued to break.’

   b. *Mira kathi tod-ət sut-l-i.
   Mira stick break-Imperf BE.RELEASED-Perf-3Sg.F
   Intended: ‘Mira began and continued to break a stick.’

   c. Mira kathyod tod-ət sut-l-i.
   Mira sticks break-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira began and continued to break sticks.’

In some cases, if the path of an event is spatio-temporally sufficiently large, rendering an event considerably durative in nature, the verb denoting such an event can combine with BE.RELEASED.12 For instance, in (36), since the wall may be taken to be spatially stretched considerably, the telos of the act of painting is sufficiently distant. In that case, it can combine with the light verb BE.RELEASED.

(36) Mira bhintə raṅgw-ət sut-l-i.
   Mira wall paint-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira started and continued to paint a wall.’

Although under certain contextual conditions, such a durative predicate can combine with the light verb BE.RELEASED, in our opinion, significant durativity is not an appropriate condition required by this light verb. For instance, if the path is quantified by adding a demonstrative, a quantity-measure expression, or a modifier attributing specificity, then the predicate becomes quantized and cannot combine with BE.RELEASED, even if it has duration (37).

   Mira Lata=GEN that famous song say-Imperf BE.RELEASED-Perf-3Sg.F
   Intended: ‘Mira started and continued to sing that famous song of Lata.’

   Mira a book read-Imperf BE.RELEASED-Perf-3Sg.F
   Intended: ‘Mira started and continued to read a book.’

12We thank an anonymous reviewer for pointing this out with the example in (36).
The sentence in (37a) is felicitous under iterative reading if it expresses that Mira began to sing that particular song in multiple occasions, as if she had no conscious control over her choice (whenever she is asked to sing, she starts singing this song, as if she is somehow conditioned to do so!). Thus, we claim that the predicate must be atelic (or at least something whose telic point is significantly distant) for this light verb to combine with it in a legitimate Type C CP.

In a nutshell, the Type C light verb does not impose a matching requirement on the main verbs it combines with, but it selects for properties that are in some sense the opposite of those it has itself in its main verb use.

Moreover, the properties that are required by this light verb do not need to be satisfied by the verb in terms of its aktionsartal classification, but can be satisfied at a higher semantic level via distributivity/iteration triggered by plurality of the theme.

3 Formalizing the generalizations

The selectional relationships obtained within each type of CP show clearly that we are not dealing with a homogeneous class of constructions. These are different kinds of CPs with their own distinct properties. Despite the fact that they all are complex predicates and have typical, defining properties of complex predicates such as monoclausality and monoeventivity, they each have their own pattern and selectional behavior.

In what follows, we seek to formalize the generalizations for each class that have emerged, using an explicit constructional framework. The purpose of the formalization is to try to approach some higher level generalizations about complex predicate building as a whole, if we take seriously the idea that verbs in natural language are the lexicalizations of a particular kind of abstract event template.

A vast body of literature on the syntax-semantics of the verbal events that has accumulated over the years has established that the internal syntactic structure of the verbal domain is more complex than a traditional VP projection (Borer 2005, Hale and Keyser 1993, Harley 1995, Kratzer 1996, Rappaport Hovav and Levin 1998; Ramchand 2008). According to constructionist approaches, the VP domain is unbundled syntactically into a more elaborate structure that tracks the compositional semantics of verbal events. In more lexicalist frameworks, the decomposition must be made within the lexical module itself (see Levin and Rappaport Hovav 2005). Either way, the nature of the components in an event description is remarkably uncontroversial: causation and telicity are parameters that seem to recur as linguistically relevant in verbal expression in language after language (see Ramchand 2014).

In what follows, we will use the framework of Ramchand (2008) and Ramchand (2017) for convenience, since it is explicit about many of the ingredients we need. But the overarching questions about the composition of complex predications can be translated fairly into other frameworks, in particular lexical ones with an articulated causational event structure to decompose verbal meaning.

We assume the decomposition put forth in Ramchand (2008) and Ramchand (2017), expressed as a syntactic template as shown in (38).\textsuperscript{13}

\textsuperscript{13}This template represents hierarchy and labeling but is intended to be neutral with respect to final word order. As is well known, the South Asian languages are robustly typologically ‘head-final’. The linearization of the structures given here is what would correspond to the trees drawn with the heads on the right. We remain neutral as to the exact nature of the parameters that effect this order of spell out based on the hierarchical representation proposed.
In (38), each phrasal projection corresponds to a subevent of a verbal event. Each subevent is linked to the subevent it dominates by means of abstract causation. Thus, the initiation causes a process to take place, which in turn may lead to a result. Initiation and Result subevents are optional, allowing distinctions to be made between caused and uncaused events, and telic vs. atelic events respectively. Each projection has its own specifier hosting the arguments/participants in the event. The interpretation of these arguments is tied to the subevent it is the specifier of. Accordingly, the specifier of the initP is the INITIATOR, the entity that causes the event; the specifier of the procP is the UNDERGOER while the specifier of the resP is the holder of the result.

Finally, the phrase structure above also contains a high head labelled Evt. This head is introduced in Ramchand (2017) as an extension of the original system, providing the landing site for the argument that will eventually be promoted to Subject position (much like the Voice head of other recent decompositional work). The Evt head is also the head position for the verb that will be inflectionally affected and marked for tense and agreement. We include the Evt head in our diagrams as the position that must be minimally filled by the finite inflected verb, in our case here the light verb in a complex predicate construction.

Recall that the purpose of the exercise in what follows is to attempt to partition the contribution of the light verb and the main verb in the different CPs that we have found in Marathi. This is easy to represent in the above system because the ingredients are explicitly decomposed, and because the system assumes that verbal lexical items spell-out different parts of the structure. In the terms of Ramchand (2008), therefore, the question of the contribution of the light verb vs. the contribution of the main verb reduces to the question of which parts of the above template are spelled out by the light verb and which by the main verb.

Recall also that we take as a working assumption Butt’s Generalization which is repeated here for convenience:

(39) **Butt’s Generalization** (Butt 2003, Butt and Lahiri 2005)

Unlike auxiliaries which may become grammaticalized over time to have a purely functional use, light verbs always have a diachronically stable corresponding full or ‘heavy’ version in all the languages in which they are found.

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14 See also Harley 2013 for a discussion of the empirical reasons for separating Voice and Cause.

15 This system assumes that a verbal lexical item comes specified for the category features init, proc, and res depending upon the aktionsart properties of the verbal event. A lexical item does not get inserted in a terminal node, but spells out chunks of syntactic structure. The category specification of a verbal lexical item determines how much of the decomposed structure the verbal lexical item spells out. For instance, a verb which is specified for the category features init and proc but not res, will spell out the initP and procP but will lack the resP projection. Similarly, the verbs lacking external cause elements will completely lack the initP projection. The unaccusative verbs are of this type. A verbal lexical item is also specified for whether the specifier of each projection is base-generated or is filled in by raising from a lower specifier position. In case of the latter, we indicate the raising head with a subscript R. For instance, an unergative verb like run has a single argument that is both the initiator of the event of running and the one that undergoes the event. In this case the UNDERGOER is raised to the INITIATOR position and acquires entailments of both theta-roles. We specify the verbal lexical entry of run as \(<\text{init}_R, \text{proc}>\). See Ramchand (2008) for further details. The generalizations we come to do not depend on the particular implementation we offer here, but are offered rather as a concrete visualization of the problem.
Given this Generalization, we assume that the light verb and its corresponding main verb version are two manifestations of the same lexical entry. Accordingly, the category specification of the light verb is the same as that of its corresponding main verb.

In a complex predicate, the main verb and the light verb ‘co-lexicalize’ the event structure template given above. The issue we would like to understand is whether there is something predictable in the division of labour between the two. It is logically possible for example, that the two pieces perfectly complement each other, one providing information that the other lacks and vice versa with nothing left over (pure Structure Building). Alternatively, it is possible that some of the information of one of the verbal lexical items is ignored completely and the other lexical item contributes its own information in its place (Structure Building plus Destruction). Finally, another logical possibility is that the two colexicalizing elements provide the same information on a certain aspect of the structure, so that they ‘agree’ or ‘match’ at least partially in information (Structure Matching).

Given that two verbal items are being conflated into one event structure, what are the patterns of addition (Structure Building) vs. overlap (Structure Matching) in decompositional featural ingredients in building a single unified event description? The research questions can be summarized as follows:

- Which ingredients do the light verbs contribute to the final event structure?
- Which ingredients do the main verbs contribute to the final event structure?
- Which ingredients do the light verb and main verb have to have in common for successful combination?

In general, we must also assume that there is some unification of the conceptual content of the two verbal lexical items. When the two lexical items build a single complex event structure, their conceptual content must also create a unified conceptual description. The terminology of ‘main verb’ vs. ‘light verb’ embodies the assumption commonly made in the literature that it is the conceptual content of the main verb that carries over to the complex predicate as a whole. Indeed the balance of the encyclopedic content certainly seems to go in this direction. However, the conceptual content of the ‘light verb’ is quite abstract even in its main verb use and we assume that this fact is not irrelevant. While the spatial and physical transfer interpretations of these verbs disappear when they are used as light verbs in CPs, certain other of their more abstract conceptual properties do survive. We thus assume that matching and unification are in operation at the conceptual level as well\footnote{In Ramchand (2014), it is argued that light verbs in Bangla are used as light verbs precisely because they only contribute very abstract conceptual content which in principle is unifiable with many other types of embodied events. The proposal there, further, is that the physical/spatial interpretations of light verbs when used on their own in main verb contexts is secondary and contextual and arises because of cognitive defaults in the absence of more specific conceptual content contributed by those items.}, and that main and light verbs always unify their conceptual content.

We make the assumption explicit in (40).

\textbf{(40) Principle of Conceptual Unification (PCU)}

When a finite verbal form and a nonfinite verbal form combine to create a complex predicate, conceptual structure corresponding to the two forms must unify, i.e. they both are present in the resulting composite verbal unit.

The possibility of complex predicate formation is therefore essentially predicated on the idea that ‘light’ verbs have minimal or extremely abstract conceptual content, which allows them to be successfully unified with a wide variety of different substantive verbs to form complex predicates.

In what follows, we set out to implement the empirical generalizations discussed in section 2 within this explicit verbal decompositional system.
Type A

Let us summarize the properties we have established for the Type A complex predicates in Marathi:

| Light verb: | +Telic, +Agentive and -Agentive versions |
| Main verb:  | +Telic (matching) plus Agentivity matching |
| CP:         | +Telic, either +Agentive or -Agentive |

Purely descriptively speaking, then, it is hard to tell in the case of Type A whether it is the light verb or the main verb that is contributing the agentivity or telicity to the resulting CP, since they both need to match for these features. However, there is an asymmetry, while all the light verbs in this construction are unambiguous with respect to telicity—they are all telic—the main verbs that they combine with can be in principle ambiguous (as in case of incremental theme verbs and degree-achievement verbs). This indicates to us that it is the light verb that is imposing the telos on the combination, and the main verb that is ‘agreeing’ with it. This is further supported by the fact that the bare plural theme of incremental theme verbs is read as contextually quantized, making the whole event telic, when combined with the Type A light verbs, as shown in (24–25).

We implement this situation in a Ramchandian system as follows. The light verb gives rise to a full verbal decompositional structure that includes res, and takes the participle as its complement. We further assume that this kind of verbal complement-taking is regulated by strict selectional matching. In other words, if a verbal form consisting of [X, Y, Z] in its featural decomposition takes a nonfinite verbal form as its complement, then the nonfinite verbal form must also possess features [X, Y, Z].

(41) Matching under Syntactic Selection (MSS)

For all X, if a finite verbal form lexicalizes a syntactic structure consisting of the head X, then its conjunctive participle complement must also possess the feature X.

This means that the light verb lexicalizes and determines the whole of the event structure. In the case of DROP and SIT, this means <Evt, init, proc, res>, and in the case of GO and COME this means <Evt, proc, res>. However, because of the selectional matching principle in (41) above, the nonfinite main verbs these light verbs combine with are forced to duplicate these features exactly.

In the trees which follow, we show the syntactic decomposition of the CP, and indicate which part of that syntactic decomposition is lexicalized by which part of the verbal complex. In the case of Type A, the light verb lexicalizes the whole structure, and the nonfinite verbal form is in the complement position of the lowest head. The principle in (41) ensures that matching (and hence complete overlap of features) must occur for the combination to be well-formed.

This is an implementation that captures the telicity matching and agentivity matching within Type A CPs. The category features of the conjunctive participle form do not lexicalize the main event decomposition, but are linked to those features via AGREE. As before, we assume that the conceptual content of both pieces must unify. This means that the participant roles of the nonfinite participle will also affect the way the arguments of the main event structure are interpreted.\textsuperscript{17}

\textsuperscript{17}We leave it open whether there is internal structure to the participle that could also be spelled out as a syntactic tree, and whether the arguments of that lower event structure literally move to the higher one. That would certainly be consistent with our assumptions here, although not necessary to them. The main point here is that this is a complex complementation structure, where one verbal functional sequence is embedded under another, as in small complement VP recursion found in e.g. Wurmbrand (2001). The additional insight we introduce here, because we are explicit about how V decomposes, is that VP recursion (in this case at least) is constrained by strict Matching.
Type B
The Type B CPs, despite their formal similarity with Type A, differ firstly with respect to the lack of mandatory telic interpretation. The telicity of the Type B CP is determined by the main verb.

<table>
<thead>
<tr>
<th>Light verb:</th>
<th>+Telic, → and ← directed versions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main verb:</td>
<td>+/− Telic, → and ← directed</td>
</tr>
<tr>
<td></td>
<td>(underspecified, or matching with the LV)</td>
</tr>
<tr>
<td>CP:</td>
<td>+/- Telic (MV), → and ← directed (LV)</td>
</tr>
</tbody>
</table>

What we find with these complex predicates is that the telicity feature (i.e. the existence or nonexistence of res) is controlled by the main verb, while the directedness feature is directly controlled by the light verb. Once again, the light verb because it is tensed, seems to control the higher part of the verbal structure and the main verb conjunctive participle the lower. But compared to Type A, the main verb in this case contributes more to the resulting form in Type B—it is the one directly determining the telicity.

We implement this situation in the Ramchandian system as follows. The light verb once again must lexicalize Evt, since it is finite, but it looks like the nonfinite main verb form is responsible for whether the resulting complex predicate ends up as proc or proc, res. However, it is also true that the light verb imposes some properties on the main verb it combines with. In particular, in Type B we see that init and proc must always be present in the main verb that goes with GIVE and TAKE. Given the MSS principle this suggests that the light verb must lexicalize both init and proc as well in order to impose those requirements on its complement.

The main contribution of the light verb in Type B CPs is to express the directedness of the action. In the case of outward directedness, an extra dative argument is licensed. Inward and outward directional polarity surfaces in complex predicate constructions in many languages. It seems necessary therefore, to capture this directional semantics within the compositional event structure. The exact manner in which to achieve this in the original system of Ramchand (2008) is still not very clear to us. However, in case of the light verbs at hand, since the deictic centre of the directionality is
the agent/initiator, there is certain appeal to locating the directionality in the initiational subevent. Symbolically we show the directionality by subscripting a directional arrow to the init head. Thus, GIVE is \(<\text{Evt, init}_-\), proc, res> while TAKE is \(<\text{Evt, init}_+, proc, res>\) in their normal main verb usage. Since these CPs are not unambiguously telic, however, we have to assume that in this case, GIVE and TAKE do not actually contribute their own res feature to the resulting structure. Instead, we assume that GIVE and TAKE lexicalize only as low as proc, and the conjunctive participle merges as the complement to the proc head.

As the complement of the process head, the conjunctive participle of the main verb will then determine how the path of change is interpreted (as generally in Ramchand 2008): if the main verb possesses a res feature, the path will be obligatorily bounded, and if it does not the path will be unbounded.

As before with Type A, we assume that the structure provided by the light verb is also ‘selectional’ in a strong structure matching sense: the features spelled out by the light verb must be matched by those on the conjunctive participle, enforcing the matching for init and proc. However, since the light verb does not spell out res, by assumption, no selection for res feature is in force, and this is free to vary from main verb to main verb.

By assumption once again, the main verb will unify its conceptual content with the light verb event. In the case of contradictory directionality in the conceptual content of the two verbs, their unification is rendered impossible and such a CP is not formed. However, verbs with underspecified directedness will have no problem unifying with either light verb.

The two types of CP using the conjunctive participle thus differ in the amount of structure contributed by the light verb. In the case of Type A, the light verb contributes all of its structural properties and then enforces matching by selection on the main verb which is in the conjunctive participle form and sits in the complement position of the result head of the light verb. Presumably, the value added in this construction is that the main verbs in question could possibly be ambiguous in their telicity, but the Type A construction imposes matching, so that the resulting CP is obligatorily telic. In the case of Type B, the light verb contributes only down to the process projection and therefore imposes matching only for dynamicity and directedness of initiation. This means that the selected conjunctive participle will have an effect on the overall telicity of the CP depending on whether it possesses a res feature or not. The idea is that a conjunctive participle in the complement of process contributes to the path structure of the event like any other XP complement of process, and when it itself is bounded, it adds telicity by means of the homomorphism between the verbal run time and its path complement more generally (see Ramchand 2008 for extensive discussion). What
Type A and Type B have in common is that the conjunctive participle is selected as a complement to the light verb’s phrase structure in both cases, and also that feature matching is imposed for all and only the categories spelled out by the light verb.

**Type C**

The CP of Type C differs from the other two types both in terms of its semantics as well as in the morphology found on the main verb. The main verb in Type C is in the imperfective participle form. Moreover, unlike the other two cases in which the light verb and the main verb seem constrained to share certain properties, the main verb and the light verb in Type C seem to possess contrasting properties.

| Light verb: | +Telic, –Agentive |
| Main verb:  | –Telic, +Agentive |
| CP:         | Inchoative transition with agentive subject followed by open-ended (out of control) process. |

Dynamically, it looks as though the two event profiles of the light verb and the main verb are being combined in sequence. However, the external argument seems to be a composite or unified version of the light verb and the main verb in being both sentent/agentive and somehow not in control.

In addition, because of the differences in morphology on the main verb, we probably need to assume that the participle form of the main verb lexicalizes in a somewhat different way than the conjunctive participle phrases seen in Types A and B. Although we do not yet have independent justification for this move, we propose that the imperfective participle form of the main verb directly lexicalizes the initP portion of the event structure, as opposed to simply being selected as a complement (as in the conjunctive participle cases). Under this view, the imperfective participle spells out everything that the corresponding finite verb would, except for the Evt head which is associated in Ramchand’s system with finiteness.

The light verb in Type C—BE.RELEASED—is an unaccusative, punctual verb. Given the system assumed here, it should be specified as $<\text{Evt, proc, res}>$ where it lacks the initializational subevent entirely. However, as we see from the description of the resulting complex predicate, this lack of initiation does not carry over to the resulting form. In other words, the light verb does not contribute its argument structure properties to the resulting CP, only its event structure profile. We capture this by assuming that in Type C, the light verb spells out the minimum it can, consistent with its status as a finite verb, namely just the Evt head.

Note that the lexicalization pattern for the imperfective participle differs from the ones we assumed before for the conjunctive participle. We have represented the imperfective participle as having fully verbal (though non-finite) properties in lexicalizing the verbal template directly, not merely sitting in the complement position to some verbal head. The light verb on the other hand lexicalizes just the locus of finiteness information, the event head. By hypothesis, its own verbal features are not expressed at all. This representation accounts for the fact that none of the light verb’s argument structure is matched via selection. However, it does not yet account for the highly constrained interpretation that results from this particular combination of light verb and main verb.

All that is retained from the light verb in this proposal are its finiteness feature and its conceptual content. We have suggested that the conceptual content of light verbs is extremely light to begin with, but not nonexistent. In the case of sut BE.RELEASED, if physical and spatial embodiment is subtracted, the verb seems to conceptually pick out an event of sudden inception followed by open-ended continuation. The examples in (45) using sut as a main verb illustrate this point.

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18 This possibly amounts to a deep category difference between the conjunctive participle and the imperfective participle, where the latter is more verb-like in some sense and the former is more adjectival. We leave exploration of this idea to further research.
Diagram 1.3 Type C Lexicalization

(45) a. turuŋa=tun koidi  su-t-l-a.
   jail=from  prisoner be.released-Perf-3Sg.M
   ‘The prisoner got released from the jail.’

b. ribini=ci  gath sut-l-i.
   ribbon=GEN knot be.released-Perf-3Sg.F
   ‘The knot of a ribbon opened.’

c. gađi  su-t-l-i.
   train be.released-Perf-3Sg.F
   ‘The train departed.’

d. məstə was  su-t-l-a.
   nice smell be.released-Perf-3Sg.M
   ‘A nice smell emitted (and kept coming out).’

e. wara sut-l-a.
   wind be.released-Perf-3Sg.M
   ‘Wind began (and continued) to blow.’

In all these cases, there is sense of ‘release’ or ‘emission’. In (45d–e), the emission of the smell and the wind respectively, inherently involves unbounded continuation. It is these instances that are most closely related with the light verb use of BE.RELEASED. We propose that this conceptual semantics is retained in the light verb use and is unified with the main verb semantics.

Recall that we have been assuming so far that the conceptual information of the two lexical items need unify in order to colexicalize this structure. Because the light verb lexicalizes only Evt, there is no featural matching enforced, by hypothesis. This means that formal matching is not a requirement and paves the way for the combination of verbs that would otherwise be impossible in one of the other two colexicalization scenarios. Indeed, what we find here is a formally unaccusative verb combining with a formally agentive one. However, the conceptual semantics of the two events can in fact be unified, if the transition expressed by the light verb is identified with the initiation of the agentive event, and the processual post-transitional part of the light verb event is identified.
with the process part of the agentive event.

Our proposal therefore, is that the properties of the Type C CP so formed are a result of conceptual unification and coercion and not a formal syntactic selectional process. Evidence that this is the case comes from the fact that semantic devices like pluralization of the direct object and modification by adverbials can be used to rescue the combination of main verb and light verb. What we are dealing with is a purely semantic conceptual unification not a selectional requirement for atelicity. In fact, an agentive verb which normally has a res feature can combine with BE.RELEASED to form this kind of Type C construction, provided that the event is iterated in an open-ended way. This is illustrated in the example (35c) which is repeated here as (46a):

(46) a. Mira katiya todi-su-t l-i.
   Mira sticks break-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira began and continued to break sticks.’

b. Mira pustaka wa-ti-su-t l-i.
   Mira books read-Imperf BE.RELEASED-Perf-3Sg.F
   ‘Mira began and continued to read books.’

A similar effect is obtained from the mismatch of the semantics associated with the external argument. The main verb is the one that contributes its external argument and agent semantics to the resulting event, but when the conceptual semantics of uncontrolled release is unified with that kind of event, we get an overlay of involuntariness or out-of-control-ness as a result of the enforced unification of conceptual content. As a result, the overall CP gets the sense that the agent of the event has no more control over the event as it commences and continues.

It appears then, that in Type C, colexicalization does not enforce any selection and structure matching. It involves pure structure building at the formal feature level, with the light verb contributing only finiteness. However, at the conceptual level, content unification gives rise to the distinctive semantic properties of the construction.

There is one fact unaccounted for under this proposal however, and that is the fact that we predict that the light verb, lexicalizing the Evt head only, can combine with verbs encoding initP and verbs lacking initP as well. Our data however, do not support this prediction, since this light verb does not combine with unaccusative verbs and experiencer-subject verbs which lack the initP. Our speculation is that given that the particular semantics of this CP results from the interaction of opposite properties of the two verbs, some sort of blocking takes place when the light and the main verbs are too similar in properties. The light verb being an unaccusative verb in its main verb use is blocked from combining with other unaccusative main verbs since the resulting CP will not have the semantics that is significantly different from that of the main verb used on its own in finite form. Type C CP only creates a distinctive event description when the conceptual content of the light verb is different from that of the main verb. The conceptual content of BE.RELEASED is very weak however, and does not add anything to the semantics of state-inchoation that we find with regular unaccusative and experiencer-subject verbs.

4 Summary and conclusions

Our examination of the selectional relations between the component lexical items of the three distinct types of Marathi CPs throws light on the division of labour between those verbs in forming a CP by co-lexicalizing a single event structure. In particular, the decomposition of the features that we have assumed has allowed us to pinpoint systematic differences in the nature of the information contributed by the light verb in each case. While we have used the system of Ramchand (2008) and Ramchand (2017) to formalize our generalizations, we think that the following general properties are probably independent of what formal system is employed. We summarize them here.

The different complex predicates vary with respect to how much of the formal feature structure of the light verb is carried over to the complex predicate so formed.

We have proposed that the main verb and the light verb conspire to share the lexicalization of
an event structure. However, the ingredients of the event structure are contributed by the different pieces in different ways for the three types of complex predicates we have examined.

- In all cases, the light verb is the highest verbal element, which goes on to inflect for tense.
- In all cases, the conceptual structure of both verbal elements must unify (the Principle of Conceptual Unification (PCU)).
- In the case of the conjunctive participle, it is always ‘selected’ and ‘embedded’ in the complement position of the light verb and is subject to the Matching Under Syntactic Selection (MSS) principle.
- In the case of the imperfective participle, it lexicalizes the event structure directly, without any ‘selection’. We make this difference in order to account for the fact that there are strong matching restrictions between the light verb and main verb in the case of the two conjunctive participle CPs and no syntactic matching in the case of Type C which uses the imperfective participle.
- Light verb structures seem to vary with respect to how much of their main verb event structure carries over to the resulting complex predicate: Type A light verbs express their full event structure; the Type B light verbs express only the portion of their event structure down to proc; Type C light verbs express only the Evt part of their event structure.

As we have emphasized, in all of three cases, the conceptual content of the light verb and the main verb must unify. It is the very abstract and impoverished lexical encyclopedic content of the light verb subclass that facilitates its use in co-lexicalizations of this kind. Semantic unification of matching is always therefore in effect. In order to distinguish between structure building and structure matching in a clean way, conceptual semantic unification needs to be acknowledged as a separate dimension of matching in this system.

However, on the structural side, structure matching only occurs when there is a genuine selectional relationship. In our implementations this is correlated with the formal expression of the light verb. If the light verb formally contributes a certain feature (corresponding in our implementation to actually lexicalizing a position), then it also ‘selects’ for that feature in the main verb. This accounts for the properties of Structure Matching in the system. In Type A, telicity matching is an example of this, as is initial directionality matching in Type B. In cases when the main verb is not constrained by formal selection via a light verb feature, it is free to contribute its own information to the resulting complex predicate. This results in the Structure Building properties of the system. In Type B, we find this with the main verbs contribution to the lower part of the event structure, essentially determining its telicity. In Type C, the main verb contributes the whole event structure which is added to the finiteness head contributed by the light verb.

We also noted an important difference between the two participles in building complex predicates. The conjunctive participle was always selected for by the light verb, and its verbal features did not directly lexicalize but were only indirectly accessed via selection. The imperfective participle was analyzed as contributing to the verbal structure directly. If this distinction is on the right track then we would expect to find further independent differences in their distribution. For example, we would expect that imperfective participles would be found more generally in CPs where the light verb minimally attaches, and in auxiliary structures. Another way to think about the difference between the conjunctive and imperfective participle is to simply see them as being different in the size of the event structure they can lexicalize. We point this out as an option here, but leave investigation of the issue to further research.

Our investigation has uncovered a pattern in the type of verbal information that can be contributed by a finite form. The patterns in our data suggest the following as an implicational hierarchy all within the minimal predication decomposition of the clause:

Evt (Voice) > Initiation/Process > Result

Our light verbs were found to contribute all three of these components to the resulting verb phrase (Type A), the top two components (Type B), or just finiteness itself (Type C). We did not find a
CP type where the light verb contributed just finiteness and selection for result, but was silent on selection for agentivity.

This structural hierarchy is further confirmed by the prediction it makes concerning complex predicate embedding: Type A and B CPs should be embeddable under Type C, but not the other way around. This is because the Type C light verb embeds the entire init-proc-res functional sequence to be spelled out by another lexical item, this sequence may itself be an already complex structure lexicalized by more than one item, as seen in (47a–b).

\[(47) \begin{align*}
a. & \text{ Mira pustako phaḍ-un } \text{ tak-āt } \text{ sut-l-i.} \\
& \text{Mira books tear-CPrt DROP-Imperf BE.RELEASED-Perf-3Sg.F} \\
& \text{‘Mira began and went on tearing up the books.’} \\
b. & \text{ to lokan=na phuktat ghara bandh-un de-t sut-l-a.} \\
& \text{he people=DAT for.free houses build-CPrt GIVE-Imperf BE.RELEASED-Perf-3Sg.M} \\
& \text{‘He began and went on building houses for people for free.’} \\
c. & *\text{Mira=ne pustako phaḍ-ōt sut-un taḥ-l-a.} \\
& \text{Mira=ERG books tear-Imperf BE.RELEASED-CPrt DROP-Perf-3Sg.N} \\
\end{align*}\]

The construction in (47c) demonstrates that a Type C CP embedded under a Type A light verb is unacceptable.

Our investigation into the various types of CPs in Marathi further indicates that the class of CP constructions in a given language is not a homogeneous set of constructions. Even if they share properties of being monoclausal, monoeventive constructions built by more than one lexical item, they differ from each other on several other counts. Even the CPs that formally/morphologically look very similar may differ from each other in significant, non-trivial ways. The light verbs building different types of CPs contribute different kinds of information. The Type A light verbs in Marathi contribute by forcing the presence of a result, the Type B contribute by expressing the directional polarity in the initiational subevent of the CP, and the Type C light verb contributes the reading of sudden inception followed by out-of-control continuation of the event. Moreover, the information that a light verb contributes to the CP is always a subportion of the information it conveys as a main verb elsewhere in the same language.

References


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