Rahul BALUSU
EFL University, Hyderabad, India
kodiguddu@gmail.com

Selectional restrictions on light verbs in Telugu
oral presentation in session: 5 Theoretical and comparative syntax (Luigi Rizzi)
Selectional restrictions on light verbs in Telugu

Rahul Balusu
EFL University, Hyderabad

This paper investigates the selectional restrictions on light verbs in V-V complex predicates in Telugu, in the framework of a decompositional syntax/semantics for verbal meaning and a theory of phrasal spell-out of lexical items, as proposed in Ramchand (2008).

After a careful examination of selectional restrictions on Hindi and Bangla light verbs in V-V complex predicates, Ramchand comes to the conclusion that selection can be achieved via category labels on lexical items in association with a theory of lexical insertion constrained by the principles of Superset Principle, Exhaustive Lexicalization, and Underassociation. In the cases she examines, Underassociation, along with agree does the job normally attributed to selectional features, and she makes the broader speculation that these very mechanisms could explain a number of c-selection patterns that are found in the literature, and thus remove the distinction between inherent features and selectional features, and the need for the latter separately, in the syntactic computation.

I find in this paper that while selectional restrictions for one class of light verbs in Telugu, the aspectuals, can be explained by Underassociation constrained by agree, the selectional patterns of another class of light verbs, the non-aspectuals, are not constrained by Underassociation. I propose that this difference arises based on whether ResP, the Result Phrase, is lexicalized by the main verb or not.

So, while selectional restrictions are in general constrained by the principles that are described in Ramchand (2008), their applicability is dependent on the patterns of lexicalization of non-terminals by lexical items.

KEYWORDS: Complex Predicates, Selectional Restrictions, First Phase Syntax, Argument Structure, Light Verbs, Dravidian, Telugu.

1 Introduction

In this paper, I examine the kind of selectional restrictions that are imposed on complex predicates formed with various kinds of light verbs in Telugu. While some light verbs, the aspectual light verbs, show selectional restrictions that pattern along the lines that

---

1A preliminary version of this paper was presented at the workshop on Complex Predicates in South Asian Languages held in EFLU, Hyderabad, January 2012. I would like to thank that audience, and the audience of the 19th ICL for helpful discussion and comments.
Ramchand (2008) found in Hindi and Bangla, there are other light verbs, that I broadly classify as non-aspectuals, that do not show any selectional restrictions.

Ramchand (2008) proposes the **Light Verb Constraint**: A verb can be used as a light verb only when all of its category features Agree with some other verbal element in its complement domain. This constraint is at best a stipulation in the system. The Telugu data examined shows that the stipulation is unnecessary and the possible combination that the compositional system allows is actually attested. In Telugu, light verbs also function as transitivizers. According to the light verb constraint, the transitivizer light verbs should not compose with unaccusative main verbs, which do not have an \[\text{init}\] feature to license the \[\text{init}\] feature of the transitivizer light verbs. But they do. What we see here are instances of direct lexicalization of the Spec of \[\text{InitP}\], thus licensing the \[\text{init}\] feature of the light verbs. The transitivizers in Telugu are thus light verbs which exhibit direct lexicalization of the \[\text{init}\] head. The paper also examines other selectional restrictions and combinatorial possibilities between light verbs of various kinds —aspectuals, transitivizers, and non-aspectuals; and between light verbs and the causative morpheme.

The paper is organized as follows. Section 2 briefly sets out the theoretical framework of first phase syntax. Section 3 explores the meaning and composition of aspectual light verbs in Telugu to arrive at their event structure projection properties. In sections 4 I postulate a structure for transitivizing light verbs in Telugu. In section 5 the selectional restrictions on the composition of complex predicates with non-aspectual light verbs in Telugu are laid-out. In section 6 the composition of the causative suffix with the aspectual and transitivizer light verbs is presented. Section 7 is the conclusion.

## 2 The theoretical framework: First Phase Syntax

### 2.1 Functional decomposition of Verbs

Ramchand's (2008) First Phase Syntax is characterized by the functional decomposition of verbs into three distinct heads, each corresponding to a primitive element of events. The internal structure of the verbal phrase contains the following three subevent projections: \[\text{init[iation]P}\], \[\text{proc[ess]P}\], and \[\text{res[ult]P}\]. The first (init) and the third (res) are stative heads, while the second – proc – is the hallmark of dynamicity. Every dynamic verb, then, contains the proc head in its decomposition. The stative init and res heads, however, can be missing in the case of dynamic verbs. Each subevent head enters in a predicational relation with its specifier position, where we find the “subject” of the event. The maximal decomposition of the verb phrase is given in (1). InitP introduces the causation event and licenses the external argument – the Initiator. ProcP specifies the process or the nature of the change and licenses the internal argument – the Undergoer. ResP introduces the result state and licenses the holder of the result state – the Resultee.

(1)
In this model, verbs come in the lexicon with a categorial feature specification which determines which subevents they lexicalize. For example, a verb specified as <init, proc> will spell out both the init and the proc head simultaneously. Depending on which subevent heads a verb lexicalizes, it belongs to a particular verb class. Thus, there is the class of <init, proc> verbs, the class of <init, proc, res> verbs, the class of <proc,res> verbs, etc. If we are to connect these classes to the traditional aspectual classes, then activities are characterized by the features <init, proc> or only <proc>, achievement verbs are specified as <init, proc, res> or <proc, res>, statives have only the feature <init>, etc. When it comes to argument structure, unergatives are verb that are specified with the feature <init>, while unaccusatives lack this feature.

Composite roles arise when the same DP argument occupies two (or more) specifier positions. This happens when a DP raises from the specifier of a lower subevent head to the specifier of a higher subevent head. In such cases, we have the roles of Initiator-Undergoer, Undergoer-Resultee, and Initiator-Undergoer-Resultee. The first one arises when the same argument is the holder of the initiational stage and undergoes the process/change (e.g. the sole argument of the verb run). The second one arises when the same argument undergoes the process/change specified by the proc head and holds the result state (e.g. the direct object of break). The third one arises when the same argument initiates the event, undergoes the process/change and is the holder of the result state (e.g. the argument of arrive). The composite thematic roles of the participants in the event are encoded in the lexical entry of the verb, that is, the verb determines whether a certain DP will raise from one specifier to another or not.

An event head can have not only another subevent phrase as its complement but also non-verbal material (DP, AP, PP, etc.) occupying its complement position —called Rheme. Rhemes are not subjects of events but part of the description of the predicate. A DP in the rheme position builds one joint predication with the verb. A DP in the specifier position of a subevent head is a verbal argument.

2.1.1 Lexical insertion as phrasal spell-out

Lexical items are not inserted under terminal nodes. Syntactic features correspond to distinct heads. Lexical items are associated with groups of category features, so they

2.1.2 The Superset Principle

The Superset Principle, argued for by Caha (2007) states that "The phonological exponent of a Vocabulary item is inserted into a node if the item matches all or a superset of the grammatical features specified in the node. Insertion does not take place if the Vocabulary item does not contain all features present in the node. Where several Vocabulary items meet the conditions for insertion, the item containing fewer features unspecified in the node must be chosen."

2.1.3 Exhaustive Lexicalization

Fabregas (2007) states the principle of Exhaustive Lexicalization "Every node in the syntactic representation must be identified by lexical content."

2.1.4 Underassociation

So while all the functional sequence in the syntax has to be exhaustively lexicalized, category features on a particular lexical item may remain 'underassociated' because these principles do not prohibit lexical items from inserting even if all of their features are not matched in the syntactic tree. But this makes the system too unconstrained, allowing for many lexical items to spell out a small chunk of structure, and underassociating the rest of their categorial features. To constrain this, Ramchand (2008) proposes the following constraints on Underassociation: If a lexical item contains an underassociated category feature, (i) that feature must be independently identified within the phase and linked to the underassociated feature, by Agree; (ii) the two category features so linked must unify their lexical encyclopedic content.

2.1.5 Agree

Agree of subevental features is possible only if the lexical conceptual content of two ‘agreeing’ features can unify conceptually without infelicity. This can happen only if one of the lexical items has a fairly general and abstract semantics, that is it is ‘light’ in a semantic sense, so that it can conceptually unify with a more specific lexical item, in a kind of hyponymous relation. Category features on a lexical item can fail to directly be associated with syntactic structure and instead be underassociated with the feature in the syntactic structure. Features on a lexical item may be underassociated when they are in an Agree relation with a feature of the same kind that is syntactically present. Underassociated features have to be licensed in the same phase by Agree. The underassociated features remain semantically active and facilitate the presence of
certain adjuncts. So Merge and Agree are both possible as operations to satisfy the
category requirements of a lexical item.

3 Aspectual light verbs in Telugu

There are 3 aspectual/completive light verbs in Telugu, poo ‘go’, veyyi ‘throw’, and
paDa.veyyi ‘fall throw’, that occur in V-V complex predicates, as shown in (2) - (4),
with the light verb version in (a), along with the the full or heavy verb version given
in (b). The light verb bears tense and agreement. The main verb appears as a per-
fective/conjunctive participle with the marker -i. The light verb has a very abstract
semantics. The semantic content of the complex predicate comes from the main verb.

(2) a. poo ‘go’
   siita paD-i-poo-indi
   Sita fall-PERF-go-PST.3FSG
   Sita fell (fully).
b. siita america poo-indi
   Sita America go-PST.3FSG
   Sita went to America.

(3) a. veyyi ‘throw’
   siita pustakam cad-i-vees-indi
   Sita book read-PERF-throw-PST.3FSG
   Sita read the book (fully).
b. siita banti vees-indi
   Sita ball throw-PST.3FSG
   Sita threw the ball.

(4) a. paDa.veyyi ‘fall throw’
   siita pustakam cadiv-i-paDees-indi
   Sita book read-PERF-fall.throw-PST.3FSG
   Sita read the book (totally).
b. Siita banti paDees-indi
   Sita ball fall.throw-PST.3FSG
   Sita dropped the ball.

Of these three verbs, poo ‘go’ is unaccusative; and veyyi ‘throw’, and paDa.veyyi
‘fall throw’, are transitive, as can be seen from their full verb use given above. These
category labels are analysed in First Phase terms as shown in (5)

(5) TRANSITIVE: init, proc, (res)
    UNACCUSATIVE: proc, (res)
3.1 Selectional restrictions on the aspectuals

There are strict selectional restrictions between the light verbs and the main verbs that they can compose with. Of the three light verbs, *poo* ‘go’ which is unaccusative can only combine with unaccusative main verbs. It cannot compose with transitive or unergative main verbs. This is shown in (6).

(6) a. **poo + unaccusative**
   icu karig-i-poo-indi
   ice melt-PERF-go-PST.3FSG
   The ice melted.

b. **poo + unergative**
   *Siita navv-i-poo-indi
   Sita laugh-PERF-go-PST.3FSG
   Intended: Sita laughed.

c. **poo + transitive**
   *Siita cadiv-i-poo-indi
   Sita read-PERF-go-PST.3FSG
   Intended: Sita read.

*Veyyi* ‘throw’, and *paDa.veyyi* ‘fall throw’, which are transitive, can only combine with transitive and unergative main verbs. They cannot combine with unaccusative main verbs. This is shown in (7) and (8).

(7) a. **veyyi + unaccusative**
   *icu karig-i-veys-indi
   ice melt-PERF-throw-PST.3FSG
   Intended: The ice melted.

b. **veyyi + unergative**
   siita navv-i-veys-indi
   Sita laugh-PERF-throw-PST.3FSG
   Sita laughed.

c. **veyyi + transitive**
   siita cadiv-i-veys-indi
   Sita read-PERF-throw-PST.3FSG
   Sita read

(8) a. **paDa.veyyi + unaccusative**
   *icu karig-i-paDa.veys-indi
   ice melt-PERF-fall.throw-PST.3FSG
   Intended: The ice melted.
b. **paDa.veyyi + unergative**
   siita navv-i-paDa.vees-indi
   Sita laugh-PERF-fall.throw-PST.3FSG
   Sita laughed.

c. **paDa.veyyi + transitive**
   siita cadiv-i-paDa.vees-indi
   Sita read-PERF-fall.throw-PST.3FSG
   Sita read.

So an aspectual light verb in Telugu has a requirement on the category or argument structure of the main verb that it combines with. The selectional restrictions can be summarized as shown in (9).

\[
\begin{array}{cccc}
\text{main verb} & \text{light verb} & \text{main verb} & \text{light verb} \\
\text{unaccusative} & \text{unaccusative} & <\text{proc}, \text{res}> & <\text{proc}, \text{res}> \\
\ast\text{unergative} & \text{unaccusative} & <\text{init}, \text{proc}, \text{res}> & <\text{proc}, \text{res}> \\
\ast\text{transitive} & \text{unaccusative} & <\text{init}, \text{proc}, \text{res}> & <\text{proc}, \text{res}> \\
\text{unaccusative} & \text{transitive} & <\text{init}, \text{proc}, \text{res}> & <\text{init}, \text{proc}, \text{res}> \\
\ast\text{transitive} & \text{transitive} & <\text{init}, \text{proc}, \text{res}> & <\text{init}, \text{proc}, \text{res}> \\
\end{array}
\]

3.2 **A First Phase Analysis of the selectional restrictions on the aspectual complex predicates**

Complex predicates like these have been analysed in First Phase Syntax terms as underassociation of the main or heavy verb features under the light verb (Ramchand 2008). This is shown for the Telugu data given in (2)-(4) above, in the syntactic structures in (10). The heavy verb lexicalizes or occupies the rheme position. Together they form one joint predication.

\[
\begin{array}{cccc}
\text{main verb} & \text{light verb} & \text{main verb} & \text{light verb} \\
\text{unaccusative} & \text{transitive} & <\text{init}, \text{proc}, \text{res}> & <\text{init}, \text{proc}, \text{res}> \\
\ast\text{unergative} & \text{transitive} & <\text{init}, \text{proc}, \text{res}> & <\text{init}, \text{proc}, \text{res}> \\
\ast\text{transitive} & \text{transitive} & <\text{init}, \text{proc}, \text{res}> & <\text{init}, \text{proc}, \text{res}> \\
\end{array}
\]
The subevent feature specification of the light verb is the same as the subevent specification of that verb when it is used as a heavy verb, an assumption that Ramchand (2012) bases on Butt’s Generalization, given in (11). Based on historical evidence, Butt and Lahiri (2012) show that the light version and the full version of a verb are very closely tied together: When a verb is lost, both light and main verb versions are lost simultaneously. There is also no evidence for progressive grammaticalization of the main verb into a light verb, as has been documented with auxiliaries.

(11) Butt’s Generalization (Butt 2003, 2010; Butt and Lahiri 2012):
Unlike auxiliaries which may become grammaticalized over time to have a purely functional use, light verbs always have a corresponding full or ‘heavy’ version in all the languages in which they are found.

The constraints on underassociation that Ramchand (2008) derives from analyzing complex predicates in Bangla and Hindi are the following: 1) Underassociation of category features of any ‘main verb’ is possible, constrained by AGREE. 2) Agreeing categorial features must unify their conceptual content.

A verb is light when its categorial features are in AGREE relation with an element in its complement position. For the conceptual content of the agreeing features to unify, one of the verbal elements must have extremely light or abstract lexical content.

In the case of poo ‘go’, the unaccusative light verb, the light verb lexicalizes [proc], and the main verb lexicalizes only the [res] head through the perfective ending -i so that all its other category features remain underassociated. Should the main verb contain an [init] feature, the structure will not converge because it will not be licensed - either by AGREE or by direct lexicalization. This explains the selectional restrictions on poo.

(12) *siita cadiv-i-poo-indi
    Sita read-PERF-go-PST.3FSG
    Intended: Sita read (fully).
In the case of the transitive light verbs, veyyi ‘throw’ and paDa.veyyi ‘fall.throw’, the light verb lexicalizes both [init] and [proc] in the first phase structure. This should allow both kinds of verbs - those with only [proc], and those with both [proc] and [init] - to lexicalize the [res] and RHEME position, thus permitting all verb types to form complex predicates with these light verbs. But the transitive light verbs do not compose with unaccusative main verbs.

(13) *icu karig-i-vees-indi
    ice melt-PERF-throw-PST.3FSG
    Intended: The ice melted (fully).

To explain the ungrammaticality of unaccusatives combining with the transitive light verbs, Ramchand (2008) proposes the light verb constraint, given in (14), which enforces matching in the other direction, from the light verb to the main verb, which requires all of the features of the light verb to be linked to another verb by means of AGREE.

(14) The Light Verb Constraint: A verb can be used as a light verb when all of its category features AGREE with some other verbal element in its complement domain.
To conclude, of the 3 aspectuals in Telugu, \textit{poo} is an unaccusative verb ([init]-less in First Phase terms) and selects for other unaccussative verbs. The other two have an [init] head and select for verbs with [init]. The [init]-less light verb cannot select [init] verbs and the [init] light verb cannot select [init]-less verbs as shown in (15) with the non-converging structures given in (16), because if two lexical items combine to lexicalize an event structure skeleton, then their conceptual contents must be able to unify without contradiction. The Telugu data is further evidence for the constraints on underassociation and the selectional restrictions of light verbs that Ramchand (2008) identifies from Bangla data.

(15) a. \textit{poo} + [init] V
   \textit{*siita cadiv-i-poo-indi}
   Sita read-PERF-go-PST.3FSG
   Intended: Sita read.

b. \textit{veyyi} + [init]-less V
   \textit{*siita america vell-i-vees-indi}
   Sita America go-PERF-throw-PST.3FSG
   Intended: Sita went to America.

c. \textit{paDa.veyyi} + [init]-less V
   \textit{*siita america vell-i-paDees-indi}
   Sita America go-PERF-fall.throw-PST.3FSG
   Intended: Sita went to America.

(16)

3.3 Aspectual light verbs induce telicity

The aspectual light verbs impart a telic interpretation to the main verb they compose with, as shown in (17) - (18).
Without aspectual light verb

a. Siita pustakam 5min cadiv.indi Atelic
   Sita book 5min read.PST.3F
   ‘Sita read the book for 5 min’

b. Siita pustakam 5min.loo cadiv.indi Telic
   Sita book 5min.in read.PST.3F
   ‘Sita read the book in 5 min’

(18) With aspectual light verb

a. *Siita pustakam 5min.cadi(v.i).veesindi *Atelic
   Sita book 5min read.PERF;throw
   ‘Sita read the book (completely) for 5min’

b. Siita pustakam 5min.loo cadi(v.i).veesindi Telic
   Sita book 5min.in read.PERF;throw
   ‘Sita read the book (completely) in 5min’

In the First Phase syntax of Ramchand (2008), there are two possible separate sources of telicity. The first, is the presence of ResP. The second, is when ProcP takes a ‘path’ complement, and Path is bounded, either a quantized DP, or a to-PP. When Path is non-bounded, like a mass noun, a bare plural DP or a towards-PP, the predicate is atelic. The ResP only occurs when there is a result state explicitly expressed by the lexical predicate; it does not correlate with semantic/aspectual boundedness in a general sense, because there is another route to telicity via bounded paths as was just outlined. Also, the occurrence of ResP in the syntactic representation does not necessarily guarantee telicity, as it can be further modified by auxiliaries, PPs etc. beyond the first-phase syntax to create predications that are atelic.

With the aspectual light verbs in Telugu, the source of telicity is the ResP that is instantiated by the perfective morpheme of the main verb, before it composes with the aspectual light verb. So the resultative semantics of aspectuals in Telugu comes from the perfective ending which contributes a [res] feature, and a ResP to the structure.

4 Three transitivizer light verbs in Telugu

In Telugu, light verbs also function as transitivizers. This is shown in (20)-(22), where each of the three transitivizer light verbs, veyyi ‘throw’, peTTu ‘put’, and koTTu ‘hit’, combine with the two unaccusative main verbs aaru ‘dry’ and karugu ‘melt’, and the resulting complex predicates take an agent DP. The unaccusative constructions are shown in (19).

(19) a. aaru ‘dry’
   baTTalu aari-niyyi
   clothes dry-PST.3FPL

In Telugu,
The clothes dried.
b. **karugu** ‘melt’
   icu karig-indi
   ice melt-PST.3FSG
   The ice melted.

(20) **veyyi** ‘throw’
   a. siita baTTalu aar-a-vees-indi
      Sita clothes dry-INF-throw-PST.3FSG
      Sita put the clothes to dry.
   b. siita icu karag-a-vees-indi
      Sita ice melt-INF-throw-PST.3FSG
      Sita melted the ice.

(21) **peTTu** ‘put’
   a. siita baTTalu aar-a-peTT-indi
      Sita clothes dry-INF-put-PST.3FSG
      Sita put the clothes to dry.
   b. Siita icu karag-a-peTT-indi
      Sita icu melt-INF-put-PST.3FSG
      Sita melted the ice.

(22) **koTTu** ‘hit’
   a. siita baTTalu aar-a-koTT-indi
      Sita clothes dry-INF-hit-PST.3FSG
      Sita put the clothes to dry.
   b. Siita icu karag-a-koTT-indi
      Sita icu melt-INF-hit-PST.3FSG
      Sita melted the ice.

Going by Butt's Generalization, stated in (11), we should find heavy versions of the three transitivizer light verbs in Telugu. These are shown in (23a) - (23c).

(23) a. **veyyi** ‘throw’
   siita banti vees-indi
   Sita ball throw-PST.3FSG
   Sita threw the ball.

b. **peTTu** ‘put’
   siita banti akkaDa peTT-indi
   Sita ball there put-PST.3FSG
   Sita put the ball there.
4.1 A First Phase analysis of the Transitivizer complex predicates

An analysis of the three transitivizers in their heavy verb use in the constructions in (23) is shown in (25).

Applying the compositional principles of the aspectual complex predicates in §3.2 to the transitivizer complex predicates, the corresponding structures for the transitivizer complex predicates in the sentences in (20) - (22) in First Phase syntax terms are shown in (26).
But according to the light verb constraint discussed in §3.2, all of the features of the light verb should Agree with features on the main verb in a complex predicate. So the three transitivizer light verbs in Telugu should not compose with unaccusative main verbs which do not have an [init] feature to license the [init] feature of the transitivizer light verbs. What we see here are instances of direct lexicalization of the Spec of init, thus licensing the [init] feature of the light verbs. This is show in (27). This is a possible composition, which the First Phase Syntax system allows, but was ruled out as a stipulation by Ramchand (2008) because there were no instances of this found in the data in Bangla. The Telugu data here shows that the Light Verb Constraint (LVC) does not apply to non-aspectuals.
4.1.1 \textit{paDa.veyyi: Aspectual light verb formed using a transitivizer}

The aspectual light verb \textit{paDa.veyyi} discussed in §3, after understanding the composition of the transitivizer light verbs, can now be itself analyzed as a composite light verb formed by the transitivization of the unaccusative verb \textit{paDu} 'fall' with the transitivizer light verb \textit{veyyi} 'throw'. This is shown in (28)

\begin{enumerate}
\item[(28)]
\begin{enumerate}
  \item \textit{paDu} 'fall' = unaccusative
    \begin{enumerate}
      \item pustakam paD-indi
      \item book fall-PST.3FSG
    \end{enumerate}
    The book fell.
  \item \textit{paDa.veyyi} = unaccusative + transitivizer light verb
    \begin{enumerate}
      \item siita pustakam paD-a-vees.indi
      \item Sita book fall-INF-throw-PST.3FSG
    \end{enumerate}
    Sita dropped the book.
  \item \textit{cadivi.paDa.veyyi} = main verb + aspectual light verb
    \begin{enumerate}
      \item siita pustakam cadiv-i-paD-a-vees-indi
      \item Sita book read-PERF-fall-INF-throw-PST.3FSG
    \end{enumerate}
    Sita read the book (fully).
\end{enumerate}
\end{enumerate}

Another such composite aspectual light verb is \textit{paara.veyyi}, composed of \textit{paara} 'side/away' and \textit{veyyi} 'throw', as illustrated in (29). It is not as productively used as the other aspectual light verbs, and has a more colloquial and dialectal distribution.

\begin{enumerate}
\item[(29)]
\begin{enumerate}
  \item \textit{paari.poo} = nominal + unaccusative light verb
    \begin{enumerate}
      \item Sita paar-i-poo-indi
      \item Sita side-PERF-go-PST.3FSG
    \end{enumerate}
    Sita ran away.
  \item \textit{paara.veyyi} = nominal + transitivizer light verb
    \begin{enumerate}
      \item siita pustakam paar-a-vees.indi
      \item Sita book side-INF-throw-PST.3FSG
    \end{enumerate}
    Sita threw the book.
  \item \textit{paara.koTTu} = nominal + transitivizer light verb
    \begin{enumerate}
      \item siita kukka-ni paar-a-koTT.indi
      \item Sita dog-acc side-INF-hit-PST.3FSG
    \end{enumerate}
    Sita beat/drove the dog away.
  \item \textit{paara.veesu.kun} = nominal + transitivizer light verb + reflexive
    \begin{enumerate}
      \item siita pustakam paar-a-veesu-kun-di
      \item Sita book side-INF-throw-REFL-PST.3FSG
    \end{enumerate}
    Sita lost the book.
\end{enumerate}
\end{enumerate}
e. cadivi.paara.veyyi = main verb + composite aspectual light verb
   siita pustakam cadiv-i-paar-a-vees-indi
   Sita book read-PERF-side-INF-throw-PST.3FSG
   Sita read the book (fully).

4.2 Transitivizer light verbs and telicity

Of the three transitivizer light verbs, the light verb with an emphasis on the start or inception of the action, veyyi ‘throw’, induces an atelic interpretation, the light verb with an emphasis on the end or completion of the action, koTTu ‘hit’, induces a telic interpretation, and the light verb with an emphasis on the progress or continuation of the action, peTTu ‘put’, is compatible with both a telic and an atelic interpretation. This is shown in (30) and (31).

(30) a. atelic predicate + veyyi ‘throw’
   siita baTTalu aidu nimaSalu aar-a-vees-indi
   Sita clothes 5 min dry-INF-throw-PST.3FSG
   Sita dried the clothes for 5 min (begin).

b. atelic predicate + peTTu ‘put’
   siita baTTalu aidu nimaSalu aar-a-peTT-indi
   Sita clothes 5 min dry-INF-put-PST.3FSG
   Sita dried the clothes for 5 min (progress).

c. atelic predicate + koTTu ‘hit’
   *siita baTTalu aidu nimaSalu aar-a-koTT-indi
   Sita clothes 5 min dry-INF-hit-PST.3FSG
   Sita dried the clothes for 5 min (end).

(31) a. telic predicate + veyyi ‘throw’
   *siita baTTalu aidu nimaSalu-loo aar-a-vees-indi
   Sita clothes 5 min-in dry-INF-throw-PST.3FSG
   Sita dried the clothes in 5 min (begin).

b. telic predicate + peTTu ‘put’
   siita baTTalu aidu nimaSalu-loo aar-a-peTT-indi
   Sita clothes 5 min-in dry-INF-put-PST.3FSG
   Sita dried the clothes in 5 min (progress).

c. telic predicate + koTTu ‘hit’
   siita baTTalu aidu nimaSalu-loo aar-a-koTT-indi
   Sita clothes 5 min-in dry-INF-hit-PST.3FSG
   Sita dried the clothes in 5 min (end).
5 Non-aspectual light verbs

5.1 No selectional restrictions with non-aspectual poo

The light verb *poo* ‘go’ also occurs in a non-aspectual flavor, which imparts an ‘inceptive’ meaning of ‘about to’ to the sentence, as shown in (32). In such constructions, *poo* can occur with both unaccusative and transitive main verbs. But here the main verb is in infinitival form, without a perfective wrapping, unlike the combination with aspectual *poo*.

(32) a. unaccusative main verb + *poo*
   Sita paD.a.pooindi
   Sita fall-INF-go-3FSG
   ‘Sita was about to fall’

   b. unergative main verb + *poo*
   Sita parigett.a.pooindi
   Sita run-INF-go-3FSG
   ‘Sita was about to run’

   c. transitive main verb + *poo*
   Sita pustakam cadav.a.pooindi
   Sita book read-INF-go-3FSG
   ‘Sita was about to read the book’

5.2 Selectional restrictions on non-aspectuals that take perfective -i

One could draw the conclusion at this point that the selectional restrictions only apply when the complex predicate structure instantiates a ResP, with the perfective marker -i as an overt reflex, because all the aspectuals we discussed in §3 have selectional restrictions, and all of them compose with a perfective marked main verb, and all the non-aspectuals we have seen so far do not compose with the perfective marked main verb, and do not have any selectional restrictions imposed on them.

But there are non-aspectuals that can compose with a perfective marked main verb, and which do not incur any selectional restrictions, as discussed in the next subsection.

5.2.1 Disapprovative non-aspectual light verbs –*cacc* ‘die’ and *eeDav* ‘cry’

The ‘disapproving’ light verb *cacc* ‘die’, which is unaccusative in its main verb use, as shown in (33), shows no selectional restrictions and combines with all types of main verbs, which come with perfective morphology, as shown in (34).
(33)  siita sacc-indi  
     Sita  die-PST.3FSG  
     ‘Sita died’  

(34)  a.  unaccusative main verb + cacc  
    Siita  paD.i.saccindi  
    Sita  fall-PERF-die-3FSG  
    ‘Sita fell (damn!)’  

 b.  unergative main verb + cacc  
    Siita  parigett.i.saccindi  
    Sita  run-PERF-die-3FSG  
    ‘Sita ran (damn!)’  

 c.  transitive main verb + cacc  
    Siita  pustakam cadiv.i.saccindi  
    Sita  book  read-PERF-die-3FSG  
    ‘Sita read the book (damn!)’

Another ‘disapproving’ light verb eeDav ‘cry’, which is unergative in its main verb use, as shown in (35), again shows no selectional restrictions, and combines with all types of main verbs, with a perfective morphology, as shown in (36).

(35)  siita  eeDis-indi  
     Sita  cry-PST.3FSG  
     ‘Sita cried.’  

(36)  a.  unaccusative main verb + eeDav  
    vell.i.eeDuvi!  
    go-PERF-cry-2SG  
    ‘Go! (disapprovingly)’  

 b.  unergative main verb + eeDav  
    parigett.i.eeDuvi  
    run-PERF-cry-2SG  
    ‘Run! (disapprovingly)’  

 c.  transitive main verb + eeDav  
    pustakam cadiv.i.eeDuvi  
    book  read-PERF-cry-2SG  
    ‘Read the book! (disapprovingly)’

However, these light verbs are also different from aspectual light verbs in being able to combine with non-perfective forms of the main verb, as shown in (37), whereas the aspectual light verbs can only combine with perfective forms of the main verb.
One could therefore claim that as these light verbs can form complex predicates not only with a ResP structure, but also enter into syntactic compositions without a Result Phrase, as when they combine with main verbs with progressive morphology, therefore, they do not evoke any selectional restrictions.

This conclusion and line of thinking is strengthened in the next subsection where we find a light verb which is always restricted to forming structures with a ResP because it only combines with main verbs marked with perfective morphology, and which always shows selectional restrictions on the type of main verb it combines with, freely composing with unergative and transitive main verbs, but not with unaccusative main verbs.

5.2.2 Selectional restrictions on the benefactive and permissive light verbs

In many languages the benefactive light verb is *give*. In Telugu the benefactive light verb is *peTTu* ‘put’, as shown in (38). It is an applicative light verb (Mohanan 1994) which increases the valency of the main verb that it composes with. It shows selectional restrictions, combining freely with unergative and transitive main verbs, but not with unaccusative main verbs.

(38) a. *peTTu* as main verb:– init, proc, res
   Siita pustakam akkaDa peTT-indi
   Sita book there put-PST.3FSG
   ‘Sita put the book there’

b. *unaccusative main verb + peTTu
   *siita ravi-koosam paD-i-peTT-indi
   Sita Ravi-for fell-PERF-put-PST.3FSG
   ‘Sita fell for Ravi’s sake.’

c. unergative main verb + peTTu
   Siita ravi-koosam parigett-i-peTT-indi
   Sita Ravi-for laugh-PERF-put-PST.3FSG
   ‘Sita ran for Ravi’s sake.’

d. transitive main verb + eeDav
   Siita ravi-koosam cadiv-i-peTT-indi
   Sita Ravi-for read-PERF-put-PST.3FSG
‘Sita read for Ravi’s sake.’

Another valency increasing light verb is the permissive light verb, \textit{ivvu} ‘give’. It always takes the main verb in its infinitival form, and does not show any selectional restrictions, as shown in (39)\footnotemark[2].

(39) a. \textbf{\textit{ivvu} as main verb}

\begin{verbatim}
siita ravi-ki pustakam icc-indi
Sita  Ravi-DAT book  icc-PST.3FSG
‘Sita gave the book to Ravi’
\end{verbatim}

b. \textbf{\textit{uancusative main verb} + \textit{ivvu}}

\begin{verbatim}
siita ravi-ni paD-a-n-icc-indi
Sita  Ravi-ACC fall-INF-give-PST.3FSG
‘Sita let Ravi fall.’
\end{verbatim}

c. \textbf{\textit{unergative main verb} + \textit{ivvu}}

\begin{verbatim}
siita ravi-ni parigett-a-n-icc-indi
Sita  Ravi-ACC laugh-INF-give-PST.3FSG
‘Sita let Ravi run.’
\end{verbatim}

d. \textbf{\textit{transitive main verb} + \textit{peTTu}}

\begin{verbatim}
siita ravi-ni cadav-a-n-icc-indi
Sita  Ravi-ACC read-INF-give-PST.3FSG
‘Sita let Ravi read.’
\end{verbatim}

The benefactive light verb can only take a perfective marked main verb and cannot take a progressive marked main verb, as shown in (40), which is unlike the non-aspectuals discussed in §5.2.1, which can take non-perfective marked main verbs.

(40) a. *Siita ravi-koosam navvu-tuu-peTT-indi

\begin{verbatim}
Sita  Ravi-for laugh-PROG-put-PST.3FSG
‘Intended: Sita kept on laughing for Ravi’s sake.’
\end{verbatim}

b. Siita ravi-koosam caduvu-tuu-peTT-indi

\begin{verbatim}
Sita  Ravi-for read-PROG-put-PST.3FSG
‘Intended: Sita kept on reading for Ravi’s sake.’
\end{verbatim}

Therefore we can conclude that the benefactive non-aspectual light verb which can only take a perfective marked main verb also shows selectional restrictions, as summarized in (41), just like the aspectual light verbs, which can also only compose with main verbs with perfective morphology, and also show selectional restrictions.

\footnotetext[2]{There is an intervocalic epenthetic nasal \textit{n} between the \textit{a} of the infinitival suffix and the initial vowel of the light verb \textit{icc} in the verb forms}
6 Selectional restrictions on combinations of aspectuals, non-aspectuals, and causative

6.1 The causative suffix and selectional restrictions

The causative suffix in Telugu is -inc or -imp as shown in (42) and the structure in (45)a. An unaccusative verb can be transitivized using the causative as shown in (43) with the structure given in (45)b. It can causativize further with underassociation as shown in (44) and the structure given in (45)c.

(42) daaram teg-indi
     thread  snap-PST.3FSG
     The thread snapped.

(43) siita daaram te-mp-indi
     Sita thread  snap-CAUS-PST.3FSG
     Sita snapped the thread.

(44) siita daaram ramu-too te-mp-inc-indi
     Sita thread  Ram-with  snap-CAUS-CAUS-PST.3FSG
     Sita made Ram snap the thread.

(45) a. 
 b. 
 c. 

\[
\begin{array}{c}
\text{initP} \\
\text{procP} \\
\text{init} \\
\text{imp} \\
\text{inc} \\
\end{array}
\]

\[
\begin{array}{c}
\text{initP} \\
\text{neenu} \\
\text{procP} \\
\text{init} \\
\text{-imp} \\
\end{array}
\]

\[
\begin{array}{c}
\text{initP} \\
\text{neenu} \\
\text{procP} \\
\text{init} \\
\text{-inc} \\
\end{array}
\]
6.2 Causative suffix -inc and aspectual light verbs

6.2.1 causative + aspectual light verb combination

The causative cannot co-occur with an unaccusative (<init>less) light verb, but it can co-occur with a transitive (init) light verb, as shown in (46). This is because the [init] feature of -inc cannot underassociate with the <init>less light verb, whereas it can underassociate with <init> light verbs, as predicted by the constraints on underassociation. This is shown in (47).

(46) a. -inc + poo ‘go’
   *siita icu karig-inc-i-poo-indi
   Sita ice melt-CAUS-PERF-go-PST.3FSG
   Intended: Sita melted the ice (completely).

b. -inc + veyyi ‘throw’
   siita icu karig-inc-i-vees-indi
   Sita ice melt-CAUS-PERF-throw-PST.3FSG
   Sita melted the ice (fully).

c. -inc + paDa.veyyi ‘fall.throw’
   siita icu karig-inc-i-paDees-indi
   Sita ice melt-CAUS-PERF-fall.throw-PST.3FSG
   Sita melted the ice (fully).

(47) karig.incu vs. *karig-inci-poo vs. karig-inici-veyyi

We can also note that the causative suffix can occur with an unaccusative main verb but cannot occur with an unaccusative light verb. This is because of the AGREE constraint on underassociation in the formation of complex predicates which does not apply in causative suffixation of simple main verbs.
6.2.2 *aspectual light verb + causative combination*

An [init]-aspectual light verb composed with the causative suffix is a licit combination, whereas a non-[init]-aspectual light verb composed with the causative suffix is an illicit combination, as shown in (48).

\[(48)\]

a. **unaccusative main verb + non-[init]-aspectual + -inc**

\[\ast siita icu karig-i-poo-inc-indi\]

Sita ice melt-PERF-go-CAUS-PST:3FSG

Sita made the ice melt (fully).

b. **unergative main verb + [init]-aspectual + -inc**

siita raamu-too parigett-(i-v)eyyi-inc-indi

Sita Ram-with run-PERF-throw-CAUS-PST:3FSG

Sita made Ram run (fully).

c. **transitive main verb + [init]-aspectual + -inc**

siita raamu-too pustakam cadiv(v-i)-veyyi-inc-indi

Sita Ram-with book read-PERF-throw-CAUS-PST:3FSG

Sita made Ram read the book (fully).

The [init] feature of the [init]-aspectual light verb can underassociate with the [init] feature of the causative suffix -inc, as shown in (49).

\[(49)\]

caduvu vs. cadiv-i-veyyi vs. cadiv-i-veyyi-inc

[init]-[init] vs. [init]-[init] vs. [init]-[init]-[init]

The causative suffix -inc, should be able to compose with the aspectually modified unaccusative main verb, as shown in (50), as there is no violation of *agree* constraints. However, it does not, as shown in (48a). Why this combination is not possible remains a mystery.
6.3 Transitivizer light verbs and causative suffix -inc

A transitivizer light verb can compose with the causative suffix -inc, as shown in (51), and it is a well-formed structure according to the principles of underassociation and AGREE, as shown in (52).

(51) unaccusative main verb + transitivizer light verb + -inc
siita raamu-too icu karag-a-peTT-inc-indi
Sita Ram-with ice melt-INF-put-CAUS-PST.3FSG
Sita made Ram melt the ice.

(52) karaga.peTTu + -inc = karaga.peTT.incu
6.4 Transitivizer and Aspectual combination

A transitivizer light verb can compose with the [init]-aspectual ligth verbs, as shown in (53). The [init, proc] features of the transitivizer light verb can underassociate with the [init, proc] features of the aspectual light verb, as shown in (54), and result in a well-formed structure according to the principles of underassociation and \textit{AGREE}.

(53) **unaccusative main verb + transitivizer light verb + aspectual light verb**

a. siita icu karag-a-peTT-(i-v)ees-indi  
   Sita ice melt-INF-put-PERF-throw-PST.3FSG  
   Sita melted the ice (fully).

b. siita baTTalu aara-a-peTT-(i-v)ees-indi  
   Sita clothes dry-INF-put-PERF-throw-PST.3FSG  
   Sita dried the clothes (fully).

(54) \textit{aar-a-peTTu} vs. \textit{aar-a-peTT-i-veyyi}

6.5 Transitivizer + Causative + Aspectual

An unaccusative main verb combined with a transitivizer light verb can compose with an [init]-aspectual light verb and causativize further, as shown in (55). An unaccusative main verb combined with a transitivizer light verb can also first compose with the causative suffix and then with an [init]-aspectual light verb, as shown in (56). Both structures are well-formed according to underassociation and \textit{AGREE}, as shown in (57).

(55) **unaccusative main verb + transitivizer + aspectual + causative suffix**

a. siita raamu-too icu karag-a-peTT-(i-v)eyyi-inc-indi  
   Sita Ram-with ice melt-INF-put-PERF-throw-CAUS-PST.3FSG  
   Sita made Ram melt the ice (fully).
(56) **unaccusative main verb + transitivizer + causative suffix + aspectual**

a. siita raamu-too icu karag-a-peTT-inc-(i-v)ees-indi
   Sita Ram-with ice melt-INF-put-CAUS-PERF-throw-PST.3FSG
   Sita (fully) made Ram melt the ice.

b. siita raamu-too baTTalu aara-a-peTT-inc-(i-v)ees-indi
   Sita Ram-with clothes dry-INF-put-CAUS-PERF-throw-PST.3FSG
   Sita (fully) made Ram dry the clothes.

(57) aar-a-peTT-i-veyyi-incu vs. aar-a-peTT-inc-i-veyyi

6.6 **Transitivizing using -inc vs. light verbs**

An unaccusative verb can be transitivized using either the causative suffix or a transitivizer light verb (Krishnamurti 1992). This is shown in (58). In (58a) the unaccusative is transitivized using the causative morpheme, and in (58b) and (58c) it is transitivized using the transitivizer light verbs.

(58) a. **unaccusative + -inc**
   siita cigarette kaal-c-indi
   Sita Cigarette burn-CAUS-PST.3FSG
   Sita smoked a cigarette.

b. **unaccusative + peTTu ‘put’**
   siita cigarette kaal-a-peTT-indi
   Sita Cigarette burn-INF-put-PST.3FSG
Sita burnt the cigarette.

c. unaccusative + veyyi ‘throw’

\[
\begin{align*}
\text{siita} & \quad \text{cigarette} \\
\text{kmaal-aa-pees.indi} & \\
\text{Sita} & \quad \text{Cigarette} \\
\text{burn-INF-throw-PST.3SG} & \\
\text{Sita burnt the cigarette.}
\end{align*}
\]

The two combinations however differ in their semantics. The transitivizer light verb brings its ‘inceptual’ meaning along with it. The causative suffix -inc is only [\text{init}] whereas the light verbs are [\text{init}, \text{proc}, \text{res}] thus building in the semantic properties of the structure into the meaning of the complex predicate. This is shown in (59).

(59)

\[
\begin{align*}
\text{initP} & \\
\text{neenu} & \quad \text{procP} \\
\text{cigarette} & \quad \text{resP} \\
\text{veyyi} & \quad \text{veyyi} \\
\text{RHEME} & \quad \text{kaala} \\
\text{res} & \quad \text{veyyi}
\end{align*}
\]

7 Conclusion

The aspectual light verbs in Telugu compose based on selectional restrictions. Selection can be captured by the underassociation of category features constrained by \text{AGREE}. The transitivizer light verbs instantiate direct lexicalization of the Spec of [\text{init}]. There are inceptual meanings associated with the transitivizers. The meanings obtained when they compose with unaccusatives are different from when the causative morpheme composes with unaccusatives.

However, many non-aspectual light verbs do not show any selectional restrictions in their composition in complex predicates. When \text{ResP} is lexicalized by the main verb (in the form of perfective morphology), as in the aspectual complex predicates and with the benefactive light verb, there has to be a strict homomorphism between the main verb and the light verb. When \text{ResP} is not lexicalized by the main verb (and it has a non-perfective morphology), there need not be a strict homomorphism, as seen with the transitivizer light verbs, and the other non-aspectual light verbs, which can compose with a main verb that bears non-perfective morphology.
References


Starke, Michal. 2011. Towards an elegant solution to language variation: Variation reduces to the size of lexically stored trees. *Ms. University of Tromsø (available at ling.auf.net/lingBuzz/001183)*.