



Rise and be surprised: Aspectual profiling and mirativity in Odia light verb constructions

Maarten Lemmens, Kalyanamalini Sahoo

► To cite this version:

Maarten Lemmens, Kalyanamalini Sahoo. Rise and be surprised: Aspectual profiling and mirativity in Odia light verb constructions. *Cognitive Linguistics*, 2019, 30 (1), pp.123-164. 10.1515/cog-2017-0053 . halshs-04292363

HAL Id: halshs-04292363

<https://shs.hal.science/halshs-04292363>

Submitted on 20 Nov 2023

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.



Distributed under a Creative Commons Attribution 4.0 International License

Maarten Lemmens*, Kalyanamalini Sahoo

Rise and be surprised: Aspectual profiling and mirativity in Odia light verb constructions

***Corresponding author: Maarten Lemmens,**

UMR 8163 STL (Savoirs, Textes, Langage), CNRS & Université de Lille, France

E-mail: maarten.lemmens@univ-lille.fr

orcid.org/0000-0003-4549-5564

Kalyanamalini Sahoo,

UMR 8163 STL (Savoirs, Textes, Langage), CNRS & Université de Lille, France

E-mail: kalyanirs@gmail.com

orcid.org/0000-0003-3853-3067

Received May 1, 2017; revised July 23, 2018; accepted August 14, 2018

Abstract: In this paper, we present our Construction Grammar account of light verb constructions in the Indo-Aryan language Odia (earlier known as Oriya). These light verb constructions are asymmetric complex verb predicates that combine a main verb (MV) with a light verb (LV). While the LVs are form-identical with a lexical verb, they are “light” because they have lost their lexical content as well as their argument structure. We argue that LV constructions present a coherent system: (i) they all modulate the interpretation of the event encoded by the main verb by adding a particular aspectual (phasal) profile on the event (i.e., profiling the ONSET, DURATION or COMPLETION of the event) and (ii) some of these light verbs further add a mirative interpretation. The present paper focuses on this subset of “aspectuo-mirative LVs” which can be characterised as non-parasitic expressions of mirativity; in particular, it presents new work on the light verb *-uṭh* ‘-rise’ that combines a profile on ONSET with mirativity. The constructional view that we present here offers an account of light verbs that is both descriptively and theoretically innovative. Its descriptive value resides in its systematic and fine-grained corpus-based analysis of the formal and semantic features of LVs beyond what is found in the existing literature. The theoretical contribution of our paper not only resides in offering a better understanding of the status of LVs in the grammar, but by situating the semantic value of some of these in the complex category of mirativity, it offers a more unified answer of quite disparate observations in the literature. Finally, we also address the question of whether this mirative value of the aspectuo-mirative LVs is semantic or pragmatic. As we will show, such a strict dichotomy cannot be maintained, which gives further support for a constructional approach.

Keywords: aspectual modulation, light verbs, mirativity, Odia, semantics/pragmatics interface

1 Introduction

This paper presents a corpus-based analysis of some light verbs in the Indo-Aryan language Odia (earlier known as Oriya), spoken in the province Odisha, in the Eastern part of India.¹ As in related languages, Odia light verb constructions are asymmetric complex verb predicates that combine a main (lexical) verb (MV) with a light verb (LV). While the LVs in these predicates are form-identical with a main (lexical) verb in the language, they are termed “light” because of their semantic and grammatical bleaching: they have lost their original lexical content as well as their argument structure. Such LVs are also known as *vector verbs*

¹ See Neukom and Patnaik (2003) for a good introduction to the Odia language and grammar.

(Hook 1993), *compound verbs* (Neukom and Patnaik 2003), *explicator compound verbs* (Abbi and Gopalakrishnan 1991), *complex predicates* (Butt 1995), or *asymmetric serial verb constructions* (Sahoo 2001). In this paper, we will use the term *light verb*, as this is the term that is most commonly used in the literature, even if it is not without flaws (see Section 4).

The light verbs that we will consider here seem at first sight to be a random and unstructured set; it is no coincidence that Butt (2010) talks about it as “the light verb jungle”. However, as we argue here, while not everything can be laid out in absolute rules, in Odia they do present a coherent system of constructions that serve as aspectual and/or mirative markers. While our study concerns light verbs in one particular language, Odia (for which LVs have never been discussed in much detail in the existing literature), we expect our findings to be applicable to other Indo-Aryan languages having such light verb constructions. In addition, our study has wider theoretical implications with respect to, on the one hand, mirativity as a possible linguistic universal, and the semantics/pragmatics interface, on the other. The latter concerns the fundamental question about the status of the mirative reading of some of these LVs.

The Indo-Aryan languages that all have such LVs (Hindi/Urdu, Odia, Bengali, Maithili, Marathi, Nepali, etc.) may differ in the specific number of such verbs. Even for Odia, different numbers have been suggested, ranging from 16 (Singh et al. 1986) to 41 (Vale 1948: 116–136). The variation is due to a less accurate delineation of what counts as a light verb. In fact, Vale (1948) gives an overview of complex verbal predicates (which he calls “verbal composition”) which comprises more than just light verbs. He also includes in the set of LVs (i) auxiliaries (like *atʃʰ* ‘be’ or *ṭʰā* ‘be, exist’), (ii) the semi-light verbs *sār* ‘finish’ and *pār* ‘can’, (iii) lexical verbs such as *āṇ* ‘bring’ or *kah* ‘speak’ used in *symmetric* serial verb constructions, or (iv) verbalizers like *kar* ‘do’ or other verbs that combine with nouns. For example, Vale (1948: 120, §269) lists *kʰā* ‘eat’ as a “verbal composition” as in *cumā.kʰā* ‘kiss_N.eat’ which he glosses as ‘to imprint a kiss’. Clearly, this is not a LV construction as we define it here, and as we will show in section 2.1 below, the same is true for the other complex constructions mentioned above, which are all quite different semantically and/or syntactically. Some of the verbs in Vale’s list are now obsolete (e.g., *ghen* ‘hold’) or colloquial.

We argue that there are ten (‘true’) light verbs in Odia that can be grouped as follows, according to lexical verb from which they historically derive and with which they still are formally identical:

1. MOTION verbs: *-jā* ‘-go’, *-tʃāl* ‘-walk’, *-paḍ* ‘-fall’, *-pakā* ‘-drop’, *-uṭʰ* ‘-rise’, *-ās* ‘-come’
2. STATIVE verbs: *-bas* ‘-sit’, *-rah* ‘-stay’
3. TRANSFER verbs: *-ḍe* ‘-give’, *-ne* ‘-take’

Given the grammaticalized nature of the LVs, such grouping is, however, of less relevance even if we will come back to their original semantics below when dealing with some persistence effects.²

These LVs each have their particular syntactic and semantic properties. Their syntactic differences relate predominantly to different transitivity constraints: some LVs combine with intransitive verbs, others, with (di)transitive verbs. Semantically, they all modulate the interpretation of the event encoded by the main verb by adding a particular *aspectual* (i.e., *phasal*) *profile* on the event, profiling the ONSET, DURATION or COMPLETION of the event. Some of these light verbs (but not all) further add a *mirative interpretation*, i.e., they express that the event is unexpected or that it is not supposed to have happened (for whatever reason). The present paper focuses precisely on one of these “aspectuo-mirative LVs”, i.e., *-uṭʰ* (‘rise’). The current study builds on and extends our earlier analyses of four other aspectuo-

² In this paper, we will mark the LV with a preceding hyphen (e.g., *-jā* ‘-go’) to distinguish it from its formally identical lexical counterpart (e.g., *jā* ‘go’).

mirative LVs: *-jā* ‘-go’, *-paq* ‘-fall’, *-ḍe* ‘-give’, and *-pakā* ‘-drop’ (Lemmens and Sahoo 2017, Sahoo and Lemmens 2017).

In short, what these five light verbs share is that they can be regarded as non-parasitic expressions of mirativity (cf. T. Peterson 2017) which is quite unusual in the languages of the world. Most expressions of mirativity discussed in the literature so far are of the parasitic type, i.e., their mirative value is a derived interpretation (usually via pragmatic inferencing) of a linguistic expression that actually serves a different purpose (e.g., expressing perfectivity or evidentiality). Our analysis of Odia light verbs thus adds new and hitherto undescribed patterns to the study of mirativity; for example, LV constructions are strikingly absent from Aikhenvald’s (fairly extensive) cross-linguistic overview of mirative expressions (Aikhenvald 2012). In addition, our analysis presents evidence of the complex nature of mirativity. Confronted with a myriad of specialised meanings that have been subsumed under the label “mirativity” (such as ‘surprise’, ‘immediate meaning’, ‘lack of awareness’, ‘unexpectedness’, and ‘new information’ etc.), T. Peterson (2017), takes a strict point of view and claims that “mirativity has the notion of *surprise* at its core” (2017: 313). Our study suggests a less strict view, as in Odia mirativity covers both *unexpectedness* (surprise) and *unsupposedness* (not necessarily surprise); in addition, the constructions expressing a higher degree of mirativity may acquire a further attitudinal value of disapproval.³ Within a cognitive perspective on categorization such a view on mirativity would be entirely coherent, as it would be regarded as a complex category with interrelated meanings. This is similar to Montaut’s (2006) view who suggests four interrelated subcategories for the mirative readings of the aorist in Hindi/Urdu structured around a prototype, in this case the notion ‘surprise’. Similarly, Aikhenvald (2012) lists five interrelated mirative meanings (related to speaker, addressee, or main character): (i) sudden discovery, sudden revelation or realization; (ii) surprise; (iii) unprepared mind; (iv) counterexpectation; and (v) new information. The notion of unsupposedness that can be expressed by some Odia LVs could be related to Aikhenvald’s feature (iv), but its social dimension still makes it stand out as somewhat different.

Overall, our analysis adopts a usage-based, cognitive perspective and considers these light verbs as symbolic units (cf. Langacker 1987, 1991) or constructions (in the sense of Construction Grammar, see e.g., Goldberg 1995, 2006), i.e., form-meaning pairs that are stored in the grammar, each with their own semantic profile. While overall we agree with Butt and Lahiri that light verbs imply some kind of “event modulation” with respect to “suddenness, force, agentivity or benefaction as well as further specification as to *Aktionsart*” (Butt and Lahiri 2001: 30), we disagree with their view that this would be “contextually defeasible information” (ibid.). Instead, we argue that this modulation has become part and parcel of the meaning of the different light verb constructions themselves (but to different degrees). This constructional perspective challenges the more common view on LV constructions in the literature which usually either consists of larger typological descriptions (encompassing different Indo-Aryan languages) or more theoretical analyses within the framework of generative linguistics). At the same time, as we will discuss below, Odia LVs do represent constructions that straddle the border between semantics and pragmatics, especially with respect to their mirative value. While certain questions remain to be analysed further, our constructional corpus-based analysis offers new insights and promising avenues for further research.

The article is structured as follows. In the next section, we briefly describe the main characteristics of Odia light verbs, looking at their formal and semantic properties. In Section 3, we present the corpus-based analysis of the aspectuo-mirative light verb *-ut^h* (‘rise’). Against the background of our corpus-based analysis, Section 4 presents a more theoretical discussion of light verb constructions and sketches avenues for further research.

³ Aikhenvald (2012:458) reports on the particle *la(a)ka* in Galo (a Tibeto-Burman language) which expresses the speaker’s “astonishment and disapproval at an event unfolding as he speaks”.

2 General description of Odia light verbs

2.1 Formal features of Odia light verb constructions

The form of LV constructions in Odia is fixed: the main verb always precedes the light verb (except occasionally in poetic language) and they are always spelled as a single word, the two verbs being linked with a linker (LNK) *-i*. LV constructions thus always take the form $V_{[lexical]}-i-V_{[light]}$, where the main verb occurs in its root form and the TAM marking occurs on the light verb. The light verb can take several morphemes carrying grammatical features like ASPECT, AUXILIARY, TENSE, AGREEMENT, etc. The following sentences illustrate the LV constructions *sar-i-ās* ‘finish-LNK-come’, *k^hā-i-tfāl* ‘eat-LNK-walk’, and *baḷ-i-paḍ* ‘leave-LNK-fall’; a more detailed account of their semantics will be given shortly.⁴

- (1) a. ମୋ ହାତରୁ ସବୁ ପଇସା ସରିଆସିଲା
mo hāṭaru sabu paisā **sar-i-ās**ilā
my hand.ABL all money **finish-LNK-come**.PST.3SG
‘The money has all gone from my hand.’
- b. ସେ ପିଠାଟାକୁ ସେତେବେଳୁ ଖାଇଚାଲିଛି
se piṭhāṭaku se tebeḷu **k^hā-i-tfāl**iṭ^hi
he pancake.CL.ACC since.then **eat-LNK-walk**.PERF.3SG
‘He has been eating the pancake since then.’
- c. ବହୁତ ଗୁଡ଼ାଏ ଖାଦ୍ୟ ବଳି ପଡ଼ିଲା
bahuṭa guḍāe k^hāḍya **baḷ-i-paḍ**ilā
too much food **leave-LNK-fall**.PST.3SG
‘Too much food was left over (unexpectedly).’

The LVs are furthermore distinguished with respect to their transitivity constraints (which, for most LVs, can be seen as inherited from their lexical origin): the LVs *-jā* ‘go’, *-tfāl* ‘walk’, *-paḍ* ‘fall’, and *-uṭ^h* ‘rise’ can only occur with intransitive verbs (including alternating verbs in their intransitive usage); *-ḍe* ‘give’, *-ne* ‘take’, *-pakā* ‘drop’, *-ās* ‘come’ can only occur with transitive or ditransitive verbs; the verbs *-bas* ‘sit’ and *-rah* ‘stay’ (which also semantically are quite different, see below) can occur with both transitive and intransitive verbs. In a constructional perspective, we characterize the entire LV construction as either intransitive or (di)transitive, not just the main verb or the LV. For reasons of space, we will not go into detail here, but refer to Lemmens and Sahoo (2017) for a more extensive treatment of transitivity constraints of Odia LVs and their relation with morphologically marked causatives.

One feature that has been noted in the literature (notably on Hindi LVs, see Hook 1974) is that LVs constructions disfavour negation. Overall, this is also true for Odia, especially for those LVs which denote COMPLETION (see Section 2.2 below). However, the issue is quite complex and the possibility of negation is influenced by the larger construction in which the LV occurs. For example, the LV constructions *k^hol-i-ḍe* ‘open-LNK-give’ and *k^hol-i-pakā* ‘open-LNK-drop’ to express “open a door (unexpectedly)” cannot be negated; however, if an indirect object or beneficiary is added (i.e., “open a door *for someone*”), negation is possible for the LV *-ḍe* ‘give’ (‘open-give-NEG’), but not for the LV *-pakā* ‘drop’ (*‘open-drop-NEG’). A full discussion of negation and LV constructions is beyond the scope of the present article.

⁴ To facilitate the reading of the examples, the LV constructions will systematically be highlighted in bold-face. Glossing is done following the Leipzig Glossing Rules (see <http://www.eva.mpg.de/lingua/resources/glossing-rules.php>). At the end of the article, we give an exhaustive list of the glosses used in this article, including those not found in the Leipzig glossing rules.

(2) ମୁଁ ମାଛଟେ କିଣି କେଳାଇ ଭାଜି ଖାଇଲି
mũ māṭʰa-te kiṇ-i ke[ā-i bʰāj-i kʰā-il-i
 I fish.CLF.INDEF-SG buy-LNK clean-LNK fry-LNK eat-PST-1SG
 ‘I bought, cleaned, fried and ate a fish.’

A second type of complex predicate that is formally similar to the LV construction are combinations with the *semi-light verbs*, i.e., *pār* ‘can’ (*V-i-pār*) and *sār* ‘finish’ (*V-i-sār*). However, these are not LVs like the ones we will discuss here, since (i) they do not have any formal constraints (they can basically combine with any verb) and (ii) they have retained their original meaning. The sequence *V-i-pār* ‘V-LNK-can’ refers to ability or permission (quite similar to English *can*), as shown in the sentences in example (3). In (3a), *pār* is combined with intransitive *jā* ‘go’ (not to be confused with the LV *-jā*); in (3b), it is attached to a LV construction *k^hā-i-ḡe* ‘eat-give’. This provides clear syntactic evidence that it is not like the other LVs which cannot co-occur with another LV (**mar-i-jā-i-paḡ* ‘*die-LNK-go-LNK-fall’; **mār-i-ḡe-i-pakā* ‘*kill-LNK-give-LNK-drop’).

- (3) a. ବର୍ତ୍ତମାନ ତୁମେ ଘରକୁ ଯାଇପାର
bart̪amāna tume g^hara-ku jā-i-pāra
 now you home-ACC go-LNK-can.IMP
 ‘You may go home now.’
 b. ସେ ସ୍ୟାଣ୍ଡ଼ଇଚଟାକୁ ଗୋଟିଏ ମିନିଟରେ ଖାଇଦେଇପାରିଲା
se syandwich-t̪ā-ku goṭie miniṭ-re k^hā-i-de-i-pārīlā
 he sandwich-CLF-ACC one minute-in eat-LNK-give-LNK-can.PST.3SG
 ‘He could eat the sandwich in one minute.’

⁵ Examples marked with the code ECC, as example (4c), are those taken from our corpus (see Section 3); they may occasionally have been edited slightly for the sake of clarity.

- (4) a. ମୁଁ ଭାତ ଖାଇ ସାରିଲି
mũ bʰāṭa kʰā-i-sārili
 I rice eat-LNK-finish.PST.1SG
 ‘I finished eating (the) rice.’
- b. ମୁଁ ଗାଧୋଇ ସାରିଲି
mũ gāḍʰo-i-sārili
 I bathe-LNK-finish.PST.1SG
 ‘I finished bathing.’
- c. ସେ ଖାଇ-ଦେଇ ସାରିଲେଣି, ମୁଁ ଗାଧୋଇ-ପକାଇ-ସାରିଲିଣି, ତମର କେତେବାର ଗଲା (ECC)
se kʰā-i-ḍe-i-sārileni, mũ gāḍʰo-i-pakā-i-sāriliṇi,
he eat-LNK-give-LNK-finish.TEL-AFF I bathe-LNK-drop-LNK-finish.TEL-AFF
tamar ketēbāṭa galā
 your how.far go.PST.2SG
 ‘He has finished eating, I have finished taking a bath, how about you?’

In sum, in these sequences the verbs *pār* ‘can’ and *sār* ‘finish’ can be regarded as semi-light verbs, in that they share some formal characteristics with LVs but are still quite different both syntactically and semantically, as will become more evident below, when we discuss the semantics of the LVs.

Before we do so, however, we should, for the sake of completeness, mention a third kind of complex predicate with the verb *kar* ‘do’ (*X-kar*) which is often called a light verb but which is quite different from the ones discussed here. As Butt (2010: 4) correctly observes, this is a *verbalizer*, which she defines as a “productive device for drawing predicates into the language and incorporating loan words into the verbal system”.⁶ It is different from the other LVs in that the first element is not a verb but either a noun (most common) or an adjective (somewhat rare), as illustrated in (5).

- (5) a. ସେ ଚିନ୍ତାକରି ବିଷାଦଗ୍ରସ୍ତ ହୋଇ ପଡ଼ିଥାନ୍ତି (ECC)
se tʃintā kar-i bisāḍagraṣṭa ho-i-paḍiṭʰāṇṭi
 he worry do-PERF sad become-LNK-fall.3PL
 ‘Having worried (a lot) he became very sad.’
- b. ସେ ମୋତେ ସବୁ ରବିବାର ଦିନ ଫୋନ୍ କରନ୍ତି
se moṭe sabu rabibāraḍina phone-karaṇṭi
 he me all Sunday phone-do.PRES.3SG.HON
 ‘He rings me up on every Sunday.’
- c. ମିଲି ସବୁ ରବିବାରଦିନ ତା’ ଲୁଗାପଟା ସଫାକରେ
mili sabu rabibāraḍina ṭā’lugāpaṭā sapʰā-kare
 Mili all Sundays her clothes clean-do.3SG
 ‘Mili washes her clothes every Sunday.’

Clearly, these light verbs are semantically relatively general; hence, the inclination in the literature to call them light verbs as well, much like English *take*, as in *take a bath* or *give*, as in *give a kiss*. However, they are not at all like the LVs that we discuss in this paper.⁷ One important (constructional) difference is that they can be the main lexical verb in a LV construction, as illustrated in (6).

⁶ Butt & Geuder (2001:328) include *kar* ‘do’ in the set of Urdu light verbs. It is not excluded that unlike in Odia, it is an event modulating light verb in the sister Indo-Aryan language Urdu; their list of light verbs intersects with those in Odia, but they also list *ḍāl* ‘put’, *mār* ‘hit’, *nikal* ‘emerge’, and *mar* ‘die’ which, however, do not exist as LVs in Odia.

⁷ Again, Vale (1948) includes *kar* ‘do’ in his list of “verbal composition” (p. 118, §266) which confirms that he lists all possible complex verb combinations, not just light verbs of the type discussed here.

- (6) ନିଜ ଭବିଷ୍ୟତର ଅନିଶ୍ଚିତତା ତାକୁ ବିବ୍ରତ କରି ପକାଉଛି (ECC)
nija b^habisyatara anisht^hiṭṭā tākū bibraṭa kar-i-pakāut^hi
 own future.GEN uncertainty him worried **do-LNK-drop**.PROG.3SG
 ‘The uncertainty of his own future is making him worried/tensed.’

Also their meaning is quite different from that of LVs, as they do not entail any “event modulation” whatsoever (see below); they are general verbs that help to build new (compound) verb forms.

In sum, the surface form *V-i-V* is a recurrent pattern used for a variety of constructions that sometimes gives rise to constructional polysemy (e.g., related asymmetric light verb constructions) and sometimes are homonymous (e.g., symmetrical vs. asymmetrical complex predicates).

2.2 Semantic features of light verb constructions

In line with our above description of different kinds of complex predicates, Butt (2010) points out that the term *light verb* as used in the literature covers a wide array of different types of predicates. However, what all these light verbs seem to share is that they “neither retain their full semantic predication content, nor are they semantically completely empty [but] appear to be semantically *light* in some manner that is difficult to identify” (2010: 48). With respect to the ten Odia LVs that we discuss here, their meaning can generally be described as “event modulation”, as observed by Butt and Lahiri (2001) and Butt and Geuder (2001) looking at the related language Urdu/Hindi. For Odia, this event modulation more specifically concerns an aspectual value for all the light verbs, and a mirative value for some of them, as explained below.

2.2.1 Aspectual modulation

A first aspect of this modulation by Odia LVs concerns the aspectual or phasal value which can be summarized as follows:

- (a) *-ut^h* ‘-rise’ expresses the ONSET of the event;
- (b) *-bas* ‘sit’, *-ās* ‘-come’, *-t/āl* ‘walk’, and *-rah* ‘stay’ express the DURATION of the event;
- (c) *-jā* ‘-go’, *-paḍ* ‘-fall’, *-ḍe* ‘-give’, *-pakā* ‘-drop’, and *-ne* ‘-take’ express the COMPLETION of the event.

The difference between a single verb construction and a LV construction with respect to this kind of aspectual modulation is nicely illustrated by the following contrastive set, where the a-sentence gives a single verb construction and the other sentences, a LV construction that expresses a particular phasal profile: COMPLETION in (7b), ONSET in (7c), and DURATION in (7d).

- (7) a. ବହିତା ମୁଁ ତାକୁ ଦେଲି, କିନ୍ତୁ ସେ ନେଲାନ୍ତି [single verb Cx]
bahi-tā mū tākū ḍeli, kiṇṭu se nelāni
 book-CLF I him give.PAST.1SG but he take.PAST.3SG.NEG
 ‘I gave (= offered) him the book, but he didn’t take it.’

- b. ବହିଟା ମୁଁ ତାକୁ ଦେଇଦେଲି (*କିନ୍ତୁ ସେ ନେଲାନି) [LV Cx, COMPLETION]
bahi-tā mū tākū de-i-deli (**kiṇtuse nelāni*)
 book-CLF I him give-LNK-give.PAST.1SG (*but he take.PAST.3SG.NEG)
 ‘I gave him the book (*but he didn’t take it).’ [‘giving’ act is completed]
- c. ଆମେ ଘରେ ପଶୁ ପଶୁ ସେ ହଠାତ୍ ଗୀତ ଗାଇ ଉଠିଲା [LV Cx, ONSET.]
g^hare pashu pashu se haṭhāt gīta gā-i-ut^hilā
 house.LOC entering entering he suddenly song sing-LNK-rise.PAST.3SG
 ‘While entering the house, suddenly he started singing a song.’
- d. ମୁଁ ଟ୍ରେନଟା ଧରି ପାରିଲି ନାହିଁ କାହିଁକି ନା ମୁଁ ଆସିବା ବେଳକୁ ସେ ମୋତେ ତା ଭଉଣୀ ବିଷୟରେ କହିବସିଲା [LV Cx, DURATION.]
mū train-tā ḡ^hari pāriḷi nāhin kāhinkinā mū āsibā beḷaku
 I train-CLF catch could not because I coming time
se moṭe tū b^hauṇi bisayare kah-i-basilā
 he me his sister about say-LNK-sit.PAST.3SG
 ‘I missed the train because he went on telling me about his sister when I was about to leave.’

The single verb construction in (7a) is neutral as to whether or not the book has been given and received, as shown by the possibility of adding a *but*-clause (note that in English *de* ‘give’ would better be expressed here by ‘offer’), whereas in (7b) the book has been given and received, an event that can no longer be cancelled out, which confirms that it is part and parcel of the meaning of the construction. In (7c), the LV *-ut^h* ‘-rise’ profiles the start of the singing. In (7d) *-bas* ‘sit’ profiles the duration of the talking which caused the speaker to miss the train. For a more elaborate discussion of the difference between single verb and LV constructions in Odia, we refer the reader to Lemmens and Sahoo (2017).

Drawing on Langacker’s (1987, 1991) Cognitive Grammar representation of processes, these three phasal or aspectual profiles can be diagrammed as in Figure 1. The different boxes represent the different stages of the on-going process, the time line is represented by the arrow; this is obviously an idealised representation, as there is a seamless flow of successive states (represented by the three dots between each state). The different light verbs can be distinguished according to the segment of the process they profile (indicated by heavier lines).

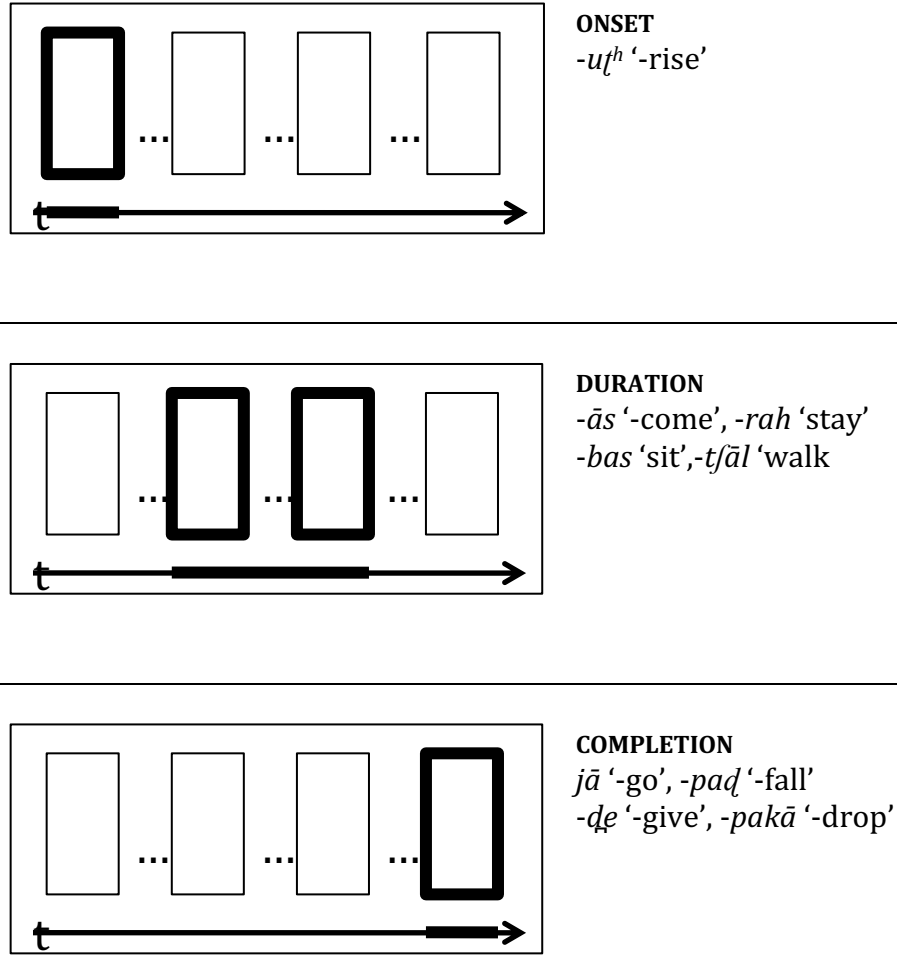


Figure 1: Phasal profiles of Odia light verbs.

In the literature on light verbs, their function is often said to be that of a perfective or telicity marker (an idea notably defended by Hook 1991); however, we argue (as do Butt 2010 and Butt and Geuder 2001 for Urdu) that it is still different and that it does more than just mark perfectivity or telicity. First of all, this would only account for a subset of the LVs, i.e., those profiling COMPLETION and not those that profile the ONSET or the DURATION of the event.⁸ But even the LVs profiling COMPLETION are more than perfectivity markers as is indicated by the fact that the LV can still have a perfective morpheme (*-i-*), as in the following example.⁹

- (8) ମୁଁ ବହିଟା ଆଣିକରି ତୁମକୁ ଦେଇଦେଇଥିଲି
mū bahi-tā āṇ-i-kar-i tuma-ku ḍe-i-ḍeithili
 I book-CLF bring-LNK-do-PERF you-ACC give-LNK-give.PERF.AUX.PAST.1SG
 ‘(Me) having brought the book, I gave (it) to you.’

⁸ Butt (1993a) argues that the aspectual features *inception* and *completion* are part of the semantic structure of (some of the) Urdu light verbs, such as *par* ‘fall’ or *le* ‘take’, but her description does not systematically treat these two features as distinguishing different LVs in Urdu. She also only mentions in passing the durative aspectual value of some Urdu LVs, like *rah* ‘stay’.

⁹ The *-t^h* morpheme is the auxiliary that co-occurs with the aspectual marker –here PERF, but it can also be PROG, cf. example (9) – for past and future tense (both distal); in the present tense, the auxiliary *-at^h* – is to be used.

If the LV were a mere marker of perfectivity, the addition of the PERF-morpheme would be difficult to explain (even if redundancy is never fully excluded). Butt and Geuder (2001) also mention this argument for Urdu and add that light verbs can occur in non-perfective readings, such as the progressive, which they characterize as “clearly an imperfective construction” (2001: 336). Also in Odia, progressive marking for light verb constructions is possible as indicated by example (9).

- (9) ତୁ ଏଠି ବସିଯା, ମୁଁ ସେଠି ବସି ଯାଉଛି
tu ei^{hi} bas-i-jā, mĩ se^{hi} bas-i-jāut^{hi}
 you_[HON] here sit-LNK-go.IMP, I there sit-LNK-go.PROG.1SG
 ‘You (manage to) sit here, I will (manage to) sit there.’

However, aspectual profiling is not the complete story of Odia LVs. For example, if the sentence in (9) is uttered in the context of a crowded bus or train, it would also indicate that seats *unexpectedly* became available. This strikes at the mirative value that some of the Odia light verbs may have, discussed next.

2.2.2 Mirative value of light verbs

In addition to the event modulation specified above, six of the Odia light verbs, i.e., *-ut^{hi}* ‘-rise’, *-jā* ‘-go’, *-paq* ‘-fall’, *-ḍe* ‘-give’, *-pakā* ‘-drop’, and *-ne* ‘-take’ also have a *mirative value*, expressing that the event expressed by the main verb is unexpected or is not supposed to have happened (for whatever reason). For instance, in example (7b) above, the LV construction not only expresses that the book has been given, but also that this was not supposed to have happened. Similarly, the singing in (7d) is unexpected (as also indicated by the adverb *haṭ^{hi}āṭ^{hi}* ‘suddenly’). The LV construction *bas-i-jā* ‘sit-LNK-go’ in (9) is used in cases where there are no reserved seats or no planned seating, or free seats become available unexpectedly, etc. If seats have been booked beforehand, a single verb construction would be more appropriate. Also in example (3b) where the LV construction *k^{hi}ā-i-ḍe* ‘eat-LNK-give’ is augmented with the semi-light verb *-pār* ‘can’ there is a mirative value: that he could eat the sandwich in one minute was unexpected/unsupposed. However, the LV construction with *-t/āl* ‘walk’ in (1b) or the one with *-bas* ‘sit’ in (7d), both expressing DURATION, do not express mirativity.

Mirativity, which DeLancey (1997, 2012) argues to be a linguistic universal¹⁰, is the linguistic expression of a psychological-cognitive phenomenon (most likely universal) which arises from the discrepancy between what is expected (given the background of the speaker’s or hearer’s knowledge or assumptions) and what is observed.¹¹ All languages seem to have lexical means of expressing surprise, such as, in English, *surprise* (noun and verb) or *out of the blue*. However, what is at issue here are grammatical expressions of mirativity. In this respect, T. Peterson (2017) distinguishes between parasitic and non-parasitic expressions of mirativity. The former are those that are discussed most in the literature; they are linguistic expressions where the mirative meaning is parasitic on other linguistic categories, such as the mirative interpretation of evidentials or control marking. In these cases, the mirative value

¹⁰ See, however, Hill (2012) for some critical discussion of DeLancey’s suggestion. For relevant discussions of mirativity in specific languages see, among others, Bashir (2010), Dickinson (2000), Lazard (1999), Montaut (2006), Napiorkowska (2016), J. Peterson (2000).

¹¹ While the literature often restricts mirativity to the *speaker*’s surprise (cf. T. Peterson 2017 who makes the distinction between “mirativity-as-surprise” vs. “mirativity-as-talking-about-surprise”), our definition clearly includes the hearer as well. For example, in telling a (mythical) story, a speaker –who clearly knows what is going to happen– may decide to code an event as being surprising (unexpected or unsupposed) so as to highlight this for the listener. By using a LV construction, the speaker encodes (conceptualises) the situation in a certain way, which may be a genuine expression of his or her surprise, but which may also be targeted at the hearer.

often finds its origin in pragmatic inferences. In contrast, the six Odia LV constructions mentioned above are non-parasitic, formally marked expressions of mirativity, i.e., expressions that overtly and directly express mirativity as part of their core meaning. That mirativity is part of their meaning, rather than contextually determined, is nicely illustrated by the following examples, where the use of a LV construction is ungrammatical if the event is clearly expected, either because it is explicitly said so, e.g., *I expected X* in (10a) or because the previous discourse has introduced the event which consequently has become part of the interlocutors shared knowledge, as in (10b) and (10c).¹²

- (10) a. ମୁଁ ଭାବିଲି ମେରି କାନ୍ଦିବ ବୋଲି, ଏବଂ ସେ କାନ୍ଦିଲା / (*କାନ୍ଦି-ଦେଲା)
*mũ b^hābili mery kāṇḍiba boli, ebaṃ se kāṇḍilā / (*kāṇḍ-i-ḍelā)*
 I thought Mary cry.FUT.3SG that, and she cry.PST.3SG / (*cry-LNK-give.PST.3SG)
 ‘I expected Mary to cry, and (indeed) she cried (*cry-give).’
- b. ସେ ହଠାତ କାନ୍ଦିପକାଇଲା। ହଁ, ସେ କାନ୍ଦିଲା (*କାନ୍ଦିପକାଇଲା)
*se haṭ^hāt kāṇḍ-i-pakāilā. hā, se kāṇḍilā (*kāṇḍ-i-pakāilā)*
 she suddenly cry-LNK-drop.PST.3SG yes she cry.PST.3SG / (*cry-LNK-drop.PST.3SG)
 ‘She suddenly cried (cry.drop). Yes, she cried (*cry.fall / *cry-go).’
- c. ସେ ହଠାତ କାନ୍ଦିପକାଇଲା। ସେ କାନ୍ଦୁଥିବାବେଳେ ମୁଁ ଗୋଟିଏ ଆରାମଦାୟକ ଗୀତ ଲଗାଇଲି
*se haṭ^hāt kāṇḍ-i-pakāilā. se kāṇḍuṭ^hibābeḷe (*kāṇḍ-i-pakāuṭ^hibā-beḷe)*
 she suddenly cry-LNK-drop.PST.3SG she cry.PROG.AUX.NMLZ.moment (*cry-LNK-drop.PROG.AUX.NMLZ.moment)
mũ goṭie ārāmdāyaka gīṭa lagāili
 I a comforting song apply.PAST.1SG
 ‘She suddenly cried. While she was crying (*cry-drop), I put on some comforting music.’

Such *grammaticalized* (non-parasitic) expression of mirativity is quite unusual in the languages of the world, which makes the description of Odia LVs all the more relevant. Occasional references to such a mirative interpretation can be found in the literature on Indo-Aryan languages, albeit not in these terms (but in terms of “suddenness” or “abruptness”) and usually, this feature is only mentioned in passing, amidst a host of other values (such as agentivity, volitionality, control, etc.). Here are some (selected) examples of such sporadic references to the (varied) semantics of LVs in Indo-Aryan languages:

The syntax of complex predicate construction allows the further specification/modification of an event by adding contextually defeasible information [...] about suddenness, force, agentivity or benefaction as well as further specification as to *Aktionsart*” (Butt and Lahiri 2001: 30; language: Urdu)

¹² The observant reader will note that the LV construction *kāṇḍ-i-pakā* ‘cry-LNK-drop’ (that would be perfectly grammatical outside the context of expected events at issue here) is in fact problematic with respect to the overall transitivity constraints, since the intransitive verb *kāṇḍ* ‘cry’ obligatorily combines with *-pakā* ‘-drop’, occasionally with *-ḍe* ‘-give’ which, however, are both restricted to transitive constructions (clearly not the case here). The same phenomenon occurs with the verb *has* ‘laugh’. Moreover, the LV constructions with *-jā* ‘-go’, *-paḍ* ‘-fall’ expected to occur with these two intransitive verbs, are plainly ungrammatical. At the same time, both *kāṇḍ* ‘cry’ and *has* ‘laugh’ can occur with the LV *-uṭ^h* ‘-rise’, which is restricted to intransitives. At this point in our analysis, we have no explanation for this deviant behaviour other than that this is a conventional/lexicalized usage for precisely these two verbs. Near-synonyms (e.g., *kuruḷ* ‘burst out in laughter’) do not behave this way. We surmise that it might have something to do with how the events denoted by these two verbs are conceptualised in Odia with respect to causation, but further research is required to confirm this.

Partially emptied of their lexical content, these [LVs] modify the meaning of the main verb in various ways not unrelated to that content, which might be best described as *manner-specification* (including directionality, completeness, suddenness, violence, deliberateness, stubbornness, benefaction, affectivity, etc.)” (Masica 1991: 326; on LVs in IA languages in general).

While the exact semantic contribution of light verbs has been difficult to pin down, they contribute several meanings such as completion, benefaction, undesirability, suddenness, etc. to the main verb. (Deoskar 2006: 183; language: Marathi).

Intensives conveying suddenness, hurry or immediate futurity [...] intensives showing suddenness (Vale 1948: *passim*; language: Odia).

[Sequences with the LV *le* ‘take’] often connote a suddenness, hurriedness or unexpectedness (Hook 1974: 47; language: Hindi).

A first comment is that many authors do not distinguish between the phasal profile and the ‘other’ semantic values of LVs, a distinction that we draw more systematically in our account. In addition, drawing on the concept of mirativity (itself a complex category) as we do here allows a more coherent account of these various but related values. What emerges is that Odia seems to have hard-wired into its (verbal) grammar whether an event is unexpected (or un-supposed, see below) to have happened. This confirms T. Peterson’s (2017) view that mirative utterances stand in a markedness relation with non-mirative utterances. However, given the double meaning of (most of) the Odia LV constructions (phasal and mirativity), the situation is more complex.

First, the maximal contrast is that between single verb and the six aspectuo-mirative LV constructions, as already illustrated by example (7) above, since this opposition concerns both the aspectual profiling and the mirative reading.

Second, there is a contrast in terms of mirativity itself: only *some* of the LVs express mirativity, i.e., those encoding ONSET or COMPLETION, not the ones encoding DURATION. The explanation for this, we hypothesize, may be that ONSET and COMPLETION both entail a difference between two states, i.e., (i) pre-onset vs. onset state and (ii) final and post-final state. For the LVs expressing DURATION there is no such difference: all the states are the same and can thus not be a trigger of surprise.

Returning to the link between ONSET/COMPLETION and mirativity, note that also in Odia there exist non-mirative alternatives, e.g., *āramb^ha kar* ‘start_N do’ to encode non-mirative ONSET or *V-LNK-sār* ‘V-LNK-finish’ for non-mirative COMPLETION, as explained above. Also, and this makes matters theoretically quite challenging, the mirative reading *may* be contextually overruled in the presence of adverbs expressing completion. For example, if an adverb like *purāpuri* or *sampurnarupe* (both meaning ‘completely’) is added to the clause, as in (11a) and (11b), the interpretation changes. In line with the semantics of the adverb, the LV construction becomes the obligatory coding (a single verb construction would be ungrammatical); however, the mirative interpretation disappears.

- (11) a. ସେଓଟା ମୁଁ ପୁରାପୁରି ଖାଇଦେଇଛି/ *ଖାଇଛି
*seo-tā mû purāpuri k^hā-i-ḍeit^hi / *k^hāit^hi*
 apple-CLF I completely eat-LNK-give.PERF.1SG / *eat.PERF.1SG
 ‘I have eaten the apple completely.’ (no mirativity)

- b. ବହିଟା ଛାପିବା ପରେ ଏଇ ପ୍ରୋଜେକ୍ଟଟା ମୁଁ ସମ୍ପୂର୍ଣ୍ଣରୂପେ ବନ୍ଦ କରିଦେବି/ *କରିବି
bahi-tā tʰāpibā pare ei project-tā mū sampurnarupe
 book-CLF publishing after this project-CLF I completely
*band kar-i-ḍebi / *karibi*
 stop do-LNK-give.FUT.1SG / *do.FUT.1SG
 ‘After publishing the book, I’ll stop this project completely.’ (no mirativity)

These examples show that a nuanced stance is required: the examples in (10) suggest that mirativity is indeed part of the LV constructions at hand, yet the examples in (11) show that this value can be cancelled out. In more traditional terms, the former would identify it as semantic (inherent to the construction), the latter as pragmatic (contextual inferencing). It may be added that tests such as the ones in (10) remain difficult because of the polysemy of mirativity in Odia between an unexpected vs. unsupposed reading. An action or event may be unsupposed but that does not necessarily make it unexpected; for example, a crooked person may be expected to do something unsupposed (for which a LV construction is to be used).

Strikingly, while mirativity disappears with overt expressions of completion, the aspectual value does not disappear when there are overt expressions of mirativity, such as the adverb *haṭṭāṭṭ* ‘suddenly’ in (7d) for example. However, also the aspectual reading can, in some specific contexts, be affected. One such context is that of repeated events where the LV construction with *-jā* ‘-go’ can be used, as in example (12a), where the giving does not exhaust (non-completion) the giver’s resources (i.e., there is still some of his money left); this can be contrasted with the coding (12b) with the LV *-de* ‘-give’ refers to the chocolates being eaten up progressively to exhaustion (completion) during the keeping of the chocolates.¹³

- (12) a. ସେ ମୋତେ ସବୁବେଳେ ବହୁତ ପଇସା ଦେଇଯାଉଛି, କିନ୍ତୁ ମୁଁ ତାକୁ କିଛି ଦେଇ ପାରୁନି
se moṭe sabubeḷe bahuṭa paisā ḍe-i-jāutʰi, kinṭu mū tākū
 he me always much money give-LNK-go.PROG.AUX.3SG, but I him
kitʰi ḍe-i-pārūni
 anything give-LNK-can.PROG.NEG.1SG
 ‘He always gives me a lot of money, but I cannot give him anything.’
 b. ଚକଲେଟ ରଖୁରଖୁ ତ ତୁ ସବୁ ଖାଇଦେଉଛୁ
tʃkleṭ rakʰu rakʰu ta tu sabu kʰā-i-ḍeutʰu
 chocolate keep.PROG keep.PROG EMPH you all eat-LNK-
give.PROG.AUX.2SG
 [‘Chocolate keeping keeping, you are eating up all (the chocolates).’]
 ‘While keeping the chocolates, you are eating up all of them.’

In contrast to a single verb construction, the LV construction with *-jā* ‘-go’ in example (12a) still involves completion, but it applies to the repeated events individually; in other words, it expresses “repeated completion” of each of the giving events. A similar example would be when a parrot has nibbled from different pieces of fruit, where you can either say *kʰump-i-galā* (‘nibble-go’), focusing on the repetition of nibbling, or *kʰump-i-ḍelā* (‘nibble-LNK-give’) referring to a single event (the parrot came and nibbled). Similarly, *lekʰ-i-galā* (‘write-LNK-go’) refers to multiple or repeated writing (e.g., a child writing a word many times to remember its spelling), while *lekʰ-i-ḍelā* (‘write-LNK-give’) refers to a single writing event.

¹³ Note that this particular context overrules the transitivity constraint that *-jā* ‘-go’ only occurs with intransitive verbs. In these contexts of repeated (or incremental events) the progressive is often used, even if it is not obligatory. See Lemmens & Sahoo 2017 for some further discussion.

A third complication is that four COMPLETION LVs (*-jā* ‘-go’, *-paḍ* ‘-fall’, *-ḍe* ‘-give’, and *-pakā* ‘-drop’) differ with respect to the degree of mirativity they express; also here, the context plays an important role (see below for details).

Finally, the LV *-ne* ‘-take’ is a special case, as it often has a self-benefactive reading (typically with a negative connotation) which may or may not have a mirative reading, depending on the context. Consider the following examples. In example (13a), the LV construction ‘rob- LNK-take’ has mirative value. (Note also the nominalised LV construction *mo āk^{hi} lāg-i-jā* ‘my eye touch-LNK-go’ which expresses the unexpected event of falling asleep during a certain time period.) In example (13b), in contrast, the LV construction does not have any mirative value, as putting on the life vests is a logical consequence of the stormy weather. Similarly, (13c) and (13d) refer to events that are not unexpected or unsupposed.

- (13) a. ବସରେ ବସି କେତେବେଳେ ମୋ ଆଖି ଲାଗି ଯାଇଥିବା ବେଳେ କିଏ ମୋ ବ୍ୟାଗରୁ ସବୁ ଟଙ୍କା ଲୁଟି ନେଇଥିଲା (ECC) (mirative)
basre basi keṭebeḷe mo āk^{hi} lāg-i-jā^{hi}ibā-beḷe
 bus.PP sit.PERF sometime my eye touch-LNK-go.COP.NMLZ-moment
kie mo byāgru sabu ṭankā luṭ-i-nei^{hi}ilā
 somebody my bag.ABL all rupees rob-LNK-take.PERF.PST.3SG
 ‘During my travel by bus, when (unexpectedly) having fallen asleep for a while, somebody robbed all the money from my bag.’
- b. ପ୍ରବଳ ପବନ ଯୋଗୁଁ ଜାହାଜ ହଲିବା ଦେଖି ସମସ୍ତ ଯାତ୍ରୀମାନେ ସ୍ୱତନ୍ତ୍ର ପୋଷାକ ପିନ୍ଧିନେଲେ (ECC) (+self-benefactive, -mirative)
prabaḷa pabana jogū jāhāja halibā ḍek^{hi} samasṭa
 too much wind because.of ship shake.nmlz see.PERF all
jāṭrimāne swaṭanṭra posāka pinḍ^{hi}-i-nele
 travellers special costume wear-LNK-take.PST.3PL
 ‘Because of (the) heavy wind and having seen the ship’s shaking, all the travellers put on a special costume.’
- c. ପାଣିରେ ଥିବା ସମସ୍ତ ସାରକୁ ଉଦ୍ଭିଦ ଗ୍ରହଣ କରିନେବା ଫଳରେ ପାଣି ସଫା ରହେ (ECC) (±self-benefactive, -mirativity)
pāṇireṭ^{hi}ibā samasṭa sāraku uḍviḍa grahaṇa
 water.LOC.COP.NMLZ all manure.ACC waterplant acceptance
kar-i-nebā p^{ha}ḷare pāni sap^{ha}ā rahe
 do-LNK-take.NMLZ result.PP water clean stay
 ‘As the plants suck the manure from the water, the water remains clean.’
- d. ନିହତ ପଶୁମାନଙ୍କୁ ଯଥାସ୍ଥାନକୁ ବୋହିନେବାପାଇଁ କମିଶନର ଆଦେଶ ଦେଲେ (ECC) (-mirative)
nihata pashumānanku jāṭ^{hi}āsṭ^{hi}ānaku boh-i-nebāpāi kamisanar
 dead animals.ACC proper.place.PP carry-LNK-take.NMLZ.for commissioner
āḍesh ḍele
 order give.PST.3SG.HON
 ‘The commissioner ordered to carry the dead animals to the designated place.’

In other words, the mirative value for the LV *-ne* ‘-take’ is context-dependent, while for the other five LVs it is not. Furthermore, while common, the self-benefactive reading (which could be argued to have persisted from its lexical origin) is also variable; in (13d), it is not present. Further research is necessary to clarify the variable uses of this particular LV.

Combining the different aspectual profiles of the LVs and their mirative value, the situation can be summarized as in Table 1.

Table 1: Phasal and mirative profiles of Odia light verbs.

	PHASAL VALUE	MIRATIVITY
<i>-ut^h</i> ‘-rise’	ONSET	+ MIRATIVE
<i>-ās</i> ‘-come’, <i>-rah</i> ‘stay’ <i>-bas</i> ‘sit’, <i>-tāl</i> ‘walk’	DURATION (MIDDLE)	- MIRATIVE
<i>-jā</i> ‘-go’, <i>-paq</i> ‘-fall’ <i>-ḡe</i> ‘-give’, <i>-pakā</i> ‘-drop’	COMPLETION	+ MIRATIVE
<i>-ne</i> ‘-take’		± MIRATIVE

As the above description has already revealed, the grammar of LVs is quite challenging. In a nutshell, we make the following five claims:

1. all ten Odia LVs express an **aspectual value** (phasal profile);
2. five LVs (*-jā* ‘-go’, *-paq* ‘-fall’, *-ḡe* ‘-give’, *-pakā* ‘-drop’, *-ut^h* ‘-rise’) furthermore express **mirativity** which may, in specific contexts, disappear;
3. the four completion LVs (*-jā* ‘-go’, *-paq* ‘-fall’, *-ḡe* ‘-give’, *-pakā* ‘-drop’) differ in the **degree of mirativity** they express;
4. the LV *-ne* ‘-take’ usually (but not always) expresses self-benefaction and may or may not express mirativity;
5. the durative LVs *ās* ‘come’, *rah* ‘stay’, *bas* ‘sit’, *tāl* ‘walk’ do not express mirativity.

The fact that the aspectual but especially the mirative readings are affected by the context (or even be cancelled out completely in some specific contexts) poses a theoretical challenge which revolves around the question of whether these readings (and again, especially the mirative one) are truly part of the construction or whether they are the result of pragmatic inferencing, as Butt and Lahiri (2001) suggest for Urdu. After the corpus-based analysis of the use of the aspectuo-mirative Odia LVs, presented in the next section, we will be in a better position to evaluate this question (section 4).

3 Corpus-based analysis of aspectuo-mirative light verbs

In this paper we only consider the five LVs that have an aspectuo-mirative reading; because of its specific meaning the LV *-ne* ‘-take’ will not be discussed in detail here. In this section we present our corpus-based analysis of Odia LVs. As will become clear, these analyses provide new insights with respect to subtle semantic differences between the different LV constructions, especially those that occur with the same main verb and thus appear to be interchangeable. First, we briefly present the corpus and method of analysis. We then (Section 3.2) present our (hitherto unpublished) analysis of the light verb *-ut^h* (‘rise’) which combines a mirative interpretation with a profile on the ONSET of the event. Next, in Section 3.3, we discuss the four COMPLETION light verbs *-jā* ‘-go’, *-paq* ‘-fall’, *-ḡe* ‘-give’, and *-pakā* ‘-drop’; this is a brief summary of an earlier, more detailed, analysis Sahoo and Lemmens (2017) which, however, we need as a back-drop for the third part of our description (Section 3.4) in which we briefly compare the choice between ONSET and the COMPLETION LVs, especially when occurring with the same main verb.

3.1 Corpus and method

Our study is based on the Odia texts that are included in the EMILLE-CIIL Monolingual Written Corpora (McEnery et al. 2003); the Odia corpus, approximately 2,730,000 words, is a fairly heterogeneous collection of literary, legal, commercial, scientific, and newspaper texts,

in Odia script.¹⁴ We extracted from these texts all occurrences of the ten light verbs. As these light verbs are form-identical with their lexical origins, the extractions contained both light verbs and lexical verbs, which necessitated laborious manual clean-up. To keep matters manageable, this was done as follows: each list of extractions was sorted randomly (using the Random-function in MS-Excel), the sentences with the lexical verbs were manually removed (by K. Sahoo, native speaker of Odia) until all LV constructions were retained or formed a sufficiently large set (for frequently occurring *V-dē* ‘V-give’ and *V-jā* ‘V-go’).

The resulting data sample for the five LVs under consideration in this paper comprises 2,459 attestations, distributed as follows: 561 for *V-i-dē* ‘V-LNK-give’, 560 for *V-i-jā* ‘V-LNK-go’, 383 for *V-i-paḍ* ‘V-LNK-fall’, 311 for *V-i-pakā* ‘V-LNK-drop’, and 644 for *V-ut^h* ‘V-rise’. These sentences were subsequently manually glossed for the main verb (with English translation) and each of them was manually considered for specific contextual features. The identification of the main verb provides the basis for a number of comparative analyses. First of all, the type and token frequencies allow us to measure the productivity of each LV, especially in comparison to those that are semantically close. The data also allow us to do a collostructional analysis (see Gries and Stefanowitsch 2004; Stefanowitsch and Gries 2003, 2005; Gries 2007) which aimed at measuring the degree of attraction (or repulsion) that certain lexical verbs may have with respect to a particular LV. The underlying assumption is that such a collostructional analysis can tell us something about the semantics of the different light verb constructions, since the meaning of the verb and that of the construction must be compatible.

Such a collostructional analysis has only been applied to the four completion LVs, so we will not consider these results in more detail here (see Sahoo and Lemmens 2017 for more details.) Another study that we have done consists in a contextual comparison where we compare the contextual properties of those cases where the same main verb occurs with different light verbs to determine what the differences in contexts of use are, if there are any. This has been done in Section 3.3 for the pair-wise comparison of the COMPLETION LVs which are argued to differ in their degree of mirativity, but also for the comparison between the ONSET versus the COMPLETION LV (again, when occurring with the same main verb) in Section 3.4.

3.2 MIRATIVITY and ONSET: a corpus-based analysis of *-ut^h* (‘rise’)

The LV *-ut^h* ‘rise’ combines a mirative reading with a profile on the ONSET of the event. The latter could arguably have persisted from its lexical origin, rising often seen as a process of emergence or appearance (cf. the sun rising which at onset combines both motion and appearance). The experiential motivation for the mirative reading is also fairly straightforward: it is the (sudden) emergence of an event that is surprising. This can be compared to the Swedish pseudo-coordinations *gå och V* ‘go and V’ and *ta och V* ‘take and V’ discussed by Wiklund (2009), where it is also the onset of the event which is responsible for the surprise reading.

The transitivity constraint of the LV –recall that it can only combine with intransitive verbs– can also be considered as having persisted from its lexical origin. However, even if very rare, *-ut^h* ‘rise’ can occasionally occur in a formerly transitive construction, as in the (constructed) example (14).

¹⁴ The Odia texts were originally gathered by the Institute of Applied Language Sciences, Bhubaneswar. The EMILLE corpus is available from the (European Language Resources Association (<http://www.elra.info/en/>) reference ELRA-W0037. The Odia script made it difficult to run extractions with existing concordance software.

- (14) ଗଛରେ ଚଢ଼ିବାକୁ ଗଲାବେଳେ ପାଦ ପାଖରେ ସାପ ଦେଖି ସେ ମନରୁ ସାହାସ ହରାଇ ଉଠିଲା
gatʃʰare tʃadʰibāku galābeḷe pāḍa pākʰare sāpa dekʰi se manaru
 tree.PP climb going.time foot near.LOC snake.see.PERF he mind.from
sāhasa har-ā-i-utʰilā
 courage lose-CAUS-LNK-rise.PST.3SG.
 ‘While going to climb a tree, having seen a snake nearby his feet, the person lost his courage.’ (lit. cause to lose)

In this sentence, there is a transitive construction with an object in the accusative case (here, *sāhasa* ‘courage’), yet the transitivity is indirectly expressed via the causative morpheme *-ā* which adds another layer of causation (a secondary Agent) to processes that in the case of LV constructions with *-utʰ* ‘rise’ are (typically) intransitive. In other words, the conceptualisation underlying the causative event in example (14) can perhaps best be paraphrased as ‘the person caused his/her courage to disappear’.¹⁵

Strikingly, while the causative morpheme requires the transitive LVs *-de* ‘-give’ or *-pakā* ‘-drop’ if the phasal profile is on COMPLETION, it can, in a limited number of cases, occur with the LV *-utʰ* ‘-rise’ which is usually restricted to intransitive processes. This can be taken as evidence that in the causative construction the instigated process continues to be conceptualised as fairly autonomous which would be particularly the case for the kinds of processes that occur with *-utʰ* ‘-rise’, a point which we will illustrate shortly. Then why is this different in the case of the COMPLETION LVs where the causative construction does impose a different LV? The answer, we suggest, is that for these LVs, the focus is on the process as a whole (and particularly its completion or result), while the focus on the onset expressed by *-utʰ* ‘-rise’ still allows the process to develop autonomously, even if it has been instigated by an external Agent or Cause. As said, such causative constructions with *-utʰ* ‘-rise’ are quite unusual; we found no attestations in our data set.

Before we turn to a more detailed analysis of the use of the LV *-utʰ* ‘rise’ in our corpus data, we should mention that the Odia verb *tʃamak* ‘surprise’ itself typically (but not always) occurs with the LV *-utʰ* as illustrated in example (15a). It can occur in a single verb construction, as illustrated in (15b), but here the child being surprised is a regularly occurring phenomenon.

- (15) a. ମଝିରାତିରେ ସେ ହଠାତ୍ ଚମକି ଉଠିଲେ (ECC)
majʰirāṭire se haṭʰāt tʃamak-i-utʰile
 midnight.PP he suddenly surprise-LNK-rise.PST.3SG
 ‘At midnight suddenly he got frightened/(surprised).’
 b. ପିଲାଟି ବହୁତ ଚମକୁଛି
pilāṭi bahut tʃamakutʰi
 child.ART.DEF much surprise.PROG.3SG
 ‘The child is often surprised/frightened.’

Let us now turn to a more detailed analysis of the use of the LV *-utʰ* ‘rise’ in our corpus data. Here are some examples from our corpus as a first illustration of its use.

¹⁵ See Lemmens & Sahoo (2017) for a more detailed discussion of the causative morpheme in relation to light verb constructions.

- (16) a. ଜୀବନର ଶୁଖିଲା ଭୂଇଁ ଏଇ କେତେଦିନ ହେବ ଫୁଲଫାଲରେ ଭରି ଉଠିଛି (ECC)
jibanarashuk^hilā b^huī ei keṭṭedina heba p^hulap^haḷare **b^har-i-
 uṭ^hit^hi**
 life.GEN dry land this someday within fruits and flowers.INS **fill-LNK-
 rise-PRES.3SG**
 ‘Sometimes this barren/unsuccessful life fills up with fruits and flowers.’
- b. ଗଙ୍ଗାଶିଉଳି ଫୁଲ ହଠାତ୍ ଫୁଟି ବିଭାସି ଉଠିଛି (ECC)
gangashiuli p^hula haṭ^hāṭ p^huṭ-i-bib^hās-i-uṭ^h-it^hi
 night-jasmine flower suddenly **bloom-LNK-fragrancev-LNK-rise.PERF.3PL**
 ‘Night-jasmine flowers suddenly blossomed and spread out fragrance.’

These examples illustrate typical intransitive events that happen autonomously and for which a mirative reading (here: unexpectedness or suddenness) is quite straightforward; example (16b) codes this even overtly via the adverb *haṭ^hāṭ* ‘suddenly’. Notice that the construction has a double complexity: it is a *symmetric* serial verb construction (*p^huṭ-i-bib^hās* ‘blossom_v-LNK-fragrance_v’) with a sequential interpretation (two separate events) which then, as a whole, is combined with the LV *-uṭ^h* ‘-rise’.

The corpus data reveal that the LV *-uṭ^h* ‘rise’ does indeed have a strong preference for processes that are typically conceived of as spontaneously occurring. Table 2 gives an overview of the verbs occurring with the LV *-uṭ^h* ‘rise’ in our corpus.¹⁶

Table 2: Overview of main verbs used with the LV *-uṭ^h* ‘rise’.

Main verb	Gloss	N
<i>ho</i>	become	282
<i>gaḍ^h</i>	build up (intr.)	77
<i>p^huṭ</i>	blossom/appear/reveal	39
<i>kar</i>	do	24
<i>has</i>	laugh/smile	18
<i>jaḷ</i>	burn	17
<i>kah</i>	speak/say/tell	16
<i>kamp</i>	shake/shiver	11
<i>bāj</i>	ring	10
<i>ṭṣamak</i>	surprise	10
<i>p^hul</i>	swell/bloat/inflate	10
<i>kāṇḍ</i>	cry	8
<i>b^hās</i>	float	7
<i>nāṭ</i>	dance	7
<i>pājīkar</i>	shout	7
<i>shitei</i>	feel cold	7
<i>jāg</i>	wake up/be alert	6
<i>j^halas</i>	shine/sparkle/glitter	6
<i>ṭek</i>	lift	6
<i>jam</i>	collect/gather	5
<i>baḍ^h</i>	increase	4
<i>pur</i>	fill up (intr.)	4

¹⁶ The English translations given in this table (and other tables) are lemmatised labels that generalise over polysemous uses. That is, they may not always be the best translations in all contexts as a given context may require a different English word to be used. For example, the verb *garj* is used for both humans “screaming” and animals (like a tiger) “roaring”; the verb *p^huṭ* means “blossom”, but can also metaphorically refer to “arise” or “reveal”; the verb *bāj* (glossed as “ring”) is used for the sound of bells but also for the sound of instruments like a guitar. Glosses are thus only an approximation and do not represent a full lexical semantic analysis of these verbs.

<i>shihar</i>	get/be frightened	4
<i>tej</i>	arise	4
<i>t^har</i>	shiver/shake	4
<i>ut/huḷ</i>	overflow	4
<i>tfahaṭ</i>	appear	3
<i>tfeĩ</i>	wake up	3
<i>gā</i>	sing	3
<i>māt</i>	excite/involve/engage	3
<i>b^har</i>	fill (up)	2
<i>tfilei</i>	scream	2
<i>garj</i>	scream/shriek/roar	2
<i>j^halak</i>	shine/sparkle	2
<i>kuruḷ</i>	laugh hilariously	2
<i>mahak</i>	emit fragrance	2
<i>tāt</i>	be heated up	2
<i>bāhun</i>	grieve with agony	1
<i>b^huk</i>	bark	1
<i>bib^hās</i>	spread out fragrance	1
<i>bigiḍ</i>	get upset	1
<i>biḷibiḷei</i>	talk in sleep	1
<i>t^hāḍ</i>	leave	1
<i>tfihĩnk</i>	be irritated	1
<i>ḍeĩ</i>	jump	1
<i>ḍohal</i>	shake	1
<i>hāimār</i>	yawn	1
<i>jaḷajaḷe</i>	reflect	1
<i>jiĩ</i>	live	1
<i>kāsh</i>	cough	1
<i>kāḷ</i>	sprout/raise	1
<i>pulak</i>	get excited	1
<i>rāg</i>	get angry	1
<i>suluk</i>	sparkle	1
<i>tānkur</i>	get frightened/upset	1
<i>ukuṭ</i>	reflect	1
<i>ulus</i>	get excited	1
<i>uṭ^hāine</i>	lift (litt. lift-LNK-take)	1
TOTAL		644

A first comment on the distribution is that the lion share of verbs that occur with the LV *-uṭ^h* ‘rise’ is accounted for by the verb *ho* ‘become’ which, as illustrated in example (17), mostly combines with adjectives to express a change of state (similar to English *become*); the semantics of such ‘becoming’-process fits nicely with the ONSET focus of the light verb.

- (17) a. ସବୁ ଦେଶ ମିଶିଗଲେ ପୃଥିବୀ ଶାନ୍ତିମୟ ହୋଇ ଉଠିବ (ECC)
sabu ḍesha mishigale pruṭ^hibi shāntimaya-ho-i-uṭ^hiba
All country united world **peaceful-become-LNK-rise**.FUT.3SG
‘If all the countries get united, the world would become peaceful.’

- b. ଫଳରେ ଦଳ ସଭାପତିମାନଙ୍କର କ୍ଷମତା ଅମିତ ହୋଇଉଠିବ (ECC)
p^ha|are ḍa|a sab^hāpatinkara k^hyamatā amiṭa ho-i-ut^hiba
 as a result group president.GEN power unlimited **become-LNK-rise.FUT.3SG**
 ‘Consequently the group-president’s power will be unlimited.’

Note also the presence in the top end of the table of the verbalizer *kar* ‘do’ discussed above; its frequency confirms the productivity of this morphological device to build new predicates. The *X-kar* patterns attested in the corpus align nicely with the type of events expressed by simplex verbs, as shown in (18).

- (18) a. ମୋ ଚିନ୍ତାଧାରାକୁ ଛିନ୍ନକରି ହଠାତ୍ ସେ ଚିତ୍କାର କରି ଉଠିଲା (ECC)
mo tʃiṇṭāḍḍ^hārāku tʃ^hinnakari haṭṭāṭ se tʃiṭkāra-kar-i-ut^hilā
 my thinking tearing suddenly he **scream-do-LNK-rise.PAST.3SG**
 ‘By interrupting my thoughts, suddenly he started screaming.’
 b. ମୁଁ ମନେ ମନେ ଆର୍ତ୍ତନାଦ କରି ଉଠିଲି (ECC)
mū mane mane āṛṭanāḍa-kar-i-ut^hili
 I mind.LOC mind.LOC **[crying with misery]-do-LNK-rise.PAST.1SG**
 ‘Inside my mind, I started crying with agony.’

As can be seen from the distribution of main verbs occurring with *-ut^h* ‘rise’, there are some larger semantic categories of events:

- verbs referring to an emotional state: be angry, excited, irritated, etc.,
- verbs referring to (spontaneous) bodily processes, like laughing, coughing, shaking, etc.)
- verbs pertaining to the emission of light (sparkle, shine), fragrance (smell), or sound (shout, scream, bark)
- verbs referring to intransitive motion events, e.g., spread out, fill up, build up, etc.
- verbs pertaining to emergence, such as arise, reveal, blossom, etc.

These are events that are mostly experienced as spontaneous events that are not directly caused by an Agent; they can be instigated by an (external) Agent or Cause (cf. example (14) above) but the caused process is still conceptualised as running autonomously. In fact, these cases might be taken as providing further illustration of Goldberg’s (1995: 39) “scene-encoding hypothesis” which defends the idea that basic constructions (or sentence types) refer to event types that are basic to human experiences. Many of the (unexpected) events expressed by *V-ut^h* ‘V-rise’ correspond to the basic experience of a stimulus or a (spontaneous) change of state.

In line with what was said above, there are quite a number of verbs that refer to emergence, which harmonizes well with the ONSET profile of the LV *-ut^h* ‘-rise’. For the verbs referring to an emotional state or bodily process, it is also conceptually quite logical to have a profile on ONSET (as expressed by *-ut^h* ‘-rise’) rather than on COMPLETION (as expressed by *-jā* ‘-go’, *-paḍ* ‘-fall’, *-ḍe* ‘-give’, and *-pakā* ‘-drop’), since it is the very occurrence (onset) of the emotion or bodily process that causes the surprise. It is quite unproblematic and common to have an inchoative interpretation here for these verbs (getting into the state). However, that does not mean that a COMPLETION-MIRATIVE perspective is excluded: several of the verbs attested with *-ut^h* ‘-rise’ do occur with COMPLETION LVs as well, e.g., ‘angry_V-rise’ vs. ‘angry_V-go’, ‘laugh-rise’ vs. ‘laugh-drop/give’, ‘float-rise’ vs. ‘float-go’, ‘do-rise’ vs. ‘do-drop/give’. These minimal pairs will be elaborated on in Section 3.4, after we have discussed the COMPLETION LVs, discussed next.

3.3. Mirativity and completion

The LVs *-jā* ‘-go’, *-paḍ* ‘-fall’, *-ḍe* ‘-give’, *-pakā* ‘-drop’, and *-ne* ‘-take’ profile the completion of the event expressed by the main verb with which they combine and they express that this event is unexpected or unsupposed. It will be recalled that for *-ne* ‘-take’ mirativity may not always be present. The combination of mirativity and completion may at first sight seem counterintuitive, as one generally is surprised by the (sudden) emergence of an event, not by its termination. However, on second thought, this combination need not be all that unusual: the observed situation is evaluated via the result of the (completed) event which does not correspond to the expected result. In fact, this kind of reasoning is not unlike what has been observed in the literature on (parasitic) mirative readings of perfective or evidential markers where the sensory observation of a state or result of an action triggers inferences leading to a surprise reading. For example, Aksu-Koç and Slobin (1986) describe the pragmatic extension of the Turkish particle *-miş* to mark events as surprising and observe that “the inferences encoded by *-miş* can be based on any kind of sensory evidence of the **resultant state**, with the provision that no aspect of the antecedent process itself has been present in the speaker’s consciousness” (1986: 160; our emph.). For similar observations on the link between result and mirativity see, among others, J. Peterson (2000) on Nepali or T. Peterson (2015) on Giskan.

Ignoring the LV *-ne* ‘-take’, the four other LVs are to be distinguished into two pairs: (i) *-jā* ‘go’ and *-paḍ* ‘fall’ only combine with intransitive verbs (or intransitively used alternation verbs), *-ḍe* ‘give’ and *-pakā* ‘drop’ only combine with (di)transitive verbs. The major additional claim that we advance with respect to these four LVs, is that they differ in the degree of mirativity they express. Schematically, this difference can be presented as in Table 3 (adapted from Sahoo and Lemmens 2017: 352).

Table 3: Degrees of mirativity for 4 Odia LV constructions.

MEANING		FORM	
“aspectuo-mirative modulation”		<i>V-i-v</i>	
		intransitive	transitive
COMPLETION	UNEXPECTED (high)	<i>V-i-paḍ</i> (‘V-LNK-fall’)	<i>V-i-pakā</i> (‘V-LNK-drop’)
	UNEXPECTED (lower)	<i>V-i-jā</i> (‘V-LNK-go’)	<i>V-i-ḍe</i> (‘V-LNK-give’)

This difference of degree can be explained as a kind of persistence of the original lexical verb: as far as intransitive motion is concerned, *fall* refers to a less controlled and thus more unexpected event than *go*, which typically refers to voluntary intransitive motion; similarly, *drop* refers to a less controlled event than *give* which typically takes a volitional Agent. In other words, the degree of mirativity can be related to a degree of agentivity and/or of volitionality that has persisted from the original lexical verb.¹⁷

¹⁷ See Hopper and Thompson (1980) for a thorough discussion of degree of transitivity, in which the feature VOLITIONALITY plays a role as well in addition to others like AFFECTEDNESS, KINESIS, PUNCTUALITY, etc. In the domain of mirativity, Dickinson (2000) mentions “lack of intention” as one of the features giving rise to mirativity interpretation in Tsafiki; T. Peterson (2017) points out that the feature of CONTROL plays a role for (parasitic) expressions of mirativity in Salish languages. Similarly, Butt (1993b) argues that the Urdu LV *-par* functions as a LV which signals lack of volitionality/lack of conscious choice; this analysis is quite compatible with ours and can in fact, easily be integrated under the denominator MIRATIVITY.

Our earlier corpus-based analysis has corroborated this view. We will only present the major findings here; the reader is referred to Lemmens and Sahoo (2017) and Sahoo and Lemmens (2017) for details of the statistical analysis as well as for additional examples. Using Hay and Plag's (2004) calculation of productivity, our study showed that *-jā* 'go' and *-de* 'give' are slightly more productive than *-paḍ* 'fall' and *-pakā* 'drop'. The collostructional analyses that we ran separately for the intransitive and transitive pairs further confirm that for each pair, different verbs are attracted to different LV constructions; however, no clear semantic difference could be identified merely on the basis of the verb types.

The different degree of mirativity was, however, confirmed by the comparison of the contexts in which the verbs are used with the same verbs (again, in pair-wise comparison). For the intransitive pair, the data suggest that while both LV constructions encode unexpected events (in general), 'V-go' is used for events that are unexpected to a lesser degree, which we have termed "expected within the unexpected". For example, breaking a cup while doing the dishes is unexpected, yet something that one knows might, and often does, happen ('break-go'); windows, in contrast, being fixed in the wall are more unlikely to break and such events would invariably be coded with 'break-fall'. Similarly, breaking a leg is unexpected (and undesirable), but it is something that we know can happen when one unexpectedly stumbles and falls, for example. The different contexts indicated that the 'V-fall' construction encodes totally unexpected events, whereas 'V-go' encodes events that are unexpected, but for which some element in the context still makes them "somewhat expected". This may often be aligned with a different degree of AFFECTEDNESS as well.

For the transitive LV constructions, we found similar confirmation of 'V-drop' expressing a higher degree of mirativity than 'V-give' (but both still having a mirative reading); here, this difference is realized via different contextualized scales (size, impact, strength, intensity, etc.). For example, breaking the top part of a palace ('break-give') requires less force and has less impact than breaking (apart) a whole country ('break-drop'). A similar opposition holds between (unexpectedly) cutting down one tree ('cut-give') versus (unexpectedly) clearing all the trees in an area ('cut-drop'), the latter requiring higher degree of force and having a higher impact. In some cases, the difference pertains more to degrees of un-supposedness, as in a person being distracted and eating all the sweets ('eat-give') versus eating something secretly ('eat-drop'; highly un-supposed and deliberate). Or consider the contrast between a princess opening the door ('open-give', unexpected given her status) versus a girl (qualified in the corpus example as 'shameless') opening her dress in front of everybody ('open-drop', high violation of what is expected as morally good behaviour).

Not all the contexts in our sample where the same verb is used with different LV constructions had such clear contextual differences. At the same time, in these cases, the intuition (still to be confirmed by further (experimental) research) is that there is a strong(er) negative stance or attitude of the speaker towards the event for 'V-fall' and 'V-drop', similar to some of the examples already cited above. In these cases, there is a (pragmatically determined) speaker judgment of higher un-supposedness (and thus often inappropriateness), even if there may not be any overt contextual clues in this respect. This confirms that the concept of mirativity cannot be constrained to the notion of surprise, at least not for how it has been grammaticalised in Odia light verbs.

3.4 ONSET versus COMPLETION

As indicated above, both ONSET and COMPLETION can give rise to a mirative interpretation: in the former situation, it is the emergence of the process that is unexpected while in the latter, it is the whole process (and typically its result) that is taken as evidence for what was not expected or supposed to have happened. As far as we can infer from the literature on

mirativity, languages tend to make a choice between either of these motivations. However, as has become clear from the above discussion, in Odia both are possible via the different LV constructions. In other words, Odia occupies a special position with respect to mirativity: not only has it hard-wired the (non-parasitic) expression of mirativity into its grammar in the form of LV constructions, it also allows for degrees of mirativity as well as a double link with either the onset or the completion of the event. As regards the phasal profiles, both are actually possible with one and the same verb. This should not be too surprising, since one can have similar contrasts in most languages; compare English *The house started to burn* vs. *The house has burned down*. A different choice of LV in Odia essentially boils down to the same opposition, with a mirative interpretation added to it (for which English would need a circumscription, e.g., via adverbs such as *unexpectedly*).

Table 4 shows the main verbs in our data sample that occur with both *-ut^h* ‘rise’ and with *-jā* ‘-go’ or *-paḍ* ‘-fall’. Our concern here is not with the overlap between *-jā* ‘-go’ or *-paḍ* ‘-fall’ which does occur but which, as explained in the previous section, is one of degree of mirativity. Our exclusive focus is on those cases where the same verb occurs with either the ONSET or the COMPLETION profile on the event (which both give rise to mirativity). As can be seen from the table, there are only 13 verbs that alternate between ONSET or COMPLETION, which can be subdivided as follows:

- 1 verb occurs with *-ut^h* ‘-rise’, and *-jā* ‘-go’/ *-paḍ* ‘-fall’: *ho* ‘become’
- 9 verbs occur with both *-ut^h* ‘-rise’ and *-jā* ‘-go’: *bāj* ‘ring’, *baḍ^h* ‘increase’, *b^har* ‘fill (up)’, *t^hāḍ* ‘leave’, *jaḷ* ‘burn’, *kaḥ* ‘speak, say’, *kar* ‘do’, *pur* ‘fill up’, *rāg* ‘be angry’
- 3 verbs occur with both *-ut^h* ‘-rise’ and *-paḍ* ‘-fall’: *tfamak* ‘surprise’, *ḍeĩ* ‘jump’, *p^huṭ* ‘blossom, appear’

Table 4: Main verbs used with either *-ut^h* ‘rise’ or *-jā* ‘-go’ / *-paḍ* ‘-fall’.

MV	Gloss	MV-fall	MV-go	MV-rise	TOTAL
<i>ho</i>	become	189	138	282	609
<i>bāj</i>	ring		1	10	11
<i>baḍ^h</i>	increase		9	4	13
<i>b^har</i>	fill (up)		2	2	4
<i>tfamak</i>	surprise	6		10	16
<i>t^hāḍ</i>	leave		3	1	4
<i>ḍeĩ</i>	jump	11		1	12
<i>jaḷ</i>	burn		4	17	21
<i>kaḥ</i>	speak, say		5	16	21
<i>kar</i>	do		4	24	28
<i>p^huṭ</i>	blossom, appear	1		39	40
<i>pur</i>	fill up		1	4	5
<i>rāg</i>	be angry		4	1	5
TOTAL		326	213	411	326

Given that *-jā* ‘-go’ (next to *-ḍe* ‘-give’) is the most frequent LV in Odia (see Lemmens and Sahoo 2017), it is to be expected that there are more cases of overlap with *-ut^h* ‘-rise’. However, on the basis of the semantics of the main verb alone, not much can be deduced as to what determines the variation between ONSET versus COMPLETION. What seems to lie at the basis is the speaker’s choice to profile the onset or the completion, which may be influenced by the particular scene that is being talked about. A nice illustration is example (19) with the verb *b^hāsi* ‘float’: in (19a), the choice for profiling the onset follows from how unexpectedly the corpse rises to the surface of the water after three days; in (19b), the focus is on the destructive result of the flood.

- (19) a. ତିନିଦିନ ପରେ ଶବଟି ନଦୀପାଣିରେ ଭାସିଉଠିଲା (ECC)
tinidina pare shabaṭi naḍipāṇire bʰās-i-utʰilā
 three.day after corpse.CLF river water.PP **float-LNK-rise**.PST.3SG
 ‘After 3 days, the corpse started floating on the river water.’
- b. ୧୯୯୯ର ବନ୍ୟାରେ ମୋର ଘରଘାଟ ଗାଈଗୋରୁ ସବୁ ଭାସିଗଲା (ECC)
uneifahāneṣ waṭara banyāre mora gʰaraḍwāra gāigoru sabu bʰās-i-galā
 1999’s flood.PP my house cattle all **float-LNK-**
go.PST.3PL
 ‘In the flood of 1999, my house, cattle, everything got washed (litt. floated) away.’

In short, while the corpus data clearly indicate that there is an overall preference for certain kinds of (intransitive) events to occur with the LV *-utʰ* ‘-rise’, as described above, the choice between ONSET and COMPLETION is not one that directly flows from these events. Rather, it is a coding choice by the speaker in function of what is to be expressed. The key is whether the focus is on the emergence of the process that could develop further or on the result of the process. In other words, the choice is much like that between English *begin to V* vs. *have V-ed*. However, unlike in English, these LV constructions also express mirativity, specifying that the process (its onset or its result) was unexpected or unsuspected. The next section offers a short more theoretical discussion of the merits of the constructional account that we defend here.

4 A constructional approach to light verbs

The type of asymmetric complex predicates that we have discussed here remains a difficult matter for linguistic analysis. As Butt (2010: 48) aptly puts it: “the study of light verbs and complex predicates is fraught with dangers and misunderstandings”. The problem is two-fold. First, the syntactic status of the light verbs is often hard to characterise: often they are form-identical with full lexical verbs (as is the case for Odia LVs as well), but have not retained their original argument structure; at most they have a transitivity constraint. While the transitivity constraints for the Odia LVs are in general fairly strict, they may occasionally be violated, as in the context of repeated events (cf. example (12a) above), which makes it difficult to fix the syntactic constraints. Secondly, these LVs are “semantically *light* in some manner that is difficult to identify” (Butt 2010: 48). We agree with Butt and Geuder (2001: 326) that “light verbs, though being lexically defective, are not completely empty elements [but convey] a special type of lexical meaning which consists in a modulation of the event description provided by the full verb that it is in a construction with”. They further point out that what is at issue here is “some type of lexically specified content which interacts with the semantics of the main verb” and that it is “the interaction of the lexical content of the light verb with the event semantics of the main verb [that] gives rise to all such effects as the specification of inception/completion, volitionality, force, benefaction, etc.” (Butt and Geuder 2001: 336). While this view is quite compatible with a cognitive grammar or construction grammar perspective, it remains to be completed, as it does not distinguish between the different LVs individually, possibly suggesting that they are all in the same basket, both syntactically and semantically. In all fairness, their concern is not with a detailed description of individual LVs (such as the one we present here for Odia), but rather with the overall status of light verbs (as opposed to lexical verbs or auxiliaries).

Nevertheless, the full-blown constructional view on light verbs which we present here allows for further refinements, since the syntactic and semantic characteristics have become part and parcel of the meaning of each of the light verb constructions itself. Such a

constructional view, we argue, is theoretically more coherent as well as descriptively more accurate.

First, when it comes to theoretical coherence, a constructional perspective avoids the issue of the (syntactic) status of light verbs, an issue which has been discussed more extensively in the (mostly generative) literature. Butt and Lahiri, for example, argue that light verbs are “a special class of elements that are distinct from lexical verbs and auxiliaries or aspectual categories” (Butt and Lahiri 2001: 358), an observation with which we fully agree. They further argue that light verbs are not derivative, in that they are not derived from a full lexical verb, but that there is “one underspecified lexical entry which allows both full verbs and light verb uses”. Their main argument for having one underspecified lexical entry rather than two separate lexical entries or a system where the light verb is derived from the main verbs, is diachronic change, or rather the absence of it: they point out that the light verb continues its synchronic relationship with the main verb. In their terms, “historical change could never affect the light verb without also affecting the main verb” (Butt and Lahiri 2001: 46). This is clearly different for auxiliaries: “there is no synchronic relation in the lexicon which connect auxiliaries to main verbs in the same intimate fashion” (Butt and Lahiri 2001: 46). However, this argument remains speculative since it is not based on a careful diachronic study of the evolution of light verbs or on a psycholinguistic study that would corroborate the synchronic link with the full lexical verb as part of a speaker’s mental grammar. In fact, given the highly bleached character of the light verbs, it is unclear how LVs would still be linked semantically with their full lexical counterpart.

In the construction grammar approach that we adopt here, light verbs are considered as constructions in their own right with syntactic and semantic properties that differ from those found with the lexical verbs (which still have semantic roles, for instance) and auxiliaries. Whether or not light verbs should be considered on a cline of grammaticalisation between lexical verbs and auxiliaries, as suggested for example by Hook (1991) or Traugott and Hopper (2003) but criticized by Butt and Lahiri (2001), is another question which we will not discuss here. We argue, however, that some of their syntactic and semantic properties can be linked up with those of their lexical origins; in other words, they show further evidence of the Hopper’s principle of persistence (which “relates the meaning and function of a grammatical form to its history as a lexical morpheme” Hopper 1991: 28). Some of the syntactic properties that have persisted can for instance be found in the transitivity constraints of the different LVs; on a semantic level, features relating to (degrees of) agentivity or control can be argued to have persisted from their lexical origin. In sum, embracing a constructional account leads to increased theoretical coherence in the description of light verbs as a separate category that can, however, still be related (or contrasted) to other constructions.

Secondly, our constructional account allows a descriptively more accurate analysis, because we can tease apart the different meanings of the different light verb constructions, something which has not been provided by previous accounts. For example, as already indicated above, Butt and Lahiri (2001) say that the event modulation by light verbs may be “suddenness, force, agentivity or benefaction” but they do not refine this any further (it is, admittedly, not their primary aim). As our analyses reveal, not all light verbs will express the same “additional values”: some will express suddenness (which we have redefined as mirativity), others do not; some will be concerned with force and/or agentivity, but to a varying degree; yet another light verb stands out by being the only one encoding self-benefaction. As we have shown, the light verb constructions form a network of related constructions where each node has its own properties. These distinctions pertain, on the syntactic level, to different transitivity constraints. On the semantic level, the LVs can be distinguished along the following parameters: phasal profile (ONSET, DURATION, COMPLETION), mirativity (to varying degrees), and self-benefaction (restricted to the LV *-ne* ‘take’). As to the larger theoretical impact of this study, our characterization in terms of mirativity adds an innovative perspective to the analysis of LVs in IA languages. While

further refinements are to be made, both for Odia and other IA languages, the concept of mirativity allows for a more unified account. Often, mirativity is limited to the notion of “surprise”, but as we have shown, it is a broader category that also includes “unsupposedness” and it can also be related to the notions of “abruptness”, “suddenness”, or “non-volitionality” that have been suggested in the literature on LVs (see, e.g., Montaut 2006 or Aikhenvald 2012 for a larger view on mirativity). In addition, our corpus-based analyses reveal that these LVs often have collocational and/or contextual preferences, which strengthen their entrenchment as constructions in their own right.

However, as already illustrated above, the (traditional) tests give conflicting results: in some cases, the interpretation of the LVs stands out as semantic (leading to semantic contradictions), in other cases, the tests indicate that it can contextually be cancelled out, and thus it is pragmatic. While in a constructional framework as we adopt here, no strict distinction is made between semantics and pragmatics (see also Lemmens 2017), this issue deserves some discussion, since it does illustrate different *kinds* of meaning (or functions) which react differently in different contexts.

The LV constructions at issue here are considered to be constructions, that is, form-meaning pairings that themselves are schematizations over different contexts of use. As it happens, the aspectuo-mirative LV constructions are used in contexts where there is a focus on either onset or completion and this focus is motivated by the fact that the onset or completion of the event is unexpected or unsupposed. Through repeated use, the originally pragmatic (i.e., contextual) meaning of unexpectedness becomes entrenched as one of the semantic characteristics of the construction itself. In fact, this is not unlike Kay and Fillmore’s (1999) study of the (semi-open) construction *What is X doing Y*, as instantiated by *What is this fly doing in my soup?* or *What is this child doing with a knife?* While the form of this construction is a regular WH-question, its meaning is not merely a question for information. Rather, this construction is typically used to express mirativity (which they call “incongruity”), i.e., that X is not expected or supposed to be at a given location or be doing some activity at that location. As they point out, the “semantics of incongruity” may have started out as a conversational implicature, but is now conventionally associated with the *What is X doing Y* construction. As Cappelle (2017: 117) puts it (referring to the same paper by Kay and Fillmore as well as Bybee 2013), “a once-pragmatic interpretation can become an aspect of the semantics of a construction”.

The same can be argued to have happened for Odia light verbs: because of these constructions being invariably used in “aspectuo-mirative contexts”, this reading—which may initially have been purely inferential—has become part of the semantic structure of the constructions themselves. The infelicity of aspectuo-mirative LVs in the context of expected events (illustrated in (10b) above) confirms the conventionalized status of the mirative reading as being stored in the grammar, as part of the LV construction at hand. Repeated use in similar contexts does lead to storage and entrenchment (see Bybee 2006). Yet, entrenchment is a matter of degree and this is certainly true for Odia LVs where there appears to be a double variability. First, there seems to be a difference of entrenchment between the aspectual and the mirative reading. The aspectual reading is the strongest, which can be affected (i.e., weakened) by the context, as for example in the incremental or repeated event reading, but it cannot really be completely cancelled out contextually. The mirative reading, on the other hand, seems to be less entrenched and can, in specific contexts, disappear altogether. Second, for the completion LVs there is a difference in the degree of mirativity they express: *-paḍ* ‘-fall’ and *-pakā* ‘-drop’ express a higher degree of mirativity than do *-jā* ‘-go’ and *-ḍe* ‘-give’.

While the possibility to cancel out the mirative reading may be grounds for some linguists to relegate this to contextual inferencing, we maintain that it has become part of the LV construction, a fact that finds confirmation in (one of the authors’) native speaker intuition as well as in usage, as shown by the semantic tests and the tendencies in our corpus data.

There is an additional language-internal diagnostic, *viz.* the existence of non-mirative alternative constructions, notably for the completion reading, in the form of the complex predicate with the semi-light verb *-sār* ‘-finish’. The very existence of such non-mirative alternative gives rise to a kind of ‘systemic opposition’ which may strengthen the special status of the LV constructions (at least those with *-jā* ‘-go’, *-ḡe* ‘-give’, *-paḡ*, ‘-fall’, and *-pakā* ‘-drop’) as expressing more than just completion.¹⁸

How can we then explain the contextual variability with respect to mirativity, even to the point of it being cancelled out completely, which never happens with the aspectual value? The answer, we suggest, lies in the different kind of meaning that is at issue here. The aspectual value has an objective (i.e., referential) basis in the event described by the speaker: its onset and/or completion are evidenced by the (observable) difference of states (cf. above). The mirative reading, in contrast, is attitudinal and/or evaluative, reflecting the speaker’s stance towards the event. In terms of Traugott (2010) or Traugott and Dasher (2002), the mirative reading can be seen as the result of a subjectification process (expression of unexpectedness) or even of an intersubjectification process (expression of un-supposedness). Typically, subjectification and intersubjectification come later in the grammaticalisation process, but for lack of diachronic analysis, we cannot at this point say anything on this issue. What the synchronic data shows is that the (inter)subjective meaning may be cancelled out more easily in contexts where it is less relevant.

The network of LV constructions can be summarized as in Figure 2. For the sake of completeness, the symmetrical serial verb construction is still mentioned, even if it is quite different. We have also added the semi-light verbs which may be argued to still have a link with the ‘true’ light verbs; the double arrow indicates the systemic opposition of the semi-light verb *-sār* ‘-finish’ and the COMPLETION light verbs. In the set of ‘true’ light verb constructions, there is the three-fold aspectual distinction (ONSET, DURATION, COMPLETION), represented by the boxes with double lines, as well as a distinction in terms of mirativity (the dashed box). The light verbs *-jā* ‘-go’ and *-ḡe* ‘-give’ are the most typical and most frequent light verbs, which has been represented by a heavier box. The higher degree of mirativity expressed by *-paḡ*, ‘-fall’ and *-pakā* ‘-drop’ is represented by their lower position in the diagram. The LV *-ne* ‘take’ –which has not been analysed in detail here– occupies a special place: it is fully included in the completion box, but it is contextually variable with respect to mirativity and may, in some contexts, have a self-benefactive reading. Its special position is represented by its straddling the two boxes representing these readings. As the durative LVs have not yet been analysed in detail (see, however, Sahoo and Lemmens 2018), they have not been distinguished any further. Note that the verb *kar* ‘do’ has not been included in this network as it is quite different, both formally and functionally.

¹⁸ See Cappelle (2017) for a similar line of reasoning on the semantics/pragmatics interface. As one of the reviewers points out, this is not very strong evidence, yet, as we say, it may strengthen the respective semantic profiles.

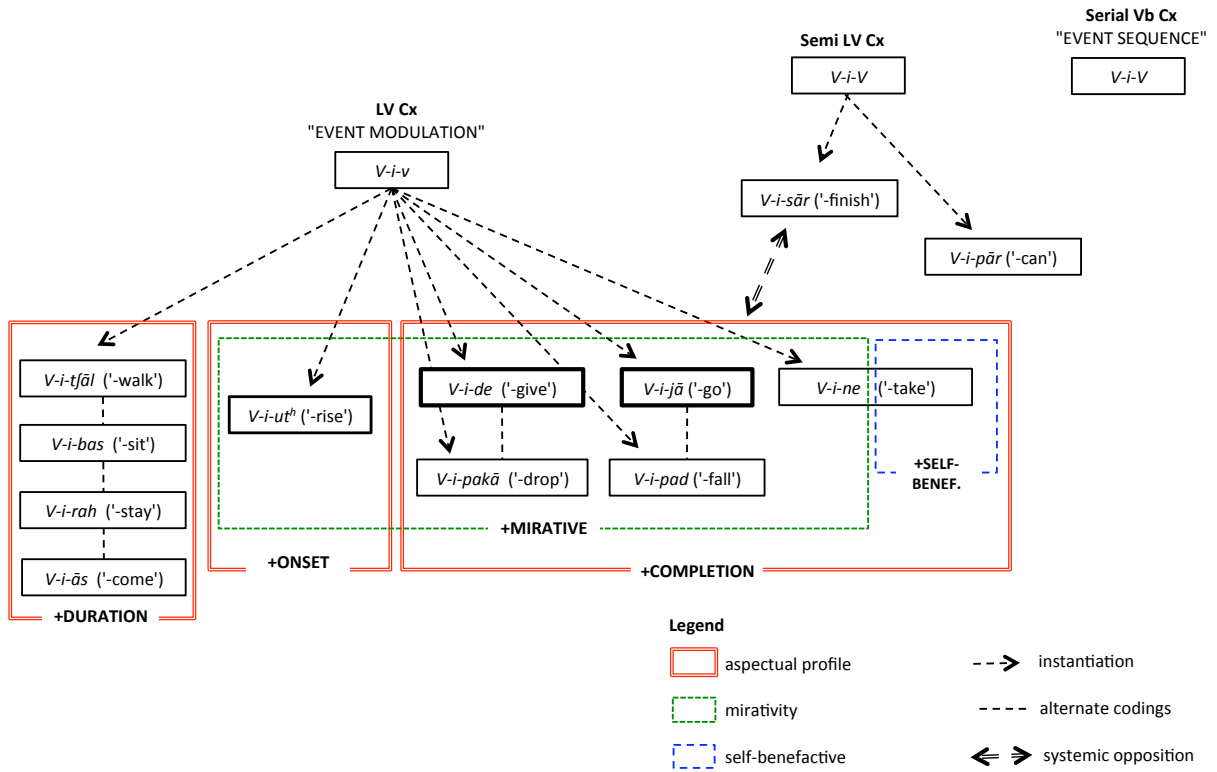


Figure 2: Schematic network of Odia complex predicates.

5 Conclusion

This paper has discussed different light verb constructions in the Indo-Aryan language Odia. The basic claims that have been developed in this paper can be summarized as follows.

There are ten light verbs in Odia which build a network of related constructions (form-meaning pairs) where each LV construction has its own syntactic and semantic properties. These light verbs are to be distinguished from the verbalizer *kar* ‘do’, a device used to create new predicates, and from some other semi-light verbs, such as *pār* ‘can’ and *sār* ‘finish’, which differ syntactically (they can be combined with LV constructions and do not have any transitivity constraints) and semantically (they have preserved their original lexical meaning).

Syntactically, Odia light verb constructions all take the same form (*MV-i-LV*) and may further be distinguished based on transitivity features. Semantically, these light verb constructions all add some kind of “event modulation”. More specifically, all light verbs entail an *aspectual perspective* on the event expressed by the main verb by profiling a particular phase of the event (ONSET, COMPLETION, or DURATION). In addition, six of these light verbs are non-parasitic expressions of mirativity, i.e., they express that the event coded by the main verb is unexpected or unsupposed; the light verb *-utʰ* (‘rise’) combines mirativity with *inchoative* aspect, i.e., the mirative interpretation is due to the ONSET of the event; in contrast, the mirative reading of *-jā* ‘-go’, *-pad* ‘-fall’, *-de* ‘-give’, and *-pakā* ‘-drop’ combines with the COMPLETION of the event; the light verb *-ne* ‘-take’ stands apart, as it also has a (often negatively connotated) self-benefactive reading and it does not always express mirativity. The light verbs *-jā* ‘-go’, *-pad* ‘-fall’, *-de* ‘-give’, and *-pakā* ‘-drop’ are moreover distinguished by expressing different degrees of mirativity; the corpus data reveal that they are indeed used in different contexts where features relating to size, force, intensity and impact play an important role. The corpus data further reveal some typical collocational

patterns and contextual preferences where those occurring with *-u^h* ‘rise’ align with what we typically conceptualise as intransitive events. Finally, the aspectual value of LVs can be contextually affected but cannot be completely cancelled out; their mirative value can be, in some restricted contexts.

Our study is based on careful analysis of corpus data; while this is common in a usage-based approach to language, it is rather unusual in work on either mirativity or light verb constructions. The corpus data have not only provided further evidence for the semantic distinctions that we present in our analyses but also opened our eyes to patterns that had previously remained elusive, such as the degrees of mirativity distinguishing four of the light verbs in Odia. While our study concerns light verbs as used in one particular language, we expect that similar patterns may be at issue in related languages, such as Hindi/Urdu or other Indo-Aryan languages with light verb constructions. In a larger perspective, the present study may contribute to a better understanding of the grammaticalised expression of mirativity and the status of these constructions within the grammar. The grammaticalisation of mirativity, and in particular the expression of “unsupposedness”, may find a cultural basis in the Odia speaking community (and those of related languages) in the importance that is attached to compliance to social norms and standards. In many cases, such a reading is accompanied by overtones of disapproval which may come in degrees.

Some further work is needed to clarify certain issues. One of these concerns the individual deviations, as for example the transitivity violations with the verbs *kāṅḍ* ‘cry’ and *has* ‘laugh’. Another issue still to be clarified is the usage of the LV *-ne* ‘-take’ and that of the durative LVs which have not yet been analysed in detail. Finally, while the suggested analysis of different degrees of mirativity finds confirmation in both native-speaker intuition and corpus data, it is warranted that it be further confirmed by experimental work testing on-line processing and production of LV constructions, which is planned as a follow-up study. We do not expect these experiments to lead to unexpected findings.

Abbreviations used in glosses

ACC	accusative
ART	article
AUX	auxiliary
CAUS	causative marker
CLF	classifier
DEF	definite
EMPH	emphatic particle
FUT	future
GEN	genitive
HON	honorific
IMP	imperative
INDEF	indefinite
INS	instrumental
LOC	locative
LNK	linker
NEG	negative marker
NMLZ	nominalizer
NOM	nominative
PERF	perfective
PL	plural
PP	postposition
PRES	present
PROG	progressive
PST	past

SG singular
TEL-AFF telic affirmative

Acknowledgements: The authors thank the anonymous reviewers for their thorough comments on the first version of this paper. We also thank Nicole Delbecque, Ad Foolen, and Peter Harder for their thoughtful comments on parts of our analysis presented at the *Seventh International conference of the French Cognitive Linguistics Association (AFLiCo 7, University of Liège, May 31–June 3, 2017)*.

References

- Abbi, Anvita & Devi Gopalakrishnan. 1991. Semantics of explicator compound verbs in South-Asian languages. *Language Sciences* 13(2), 161–180.
- Aikhenvald, Alexandra. Y. 2012. The essence of mirativity. *Linguistic Typology* 16(3), 435–486.
- Aksu-Koç, A. & Dan I. Slobin. 1986. A psychological account of the development and use of evidentials in Turkish. In William Chafe & Johanna Nichols (eds.), *Evidentiality: The linguistic coding of epistemology* (Advances in Discourse Processes 20), 159–167. Norwood, N J: Ablex.
- Bashir, Elena. 2010. Traces of mirativity in Shina. *Himalayan Linguistics* 9(2), 1–55.
- Butt, Miriam. 1993a. *The structure of complex predicates in Urdu*. Stanford: Stanford University dissertation.
- Butt, Miriam 1993b. Conscious choice and some light verbs in Urdu. In Manindra K. Verma (ed.), *Complex predicates in South Asian languages*, 31–45. New Delhi: Manohar.
- Butt, Miriam. 1995. *The Structure of complex predicates in Urdu*. Stanford, CA: CSLI Publications.
- Butt, Miriam. 2010. The light verb jungle: Still hacking away. *Harvard Working Papers in Linguistics* 9, 1–49.
- Butt, Miriam & Wilhelm Geuder. 2001. On the (semi) lexical status of light verbs. In Nick Corver & Hans van Riemsdijk (eds.), *Semilexical categories: On the content of function words and the function of content words*, 323–370. Berlin: Mouton de Gruyter.
- Butt, Miriam & Aditi Lahiri. 2001. Historical stability vs. historical change. Manuscript <http://ling.uni-konstanz.de/pages/home/butt/main/papers/stability.pdf> (accessed 10 August 2018).
- Bybee, Joan. 2006. From usage to grammar: The mind’s response to repetition. *Language* 82(4), 711–733.
- Bybee, Joan. 2013. Usage-based theory and exemplar representation of constructions. In Thomas Hoffmann & Graham Grousdale (eds.), *The Oxford handbook of Construction Grammar*, 49–69. Oxford: Oxford University Press.
- Cappelle, Bert. 2017. What’s pragmatics doing outside constructions? In Ilse Depraetere & Raphael Salkie (eds.), *Semantics and pragmatics: Drawing a line*, 114–151. Springer.
- DeLancey, Scott. 1997. Mirativity: The grammatical marking of unexpected information. *Linguistic Typology* 1(1), 33–52.
- DeLancey, Scott. 2012. Still mirative after all these years. *Linguistic Typology* 16(3), 529–564.
- Deoskar, Tejaswini. 2006. Marathi light verbs. *Chicago Linguistics Society* 42(2), 183–198.
- Dickinson, Connie. 2000. Mirativity in Tsafiki. *Studies in Language* 24(2), 379–421.
- Goldberg, Adèle E. 1995. *Constructions: A Construction Grammar approach to argument structure*. Chicago: Chicago University Press.
- Goldberg, Adèle E. 2006. *Constructions at work. The nature of generalization in language*. Oxford: Oxford University Press.

- Gries, Stefan Th. 2007. Coll.analysis 3.2. A program for R for Windows 2.x.
- Gries, Stefan Th. & Anatol Stefanowitsch. 2004. Extending collostructional analysis. A corpus-based perspective on 'alternations'. *International Journal of Corpus Linguistics* 9(1), 97–129.
- Hay, Jennifer & Ingo Plag. 2004. What constrains possible suffix combinations? On the interaction of grammatical and processing restrictions in derivational morphology. *Natural Language and Linguistic Theory* 22(3), 565–596.
- Hill, Nathan W. 2012. "Mirativity" does not exist: *hdug* in "Lhasa" Tibetan and other suspects. *Linguistic Typology* 16(3), 389–433.
- Hook, Peter E. 1974. *The compound verb in Hindi*. Ann Arbor, Michigan: University of Michigan dissertation.
- Hook, Peter E. 1991. The compound verb in Munda: An areal and typological overview. *Language Sciences* 13(2), 181–195.
- Hook, Peter E. 1993. Aspectogenesis and the compound verb in Indo-Aryan. In Manindra K. Verma (ed.), *Complex predicates in South Asian languages*, 97–113. New Delhi: Manohar Publication.
- Hopper, Paul J. 1991. On some principles of grammaticization. In Elizabeth Closs Traugott & Bernd Heine (eds.), *Approaches to Grammaticalization*, Vol. I., 17–36. Amsterdam: John Benjamins.
- Hopper, Paul J. & Sandra. A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56(2), 251–299.
- Kay, Paul & Charles Fillmore. 1999. Grammatical constructions and linguistic generalisations: The What's X doing Y? construction. *Language* 75(1), 1–33.
- Langacker, Ronald W. 1987. *Foundations of Cognitive Grammar. Vol. I: Descriptive Application*. Stanford: Stanford University Press.
- Langacker, Ronald W. 1991. *Foundations of Cognitive Grammar. Vol. II: Descriptive Application*. Stanford: Stanford University Press.
- Lazard, G. 1999 [2009]. Mirativity, evidentiality, mediativity, or other? *Linguistic Typology*, 3(1), 91–109.
- Lemmens, Maarten. 2017. A cognitive, usage-based view on lexical pragmatics. In Ilse Depraetere & Raphael Salkie (eds.), *Semantics and pragmatics: Drawing a line*, 101–114. Springer.
- Lemmens, Maarten & Kalyanamalini Sahoo. 2017. Something's gotta go, something's gotta give: Completion, mirativity, and transitivity in Odia light verb constructions. *Studia Linguistica* 71(3), 337–367.
- Masica, Colin P. 1991. *The Indo-Aryan languages*. Cambridge: Cambridge University Press.
- McEnery, Anthony M., Paul Baker & Andrew Hardie. 2003. The EMILLE Corpus. <http://www.ling.lancs.ac.uk/corplang/emille>.
- Montaut, Annie. 2006. Mirative meanings as extensions of aorist in Hindi/Urdu. In Rajendra Singh (ed.), *The yearbook of South-Asian languages and linguistics*, 71–86. Berlin: Mouton de Gruyter.
- Napiorkowska, Lidia. 2016. Mirativity and the near deixis copula *dule* in Neo-Aramaic. *Journal of Pragmatics* 98(1), 1–17.
- Neukom, Lucas & Manideepa Patnaik. 2003. *A grammar of Oriya*. Zürich: Zürich Universität.
- Peterson, John. 2000. Evidentials, inferentials and mirativity in Nepali. *Linguistics of the Tibeto-Burman Area* 23(2), 13–37.
- Peterson, Tyler. 2015. Mirativity as surprise: Evidentiality, information, and deixis. *Journal of Psycholinguistic Research* 45(6), 1327–1357.
- Peterson, Tyler. 2017. Problematizing mirativity. *Review of Cognitive Linguistics* 15(2), 312–342.

- Sahoo, Kalyanamalini. 2001. *Oriya verb morphology and complex verb constructions*. Trondheim, Norway: Norwegian University of Science & Technology dissertation.
- Sahoo, Kalyanamalini & Maarten Lemmens. 2017. Degrees of mirativity. *Review of Cognitive Linguistics* 15(2), 343–384.
- Sahoo, Kalyanamalini & Maarten Lemmens. 2018. Stay where you walk: Durative light verbs in Odia. Paper presented at the Tenth International Conference on Construction Grammar (ICCG-10), Université Sorbonne Nouvelle Paris, 16–18 July.
- Singh, Udaya Narayana, Karumuri Venkata Subbarao & Swapon Kumar Bandyopadhyay. 1986. Classification of polar verbs in selected South Asian languages. In Bhadriraju Krishnamurti (ed.), *South Asian languages: Structure, convergence and diglossia*, 244–269. Delhi: Motilal Banarsidass.
- Slade, Benjamin. 2013. The diachrony of light and auxiliary verbs in Indo-Aryan. *Diachronica* 30(4), 531–578.
- Slade, Benjamin. 2016. Compound verbs in Indo-Aryan. In Hans Henrich Hock, Elena Bashir & K.V. Subbarao (eds.), *World of linguistics: South Asia*, 1404–1423. Berlin: Mouton de Gruyter.
- Stefanowitsch, Anatol. & Stefan Th. Gries. 2003. Collostructions: Investigating the interaction of words and constructions. *International Journal of Corpus Linguistics* 8, 209–243.
- Stefanowitsch, Anatol. & Stefan Th. Gries. 2005. Covarying collexemes. *Corpus Linguistics and Linguistic Theory* 1(1), 1–43.
- Traugott, Elisabeth C. 2010. Revisiting subjectification and intersubjectification. In Kristin Davidse, Lieven Vandelanotte & Hubert Cuyckens (eds.), *Subjectification, intersubjectification and grammaticalization*, 29–70. Berlin: Mouton de Gruyter.
- Traugott, Elisabeth C. & Richard B. Dasher. 2002. *Regularity in semantic change*. Cambridge: Cambridge University Press.
- Traugott, Elisabeth C. & Paul J. Hopper. 2003. *Grammaticalisation*. Cambridge: Cambridge University Press.
- Vale, Ramchandra Narayan. 1948. *Verbal composition in Indo-Aryan*. Poona: Deccan College Postgraduate and Research Institute.
- Wiklund, Anna-Lena. 2009. The syntax of surprise. Unexpected event readings in complex predication. *Working Papers in Scandinavian Syntax* 84, 181–224.