

**Content-denoting clausal complements to deverbal nouns can be arguments:  
Evidence from English and Kannada light verb constructions**

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**Main claim.** In this paper, we claim contra Moulton (2009, 2013) that deverbal content nouns like *belief* or *thought* can and do behave like their verbal counterparts in selecting for content-denoting clausal complements as arguments, particularly when they occur as part of Light Verb Constructions (LVCs).

**Background.** An influential view in the literature, first made by Stowell (1981), and defended recently by Moulton (2009, 2013) claims that while the *that*-complement in (1) is a clausal argument selected by the verb *believe*, it is not similarly selected by the deverbal noun *belief* in (2), where it is only an adjunct.

(1) John believes [that the earth is flat].                      (2) John holds [the belief [that the earth is flat]].

More generally, deverbal nouns like *belief* are said to lack argument structure altogether, as seen in their inability to take canonical content-denoting DP arguments supported by preposition *of*, as shown in (3):

(3) \*His belief/claim/decision/thought of that. (adapted from Moulton 2009, pg. 46)

The underlying reason for differences in argument selection between the verb form (*believe*) and the nominal (*belief*) is attributed to the process of nominal formation: in particular, deverbal content nouns are claimed never to denote complex events (which retain argument structure); they only denote results, or simple events. Here, we aim to show that at least in some contexts (including LVCs), deverbal content nouns can denote complex events. We begin with English, where we observe several naturally-occurring instances of nouns like *belief* appearing with canonical content arguments of the form ‘*of DP*’, undercutting Moulton’s proposal made on the basis of ungrammaticality of examples like (3). We then examine LVCs in Kannada.

**Clarifications from English.** A corpus search (COCA) reveals several instances of deverbal content nouns appearing with ‘*of DP*’ complements. Some examples below:

(4) They project an unshakeable belief of the rightness of their cause.

(5) I also had the thought of not publishing this at all.

(6) He would reject Machiavelli’s claim of the necessity of unlimited acquisition...

It can be shown that the ‘*of DP*’ complements in the examples above are true content-denoting arguments and not simply *res* or ‘about’ness-denoting (Moulton 2009), by observing that they cannot felicitously co-occur with an additional content-carrying *that*-clause as shown in (7), unlike true *res* arguments in (8):

(7) \*Machiavelli’s claim of the necessity of unlimited acquisition is that it is unnecessary.

(8) His theory of crop circles’ origins is that they were formed by UFOs.

Moreover, the complex-event status of deverbal nominals occurring specifically within LVCs is indicated by their ability to take aktionsart modifiers. Moulton (2013) notes that only argument-selecting complex event nouns show the same aktionsart distinctions as the corresponding verbs. Thus, the inability of nouns like *belief* to occur with these modifiers like in (9) strongly indicates that they are not complex events:

(9) John’s belief (\*for years) that Bill was a thief (\*for years).

However, when these nominals appear in LVCs like in (10)-(12), they are compatible with aktionsart modifiers, indicating that in these contexts, the nominals do indeed denote complex events. The ability to license these adverbials cannot be attributed to the light verb itself, but must be due to the nature of the nominal: the same LV *make* appears in both (11) and (12), but the two are compatible with different aktionsart modifiers.

(10) John had the belief for years/\*in a month that Bill was a thief.

(11) John made the decision in a minute/\*for a minute to send Mary to college.

(12) John made the claim for a year/\*in a year that Mary was the thief.

**More evidence from Kannada LVCs.** Utterances containing clause-selecting lexical verbs in Kannada, like in (13), can be productively rephrased as one of two types of LVCs, as shown in (14): infinitival LVC with infinitival morphology *-alu* on the embedded verb, or participial LVC with participial morphology *-a*.

(13) Raama \*(haNNU tar-*alu*) nirdharsidanu.

Raama fruit bring-INF decided (‘Raama decided to bring fruit.’)

- (14) Raama \*(haNNU **tar-*alu*/taru-a**) nirdhaara maaDidanu.  
 Raama fruit bring-INF/bring-PART decision did ('Raama decided to bring fruit.')
- While the infinitival complement is a modifier of the verb, attaching to the LVC as a whole, it can be shown that the participial complement attaches to the noun within the LVC. For instance, only adjectival modifiers are allowed to intervene between the noun and the participial complement, no adverbial modifiers are allowed. On the other hand, in infinitival LVCs, only adverbs can intervene:
- (15) Ravana-nu [[Raama-nannu kollu-a] keTTa/\*nenne nirdhaara]<sub>NP</sub> maaDidanu.  
 Ravana-NOM Raama-ACC kill-PART evil(ADJ)/yesterday(ADV) decision did-3.SG.M  
 "Ravana made the evil decision of killing Raama."
- (16) Ravana-nu [[Raama-nannu koll-*alu*] \*keTTa/nenne nirdhaara maaDidanu]<sub>VP</sub>.  
 Ravana-NOM Raama-ACC kill-INF evil(ADJ)/yesterday(ADV) decision did-3.SG.M  
 "Yesterday, Ravana made the decision of killing Raama."

Several other arguments also show that these complements modify the noun in the LVC: e.g., the participial complement is ungrammatical with lexical verb constructions unlike the infinitival, and these complements together with the noun can behave as sentential subjects (examples not provided for lack of space). Below, we argue that the participial complement is not only attached to the noun, but is in fact selected by it.

**Evidence of argument status of participial complements in Kannada LVCs.** The inmissibility of the participial complement in (14) provides us the first strong argument that this complement is indeed selected by the light verb complex, and is parallel in status to the infinitival complements. We also note that parallel to the English data, participial LVCs in Kannada can be modified with aktionsart modifiers:

- (17) Raama aidu nimishada tanaka/\*aidu nimisha-dalli haNNU tar-ua yoochane maaDidanu.  
 Raama five minutes till/\*five minutes-in fruit bring-PART thought did  
 Raama thought of bringing fruit for five minutes/\*in five minutes.

Participial LVCs additionally fulfill all of the other diagnostics that Grimshaw (1990) proposes to differentiate argument-selecting event nominals from result nominals, such as allowing for a purpose clause or not being compatible with temporal modifiers. An additional argument specific to the Kannada data builds on Grimshaw & Mester's (1988) *Argument Transfer* hypothesis, according to which the light verb is thematically incomplete and can borrow arguments from the noun that it combines with. The existence of two different types of LVCs in Kannada lends itself to a natural explanation under this hypothesis: the infinitival LVC is the result of argument transfer, where the content argument of the noun has been borrowed onto the light verb; no transfer occurs in participial LVCs. But for this explanation to hold, the content-denoting participial complement must be an argument and not an adjunct, since only arguments may be transferred

**Consequences and outlook.** Acknowledging that the deverbal nominal within LVCs are argument-selecting gives us a novel resolution for the contrast between extraction from DP islands in non-LVC vs. LVC contexts, as noted in Ross (1967): the contrast is due to argument islands being weaker than adjunct islands.

- (18) ?The purse that John made the claim that Mary stole (was found yesterday).  
 (19) \*The purse that John heard the claim that Mary stole (was found yesterday).

Finally, a further semantic justification is advanced by Moulton (2009, 2013, 2015) against the argument status of clausal complements to content nouns: these complements are said to combine with the noun through the compositional operation of Predicate Modification (PM) and not Function Application (FA), but true arguments must compose via FA. However, assuming such one-to-one correspondence between argument selection and method of semantic composition is problematic. One counter-example for this view comes from neo-Davidsonian event semantics, where event arguments generally combine via PM. Chung & Ladusaw (2004) also use a generalized version of PM to explain noun incorporation in Chamorro: but only arguments selected by the verb can be incorporated. Assuming that syntactic arguments can semantically combine via PM also benefits languages like Kannada where the CP is not obviously moved to leave a trace of the right semantic type for FA behind (Moulton 2015), even with argument-taking lexical verbs:

(20) [[Raama bandidane anta]<sub>CP</sub> nenne tiLiyitu]<sub>VP</sub>.

Raama has.come that yesterday discovered ('I discovered yesterday that Raama has come.')

**Selected refs.** Moulton 09, *Natural selection & syntax of clausal complementation*. Grimshaw 90, *Argument Structure*. Grimshaw & Mester 88, *Light verbs and  $\theta$ -marking*. Moulton 13, *Simple Event Nominalizations: roots & their interpretation*. Moulton 15, *CPs: Copies & Compositionality*.