The Case of Bangla N-V Conjunct verbs

Mohanan (1990) mentions how some verbs serve an auxiliary or modal function and combine quite productively with other adjectives, verbs or nouns to form complex predicates. While configuring such constructions, the verbs appear to lose to varying degrees the syntactic and semantic content associated with its main verb counterpart. Such verbs – light verbs combine with the host which could be a noun or adjective in Bangla which make up conjunct verbs or compound verbs when the light verb attaches to a main verb in Bangla. The light verbs essentially function as verbal licensers for the nouns. Mohanan (2006) points that any undertaking of conjunct verbs should look at a few aspects of these constructions. Thus, questions surrounding typological differences would also subjugate these constructions to subtle or major differences. This paper attempts to look at the lexical or phrasal category status of N-V conjunct verbs, case marking as well delineate the possible semantic compositionality possible within HPSG.

1. protinidhi-der mod^hd^he akromon-er alochona cholche. Representative-Plⁱ-Gen amongst-Post P attack-Gen discussion-N walk-Prst-imperf There is a discussion about the attack amongst the representatives.

In 1. the non-referential, predicative noun [PRD+] i.e. [alochona] meaning 'discussion' brings the arguments [protinidhi] meaning 'representatives' and the genitive case marked [akromon] meaning 'attack'. The subcategorization frame of the light verb need not be filled by the predicative noun as predication primarily depends on the noun itself. Thus, the light verb can be used to realize either the full number of arguments or a reduced set of arguments of the predicative noun (Müller, 2019). Considering two central theories in accounting for case – verbal nouns (Sells, 1991; Choi and Wechsler, 2001) and Grimshaw and Mester's notion of Argument Transfer (1988) for the Japanese verb 'suru' – to do - Verbal nouns account for predicative nouns and hence may be modified by adverbs and are capable of case marking arguments on their own. Choi and Wechsler (2001) propose that to be able to account for Korean light verb constructions of N-V type, a mixed approach is more appropriate to able to account for the data and posit two abstract lexical type namely nominal and verbal following Malouf (1998). Bangla N-V conjunct verbs with kora may show structures like sentences 1 and 2.

Complete Transfer:

 radhika shudhu krishna ke prem kore. Radhika-Nom only Krishna Acc love-N do-Prst Radhika only loves Krishna.

Partial Transfer:²

2. radhika irar khoj korche.

¹ The Bangla N-V conjunct verbs with [kora] meaning 'to do' has different structures too – it may have an argument through a postpositional phrase (where the argument may be marked by genitive case) or bring in a comitative argument.

² For partial transfer, the value of case will be [REALIZED +] for the genitive case marked argument (Choi and Wechsler, 2001; Przepiorkowski, 1998). Bangla, as observed in sentence 5 has instances where all the arguments are essentially genitive case marked. Even with arguments brought in by the post-positions, barring a few instances, the arguments are generally marked with genitive case. This paper intends to analyze these structures and deviations further.

Radhika-Nom Ira-Gen search-N do-Prst-imperf Radhika is looking for Ira.

With the light verb [kora] meaning 'to do', a thematic influence in terms of a requirement of 'agent' is brought in within the N-V conjunct verb. Thus, generally, the light verb needs a main predicate that also selects an agent.

- 3. amita/*amita ke porishrom kore.
 Amita-Nom/*Amita-Dat hard-work-N do-Prst
 Amita works hard.
- 4. amita ke/*amita porishrom korte hoye. Amita-Dat/*Amita-Nom hard-work-N do-Inf be-Prst Amita has to do hard-work.
- 5. amita-r onek porishrom hoye haspatal e Amita-Gen lot hard-work-N be-Prst hospital-Loc Amita goes through a lot of hard-work at the hospital.

However, with certain main predicates like the one presented below, the genitive case marked subject may appear as well. For the desire predicate [ichche kora] meaning 'to desire', for example, the subject is required to be genitive case marked. The main predicate in this case does not take an agent. Thus, Bangla clearly presents cases where the subject maybe presented within the NP, contrary to Grimshaw and Mester's account for the Japanese 'suru'.

6. amar onko shekhar ichche korche. 1-Sg-Gen maths learn-VN-Gen desire-N do-Prst-imperf My desire is to learn maths.

[ichche] meaning 'desire' gives the genitive case marked subject [amar] and genitive case marked [onko shekhar] meaning 'to learn mathematics' while [onko] meaning 'maths' is the argument of the verbal noun [shekha]. Mohanan (2006) comments on how different languages are able to account for different predicates whether phrasal or lexical noting that the Dravidian language Malayalam takes phrasal hosts while Hindi takes lexical hosts. Main predicates like the desire predicate and some other Bangla predicates give an interesting analysis along these lines. In the section considering the agentive nominalizations, it is noted through different possibilities that the predicative noun and the light verb do not undergo morphological processes in a combined manner.

In considering modification possibilities, the noun may be modified by both adjective and adverb as seen below. These predicates, thus, present a case where the predicative noun is under the nominal category in the hierarchical schemata presented in Choi and Wechsler (2001).

- 7. Amir Ravir songe besh lomba torko korche. Amir-Nom Ravi-Gen with very-INT long-Adj argument-N do-Prst-imperf Amir is having a lengthy argument with Ravi.
- 8. Amir Ravir songe besh jore-jore torko korche.
 Amir-Nom Ravi-Gen with very-INT loudly-redup argument-N do-Prst-imperf

Considering the phrasal or lexical status of the conjunct verb, it appears that the noun itself undergoes agentive nominalization unlike how in Persian, the participle does not always exist independently of the complex predicate (Godard and Samvelian, 2021; Muller, 2010). In Bangla too, agentive nominalizations may be of the kind where it is either a verbal noun or a verbal root as in Arabic (Islam et al, 2010). For the examples 9-10 below, although these are Sanskrit verbal roots, these have a nominal form in Bangla that forms a conjunct verb with a light verb³. However, the agentive nominalizations below take the verbal root directly. Bangla nominals may directly take the agentive nominalizer [-ari] as seen in 11-12.

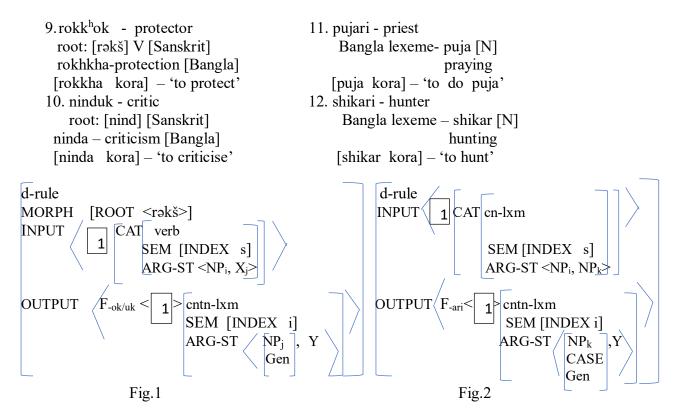


Fig.1 corresponding to the Sanskrit verbal roots and Fig.2 showing the Bangla nominal lexeme clearly show that the light verb [kora] meaning 'to do' is not involved in the formation of the agentive nominalizations in Bangla. The noun or the Sanskrit verbal roots itself undergoes nominalization. The sentences above coupled with nominalizations hints at the formation of N-V conjunct verbs in Bangla at a phrasal level.

Considering issues of compositionality, N-V conjunct verbs in Bangla allow a wider range of compositionality than V-V compound verbs which situate a stricter semantic compositionality between the main verb and light verb (Paul, 2003). While looking at some light verbs like [kora] meaning 'to do' and [howa] meaning 'to be' also find similar patterns that Fatma (2013) finds for Hindi N-V conjunct verbs with the 'do' and 'be' verb in Hindi. Samvelian and Faghiri (2014) propound on the possibility of a posteriori combinations with the idea being these are idiomatically combining expressions. Samvelian (2012) proposes a thorough account of Persian light verb [zadan] meaning 'to hit' establishing a list of abstract constructions with the

³ There are other agentive nominalizers too like [-uni] that take Bangla verbal lexemes and [-ini] that form agentive nominalizations with Bangla nominals. However, all the data just takes the nominal or verbal root and none of the cases really form participles like that in Persian with the light verb.

same. Bangla conjunct verbs in general can also be put under such a schemata that can be seen by using some verbs as seen below. This compositionality can further be undertaken by taking the GRAM feature structure posited by Paul in SEM (2003). The GRAM feature structure relates information which accounts for ideas like telicity, action, stativity, duration and notions of modality, self-benefaction, non- self-benefaction, aspectual notions of inception, perfectivity, imperfectivity etc – based off the idea proposed by Carlotta Smith that these are notions that are situation types that have lexico-semantic property which at the basic level is associated with verb constellations.

In Bangla, thus, while light verbs like [kora] meaning 'to do' and [howa] meaning 'to be' generally have a compositional prerequisite. [kora] meaning 'to do' forms conjunct verbs with nouns denoting action and [howa] meaning 'to be' forms conjunct verbs with nouns denoting mental states or natural states. These nouns are most often the object of the light verb as well. Thus, for compositional type, the following light verbs are most commonly used

- [howa] meaning 'to be' or 'become' with stative nouns like [sukhi] meaning 'happiness'; [pochondo] meaning 'liking' natural states like [jhor] meaning 'storm', [brishTi] meaning 'rain'
- [kora] meaning 'to do' with action nouns⁵ like [hotta] meaning 'murder'; [churi] meaning 'steal', [protibad] meaning 'protest', [nritya] meaning 'dancing'.
- Furthermore, light verbs like [dewa] meaning 'to give' and [newa] meaning 'to take' ⁶also take nouns that share the GRAM notion of direction of the noun⁷ thus the following is observed:
 - i.jhaap dewa ii.*jhaap newa iii.*prottigga dewa iv. prottigga newa jump give jump take pledge give pledge take

Thus, while considering compositionality in N-V conjunct verbs, a broader range of possibilities is found. However, there is a pattern with light verbs like [kora]-to do, [howa]- to be, [dewa]-to give, [newa]-to take that generally seek semantic compatibility.⁸

References:

Choi, I. & Wechsler, S. 2001. *Mixed Categories Argument Transfer in the Korean Light verb construction* in Proceedings of Head-driven Phrase Structure Grammar

⁴ Bangla conjunct verbs also show their intransitive counterparts of light verb constructions with [kora] meaning 'to do' with the verb [howa] meaning 'to be'. However, natural states generally form conjunct verbs with [howa] meaning 'to be' in Bangla and not [kora] meaning 'to do'.

⁵ While light verbs like [kora] meaning 'to do' and 'to be' require semantic structure sharing with predicative noun but also have a small group of nouns with the lighter version (semantically opaque) of [kora] meaning 'to do' with just aspectual notions where they form conjunct verbs where it is not more compositional like [phone kora] meaning 'to call', [email kora] meaning 'to mail' etc with a referential noun.

⁶ [dewa] meaning 'to give' or [pawa] meaning 'to get' also license conjunct verbs like [kosto pawa/dewa] meaning 'to get hurt/to hurt' where the directionality provided by the light verb completes the semantic content within the construction where it is not completely compositional and there is no structure sharing between GRAM of DTR1 (predicative noun) and DTR2 (light verb).

⁷ In this compositional type, there is structure sharing (of GRAM-direction) between the predicative noun and the light verb.

⁸ Other light verbs like [maara] meaning 'to hit' and [khaawa] meaning 'to eat' show compositionality along a wider range with completely idiomatic expressions, or semantically opaque constructions as well as some compositional meanings as well.

Fatma, Shamim. (2018) *Conjunct verbs in Hindi*. DOI: 10.1515/9783110610796-009 Godard G and Samvelian P. 2021. Complex predicates. In Stefan Müller, Anne Abeille, Robert D. Borsley & Jean Pierre Koenig (eds), Head-driven Phrase Structure Grammar: The handbook, 419-488. Berlin: Language Science Press. DOI:10.5281/zenodo.5599838 Grimshaw,J. and Mester, A. 1988. Light verbs and θ marking. Linguistic Inquiry 19(2): 205-

Islam, Md & Hasan, M. and Bhuyan, Md Shariful Islam & Bhuyan, Islam & Ahmed, Reaz. 2010. Arabic nominals in HPSG: A verbal noun perspective. Proceedings of the International

Conference on Head-Driven Phrase Structure Grammar. 10.21248/hpsg.2010.9.

Malouf, Robert. (1998). Mixed Categories In The Hierarchical Lexicon. Mohanan, T.1990. Arguments in Hindi. PhD thesis, Stanford University

Mohanan, T. 2006. Grammatical Verbs (with Special Reference to Light Verbs). The Blackwell Companion to Syntax, volume I. Edited by Martin Everaert, Henk van Riemsidijk

Müller, S. 2019 Complex predicates: Structure, potential structure and underspecification. *Linguistic Issues in Language Technology* 16(3). 2–10.

Müller, S. 2010. Persian complex predicates and the limits of inheritance based analyses. Journal of Linguistics 46(3). 601-655. DOI: 10. 1017/S0022226709990284.

Paul, S. (2003) Composition of Compound Verbs in Bangla. *Proceedings of the workshop on Multi-Verb constructions* Trondheim Summer School, Trondheim.

Samvelian, P. 2012. Grammaire des prédicats complexes. Les constructions nom-verbe. Lavoisier.

Samvelian, P. and Faghiri, P. 2014. Persian Complex Predicates: How Compositional Are They?. Semantics-Syntax Interface - © by University of Tehran. 1. 43 - 74.

Sells, P. 1991. Properties of Verbal nouns and Category Status in Japanese. Ms., Stanford University.

Sag, I.A. 2007. Remarks on locality. In Stefan Müller (ed.), Proceedings of the 14th International Conference on Head-driven Phrase Structure Grammar, Stanford Department of Linguistics and CSLI's LinGO Lab, 394-414. Stanford, CA: CSLI Publications. http://csli-publications.stanford.edu/HPSG/2007

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ⁱ Pl-Plural; Gen-Genetive case; Post P- Post position; N- noun; Prst-Present Tense; imperf -imperfective; Nom-Nominative case; Fut-Future tense; Neg- negative marker; INT-intensifier; Adj-adjective; Acc-Accusative case; Pst- Past tense