Santali Zero Nominals: Evidence for Verbal Properties in Nominalization

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Morphologically zero nominals (ZN) are nominalized elements without overt nominal morphology. In the non-lexicalist tradition, ZNs are considered to be a subtype of Derived nominals (DN) and not Gerundive nominals (GN). The key difference between the two is that DNs are formed by merging a root to a nominal functional head (n), while GNs are formed by merging a root to a verbal structure (v) before merging it with n.

I claim that ZNs in some languages carry a larger verbal structure and behave like GNs or Grimshaw's (1990) Complex Event nominals (CEN). I show that in the syntax, ZNs should be analyzed as GNs. I provide novel empirical evidence to show that the structure of ZNs cannot be derived by merging a root directly with a nominalizer. The presence of a v is obligatory for the formation of ZNs. The empirical support comes from Santali, an understudied Austro-Asiatic language.

Below I present the existing arguments in favour of counting ZNs among DNs. These will subsequently be critiqued and revised using novel empirical evidence from Santali. According to the generative literature, ZNs contain neither argument structure (Borer, 1999) nor complex events (Grimshaw, 1990). In (1), 'salutation' (CEN) and 'saluting' (GN) are allowed, but the ZN 'salute' is not. The existing accounts claim that the structure calls for a complex event or argument structure, and ZNs are reported to lack either.

(1) The salutation/ saluting/ *salute of the officers by the subordinates.

Another reason why ZNs are analyzed as DNs is that they are faithful to roots and display idiosyncratic properties (Iordachioaia, 2020; Borer, 2013; Levin & Rappaport Hovav, 2013; a.o). Consequently, they are reported to lack verbal properties.

Here I present data from Santali that contradict these claims. Santali has productive and compositional ZNs, (2), where the verbal root *sen* in (2a) is nominalized in (2b). (2b) is a ZN with a verbal structure, a very productive paradigm in Santali.

(2) a.	<i>uni</i> He 'He	<i>aRaa</i> home went ho	sen go ome.'	<i>-en</i> -PST.I	MID	-a -FIN	-е -3SG		
b.	uni/i	unia	aRaa	sen	ba-iŋ		kusi	adaa	
	He/his		home	go	not-1SG		good	feel	
'I didn't like he/his go(ing) home.'									

I apply four different diagnostics to argue that the Santali ZNs indeed have verbal properties. **Test 1:** Modification by adverbials is one way to clearly distinguish between GNs and DNs; GNs can be modified by adverbials, unlike DNs (Chomsky, 1970; Ross, 1973, a.o). Time and manner adverbials like 'every day' and 'silently', which are canonical verbal modifiers (3a), also modify the ZN *paDhaa* in (3b), evidencing that ZNs in Santali behave like GN or CEN, and not DNs.

(3) a. uni jotodin/aaste	buhi	paDhaa	kan-a-e							
He every day/silently	book	read	PRS.PROG-FIN-3SG							
'He reads a book every day/silently.'										
1	1.1.		1							

b. *uni-a jotodin/aaste buhi paDhaa ba-iŋ kusi adaa* He-Gen every day/silently book read not-1SG good feel 'I didn't like his reading a book every day/silently.' (Santali)

(3b) proves that Santali ZNs carry the internal syntax of a verb, which allows them to be modified by adverbials.

Test 2: The presence of argument structure is an important indicator of the verbal nature of a nominal. The ZN *paDhaa* in (3b) is identical to its verbal counterpart in (3a): both can support an internal argument 'book'. This shows that ZNs can have argument structure, which is counter evidence for the claim in (1).

Test 3: Compatibility with aspectual markers is evidence for verbal structure in a nominal. The ZNs in Santali can be modified by aspectual modifiers like 'in three days' (4).

(4) uni-a peyaa din-re buhi paDhaa ba-iŋ kusi adaa

He-Gen three day-in book read not-1SG good feel

'I didn't like his reading a book in three days.'

Test 4: A high degree of productivity in the formation of ZNs is an indicator of the presence of a verbal structure in nominals. In Santali, any verb can be nominalized to form a ZN. The meaning of the resultant nominal is always compositional (from the verb), and not idiosyncratic (dependent on the root).

To sum up, I have presented four pieces of evidence to strengthen my claim that Santali ZNs should be understood as GNs or CENs, i.e., nominals with verbal structures. Having established this, we can now take a step back and look at all nouns in Santali. Prototypical nouns like 'man', 'stone', 'book' (5) are directly derived from roots without an overt nominalizer.

(5) a. *hoR* 'man' b. *dhiri* 'stone' c. *puthi* 'book' The absence of overt nominalizing morphemes in ZNs (2b, 3b) and in prototypical nouns (5) makes them appear similar. It can lead to nouns such as (5) to be interpreted as ZNs, and, consequently, part of GNs. Such an understanding would incorrectly attribute a verbal structure for the nouns in (5), since they are root-derived, and lack a verbal structure. It is here that I clarify that in Santali, nominals without overt morphological marking constitute two types: ZNs as in (2b, 3b), and prototypical nouns, as in (5).

I propose that the ZNs are the nominalization of verbs, where a root goes through verbalization first before getting nominalized (6). On the other hand, prototypical nouns (5) are directly derived from roots without any other intervening categorizer (7). The latter corresponds to DNs, more specifically result nominals (Grimshaw, 1990) or referential nominals (Borer, 1999, 2003) cross-linguistically.

(6) $[\mathbf{n}\mathbf{P}[\mathbf{n} \ \varnothing][\mathbf{v}\mathbf{P}[\mathbf{v} \ \varnothing][\sqrt{\text{ROOT}}]]]$ (Z1)

(7) $[nP[n \oslash][\sqrt{ROOT}]]$

(ZNs/ GNs/ CENs) (Prototypical nouns/ DNs)

I explain the verbal and nominal semantics of the roots in (6) and (7), respectively, using the Locality Constraint on the Interpretation of Roots (LCIR) (Arad, 2003; Marantz, 2000). The first categorizer, v in (6) and n in (7), creates a closed interpretation domain (CID). The second categorizer, n in (6), doesn't have access to anything lower than the CID and, therefore, carries the semantics of the categorizer local to it, i.e., v. Therefore, ZNs get the compositional verbal semantics available on v (6). Prototypical nouns get idiosyncratic nominal semantics, since n is the most local (and the only) categorizer to the root (7).

To conclude, I have shown, using novel empirical data, that ZNs belong to GN/ CEN in Santali. ZNs carry a larger verbal structure and do not show idiosyncratic properties. Santali also has prototypical nouns that do not carry verbal properties at all. The difference between these two types of nominals arises from the categorizer with which the root merges in the process of nominalization. Thus, while adopting a non-lexicalist approach to categorization, we now have a way to represent a finer distinction between two types of nominals in syntax.

Selected References

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