

Verbal material is not needed for argument structure; evidence from Korean

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S-Circle 3.11.2024

1. Overview

- An investigation of eventive nominals in Korean challenges the assumption that argument structure is exclusively licensed in the verbal domain
- Exploratory analysis for how AS could be represented in a syntactic model, given this finding
 - Korean nominals suggest that the ability to realize arguments is not inherently domain-specific, pointing us toward functional structure that is not inherently restricted to verbal syntax
 - This presentation examines the consequences of this generalization for deciding between two proposals for functional structure in the nominal domain, under a syntactic framework DM (Distributive Morphology; Halle & Marantz 1993) which assumes category-neutral roots as the relevant items that enter the syntax and functional structure that plays both the role of syntactic categorization, as well as (for one of the approaches) licensing arguments associated with the root predicate.

2. Background

- The syntactic representation of nominalizations has been a topic of interest for a long time, tracing back to the Chomsky (1970) analysis of English nominalizations, in response to the Lees (1960) transformational approach.
 - What makes these constructions so interesting is their hybrid nominal-verbal properties; though the full constructions unambiguously have nominal distribution, they have varying degrees of verbal syntax internally, and the root predicates share the same semantic relationship with their arguments as the corresponding verbal constructions do (cf. (2))
- (1)

 - a. Jimin refusing the offer
 - b. Jimin's refusing (of) the offer
 - c. Jimin's refusal of the offer

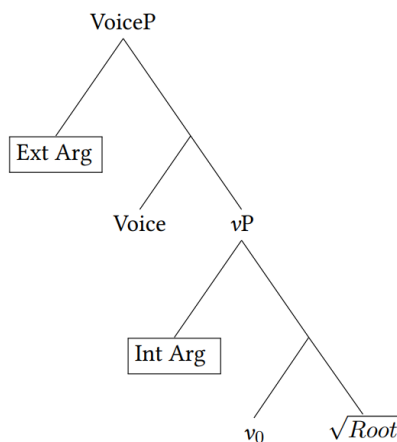
(2) Jimin refused the offer.
- Chomsky (1970) proposes that derived nominals (1c), given that their internal syntax is also unambiguously nominal, ought to be understood as base generated nominal structures, rather than the result of transformation.
 - Contemporary approaches to nominalizations continue to work on understanding the relationship between the verbal constructions in (2) vs. the nominal constructions of (1c).
 - The current approaches could be said to be returning to the spirit of a transformational account, but with more more developed syntactic machinery (Rozwadowska 2017)
 - Of particular interest, accounts from Borer (2003, 2013) and Alexiadou (2014) assume category-less roots, with functional structure that introduces both the internal and external arguments
 - Taking the Kratzer (1996) approach to the external argument, and applying it to the internal argument.

- Kratzer (1996): while the lexical verb licenses the internal argument, the Voice head introduces the external argument (3).

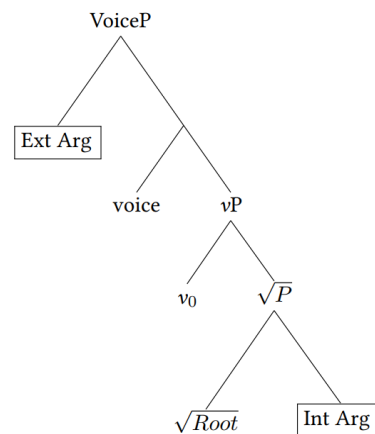
(3) [[VoiceP Ext_Arg [vP [....]]

- Splicing the internal argument from the lexical root, as well, fully commits to a syntactic understanding of argument structure: all arguments are introduced as specifiers to functional heads. For Alexiadou (2001, 2014) it is assumed that little v introduces the int. argument (4)
 - It is crucial that the internal argument is licensed by the categorizing head, since she is following the empirical generalization that argument structure found in the nominal domain occurs only for deverbal nominals, and as such argument licensing is something only possible with the use of verbal projections.
- In contrast, Harley (2014), though proposing similarly the use of a category-less root as the terminal node of the predicate, argues that it is the root itself that introduces the internal argument as its complement, rather than the categorizing head (5)

(4) Alexiadou 2014



(5) Harley 2014



- Note that, though verbal material is still built on top of the root in (5), having the internal argument licensed by the root directly makes a prediction that it should be possible to directly nominalize the root and its internal argument directly, without the need for any verbal projections at all.
 - I will argue that this is in fact a desirable prediction that is borne out for Korean eventive predicates and their constructions in both nominal and verbal domains.

3. Korean event nominals

High-level takeaway of this section: Korean event nominals lack verbal material, but nonetheless denote events and license arguments.

- There is a robust class of roots in Korean that demonstrate characteristics of argument structure in the nominal domain. Broadly speaking, items in this class are always disyllabic, and of Sino-Korean origin.

(6)	<i>kongkyek</i>	‘attack’	공격	<i>haykyel</i>	‘settlement’	해결
	<i>chimhyak</i>	‘invasion’	침략	<i>kensel</i>	‘construction’	건설
	<i>kyeysan</i>	‘calculation’	계산	<i>pocang</i>	‘guarantee’	보장 ...etc.

- The Korean nominal is head final, with modifiers and other phrases within appearing to the right of the noun. See an example below in (7)
- Agent precedes patient, and the morpheme *ny*, glossed as genitive case in the examples, appears on both. *ny* is obligatory on the agent, but exhibits optionality on the patient.

- (7) a. *cek-ny* *kwukka(-ny)* *kongkyek*
 enemy-GEN country(-GEN) attack
 ‘The enemy’s attack (of/on) the country’; 적의 국가(의) 공격
- b. *cikwen-ny* *yengswucung(-ny)* *kyeysan*
 waiter-GEN receipt(-GEN) calculation
 ‘The waiter’s calculation of the receipt’; 직원의 영수증(의) 계산

Diagnosing event structure:

- The presence of event semantics is understood to be a necessary factor for determining whether a nominal construction has argument structure or not (Grimshaw 1990)

Diagnostic 1: modification of the nominal using event modifiers, e.g. ‘frequent’ or ‘constant’

- Only AS nominals allow these modifiers when singular, Non-AS nominals will only be successfully modified by ‘frequent’ or ‘constant’ when plural.
 - (8a) below is an AS-nominal, whereas (8b) is non-eventive use of the noun ‘calculation’, and lacks event structure.
 - This structure is straightforwardly replicable in the Korean nominal constructions under discussion (9)

- (8) a. A waiter’s frequent calculation of receipts (... is just part of the job.)
 b. The frequent calculations (... were starting to get exhausting)

- (9) *cikwen-ny* *cac-un* *yengswucung* *kyeysan*
 waiter-GEN frequent receipt calculation
 ‘The waiter’s frequent calculation of receipts’; 직원의 잦은 영수증 계산

Diagnostic 2: agent-oriented modifiers, e.g. ‘deliberate’ or ‘intentional’

- biases an interpretation of an agentive event participant. These modifiers will strongly encourage an event reading, hence the awkwardness of combining them with nominals that lack event structure (10b).
- These modifiers are also well-formed for these Korean nominals (11)

- (10) a. [The deliberate assignment of unsolvable problems]
 (...made the students feel overwhelmed.)
 b. ?# The student turned in [the deliberate assignment on mathematics].

- (11) *cek-ny* *kyeyhwoekceki-n* *tosi* *chimhyak*
 enemy-GEN deliberate city invasion
 ‘The enemy’s deliberate invasion of the city’; 적의 계획적인 도시 침략

Diagnostic 3: embedding in predicates that have selective restrictions for events

- These Korean nominals are also successfully licensed as complements of predicates that require the selection of an event, such as phrases “took 2 hours/lasted 2 hours”; see (12):

- (12) *cikwen-ny* *yengswucung* *kyeysan-i* *o.pwun-inay-ey* *twoe-yss-ta*.
 waiter-GEN receipt calculation-NOM five.minutes-in become-past.DECL

“The waiter’s calculation of the receipt took 5 minutes.”; 직원의 영수증 계산이 5분 이내에 됐다

- These nominal constructions straightforwardly pass the diagnostics for eventhood, and match the standard characteristics associated with AS-nominals (nominals with argument structure) (Grimshaw 1990, Borer 2013)
- Crucially, these nominals are *non-derived*
 - They lack any overt verbal morphology that might indicate a derivation from clausal to nominal, and they compose with matrix verbs in the clausal domain.
 - For example, a corresponding verbal predicate in (13) below (cf. (7b) for the related nominal construction) is transparently composed from the root *keyeysan* and the light verb *ha*.
 - This is incompatible with a ‘nominalization’ approach— not only does it demonstrate lack of clause-to-nominal directionality, it suggests the opposite, a derivation with nominal-to-clause directionality.

- (13) *cikwen-i yengswucung-ul keyeysan-ha-nta.*
waiter-NOM receipt-ACC calculation-do-pres.DECL
‘The waiter calculated the receipt.’; 직원이 영수증을 계산한다

4. How to represent? Some initial explorations of structure

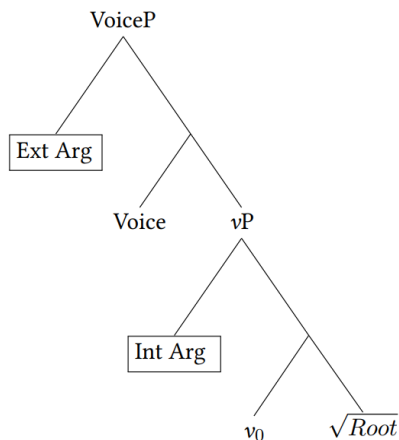
Exploring category neutral options:

- Borer, Alexiadou, and Harley all provide approaches that utilize a category neutral root
- uncontroversial: VoiceP for licensing of the agent in the clausal domain.
 - Separates the external argument from the verb
 - still working with the direction to go in how to license the external argument in the nominal domain (i.e. if we go a non-derived approach, is there anything in the nominal domain that can do the same function in licensing an external argument as Voice does in the verbal domain?)

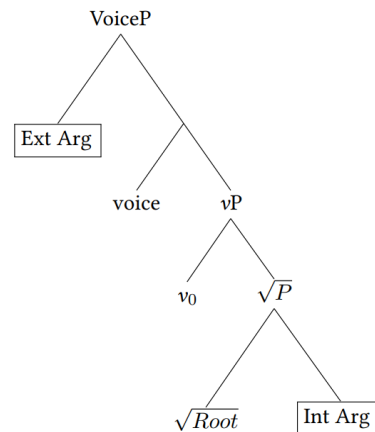
What about the internal argument?

- Recall the Harley (2014) vs. Alexiadou (2014) structures from earlier (reprinted below):

(4) Alexiadou 2014

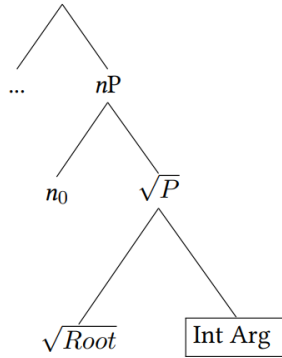


(5) Harley 2014

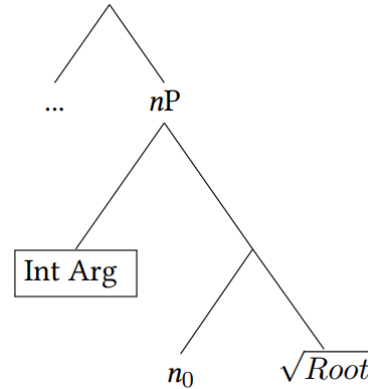


- The Korean event nominals are not compatible with the idea that v is the internal argument introducer; as there is no v in these nominals.
 - this makes the Harley (2014) approach more immediately adaptable to the Korean nominals (e.g. (14)), since we can easily get the argument generated by the root underneath a nominalizing affix.

(14) Harley-esque Korean nominal



(15) Alexiadou-esque Korean nominal tree



- in the Alexiadou account, we would need to allow n to generate an internal argument (15). This seems problematic on two accounts:
 - 1). it is NOT the case that just any noun can generate an internal argument, but allowing n to be an argument introducer opens the avenue that this should be possible.
 - We could go even further and say that this predicts that there should be certain n nominalizers that always trigger the inclusion of an internal argument, which is just not empirically true.
 - 2). This structural account does not quite as straightforwardly map the observed parallel in that the root in the verbal domain and the nominal domain introduces the SAME type of argument in both. Having n be an introducer predicts that it could be possible for the argument licensed in the nominal domain to have a completely different semantic connection to the root than an internal argument licensed in the verbal domain. This doesn't seem borne out.

5. Conclusions

- The Korean nominals provide an empirical domain with the potential to differentiate between two different syntactic proposals to the licensing of argument structure, and provide a motivation to adopt a version that allows for the (now-attested) pattern of non-verbal predicates being capable of qualifying as nominals with argument structure.
- This presentation gave a first look at the consequences for licensing the internal argument; future development looks to understand the consequences for licensing the external argument, as well as the necessary structure needed, if any, for understanding what the sources of event structure is within nominals that lack verbal origins

References

- Alexiadou, Artemis. 2014. Roots don't take complements. *Theoretical Linguistics*, 40(3-4): 287-297.
- Alexiadou, Artemis. 2001. *Functional structure in nominals: nominalization and ergativity*. Amsterdam: John Benjamins.
- Borer, Hagit. 2013. *Structuring Sense: Volume III: Taking Form*. Oxford University Press.
- Borer, Hagit. 2003. Exo-skeletal vs. endo-skeletal explanations: syntactic projections and the lexicon. *The nature of explanation in linguistic theory*. 31–67. Stanford: CSLI Publications.
- Chomsky, Noam. 1970. Remarks on Nominalization. In Jacobs, R. A. and Rosenbaum, P. S. (Eds.), *Readings in English Transformational Grammar*, 184-221.
- Grimshaw, Jane. 1990. *Argument structure*. MIT Press.
- Halle, M. & Marantz, A., 1993. Distributed morphology and the pieces of inflection. *The view from Building*, 20, 111–176.
- Harley, Heidi. 2014. On the identity of roots. *Theoretical Linguistics*, 40(3-4). 225-276.
- Kratzer, Angelika. 1996. Severing the external argument from its verb. *Phrase structure and the lexicon*. 109-137. Springer, Dordrecht.
- Lees, Robert. 1960. *The grammar of English nominalizations*. The Hague: Mouton.
- Rozwadowska, Bożena. 2017. Derived nominals. In Everaert, M., & Riemsdijk, H. C. (eds). *The Wiley Blackwell companion to syntax*. John Wiley & Sons, Inc.