The syntactic and semantic introduction of internal arguments

Main Claim. There are two distinct base positions to generate an internal argument (IA) of an eventive predicate: some verbs have low IAs introduced directly by Roots (**Fig 1**; Harley 2014), while others have higher IAs associated with verbal structure (**Fig 2**). The evidence: different Roots involved in predicate formation in Korean have different structures that they create, entirely dependent on whether the Root itself has Event Structure (ES) that semantically entails an undergoer event participant (Ramchand 2008). I argue that one type of predicate is best understood as a construction built above a √P structure containing the Root and the IA as its complement, while a second type is best understood as one where the IA is introduced as a specifier of a verbal projection (F_v). The major theoretical consequences of this proposal is that not all argument introduction is contingent on verbal structure, and that Roots can live a syntactic life as argument realizers. However, if a Root lacks the inherent ES needed to license said arguments, verbal structure provides an alternative means to introduce an IA into the derivation.

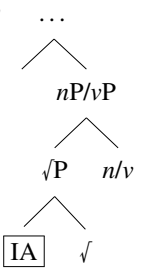

Fig1. Base position of the IA given a root with ES which may semantically entail an event participant.

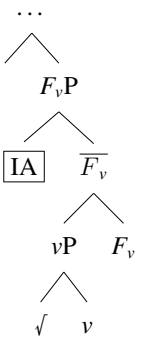

Fig2. Base position of the IA given a root with no ES which cannot semantically entail event participants.

Background. Contemporary theories of predicate decomposition and argument structure (AS) assert that verbal functional projections are the introducers of thematic arguments (Borer 2013). These analyses are driven by data on nominalizations ('derived nominals'), which often have overt embedded verbal morphology (Alexiadou 2009), as well as by evidence that nominals with AS in some languages grammatically license adverbs and VP-anaphora (Fu et al. 2001). Syntactic categorization of Roots by functional heads as a necessary requisite for introducing a Root into the syntax is also independently assumed in Distributed Morphology (DM) and DM-inspired theories of morphological representation, borne out of commitments to the post-syntactic mechanisms of Vocabulary Insertion and the relative complexity of the Lexicon (Embick & Marantz 2008).

Data. Korean complex predicates form two cohesive classes based on syntactic behavior. Type 1 predicates are built from eventive Roots (often called Verbal Nouns), such as √EXPLORE, √ATTACK, √HUNT (Korean: *thamkwu, kongkyek, sanyang*). Yoon & Park (2008) note that these Roots pose an empirical challenge to mainstream theoretical assumptions, because they can be used to build process nominal constructions that pass all Grimshaw (1990) diagnostics for AS, while disallowing all verbal properties such as NOM/ACC case and VP-adverbs, indicating that the process nominal constructions built on top of these roots are not derived from a verbal structure. These Roots appear in three distinct syntactic constructions: ① as part of a complex predicate with a light verb (1); ② heading the aforementioned non-derived nominal construction, where GEN case is optional on the IA (2); and ③ as the object of the verb "do" (*ha-*), with its IA either within the nominal headed by the Root (3a) with optional GEN case, or scrambled higher (Ko 2007), with ACC (3b).

(1) *yenkwuwen-i* *tongkwul-ul kkunhi.m.eps-i/*-nun* ***thamkwu****-ha-yss-ta*
researcher-NOM cave-ACC constant-ADV/*-ADJ explore-do-PST-DECL
'The researcher tirelessly/continuously explored the cave.'

(2) [$_{DP}$ *yenkwuwen-uy* *kkunhi.m.eps-nun/*-i* *tongkwul* ***thamkwu***]*-nun*
[$_{DP}$ researcher-GEN constant-ADJ/*-ADV cave explore]-TOP
'The researcher's constant exploration of the cave (…was tiring/etc.)'

(3) a. *yenkwuwen-i* [*tongkwul(-uy)* ***thamkwu***]-*ul* *ha-yss-ta*
researcher-NOM [cave(-GEN) explore]-ACC do-PST-DECL
'The researcher did cave exploration.'

b. *yenkwuwen-i* [*tongkwul*]-*ul* [***thamkwu***]-*ul* *ha-yss-ta*
researcher-NOM [cave]-ACC [explore]-ACC do-PST-DECL
'The researcher did exploration of/explored the cave (tirelessly/continuously).'

Type 2 constructions are built from non-eventive roots, such as √SONG, √WORD, √WORK (Korean: *nolay, mal, il*). They can also combine with a light verb to form complex predicates (4), but unlike Type 1, they cannot head non-derived process nominal constructions (5), and if they appear as the direct object of the verb, it is not possible for the associated IA to be licensed with GEN case (6a), nor is it possible to have double ACC case on both the IA and the nominal headed by the Root (6b).

(4) *Cwuni-ka* *sasil-ul* *cac-wu/*-un* ***mal-ha-yss-ta***
Juni-NOM truth-ACC frequent-ADV/*-ADJ word-do-PST-DECL
'Juni frequently spoke (the) truth.'

(5) * [$_{DP}$ *Cwuni-uy cac-un/*-wu* *sasil* ***mal***]-*un*
[$_{DP}$ Juni-GEN frequent-ADJ/*-ADV thruth word]-TOP
Intended: 'Juni's frequent speaking of (the) truth'

(6) a. * *Cwuni-ka* [*sasil(-uy)* ***mal***]-*ul* *ha-yss-ta*
Juni-NOM [truth(-GEN) word]-ACC do-PST-DECL
(This sentence can only grammatically mean 'Juni did words of truth.')

b. * *Cwuni-ka* [*sasil*]-*ul* [***mal***]-*ul* *ha-yss-ta*
Juni-NOM [truth]-ACC [word]-ACC do-PST-DECL
Intended: 'Juni spoke the truth'

Analysis. We can understand the difference between Type 1 and Type 2 Roots as driven by the availability of the √P structure. The √P is available for only eventive Roots that semantically entail an undergoer event participant: Type 1 Roots can introduce IAs as their direct complements (**Fig 1**), so long as that IA is entailed by the ES. For predicates built out of Type 2 Roots, which lack ES and therefore cannot ever semantically entail an event participant, the IA is introduced higher (**Fig 2**), by verbal structure, which is why the non-derived process nominal is unavailable. This difference also explains why the double ACC case paradigm is not possible for Type 2, if we understand double case marking as only possible for elements that originated in a sisterhood relationship. This is shown clearly in the literature for Korean multiple case marking on non-eventive nominals (Yoon 2015), where these constructions are only possible when there is a direct argument of the N, i.e. instances of inalienable possession, part-whole, relational (Barker & Dowty 1993).

Conclusion. I argue, on the basis of two types of complex predicate formations with the light verb DO (*ha-*) in Korean, that there are two distinct positions for the introduction of the internal argument: as either the direct complement of a Root, or as a specifier of a verbal functional projection. The proposal asserts that the necessary pre-conditions for the √P is the ES of the Root, which may semantically entail an undergoer event participant (Ramchand 2008). Roots, then, under this account, cannot be semantically bleached elements with no syntactic relevance, contrary to the characterization of Roots in many decompositional theories of morphosyntax. Though not shown here, the project utilizes the semantics of delayed argument saturation (Harley 2013, Legate 2014) to formalize the entailments of a Root and its effect on AS, and further investigates the advantages this account has when weighed against (pseudo-)incorporation accounts of complex predication.

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