

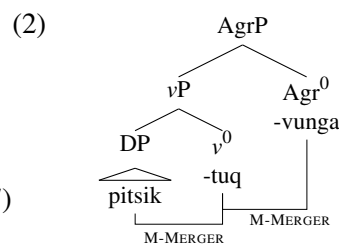
M-merger and copy spell-out in Inuktitut noun incorporation

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A longstanding issue in the analysis of noun incorporation concerns whether the noun-verb complex involves syntactic movement of the object (e.g. Baker 1988, Barrie & Mathieu 2016) or postsyntactic m-merger of the verb and an in situ object (e.g. Levin 2016). The same question pervades the literature on word formation and affixation more generally (Matushansky 2006, Harley 2013, Gribanova & Harizanov 2016, a.o.). This paper argues that Inuit noun incorporation is a *strictly postsyntactic phenomenon* and extends this view to polysynthetic word-building more generally. Novel fieldwork from Inuktitut (Nunavut dialects) reveals that incorporated objects are *syntactically active*—i.e. remain accessible for case, agreement, and A-/Ā-movement operations—despite being overtly realized within the verb complex. The full range of facts is unexpected under a movement analysis, but follows straightforwardly if incorporation is m-merger, applying after operations in the syntax. A further argument for the m-merger analysis comes from *interactions between m-merger and copy spell-out*, as an extension of Landau (2006). More broadly, this paper proposes that successive m-merger under adjacency is sufficient to derive polysynthetic word formation, against recent characterizations of polysynthesis as a purely phonological phenomenon (Compton & Pittman 2010, Barrie & Mathieu 2016).

Inuit noun incorporation: Unlike ‘canonical’ noun incorporation (Baker 1988), Inuit noun incorporation is obligatory with a small set of light verbs (underlined) and is otherwise impossible with all lexical verbs (Sadock 1980, Johns 2007), (1). Johns (2007) attributes Inuit NI to a morphological requirement that every word contain a root; light verbs are v^0 s that trigger movement of a nominal root. This paper instead proposes that noun incorporation—and Inuit word formation more generally—is derived *postsyntactically via m-merger* between a head and the element it immediately c-commands (analogous to Lowering; Embick & Noyer 2001). Light verbs directly select for and undergo m-merger with a nominal complement rather than a verbal root, yielding the appearance of incorporation, (2).

- (1) a. pitsi-tu-vunga
dried.fish-consume-INTR.1S
‘I am eating dried fish.’
b. pitsi-mik nigi-vunga
dried.fish-MOD eat-INTR.1S
‘I am eating dried fish.’ (Johns 2007)



In situ objects: Evidence that v^0 directly takes the object as its complement, feeding m-merger, comes from idiosyncratic selectional restrictions between the two; I assume these are built into the denotations of the light verbs. For instance, certain light verbs like *-siuq* ‘seek’ only take nominal objects of type $\langle e, t \rangle$, (3a); type e objects such as pronouns are impossible, (3b). In contrast, *-uquuji* ‘resemble’ only selects for type e objects, yielding the opposite pattern, (4). Moreover, evidence that the object truly stays in situ (i.e. that incorporation does not even involve short movement) comes from the ability to incorporate island-internal nominals, e.g. in coordinate structures, (5).

- (3) a. savi-siuq-tunga
knife-look.for-INTR.1S
‘I am looking for a knife.’
b. *igvi-siuq-tunga
2S-look.for-INTR.1S
Intended: ‘I am looking for you.’
- (4) a. *angaju-uquuji-juq
elder.rel.-resemble-INTR.3S
Int.: ‘She resembles an elder relative.’
b. igvi-uquuji-juq
2S-resemble-INTR.3S
‘She resembles you.’
- (5) uviniru-taa-ruma-junga amma=lu qaalli-nit
shirt-get-want-INTR.1S and=ADD pants-MOD
‘I want to get a shirt and pants.’

Syntactic activity: The central argument for postsyntactic m-merger, however, comes from the observation that *incorporated objects in Inuktitut are not syntactically inert*, contrary to previous literature (Sadock 1980, van Geenhoven 1998). Rather, they are visible for (i) case assignment and ϕ -agreement and (ii) movement. These facts are problematic for an incorporation-via-movement analysis, and necessitate an order of operations in which incorporation takes place after the syntactic derivation.

(I) CASE/AGREEMENT: As first noted by Johns (2009), NI in Inuktitut optionally allows object ϕ -agreement. While this is in principle compatible with a movement analysis of NI (see Baker et al. 2005), novel data from Inuktitut reveal a fuller picture that argues for postsyntactic m-merger. Crucially, incorporation constructions may be *antipassive* (ABS-MOD; 6a) or *transitive* (ERG-ABS; 6b), just like their non-incorporating counterparts. That Inuktitut incorporated objects may participate in clause-level case alternations is particularly unexpected under a movement analysis, as incorporation-via-movement is known to disrupt case patternings in other languages (e.g. Alutor; Podobryaev 2013). Thus, Inuktitut case/agreement relations must be calculated in the course of the syntactic derivation *prior to incorporation*. The sole difference between incorporating and non-incorporating constructions in Inuktitut is the fact that the former involves an additional step of m-merger between the verb and its object.

- (6) a. **Jaani** marruu-**ni** nunasiuti-~~taa~~-ruma-**juq**
 J.ABS two-MOD car-get-want-INTR.3S
 ‘Janni wants to get two cars.’ (ABS-MOD; want > 2 cars)
- b. **Jaani-up** **marruu** nunasiuti-~~taa~~-ri-juma-**jangit**
 J.-ERG two.ABS car-get-TR-want-TR.3S/3P
 ‘Jaani wants to get (these specific) two cars.’ (ERG-ABS; 2 cars > want)

(II) MOVEMENT: The data in (6) also illustrate a well-known scope contrast between antipassive and ABS objects; a standard account is that ABS objects move to a structurally higher position (e.g. Bittner & Hale 1996). However, this movement step raises a derivational puzzle for movement-based approaches to NI: How can the object both incorporate into the verb and undergo further movement to a vP-external position? Compounding this problem, Inuktitut also allows incorporated objects to be *passivized* and *relativized* (cf. Johns 2009). Passivized incorporated nominals control subject ϕ -agreement and may bind a lower anaphor, (7a), suggesting that they have undergone A-movement. Similarly, the relative clause in (7b) may be analyzed as involving \bar{A} -movement of the object *ujuq* ‘stew.’

- (7) a. **aasiva-tuq**-ta-u-**juq** nulia-**mi**-nut
 spider-eat-PASS-be-INTR.3S mate-POSS.REFL-OBL
 ‘The spider_i is being eaten by self_i’s mate.’
- b. kina nungu-si-vaa [_{rel} uvanga **uju**-**liu**-qqau-janga]-ni
 who.ABS finish-AP-INTR.INTERR.3S 1S stew-make-REC.PST-TR.3S/3S-MOD
 ‘Who ate the stew that I made earlier?’

M-merger and higher copy deletion: Postsyntactic m-merger provides a solution to this paradox. I argue that movement has indeed taken place in the syntax in the above examples; however, this is *obscured* by a later interaction between m-merger and copy deletion. I assume Landau’s (2006) theory of copy spell-out (see also van Urk 2017): an economy condition forces deletion of all but one copy in a chain, and the choice of which copy to pronounce is regulated by well-formedness conditions on wordhood (e.g. the Stray Affix Filter). In Inuit NI, m-merger feeds affixation. Thus, m-merger with the object in its base position forces that copy to be pronounced; the economy condition then forces deletion of all higher copies of the object. Support for this approach comes from the limited possibility of *object doubling*. Possessed DPs generally may not be incorporated (Johns 2007); in these cases only, a doubled object or an expletive pronoun may surface in the verb complex instead, (8). In the full paper, I analyze this as a Last Resort process which takes place to satisfy the same well-formedness condition.

- (8) [Carol-m **nunasiuti**-nga-nit] **pi**-**liri**-junga / **nunasiuti**-**liri**-junga
 Carol-GEN car-POSS.3S/3S-MOD EXPL-do-INTR.1S car-do-INTR.1S
 ‘I am working on Carol’s car.’

Implications for polysynthesis: Inuit NI is treated here as a subtype of complex word formation. This is *prima facie* similar to Compton & Pittman (2010), who propose an Inuit-specific requirement that all CP/DP syntactic phases get realized as single phonological words (see also Barrie & Mathieu 2016). Under such an approach, polysynthesis is a *phonological phenomenon*, not morphosyntactic. Against this, however, I contend that there is nothing special about complex words in Inuit or other polysynthetic languages; *m-merger under adjacency is a universally-available mechanism*. The polysynthetic nature of Inuit comes from the requirement all heads undergo m-merger with an immediately adjacent X⁰/XP.