Stowaway nominals: Incorporation and nPs in Kanien'kéha*

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Abstract: Previous accounts of noun incorporation phenomena posit a derivational relationship between incorporated clauses and their unincorporated near-equivalents, either proposing that incorporation derives from movement of an externally-generated nominal root into the verb, or that unincorporation is "excorporation," involving the movement of a verb-internally generated nominal root outside of the verbal complex. Nevertheless, both accounts leave morphological facts of both nominals and the verbal stem unaccounted for. Contra these analyses, I suggest that incorporated and unincorporated variants do not share a derivational relationship. Instead, incorporated roots are generated as the theme arguments of the verb, while on the other hand, unincorporated nominals are not themes at all, being generated as the inalienable possessors of a dummy theme root. Both of these structures result from a language-internal constraint that internal argument-selecting V must merge with a nP.

Keywords: incorporation, Northern Iroquoian, possessor raising, dummy roots, nPs

1 Introduction

Kanien'kéha (Mohawk; Northern Iroquoian) is well-known for its noun incorporation phenomena (Baker 1988; Mattissen 2004; Mithun 1984; Woodbury 1975). As in other Northern Iroquoian languages, noun incorporation is highly productive, with the majority of verbs showing an alternation between incorporated forms and "excorporated" forms.¹ A classic pair is shown in (1). In the incorporated version (1a), the nominal root *nakt* 'bed' appears inside of the verbal complex headed by *hninon* 'buy'. In contrast, the same nominal root appears as a separate word outside of the verbal complex in the excorporated version (1b).²

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¹ I use the terms "incorporation" and "excorporation" for consistency with the literature; however, my analysis is explicitly opposed to any derivational relationship between the forms in (1a) and (1b).

 $^{^2}$. Glosses from cited work may have been edited for consistency. Unmarked data presented here is from the Ahkwesáhsne dialect of Kanien'kéha. However, cited examples appearing with *K*. are from the dialect spoken in Kahnawà:ke.

Natalie Weber, Erin Guntly, Zoe Lam, and Sihwei Chen (eds.). Vancouver, BC: UBCWPL, 2024.

(1)	a.	Incorporation	b.	Excorporation		
		Wa'kenaktahní:non'.		Wa'khní:non'	ne	kanákta'.
		wa'-ke-nakt-a-hninon-'		wa'-k-hninon-'	ne	ka-nakt-a'
		fact-1sgA-bed-jr-buy-punc		fact-1sgA-buy-punc	NE	NA-bed-NSF
		'I bought a bed.'		'I bought a bed.'		(Baker 1996:12, K.)

Previous literature on noun incorporation in Kanien'kéha (e.g., Baker 1988, 1996, 2009) has described incorporation as optional, analyzing incorporation as a process in which a nominal generated external to the verbal complex undergoes movement into the verbal word. In other words, incorporation is treated as a process deriving (1a) from (1b).

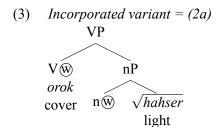
On the other hand, more recent work (e.g., DeCaire, Johns, and Kučerová 2017) argues that incorporation is *not* optional, with the incorporated form being the default. In this line of work, unincorporated nominals are generated internal to the verb and then undergo a process of "excorporation" due to information structural requirements. In this case, (1b) is treated as being derived from (1a). Crucially, both the incorporation and excorporation analyses rely on the assumption that incorporated and excorporated forms are derivationally related.

A different pair of incorporated and excorporated variants is shown in (2). Just as in (1), the incorporated (2a) involves a nominal root (*hahser* 'light') appearing inside of the verbal complex, while the nominal root appears outside of the verbal complex in the excorporated (2b).

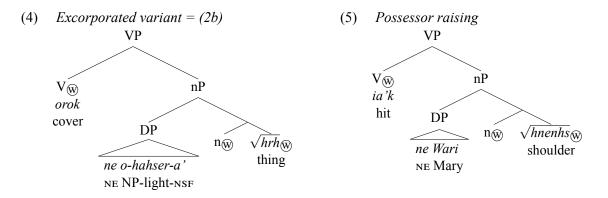
(2)	a.	Incorporation	b.	Excorporation		
		Wa'khahseró:roke'.		Wa 'kehrhó:roke'	ne	oháhsera'.
		wa'-k-hahser-orok-e'		wa'-ke- hrh -orok-e'	ne	o-hahser-a'
		FACT-1sgA-light-cover-punc		FACT-1sgA-thing-cover-punc	NE	NP-light-NSF
		'I covered the lamp.'		'I covered the lamp.'	(Mo	Donald 2023)

Despite the pair in (2) displaying the canonical footprint of incorporation, a derivational relationship between incorporated (2a) and excorporated (2b) as proposed by previous accounts leaves two crucial facts unaccounted for. First, nominal roots appear to "gain" morphology when they occur excorporated. Whereas the theme in (2a) is expressed simply by the bare root *hahser* 'light', the excorporated theme nominal in (2b) additionally contains a noun suffix *-a*' and a neuter patient agreement prefix *o*- alongside the nominal root. Second, certain verbs also appear to "gain" morphology when no lexical root is incorporated. In both variants in (2), the verb root is *orok* 'cover'. Nevertheless, when this verb occurs without an incorporated lexical root in (2b), the verbal complex contains an additional *hrh* immediately before the verb root.

Contrary to both the incorporation and excorporation analyses, I suggest that there is *not* a derivational relationship between incorporated variants and excorporated variants. Instead, I propose that the "themes" in the two variants are generated differently. Incorporated themes are generated as the true theme complement of V, as shown in (3), and are incorporated as part of a more general process of word-building. In the tree in (3), a subscript (3) occurs on heads that undergo the word-building process.



On the other hand, excorporated "themes" are not generated as themes at all. Instead, I argue that excorporation has the same structure as that of possessor raising in the language (to be motivated in §5.1). More explicitly, excorporated "theme" nominals like the one in (2b) are "stowed away" into the derivation, being generated in the specifier of a true theme root's nP as an inalienable possessor.



My proposal is thus that for Kanien'kéha nominals that appear to be themes, those on the left of the table (6) may generate as the theme complement of V, while those on the right must be generated as the inalienable possessor of a true theme.

	Generated as a theme	Stowed away as a theme's (inalienable) possessor			
	Incorporated neuter nominals	Freestanding neuter nominals			
		Proper names and pronouns (including pros)			
(6)		Animate nominals			
		Alienably-possessed nominals			
		Focused nominals			
		Nominals with demonstratives			

I suggest that both of the incorporation and excorporation structures, shown in (3) and (4) respectively, follow from a selectional property that theme-selecting V may only merge with nPs. The nominals in the left column of (6) may be nPs and thus may merge directly with V in an incorporation structure, while those in the right column involve more structure and thus require the use of the excorporation structure to enter the derivation.

The remainder of this paper is organized as follows. Section 2 provides relevant languagespecific background on Kanien'kéha to orient the reader. I begin with a discussion of incorporation, arguing in section 3 that incorporated material always expones a nP theme. I then propose that incorporation is part of a general word-building mechanism in section 4, correctly predicting the nP structure of incorporated material. I further suggest that this word-building process accounts for the appearance of "dummy" incorporated roots with certain verbs. Section 5 turns to excorporation. First, I motivate the structure of possessor raising in Kanien'kéha, before arguing that the structure of possessor raising is identical to the structure of excorporation. Section 6 concludes.

2 Background on Kanien'kéha

Kanien'kéha is part of the Five Nations branch of Northern Iroquoian languages, alongside closelyrelated OnAyote'a·ká· (Oneida), Onuda'gehá' (Onondaga), Gayogoho:nq' (Cayuga), and Onödowá'ga:' (Seneca). It is spoken in six communities located in Southern Québec, Southern Ontario, and Upstate New York (Mithun 2017). It is considered definitely endangered (Moseley 2010), with an estimated 560 first-language speakers, the vast majority of whom are elders (DeCaire 2023). Data in this work comes from the author's fieldwork with Mary McDonald, a first-language speaker; original fieldwork data is cited as McDonald (2023).

Kanien'kéha is often taken to be a canonical "polysynthetic" language, being highly agglutinating (with some fusion in the pre-pronominal prefixal domain; see Martin 2023). As is common of languages of this type, Kanien'kéha is head-marking, with highly complex agreement and robust *pro*-drop. Intransitive agreement follows a "split-S" ("active") pattern, with agent and patient sets of agreement morphemes.³ Multivalent verbs display transitive agreement morphemes (largely taken to be portmanteaux; see Bonvillain (1973) for more details) that index the subject and the primary object (in the sense of Dryer 1986). Word order is often described as "free," but the language is probably better described as discourse-configurational (Mithun 2020).

3 The structure of incorporated material

The structure of incorporated material discussed in this section serves as the doorway into my analysis of incorporated and excorporated alternations. I will first argue that incorporated material always instantiates a nP theme. Baker (1996) shows that for (di)transitives, themes may be incorporated while neither agent nor applied arguments may incorporate. Additionally, he shows that the sole argument of (independently-diagnosed) unaccusative verbs is also available for incorporation, while the sole argument of unergatives is not. He therefore concludes that only theme arguments are available for incorporation.⁴ Adopting a standard approach to argument structure, I therefore follow him in proposing that incorporated arguments are theme complements of V, immediately predicting the pattern of which arguments may incorporate.

I now turn to the internal structure of incorporated material. In general, incorporated material is quite bare. The base case, exemplified in (7), involves incorporation of only a root. Here, the bare root *nenhst* 'corn' appears without any functional material.

³ These sets are often lexically specified by the verb, as well as some inflectional material. See Baker (1996); Koenig and Michelson (2015); and Mithun (1991) for more details and patterns.

⁴ Others such as Barrie (2015) suggest that for related languages, incorporation of instruments is also attested (for example, in Onondaga). Similar examples may be found in Kanien'kéha. However, I have only found one or two potential examples of "instrument incorporation" throughout my elicitations and in texts, thus more research is needed to determine the productivity of these forms.

(7) Ieniakwanenhstáweron sók...
 i-en-iakwa-nenhst-aweron sok
 TRANS-FUT-1EXCL.PLA-corn-pour[PUNC] then
 'We would pour the corn into it, then...'

Nevertheless, certain nominal roots and all verbs require a morphologically overt nominalizer to incorporate. As shown in (8a), the nominal root *hstien* 'bone' appears with the nominalizing suffix -'t when incorporated (cf. the unincorporated *ohstien* 'bone'). Example (8b) shows that verbs, here *atkahrhi't* 'manipulate', may also incorporate, though crucially it requires the overt nominalizer *-htsher* to do so.

(8) a. Nominal root with nominalizer

Tánon' ó:nen ó:ni' iahothón:te'ne' i-a-ho-athonte-'n-e' tanon' onen oni' and now also TRANS-FACT-MSGP-hear-INCH-PUNC "tsik a tsik, tsik a tsik, tsik a tsik," taiohstien'takaré:re', ... t-a-io-hstien-'t-a-karere-' tsik a tsik CIS-FACT-NP-bone-NMLZ-JR-noise.travel-punc ONOM 'And just then he heard the sound of bones coming, "chick a chick, chick a chick, chick a chick."" (Jacobs 1976a, K.)

b. *Verb with nominalizer*

Wahatkahrhi'tahtsheratkwé:ni.wa-h-atkahrhi't-a-*(htsher)-atkweniFACT-MsgA-manipulate-JR-NMLZ-win[PUNC]'He won a (finger) toy (i.e., a toy involving fine motor skills).'(McDonald 2023)

Due to their transparent nominalizing function, I assume the overt nominalizers are the exponents of a n head. I further assume that nominal roots that do not occur with an overt nominalizer merge with a phonologically null n head. This suggests that *all* incorporated material has the structure of a nP (as also argued by Barrie and Mathieu (2016) from Onuda²gehá²). Put together with the restrictions on which arguments may incorporate, it follows that incorporated material is always generated as the nP complement of V.

4 Incorporation as word-building

This section is concerned with how the nP complements of V end up incorporated. I will argue that incorporation is not a separate syntactic mechanism, and that instead it comes about as a part of a more general word-building process that occurs in the VoiceP domain. I show that incorporation therefore results from a crosslinguistically unmarked structure. I then turn to the presence of "dummy" incorporated roots in some verbs, suggesting that this follows from a language-internal constraint that argument-selecting V must merge with nPs.

4.1 Word-building

As discussed in §2, Kanien'kéha verbs can be highly complex, as expected of a polysynthetic language. Despite this, they are largely templatic in nature. The general Northern Iroquoian verbal template in (9) shows the four general domains of the Northern Iroquoian verb. (See Michelson 2016; Mithun 2017; and Martin 2023 for details on the general properties of each of the domains.)

(9) Verb template (based on Michelson 2016 and Mithun 2017) pre-prenominal prefixes—pronominal prefixes—stem—aspectual suffixes

Important to the present discussion is the verbal stem, which appears in the template in (10).

(10) Verbal stem template (Michelson 2023; Mithun 2017) srfl/refl – incorporated root – nmlz – verb root – inch/rev – caus – ins – ben – dist – purp

Given the types of morphemes that appear within the traditional Northern Iroquoian verb stem, I suggest that this domain corresponds to VoiceP. In particular, I posit that the VoiceP in Kanien'kéha is a domain for word-building, that is, that consecutive heads within the VoiceP combine to form a morphological word together. Crucially, this includes the heads in a nP complement of V.

There are morphological and phonological correlates for suggesting that the VoiceP delineated by the verb stem forms a morphological word. First, morphological words are expected to follow Mirror Principle effects (Baker 1988), in which morphemes of the word are ordered reflecting the order of syntactic heads. If a word-building process applies to the heads in the VoiceP, we should then expect the ordering of morphemes in the verb stem to reflect a crosslinguistically standard ordering of heads within the VoiceP. Examining the template in (10), this is indeed the case. Due to reasons of space, I do not elaborate on the large body of work showing that the ordering is a crosslinguistically common one; see Boles (2024) for more detailed argumentation.

Second, multiple theories of morphological word-building (e.g., head movement; Baker 1985; Banerjee 2019; but also more recent proposals, such as spanning; Svenonius 2023) suggest that the creation of morphological words from multiple heads results in mirrored exponence; that is, heads in a morphological word linearize from the bottom up, with consecutive heads appearing to the right of lower ones. A word-building mechanism like the one I propose should be expected to linearize the incorporated root first, followed by the nominalizer, the verb root, and then higher functional morphology. This suffixal pattern is exactly what is observed.

A third argument comes from morphophonology. Previous analyses have argued for three epenthetic vowels in Kanien'kéha: /i/, /e/, and /a/ (Michelson 1988). The /a/ vowel is traditionally called the "joiner" or "linker" vowel in the Iroquoian literature. It apparently operates in a similar way to the other epenthetic vowels; however, the joiner /a/ has a much more restricted appearance. Crucially, the joiner only appears between incorporated nouns, the verb root, and derivational suffixes. In other words, the joiner only appears between morphemes within my proposed word-building domain. I therefore suggest that the joiner is limited in distribution because it is the result of an operation within the morphological word built within the VoiceP. The joiner vowel then provides another piece of evidence for a morphological word built from the heads within the VoiceP.

Lastly, Dyck (2009) suggests that words in closely-related Gayogoho:no[?] (Cayuga) are phonological phrases (P-phrases) and thus operate as domains for stress assignment, syllabification, and epenthesis. Nevertheless, she argues that Gayogoho:no[?] words have a separate internal domain, marked by the ability to license extrasyllabic consonants. She argues that these smaller domains are phonological words (Pwds) internal to the bigger Gayogoho:no[?] word (i.e., the bigger P-phrase). She argues that both incorporated roots and verb roots correspond to Pwds, assuming that lexical stems constitute Pwds. However, this assumption requires her to make an exception: while most Pwds license initial extrasyllabic consonants, the Pwd boundary between incorporated roots and verbal roots does not. I argue that this instead suggests that incorporated roots and verb stems correspond to a singular Pwd domain. This then provides independent phonological evidence from a related language that the Northern Iroquoian verb stem corresponds to a special morphological domain.

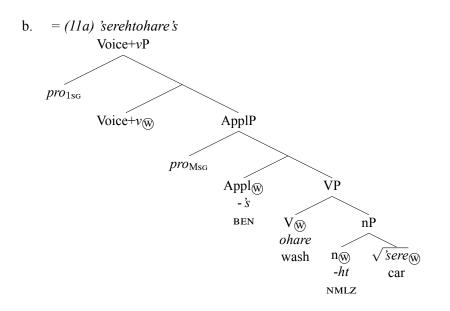
Given these arguments, I propose that the verb stem is formed via a word-building mechanism that applies to consecutive heads within the VoiceP, crucially including any nP complement of V. I remain agnostic as to which of multiple word-building analyses (e.g., Amalgamation, Harizanov and Gribanova 2019; Generalized Head Movement, Arregi and Pietraszko 2021; or Spanning, Svenonius 2016) is most apt for the data.

Importantly, as in other cases of word-building crosslinguistically, this word-building mechanism is obligatory. This means that nP complements of V are always forced to incorporate, since they are always the target of word-building along with the verbal root. This has the beneficial corollary that incorporation is not a separate syntactic operation. Indeed, the application of word-building to all heads within the VoiceP including nP complements of V is no different from word-building in a language like English or French. The crucial difference is that since Kanien'kéha V may merge with a nP, no D-layer is present on the theme to prevent it from being "swallowed up" by the verb via word-building.⁵ Another benefit to this analysis is that it views incorporation as the surface linearization of a crosslinguistically standard transitive clause. Incorporation is then predicted to have neutral pragmatics, exactly as DeCaire et al. (2017) suggest.

The word-building mechanism thus operates as in (11b), which is the tree of the bracketed stem in (11a). All heads within the VoiceP, including those of the nP complement of V, are marked with (W), to show that these heads undergo a process to form a morphological word with each other. The morphological word-building mechanism applies to create a word linearized beginning with the lowest head. This correctly places the incorporated root before the nominalizer, which in turn is before the verb root, and so on.

(11)	a.	Wahakéhnha 'ne '	ahi 'serehtóhare 'se '	ne	Wíshe.
		wa-hake-hnha'n-e'	a-hi-['sere-ht-ohare-'s]-e'	ne	Wishe
		FACT-MSG>1SG-hire-punc	opt-1sg>Msg-car-nmlz-wash-ben-punc	NE	Wishe
		'Wishe hired me to wash th	he car for him.'	(M	cDonald 2023)

⁵ As noted by Svenonius (2016), word-building rarely—if ever—crosses the D-layer.



4.2 "Dummy" incorporated roots

Having argued for a morphological word-building mechanism within the VoiceP of Northern Iroquoian languages, I now turn to the existence of "dummy" roots. When certain verbs appear without an incorporated lexical root, additional morphology appears within the verbal stem. One such verb is in (12). When the lexical root *'sere* 'car' is incorporated into the verb 'wash' in (12a), the verb root appears as *ohare*. Nevertheless, in the absence of any incorporated lexical root, such as in (12b), the verbal complex appears with an *n* before the verb root.

- (12) a. *Wa'ke'serehtohare'*. wa'-ke-'sere-ht-ohare-' FACT-1sgA-car-NMLZ-wash-PUNC 'I washed the car.'
 - b. *Ì: 'i wa'kenóhare'*.
 i'i wa'-ke-nohare-'
 1sg.pro FACT-1sgA-wash-punc
 'I washed it.'

(McDonald 2023)

Importantly, for verbs showing such an alternation, the form of the additional morphology that appears in the absence of an incorporated lexical root depends on the verb; it appears as *n* with the root *ohare* 'wash', but it appears as *hni* with *ot* 'erect, stand up', and as *a's* with *en'* 'fall'.

The generalization is that for all of the verbs exhibiting extra material when no lexical root is incorporated, the extra material appears immediately before the verb root. This is the exact location where incorporated roots appear. I take this extra morphological material to be the overt morphological exponence of "dummy" incorporated roots, as has been previously suggested in the Northern Iroquoian literature (Baker 1996; Lounsbury 1953; Michelson and Doxtator 2002). Due to their "dummy" status, I hence gloss them as 'thing'.

As I assumed in §3 (following Baker 1996), incorporated material is the complement of V. Therefore, since the dummy roots are incorporated, they must also generate as the complement of V, before being incorporated as part of the word-building mechanism outlined in §4.1.

Crucially though, dummy roots appear incorporated in cases where the theme is apparently either *pro*, as in (12b) or excorporated, as in (2b). Following the arguments in §3, these apparent "themes" therefore cannot be themes at all; instead the dummy root must be. I suggest that in these cases, the dummy root is generated as the complement of V because *pros* and excorporated nominals may not merge with V. Specifically, I propose that internal argument-selecting V has a selectional requirement for nPs, which neither *pro* nor excorporated nominals fit. The existence of dummy roots is then tied to the fact that argument-selecting V must combine syntactically with an internal argument. Importantly, I therefore suggest that when no incorporated material occurs, a dummy root is always incorporated nominal can satisfy the selectional requirement of V, and therefore a dummy root is generated. This dummy root is incorporated by virtue of the fact that nP complements of V always undergo morphological word-building.

I have therefore suggested that internal argument-selecting V has a selectional requirement for nPs in Kanien'kéha. This both accounts for the fact that incorporated elements are always nPs (argued in §3) as well as for the distribution of dummy incorporated roots. Additionally, nP compliments of V are incorporated simply due to the obligatory nature of morphological word-building.

5 Stowaway themes

In this section, I argue that the apparent "theme" excorporated nominals enter the derivation in the same way as raised possessors in the language: as the inalienable possessors of the dummy root. First, I introduce Kanien'kéha possessor raising and motivate a structure for it, before extending the structure to the case of excorporated nominals.

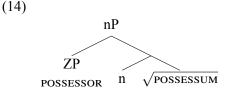
5.1 Possessor raising

Kanien'kéha has a possessor raising construction in which the inalienable possessor of a theme is marked as an argument of the verb (e.g., Cheng and Ritter 1987; Davies 1981; Landau 1999, among many others; see Deal 2017; Payne and Barshi 1999 and citations therein).⁶ Specifically, possessor raising in Kanien'kéha involves: (a) incorporation of the theme possessum; and (b) the marking of the possessor as a primary object via verbal agreement. This is shown in (13). The inalienably possessed root *hnenhs* 'shoulder' is incorporated into the verb, while the possessor DP *Wari* remains verb-external. Additionally, the verbal agreement appears as *hshako*-, representing the possessor DP as bonafide verbal argument, namely as the feminine-indefinite primary object.

(13)	Ohahí:io	wahshakohnenhsáia 'ke '	ne	Wári.	
	Ohahiio	wa-hshako-hnenhs-a-ia'k-e'	ne	Wari	
	Ohahiio	FACT-MSG>FI-shoulder-jr-hit-punc	NE	Mary	
	'Ohahí:io	tapped Mary's shoulder.'			(McDonald 2023)

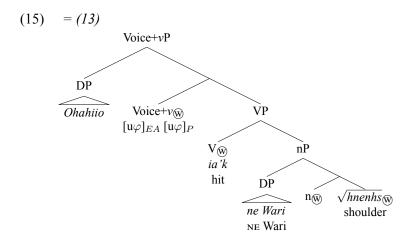
⁶ I use the term "possessor raising" descriptively; I do not suggest any actual movement of the possessor.

Following Alexiadou (2003) and Tyler (2021), I posit that inalienably-possessed roots are nPs and that the inalienable possessor is introduced in Spec,nP. The structure for an inalienably-possessed root is then as in (14).



Such a structure capitalizes on the intuition that inalienable possessums require inalienable possessors in order to be grammatically well-formed. Therefore, instead of being introduced in some higher projection, inalienable possessors form a minimal constituent with their possessa.

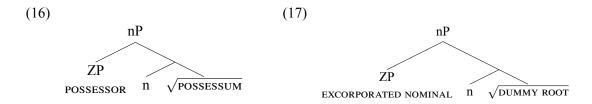
The possessor raising data easily falls out of such a structure, as shown in (15). Since the theme possessum with its inalienable possessor constitute a nP, the selectional requirement of V is satisfied by merging the inalienable possession nP. Additionally, the word-building mechanism is obligatory for all heads within the VoiceP domain. This includes the inalienable possessum root since it is the root of the nP complement of V. This theme root is then of course incorporated via the word-building process. On the other hand, the inalienable possessor is not eligible to form part of the morphological word since it occurs in the specifier of the n head. Since it is not a head, it does not participate and therefore surfaces external to the verbal complex. Lastly, I follow Coon (2023); Oxford (2019); and Toosarvandani (2023) in proposing that neuter nominals have no φ -features. Since the only inalienably-possessed roots are body parts in Kanien'kéha, which are by definition neuter, agreement probes on higher functional projections will always agree with the inalienable possessor in Spec,nP, which has φ -features.⁷



Returning to the main point of this work, the structure of excorporated variants strongly parallels that of possessor raising. Both cases require an incorporated root; in the case of possessor raising, this is the inalienably-possessed theme, while with excorporated variants, it is a (potentially null) dummy

⁷ A more full account of agreement in Kanien'kéha is out of the scope of this work; see Coon (2023) for one generative account of Northern Iroquoian agreement.

root. Additionally, both require a nominal to be "stranded" external to the verbal complex. With possessor raising, this is the inalienable possessor. In excorporated cases, it is more straightforwardly the excorporated nominal. Finally, both require that primary object agreement be controlled not by the incorporated root, but by the verb-external nominal. Due to the high level of parallelism between the two structures, I propose that excorporated variants have the exact same structure as possessor raising. More concretely, I suggest that excorporated nominals are in fact the inalienable possessors of dummy incorporated roots. This can be seen in the pair (16) and (17). The structure in (16) is the basic inalienable possession structure introduced above. The structure I propose for excorporated nominals is then as in (17); instead of an inalienable possessum, excorporated nominals inalienably possess dummy roots.

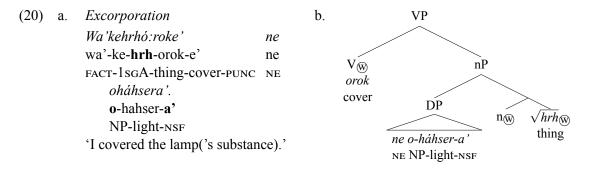


5.2 Stowaway nominals: tying it all together

In this section, I discuss why and how excorporated nominals may appear using the possessor raising account developed in §5.1. Freestanding nominals, of which excorporated nominals are a special case, appear with agreement prefixes and noun suffixes, shown for the freestanding nominal 'skirt' in (18). In order to appear as a freestanding noun, the root 'whahs 'skirt' must appear with the neuter patient prefix o- as well as the noun suffix -a'. Importantly, both pieces are obligatory. Note that noun suffixes appear outside overt nominalizers, as in (19). On the word for 'paper', the noun suffix -a' appears after the nominalizer *-hser* which nominalizes the verb root *hiaton* 'write'.

(18)	o'wháhsa'	(19)	kahiatónhsera'	
	(o)-'whahs-(a ')		ka-hiaton-hser-a'	
	NP-skirt-nsf		NA-write-nmlz-nsf	
	'skirt'	(McDonald 2023)	'paper'	(McDonald 2017)

By hypothesis, the nominalizers expone n heads, and thus the noun suffixes must reflect the presence of structure in addition to nP. Additionally, the agreement prefixes on freestanding nominals always reflect the φ -features of the referent of the nominal, so the probe responsible for the generation of the agreement prefixes must be able to copy features from the projection that introduces φ -features, such as PersP. Under an analysis where PersP is higher than nP (Danon 2006, 2011; Forbes 2019; Lidz 2006; Richards 2015), the presence of agreement prefixes is another argument in favor of the presence of more functional material than nP in freestanding nominals. It then immediately follows that excorporated nominals are larger than nP. Due to the presence of dummy roots, I have suggested that Kanien'kéha internal argument-selecting V has a strict selectional requirement for nPs. This means that excorporated nominals cannot merge with V as internal arguments. Instead, I propose that excorporated "themes" must be stowed away as the inalienable possessor of the dummy root. In this case, excorporated variants are structurally identical to possessor raising sentences (cf. 15 and 20b). The derivation of excorporated variants then follows exactly as the derivation of possessor raising. Since the excorporated "theme" is not of the right category to merge with V, it may stow away as the inalienable possessor of a dummy root. Specifically, the excorporated nominal may generate in the specifier of the n head which nominalizes the dummy root. The constituent containing the excorporated nominal and the dummy root is a nP and therefore may merge with V. The obligatory word-building mechanism applies; this involves all heads in the VoiceP domain, and therefore the dummy root, n, V and all VoiceP-internal functional heads form a morphological word, resulting in incorporation of the dummy root. The excorporated nominal, being in the specifier of the nP complement of V, may not participate in word-building since it is not a head, and therefore it ends up external to the verbal complex, that is, it ends up excorporated.



I suggest that the dummy root has the semantics of the "substance" of whatever its possessor is. This results in equivalent truth conditions for incorporated and excorporated variants. I suggest then that a more apt translation of the sentence in (20a) includes the parenthetical 'substance'. Covering the lamp's substance is truth conditionally equivalent to covering a lamp (which would be expressed via the incorporated variant), the result being the required semantic equivalence between incorporated and excorporated variants.

One last point in favor of the dummy root and excorporated nominal having an inalienable possession relationship comes from animate themes. When many verbs appear with an animate "theme," the animate appears excorporated and a dummy root *ia't* 'body' is incorporated. This is clear in the example in (21), where the "theme" *rohsotha* 'his grandfather' appears excorporated and the the root *ia't* 'body' is incorporated into the verb *enhaw* 'bring'.

(21)	Ó:nen	iá:ken'	ki	raksà: 'a	iahoia 'ténhawe '	ne			
	onen	iaken'	ki	ra-ksa-'a	i-a-ho- ia't -enhaw-e'	ne			
	now	they.say	this	MsgA-child-ым	TRANS-FACT-MSG>MSG-body-bring	g-punc ne			
	roh	sótha.							
	ro-hsotha								
	Msg>Msg-grandparent								
	'Now, they say, the boy brought his grandfather there.' (Jacob								

Note that the body is definitionally a body part noun and thus should participate in the possessor raising construction. Additionally, the body is a animate's substance. In this way, *ia't* plays "double

duty," occurring as an inalienably possessed body part nominal as well as a dummy root alongside animate "themes." This suggests that parallels between possessor raising and excorporated variants are on the right track.

6 Conclusion

I have argued that a language-specific selectional requirement for nP by internal argument-selecting V results in distinct derivations for incorporated and excorporated variants in Kanien'kéha. I argued that incorporated variants result from a theme nP directly merging with V, followed by a process of word-building that combines all heads within the VoiceP into a morphological word. On the other hand, excorporated material is too large to satisfy the merge requirement of V and therefore must be stowed away into the derivation. It therefore does not generate as the theme complement of V but rather generates as the inalienable possessor of a dummy incorporated root. The dummy root and excorporated nominal therefore form a nP together and allow the excorporated nominal to enter the derivation, bypassing the selectional requirement of internal argument-selecting V. In short, I have argued contra previous analyses of Kanien'kéha incorporation (Baker 1996; DeCaire et al. 2017; Renard 2023) that incorporated and excorporated variants in Kanien'kéha do not display any derivational relationship.

References

- Alexiadou, Artemis. 2003. Some notes on the structure of alienable and inalienable possessors. In *The expression of possession in noun phrases*, ed. Martine Coene and Yves D'hulst, volume 2 of *From NP to DP*, 167–188. Amsterdam: John Benjamins.
- Arregi, Karlos, and Asia Pietraszko. 2021. The ups and downs of head displacement. *Linguistic Inquiry* 52:241–289.
- Baker, Mark C. 1985. The Mirror Principle and morphosyntactic explanation. *Linguistic Inquiry* 16:373–415.
- Baker, Mark C. 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, Mark C. 1996. The polysynthesis parameter. New York: Oxford University Press.
- Baker, Mark C. 2009. Is head movement still needed for noun incorporation? Lingua 119:148–165.
- Banerjee, Neil. 2019. Templatic morphology through syntactic selection: Valency-changing extensions in Kinyarwanda. *Glossa* 4:112.
- Barrie, Michael. 2015. Two kinds of structural noun incorporation. Studia Linguistica 69:237-271.
- Barrie, Michael, and Éric Mathieu. 2016. Noun incorporation and phrasal movement. *Natural Language and Linguistic Theory* 34:1–51.
- Boles, Chase. 2024. Stowaway themes: Incorporation, possession, and nPs in Kanien'kéha. Honours undergraduate thesis, McGill University, Montréal, QC.
- Bonvillain, Nancy. 1973. *A grammar of Akwesasne Mohawk*. Ottawa, ON: National Museum of Man.

- Cheng, Lisa Lai-Shen, and Elizabeth Ritter. 1987. A small clause analysis of inalienable possession in Mandarin and French. In *Proceedings of NELS 18*, 65–78.
- Coon, Jessica. 2023. The syntax of Northern Iroquoian pronominal prefixes. Ms., McGill University.
- Danon, Gabi. 2006. Caseless nominals and the projection of DP. *Natural Language and Linguistic Theory* 24:977–1008.
- Danon, Gabi. 2011. Agreement and DP-internal feature distribution. Syntax 14:297–317.
- Davies, William D. 1981. Possessor ascension in Choctaw. In Proceedings of NELS 11, 38-57.
- Deal, Amy Rose. 2017. External possession and possessor raising. In *The wiley blackwell companion to syntax, second edition*, ed. Martin Everaert and Henk C. van Riemsdijk. John Wiley Sons, Inc.
- DeCaire, Oheróhskon Ryan. 2023. The role of adult immersion in Kanien'kéha revitalization. Doctoral Dissertation, University of Hawai'i at Hilo.
- DeCaire, Ryan, Alana Johns, and Ivona Kučerová. 2017. On optionality in Mohawk noun incorporation. *Toronto Working Papers in Linguistics* 39. URL https://twpl.library.utoronto.ca/index. php/twpl/article/view/28604.
- Dryer, Matthew S. 1986. Primary objects, secondary objects, and antidative. Language 62:808–845.
- Dyck, Carrie. 2009. Defining the word in Cayuga (Iroquoian). *International Journal of American Linguistics* 75:571–605.
- Forbes, Clarissa. 2019. Number, names, and animacy: Nominal classes and plural interactions in Gitksan. In Gender and noun classification, ed. Éric Mathieu, Myriam Dali, and Gita Zareikar, Oxford studies in theoretical linguistics, chapter 10, 203–233. Oxford: Oxford University Press.
- Harizanov, Boris, and Vera Gribanova. 2019. Whither head movement? *Natural Language and Linguistic Theory* 37:461–522.
- Horne, Josephine Warisó:se Kaieríthon. 1976. Kana'tarokhón:we. In Kanien'kéha okara'shòn: 'a, ed. Marianne Williams, 44–47. Albany: University of the State of New York, State Education Dept.
- Jacobs, Annette Á:nen Kaia'titáhkhe'. 1976a. Tsik a tsik, tsik a tsik, tsik a tsik. In Kanien'kéha okara'shòn: 'a, ed. Marianne Williams, 66–68. Albany: University of the State of New York, State Education Dept.
- Jacobs, Carolee Konwatièn:se'. 1976b. Sha'tewahsirí:hen. In *Kanien'kéha okara'shòn: 'a*, ed. Marianne Williams, 11–12. Albany: University of the State of New York, State Education Dept.
- Koenig, Jean-Pierre, and Karin Michelson. 2015. Invariance in argument realization: The case of Iroquoian. *Language* 91:1–47.
- Landau, Idan. 1999. Possessor raising and the structure of VP. Lingua 107:1–37.
- Lidz, Jeffrey. 2006. The grammar of accusative case in Kannada. Language 82:1–23.
- Lounsbury, Floyd. 1953. Oneida verb morphology. New Haven, CT: Yale University Press.
- Martin, Akwiratékha'. 2023. *Tekawennahsonterónnion Kanien'kéha morphology*. Kahnawà:ke: Kanien'kehá:ka Onkwawén:na Raotitióhkwa Language and Cultural Center.

Mattissen, Johanna. 2004. A structural typology of polysynthesis. Word 55:189–216.

- McDonald, Mary Onwá:ri Tekahawáhkwen. 2017. Base nouns. Slides created for teaching Kanien'kéha., 5 2017.
- McDonald, Mary Onwá:ri Tekahawáhkwen. 2023. Interviews. Kanien'kéha language consultation work with the author.
- Michelson, Karin. 1988. A comparative study of Lake-Iroquoian accent. Dordrecht: Kluwer.
- Michelson, Karin. 2016. Iroquoian languages. In Oxford research encyclopedia of linguistics.
- Michelson, Karin. 2023. Word classes in Iroquoian languages. In *The Oxford Handbook of Word Classes*, ed. Eva van Lier. Oxford: Oxford University Press.
- Michelson, Karin, and Mercy Doxtator. 2002. An Oneida–English/English–Oneida dictionary. Toronto: University of Toronto Press.
- Mithun, Marianne. 1984. The evolution of noun incorporation. Language 60:847-893.
- Mithun, Marianne. 1991. Active/agentive case marking and its motivations. Language 67:510-546.
- Mithun, Marianne. 2017. The Iroquoian language family. In *The cambridge handbook of linguistic typology*, ed. Alexandra Y. Aikhenvald and R.M.W. Dixon, Cambridge Handbooks in Language and Linguistics, chapter 24, 747–781. Cambridge: Cambridge University Press.
- Mithun, Marianne. 2020. Discourse particle position and information structure. In *Information-structural perspectives on discourse particles*, ed. Pierre-Yves Modicom and Olivier Duplâtre, number 213 in Studies in language comparison, chapter 1, 27–46. Amsterdam: John Benjamins.
- Moseley, Christopher, ed. 2010. Atlas of the world's languages in danger. UNESCO, third edition.
- Oxford, Will. 2019. Inverse marking and Multiple Agree in Algonquin. *Natural Language and Linguistic Theory* 37:955–996.
- Payne, Doris L., and Immanuel Barshi, ed. 1999. *External possession*, volume 39 of *Typological Studies in Language*. Amsterdam: John Benjamins.
- Renard, Martin. 2023. Inactive, active, and non-noun incorporation in Kanien'kéha: A categorization and excorporation analysis. Ms., University of Toronto.
- Richards, Marc D. 2015. Defective agree, case alternations, and the prominence of Person. In *Scales and hierarchies*, ed. Ina Bornkessel-Schlesewsky, Andrej Malchukov, and Marc D. Richards, 173–196. Berlin: De Gruyter Mouton.
- Svenonius, Peter. 2016. Spans and words. In *Morphological metatheory*, ed. Heidi Harley and Daniel Siddiqi, 199–220. Amsterdam: John Benjamins.
- Svenonius, Peter. 2023. The origin of words. Talk given at Morphology as Syntax 3, Montréal, QC.
- Toosarvandani, Maziar. 2023. The interpretation and grammatical representation of animacy. Ms., University of California Santa Cruz.

Tyler, Matthew. 2021. Two kinds of external possession in Mississippi Choctaw. Syntax 24:78–122.

Woodbury, Hanni. 1975. Noun incorporation in Onondaga. Doctoral dissertation, Yale University.