



Quasi PNI in Tagalog: Internal restructuring*

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1 Nutshell

- re-examine data on pseudo noun incorporation (PNI) in Tagalog (Starr, 2015; Barrie and Kim, 2018)
- argue that so-called Tagalog PNI behave differently from typical PNI, dubbing this construction "quasi PNI"
 - strict adjacency condition unobserved
 - nominals case-marked with *ng*:
 - have *some* typical semantic PNI properties (narrow scope, number neutrality)
 - lack syntactic properties of PNI (case marked, free movement)
- suggest an analysis called *internal restructuring* (term adapted from (Rizzi, 1978))
- like (P)NI, functional material is removed from the nominal structure
- removed from the middle rather than from the root
- KP is still present, but DP and NumP are absent
- tentative suggestions on the semantics of structural Case (or lack thereof)
- explain how quasi PNI has the semantics of PNI without the syntactic properties of PNI
- Roadmap:
 - Section 2: Background on PNI and Tagalog
 - "PNI" in Tagalog
 - Discussion - Quasi PNI in Tagalog via internal restructuring

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2 Background

2.1 PNI

- Syntactic Noun Incorporation: (Baker, 1988) – morphological fusion between N and V.¹

(1) Noun Incorporation - Onondaga (Woodbury, 1975)

(a) *waʔhahninúʔ* *neʔ oyɛkwaʔ*
waʔ-ha-hninu-ʔ neʔ o-**yɛkw**-aʔ
FACT-3SG.M.AG-buy-PUNC NE NPREF-**tobacco**-NFS

‘He bought tobacco.’

(b) *waʔhayɛkwahninúʔ*
waʔ-ha-**yɛkw**-a-hninu-ʔ
FACT-3SG.M.AG-**tobacco**-EPEN-buy-PUNC

‘He bought tobacco.’

- Morphosyntactic characteristics of PNI
 - absence of case marking (Dayal, 2011; Massam, 2001)
 - nominal phrase without extended functional projection (i.e. NP or NumP instead of DP or KP) (Massam, 2001)

(2) Pseudo-Noun Incorporation - Nieuuan (Massam, 2001)

(a) *Kua fakahū he ekekafo e tohi.*
PVF send ERG doctor ABS letter

‘The doctor sent the letter.’

(b) *Kua fakahū tohi e ekekafo*
PFV send letter ABS doctor

‘The doctor sent the letter.’

- PNI object in (2b)
 - no case (reduced morphology on the noun)
 - subject marked with absolutive (reduced transitivity on the verb)
- Syntactic characteristics
 - reduced nominal structure
 - strict adjacency with verb
- Semantic characteristics

¹Abbreviations: ABS - absolutive; AV - actor voice; DEM - demonstrative; EPEN - epenthetic; ERG - ergative; FACT - factual; IC - initial change (signals past tense); IMPF - imperfective; INV - inverse; MID - middle voice; NEG - negative; OBV - obviative; OV - object voice; PFV - perfective; PL - plural; PRN - pronoun; PROX - proximate; PUNC - punctual; SG - singular; SRFL - semireflexive NLZR - nominalizer

- PNI-ed nominals are number-neutral, indefinite, and non-referential
- obligatorily low scope (<modal, negation, quantifier)
- Blackfoot (Algic) (Bliss, 2018)

- (3) *Íihkaniyaapiyaawa piítaa*
 iihkan-yaapi-yi-aawa piítaa
 all-see.AI-PL-3PL.PRN eagle
 ‘They all saw an eagle. ($\forall > \exists, * \exists > \forall$)’

2.2 Tagalog

- In previous work on Tagalog, Starr (2015) analyzes *ng*-objects in Tagalog as having undergone PNI.
- *Ng*-marked objects can receive a general number reading, while *ang*-marked objects cannot.
- Furthermore, *ng*-marked objects with an adjective resist general number.
- However, in a subsequent study that replicated Starr’s investigation, we found that *ng*-marked objects with an adjective can also exhibit number neutrality for some speakers.
- Finally, it has been observed that *ng*-marked arguments can be specific or unspecific in contrast to *sa*-marked arguments (Latrouite (2011)).

3 "PNI" in Tagalog

- Number neutrality of *ng*-objects and number-specificity of *ang*-marked arguments (Starr, 2015) are confirmed in our previous study.

- (4) (a) *B<um>ili ang babae ng mansanas*
 <PST.AV>buy ANG woman NG mansanas
 ‘The woman bought some an apple/some apples.’
- (b) *B<um>ili ang babae ng mga mansanas*
 <PST.AV>buy ANG woman NG PL mansanas
 ‘The woman bought some apples’
- (c) *B<in>ili ng babae ang mansanas kahapon*
 <PST.OV>buy NG woman ANG apple yesterday
 ‘The apple was bought by a woman yesterday.’

- Our data on general number broadly aligns with Starr in that a *ng*-object can have general number while an *ang*-NP cannot.
- Starr: *ng*-NP with adjective is not number neutral
- our prior work: *ng*-NP with adjective is number neutral for some speakers.

- (5) (a) *B<um>ili ng libro ang babae.*
 <PST.AV>bought NG book ANG woman
 ‘The woman bought a book/some books.’
- (b) *B<um>ili ng pula-ng libro ang babae.*
 <PST.AV>bought NG red-LNK book ANG woman
 ‘The woman bought a red book/%some red books.’
- (c) *B<in>ili ang libro ng babae*
 <PST.OV>bought ANG book NG woman
 ‘The woman bought a book/*some books.’
- A *ng*-object can be specific or non-specific.
 - A specific reading can be induced by modifiers such as ‘certain’ (Paul et al., 2015), and an *ang*-marked object is typically specific, but a non-specific reading can be forced in certain contexts (Paul et al., 2015).
 - a *sa*-marked object is specific (Latrouite, 2011)
- (6) Specificity Examples
- (a) *Si Maria ang k<um>ain ng mansanas.*
 ANG.PR Maria ANG eat.PST.AV NG apple
 ‘Maria is the one who ate an apple.’
- (b) *... pero hindi ko alam kung alin*
 ... but NEG I know whether which
 ‘... but I don’t know which one.’
- (c) *Si Maria ang k<um>ain sa mansanas*
 ANG.PR Maria ANG eat.PST.AV SA apple
 ‘Maria is the one who ate an apple.’
- (d) *... #pero hindi ko alam kung alin.*
 ... but NEG I know whether which
 ‘(... but I don’t know which one.)’
- In terms of scope, a *ng*-object scopes low (optionally high with negation, though) and *ang*- and *sa*-objects obligatorily scope high.
- (7) Scope under Negation
- (a) *Hindi k<um>ain si Juan ng mansanas dahil wala nito.*
 NEG <AV>eat ANG Juan NG apple because nothing this
 ‘Juan didn’t eat an apple because there aren’t any.’
- (b) *Hindi k<um>ain si Juan ng mansanas ...Sige. Ako na lang ang ka~kain n-ito.*
 NEG <AV>eat ANG Juan NG apple ...Ok. 1SG.ANG now only ANG
 CONT.AV~eat NG-this
 ‘Juan didn’t eat the apple ...Ok. I’ll eat it then.’

- (c) **Hindi k<in>ain ni Juan ang mansanas dahil wala nito*
 NEG <OV>eat NG Juan ANG apple because nothing this
 ‘Juan didn’t eat the apple because it doesn’t exist.’
- (d) *Hindi k<in>ain ni Juan ang mansanas ...Sige. Ako na lang ang*
 NEG <OV>eat NG Juan ANG apple ...Ok. 1SG.ANG now only ANG
ka~kain n-ito.
 CONT.AV~eat NG-this
 ‘Juan didn’t eat the apple ...Ok. I’ll eat it then.’

(8) Scope under Modal *dapat* ‘should’

- (a) *Dapat k<um>ain si Juan ng mansanas.*
 NEG <AV>eat ANG Juan NG apple
 ‘Juan needs to eat an apple. (speaker: any apple)’
- (b) *Dapat kain-in ni Juan ang mansanas.*
 NEG eat-OV NG Juan ANG apple
 ‘Juan needs to eat an apple. (speaker: a specific apple)’

- Where quasi-PNI object in Tagalog differ is in linear adjacency.
- While Nieuuan requires strict adjacency, Tagalog does not.
- Note that only a portion of the word order possibilities are shown here.

- (9) (a) *B<um>ili ang babae kahapon ng mansanas.*
 <AV.PST>buy ANG woman yesterday NG apple
 ‘The woman bought some apple(s) yesterday.’
- (b) *k<um>ain ng dahan-dahan ang babae ng mansanas.*
 <AV.PST>eat NG slowly ANG woman NG apple
 ‘The woman slowly ate the apple(s).’

4 Discussion

- restructuring typically chips away from the highest functional projection
 - V selects CP or TP or *v*P or VP
 - V selects KP or DP or NumP or *n*P or NP
 - Alboiu (2009): Romanian CP can select *v*P directly with no intervening TP.
 - no evidence for TP (no tense), but that epistemic adverbs (*probably*) and topicalized phrases are possible, suggesting a CP layer, based on Avram (2003).
- (10) *Ea fiind încă supărată, am decis să plecăm singuri.*
 3SG.F.NOM be-GER yet upset.3SG.F, AUX.1PL decided SBJ leave.1PL alone.1PL
 ‘What with her still being upset, we decided to leave by ourselves.’

(11) CP > AspP > vP > VP

- Rather than restructuring from the top, this is restructuring from the middle, which we dub *internal restructuring*.
- Recall the two sentences that illustrate the phenomenon under consideration

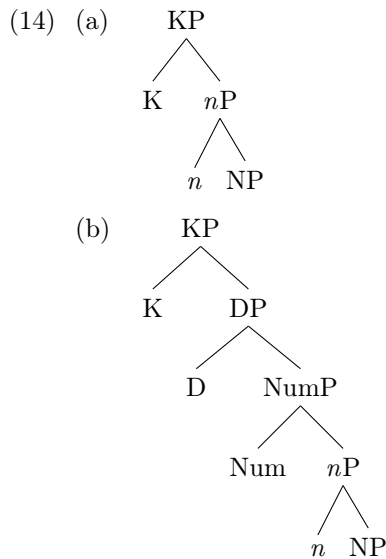
(12) (a) *B<um>ili ang babae ng mansanas*
 <PST.AV>buy ANG woman NG mansanas
 ‘The woman bought some an apple/some apples.’

(b) *B<in>ili ng babae ang mansanas kahapon*
 <PST.OV>buy NG woman ANG apple yesterday
 ‘The apple was bought by a woman yesterday.’

- We propose that Tagalog quasi PNI, example (12 a), results from internal restructuring.
- A defective K selects *nP* directly, with no intervening DP or NumP.²

(13) KP > *nP* > NP

- We propose the following structures for the *ng*-object in (12 a) and the *ang*-object in (12 b), respectively.



- Case features typically assumed to be uninterpretable (Adger, 2003; Pesetsky and Torrego, 2001)
- discussions of the semantic denotation of K are scant
- assume that structural Case is semantically opaque

²We use the term *defective* here rather loosely, assuming that *ng* is, in some way, the default case.

(15) [[KP]] = [[sister of K]]

- Leave precise details aside
- long tradition of treating DP as type $\langle e \rangle$ and NP (or nP) as type $\langle e, t \rangle$ (Chierchia, 1998)
- propose further that a defective K head may select nP
- Analysis for quasi PNI:
- Consider first *ng*-object in Tagalog
- KP in (14 a) has the same denotation as nP , $\langle e, t \rangle$
- has the same semantics of bare nominals in more traditional (P)NI languages
- NumP is missing, so there is no specification for number
- presence of K requires Case checking
- potential for movement, as with other Case marked nominals
- accounts for the free word order of the *ng*-object
- KP in (14 b) takes DP as a complement
- KP is type $\langle e \rangle$
- gives rise to the usual semantic and syntactic properties of a full nominal

(16) *B<um>ili ng pula-ng libro ang babae.*
<PST.AV>bought NG red-LNK book ANG woman
'The woman bought a red book/%some red books.'

- Speculation on adjectives: Exactly how adjectives merge into the extended nominal projection still a matter of debate (Cinque, 2010; Ernst, 2002).
- assume adjuncts adjoin to some maximal projection - i.e., not a Cinquean cartography
- individual grammars may allow adjectives to adjoin in different locations.³
- If an adjective adjoins above nP , then a full extended nominal will be projected
- such a speaker will not exhibit number neutrality in *ng*-marked nominals.

³See Han et al. (2007) for an example of different grammars in an otherwise homogenous speech community.

5 Conclusions

- We have argued that the properties of the *ng*-object in Tagalog result from its syntactic structure.
- Specifically, the *ng*-object consists of a KP that selects an *nP* directly (*internal restructuring*).
- We have dubbed this construction Quasi PNI as it has some of the properties of PNI (number neutrality, low scope) but still exhibits some properties of a full nominal (overt case marking, free movement).
- We have proposed that K (Case) is semantically opaque and that KP has the same semantic denotation as the sister of the K head.
- While K typically takes DP as a complement, we have suggested that a defective K (*ng*) takes a bare *nP* as a complement.
- It remains to be seen whether this analysis can be carried over to other similar constructions such as the partitive in Finnish (Kiparsky, 1998).

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