



Quasi PNI in Tagalog: Internal restructuring*

Michael Barrie, Moonhyun Sung
Sogang University, Korea Army Academy at Yeongcheon

August 20, 2020

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

*We wish to thank Maryelle Macarubbo and Alexis Tamayo for their help with Tagalog. We also wish to thank Gyumin Kim for his earlier collaboration on this project and Raphael Mercado for help with the glosses. All errors are our own. This work was supported by Global Research Network program through the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2017S1A2A2039972).

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 AspP 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

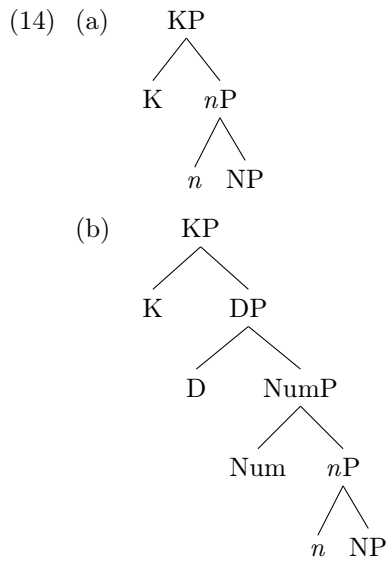
(12) (a) *B<um>ili ang babae ng mansanas*
 <PST.AV>buy ANG woman NG mansanas
 ‘The woman bought some an apple/some apples.’

(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

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

- link between K and D: definiteness/specificity may derive from K (Kim, 2019; López, 2012; Kornfilt, 1984; Öztürk, 2005; Enç, 1991)
 - assume that default Case, however, is semantically opaque
- (15) [[KP_{ng}]] = [[sister of K_{ng}]]
- Leave precise details aside
 - long tradition of treating DP as type <e> and NP (or nP) as type <e,t> (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, <e,t>
 - 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 <e>
 - gives rise to the usual semantic and syntactic properties of a full nominal
 - upshot
 - K_{ng} can take any nominal complement (DP or nP)
 - K_{ang}, having definiteness/specificity features to pass down to D, must take a DP complement
- (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).

References

- Adger, David (2003). *Core Syntax*, Oxford: Oxford University Press.
- Alboiu, Gabriela (2009). ‘Null expletives and Case: The view from Romance’, in Pascual José Masullo (ed.), ‘Romance Languages: Structure, interfaces, and microparametric variation’, Amsterdam: John Benjamins.
- Avram, Larisa (2003). ‘An aspectual analysis of gerunds’, *Revue roumaine de linguistique* 48 (1-4): 203–219.
- Baker, Mark C. (1988). *Incorporation: A Theory of Grammatical Function Changing*, Chicago, IL: University of Chicago Press.
- Barrie, Michael and Gyumin Kim (2018). ‘Pseudo Noun Incorporation in Tagalog: Prosody and Structure’, Academia Sinica, Taiwan.
- Bliss, Heather (2018). ‘Pseudo-Incorporation in Blackfoot’, *International Journal of American Linguistics* 84 (4): 441–470, URL <https://doi.org/10.1086/698853>.
- Chierchia, Gennaro (1998). ‘Reference to kinds across languages’, *Natural Language Semantics* 6: 339–405.
- Cinque, Guglielmo (2010). *The Syntax of Adjectives: A Comparative Study*, Cambridge, MA: MIT Press.
- Dayal, Veneeta (2011). ‘Hindi pseudo-incorporation’, *Natural Language Linguistic Theory* 29 (1): 123–167.
- Enç, Muervet (1991). ‘The Semantics of Specificity’, *Linguistic Inquiry* 22 (1): 1–25.

- Ernst, Thomas (2002). *The Syntax of Adjuncts*, Cambridge: Cambridge University Press.
- Han, Chung-hye, Jeffrey Lidz, and Julien Musolino (2007). ‘V-Raising and Grammar Competition in Korean: Evidence from Negation and Quantifier Scope’, *Linguistic Inquiry* 38 (1): 1–47, URL <http://www.mitpressjournals.org/doi/abs/10.1162/ling.2007.38.1.1>.
- Kim, Hye Jung (2019). *Feature Inheritance of the Definiteness Feature*, Master’s thesis, Sogang University.
- Kiparsky, Paul (1998). ‘Partitive Case and Aspect’, in Miriam Butt and Wilhelm Geuder (eds.), ‘The Projection of Arguments: Lexical and Compositional Factors.’, 265–307, Stanford, CA: Center for the Study of Language and Information.
- Kornfilt, Jaklin (1984). *Case marking, agreement, and empty categories in Turkish*, Ph.D. Dissertation, Harvard University.
- Latrouite, Anja (2011). ‘Differential object marking in Tagalog’, in Lauren Eby Clemens, Gregory Scontras, and Maria Polinsky (eds.), ‘Proceedings of the Eighteenth Meeting of the Austronesian Formal Linguistics Association (AFLA)’, 94–109.
- López, Luis (2012). *Indefinite Objects: Scrambling, Choice Functions, and Differential Marking*, Cambridge, MA: MIT Press.
- Massam, Diane (2001). ‘Pseudo noun incorporation in Niuean’, *Natural Language & Linguistic Theory* 19 (1): 153–197, URL <https://doi.org/10.1023/A:1006465130442>.
- Paul, Ileana, Key Cortes, and Lareina Milambiling (2015). ‘Definiteness without D: The case of ang and ng in Tagalog’, *Canadian Journal of Linguistics/Revue canadienne de linguistique* 60 (3): 361–390.
- Pesetsky, David and Esther Torrego (2001). ‘T-to-C Movement: Causes and Consequences’, in Michael Kenstowicz (ed.), ‘Ken Hale: A Life in Language’, Current Studies in Linguistics. (CSLing). Cambridge, MA; 36, 355–426, Cambridge, MA: MIT Press.
- Rizzi, Luigi (1978). ‘A Restructuring Rule in Italian Syntax’, in Samuel J. Keyser (ed.), ‘Recent Transformational Studies in European Languages’, 113–158, Cambridge, MA: MIT Press.
- Starr, Nova (2015). ‘Tagalog general number and incorporation’, in ‘22nd Meeting of the Austronesian Formal Linguistics Association’, .
- Woodbury, Hanni (1975). ‘Onondaga noun incorporation: Some notes on the interdependence of syntax and semantics’, *International Journal of American Linguistics* 41 (1): 10–20.
- Öztürk, Balkız (2005). *Case, Referentiality, and Phrase Structure*, Linguistics today, Amsterdam: J. Benjamins Publishing Company.