

- Williams, Edwin. 1980. Predication. *Linguistic Inquiry* 11:203–238.
 Yang, Dong-Whee. 1984. The extended control theory. *Language Research* 20:19–30.

RIGHT NODE RAISING AND
 EXTRACTION IN TAGALOG
Joseph Sabbagh
University of California,
Berkeley

1 Introduction

The correct analysis of *right-node-raising* (RNR) constructions, exemplified by the English example in (1), remains controversial.

- (1) Many people supported ____, but many people also denounced, *that particular amendment*.

Classic analyses of this construction assume a derivation involving across-the-board (ATB) rightward movement (Ross 1967, Postal 1974, Abbott 1976, Grosu 1976). According to this analysis, the shared constituent in (1) (henceforth, the *pivot*) moves out of each conjunct and right-adjoins to a position external to the coordinate structure.

Since the work of Wexler and Culicover (1980), this analysis has been subject to extensive criticism. In particular, Wexler and Culicover, and many authors working on RNR since then, offer evidence that the ‘gaps’ in RNR constructions like (1) do not behave like ordinary gaps either of rightward movement, in particular, or of extraction (*wh*-movement, relativization, etc.) more generally (see McCawley 1982, Levine 1985, McCloskey 1986, Wilder 1997, Hartmann 2000). To mention just one argument, rightward movement in English cannot strand prepositions, as the ungrammaticality of (2a) shows (cf. *Whose office were you looking for ____ all day?*). As (2b) illustrates, on the other hand, preposition stranding is unexceptional with RNR.¹

- (2) a. *We’ve been looking for ____ all day *the dean’s office*.
 b. We’ve been looking for ____, but haven’t yet found, *the dean’s office*.

On the basis of observations like this, in-situ analyses of RNR have been proposed. One such approach proposes that the gap(s) in an RNR construction are derived by a (PF) deletion operation that operates backward (Kayne 1994, Wilder 1997, Hartmann 2000, Ha,

Many thanks to the Tagalog speakers who contributed to this work: G. Banzon, V. De Alday, and P. Santos. Thanks also to two anonymous reviewers for their helpful suggestions.

¹ This argument has been made even more dramatically on the basis of languages such as Irish (McCloskey 1986), where preposition stranding is systematically prohibited for both leftward and rightward extractions. Just as in English, preposition stranding in RNR constructions is grammatical in Irish. Note also that RNR in English seems to be impervious to island constraints like the one prohibiting extraction from a relative clause.

- (i) Max knows [someone who sells ____], and Kate knows [someone who wants to buy], *antique books*.

to appear). According to this approach, the shared element in (1) is crucially located in situ within the final and nonfinal conjuncts but deleted from the nonfinal conjunct. Another in-situ approach claims that there is just one occurrence of the RNR pivot, which is multiply dominated from a position within each conjunct of the coordinate structure (McCawley 1982, Levine 1985, McCloskey 1986, Phillips 1996, Wilder 1999, Bacharach and Katzir 2006).

I argue in this squib that with respect to at least one language, Tagalog (Western Austronesian), the classic analysis of RNR as ATB rightward movement is correct. The argument is based on the celebrated extraction restriction—iconic of many Western Austronesian languages—in which only subjects, certain oblique arguments, and various types of adverbs may be targets for (\bar{A} -)movement in *wh*-question formation, relativization, topicalization, and so on. In addition to limiting movement in these environments, this restriction seems to limit the range of possible RNR constructions in Tagalog, a fact that provides compelling evidence for a movement analysis of RNR in this language.

2 The Subject Restriction

Like many Philippine languages, Tagalog observes a ‘subject-only’ restriction on constructions involving (\bar{A} -)movement. For present purposes, it will suffice to define the subject as the argument that controls the particular choice of voice morphology (i.e., agreement) on the verb and that is inflected with the case marker *ang* (or *si*, with proper names) (see Keenan 1976 and Schachter 1976 for further discussion). In (3a), for example, the subject is *si Juan* ‘Juan’, while in (3b) the subject is *ang aklat* ‘the book’. Observe the change in agreement morphology on the verb, corresponding to the different choice of subject.²

- (3) a. *Humahawak ng aklat si Juan.*
 AGR.ASP.hold NS book s Juan
 ‘Juan is holding a book.’
 b. *Hinahawak-an ni Juan ang aklat.*
 ASP.hold-AGR NS Juan s book
 ‘Juan is holding the book.’

In constructions involving extraction (e.g., *wh*-movement, relativization), movement of nonoblique and nonsubject arguments is systematically prohibited. This is illustrated by the contrast between the (a) and (b) examples in (4) (from Rackowski 2002) and (5). The subject in (4b) is *ang kotse mo* ‘your car’, and the subject in (5b) is *si Pedro*.

² Tagalog is a predicate-initial language that exhibits a fair amount of word order freedom with respect to arguments following the predicate.

The following abbreviations have been used to gloss the examples: ACT = active, AGR = agreement, ASP = aspect, COMP = complementizer, L = linker, NEG = negative, NS = nonsubject case, OBL = oblique case, PERF = perfective, PL = plural, PSV = passive, s = subject case.

The ungrammaticality of both (4b) and (5b) is the result of extracting the nonsubject argument of the clause.³

- (4) a. Sino ang n-agnakaw ng kotse mo?
 who S ACT.PERF-steal NS car you(NS)
 'Who stole your car?'
 b. *Sino ang *ninakaw* ang kotse mo?
 who S PERF.steal.AGR S car you(NS)
 'Who stole your car?'
- (5) a. Ano ang *ninakaw* ni Pedro?
 what S PERF.steal.AGR NS Pedro
 'What was stolen by Pedro?'
 b. *Ano ang n-agnakaw si Pedro?
 what S AGR.PERF-steal S Pedro
 'What was stolen by Pedro?'

In addition to subjects, oblique arguments and various types of adverbs can be extracted regardless of the agreement morphology on the verb (i.e., whether or not they are subjects). (Examples (6a–b) and (7a) are from Rackowski and Richards 2005. Example (7b) is from Schachter and Otnes 1972:515.)

- (6) a. Sa ali-ng kalabaw i-binigay ng lalaki ang
 OBL which-L water.buffalo AGR-ASP.give NS man S
bulaklak?
 flower
 'To which water buffalo did the man give the flower?'
 b. Sa ali-ng kalabaw n-agbigay ang lalaki ng
 OBL which-L water.buffalo AGR-ASP-give S man NS
bulaklak?
 flower
- (7) a. Kailan n-agbigay ang lalaki ng bulaklak sa
 when AGR-ASP-give S man NS flower OBL
 kalabaw?
 water.buffalo
 'When did the man give a flower to the water buffalo?'
 b. Gaano-ng kabilis tumakbo si Juan?
 how-L fast AGR-ASP.run S Juan
 'How fast does Juan run?'

³ In Tagalog, as well as many other Austronesian languages, *wh*-questions involving a questioned nonoblique argument take the form of a pseudocleft, as schematized in (i).

(i) [_{PreDP} Sino]_{DP} ang [_{NP} e [_{CP} [_{Op}_i [nagnakaw *t*_i ng kotse mo]]]]?
 who S stole NS car you(NS)

Thus, in a basic *wh*-question like (4a), the phrase *ang nagnakaw ng kotse mo* is a headless relative clause (see (i)) that is the subject of the predicate *sino*. A more literal translation for (4a) would therefore be '(The one) who stole the car is who?'

Various proposals have been put forward to account for this restriction. For instance, Chung (1998) attributes the failure of nonsubject arguments to extract to the Empty Category Principle. Pearson (2001, 2005), on the other hand, argues that subjects in Tagalog occupy an \bar{A} -position and that extraction of a nonsubject argument therefore gives rise to a Relativized Minimality violation (Rizzi 1990). Finally, Rackowski and Richards (2005) attempt to account for the restriction in terms of (a version of) Chomsky's (2000) Phase Impenetrability Condition. For present purposes, it will not be necessary to choose among these alternatives.

To the paradigm of extraction possibilities noted above, we can add the observation that preposition stranding is strictly prohibited in Tagalog, as these examples show:

- (8) a. *Para kanino bumili si Pedro ng pagkain?*
 for who(OBL) AGR.ASP.buy S Pedro NS food
 'For who(m) did Pedro buy food?'
 b. **Kanino bumili si Pedro ng pagkain*
 who(OBL) AGR.ASP.buy S Pedro NS food
 [*para* ____]?
 for
 'For who(m) did Pedro buy food?'

Significantly, it is not the case that *wh*-phrases like *kanino* 'who' resist extraction in general. As the source argument of *bumili* 'buy', for instance, *kanino* may be extracted. In this case, however, there is no preposition to be stranded. Consider (9).

- (9) *Kanino bumili si Pedro ng pagkain ____?*
 who(OBL) AGR.ASP.buy S Pedro NS food
 'Who did Pedro buy food from?'

With this paradigm in mind, illustrating the "subject-only" restriction on movement, we can now turn to RNR constructions.

3 Right Node Raising

In Tagalog, it is possible for an argument that belongs to more than one conjunct to surface at the far right periphery of a coordinate structure. I claim that such constructions instantiate the Tagalog equivalent of the RNR construction common in English (see (1)) and attested in other languages as well. The examples given in (10) involve RNR with a subject pivot ((10b) is from Bloomfield 1917:40). In the examples in (11), the RNR pivot is an oblique PP argument.⁴

⁴ Negation is used in one or both conjuncts in (10) so as to ensure that the examples involve sentential (TP) coordination rather than, say, VP-coordination. Negation in Tagalog is situated somewhere below C (as shown by the example in (i)), but higher than the verb, which I assume raises to T. For present

- (10) a. [Hindi n-agluto' ng bigas ____] at [hindi
not AGR.ASP-cook NS rice and not
kumain ng isda ____] *ang pareho-ng babae*.
AGR.ASP.ate NS fish s same-L woman
'The same woman did not cook rice and did not eat
fish.'
- b. [Kung hindi maingat ____] at [wala'-ng
if not careful and not.have-L
hinala ____] *ang mangkukulam . . .*
suspicion s sorcerer
'If the sorcerer is not careful and has no suspicion . . .'
- (11) a. [Linuto' ni Pedro ang pagkain ____] at
ASP.buy.AGR NS Pedro s food and
[hinugas-an ni Juan ang mga pinggan ____] *para*
ASP.wash-AGR NS Juan s PL dish for
kay Maria.
OBL Maria
'Pedro bought the food, and Juan washed the dishes,
for Maria.'
- b. [N-agbigay ng regalo si Maria ____] at
AGR.ASP-give NS gift s Maria and
[n-agpadala ng liham ang mga bata ____]
AGR.ASP-send NS letter s PL children
kay Juan.
OBL Juan
'Maria gave a gift, and the children sent a letter,
to Juan.'

Crucially, other arguments—namely, nonoblique internal arguments—cannot be RNR pivots, as the following examples demonstrate. (Example (12b) is from Kroeger 1993:35.)

- (12) a. *[N-agsara si Juan ____] at [n-agbukas
AGR.ASP-close s Juan and AGR.ASP-open
si Pedro ____] *ng pintuan*.
s Pedro NS door
'Juan closed, and Pedro opened, a door (= the same
door).'

purposes, it is sufficient to assume that Negation is its own projection, NegP, which lies between CP and TP, as schematized in (ii).

- (i) Sinabi ko-ng hindi ako nag-tagumpay.
PSV.PERF.say I(NS)-COMP NEG I(S) ACT.PERF-succeed
'I said that I didn't succeed.'
- (ii) [CP C [NegP Neg [TP T + V

- b. *[N-anghuhuli ang ama ko _____] at
 AGR.ASP-catch S father my(NS) and
 [n-agtitinda ang ina ko _____] ng isda.
 AGR.ASP-sell S mother my(NS) NS fish
 ‘My father catches, and my mother sells, fish.’
- c. *[Ni-luto’ ang pagkain _____] at [hinugas-an
 AGR.ASP-COOK S food and ASP.wash-AGR
 ang mga pinggan _____] ni Josie.
 S PL dish NS Josie
 ‘Josie cooked the food and washed the dishes.’

Finally, preposition stranding is also prohibited in RNR constructions.

- (13) *[Linuto’ ni Pedro ang pagkain [para _____]] at
 ASP.COOK.AGR NS Pedro S food for and
 [hinugas-an ni Juan ang mga pinggan
 ASP.wash-AGR NS Juan S PL dish
 [para _____]] kay Maria.
 for OBL Maria
 ‘Pedro cooked food for, and Juan washed dishes for,
 Maria.’

Overall, then, RNR constructions in Tagalog seem to have the same basic profile as other constructions in the language that involve extraction. Exactly those arguments that may be targeted in *wh*-question formation, for instance, may be RNR pivots. Additionally, just those elements that cannot be targeted for movement in *wh*-questions cannot be RNR pivots. These observations strongly support an extraction analysis of RNR constructions in Tagalog.

4 An Alternative Interpretation

An alternative interpretation of these facts would be to claim that the restriction that only subjects can be extracted, in addition to the ban on preposition stranding, holds of empty categories in Tagalog more generally, and not just of empty categories derived by movement. If so, the facts discussed above would not necessarily be telling us that movement is involved in the derivation of RNR constructions (as opposed to some other mechanism that derives empty categories in the syntax).

This alternative interpretation of the data is untenable, however. First, certain types of elements that are impossible as RNR pivots can be null (i.e., realized as an empty category of some sort) in non-RNR environments. For instance, if an argument contained in a conjunct has a coreferential antecedent in a preceding conjunct, it can be null. An example involving a subject is given in (14a). Let us refer to this process descriptively as *forward argument drop* (FAD). FAD appears to be possible not only for subjects (as in (14a)), but also—crucially—for some of the types of arguments that cannot be RNR pivots. In (14b), for instance, the nonsubject external argument (i.e., the agent) of the clause in the second conjunct has been dropped (cf. (12c)). In

(14c), the nonsubject internal argument (i.e., the theme) has been dropped from the second conjunct under identity with an identical argument in the first conjunct (cf. (12b)).

- (14) a. N-agluto' ng pagkain *si Maria*, at saka
 AGR.ASP-cook NS food s Maria and then
 n-aghugas ng mga pinggan *pro*.
 AGR.ASP-wash NS PL dish (Maria)
 'Maria cooked food, and then (she) washed dishes.'
- b. *Linuto'* ni Pedro ang pagkain at saka
 ASP.COOK.AGR NS Pedro s food and then
 hinugas-an *pro* ang mga pinggan.
 ASP.WASH-AGR (Pedro) s PL dish
 'Pedro cooked the food, and then (he) washed the dishes.'
- c. N-anghuhuli si Maria *ng daga* at n-agbibili
 AGR.ASP-catch s Maria NS rat and AGR.ASP-sell
pro si Marco.
 (rats) s Marco
 'Maria catches rats, and Marco sells (them).'

Additionally, FAD is apparently impossible for oblique arguments. Consider (15a–b). In both examples, the oblique argument (italicized) cannot be construed as an argument of the verb in the second conjunct.⁵ Compare these examples with (11a–b), where the same oblique argument occurring at the far right periphery of the coordinate structure is obligatorily construed as belonging to both conjuncts of the coordinate structure.

- (15) a. *Linuto'* ni Pedro ang pagkain para *kay Maria*
 ASP.COOK.AGR NS Pedro s food for OBL Maria
 at hinugas-an niya ang mga pinggan.
 and ASP.WASH-AGR he(NS) s PL dish
 'Pedro bought food for Maria and washed the dishes.'
 ≠ 'Pedro bought food for Maria, and he washed dishes for her.'
- b. ?N-agbigay ng regalo si Maria *kay Juan* at
 AGR.ASP-give NS present s Maria OBL Juan and
 n-agpadala ng liham ang mga bata'.
 AGR.ASP-send NS letter s PL child
 'Maria gave a present to Juan, and the children sent a letter (somewhere).'
 ≠ 'Maria gave a present to Juan, and the children sent a letter (to him).'

⁵ The translation of (15b) shows that while it is marginally possible to omit the oblique argument from the second conjunct, the interpretation of this argument cannot be supplied by the antecedent oblique argument from the first conjunct.

To summarize, arguments that cannot occur as RNR pivots can be null in FAD contexts. Furthermore, certain types of arguments (namely, obliques) that can function as RNR pivots cannot be null in FAD contexts. Overall, then, it seems quite unlikely that the extraction restriction on nonsubjects can be generalized as a restriction on all empty categories. This supports the original conclusion concerning RNR. The fact that RNR and constructions involving movement (e.g., *wh*-questions) are subject to the same restriction is attributed to the fact that the same mechanism—movement—is involved.

5 Conclusion

It has been a straightforward task to demonstrate that the restrictions on possible pivots for RNR constructions in Tagalog parallel the restrictions on possible (\bar{A} -)movement targets in other constructions involving extraction.

Drawing larger crosslinguistic conclusions about this is more challenging, however. On the one hand, we might conclude that RNR constructions are derived by extraction in Tagalog, but by some other mechanism (e.g., deletion) in languages like English, where whatever process derives the construction in these languages seems to be impervious to extraction restrictions. On the other hand, it has been argued that, even in English, RNR is derived by ATB rightward movement (Postal 1998, Sabbagh 2007). If the latter conclusion is correct, we are left with the more difficult question, though perhaps the more interesting one, of understanding what makes Tagalog unique in adhering to restrictions on movement even in RNR contexts.

One direction to take here would be to ask whether the types of movement that derive RNR in the two languages differ in some way. It is often assumed that in English, RNR constructions involve rightward movement that applies across the board. Moreover, this process is typically assumed to be the same type of movement involved in so-called heavy NP shift constructions like (16).

(16) Oscar gave _____ to Ruby *a dusty old box*.

The properties of this operation are notoriously ill understood. Some authors have claimed it to be a (postsyntactic) “stylistic” rule, while others assume it to be in the category of better-understood \bar{A} -constructions. Importantly, there is little evidence as yet to show that RNR constructions are derived by a movement rule of exactly the same type, a fact that gives us room to work in uncovering the different properties of the movements involved, relating to their (in)ability to evade the restrictions that characterize other types of movement.

Another direction to take would be to examine the nature of the Tagalog subject-only restriction in order to better understand its inviolability in RNR contexts. The extant analyses of this restriction (see references above) all attempt, for good reason, to relate it to familiar types of constraints on movement—namely, the Empty Category Principle, Relativized Minimality, and the Phase Impenetrability Condi-

tion. By relating the subject-only restriction to these familiar types of constraints, however, we are possibly missing something, as it is constraints of exactly this type that can apparently be violated by RNR in languages such as English.

References

- Abbott, Barbara. 1976. Right node raising as a test for constituenthood. *Linguistic Inquiry* 7:639–642.
- Bacharach, Asaf, and Roni Katzir. 2006. Right node raising and delayed Spell-Out. Ms., MIT, Cambridge, MA.
- Bloomfield, Leonard. 1917. Tagalog text with grammatical analysis. Urbana: University of Illinois.
- Chomsky, Noam, 2000. Minimalist inquiries. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by Roger Martin, David Michaels, and Juan Uriagereka, 89–155. Cambridge, MA: MIT Press.
- Chung, Sandra. 1998. *The design of agreement: Evidence from Chamorro*. Chicago: University of Chicago Press.
- Grosu, Alexander. 1976. A note on subject raising to object and right node raising. *Linguistic Inquiry* 7:642–645.
- Ha, Seungwan. To appear. Multiple dominance CAN'T, but ellipsis CAN account for right node raising. *Chicago Linguistic Society (CLS) 42*. Chicago: University of Chicago, Chicago Linguistic Society.
- Hartmann, Katharina. 2000. *Right node raising and gapping: Interface conditions on prosodic deletion*. Amsterdam: John Benjamins.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Keenan, Edward L. 1976. Remarkable subjects in Malagasy. In *Subject and topic*, ed. by Charles N. Li, 247–301. New York: Academic Press.
- Kroeger, Paul. 1993. *Phrase structure and grammatical relations in Tagalog*. Stanford, CA: CSLI Publications.
- Levine, Robert D. 1985. Right node (non-)raising. *Linguistic Inquiry* 16:492–497.
- McCawley, James D. 1982. Parentheticals and discontinuous constituent structure. *Linguistic Inquiry* 13:91–106.
- McCloskey, James. 1986. Right node raising and preposition stranding. *Linguistic Inquiry* 17:183–186.
- Pearson, Matthew. 2001. The clause structure of Malagasy: A minimalist approach. Doctoral dissertation, UCLA, Los Angeles, CA.
- Pearson, Matthew. 2005. The Malagasy subject/topic as an A'-element. *Natural Language and Linguistic Theory* 23:381–457.
- Phillips, Colin. 1996. Order and structure. Doctoral dissertation, MIT, Cambridge, MA.
- Postal, Paul M. 1974. *On raising*. Cambridge, MA: MIT Press.

- Postal, Paul M. 1998. *Three investigations of extraction*. Cambridge, MA: MIT Press.
- Rackowski, Andrea. 2002. The structure of Tagalog: Specificity, voice, and the distribution of arguments. Doctoral dissertation, MIT, Cambridge, MA.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36:565–599.
- Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, MA: MIT Press.
- Ross, John R. 1967. Constraints on variables in syntax. Doctoral dissertation, MIT, Cambridge, MA. Published as *Infinite Syntax!*. Norwood, NJ: Ablex (1986).
- Sabbagh, Joseph. 2007. Ordering and linearizing rightward movement. *Natural Language and Linguistic Theory* 25:349–401.
- Schachter, Paul. 1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above? In *Subject and topic*, ed. by Charles N. Li, 491–518. New York: Academic Press.
- Schachter, Paul, and Fe T. Otones. 1972. *Tagalog reference grammar*. Berkeley: University of California Press.
- Wexler, Kenneth, and Peter W. Culicover. 1980. *Formal principles of language acquisition*. Cambridge, MA: MIT Press.
- Wilder, Chris. 1997. Some properties of ellipsis in coordination. In *Studies on Universal Grammar and typological variation*, ed. by Artemis Alexiadou and T. Alan Hall, 59–107. Amsterdam: John Benjamins.
- Wilder, Chris. 1999. Right node raising and the LCA. In *WCCFL 18: Proceedings of the 18th West Coast Conference on Formal Linguistics*, ed. by Sonya Bird, Andrew Carnie, Jason D. Haugen, and Peter Norquest, 586–598. Somerville, MA: Cascadilla Press.

NOR: NEITHER DISJUNCTION NOR
PARADOX

Susi Wurmbrand
University of Connecticut

1 Introduction

Bivalent coordination constructions involving a negative first conjunct and a second conjunct introduced by *nor* such as those in (1a) (henceforth NEG-*nor* constructions) can be described as disjunctions (1b) or as conjunctions (1c), owing to the logical equivalence of $\neg [p \vee q]$ and $[\neg p] \& [\neg q]$.

- (1) a. Leo ate neither the rice nor the carrots.
Leo didn't eat the rice nor did he eat the carrots.
Leo has never eaten rice nor has he eaten carrots.

I would like to thank Yael Sharvit and Jonathan Bobaljik for extensive discussions of this squib. I am also grateful for the feedback received from Jon Gajewski, Winnie Lechner, Uli Sauerland, and two reviewers. All errors are mine.