# **Determining the scope of Tagalog clitic adverbs**

Henrison HSIEH<sup>1</sup> and Michael Yoshitaka ERLEWINE<sup>2</sup> Linguistic Society of America, January 2024

## 1 Introduction

Austronesian languages of the Philippines, including Tagalog, are well-known for their inventory of second-position clitics.

- (1) a. Umi~inom ka na rin daw ng alak.
   AV.IPFV~drink 2sg.NOM already also EVID GEN alcohol
   'You're also drinking alcohol now (somebody said).'
  - b. Hindi **ka na rin daw** umi~inom ng alak. NEG 2SG.NOM already also EVID AV.IPFV~drink GEN alcohol 'You're also no longer drinking alcohol (somebody said).'

As seen in (1), there are pronominal clitics and adverbial clitics.

► The order of multiple clitics within a cluster is (mostly) fixed, based on their type (pronoun vs adverbial) and phonological shape.

### (2) The order of Tagalog second-position clitics:

 $1\sigma$  pronouns <  $1\sigma$  adverbs <  $2+\sigma$  adverbs <  $2\sigma$  pronouns

See e.g. Schachter 1973 and Schachter and Otanes 1972: pp. 411–414.

Prior work on Tagalog second-position clitics (e.g. Richards, 2003; Anderson, 2009; Kaufman, 2010) propose that their *surface* word order is determined <u>postsyntactically</u>, both for second-position placement and cluster-internally (*pace* Tanenbaum, 2020a,b).

- Richards (2003) and Erlewine and Levin (2021) argue that clitic pronouns originate in argument positions and move to (or Agree with) a higher position outside of the predicate.
- But previous work has not determined the exact *logical* positions of clitic adverbs.

**Today:** We report on the semantic scope of clitic adverbs in Tagalog, based primarily on the native speaker intuitions of the first author.

- No prior work has conducted a systematic investigation of clitic adverb scope.
- The clitic adverbs show heterogeneous scope behavior despite uniform surface syntax.
- The semantic scope of adverbs tells us about their <u>logical positions at LF</u>, and therefore clarifies the exact extent and shape of their postsyntactic displacement.

<sup>&</sup>lt;sup>1</sup> The Hong Kong Polytechnic University, henrison.hsieh@polyu.edu.hk

<sup>&</sup>lt;sup>2</sup> University of Helsinki / National University of Singapore, mitcho@nus.edu.sg

## 2 Clitic adverb inventory

We first introduce the inventory of second-position clitics in Tagalog — with *approximate* glosses — building on Schachter and Otanes 1972: §6.2 and Kaufman 2009: 9:

(3) a.	speech act	/clause type:	d.		temporal:		
	pò/hò	politeness		$\bigcirc$	па	'already'	
	ba	question marker		$\bigcirc$	ра	'still'	
	sána	hortative/counterfactual	e.		focus:		
b.	discourse	coherence:			man	'even'	
	naman	switch topic		$\bigcirc$	din	'also'	
	kasi	'because'		$\bigcirc$	lang/lamang	'only'	
	tuloy	'as a result'	C	0	. (1		
	ngà	"emphasis"	f.		other: talaga	'really/very'	
с.	speaker at	titude/status:			múna	'first'?	
C	) talaga	'really/certainly'					
	daw	reported speech					
	kayà	'hopefully'					
	pala	surprise					
	yátà	'perhaps'					

- We expect the meanings of the "speech act/clause type" (3a) and "discourse coherence" (3b) type and probably most of the "speaker attitude" (3c) type to be high, taking scope over the entire proposition expressed by the clause.
- In addition, the semantics of some clitic adverbs are themselves not yet clear (e.g. *ngà*, *múna*), so we set them aside.
- ► We therefore take a closer look at the scope of adverbs with  $\bigcirc$ , whose semantic contributions are relatively clear and which may potentially take scope in different ways. We concentrate on instances where we have the clearest evidence for relative scope relations.

## 3 Scope with respect to negation

Here we consider the scope of temporal and focus particles with respect to negation.<sup>3</sup>

### 3.1 *na | pa*

We begin with *na* and *pa*, which reflect well studied temporal particles in many other languages. *Pa* has semantics similar to German *noch* and English *still*; see e.g. Löbner 1989; Krifka 2000.

<sup>&</sup>lt;sup>3</sup> We do not consider the scope of *man* 'even' with respect to negation, as such combinations yield "scale reversal" behavior, which can be analyzed as involving scope-taking (e.g. Karttunen and Peters, 1979) or with a cross-linguistically common lexical ambiguity (see e.g. Rooth, 1985; von Stechow, 1991).

(4) pa(p)

- a. at-issue: *p* true
- b. presupposes: *p* true at a (recent) prior time
- (5) a. Masaya **pa** si Gina. happy still NOM Gina 'Gina is still happy.'

b. **Hindi pa** masaya si Gina. NEG still happy NOM Gina 'Gina is still not happy.' (pa > not, \*not > pa)

Let p ='Gina happy'

 $\bigcirc$  "*pa* > not": predicts *p* false now and false at a prior time

 $\times$  "not > *pa*": predicts *p* false now, but was true recently (presupposition of *pa*(*p*) projects)

*Na* expresses a "change of state" meaning akin to that of German *schon*, Mandarin sentence-final *le*, and certain uses of English *already*; see e.g. Löbner 1989; Krifka 2000; Soh and Gao 2008.

(6) na(p)

- a. at-issue: *p* true
- b. presupposes: *p* false at a (recent) prior time

(7)	Hindi	ka	na	umi~inom	ng	alak.	simplified from (1b)
	NEG	2sg.nom	already	AV.IPFV~drink	GEN	alcohol	
	'You're no longer drinking alcohol now.'						( <i>na</i> > not, *not > <i>na</i> )

#### Let p = 'you're drinking alcohol'

- $\bigcirc$  "*na* > not": predicts *p* false now, but *p* true (¬*p* false) at a prior time
- $\times$  <u>"not > na"</u>: predicts p false now and was also false before (presupposition of na(p) projects)
- ► As noted by Richards (2003: 243–244), *na* 'already' and *pa* 'still' must scope over negation.

#### 3.2 *din*

*Din* (postvocalically: *rin*) is an additive focus particle ('also'), presupposing the truth of a discourse-salient alternative proposition.

- (8) a. ✓ Hindi b<um>ili si Juan ng [isda]<sub>F</sub>, at hindi rin siya b<um>ili ng itlog.
   NEG <AV>buy NOM Juan GEN fish and NEG also 3sG.NOM <AV>buy GEN egg
   'Juan didn't buy [fish]<sub>F</sub>, and he also didn't buy [eggs]<sub>F</sub>.'
  - b. #B<um>ili si Juan ng [isda]<sub>F</sub>, pero hindi rin siya b<um>ili ng itlog.
     <av>buy NOM Juan GEN fish but NEG also 3sg.NOM <av>buy GEN egg
     Intended: 'Juan bought [fish]<sub>F</sub>, but he did not also buy [eggs]<sub>F</sub>.' (\*not > also)
  - ► *din* must take scope over negation.

#### 3.3 lang

*Lang* (and its variant *lamang*) is an exclusive focus particle ('only'). Although it often associates with a fronted focus, it can also associate with a postverbal argument focus (Richards, 2019).

(9)	a.	Umi~inom <b>lang</b> si Juan ng [kape] <sub>F</sub> .	
		av.ipfv~drink only Nom Juan Gen coffee	
		'Juan only drinks [coffee] <sub>F</sub> .' (He doesn't drink anything else.)	
	b.	<b>Hindi lang</b> umi~inom si Juan ng [kape] <sub>F</sub> . NEG only AV.IPFV~drink NOM Juan GEN coffee	
	$\checkmark$	'Juan doesn't only drink [coffee] <sub>F</sub> .' (He drinks other things too.)	(not > only)
	V	' 'Juan only doesn't drink [coffee] <sub>F</sub> .' (He drinks everything else.)	(only > not)

#### 3.4 Summary

The evidence above suggests that not all clitic adverbs behave the same in their scope with respect to negation:

- *na* 'already,' *pa* 'still,' and *din* 'also' strictly scope over negation;
- *lang* 'only' can take scope above or below negation.

## 4 Scope in adverb clusters

Next we consider the relative scope of two clitic adverbs in the same cluster.

#### 4.1 *na/pa* × *lang* 'only'

Word order: na lang, \*lang na

- (10) [English]<sub>F</sub> na lang ang alam niya.
   English already only NOM know Зъс.GEN
   'S/he only knows English now.'4
- (11) a. <u>Context (lost all but one)</u>: This person used to speak several languages, but got into an accident and suffered a brain injury. Because of this, they've lost the ability speak all those languages except for English. (Predicts "*na* > only" true.) ✓ (10)
  - b. <u>Context (acquired only one)</u>: A child is growing up in a multilingual environment. After some time, they're able to speak English, but not any of the other languages yet. (Predicts "only > *na*" true.) # (10)

<sup>&</sup>lt;sup>4</sup> The argument 'English' is clefted here. The judgments in (11) are the same with 'English' being the predicate itself:
(i) Nag-i~English na lang siya.

Av-пргv~English already only 3sg.nom ≈ 'S/he now only [Englishes]<sub>F</sub>.'

#### Word order: pa lang, \*lang pa

- (12) [Si John]<sub>F</sub> pa lang ang nasa bahay.
   NOM John still only NOM PRED.OBL house
   'Still only John is at home.'
- (13) a. <u>Context (still only one)</u>: After the meeting, everyone goes back to their respective homes. Thirty minutes after the meeting, only John has arrived at home. Now, one hour after the meeting, John is still the only one at home. The others are still on their way. (Predicts "*pa* > only" true.) ✓ (12)
  - b. <u>Context (one still at home)</u>: Friends have agreed to meet at the mall at 1pm. At 12:30pm, everyone was at their respective homes. Now at 12:45, there is just one person who still hasn't left their home: John. (Predicts "only > *pa*" true.) # (12)
  - ► Only *na/pa* > *lang* scope is possible!

#### 4.2 *din* 'also' × *lang* 'only'

Word order: din lang, lang din orders both ok, with some preferences (not yet understood)

- (14) Nag-i~English {lang din / ?din lang} si Mary.
   AV-IPFV~English only also also only NOM Mary
   '[Mary]<sub>F2</sub> also<sub>F2</sub> speaks only<sub>F1</sub> [English]<sub>F1</sub>.'
- (15) a. Context 1: John speaks  $only_{F1}$  [English]<sub>F1</sub>. [Mary]<sub>F2</sub> also<sub>F2</sub> speaks  $only_{F1}$  [English]<sub>F1</sub>. (Predicts "also > only" felicitous.)  $\checkmark$  (14)
  - b. <u>Context 2</u>: Everyone here speaks Tagalog. Only<sub>F1</sub> [Mary]<sub>F1</sub> also<sub>F2</sub> speaks [English]<sub>F2</sub>. (Predicts "only > also" felicitous.) #(14)
  - ▶ Only *din* 'also' > *lang* 'only' scope is possible, regardless of word order.<sup>5</sup>

#### 4.3 *nalpa* × *talaga* 'really'

*Tagalga* invites the translation 'really,' but has two distinct uses: as an epistemic adverb ('cer-tainly/actually') and as a degree intensifier ('very').

▶ The two *talaga* take different scope with respect to *na* and *pa*.

- (ii) a. Si Mary **din** ay nag-i~English **lang**. NOM Mary also TOP AV-IPFV~English only 'Mary also speaks only English.' (<sup>\C1</sup>, #C2)
- b. Si Mary **lang** ang nag-i~English **din**. Nom Mary only Nom Av-IPFv~English also 'Only Mary also speaks English.' (#C1, <sup>✓</sup>C2)

<sup>&</sup>lt;sup>5</sup> The two intended readings can be expressed more clearly by fronting the nominal argument, creating two separate domains for clitic placement. The fronting in (iia) is topicalization, as opposed to clefting in (iib).

#### Word order: *na talaga*, *\*talaga na*

- (16) Buntis na talaga si Susan.
   pregnant already really NOM Susan
   'Susan is really pregnant now.'<sup>6</sup>
- (17) a. Context (confirming pregnancy): Susan thought she was pregnant based on an athome test, but she hasn't looked or felt different at all, so she went to a doctor to check. The doctor confirmed that Susan indeed is now pregnant. ✓ (16)
  - b. Context (became very pregnant): The last time I saw Susan, she told me she was pregnant but she wasn't showing yet. Now I saw her at 8 months, and she's *really* pregnant. (Predicts  $na > talaga_{DEG}$  true.)  $\checkmark$  (16)

Although we constructed (17a) so that  $talaga_{EPIST} > na$  is true ( $\approx$  'It's certain that she became pregnant'), the context may also support a  $na > talaga_{EPIST}$  reading ( $\approx$  'It's now certain (and wasn't certain before) that she is pregnant.') Here's an example to specifically test this:

- (18) Si Rob **na talaga** ang mamamatay-tao. NOM Rob already really NOM killer-person literally: 'The killer is Rob' + *na* + *talaga*
- (19) <u>Context (became certain)</u>: This town has had a serial killer, and Rob is a prime suspect. Now, new DNA evidence came back from the lab which shows that it indeed was Rob.
   (Predicts *na* > *talaga*<sub>EPIST</sub> true; *talaga*<sub>EPIST</sub> > *na* false.<sup>7</sup>) # (18)
  - The infelicity of (18) in (19) shows that  $talaga_{EPIST}$  cannot take scope under *na*.<sup>8</sup>

#### Word order: pa talaga, \*talaga pa

- (20) Buntis **pa talaga** si Susan. pregnant still really NOM Susan 'Susan is really pregnant still.'
- (21) a. Context (confirmed still pregnant): Susan was pregnant and had an accident, and so was worried if there was a miscarriage. An at-home test confirmed she's still pregnant, but she wanted to be sure so she went to a doctor. The doctor confirmed that she is still pregnant. (Predicts  $talaga_{EPIST} > pa$  true.)  $\checkmark$  (20)
  - b. <u>Context (still very pregnant)</u>: The last time I saw Susan, she was 8 months pregnant and showing a lot. Now she's at 9 months and hasn't given birth yet, so she's still very pregnant. (Predicts  $pa > talaga_{DEG}$  true.)  $\checkmark$  (20)
  - ► Like *na*, *pa* naturally takes scope under *talaga*<sub>EPIST</sub> but above *talaga*<sub>DEG</sub>.<sup>9</sup>

 <sup>&</sup>lt;sup>6</sup> *Talaga* also has a use as a predicate, embedding a clause with a linker (*ng*), which only has the epistemic use:
 (iii) Talaga-ng buntis na si Susan

certain-LK pregnant already NOM Susan 'It's certain that she is now pregnant.'

<sup>&</sup>lt;sup>7</sup> The latter would informally predict a meaning like 'It is certain that the killer is now Rob / Rob became the killer.'

<sup>&</sup>lt;sup>8</sup> We do not specifically test for a  $talaga_{DEG} > na$  interpretation, as it is unclear what this would mean.

<sup>&</sup>lt;sup>9</sup> Unlike with *na* which we tested in (18), it seems impossible to construct an example where *pa* > *talaga*<sub>EPIST</sub> would be

#### 4.4 Summary

From the interpretation of clitic adverbs in clusters, we learn:

- *na* 'already,' *pa* 'still,' *din* 'also' strictly scope over *lang* 'only';
- epistemic *talaga* scopes above *na/pa* but degree *talaga* scopes under *na/pa*.

In sum, we have learned that clitic adverbs exhibit <u>certain fixed scope effects</u> with respect to other clitic adverbs and with functional heads, reflected in (22):

(22)  $talaga_{EPIST} > na/pa/din^{10} > \{lang\} > negation > \{lang\} > talaga_{DEG}$ 

## 5 Proposal

- The scope of clitic adverbs reflects fixed structural positions for their LF interpretation.
- The clitic adverbs are then <u>linearized postsyntactically</u>, à la Richards 2003, Anderson 2009, Kaufman 2010.

Concretely, we assume the following functional sequence for the clausal spine in Tagalog, combining proposals in Kaufman 2005 and Hsieh 2020:

#### (23) Tagalog functional sequence, *without* heads for clitic adverbs:

 $C^{11} > (Top^*) > (Neg_1) > (Foc) > (Neg_2) > Asp > Voice \dots$ 

- Voice is the lower phase head (Hsieh to appear; = *v* in Erlewine and Levin 2021). The verb moves up to Asp, preceding postverbal arguments in the lower phase.
- Foc hosts non-DP focus; DP focus constructions are biclausal (see e.g. Hsieh, 2020). Top hosts *ay*-marked topics.
- Kaufman 2005 proposes two positions for negation, which we discuss below.

Each clitic adverb has a designated logical position in relation to the functional sequence.

#### (24) Logical positions of clitic adverbs:

(speech act modifiers) > (epistemic adverbs, e.g. TALAGA<sub>EPIST</sub>) > (NA/PA/DIN) > Top/Neg<sub>1</sub> > Foc(=LANG) > Neg<sub>2</sub> > (predicate-internal adverbs, e.g. TALAGA<sub>DEG</sub>)

- We assume these LF positions reflect their positions in narrow syntax.
- Formally, each adverb may correspond to its own functional head (à la Cinque, 1999, 2004) or adjoin but restricted to this order (cf Ernst, 2002).
- Note that we specifically identify *lang* 'only' with the head Foc.

true but  $talaga_{EPIST} > pa$  would be false, in order to test the availability of the wide scope pa. Again, it is unclear what a  $talaga_{DEG} > pa$  reading would be.

<sup>&</sup>lt;sup>10</sup> *Na* and *pa* never cooccur. It's possible that the scope of *na/pa* vs *din* have ordering restrictions on their scope too, but see Appendix A on the difficulty of determining this scope relationship.

<sup>&</sup>lt;sup>11</sup> Hsieh (2020) further splits the C into Force > Rel.

► Clitics are linearized to follow the first overt head or phrase in the clitic domain (TopP).<sup>12</sup>

Support for the proposal comes from data such as in (25):<sup>13</sup>

(25)	a.	<b>Hindi</b> NEG	{ <b>lang</b> } only	[dito] <sub>F</sub> {*] here	0.	ma-sarap ADJ-delicious	0 I	
				2 0	_	- 0	od everywhere else.) od elsewhere too.)	(*only > not) (not > only)
	b.	[Dito] <sub>F</sub> here	{ <b>lang</b> } only	e e	0,	ma-sarap ADJ-delicious	ang kape. Nом coffee	
				•		0	od everywhere else.) od elsewhere too.)	(only > not) (*not > only)

- At first glance, the pattern here seems simple: each allows only the surface scope reading.
- But it is not generally the case that both *hindi lang* and *lang hindi* orders are possible. Note that the position of *lang* is fixed in each example.
- ► The scope of 'only' reflects the position of Foc, reflected by the linear position of its specifier *dito* 'here,' with respect to negation. *Lang* is linearized postsyntactically.

(26) a. Structure for (25a):

	PF:	[Neg1P	Neg <sub>1</sub> hindi <b>=lang</b>	[FocP	[dito] <sub>F</sub> [dito] <sub>F</sub>	<b>Foc</b> only	[AspP	Asp ma-sarap
b.	Structure for (25b):							
	PF:	[FocP	[dito] <sub>F</sub> [dito] <sub>F</sub> <b>=lang</b>	Foc <sub>on</sub>	ly [Neg2]	P Neg <sub>2</sub> hindi	[AspP	Asp ma-sarap

Recall that there are also examples where 'only' and negation are scopally ambiguous. Such examples involve no focus-fronting, so the height of negation with respect to FocP is unclear.

(9b) Hindi lang umi~inom si Juan ng [kape]<sub>F</sub>.
 NEG only AV.IPFV~drink NOM Juan GEN coffee
 ✓ 'Juan doesn't only drink [coffee]<sub>F</sub>.' (He drinks other things too.) (not > only)
 ✓ 'Juan only doesn't drink [coffee]<sub>F</sub>.' (He drinks everything else.) (only > not)

(27) a. <u>Structure for "not > only" reading:</u>

 $[Neg1P Neg1 [FocP Foc_{only} [AspP Asp ...$ <u>PF:</u> hindi=lang umiinom ...b. <u>Structure for "only > not" reading:</u> $<math display="block">[FocP Foc_{only} [Neg2P Neg2 [AspP Asp ...$ <u>PF:</u> hindi=lang umiinom ...

These derivations illustrate that the linear placement of clitics is not limited to one particular structural "direction":

<sup>&</sup>lt;sup>12</sup> For clitic adverb placement, this may be after one prosodic word, *inside* the first phrase; see Kaufman 2005. We set such examples aside here.

<sup>&</sup>lt;sup>13</sup> We thank an anonymous AFLA reviewer for leading us to rethink our analysis of these facts.

- *lang* must raise across intervening material in (26a).
- *lang* must lower across intervening material in (27b).

### 6 Conclusion

- We have reaffirmed the idea that Tagalog second-position clitics are linearized postsyntactically (e.g. Richards, 2003; Anderson, 2009; Kaufman, 2010). But the exact extent and shape of resulting mismatches between linear order and logical position have been unclear.
- The scope of Tagalog clitic adverbs shows us that <u>each clitic adverb</u> is associated with its own designated structural position. Clitic adverbs are not all the same.
  - Many languages exhibit a (generally) fixed relative order for adverbs (see e.g. Cinque, 1999, 2004; Ernst, 2002). Interestingly, Tagalog shows us that <u>similar restrictions hold</u> of relative scope-taking, independent of their linear order.
- The scope of clitic adverbs shows that, descriptively, <u>both lowering and raising are</u> necessary for the placement of clitic adverbs with respect to their logical positions.

### References

- Anderson, Stephen R. 2009. Second-position clitics in Tagalog. In *The nature of the word: Studies in honor of Paul Kiparsky*, ed. Kristin Hanson and Sharon Inkelas, 549–566. MIT Press.
- Cinque, Guglielmo. 1999. Adverbs and functional heads. Oxford University Press.
- Cinque, Guglielmo. 2004. Issues in adverbial syntax. *Lingua* 114:683–710.
- Erlewine, Michael Yoshitaka, and Theodore Levin. 2021. Philippine clitic pronouns and the lower phase edge. *Linguistic Inquiry* 52:408–425.
- Ernst, Thomas. 2002. The syntax of adjuncts. Cambridge University Press.
- Hsieh, Henrison. 2020. Beyond nominative: A broader view of Ā-dependencies in Tagalog. Doctoral Dissertation, McGill University.
- Hsieh, Henrison. to appear. Locality in exceptional Tagalog A'-extraction. Linguistic Inquiry .
- Karttunen, Lauri, and Stanley Peters. 1979. Conventional implicature. In *Syntax and semantics, volume 11: Presupposition*, ed. Choon-Kyu Oh and David A. Dinneen, 1–56. Academic Press.
- Kaufman, Daniel. 2005. Aspects of pragmatic focus in Tagalog. In *The many faces of Austronesian voice systems: some new empirical studies*, ed. I Wayan Arka and Malcolm Ross, 175–196. Pacific Linguistics.
- Kaufman, Daniel. 2009. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35:1–49.
- Kaufman, Daniel. 2010. The morphosyntax of Tagalog clitics: A typologically driven approach. Doctoral Dissertation, Cornell University.
- Krifka, Manfred. 2000. Alternatives for aspectual particles: Semantics of *still* and *already*. In *Proceedings of BLS 26*, 401–412.
- Kripke, Saul. 1990/2009. Presupposition and anaphora: Remarks on the formulation of the projection problem. *Linguistic Inquiry* 40:367–386.

- Löbner, Sebastian. 1989. German schon erst noch: An integrated analysis. Linguistics and Philosophy 12:167–212.
- Richards, Norvin. 2003. Why there is an EPP. Gengo Kenkyu 123:221–256.
- Richards, Norvin. 2019. Association with lang 'only' in Tagalog. Presented at AFLA 26.
- Rooth, Mats. 1985. Association with focus. Doctoral Dissertation, University of Massachusetts, Amherst.
- Schachter, Paul. 1973. Constraints on clitic order in Tagalog. In Parangal kay Cecilio Lopez: Essays in honor of Cecilio Lopez on his seventy-fifth birthday, ed. Andrew B. Gonzalez, number 4 in Philippine Journal of Linguistics Special Monographs, 214–231. Quezon City: Linguistic Society of the Philippines.
- Schachter, Paul, and Fe T. Otanes. 1972. *Tagalog reference grammar*. University of California Press.
- Soh, Hooi Ling, and Meijia Gao. 2008. Mandarin sentential *le*, perfect and English *already*. In *Event structures in linguistic form and interpretation*, ed. Johannes Dölling, Tatjana Heyde-Zybatow, and Martin Schäfer, 447–473. Walter de Gruyter.
- von Stechow, Arnim. 1991. Focusing and backgrounding operators. In *Discourse particles: Descriptive and theoretical investigations on the logical, syntactic and pragmatic properties of discourse particles in German,* ed. Werner Abraham, 37–84. John Benjamins.
- Tanenbaum, Russell. 2020a. Order and chaos in the cluster: A typology of pronominal and nonpronominal clitics. Doctoral Dissertation, Stony Brook University.
- Tanenbaum, Russell. 2020b. Untangling the Tagalog clitic cluster. In *Proceedings of AFLA 25*, ed. Henry Yung-li Chang and Hui-Chuan J. Huang, 80–96. University of Hawai'i Press.

#### Handout with appendices: tinyurl.com/clitics-lsa

## **Appendix A: Challenges to scope determination**

For some particle combinations, the predicted semantics for the two scope possibilities are difficult to distinguish. One such combination is na 'already'  $\times$  din 'also.'

#### Word order: na rin, \*din na

We assume the semantics for *na* as in (6) and that *din* presupposes a true contextual alternative, as for English *also/too* (see Kripke, 1990/2009). Depending on assumptions regarding presupposition projection, we predict:

- (28) na(din(p))
  - a. at-issue: *p* true now
  - b. presupposes: there is a focus alternative p', p' true now;  $p(\wedge p')$  false at a prior time
- (29) din(na(p))
  - a. at-issue: *p* true now
  - b. presupposes: p false at a prior time; there is a focus alternative p', p' true now (and p' false at a prior time)

So there are three possible interpretations:

- (i) weak (indistinguishable between *na* > *din* / *din* > na)
- (ii) strong *na* > *din*
- (iii) strong *din > na*
- (i) is asymmetrically entailed by both (ii) and (iii). Now consider:
- (30) Tao **na rin** si Ariel. person already also NOM Ariel 'Ariel's a person now too.'
- (31) a. Context (no changed antecedent): The little mermaid Ariel's friends are all (natural-born) humans. A witch cast a spell, and now Ariel's a human too. (Predicts weak *na* > *din* / *din* > *na* (i) felicitous.) (30)
  - b. <u>Context (only alternative changes)</u>: Ariel is a (natural-born) human, but all her friends are mermaids. A witch cast a spell, and now one of her friends is a human too. (Predicts strong *na* > *din* (ii) felicitous.) #(30)
  - c. Context (with changed antecedent): Ariel is a mermaid and Barbara is a turtle. A witch cast a spell and made Barbara a human. Next, the witch cast a spell and made Ariel a human too. (Predicts weak (i) as well as strong din > na (iii) felicitous.)  $\checkmark$  (30)

We learn...

- the weak interpretation (i) is possible, from the felicity in (31a);
- the strong interpretation of *na* > *din* (ii) is not possible;
- these facts are compatible with only the weak interpretation (i) being available, and we then can't distinguish between *na* > *din* and *din* > *na* scope.

## **Appendix B: Clitics and ellipsis**

money to the church>.'

Richards (2003) investigates <u>"complement-of-negation ellipsis"</u> in Tagalog. He shows that pronominal clitics are deleted in complement-of-negation ellipsis, but *pa* is not:

(32) Hindi ko alam kung nag-bigay ako ng pera sa simbahan, pero NEG 1sG.NOM know if AV.PFV-give 1sG.NOM GEN money OBL church but s<in>abi ni Maria na hindi pa (\*ako).
<PFV>say[PV] GEN Maria LK NEG still 1sG.NOM
'I don't know if I gave money to the church, but Maria said that <I> still haven't <given</li>

Against this background, we note that *lang* 'only' with "Neg > only" scope interpretation must be deleted in complement-of-negation ellipsis (33), like pronominal clitics but unlike na/pa:<sup>14</sup>

(Richards, 2003: 237)

(33) Nagbi~bigay lang ako ng pera sa [simbahan]<sub>F</sub>, pero akala ni Maria na AV.IPFV~give only 1sg.NOM GEN money OBL church but think GEN Maria LK hindi (\*lang) (\*ako).
 NEG only 1sg.NOM

'I only give money to the [church]<sub>F</sub>, but Maria thinks that <I> don't <**only** give money to the church>.' (Maria thinks I give money to other places too.)

► Complement-of-negation ellipsis targets the complement of Neg (here, Neg<sub>1</sub>), which includes Foc (=*lang*) but not *pa* or other higher clitic adverbs.

<sup>&</sup>lt;sup>14</sup> The antecedent clause may be more natural with fronting of the oblique: [*Sa simbahan*]<sub>*F*</sub> lang ako nagbibigay ng pera..., but the ellipsis facts are the same.