On Tagalog Determiners*

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1. Introduction

Noun phrase arguments in Tagalog are preceded by particular grammatical function markers, such as ng, sa, and ang. Ang precedes topic nouns, ng precedes non-topic nouns and sa precedes dative nouns. These different positions are illustrated in example (1). Ang precedes the topic noun itlóg 'egg', ng precedes the non-topic noun manggagamot 'doctor' and sa precedes the dative noun sundalo 'soldier'.

(1) Iniabót ng manggagamot sa sundalo ang itlóg hand NG doctor SA soldier ANG egg 'The physician handed the egg to the soldier.'

And as we can see in the graph below, these grammatical function markers differ in front of proper nouns (Kroeger 1993). We will gloss them as ANG, NG, and DAT throughout.

	NOM/topic	GEN/non-topic	DAT
Common noun markers	ang	ng	sa
Personal name markers	si	ni	kay

These grammatical function markers are sometimes called case markers, determiners, or proclitics (Reid 2002)², however their precise function remains the subject of debate. The goal of this paper is to determine whether the *ang* and *ng* elements in Tagalog pattern syntactically and semantically with determiners.

We argue, following Himmelmann (To appear), that *ang* and *ng* are determiners. We set aside *sa*, which Himmelmann claims is a preposition. We begin with the general question of what determiners are. Gorrie, Kellner and Massam (2010) describe the three main functions of determiners: first to allow a nominal phrase to serve as an argument, second to encode definiteness and

Abbreviations used in this paper:

DAT dative INV inversion marker

LI linker PERF perfective

EXCL exclamative POLI politeness marker

NEG negation PL plural

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² Unless otherwise indicated, the data are from the first two authors. We have modified some of the glosses of the examples to make them consistent.

specificity, third to provide referentiality. The *ang* and *ng* elements can both function in this manner, therefore at first glance *ang* and *ng* elements both look like determiners. In this paper we will look more closely at the syntax and semantics of *ang* and *ng*. We begin by testing Bošković's (2008) NP/DP generalizations, then apply Gillon and Armoskaite's (2011) Diagnosis D, and finish with a discussion of the debate on *ang* versus *ng* in the literature on Tagalog.

2. Bošković's NP/DP generalizations applied to Tagalog

Bošković (2008) claims that there are two types of languages, NP languages and DP languages. NP languages are languages that do not have any structure capable of sustaining determiners. DP languages contain the structure required to hold determiners, however having this structure does not mean that determiners or other markers are necessarily present. In other words, there are DP languages without determiners. Therefore, if ang and ng are determiners, Tagalog must be a DP language; if they are not determiners, it is possible that Tagalog is an NP language. But it is important to remember that if ang and ng are not determiners, Tagalog could still be a DP language, having a null determiner or an empty DP structure present.

In Table 1, we have listed 13 of Bošković's (2008) diagnostic tests. According to these tests, Tagalog behaves like both an NP language and like a DP language. In the top half of Table 1, the tests that show Tagalog looks like an NP language are listed. In the bottom half of the table, the tests that show Tagalog looks like a DP language are listed. Of the 13 tests, 7 indicate that Tagalog is an NP language, but 6 suggest it is a DP language.

Table 1. Bošković's NP/DP generalizations applied to Tagalog

, , , , , , , , , , , , , , , , , , ,	NP	DP	Tagalog			
TAG LOOKS LIKE NP						
Clitic doubling	no	yes	no			
Inverse scope	no	yes	no			
Radical pro-drop	yes	no	yes			
Exhaustivity of possessives	no	yes	no			
Second position clitics	yes	no	yes			
Possessors and adjective variable order	yes	no	yes			
Majority reading of <i>most</i>	no	yes	no			

	NP	DP	Tagalog
TAG LOOKS LIKE DP			
Cross-clausal scrambling	yes	no	no
Left branch extraction	yes	no	no
Adjunct extraction	yes	no	no
Neg raising	no	yes	yes
Two lexical genitives	no	yes	yes
Obligatory # morphology ³	no	yes	yes

³ The data about number interpretation are not clear, so this claim is tentative.

In section 2.1, we discuss three of Bošković's (2008) tests that show that Tagalog looks like an NP language. In section 2.2, we discuss three of Bošković's tests that show that Tagalog looks like a DP language.

2.1 Tagalog is an NP Language

Below we illustrate the three tests that show that Tagalog patterns with NP languages.

2.1.1 Second Position Clitics

The first test is second position clitics. According to Bošković (2008), second position clitic systems are only found in NP languages. Like NP languages, Tagalog has second position clitics, such as *ko* in (2) (Schachter 1973).

(2) Ibinigay ko ang pera kay Charlie. give 1SG ANG money DAT Charlie 'I gave the money to Charlie.'

And as we see in Table 2, Tagalog patterns with NP languages according to this diagnostic.

Table 2: Second Position Clitics

TEST	NP	DP	TAGALOG
Second Position Clitics	yes	no	yes

2.1.2 Possessors and Adjective Variable Order

According to Bošković (2008), only NP languages have possessors and adjective variable order. In (3), we see that the possessor *ni Maria* and the adjective *na itim*, are in different orders in examples (3)a and (3)b, yet both examples are grammatical and yield the same reading.

- (3) a. ang lamesa ni Maria na itim ANG table NG Maria LI black 'Maria's black table'
 - b. ang lamesa na itim ni Maria ANG table LI black NG Maria

As summarized in Table 3, Tagalog again patterns with NP languages.

Table 3: Possessors and Adjective Variable Order

TEST	NP	DP	TAGALOG
Possessors and Adjective Variable Order	yes	no	yes

2.1.3 Clitic Doubling

Tagalog does not allow clitic doubling, which according Bošković (2008), only occurs in DP languages. Example (4) illustrates basic word order with a proper

name *si Maria*. In (4), *si Maria* has been replaced by the clitic *siya*. However, example (6) contains both *siya* and *si Maria* and the sentence is ungrammatical. Therefore, Tagalog does not allow clitic doubling and patterns with NP languages as shown in Table 4.

- (4) Hindi pumasok si Maria sa bahay.

 NEG enter ANG Maria SA house.

 'Maria didn't enter the house.
- (5) Hindi siya pumasok sa bahay.

 NEG he/she enter SA house
 'She didn't enter the house.'
- (6) *Hindi siya pumasok si Maria sa bahay.

 NEG he/she enter ANG Maria SA house.

Table 4: Clitic Doubling

TEST	NP	DP	TAGALOG
Clitic Doubling	no	yes	no

We have seen three tests that show Tagalog patterning as an NP language; let us turn to tests that show Tagalog patterning as a DP language.

2.2 Tagalog is a DP language

In this section, we will illustrate three of the six tests that show that Tagalog patterns with DP languages.

2.2.1 Two Lexical Genitives

According to Bošković (2008), DP languages allow two lexical genitives. The example in (7) has two genitives, *ng lunsod* 'of the city' and *ni Napoleon* 'by Napoleon' and thus shows that Tagalog patterns with DP languages.

(7) ang pagwasak ng lunsod ni Napoleon ANG destruction NG city NG Napoleon 'the destruction of the city by Napoleon'

Table 5: Two Lexical Genitives

TEST	NP	DP	TAGALOG
Two Lexical Genitives	no	yes	yes

2.2.2 Neg Raising

Tagalog also allows negative raising, which is argued by Bošković (2008) to occur only in DP languages. Example (8) has two readings. The first reading (atheist) is the neg raising reading. In this reading, *hindi* negates the embedded verb.

- (8) Hindi naniwala si Pedro na may Diyos NEG believe ANG Pedro PERF exist God 'Pedro doesn't believe that God exists.
 - 1. Pedro thinks that God does not exist (atheist)
 - 2. Pedro does not know if God exists (agnostic)

And just like in English, negation in the matrix clause can license an embedded NPI (hanggang 'until') in Tagalog. In (9), it is ungrammatical to have hanggang 'until' within a sentence without the presence of negation. However in (10), both hanggang 'until' and negation are present, and the sentence is grammatical, showing that hanggang 'until' is an NPI. In (11), the matrix clause negation licenses the NPI hanggang 'until' in the embedded clause.

- (9) *Makakalis si Maria hanggang bukas. will leave ANGMary until tomorrow *'Mary will arrive until tomorrow.'
- (10) Hindi makakalis si Maria hanggang bukas.

 NEG will leave ANGMary until tomorrow 'Maria won't arrive until tomorrow.'
- (11) Hindi naniwala si Jose na makakalis

 NEG believe ANG Joseph PERF will leave

 si Maria hanggang bukas

 ANG Mary until tomorrow

 'Joseph doesn't believe that Maria will arrive until tomorrow.'

Again, as summarized in Table 6, we see that Tagalog patterns with DP languages.

Table 6: Neg Raising

TEST	NP	DP	TAGALOG
Neg Raising	no	yes	yes

2.2.3 Left Branch Extraction

In Tagalog, you can relativize a possessor, as in (12) and (13), and that is typically thought of as Left Branch Extraction. According to Bošković, only NP languages allow Left Branch Extraction.

- (12) Madismaya ang doktor na suwail ang anak. disappoint ANG doctor PERF blacksheep ANG child 'The doctor whose child is a blacksheep was disappointed.'
- (13) Nadismaya ang doktor na palaging umiiyak ang anak. disappoint ANG doctor PERF always crying ANG child 'The doctor whose child is always crying was disappointed.' (Cena 1979)

However, Bošković (2008) explicitly excludes possessor movement when testing for Left Branch Extraction. For this test, we need to look at examples similar to (14) and (15).

- (14) Bumili siya ng pulang kotse. buy he NG red-LI car 'He bought a red car.'
- (15) *Pula bumili siya ng kotse red buy he NG car

In (15), the movement of *pula* 'red' from its original position in (14) does not yield a grammatical sentence and therefore Tagalog does not allow left branch extraction. Therefore, Tagalog patterns with DP languages as we see in Table 7.

Table 7: Left Branch Extraction

TEST	NP	DP	TAGALOG
Left Branch Extraction	yes	no	no

As we have seen, some of Bošković's (2008) tests show that Tagalog patterns both as a DP language and as a NP language. Therefore these tests are not helpful in reaching our goal and we must turn to other analyses, such as Gillon and Armoskaite (2011)'s Diagnosis D. In the following section, we apply their tests to *ang* and *ng*.

3. Diagnosis D

Gillon and Armoskaite (2011) point out that none of Bošković's (2008) tests look at the semantic/pragmatic functions of determiners. To look at these semantic and pragmatic functions we have applied Gillon and Armoskaite's tests to *ang* and *ng* respectively.

Table 8: Gillon and Armoskaite's Diagnostics D applied to Tagalog

Table 6. Ghion and Mi moskatte's Diagnosties	Table 6. Giron and 11 moskatte 5 Diagnosties D applied to Tagalog						
TEST	NP	DP	ang	ng			
Wide scope/escape scope	no	yes	yes	no			
Obligatory narrow scope	yes	no	no	no			
Assertion/presupposition of uniqueness	no	yes	yes	no			
Potential anaphoric use	no	yes	yes	yes			
Obligatory anaphoric use	no	yes	yes	yes			
Law of contradiction	no	ves	ves	no			

Gillon and Armoskaite's (2011) tests clearly show *ang* to be a determiner. *Ng* has some D properties, but not all, as summarized above in Table 8. We will discuss each test in the following sections.

3.1 ANG

In the next section we will discuss the application of Gillon and Armoskaite's tests to *ang*-phrases. We will see that *ang* patterns with determiners.

3.1.1 Scope

The first two tests consider scopal interactions. In (16) ang bata 'the child' refers to one particular child that every woman kissed. This sentence lacks the narrow scope reading for ang bata 'the child', where every woman kissed a different child. Ang, therefore, takes obligatory wide scope. Therefore these first two tests show ang behaving as a determiner.

(16) Hinalikan ng bawat babae ang bata. kiss NG each woman ANGchild. 'Every woman kissed the child.' (∃ > ∀)

Table 9: Scope

TEST	NP	DP	ANG
Wide Scope/Escape Scope	no	yes	yes
Obligatory Narrow Scope	yes	no	no

3.1.2 Uniqueness and Potential Anaphoric Use

Ang also indicates uniqueness and has anaphoric use (see results in Table 10). In (17)b ang tinapay 'the bread' must be interpreted as the same bread in (17)a. It is ang tinapay 'the bread' that I bought (anaphoric) and I assert that I ate all of it (uniqueness). Therefore ang patterns as a determiner according this test.

- (17) a. Bumili ako ng tinapay sa palengke. buy 1SG NG bread SA market. 'I bought bread at the market.'
 - b. Kinain ko ang tinapay. eat 1SG ANG bread. 'I ate the bread.'

Table 10: Uniqueness and anaphoric use

TEST	NP	DP	ANG
Assertion/Presupposition of Uniqueness	no	yes	yes
Potential Anaphoric Use	no	yes	yes

3.1.3 Obligatory Anaphoric Use

The next test applied is obligatory anaphoric use. *Ang hari* 'the king' in (18)b must refer to the same king that was mentioned in (18)a *isang hari* 'a king' which shows obligatory anaphoric use. As we can see in Table 11, this test again shows *ang* patterning as a determiner.

(18) a. May isa-ng hari sa kaharian ng Mayon. exist one-LI king SA kingdom LI Mayon. 'There was once was a king in the kingdom of Mayon.' b. tinaguriang Ang hari ay may anak na king INV exist daughter PERF considered ANG pinakamagandang dalaga sa kaharian maiden SA kingdom most beautiful- LI 'The king had a beautiful daughter who was considered the most beautiful maiden in the whole kingdom.'

Table 11: Obligatory anaphoric use

TEST	NP	DP	ANG
Obligatory Anaphoric Use	no	yes	yes

3.1.4 Law of Contradiction

The last test applied is the law of contradiction. (19) is semantically odd, similar to its English counterpart. The cat cannot be *gutom* 'hungry' and *hindi gutom* 'not hungry' at the same time. *Ang*, therefore, follows the law of contradiction, and therefore patterns as a determiner here as well (see Table 12).

(19) #Ang pusa ay gutom at hindi gutom ang
ANG cat INV hungry and NEG hungry ANG
pusa.
cat
'The cat is hungry and the cat is not hungry.'

Table 12: Contradiction

TEST	NP	DP	ANG
Law of Contradiction	no	yes	yes

As we can see in the results (found in Tables 9-12) of each of Gillon and Armoskaite's (2011) tests applied to *ang*-phrases, *ang* clearly patterns as a determiner. Now let us apply these tests to *ng*-phrases.

3.2 NG

In this section we discuss in detail the results of Gillon and Armoskaite's (2011) tests applied to *ng*-phrases. We will see that unlike *ang*, *ng* gives mixed results.

3.2.1 Scope

The first two tests applied to ng concern scope. Compare the sentences in (20):

- (20) a. Binasa ng dalawang estudyante (ang) lahat ng read NG two-LI students (ANG) all LI libro.
 - 'Two students read every book.'
 - = Two specific students read all the books. 2>∀
 - = Each book was read by two (potentially different) students. $\forall >2$
 - Bumasa ang dalawang estudyante ng lahat ng read ANG two students NG all LI libro book
 - 'Two students read every book'
 - = Two specific students read all the books. 2>∀
 - ≠ Each book was read by two (potentially different) students. ∀>2

In (20)a both readings are possible but in (20)b only one reading is possible. What is crucial here is the ng-phrase in $(20)b - ng \ lahat \ ng \ libro -$ cannot take wide scope. Therefore ng only patterns as a determiner in the second of these two scope based tests as summarized in Table 13.

Table 13: Scope

TEST	NP	DP	NG
Wide Scope/Escape Scope	no	yes	no
Narrow Scope	yes	no	no

3.2.2 Uniqueness

The next test applied is uniqueness. In the second sentence in (21) ng saging 'some bananas' cannot refer to all of the bananas bought; in other words, only some, not all, of the bananas bought were eaten. Ng, therefore, does not have uniqueness, and according to this test, does not pattern as a determiner.

(21) Bumili ako ng saging sa palengke. Kumain ako ng saging. bought 1SG NG banana SA market ate 1SG NG banana 'I bought bananas at the market. I ate some bananas.'

Table 14: Uniqueness

TEST	NP	DP	NG
Assertion/Presupposition Of Uniqueness	no	yes	no

3.2.3 Potential Anaphoric Use

Ng has potential anaphoric use (see Table 15). The example in (22) is appropriate in a context where there is one cup and one glass on the table. Both the speaker the hearer knows exactly which cup the speaker is referring to,

which means that *ng tasa* 'a/the cup' can be anaphoric in (22). Therefore the application of this test shows that *ng* patterns as a determiner.

(22) Pakiabot ng tasa.

POLI-hand NG cup
'Hand me a/the cup'.

Table 15: Potential anaphoric use

TEST	NP	DP	NG
Potential Anaphoric Use	no	yes	yes

3.2.4 Obligatory Anaphoric Use

Ng also has obligatory anaphoric use (see results in Table 16). In (23)b ng mga bata 'the children' must refer to mga batang 'the children' introduced in (23)a. Therefore, this test also shows ng patterning as a determiner.

- (23) a. May mga batang naglalaro sa labas. exist PL child-LI playing SA outside. 'There are children playing outside'.
 - b. Napakaingay ng mgabata. noisy NG PL child 'The children are very noisy.'

Table 16: Obligatory anaphoric use

TEST	NP	DP	NG
Obligatory Anaphoric Use	no	yes	yes

3.2.5 Law of Contradiction

The last test applied to ng is law of contradiction. First, recall the facts about ang, discussed in (19). A similar example is illustrated in (24)a, which is semantically odd because ang babae 'the woman' cannot simultaneously drown and not drown. Now let us try a similar sentence with ng. (24)b, although awkward, is better than (24)a. Thus, ng does not follow the law of contradiction as shown in Table 17, and therefore, ng does not pattern as a determiner with the application of this test.

(24) a. #Nalunod ang babae at hindi nalunod ang babae.
drown ANGwoman and NEG drown ANGwoman.
'The woman drowned and the woman didn't drown.'

P.Kakalunod (lang) ng babae at hindi kakalunod ng drown (just) NG woman and NEG drown NG babae.
 Woman

'The woman just drowned and the woman didn't just drown.'

Table 17: Contradiction

TEST	NP	DP	NG
Law Of Contradiction	no	yes	no

After having seen the results of Gillon and Armoskaite's (2011) tests (shown in Tables 13-17) as applied to *ng*-phrases, we see that *ng* only shows some D properties.

4. The debate on ang vs. ng

In the preceding sections, we have looked at some syntactic and semantic properties of ang and ng. In this section, we will review some of the previous literature on these two markers. It is generally claimed that ang phrases are definite and that ng phrase objects are indefinite (Schachter and Otanes 1972). In particular, the two sentences in (25) differ in the translation: ng kotse is translated as 'a car' in (25)a and ang kotse is translated as 'the car' in (25)b.

- (25) a. Bumili ang babae ng kotse. buy ANG woman NG car 'The woman bought a car.'
 - b. Binili ng babae ang kotse. buy NG woman ANG car 'A/The woman bought the car.'

The definiteness of *ang* has led many researchers to claim that *ang* phrases are topics, not subjects (Schachter 1976; Richards 2000, among many others). The contrast between *ang* and *ng* has also been used as evidence for an ergative analysis of Tagalog (De Guzman 1988; Aldridge 2004, 2012; inter alia). In particular, *ang* phrases are absolutive and scope high, while *ng* phrase themes are antipassive objects and therefore indefinite.

It has also long been recognized that the above definite/indefinite distinction between *ang* and *ng* is too simple. As pointed out by Bell (1978), Adams and Manaster-Ramer (1988), and others, *ang* phrases can be indefinite:

- (26) a. Hoy, mahusay ang ibang komiks.

 EXCL good ANG other-LI comic

 'Well, some [i.e. other] comics are good.'
 - b. Dumarating ang isang dyip. come ANG one-LI jeep 'A jeep is coming.'

The presence of an indefinite quantifier allows the indefinite reading (note the lack of uniqueness here). It has also been suggested that some *ng* phrases can be definite. In (27), *ng adobo* can be either definite or indefinite.

(27) Ipinagluto ni Romeo ng adobo ang babae. cook NG Romeo NG adobo ANG woman 'Romeo cooked the/some adobo for the woman.

Clearly more research is required to tease out the precise semantic/pragmatic nature of ang and ng. It is clear, however, that syntactic position plays an important role in the interpretation of noun phrases in Tagalog (Rackowski and Richards 2005; Flegg 2004).

5. Conclusion

As we saw in section 2, Bošković's (2008) tests are not helpful for Tagalog -Tagalog appears to be both an NP and a DP language. On the other hand, Gillon and Armoskaite's (2011) tests, discussed in section 3, are more useful – ang clearly patterns as a determiner. On the other hand, the facts are perhaps not so simple and we need to take into consideration syntactic position.

In future research, we hope to apply Diagnosis D to sentences like (27), test for differences between ng as goal versus ng as agent, investigate sa, and explain why Tagalog has determiners but has many NP properties.

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