Ang marks the what?: An analysis of noun phrase markers in Cebuano

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1 Introduction

1.1 Overview of Essay

Cebuano is an Austronesian language spoken in the Philippines by about 15 million people. Like many other Western Austronesian languages, it has a complex agreement system between verbs and noun phrases whose characterization has been the subject of much disagreement over at least the last fifty years (Himmelmann 2005). As a result of the varied characterizations of the voice system, Cebuano noun phrase markers have also received many different classifications, ranging from 'introducing particles' and 'construction markers' to 'determiners', 'topic markers', and 'case markers' (Reid 2002). This paper attempts to arrive at a classification of the Cebuano noun phrase markers by looking at their distribution, function, and semantic characteristics, both as described in previous analyses and in newly collected data.

Section 1 offers a basic history of the Cebuano language as well as a summary of the issues in analyzing noun phrase markers in Austronesian languages. Section 2 contains an outline of relevant features in the grammar of Cebuano, including the voice system, as well as an explanation of the relevance of Tagalog to analysis in Cebuano. In Sections 3 through 5, I examine three different analyses of Cebuano noun phrase markers, noting possibilities suggested by my own evidence and relevant analyses in Tagalog. Section 3 covers the topic marker analysis, Section 4 covers the determiner analysis, and Section 5 covers the case marker analysis. Section 6 provides a summary of the possibilities and conclusions.

1.2 Cebuano Language Information and History

Cebuano is a member of the Bisayan languages, a subgroup of the Central Philippine languages (Lewis 2009). Other Central Philippine languages include Tagalog and Bikol.

Cebuano is spoken in the Southern Philippines on the islands of Cebu and Bohol and on parts of the islands of Leyte, Negros, and Mindanao (Lewis 2009).

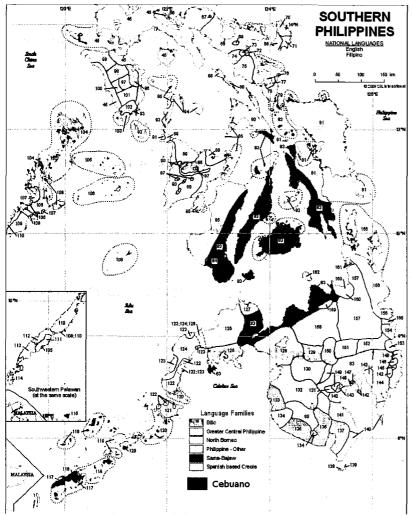


Figure 1-1: Cebuano Language Map (Lewis 2009)

The first written work on the language was done in the 16th and 17th centuries by the Spanish, and the first English-Cebuano dictionary was published in 1900 (Tanangkingsing 2009: 10). Some of the most important early analysis of the language was done by John U. Wolff in his dissertation and subsequent publications in the 1960s and 1970s. Due to the colonization of the Philippines by the Spanish in the 16th century, the language has a good deal of loanwords from Spanish, including much of the numeral system above ten, and has also incorporated words from English and Chinese, for example *sipir* for 'zipper' and *bakya* from the Chinese for

'wooden slippers' (Tanangkingsing 2009: 14). Since the first written work on the language, Cebuano has changed considerably, both in its morphosyntax (specifically verb forms) and in its lexical inventory. At least one third of the vocabulary from the mid-17th century was unknown to a group of 100 speakers of Cebuano in the 1960s (Wolff 2008: 197).

Cebuano is similar to Tagalog in its sound system, verb system, affix system, and some of its lexical inventory. However, Cebuano has a different tense-aspect system, a more complex system of deictics, and a slightly different set of noun phrase particles. Unlike Tagalog, Cebuano has what Frank Blake (1905: 127) calls "a sort of indefinite accusative particle...ug." Tagalog has the most speakers of any Philippine language, with over 21 million recorded in the Philippines during the 2000 census, while Cebuano is the second most spoken language, with over 15 million speakers on the Philippines (Lewis 2009).

1.3 Voice in Austronesian Languages

Cebuano is a member of the Austronesian language family, possibly the largest language family in the world, with about 1200 languages. It is also an incredibly diverse and widespread family, stretching from Easter Island to Madagascar, with at least 80 separate languages in Vanuatu alone (Crowley 2008: 97).

While the linguistic structures of these languages vary greatly, many languages in Taiwan and the Philippines are known for their elaborate voice systems, sometimes called 'focus' systems, which mark verbs for actor focus, undergoer focus, locative focus, and instrumental focus (Adelaar & Himmelmann 2005: xvi; Crowley 2008: 100).

The following two examples illustrate the voice alternation in Cebuano.¹

- (1) ang liyon nikaon sa iro ANG lion AV-eat SA dog 'The lion ate the dog'
- (2) ang liyon gikaon sa iro ANG lion NAV-eat SA dog 'The dog ate the lion'

In example (1), the verb *nikaon* carries the actor voice affix *ni*- and the *ang*-marked NP *ang liyon* is the actor of the sentence while the *sa*- marked NP *sa iro* is the patient. Example (2) features the same noun phrases but a different verb affix. The verb *gikaon* carries the patient voice affix *gi*- and the *ang*-marked NP is the patient of the sentence while the *sa*-marked NP assumes the agent role. While sentences like (2) have sometimes been analyzed as passives (Guilfoyle, Hung, & Travis 1992), there is significant evidence that this is not the case (see Section 5.3), and that the above alternation represents two equally viable structures in the language, rather than a frequently used active form and its infrequently used passive cousin.

The classification of this system is complicated by the varied terminology used to refer to the verb types and to the *ang*-marked noun phrase. Most significantly, the use of the terms 'topic' and 'focus' in Austronesian linguistics have an interesting history that obscures their relationship to traditional focus and topic. Traditionally, pragmatic focus is defined as referring to information that is new and of high interest, often marked by stress (Talmy 1985) while pragmatic topic refers to given information. Levinson (1983) posits that "a major function of topic marking is precisely to relate the marked utterance to some specific topic raised in the prior

¹ Due to the various analyses of the classifications of the noun phrase markers, I gloss them with capital letter equivalents, unless I am citing an example from the literature, in which case I use the same gloss as the author. I gloss verb affixes as 'actor voice' and 'non-actor voice' to maintain clarity in the examples; there are also many other analyses of these affixes. Again, when citing an example from the literature, I use the same affix gloss as the author. A full list of the gloss abbreviations used can be found at the end of this paper.

discourse." The most often used example of topic marking is Japanese, as in (3), an example taken from Nakanishi (2001).

(3) John-wa gakusei desu John-TOP student is 'Speaking of John, he is a student'

In Austronesian linguistics, these terms were used beginning in the 1950s to distinguish subjects in European languages from patterns found in Austronesian languages (Himmelmann 2005). The term 'topic' was used instead of 'subject' and 'focus' was used instead of 'voice' to talk about noun-verb agreement. *Ang* was thought to mark this 'topic' and the 'topic' matched the 'focus' of the verb. Thus, an 'agent focus verb' marks the agent as the 'topic', while an 'object focus verb' marks the patient as the 'topic'. It is unclear whether Austronesian 'topic' and 'focus' are compatible with the traditional senses of the terms.

The issue of the basic alignment system in these languages remains highly contested as well. The voice or 'focus' systems describe the agreement between the verb and a particular noun phrase marker, essentially determining which noun phrase is the 'subject' of the sentence. The relation of the marking of these 'subjects' to the valency of the verb determines the classification of the alignment system. While it is generally agreed that the most of the languages are not nominative-accusative – that is, subjects of transitive and intransitive clauses are marked the same while objects of transitive clauses are marked differently – some claim the languages show ergative alignment or split-S (active) alignment while others suggest an entirely different system. Himmelmann (2005: 158) notes that "in Western Austronesian languages clear-cut cases of ergative alignment are restricted to person marking systems, with little or no evidence of an ergative distribution of noun phrase markers." Furthermore, since the difference between ergative and nominative-accusative alignment is based on how markers group with

respect to transitive and intransitive clauses, the analysis of alignment is heavily reliant determining which verbs are transitive in the language and which noun phrases are core arguments of those verbs. These distinctions are not always clear, complicating the analysis of the voice system (see Section 5.3). Additionally, according to Dixon (1994: 219) it is unclear exactly what a language being ergative would entail, since there does not seem to be much that correlates with it. Because the voice system interacts with noun phrase markers, the lack of consensus on the analysis of the voice system complicates the classification of those markers.

Another characteristic of Western Austronesian languages is that they seem to lack a definite unmarked word order: in many of these languages, word order is more flexible, employing, for example, both SVO and VXS order. However, not all word order is free. Most Western Austronesian languages have prepositions as opposed to postpositions and auxiliaries generally precede main verbs. Constituents of noun phrases and prepositional phrases cannot be distributed discontinuously across the clause, and there are generally only two or three phrase ordering options within a clause. Placement of adjuncts, though, is much less restricted (Himmelmann 2005: 142). Due to the flexible word order of arguments, noun phrase markers play a key role in determining agreement with the verb and assignment of theta roles to noun phrases.

1.4 Noun Phrase Markers in Austronesian Languages

The classification of noun phrase markers is an issue across all Western Austronesian languages. As noted by Reid (2002), there have been a great number of classifications of the monosyllabic words that precede nouns. Since they are often translated to English as articles or prepositions, several analyses have simply used this classification (Vanoverbergh 1955; Lambrecht 1978). Other linguists have simply labeled them based on their distribution, e.g.

"introducing particles", "noun-marking particles", or "noun phrase markers" (Reid 2002: 296). Others have labeled them "construction markers" in order to denote that they identify the construction of which they are a constituent. There have also been many analyses which attempt to denote the grammatical function of the words, e.g. "nominalizing particles", "determinants of relations", "determiners", or, most commonly, "case-marking particles" or "topic/goal-markers" (Reid 2002: 298).

Himmelmann (2005: 133) notes that the noun phrase markers in Austronesian languages are all clitics. Reid (2002: 295) notes that in some cases, authors classify the markers simply as proclitics. The labeling of these particles as phrase-marking clitics does little to illuminate their role in the Cebuano phrase. Clitics are neither affixes nor words that stand alone, but none of these wordhood classifications require a particular syntactic classification. Thus, whether or not the particles are clitics, there are still questions as to their function within the sentence. However, their status as clitics is helpful in determining the relevance of other observations.

According to Zwicky (1977), clitics have some properties of affixes, such as being bound morphemes and being stressless, and some properties of independent words, such as resisting phonological rules that do not apply across word boundaries and attaching to words of more than one syntactic category. In Cebuano, the noun phrase markers *ang*, *sa*, and *ug* as well as the personal name markers *si*, *ni*, and *kang* are not clearly independent words, as they cannot stand alone, even as the answer to a question. Furthermore, they do not bear stress.

Yet the markers are not affixes either, as they can attach to more than one type of syntactic category. For example, *ang* can attach to nouns, adjectives, and verbs.

(4) ang auto kay dako
ANG car was big
'The car was big'

- (5) ang pula nga auto kay dako
 ANG red NGA car was big

 'The red car was big'
- (6) tulo ka mga iro ang nipaak sa tawo three KA PL dog ANG AV-bite SA man 'Three dogs were the ones who bit the person'

In some languages, orthography also supports the analysis of the particles as clitics, in that they are separate words in the orthography, similar to the English word 'the'. However, this evidence does not speak to the function of the particles in the sentence.

Even classifications which do focus on the function of the noun phrase markers within the sentence vary greatly. For example, in Cebuano, *ang* and *sa* mark common noun phrases. The example below shows a few different characterizations of the noun phrase markers.

(7)	ang	liyon	nikaon	sa	karne	
` ′	DET	lion	ACT-eat	OBL	meat	(Huang & Tanangkingsing 2005)
	NOM/TOP	lion	ACT-eat	ACC	meat	(Guilfoyle, Hung, & Travis 1992)
	ABS	lion	ANTIP-eat	OBL	meat	(Walters 1994)
	TOP	lion	AV-eat	OBL	meat	(Ghazali 1990)
	NOM/ABS	lion	AV-eat	OBL	meat	(Tanangkingsing 2009)
	'The lion ate	the mea	at'			

In this example, the *ang*-marked noun phrase is classified by different authors as a noun marked by a determiner, a noun bearing nominative case, a noun bearing absolutive case, and a topic marked noun. In the first two cases, the verb is analyzed as active, while in the third example, it is an antipassive, and in the fourth and fifth it is an actor voice verb. The *sa*-marked noun is analyzed as accusative or oblique, depending on the framework.

Reid points out several problems with the above categorizations, particularly the popular case marker analysis. One is that although the words do introduce noun phrases, they can also precede predicate nouns as in (8) and fronted noun phrases as in (9). He suggests that fronted

NPs cannot receive case by virtue of moving to a fronted position, since A'-movement does not assign case.²

- (8) ang babáe ang pumások (Tagalog)
 ANG woman ANG entered
 'The one who entered was the woman'
- (9) ang babáe, ay pumások (Tagalog)
 ANG woman TOPIC.LINKER entered

 'As for the woman, she entered'

Additionally, Reid states that the various labels are functional but do not specify syntactic category, pointing out that discussions of terminology and labels do not illuminate the role of these markers in syntax. He chooses to examine the idea that they are determiners based on the criteria that they are dependents of head nouns, occur at the outer edge of the noun phrase, cannot be modified by other forms, and agree in semantic features with the head noun (Reid 2002: 298). His theory of determiners maintains that determiners are dependents of head nouns, so evidence of markers followed by verbs and prepositional phrases leads him to conclude that the markers are not determiners. Yet his proposed analysis of the 'nominative' noun phrase bears a strong resemblance to a Determiner Phrase with a D head, suggesting that perhaps he too focuses on terminology and labeling, rather than syntactic analysis. Thus, while Reid highlights the lack of standard analysis of these markers, and surveys their previous analyses, he does not provide a convincing cross-linguistic analysis. Given the differences in voice/focus structure among the Austronesian languages and the fact that noun phrase markers are deeply related to voice structure, it is difficult to generalize across the entire language family. As evidenced by previous research, attempts to devise a single analysis of phrase marking systems in the entire

² Reid's rejection of the case marker analysis is based on the assumption that fronted NPs move to an A' position. However, it is possible that fronted NPs move via A-movement, or that they receive case before moving. Additionally, predicate NPs are not barred from showing case cross-linguistically. Thus Reid's rejection does not preclude a consideration of noun phrase markers as case markers.

language family leads to imprecise labeling with a focus on terminology rather than syntactic function. In order to develop a deeper understanding of noun phrase markers, it is necessary to analyze them within a single language and to test the implications of each analysis in depth.

1.5 Cebuano Noun Phrase Markers

This essay will focus on the classification of the noun phrase markers in Cebuano. As shown above, there have been many analyses of these markers in the literature, but there is no standard analysis (Himmelmann 2005: 146). Previous work on Cebuano has tended to focus on the voice/'focus' system of the language, and has chosen an analysis for the noun phrase markers that best fits the larger voice and phrase structure analysis without much independent analysis. For example, Tanangkingsing & S. Huang (2007) employ the case marker analysis while H. Huang & Tanangkingsing (2005) treat the noun phrase markers as determiners, prepositions, and case markers. I will examine the noun phrase markers independently, and determine whether it is possible to develop an independent analysis, or whether the function of the markers is inextricably bound up in the analysis of the voice/'focus' system. If the markers are case markers, then the case features of the noun phrase must be assigned in view of the argument structure of the verb and the theta roles it assigns to the noun phrases. In this case, an analysis of the voice system is required for a complete understanding of the noun phrase markers. However, if the markers are topic markers, then verb agreement is simple: the verb agrees with the topicmarked noun phrase and the analyses of the voice system as nominative-accusative or ergativeabsolutive do not have bearing on the noun phrase markers.

Data for my analysis comes from several publications on Cebuano, including Michael Tanangkingsing's 2009 dissertation, a reference grammar of Cebuano. Additionally, data has been taken from elicitation done by members of Claire Bowern's field methods class (LING)

241b) at Yale University in the spring of 2009. Additional data was collected in the spring of 2011 through elicitation sessions with Ms. Threese Serana, who was also the consultant for the class.

Elicitation with Ms. Serana was conducted on a weekly basis, focusing mainly on complete sentences of differing levels of transitivity and with different voice structures. An effort was made to obtain various grammatical sentences with different word orders and different uses of noun phrase markers, as well as to determine ungrammatical sentences whose ungrammaticality was based solely on noun phrase marker usage.

2 Background

2.1 Outline of Cebuano Grammar

The Cebuano phoneme system is very similar to Tagalog. Cebuano has sixteen consonants, shown in the table below along with their orthographic equivalents, if they differ.

Table 2-1: Cebuano Phoneme System (Bunye & Yap 1971)

	bilabial	dental	palatal	velar	glottal
voiceless stops	р	t		k	? = - or no letter
voiced stops	b	d		g	
nasals	m	n		$ \eta = ng $	
fricatives		s			h
liquids		1 r			
glides			j = y	w	

Cebuano has three main vowels, /i/, /u/, and /a/. However, due to the influence of Spanish and numerous Spanish loanwords, /e/ and /o/ also occur and have made their way into the orthography.

Although Cebuano is often characterized as a verb-first language (Billings 2005), word order tends to be extremely flexible, with VSO, VOS, and SVO orders possible in simple sentences (assuming traditional characterization of subject and object, see Section 2.2 below).

- (10) ang tawo nikaon ug kanon ANG man AV-eat UG rice 'The man ate rice'
- (11) nikaon ang tawo ug kanon AV-eat ANG man UG rice 'The man ate rice'
- (12) nikaon ug kanon ang tawo AV-eat UG rice ANG man 'The man ate rice'

However, there is less flexibility in sentences with more than two arguments, or in sentences involving possession, where the possessor always follows the possessee.

- (13) nihatang ang tawo sa libro sa iyang higala AV-give ANG man SA book SA his friend 'The man gave the book to his friend'
- (14) *nihatang sa libro ang tawo sa iyang higala AV-give SA book ANG man SA his friend
- (15) si Inday ang nipaak sa iro ni Threese SI Inday ANG AV-bite SA dog NI Threese 'It was Inday who bit Threese's dog'
- (16) *si Inday ang nipaak ni Threese sa iro SI Inday ANG AV-bite NI Threese SA dog

In addition to the noun phrase markers discussed in this paper, Cebuano also has a few important feature markers and linkers. The plural marker *mga* precedes nouns it modifies.

- (17) ang iro nipaak ni Inday ANG dog AV-bite NI Inday 'The dog bit Inday'
- (18) ang mga iro nipaak ni Inday ANG PL dog AV-bite NI Inday 'The dogs bit Inday'

The numeral linker *ka*, corresponding roughly to 'units of' is used with cardinal numbers in addition to the plural marker.

(19) ang tulo ka mga iro nipaak ni Inday ANG three KA PL dog AV-bite NI Inday 'The three dogs bit Inday'

Clauses and phrases are often connected with the conjunction ug (different from the noun phrase marker ug) or with the relativizer nga.

(20) mupadala ug sulat si Inday kang Perla nga taga Sugbu AV-send UG letter SI Inday KANG Perla NGA from Cebu 'Inday will send a letter to Perla who is from Cebu'

Nga is also used to link adjectives to nouns.

(21) ang tawo nga taas nikaon sa puti nga kanon ANG man NGA tall AV-eat SA white NGA rice 'The tall man ate the white rice'

In some cases, *nga* attaches to the word before it, such as a demonstrative or pronoun. In this case, the final vowel is dropped.

- (22) kini nga liyon mukaon ug karne this NGA lion AV-eat UG meat 'This lion eats meat'
- (23) kining liyon mukaon ug karne this NGA lion AV-eat UG meat 'This lion eats meat'

Relative clauses headed by *nga* are important in determining the role of noun phrase markers in contexts other than simple transitive sentences (see Section 5.3).

2.2 Cebuano Voice System

The Cebuano voice system is the agreement system between verbs and their arguments.

While Cebuano verbs are not marked for person, number, or gender, affixes do indicate tense and aspect, as well as the theta roles of the arguments. Arguments are marked with one of the noun

phrase markers *ang*, *sa*, or *ug*, or one of the personal name markers *si*, *ni*, or *kang*.³ The verbal morphology indicates the role of the noun phrase marked with *ang* or *si*. Other arguments fill in appropriate roles. Actor voice (AV) verbs agree with an *ang*-marked agent, while non-actor voice verbs agree with an *ang*-marked patient (PV), instrument (IV), or location (LV). Below is a selection of verbal affixes along with examples of their use in sentences.

Table 2-2: Cebuano Verb Affixes (Tanangkingsing 2009)

affix	VOICE	TENSE	ASPECT/MOOD
mag(a)-	AV	Future	Imperfective; Volitional
man-/mang-	AV	Future	Imperfective
mo- / mu-	AV	Future	Volitional
na-	AV	Non-Future	Potential-Spontaneous
ni-	AV	Non-Future	Volitional
		Γ	
gi-	NAV	Non-Future	Perfective; Volitional
gi- gika-	NAV IV	Non-Future Non-Future	Perfective; Volitional Potential-Abilitative
gika-	IV	Non-Future	Potential-Abilitative
gika- na-	IV PV; IV	Non-Future Non-Future	Potential-Abilitative Potential-Spontaneous
gika- na- ma-	IV PV; IV PV; IV	Non-Future Non-Future Future	Potential-Abilitative Potential-Spontaneous Potential-Spontaneous

- (24) ang lalaki mupadala sa sulat ngadto sa babayi ANG boy MU-send SA letter toward SA woman AV-send
 - 'The boy will send the letter to the woman'
- (25) ang lalaki nipadala sa sulat ngadto sa babayi
 ANG boy NI-send SA letter toward SA woman
 AV-send

 'The boy sent the letter to the woman'
- (26) gipadala sa lalaki ang sulat ngadto sa babayi
 GI-send SA boy ANG letter toward SA woman
 PV-send
 'The boy sent the letter to the woman'

In the above three examples, it is clear that while AV verbs mark the agent with *ang*, the PV verb *gipadala* marks the patient with *ang*. In the next three examples, it is clear that

³ I will focus mainly on the common noun markers. Some observations are also applicable to the personal name markers. However, the personal name marker *kang* does not match any common noun marker.

changing either the verb affix or the noun phrase markers will alter the theta role distribution in the sentence. In a simple transitive sentence, if the verb is changed from AV to PV, the agent becomes the patient and the patient becomes the agent. If the verb affixes remain constant and the noun phrase markers are switched (making required adjustments for personal names), the agent and patient also switch.

- (27) ang iro nipaak ni Inday
 ANG dog NI-bite NI Inday
 AV-bite
 'The dog bit Inday'
- (28) ang iro gipaak ni Inday
 ANG dog GI-bite NI Inday
 PV-bite
 'Inday bit the dog'
- (29) si Inday gipaak sa iro
 SI Inday GI-bite SA dog
 PV-bite
 'The dog bit Inday'

In some cases, the agent can even be omitted from the sentence with a NAV verb.

- (30) ipadala ni Inday ang sulat ngadto sa Sugbu I-send NI Inday ANG letter toward SA Cebu IV-send 'Inday will send the letter to Cebu'
- (31) ipadala ang sulat ngadto sa Sugbu
 I-send ANG letter toward SA Cebu
 IV-send
 'The letter will be sent to Cebu'

However, the omission of agents is not consistent enough to justify calling (31) a passive according to Tanangkingsing & Huang (2007), and generally, agents are not demoted to non-arguments in NAV clauses. They also note that most instances of agent omission are fixed expressions of naming and identifying.

Once one knows which affixes correspond to which voice, it is not difficult to pick out the agent in an actor voice sentence (it is the *ang*- or *si*-marked NP) or a patient voice sentence (it is the *sa*- or *ni*- marked NP). However, it is not clear what type of agreement system Cebuano possesses, or what is driving this agreement. An independent look at the properties of the noun phrase markers may help to clarify the possible systems.

2.3 Analyses of Tagalog and Applications to Cebuano

Although Cebuano is the second most spoken language in the Philippines, the literature tends to be more descriptive than analytic of the syntax. Tagalog has been studied more frequently, in more depth, and with greater formal rigor than Cebuano, and therefore I include some analyses of Tagalog in order to provide some insight into possibilities for Cebuano analysis. While there are differences between Cebuano and Tagalog, major similarities exist in terms of the set of noun phrase markers, their morphology, and their use in sentences. Therefore, conclusions drawn about Tagalog may be applicable to Cebuano. However, the extent of syntactic differences between Cebuano and Tagalog is not well studied, so no definitive conclusions can be drawn without further tests.

As in Cebuano, the analysis of noun phrase markers in Tagalog has depended heavily on analysis of the voice and argument structure of the language. There have been several analyses, ranging from its classification as an ergative language (Aldridge 2004), an accusative language with extensive use of passive constructions (Guilfoyle, Hung, & Travis 1992), a hybrid between accusative and ergative languages, to a member of its own distinct class.

Below, I examine previous analyses of Cebuano noun phrase markers, some of which are independent and some of which are part of an analysis of the voice system. I note the implications of these analyses and then present my own data and what it adds to the discussion. I

then look at some similar analyses in Tagalog to see what insight they might provide for an analysis of the Cebuano noun phrase markers.

3 Noun Phrase Markers as Topic Markers

3.1 Previous Analysis in Cebuano

While the use of the term 'topic' was initially introduced in order to separate

Austronesian linguistics from European linguistics, the analysis of noun phrase markers as

'topic' or pragmatic topic markers has continued even recently. Authors who note that the

choice of noun phrase markers tend to have some influence on the perceived importance of the

noun in the sentence continue to posit that noun phrase markers are topic markers. Ghazali

(1990: 52) describes the topic as the part of the sentence with the most emphasis, and notes that

it can be the actor, goal, instrument, or location, and that it is always marked with *ang*. Below,

examples (32) – (35) demonstrate, respectively, actor focus, object focus, instrumental focus, and
locative focus.⁴

- (32) magluto ang babaye ug bugas sa kulon ACT-cook NOM woman OBL rice OBL ricepot 'The woman will cook rice in the ricepot'
- (33) luto'on sa babaye ang bugas sa kulon cook-OBJ GEN woman NOM rice OBL ricepot 'The rice will be cooked in a ricepot by the woman'
- (34) isulat ni Linda ang lapis ug sulat INS-write GEN Linda NOM pencil OBL letter 'The pencil will be used by Linda to write a letter with'
- (35) luto'an sa babaye ang kulon ug bugas cook-LOC GEN woman NOM ricepot OBL rice 'In the ricepot is where the woman will cook rice'

Ghazali recognizes that there is a close relationship between the voice marking of the verbs and the noun phrase marking of their arguments. In each of the above examples, the affix

⁴ The following examples employ the glossing system used by Ghazali (1990).

of the verb must match the noun phrase marked with *ang*. She also notes that the locative and instrumental voices sometimes match topics other than location and instrument: locative voice is sometimes used for the indirect object or benefactive, and instrumental voice is sometimes used for the time of an action.

3.2 Evidence in Favor of the Topic Marker Analysis

There are several reasons for viewing *ang*-marked noun phrases as pragmatic or discourse topics. The first is Ghazali's observation that *ang* seems to mark the phrase with the most emphasis, that is, what the sentence is 'about'. Furthermore, *ang* seems to mark information previously given in the discourse. For example, the following minimal pair differs only in the use of *ang* or *sa* in one instance. The sentences are translated identically; the only difference relates to what the discourse preceding the sentence would have been.

- (36) walay pagkaon nga gikaon ang iro
 NEG food NGA NAV-eat ANG dog
 'There was no food that **the dog** ate' (previous discourse about the dog)
- (37) walay pagkaon nga gikaon sa iro
 NEG food NGA NAV-eat SA dog
 'There was no food that the dog ate' (previous discourse about the food)

Lastly, there are some properties of *ang*-marked noun phrases that are inconsistent with classification as subjects. For example, *ang*-marked nouns must be specific or definite.

According to Schachter & Otanes (1972), this is a strange requirement for a subject. In English and other European languages, the subject of a sentence can be indefinite and non-referential. In Cebuano, this is not possible:

(38) kaonon sa bata ang saging eat-NAV SA child ANG banana 'The child will eat the/*a banana'

Since pragmatic topics mark given information, it is expected that they are specific and definite, and so classifying the *ang*-marked noun phrase as a pragmatic topic provides a satisfying explanation for the definiteness restriction.

3.3 Evidence Against the Topic Marker Analysis

There are some issues, however, with the classification of *ang* as a topic marker. If *ang* marks pragmatic topic in the traditional sense, then *ang*-marked noun phrases are the given information in a sentence. Pragmatic focus refers to new information, and thus pragmatic topic and focus are mutually incompatible (Kroeger 1993b). In the answer to a WH-question, the phrase corresponding to the WH-word should carry focus and thus not be marked for pragmatic topic. However, an *ang*-marked noun phrase can be used to answer a WH question.

- (39) unsa ang imung gipalit sa merkado what ANG you NAV-buy SA market 'What did you buy at the market?'
- (40) gipalit nako ang sinena NAV-buy 1SG ANG dress 'I bought the dress'

Since the focus-carrier is marked with ang, ang does not mark pragmatic topic.

Another possibility is that *ang* marks discourse topic, a noun phrase that is salient in context. In this case, it would mark what the discourse is 'about' at the level beyond the sentence. One way to measure this is Topic Persistence, "the number of contiguous subsequent clauses in which the participant NP remains a semantic argument of the clause." (Cooreman, Fox & Givón 1984) Topical arguments have higher values for Topic Persistence, so if *ang* marks discourse topic, *ang*-marked nouns should have higher values for Topic Persistence. Data on Topic Persistence from Walters' (1994) research on ergativity in Cebuano suggests that this is not the case.

Table 3-1: Topic Persistence of Cebuano NPs (Walters 1994)

	# Clauses	Agents	Patients
'Actor focus' (ang-marked agents)	8	TP = 1.9	TP = 0.8
'Object focus' (ang-marked patients)	24	TP = 2.7	TP = 0.5

If ang marked discourse topic, topic persistence would be highest for agents in 'actor focus' clauses and for patients in 'object focus' clauses. Yet in Walters' data, agents have higher values for topic persistence both in actor focus clauses and in object focus clauses. Even when the patient is ang-marked, the agent has higher topic persistence. This suggests that ang does not mark discourse topic, because ang-marking does not have an effect on the topicality of the noun phrase.

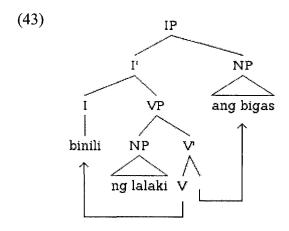
3.4 Tagalog Noun Phrase Markers as Topic Markers

In Tagalog as well, several analyses classify *ang* as a topic marker. Richards (2000) examines the following alternation in Tagalog and claims that it has nothing to do with case, but with which item is marked as the topic⁵:

- (41) bumili ang lalaki ng bigas
 ACTORTOPIC-bought TOPIC man GOAL rice
 'The man bought rice'
- (42) binili ng lalaki ang bigas
 GOALTOPIC-bought ACTOR man TOPIC rice
 'A man bought the rice'

He states that the *ang*-marked topic is in an external subject position, while the actor (*lalaki* in both examples) is base-generated in an internal subject position. The uniqueness of Tagalog stems from its ability to fill both the external and internal subject positions with different nominals without either being demoted to an adjunct. Example (43), a tree for (42) shows the actor (*ng lalaki*) generated in an internal subject position while the topic (*ang bigas*) occupies an external subject position (Richards 2000).

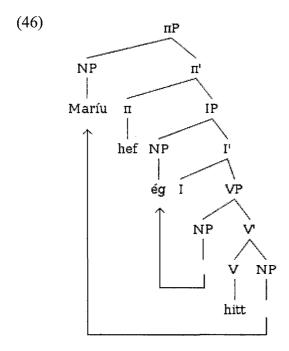
⁵ In the following examples I use Richards' (2000) gloss system.



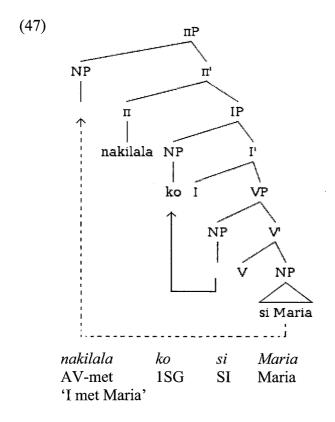
Richards also states that one of the major problems in theories of Tagalog is the assumption that the topic moves to Spec IP, a position where subjects in other languages receive case. He instead argues for an A'-specifier above Spec IP (labeled π P) which is occupied by the Tagalog topic. This position has been argued for in Icelandic, and Richards compares the Tagalog alternation to the following alternation in Icelandic:

- (44) ég hef aldrei hit Maríu I have never met Maria
- (45) Maríu hef ég aldrei hit Maria have I never met

In (45), $\acute{e}g$ is generated in Spec VP and moves to Spec IP while $Mar\acute{u}u$ is generated under V' and moves by A'-movement to Spec πP , a non-case-assigning position. This movement is shown in (46).



Richards suggests that Tagalog structure is very similar, the only difference being that while Icelandic movement to Spec πP is overt, Tagalog movement occurs at LF, as shown in example (47).



Richards has several reasons for proposing this structure in Tagalog. First, Tagalog topicalization behaves like A'-movement for Binding Theory, rather than case driven movement, suggesting that *ang* cannot be a case marker. Movement of an anaphor by A-movement to a position c-commanding its binder is not possible, but topicalization of an anaphor is possible in Tagalog:

- (48) nagmamahal si Juan sa kanyang sarili ACTORTOPIC-loves TOPIC Juan Loc his self 'Juan loves himself'
- (49) minamahal ni Juan ang kanyang sarili GOALTOPIC-loves ACTOR Juan TOPIC his self 'Juan loves himself'

Topicalization of an anaphor above its binder is also possible in Icelandic, suggesting Tagalog topicalization is movement to Spec πP , rather than case-driven movement (Richards 2000: 107).

- (50) Jón elskar sjálfan sig John loves himself
- (51) sjálfan sig elskar Jón himself loves John

Further evidence stems from the fact that Tagalog has a ban on extraction of non-topics.

- (52) $[CP \ sino \ ang \ [\pi P \ hinalikan \ [IP \ ni \ Maria]]]$ who DIRECTION TOPIC-kissed ACTOR Maria 'Who did Maria kiss?'
- (53) $*[_{CP} sino \ ang \ [_{\pi P} \ humalik \ [_{IP} \ si \ Maria]]]$ who ACTORTOPIC-kissed TOPIC Maria

This looks similar to the Icelandic restriction in that only elements in the external subject position can be extracted.

- (54) [CP hvern [$_{\pi P}$ hefur [IP Maria kysst]]]? whom has Maria kissed
- (55) *[$_{\text{CP}}$ hvern [$_{\pi P}$ Maria hefur [$_{\text{IP}}$ kysst]]]? whom Maria has kissed

In both languages, extraction can take place only if the extracted element is in Spec πP . Since the topic occupies Spec πP , it can be extracted, but extraction of other elements is blocked by the topic in Spec πP . In (55), *Maria*, the topic, blocks extraction through Spec πP . In (53), *si Maria* has moved to Spec πP at LF, and therefore blocks extraction of the object of kissing.

Richards addresses another objection to Tagalog topichood by noting that although Tagalog 'topics' do not need to be especially discourse-prominent, Icelandic can also have less discourse-prominent topics. Additionally, the restriction that Tagalog topics be specific or definite is also similar to Icelandic topic, and fits much better with the topic classification than with the subject classification cross-linguistically (Richards 2000: 110). Based on the similarities between Icelandic and Tagalog, Richards concludes that *ang* is a topic marker rather than a case marker, and that the question of whether or not Tagalog is ergative-absolutive is irrelevant.

3.5 Interim Summary

It seems then, that although the term 'topic' has been used in the Cebuano literature for years, this term does not line up with either pragmatic or discourse topic. However, as Richards' analysis suggests, it may be necessary to consider topichood outside the usual senses of given information or 'aboutness' and to view it as an internally or externally generated noun phrase that moves to an A' position at LF. In order to determine whether this type of analysis is desirable, it is necessary to consider other possibilities for the noun phrase markers, and to reconsider the similarities between Cebuano 'topics' and European subjects.

4 Noun Phrase Markers as Determiners

4.1 Previous Analysis in Cebuano

Due to some of the differences in function between *ang*, *sa*, and *ug*, some have questioned whether the noun phrase markers truly form a paradigm. In particular, they point out that *ang* behaves differently from both *sa* and *ug*. Huang and Tanangkingsing (2005: 585) note that while *sa* can be preceded by a demonstrative pronoun in a noun phrase, *ang* cannot.

- (56) kining sa iyang mama kay pilo-on this SA her mother is fold-NAV 'This, which is her mother's, is folded.'
- (57) *kining ang lalaki nipaak sa iro this ANG boy AV-bite SA dog

While some use the differences between *ang* and other noun phrase markers to claim it is a topic marker, Huang and Tanangkingsing classify *ang* as a determiner and *sa* as a case marker. Himmelmann (2005: 146) notes that the split between common and personal markers is typical for determiners. The noun phrase marker *sa*, on the other hand, behaves somewhat like a preposition or case marker in that it is used for adjuncts and is an obligatory constituent of complex prepositions such as *para sa* 'for' and *sulod sa* 'inside'.

- (58) mupadala si Inday ug sulat sa batang lalaki AV-send SI Inday UG letter SA young boy 'Inday will send a letter to the boy'
- (59) nagdula-dula ang iro sa bola sulod sa balay
 AV-play ANG dog SA ball inside SA house
 'The dog is playing with the ball inside the house'

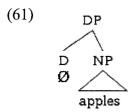
However, while authors often use the term 'determiner' to describe *ang* and to separate it from *sa* and *ug*, there is little discussion as to what the term actually means and what criteria have been used in the classification. For example, Huang and Tanangkingsing's paper is focused on repair, and does not provide any analysis for their choice of classification.

4.2 Implications of Analyzing Noun Phrase Markers as Determiners

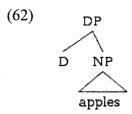
Classifying *ang* as a determiner references an extended literature on determiners developed initially in Germanic and Romance languages (Ghomeshi et al. 2009). Determiners have traditionally been associated with turning a predicate into an argument (Stowell 1989). However, there is disagreement as to whether the category 'determiner' denotes a syntactic position, word class, or both, a distinction which has bearing on the analysis of bare nominals and on the classification of Cebuano NP markers. Ghomeshi et al. (2009) outline three possibilities:

i. Determiners are not required for argumenthood:

ii. Determiners are required for argumenthood, but a null determiner can occupy the D head. The existence of the DP is dependent on the determiner, be it overt or null:



iii. D is a syntactic position that exists separately from the morphological determiner, and does not require an overt or null determiner to exist. The empty D head alone can license the bare nominal:



The three analyses of bare nominals present three ways to interpret why overt determiners are not necessary in some cases in English. They also provide possible frameworks for assessing the presence or absence of determiners in Cebuano. If determiners are not always necessary to turn predicates into arguments, or if empty or null determiners are possible, then it is not necessary to use the label determiner for *ang* simply because it occupies a similar linear position to the word 'the'. The label should only be used if *ang* shares significant characteristics with the determiner class and words that occupy the D head.

Another property associated with determiners is that of definiteness. Ghomeshi et al. (2009) note that it is unclear whether definiteness is a property of lexical entries or the D head itself. If it is a property of lexical entries, different words may carry different values for definiteness. If, however, it is a property of the syntactic position, it is less clear from where variation would stem.

While turning predicates into arguments and denoting definiteness are the two major features associated with determiners, there are other features that determiners may encode. For example, in German, determiners are marked for gender, number, and case (Wiltschko 2009). It is therefore possible that all noun phrase markers are determiners and have case-marking properties as well as determiner properties. If all noun phrase markers are D heads, then *ang*, *sa*,

and ug would be glossed as determiners with a case feature, while if only ang is a D head, sa could be a preposition or a case marker, and ang would not necessarily carry a case feature. To determine whether noun phrase markers are indeed determiners or whether ang alone is a determiner, it is necessary to look at the argument-creating function of the particles as well as their impact on the understanding of the definiteness of the nouns they mark.

4.3 Analysis of Relevant Data from Cebuano

In most cases, it seems that a noun phrase marker such as *ang* (or sometimes *sa*) is necessary to turn a noun phrase into an argument in a sentence.

- (63) *mga iro nipaak sa tawo
 PL dog AV-bite SA man
 'Some dogs bit the man'
- (64) *ubang mga iro nipaak sa tawo some PL dog AV-bite SA man 'Some dogs bit the man'
- (65) ang mga iro nipaak sa tawo ANG PL dog AV-bite SA man 'The dogs bit the man'
- (66) ang ubang mga iro nipaak sa tawo ANG some PL dog AV-bite SA man 'Some dogs bit the man'

In these cases, *ang* marks a definite noun phrase, and sentences without an *ang*-marked noun phrase are ungrammatical. While the notion of definiteness is not entirely well defined, many agree that it encompasses a sense of familiarity with the referent and uniqueness of that referent or group (Paul 2009: 221).

However, there are some cases where *ang* marks a non-definite noun phrase, for example, in its use in sentences that contain generics.⁶

(67) ang mga liyon mukaon ug karne ANG PL lion AV-eat UG meat 'Lions eat meat'

There are some cases where *ang* is not necessary to turn a noun phrase into an argument, for example with demonstratives.⁷

(68) kining liyon mukatkat sa kahoy this lion AV-climb SA tree 'This lion climbed the tree'

Much like the bare nominals in English, there are several possibilities for this data. If demonstratives are not determiners, then the same possibilities that apply to English bare nominals apply here; that is, either determiners are not necessary to turn predicates into arguments, there is an empty D head, or there is a null determiner in the D head. The other possibility is that demonstratives do occupy the D head in the DP, and themselves turn the noun phrases into arguments.

However, if demonstratives occupy the D head, one would expect that they could not cooccur with other determiners. In English, for example, '*the this lion' is ungrammatical. This is not the case in Cebuano. In fact, *ang* and the demonstrative can co-occur.

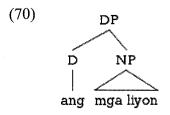
(69) ang kining mga liyon mukatkat sa kahoy
ANG these PL lion AV-climb SA tree
'These lions climbed trees'

Since both can alone change the NP into an argument, they each must be associated with whatever structure or feature does this. Yet since both can occur together, they do not both

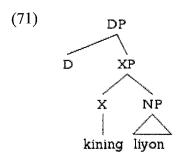
⁶ It is unclear, though, whether generics are actually non-definite. In this case, there seems to be no particular familiar referent. However, in Romance languages, definite determiners accompany plural generics, so this type of result is not limited to Austronesian languages.

⁷ However, in these cases, the demonstrative appears in the 'ang form' and not the sa or kang form.

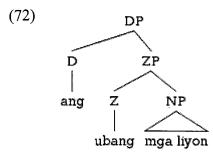
occupy the D head.⁸ This suggests that there is some sort of null or empty determiner that turns predicates without an overt determiner into arguments, or that no determiner is necessary to turn noun phrases into arguments. But in (64) it is clear that there are some cases in which *ang* is necessary to obtain a grammatical NP. Therefore, it is most likely that there is a DP structure introduced or licensed by some but not all noun modifiers, and that this DP structure, occupied or not, turns the NPs into arguments. As to which word actually occupies the D head, *ang* is the best candidate, since it is the leftmost word in the sentence. Demonstratives would occupy lower XP positions which carry or license DP structure.



ang occupies D and turns the phrase into an argument

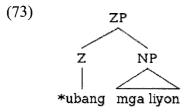


kining introduces or licenses DP structure which turns the phrase into an argument



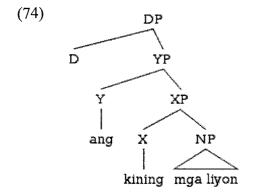
ang occupies D and turns the phrase into an argument

⁸ In this paper, I do not address the possibility of multiple stacked DPs.



ubang does not introduce or license DP structure, thus without *ang*, the phrase is ungrammatical

Yet if *kining* can occupy an XP which introduces DP structure, it is also possible that *ang* does the same, since it does not possess all of the definiteness characteristics usually associated with determiners. For example, it marks generics. In this situation, *ang* would not be a determiner, but would introduce or license structure necessary to turn a predicate into an argument, much like *kining*.



Analyzing ang as introducing or occupying a D head raises questions about sa and ug, often considered to form a noun phrase marker paradigm. While sa possesses definiteness characteristics distinct from ug, it has a different distribution from ang and is not only associated with arguments of the verb, but also with adjuncts and prepositions. These differences are discussed in more detail below.

The definiteness distinction between sa and ug is clear and repeatedly attested. Like ang, sa marks mainly definite nouns with known referents, while ug only marks indefinite nouns.

- (75) nagdala ug sikbut ang batang lalaki AV-carry UG net ANG young boy 'The boy was carrying a/*the net'
- (76) nagdala sa sikbut ang batang lalaki AV-carry SA net ANG young boy 'The boy was carrying the/*a net'

While there is generally only one *ang*-marked noun phrase in a sentence, there can be several *sa*-marked noun phrases, one sometimes appearing to function as an argument while others are adjuncts or prepositions. For example, in (77), *sa* marks 'the letter', which is taken to be an argument of 'Inday sent the letter to Perla'. In (78), *sa* marks not only the indirect object 'to the boy', but also marks the location of the boy 'in the city', and a characteristic of the city, 'the city of Cebu'.

- (77) padalhan ni Inday si Perla sa sulat send-NAV NI Inday SI Perla SA letter 'Inday sent the letter to Perla'
- mupadala sa ang babayi ug sulat ngadto lalaki sa siyudad Sugbu sa AV-send ANG woman UG letter toward SA boy SA city SA Cebu 'The woman will send a letter to the boy in Cebu City'

However, Himmelmann (2005: 147) notes that the variety of functions of a *sa*-like marker is a common feature of Philippine languages, and that there is cause for doubt about whether Cebuano even has a core-peripheral argument distinction.

While the question of whether *ang*, *sa*, and *ug* are determiners is one that has been debated in the literature, one must ask what bearing the answer to this question has on the understanding of the rest of Cebuano sentence structure. While other languages have agreement between verbs and noun phrases based on person, number, gender, or word order, Cebuano possesses none of this. Agreement is based solely on the interaction between the verb

morphology and the noun phrase markers. Thus in order to label the noun phrase markers determiners, this agreement must be able to be obtained within the determiner model.

If, following Huang and Tanangkingsing (2005), ang is a determiner while sa and ug are case markers, this agreement could be obtained by noting that the verb agrees with noun phrases marked with a determiner. This recalls the topic marker classification, where ang marks topic, and the verb agrees with topic marked noun phrases.

It is also possible that ang, sa, and ug as well as the personal name markers si, ni, and kang do form a paradigm. This is a tempting analysis, since ang and sa do share some definiteness characteristics, and since demonstratives and pronouns have three forms that correspond to ang, sa, and kang (since names cannot be indefinite). It seems unlikely that the determiner characteristic alone would be responsible for driving agreement with the verb. Yet there is no reason why ang cannot be marked for case like sa and ug. As discussed above, German determiners are marked for case, and in Cebuano it is possible that agreement is case based.

4.4 Tagalog Noun Phrase Markers as Determiners

In Tagalog, since *ang*-marked NPs have definiteness restrictions that are not usually associated with subjects, one proposal is that *ang* is actually a determiner, and definiteness restrictions stem from its determiner status, rather than its characterization as a case or topic marker.

Himmelmann (2006: 2) notes that the markers form a paradigm, all non-pronominal argument and adjunct expressions must have one of the markers, and personal pronouns and demonstratives, which are not marked, have three different forms whose distribution is roughly equivalent to the distribution of the markers, differing from the common markers because of

their required definiteness. He claims that the markers are actually syntactic heads and that sa heads prepositional phrases while ang and ng head determiner phrases. In classifying sa as a preposition, he notes that adjuncts are introduced with sa and that it marks many non-subject arguments, including beneficiaries and recipients. He points out that sa is different from European prepositions in that it is the only preposition in Tagalog, and is thus obligatory in all prepositional phrases. In order to express different meanings, sa is combined with a specifier. Additionally, while in English, the complement of a preposition is a DP, this is not true in Tagalog if DPs are considered to be ang or ng marked phrases.

The assumption that *ang*, *ng*, and *sa* form a paradigm breaks down because while *ang* and *ng* are in complementary distribution, they each can immediately precede a phrase marked by *sa* (Himmelmann 2006: 4) and there are no phrases where *sa* immediately precedes *ang* or *ng*.

tumubo' hanggáng (79)yamang pagóng magbunga while SPEC Loc turtle PRED until Loc AV-flower MRK growth "...while that of the turtle grew until it bore fruit"

He states that *ang* and *ng* must be in c-commanding position over *sa*, since their phrase structural position is always 'higher' and no empty categories are assumed (Himmelmann 2006). Both *ang* and *ng* occur at the left edge of the phrase and can be replaced by demonstratives. Yet while *ang* marks subject phrases, topic phrases, and predicates, *ng* marks non-subject complements (where it alternates with *sa*) and possessors. Since the syntactic distribution is determined by the marker, Himmelmann concludes that they are heads of their phrases. Yet unlike demonstratives, they are not distributional equivalents of their phrases because they cannot stand alone (Himmelmann 2006: 7). However, this is most likely a result of their clitic status, rather than their syntactic structure.

Himmelmann notes that *sa* is widely accepted as a preposition which allows for a specifier, and that the category of *ang* and *ng* is more disputed. He analyzes *ang* as a specific article and *ng* as its genitive form, and considers them determiners heading DPs. There is some support for this in that phrases with both *ang* and a demonstrative are considered ungrammatical in all but informal registers. This suggests that demonstratives occupy the same position as *ang* and *ng*. However, there is also evidence that there are multiple types of demonstratives, including adjuncts that occur in rightmost position accompanying another non-adjunct demonstrative. Therefore, while there is evidence suggesting similarities between determiners, demonstratives, and *ang* and *ng*, there are also issues with the analysis, and it does not entirely account for the voice alternations that are prevalent in the language.

4.5 Interim Summary

Due to the varying possibilities of the structure of determiners, it is difficult to tell whether ang is a D head or whether it simply introduces or licenses DP structure. If ang is a determiner, deeper analysis reveals one of two possibilities: if ang is the only determiner, that is, the only noun phrase marker to introduce DP structure, then it is possible that ang-marked NPs are the only real arguments in the sentence, and that sa- and ug-marked NPs are all adjuncts. Determining agreement would be simple: the verb simply agrees with the only DP in the sentence. This would require positing that all Cebuano verbs are intransitive. However, if ang, sa, and ug are all determiners, there must be case marking on these determiners, and agreement with the verb is based on case.

The ability of *ang* to turn noun phrases into arguments points toward it being a determiner, but questions still exist due to ambiguities about definiteness. The ability of demonstratives both to turn noun phrases into arguments and to co-occur with *ang* points to the

existence of null or empty D heads in Cebuano, and thus whether *ang* occupies the D head or merely introduces or licenses a functional D head is unclear.

5 Noun Phrase Markers as Case Markers

5.1 Previous Analysis in Cebuano

While no Western Austronesian language has case affixes, Himmelmann (2005) notes that languages like Cebuano have phrase-marking clitics which are often called case markers. In his reference grammar, Tanangkingsing (2009: 105, 107) classifies noun phrase markers as case markers, and claims that every noun phrase takes a case marker, though he notes that *ang* can be omitted in colloquial speech. He analyzes 'actor focus' constructions as intransitive, and 'object focus' constructions as transitive, thus determining that Cebuano is morphologically ergative: actors in 'actor focus' clauses and patients in 'object focus' clauses take the same case marker, *si* or *ang*, while agents in 'object focus' clauses take a separate maker, *ni* or *sa*. Patients in 'actor focus' clauses are taken to be extended arguments and are marked with *kang*, *sa*, or *ug* (Tanangkingsing 2009: 106). Rather than use the terms 'ergative' and 'absolutive' however, he chooses to use the term 'nominative' for the 'actor focus' construction and the patient of the 'object focus' construction, and the term 'genitive' for the agent of the 'object focus' construction. Below is his table of case markers.

Table 5-1: Cebuano Noun Phrase Markers (Tanangkingsing 2009)

	NEUTRAL	NOM	GEN	DAT	EXT	LOC
PERSONAL	=y	si	ni	kang	-	-
COMMON		ang	sa	-	ug	sa

Tanangkingsing (2009: 107) describes nominative case markers as marking nominative nominal no matter what their semantic role: agent in actor voice clauses and patient in patient voice clauses In addition, he notes that topicalized nominals are also marked with *ang* or *si*. 9

⁹ The following example uses Tanangkingsing's (2009) glossing system.

(80) ang iya-nga dog gi-uyog ang tree
ANG 3SG.POSS-LK dog PFV.PV-shake ANG tree
'His dog, (it) shook the tree'

Bunye and Yap (1971: 38) also classify the noun phrase markers as case markers, but rather than use terms such as nominative or ergative, they term *ang* and *si* 'topic', *sa* and *ni* 'agentive', and *sa*, *ug*, and *kang* 'oblique'. They note that the topic always indicates the subject or focus of a construction, and that the agentive and oblique have varying roles depending on the construction. Their notes on topic constructions are similar to Ghazali (1990). They note that the agentive marker indicates source of action, possession, and location.¹⁰

- (81) gikaon sa amahan ang ubas OBJ-ate AGT father TOP grapes 'The father ate the grapes'
- (82) dako ang balay sa babaye big TOP house AGT woman 'The woman's house is big'
- (83) mularga si Ginny sa Pilipinas
 ACT-leave TOP Ginny AGT Philippines
 'Ginny is leaving for the Philippines'

The oblique markers have several uses including goal, beneficiary, instrument, and occasionally actor.

- (84) guhaton nila ang siya kang Ramon make-OBJ AGT-3PL TOP chair OBL Ramon 'They'll make the chair for Ramon'
- (85) giabri nila ang pultahan sa akong yawe OBJ-open AGT-3PL TOP door OBL my key 'They opened the door with my key'
- (86) kaonon ug bata ang saging eat-OBJ OBL child TOP banana 'A child will eat the banana'

 $^{^{10}}$ The following examples use Bunye & Yap's (1971) glossing system.

The marker *sa* may also be preceded by an additional preposition or auxiliary word when referring to recipients of certain actions.

The state of the s

(87) putlon alang ni Undo ang kahov iyang sa amigo cut-OBJ AGT Undo tree TOP for OBL his friend 'Undo will cut the tree for his friend'

Bunye and Yap make a couple of other interesting observations. First, when there is a sequence of constituents marked with sa, the first (the one that follows the verb) is oblique, while all subsequent ones are agentives.

(88) maghinpyo sila muebles sala amahan sa mga sa sa ACT-clean OBL furniture AGT living father TOP-PLAGT 3PL room 'They'll clean the furniture in the living room of the father'

They also note that sa marks definite nouns while ug marks indefinite nouns.

- (89) mangaon kami ug isda ACT-eat TOP-1PL OBL fish 'We'll eat fish'
- (90) mangaon kami sa isda ACT-eat TOP-1PL OBL fish 'We'll eat the fish'

However, Bunye and Yap use the terms topic and agentive as types of case, and classify the noun phrase markers as case markers. Even Ghazali (1990: 55), who uses the term topic, equates topic with "phrases in nominative nominal position", and notes that topics are always in nominative case. She also uses the terms 'genitive' and 'oblique' to describe the other noun phrase markers, effectively using the same terms as the case-marking analysis of Cebuano does. There is a significant amount of terminology overlap between the case-marking and topic-marking theories. Thus it is necessary to examine what would be expected of noun phrase markers that mark case, and compare these expectations to the evidence present in Cebuano.

5.2 Implications of Analyzing Noun Phrase Markers as Case Markers

The labeling of Cebuano noun phrase markers as case markers references a long tradition of case in linguistic theory. While according to Butt (2006), there is no well-defined notion of case, there is a sense that it marks the relationships between words in a sentence. Blake (2001) defines case as "a system of marking dependent nouns for the type of relationship they bear to their heads." Two main theories of case are structural case within Government-Binding (GB) and the Minimalist Program (MP) and linking theories of case within Lexical-Functional Grammar (LFG).

Structural case within GB/MP posits that case assignment depends on the structure of the verb phrase and the assignment of theta roles. Only abstract case (nominative and accusative case) is assigned by the verb, while other cases are termed 'inherent' and are not assigned by the verb. However, all NPs must have Case in order to appear in a sentence. Overt case marking is considered to be part of PF, just a matter of spell out of abstract case features (Butt 2006).

Linking theories such as LFG, on the other hand, look at case as a mapping between thematic roles (agent, beneficiary, patient, etc.), argument structure (the thematic roles of a particular predicate) and grammatical functions (subject, object, second object, oblique, complement, adjunct). While subject and object are not very selective about thematic roles, second objects and obliques are more sensitive to theta information (Butt 2006: 121).

Kiparsky (1997) notes that richness of inflection is correlated with freedom of word order. That is, languages without much morphology have little word order freedom.

Furthermore, languages with little or no case morphology tend to make use of agreement morphology or positional cues to identify the subject vs. object (Butt 2006: 109).

Another facet to case-marking, other than how it is assigned, is the question of alignment, which refers to how case marking is grouped relative to transitive and intransitive verbs. nominative-accusative alignment marks subjects of intransitive clauses (S) and subjects of transitive clauses (A) with nominative case, and objects of transitive clauses with accusative case. By contrast, ergative-absolutive alignment marks S and O with absolutive case and A with ergative case. In many languages, the absolutive or nominative cases are unmarked morphologically. An analysis of Cebuano noun phrase markers as case markers must also hypothesize in which alignment system the language falls.

Based on Kiparsky's observations, if Cebuano lacked overt case markers, rigid word order or agreement morphology would be expected to compensate for this. Working within GB/MP, structure would be expected to determine case, while in LFG, case would be assigned as a mapping from argument structure to grammatical functions. Additionally, while it is possible for topics to have case, they do not receive case by virtue of being topics. Thus a case marking analysis would result in some notion of subject in Cebuano, which might then raise to topic position. That subject would either be marked with nominative case, or with ergative or absolutive case depending on the transitivity of the verb.

5.3 Analysis of Relevant Data from Cebuano

Since Cebuano lacks rigid word order or person/number/gender agreement on verbs, thematic roles of arguments are determined by the interaction between the verb and noun phrase markers only.

- (91) nipaak ang iro sa tawo AV-bite ANG dog SA man 'The dog bit the man'
- (92) nipaak sa iro ang tawo AV-bite SA dog ANG man 'The man bit the dog'

This suggests that the noun phrase markers are either overt case markers, for example, that *ang* marks nominative and *sa* marks accusative case, or that there is an entirely different system of agreement occurring in Cebuano, for example topic agreement.

At the very least, it seems that non-argument noun-phrase markers mark inherent case, such as location. The prepositional nature of these constructions has led some to label them prepositions rather than case markers. However, they also are present even when a lexical preposition is used, suggesting they mark the theta role of the noun phrase.

(93) nagdula-dula ang iro sa bola sulod sa balay sa babayi AV-play ANG dog SA ball inside SA house SA woman 'The dog is playing with the ball inside the woman's house'

In this example, sa also marks possession, which is typical of the genitive case.

In order to believe that the noun phrase markers mark case as opposed to a different sort of verbal agreement like topic, Cebuano would be expected to have subjects. However, *ang*-marked nouns, the best candidate for subjects, have some characteristics that are strange for subjects, for example the requirement of definiteness. Additionally, due to the flexibility of Cebuano sentence structure, it is often difficult to find diagnostics for subjecthood. Himmelmann (2005) lists a few that are often used in determining subjecthood in Western Austronesian languages, such as quantifier float, and relativization.

Himmelmann notes that floated quantifiers agree exclusively with the *ang*-marked noun phrase, and determines that it is therefore the subject. In (94) and (95), the quantifier modifies

the noun phrase of which it is a part. However, when the quantifier is floated, as in (96), the quantifier modifies only the *ang*-marked noun phrase.

- (94) himuon sa mga bata ang tanang mga sulat do-NAV SA PL child ANG all PL letter 'All the letters will be written by the children'
- (95) himuon sa tanang mga bata ang mga sulat do-NAV SA all PL child ANG PL letter 'The letters will be written by all the children'
- (96) himuon tanan sa mga bata ang mga sulat do-NAV all SA PL child ANG PL letter 'All the letters will be written by the children' *'The letters will be written by all the children'

Relative clauses also point toward the existence of subjects in Cebuano, since only subjects can be relativized; that is, the head to which the relative clause is attached must be the subject of the relative clause (Himmelmann 2005: 161).

- (97) ang bata nga gilabay niya sa isda ANG child NGA NAV-throw 3SG SA fish 'The child that he threw the fish to'
- (98) ang bata nga naglabay niya sa isda ANG child NGA AV-throw 3SG SA fish 'The child who threw him the fish'

In the above two examples, *ang bata* can be taken to be the subject in the relative clause. In both cases, the verb within the relative clause agrees with the *ang*-marked noun phrase. In example (97), the non-actor voice verb agrees with *ang bata* and the child is the recipient, while in (98), the actor voice verb agrees with *ang bata* and the child is the actor. However, a relative clause where the verb does not agree with the head of the relative clause is ungrammatical:

(99) *ang bata nga gilabay niya ang isda ANG child NGA GI-throw 3SG ANG fish *'The child who the fish was thrown to him by' In this case, *ang isda* is the subject of the relative clause and agrees with the non-actor voice verb. However the sentence is ungrammatical because the verb must agree with the head of the relative clause. Himmelmann claims this property points to the existence of subjects in Cebuano.

While some tests may point to *ang*-marked phrases as being subjects, subject itself is a vague term, and one must question whether subjecthood merely consists of having a certain number or the right subset of properties. For this reason, some use the term 'syntactic pivot' rather than subject for *ang*-marked noun phrases in Austronesian languages (Himmelmann 2005: 156).

Whether or not Cebuano has subjects, if the noun phrase markers are case markers, the question still remains as to what case they mark. One possibility is that Cebuano follows an English-like nominative-accusative case marking pattern. Under this schema, *ang* and *si* mark nominative subject while *sa*, *ug*, and *ni* mark accusative object.

(100) nipaak ang iro sa tawo AV-bite ANG dog SA man VERB-TRANS NOM/SUBJ ACC/OBJ 'The dog bit the man'

Sentences with non-actor voice verbs are taken to be passive constructions.

(101) ang tawo gipaak sa iro
ANG man NAV-bite SA dog
NOM/SUBJ VERB-TRANS ADJUNCT
'The man was bitten by the dog'/'The dog bit the man'

However, under this analysis, all non-actor voice sentences are assumed to be passives. Cross-linguistically, passives show defocusing of agents, low text frequency, and distinct word order from the active construction. Tanangkingsing & Huang (2007) note that clauses with *gi*-verbs do not show a tendency toward agent omission and that these clauses account for 51% of clauses in narratives, too frequent for passives. This suggests that *ang* does not mark nominative case.

Another possibility is that *ang* and *si* mark absolutive case while *ni* and *sa* mark ergative case. This requires assuming that actor voice clauses are actually intransitive, this marking their intransitive subject with absolutive case. Object voice clauses are then taken to be transitive, and the agent of the transitive clause is thus marked with ergative case while the object takes absolutive case. In actor voice intransitive clauses, then, patients are not core arguments, but adjuncts marked with *ni*, *kang*, *sa*, or *ug*.

- (102) nipaak ang iro sa tawo AV-bite ANG dog SA man VERB-INTR ABS/SUBJ ADJUNCT 'The dog bit the man'
- (103) ang tawo gipaak sa iro
 ANG man NAV-bite SA dog
 ABS/OBJ VERB-TRANS ERG/SUBJ
 'The man was bitten by the dog'/'The dog bit the man'

Another analysis is that actor voice clauses are antipassives that maintain their patients. However, much like the passive analysis above, it would be strange for a language to have such a high frequency of antipassives. Again, one of the problems in determining alignment is that the phrase marking paradigms "rarely, if ever, provide clear cut evidence for distinguishing core arguments from peripheral arguments (or adjuncts)." (Himmelmann 2005: 147) Since determining alignment requires an understanding of which constructions are transitive and which are intransitive, this issue makes definitive analysis difficult.

However, the existence of a phrase marker paradigm that seems to apply to demonstratives and pronouns suggests that there is similarity among the noun phrase markers, which is most easily explained by positing that the markers all share a single feature, such as case.

Table 5-2: Cebuano Pronouns (Tanangkingsing 2009)

	si-like	ni-like	kang-like
1SG	ako	nako	kanako
2SG	ikaw	nimo	kanimo
3SG	siya	niya	kaniya
1PL-EXCL	kami	namo	kanamo
1PL-INCL	kita	nato	kanato
2PL	kamo	ninyo	kaninyo
3PL	sila	nila	kanila

One issue with this analysis is the well-defined definiteness distinction between sa and ug in (89) and (90), where the use of one or the other changes only definiteness and has no influence on thematic roles. Some possible solutions are that sa is a determiner that carries case, while ug is only a case marker, or that sa-marked NPs are arguments while ug-marked NPs are adjuncts. Unfortunately, both of these possibilities contradict other observations about the determiner-like distinctions between ang and sa and the argument structure similarities between sa and ug.

The above issues have led some to suggest that Western Austronesian alignment is wholly different from either nominative-accusative or ergative-absolutive. This, though, is an unsatisfactory analysis, since one would hope theories could be applied cross-linguistically. However, if the mapping theory of LFG is employed, it might be conceivable that actor voice verbs map agents to subjects, while object voice verbs map patients to subjects, allowing the LFG account of case to apply both to languages like English and languages like Cebuano.

5.4 Tagalog Noun Phrase Markers as Case Markers

The analysis of noun phrase markers as case markers is also prevalent in Tagalog.

Kroeger (1993a) views the noun phrase markers as case marking clitics which in standard

Tagalog orthography are written as separate words. He classifies them along traditional lines as nominative, genitive, and dative case markers. Common markers mark all common nouns and place names, while Personal markers mark personal names.

Table 5-3: Tagalog Noun Phrase Markers (Kroeger 1993a: 13)

	NOM	GEN	DAT
Common	ang	ng	sa
Personal	si	ni	kay

He notes that each verbal clause must contain only one nominative argument and that the voice marker picks out the role of the nominative argument. Thus, the nominative argument is said to be 'in focus' (in a different sense from the traditional pragmatic one). Kroeger also points out that while the nominative argument is usually definite, it can also be generic, or even indefinite if it is marked by a numeral quantifier.

Rackowski and Richards (2005) suggest that ang and ng are not case markers exactly, though they carry case information, but that nominative case is checked and valued by T while accusative case is checked and valued by v, similar to what occurs in English. They characterize ang as a DP marker which agrees with the verb and copies its case feature to the verb. ¹¹

Thus ang-marked DPs undergo case agreement with v and are the highest DP in the vP phase edge. This conclusion is derived from their notion of locality, and results in the restriction on extraction to ang-marked noun phrases. Since the ang-marked DP is the highest in vP, it is the only one that is able to be extracted.

Aldridge (2006) also claims the words are case markers, but differs in the analysis of the type. She believes that Tagalog is an ergative language, and that *ang* marks absolutive, rather than nominative case. She disagrees with Rackowski and Richards' (2005) case agreement analysis, and argues that the verbal affix is not a copied case feature, but a marker of transitivity.

¹¹ This example is glossed according to Rackowski & Richards (2005).

Aldridge shows that plural agreement does not occur between all *ang*-marked NPs and the verb. It occurs in 'nominative agreement' contexts where the agent is marked with *ang*, but not in 'accusative agreement' contexts where the patient is marked with *ang*. 12

- (105) nag-si-basa ang mga bata ng liham NOM.ASP-PL-read ANG PL child CASE letter 'The children read a letter'
- (106) *si-ni-basa ng bata ang mga liham
 PL-ACC.ASP-read CASE child ANG PL letter
 *'The child read the letters'

To account for this distribution, Aldridge proposes that 'nominative agreement' verbs are actually intransitive and their v does not carry a structural case feature, while 'accusative agreement' verbs are transitive and their v does carry a case feature. T then, has an absolutive case feature when it combines with intransitive v. She supports this by noting that sentences with only one argument have the same verbal morphology as verbs that agree with an ang-marked agent. (Nag-, above, and -um-, below, both mark verbs that agree with ang-marked agents.)

(107) d-um-ating ang babae
-INTR.PERF-arrive ABS woman
'The woman arrived'

Under this analysis, sentences with *ang*-marked patients are transitive. Their agents receive ergative case and their patients receive absolutive case. Sentences with *ang*-marked agents are intransitive, so their agents receive absolutive case and their patients receive inherent oblique case.

(108) guma-gamit siya ng lalaki INTR.PROG-use 3SG.ABS OBL man 'He uses a man'

¹² The following examples are glossed according to Aldridge (2006).

Lastly, Aldridge notes that under her analysis, where transitive objects and intransitive subjects both carry the same (absolutive) case marker, only absolutive noun phrases can be extracted, a well-known property of ergative languages. Thus treating the noun phrase markers as case markers requires, for her, an analysis of the voice system of Tagalog as ergative.

While most of the discussion of ergativity in Tagalog is related to agreement of noun phrases with the verb and relies on an analysis of the noun phrase markers as morphologically ergative or absolutive, Manning and Sag (1999) claim that what distinguishes Tagalog and other Philippine languages is not their morphology, but their syntax. Working within LFG, they argue that syntactic and morphological ergativity are two separate phenomena. Classifications such as accusativity and ergativity result from differences in the mapping from argument structure to grammatical relations. Syntactic accusativity is marked by agents mapping to subjects, while syntactic ergativity is marked by agents mapping to objects, regardless of the morphology (Manning 1995). Manning claims that Tagalog and other Western Austronesian languages are neither syntactically ergative nor syntactically accusative. Instead, the voice system allows for great flexibility in the mapping of argument structure to grammatical relations, allowing both agents and patients to retain their core argument status; the corresponding grammatical relations are determined by the voice system, rather than by demoting a core argument to an oblique argument (Manning 1995: 14). In this way, he is able to explain why Tagalog does not easily fit into traditional alignment categories without positing an entirely different structure for Philippine languages.

5.5 Interim Summary

Case marker terminology tends to be the default for describing noun phrase markers, yet there are many consistency issues with this analysis. While the markers appear to form a paradigm, they do not pattern convincingly with nominative-accusative or ergative-absolutive languages. Even the presence of subjects in Cebuano cannot be taken for granted. Some markers possess characteristics expected of inherent case markers, yet *ang* can also mark topicalized noun phrases and verbs.

Unfortunately, several of the tests which suggest a case marking analysis in Tagalog are not available in Cebuano. For example, there is no plural agreement on the verb in Cebuano, and this lack of additional agreement between verbs and NPs makes an analysis of transitivity more difficult in Cebuano. Additionally, the two languages have a different array of noun phrase markers. While both languages have the *ang* and *sa* markers, Tagalog has *ng*, corresponding to something like a definite genitive while Cebuano has *ug*, an indefinite oblique. Thus Cebuano may have different results in areas such as definiteness.

However, perhaps within the LFG case theory, there is enough flexibility to accommodate Cebuano noun phrase markers as case markers. The idea that Cebuano and Tagalog are able to map agents to subject or object without demoting either to an adjunct could accommodate the facts while positing only a slight modification to an existing cross-linguistic theory.

6 Summary and Conclusion

As evidenced by the varying analyses presented in this paper, the characterization of the voice system and the noun phrase markers is still an open question among linguists. There is evidence both within Cebuano and cross-linguistically for characterization of the noun phrase markers as something like a topic marker, something like a determiner, and something like a case marker.

The classification of *ang* as a topic marker is appealing because it provides a simple analysis for why *ang*-marked noun phrases must be definite and why only *ang*-marked phrases can be extracted. It also captures a notion of 'aboutness' associated with *ang*-marked NPs in a sentence. However, *ang*-marking does not correlate with 'aboutness' on the level above the sentence, as evidenced by its lack of correlation with increased Topic Persistence, and so does not fit into the traditional category of discourse topic. Nor does it align with traditional pragmatic topichood, since it can mark both new and given information. Thus characterizing *ang* as a topic marker is only appropriate if the notion of topichood is expanded crosslinguistically to include less strict distinctions between given and new information or a different sense of the meaning of 'aboutness'.

Analyzing all or some of the noun phrase markers as determiners is useful because it captures well attested differences in definiteness among noun phrases with different markers. Since noun phrase markers, especially *ang*, are almost always required in order to form grammatical sentences, the cross-linguistic observation that determiners turn predicates into arguments makes the determiner analysis very appealing. The fact that demonstratives can sometimes take the place of the noun phrase markers is consistent with evidence from other languages, such as English. Although the co-occurrence of *ang* and demonstratives necessitates

the assumption of null or empty D heads, this is not unprecedented cross-linguistically. However, there are some instances where *ang* marks seemingly non-definite noun phrases, calling into question its status as a definite determiner. Additionally, if both *ang* and *sa* are determiners, further marking would be necessary in order to determine agreement with the verb, suggesting that perhaps the noun phrase markers bear an additional feature, such as case.

The fact that Cebuano has relatively free word order and no person, number, or gender agreement suggests that overt case marking is what shows agreement with the verb. Because the agreement between the noun phrase marking and the verbal morphology determines theta roles of the noun phrases, it is simple to assume that arguments are marked with overt case. Furthermore, sa assumes roles typical of inherent case markers, such as marking possession and location. However, there is an implicit assumption that the 'nominative' case marker will denote the subject, and the subject properties of ang-marked noun phrases are cloudy at best. Particularly, the requirement of definiteness in an ang-marked noun phrase is a strange requirement for a subject. The case marker analysis also does not provide a satisfying account of the definiteness distinction between sa and ug. Another issue with the case marker analysis is that within GB/MP, it requires an analysis of the language as nominative-accusative or ergativeabsolutive. This is problematic because both agent voice and patient voice phrases seem to incorporate both agents and patients as core arguments. This data points away from a nominative-accusative analysis, which requires extensive use of passives with demoted agents and also points away from an ergative-absolutive analysis, which requires extensive use of intransitives with oblique patients. The most compelling analysis is the case-marking analysis within LFG, which allows for the coexistence of two distinct methods of mapping argument structure to grammatical functions to case.

The issue of how to classify these markers is further complicated by the various theoretical frameworks that have been used to examine Cebuano and other Austronesian languages. The same facts are approached differently by authors who subscribe to different theories, yielding various essentially similar analyses with varying terminology as well as fundamentally different analyses that use similar terminology. Because their analyses are bound up in the theories they employ, authors often argue parallel to each other, some in the same direction and some in opposite directions, complicating the literature. Furthermore, even within a single theory, there is little consensus as to how each type of marker functions crosslinguistically. Since commonly used diagnostics in one language family often do not apply to another, each author decides which properties he or she will use to characterize each possibility, and then determines which classification most closely matches the set of properties displayed by Cebuano noun phrase markers. Overlaps in the sets of properties used to distinguish topic markers, determiners, and case markers lead to conflicting classifications based on the same observations.

Based on my observations, the most compelling analysis is that the noun phrase markers ang and sa license D heads and ang, sa, and ug bear case features. The best analysis of how case is assigned is Manning & Sag's (1999) modification of LFG mapping rules to allow Cebuano to map agents to subjects or agents to objects, depending on the voice marker. This analysis requires neither the extensive use of passives or intransitives nor does it posit a completely different voice system for Western Austronesian languages. The combination of the case marker analysis with the determiner analysis could also help explain the strange definiteness requirements of subjects in Cebuano.

While the precise analysis of the noun phrase markers in Cebuano is still unclear, the close examination in this paper highlights the usefulness of Western Austronesian languages as a testing ground for theories of noun phrases and argument structure. The questions posed by these languages offer useful insight into possibilities that should be considered when formulating theories of topic markers, determiners, or case markers. Rather than claiming that a language like Cebuano is fundamentally different from a language like English, it makes sense to reexamine the facts and determine if there is a way of incorporating both sets of evidence under a single analysis.

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Appendix

Appendix				
Table of Abbreviations				
1SG	first person singular			
2SG	second person singular			
3SG	third person singular			
1PL-EXCL	first person plural exclusive			
1PL-INCL	first person plural inclusive			
2PL	second person plural			
3PL	third person plural			
A	agent-like argument of canonical transitive verb			
ABS	absolutive			
ACC	accusative			
-ACC-	accusative verb marker; indicates ang marks patient			
ACT-	active verb marker; indicates ang marks agent			
AGT	agent			
ANTIP-	antipassive			
ASP-	aspect			
AV-	actor voice; indicates ang marks agent			
DAT	dative			
DET	determiner			
ERG	ergative			
EXT	extension			
GEN	genitive			
INS-	instrumental verb marker; indicates ang marks instrument			
INTR	intransitive			
IV-	instrument voice; indicates ang marks instrument			
KA	numeral connector; indicates units of			
LK	linker			
LOC	locative			
-LOC	locative verb marker; indicates ang marks location			
LV-	locative voice; indicates ang marks location			
NAV-	non-actor voice; indicates ang does not mark agent			
NEG	negation			
NOM	nominative			
O	object-like argument of canonical transitive verb			
OBJ	object			
-OBJ	-			
OBL	object verb marker; indicates ang marks patient oblique			
PERF	•			
PFV	perfect			
PL	perfective			
POSS	plural			
	possessive			
PROG	progressive			
PV-	patient voice; indicates ang marks patient			
S	single argument of canonical intransitive verb			
SPEC	specifier			
SUBJ	subject			
TOP	topic			
TRANS	transitive			