

Non-Verbal Argument Structure: Evidence from Tagalog

by

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B.A. Linguistics
University of California, Santa Cruz, 2000

Submitted to the Department of Linguistics and Philosophy
In Partial Fulfillment of the Requirement for the Degree of

Doctor of Philosophy

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

AUGUST 2005

[September 2005]

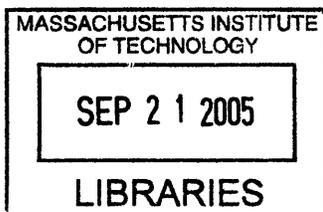
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Abstract

This dissertation examines the syntax and argument structure of non-verbal predicates (focusing primarily on adjectives) in Tagalog. Drawing on evidence from a variety of construction types (including Comparative, Existential, and Ellipsis constructions among others), I argue against the claim that adjectives differ from verbs in their ability to project an internal *theme* argument (Pesetsky 1982; Borer 1984, 1991; Levin and Rappaport 1986; Baker 2003; among others). More generally, I argue that evidence about the argument structure of non-verbal predicates offers a more general argument against strong decompositional views of argument in which both external and internal arguments are ‘severed’ from the predicate.

Thesis Supervisor: David Pesetsky, Professor of Linguistics

Acknowledgements

First and foremost, I wish to acknowledge each of my committee members who gave so much of their time to helping me see this project through: Sandy Chung, Sabine Iatridou, David Pesetsky, and Norvin Richards.

Sandy Chung taught the first syntax class I ever took in the Spring of '97. The path I wanted to follow after that was pretty much decided. I asked Sandy to join my committee during the final months of writing, at a point where her expert knowledge of Austronesian syntax and her unique insight into theoretical research were extremely critical. Our few meetings at Pete's (though brief) and the detailed comments I received from her were what gave this dissertation a coherent shape in the end. It will take a lifetime to fully express my gratitude for her involvement in my work over the past 9 years (and hopefully, for the years to come).

Sabine Iatridou played a critical role in this work. Sabine consistently raised questions that took me outside of the box that I had constructed and limited myself to as a necessary part of finishing this dissertation on time. Without exception, she showed me the far limits where each of my ideas would lead (even when those limits were dead ends). Because she so often pushed me to see the much larger picture, Sabine's guidance enabled me to present my ideas with style and confidence.

David Pesetsky has been my primary mentor for the past 5 years. David has listened with an unusual amount of patience, interest, and respect to virtually every idea (ranging from eloquent to incoherent) that I have had since entering graduate school. For every problem I encountered, he consistently encouraged me to push for the most imaginative solution possible. From my earliest work through my dissertation, he has always expressed more confidence in my abilities than I did personally. The impact that his guidance and influence have had on me will undoubtedly show through far beyond this dissertation.

Last, but far from least, I thank Norvin Richards. I could not possibly have written a dissertation on Tagalog without Norvin's expert knowledge of the language. He has been especially generous throughout, especially given that many of the ideas I brought before him were often in one way or another in opposition to his own. Nonetheless, his inspiring intellectual curiosity provided the most comfortable atmosphere in which to present the thoughts on my work.

Genara Banzon has been my primary Tagalog informant for the past two years, and I wish to express my deepest gratitude to her. Her patience, enthusiasm, and friendship have made the process of fieldwork so enjoyable.

My 5 years in the department have been enriched significantly by meetings and interactions with other faculty as well. In particular I would like to acknowledge Suzanne Flynn, Danny Fox, Alec Marantz, Donca Steriade, and Cheryl Zoll.

I could not have asked for a better set of classmates. Much of the support and encouragement that I needed over the years came directly from them: Aniko Csirmaz, Marketa Ceplova, Jon Gajewski, Heejeong Ko, Andrew Nevins, Becki Norris, and Michael Wagner. I especially wish to thank Jon Gajewski and Michael Wagner for their close friendship, and for keeping my sense of humor consistently in tact. Special thanks also to Becki Norris, without whose close friendship I would not have made it past the first year. I am also grateful to Heejeong Ko for being the most considerate office-mate.

Outside of my immediate class, I had the pleasure of getting to know several people through work and friendship. Special acknowledgements go out to Teal Bissell, Ellisa Flag, Vivian Lin, and Andrea Rackowski for including me in their lives and helping me make my way through the complexities of graduate school life. The last couple of years have not been the same without them. My friendships with Aly Adler, and Valentine Hacquard have also been extremely valuable.

Many linguists outside of the department have also influenced me in ways that I can hardly express. Lotus Goldberg is responsible for introducing me to the field 4 years before I took my first linguistics course. It is any one's guess where I might have ended up if it had not been for my chance encounter with her. Throughout the years, she has been the most important sources of encouragement for me. I do hope she understands the important role she has had on my life. I have gained a lot of stability over the past few years also from my friendship with Rajesh Bhatt. Rajesh offered much needed guidance (on both personal as well as intellectual matters) that sustained me at some very critical moments.

Finally, I want to express my thanks to the non-linguists in my life. Although they probably don't even know it, my family have consistently been the rock upon which I lean: My mother (Sandy), my brother (Mark), my sister (Anne), my niece and nephews (Josh, Jamie, and Pablo), my step-brother (BJ), my step-sister (Kate), and Rich. My thanks also to Dr. Marjorie Rechant, who gave me a space all to my own, which helped me find the peace of mind that I needed to make it to the end. Finally, thanks and love to David Meiri, who offered much needed support and companionship throughout this year.

To all those mentioned herein, and to the many which I have regrettably left out—
Thank You!

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Glen (the bus driver, to Jerri): ...you have no idea what its like to not be able to do the thing that everybody thinks you can.

Jerri (the passenger): Oh, I think I do Glen. But I also think its time to stop not doing the things that you pretend that you can do but can't, and start doing the things that you can't do, but can no longer pretend that you can.

from Strangers With Candy, "The Blank Page"

Chapter 1.

Introduction

This dissertation is about the argument structure of verbal and non-verbal (namely, adjectival) predicates. My goal is to address the following question: Do verbs and adjective co-occur with the same range of argument types? The question has been asked before with respect to subjects (Stowell 1983), where it has been argued—for instance—that all of the major categories can license a subject (external argument). My question is whether the same is true of internal arguments—specifically, can adjectives license non-oblique internal arguments, or is this only possible for verbs?

This question is actually a difficult one to answer, since most adjectives only select or allow a single argument, and the single argument always seems to function (superficially, at least) as a subject.

- (1) a. The window was open_A all night.
- b. *There/It was open_A a window all night.

Superficial appearances are often misleading, however. The same facts as in (1) are paralleled in the verbal domain.

- (2) a. The window was opened_V repeatedly last night by John.
- b. *There/It was opened_V the window repeatedly last night by John.

As is well-known, the argument that appears as a surface subject of a single argument taking verb could very well have originated as an internal argument. That is, for the class of predicates referred to as *Unaccusative* (e.g., *break*, *fall*, *arrive*) the claim (Perlmutter 1978; Burzio 1986; Perlmutter and Postal 1984; and Levin and Rappaport 1995, and many others) is that their single argument is an underlying internal argument (direct

object)—regardless of surface position. Thus, according to this hypothesis, a sentence like (2a) may be represented as in (3).

(3) *The window* was [*opened*_v ____] repeatedly last night by John.

Since the *Unaccusative Hypothesis* was first proposed, there have been various attempts to explain why sentences like those in (1b) are ungrammatical—i.e., sentences where the argument of the unaccusative predicate does not remain in its underlying position. Burzio (1981), for instance, proposes a Case-theoretic account according to which the single—internal argument—of the unaccusative verb must raise to the surface subject in order to be Case licensed (cf., Marantz 1991). Whatever the correct answer to this question ends up being, it should be possible—in principle—to apply the same analysis to adjectives so that a sentence like (1a) might be represented as in (4).

(4) *The window* was [*open*_A ____] all night.

Interestingly, it has been claimed in many places that sentences like (1a) should not be presented as in (4). It has been claimed, for instance, that adjectives are “external predicators” that never take internal theme arguments (Pesetsky 1982; Borer 1984; Levin and Rappaport 1986; Borer and Grodzinsky 1986; Burzio 1986; Stowell 1991; Borer 1991; Baker 2003). The basic empirical content of this claim is stated as in (5) (from Baker 2003:65).

- (5) a. The theme argument of a verb is an internal argument.
b. The theme argument of an adjective is an external argument.

This dissertation will focus on evaluating this claim about the argument structure differences between verbs and adjectives. To briefly say what is at stake, it is important to consider related verb-adjective pairs like *opened* and *open*. Given (5), one possible approach to related lexical items like these is to say that there are two lexical items—*opened*_v and *open*_A—each of which is listed separately in the lexicon with a different

argument structure (as dictated by (5)). Minimally, this simply entails that a verb like *opened* is a predicate—i.e., an element that must compose directly with a (DP) argument for semantic and possibly syntactic reasons— while an adjective like *open* is not.

A more radical (but interesting) approach is one that says that the lexical item that is common to both verb and adjective (e.g., *open*) is not a predicate at all—i.e., has no argument structure. Rather, it might be said that *open* can ‘acquire’ an argument only when licensed by a ‘light verb’ predicate. In recent work, this is precisely what Baker (2003) proposes. In particular, he argues that the theme argument associated with a lexical item like *open* is actually an argument of a light-verb predicate meaning something like “be(come)”, which takes the adjective *open* as its complement. This is, in essence, a generalization of the analysis of external arguments as being ‘severed’ from the verb (Kratzer 1996). It has been argued, for instance, that the external argument of a verb like *open* is not an argument of the verb at all, but rather it is an argument of a light-verb predicate that relates an individual (the agent or cause) to an event. Extending this approach to theme argument, we arrive at representations like the one in (6) for a sentence like *John opened the window* (see also, Hale and Keyser 1993, 2002 for a related view). Kratzer herself does not advocate this kind of decomposition with respect to the theme argument, as I discuss in Chapter 3.

(6) [TP [VP John [V' v-(cause) [VP the window [V' V-(be) [AP open]]]]]]]

When an adjective like *open* is used predicatively—e.g., in a sentence like *The window is open*—Baker (2003) assumes that the actual predicate that licenses the theme argument is a functional element in the syntax—Pred⁰. Thus, clauses with that have an adjective as their predicate are presented as in (7).

(7) [TP [PredP The window [Pred' Pred⁰ [AP open]]]]]

What is significant about this line of proposals is the ultimate claim that, apart from small class of ‘light-verbs’ and Pred⁰, there are no other predicates—i.e., elements that must obligatorily combine (syntactically and semantically) with a DP argument.

If it can be shown, on the other hand, that (5) is not empirically correct as a universal, then—I would argue—we should not be so quick to reach this conclusion. In this dissertation, I will present a number of arguments demonstrating that (5) is not a universal. As my empirical focus, I will demonstrate that adjectives and other non-verbal predicates in Tagalog falsify the generalization in (5) (see also, Cinque 1990). Concretely, I will demonstrate that adjectives in Tagalog—like verbs—can be classified as either unaccusative or unergative. The existence of unaccusative adjectives in particular argues against the generalization in (5). If these arguments are successful, moreover, this will hopefully demonstrate that lexical items like *open*, etc. are themselves predicates. Put in another way, while it might be right to ‘sever’ the external argument from a predicate, I argue that the same is not true for internal arguments.

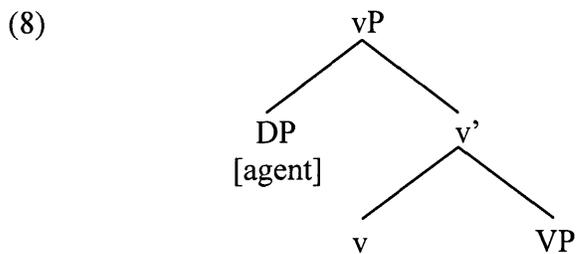
1.1. Theoretical Framework

The data that will be presented in this dissertation will be analyzed within the Principles and Parameters/Minimalist framework of Chomsky (1995, 1998, 2000, 2001). Most of the specific analytical tools of this framework will be introduced as they become relevant. There are, however, a few important assumptions that should be stated at the outset.

The framework that I adopt maintains that the grammatical functions ‘Subject’, ‘Object’, etc. are not primitive notions—but correspond rather to particular structural configurations. Thus, grammatical rules and constraints refer not to grammatical functions, but rather to arguments that occupy specific structural relations within a hierarchically organized clause structure. This particular assumption will become particularly important in section 2.3. of Chapter 2, where I discuss the ‘Subject-only’ restriction on extraction in Tagalog.

Chapter 1

Just as grammatical rules and constraints do not refer to notions like ‘Subject’ and ‘Object’, this framework also assumes that rules and constraints do not refer to specific thematic roles like ‘Agent’ and ‘Theme’. These too reflect particular configurations. At issue in this dissertation is how Theme arguments are licensed in general. I will assume without argument, however, a view of how Agent arguments are licensed that is rather standard. In particular, I assume a vP-shell analysis for the projection of a verb phrase in which the agent argument is licensed in the Specifier of a light-verbal head— v^0 , as shown in (8). According to this view—significantly—the agent argument is an argument not of the verb (the element contained within VP), but rather is an argument of v^0 (see Kratzer 1996 for discussion).



One of the main questions of this dissertation is whether or not the verb phrase should be decomposed further so that other arguments are also ‘severed’ from the verb in this way.

1.2. Organization

1.2.1. Chapter overviews

This dissertation is organized into five main chapters, which are summarized as follows:

Chapter 2 of this dissertation has two goals. First, it provides a basic descriptive introduction to Tagalog grammar and introduces some of the terminology that will be used throughout. Second, it explores some of the central analytical questions concerning clause structure in Tagalog. In particular, this chapter focuses on the question of how the word order of Tagalog clauses should best be accounted for. The approach I take is to start from an analysis of the classic ‘Subject Only’ restriction on extraction

Chapter 3 presents the claim that I will argue against that verbs differ from other categories with respect to the ability to license non-oblique internal arguments—i.e., with respect to their status as predicates. In particular, I examine some of the original empirical justification for the generalization in (5) above. It is in this chapter also that I make explicit what I understand to be at stake if the generalization in (5) is correct—for instance, with regards to the question of what kinds of elements can count as predicates in natural language.

Chapter 4 contains my major argument against the claim that there are no unaccusative adjectives. In particular, this chapter is devoted to demonstrating that the unaccusative-unergative distinction is as relevant to verbs in Tagalog as it is to adjectives. More generally, this chapter contains my main argument that there are predicates beyond the ‘light-verb’ predicates.

Chapter 5 explores the syntax of existential constructions in Tagalog. I argue in this chapter that the existential predicate *roón* (‘there’)—which has both a verbal and a non-verbal form—is an unaccusative predicate. This constitutes another major argument for

Chapter 1

the claim that verbal as well as non-verbal categories can be predicates that are capable of licensing internal arguments.

Finally, Chapter 6 is concerned with the overall architecture of verbal and non-verbal clauses. In particular, I address here the question of whether or not there is evidence for the existence of the functional head Pred^0 argued by Baker (2003) to be needed for non-verbal predicates to license an argument.

Introduction

Chapter 2.

The Clause Structure of Tagalog

The goal of this chapter is to make explicit certain assumptions concerning the structure of Tagalog clause structure. Since the grammar of Tagalog has been amply described elsewhere, my initial descriptive grammatical sketch will be brief, including only a few of the syntactic and morpho-syntactic properties that will be useful to know for the reader who is less familiar with the language.

After a brief descriptive overview, I will address some of the more difficult analytical problems concerning Tagalog clause structure. The main question I will attempt to answer is the following. In Tagalog simplex clauses, what syntactic position does the subject argument occupy—e.g., does it occupy Spec, TP (as in English), or does it remain in its base generated position, inside vP. As we shall see, the answer to this question raises related questions about how to analyze the predicate-initial property of Tagalog clauses structure, as well as how to properly analyze the flexible word order of arguments following the predicate.

I will discuss evidence that the subject argument does raise out of its vP-internal position to a position that is higher than the verb. As we will see, this creates a paradox in that it also appears that the subject can appear lower in the vP, interpolated among vP-internal arguments. I will show that we can solve this paradox by adopting Chung's Subject-lowering analysis. I will also argue that although the Subject-Raising/Subject-Lowering analysis is necessary to account for verb-initial word order with respect to the subject argument, it is not sufficient to account for all aspects of verb-initial order in Tagalog. In particular, I will argue that it is also necessary to assume Verb-Raising in the form of V-toT movement in order to account for verb-initial order with respect to the non-subject external argument.

The Clause Structure of Tagalog

After each of these claims have been justified, I will move on argue that Verb-initial languages like Tagalog require us to say that the syntactic categories that constitute Phases/Spell-Out domains can be parameterized across languages. Concretely, I will argue that in Tagalog, TP and not vP must be the lowest Phase/Spell-Out domain of a simplex clause. This conclusion is reached withing the context of the specific model of Cyclic Spell-Out proposed by Fox and Pesetsky (2003, 2005). In addition to demonstrating that this conclusion is necessary on the basis of the analysis of predicate-initial word order, I will also argue that it provides a unique straightforward analyses of the subject-only restriction on extraction observed in Tagalog and related languages.

2.1. Background: Word Order and Case

Simplex clauses in Tagalog are predicate-initial. Beyond this rigid condition, the word order of arguments following the predicate is quite free, as demonstrated by the examples below.

- (1) a. P-um-unit *si Maria* ng kanya-ng damit nang (VSOX)
 A-t.Perf.tear T Maria NS her L dress when
 siya'y magalit.
 she Top be.mad
 'Maria tore her dress when she became mad.'
- b. Nag-bigay ng mga bulaklak sa guro *ang mga bata*. (VOXS)
 A-t.perf.give NS Pl. flower Obl. teacher T Pl. child
 'The children gave flowers to the teacher.'
- c. P-um-unit ng kanya-ng damit *si Maria* nang siya 'y (VOSX)
 A-t.perf.tear NS her L dress T Maria when she Inv.
 magalit.
 be.mad
 ('Maria tore her dress when she became mad.')

Clauses with non-verbal predicates look similar with respect to the word order following the predicate. The head of the predicate phrase (A, N, or P) appears initial within the clause, but following the predicate the subject may appear in virtually any position with respect to other arguments. The examples in (2) illustrate two of the possible subject positions for a clause that contains an adjectival predicate.

The Clause Structure of Tagalog

- (2) a. Bagay sa iyo *ang damit na iyan.*
suitable Obl. you T dress L that
'That dress is suitable for you.' (English: 109)
- b. Takot *si Juan* sa kulog.
afraid T Juan Obl. thunder
'Juan is afraid of thunder.'
- c. Maayos na maayos *si Juan* sa kanya-ng bago-ng kasúútan.
spruce L spruce T Juan Obl. his L new L suit
'Juan is very spruce in his new suit' (English: 95)

The flexibility in word order even extends to clauses with a main predicate that is an NP (as in (3)) and to clauses with a main predicate that is a PP (as in (4)) (see Kroeger 1993):

- (3) a. Anak ni Belen *si Romy* talaga.
son NS Belen T Romy really
'Romy is really Ben's son.'
- b. Anak *si Romy* ni Belen talaga.
son T Romy NS Belen really
('Romy is really Ben's son.')
- (4) a. Para sa iyo *ang liham.*
for Obl. you T letter
'The letter is for you.'
- b. Para *ang liham* sa iyo.
for T letter Obl. you
('The letter is for you.')

Concentrating on simplex clauses where the verb is marked in the 'Actor-topic' voice (see below), three distinct morphological cases are distinguishable, which I will refer to as: Topic, Non-Subject, and Oblique (see, e.g., (1b)).¹ These are listed in (5).

¹ The names of these cases are meant to reflect the fact that I am talking about *morphological case* and not *Case* in the abstract sense that it often used. In other words, these case names refer

Morphological Case Markers

(5)	Top.	NS	Obl.
Proper Name	si	ni	kay
Common Noun	ang	ng	sa

Pronouns are also distinguished with respect to these cases.

Morphological Case of Pronouns

(6)	Top.	NS	Obl.
1Sg.	ako	ko	akin
2Sg.	ikaw, ka	mo	iyo
3Sg.	siya	niya	kaniya
1Pl.	kami	naming	amin
2Pl.	kayo	ninyo	inyo
3Pl.	silá	nila	kanila

In possessed noun phrases, the possessor argument can generally precede or follow the head noun. When it precedes the head noun, as in (7), the possessor appears in an oblique form. (NB., This option is only allowed when the possessor is a pronoun.)

simply to the morphological spell outs of some set of more abstract features (called Case—following Chomsky 1981). I will return to the issue of these abstract Case features below.

The Clause Structure of Tagalog

- (7) a. aki- ng lapis
1Sg. L pencil
'my pencil'
- b. iyo-ng kamay
2Sg. L hand
'your hand'
- c. ami-ng bayan
1Pl. L town
'our town'

When the possessor follows the head noun, it appears in the NS case form.

- (8) a. lapis ko
pencil 1Sg.
'my pencil'
- b. anak ni Maria
child NS Maria
'Maria's child'
- c. lapis ng bata
pencil NS child
'the/a child's pencil.'

The same case form also marks external arguments in clauses where the external argument is not the subject of the clause—i.e., when it does not agree with verb or bear Topic case. This is seen, for instance, in sentences where the verb agrees with the theme argument, as in the examples in (9).

Chapter 2

- (9) a. I-b-in-aón *ng mga pirata* sa isa-ng lugar na lihim
T-t.perf.bury NS Pl pirates Loc one L place L secret
ang kanila-ng mga dinambong.
T their L Pl booty
'The pirates hid their booty (treasure) in a secret place.' (E 406)
- b. T-in-ukso *ng mga kaibigan* si Juan.
T-t.perf.tease NS Pl. friend T Juan
'Juan was teased by his friends.'

Throughout this dissertation, I gloss the case found on non-subject external arguments and possessors as Non-Subject (NS). Later, we will see that—despite the fact that the internal and external argument bear homophonous morphological case marking when neither is the Topic-marked argument—the two argument can be syntactically distinguished (See also Maclachlan 1996:80-87). For this reason—and others to become clear shortly—I propose that the external and internal argument both have distinct *Abstract Case* assigned to them. For instance, I propose below that the external argument is assigned Nominative Case, while the internal argument is assigned Accusative Case. Note that the fact that Nominative and Accusative Cases are spelled out morphologically in the same way—i.e., when neither is marked with Topic-case by virtue of the fact that it agrees with the verb—is not a particularly exotic fact. The very same fact can be said to be true of (non-pronominal) arguments in English, except that Nominative and Accusative case in English are both spelled out as null morphemes.

2.2. Voice Agreement

One of the striking aspects of Tagalog syntax (and that of many related Philippine languages) is its robust “Voice” system.² Consider a predicate like *bili* ‘buy’, which is associated with three arguments (e.g, Agent, Theme, Goal/Recipient/Location). The predicate can be morphologically inflected in one of three ways depending on which argument serves as the subject of the clause—i.e., marked morphologically with *ang* (or, with proper names, *si*). This argument is also often referred to as the ‘Topic’, hence the name chosen here for its case morphology. Observe, for instance, that in (10a) the Agent argument is in the Topic case form and the *-um-* infix on the predicate indicates ‘Agent-topic’ voice form. In (10b), the Topic marked argument is the Theme, and the infix *-in-* indicates ‘Theme-topic’ voice. In (10c), finally, the Locative argument appears in the Topic case form and the suffix *-an* appears on the predicate indicating ‘Locative-topic’ voice.

Voice Agreement

- (10) a. B-*um*-ili ng libro sa tindahan *ang maestro*.
A-t.perf.buy NS book Loc store T teacher
‘The teacher bought a book at the store.’
- b. B-*in*-ili ng maestro sa tindahan *ang libro*.
T-t.perf.buy NS teacher Loc store T book
(‘The teacher bought a book at the store.’)
- c. B-*in-ilh-an* ng maestro ng libro *ang tindahan*.
L-t.perf.buy NS teacher NS book T store
(‘The teacher bought a book at the store.’)

² Although this Voice system is sometimes assumed to involve alternations like Active-Passive in English, this is most likely not the correct way of looking at it (see references above for extensive discussion of this). Although I will speak of “Voice Agreement” and the “Voice System”, this is mostly for convenience, and I do not intend to suggest an analytical connection with Active-Passive system found in many other languages.

As discussed in many places, many of the properties typically attributed to the subject cross-linguistically are distributed in Tagalog among the Topic marked argument and the external argument (see Schachter 1976; Guilfoyle, Hung and Travis 1992; Kroeger 1993; and Richards 1993 for more detailed discussion). For example, as observed in the examples in (10) the Topic argument controls the voice form of the verb. Interpretively, the Topic marked argument must be specific or definite, is the only argument that may extract, and is the only argument that may license floating quantifiers. By contrast, the external argument—whether it is Topic marked or not—is the only argument that may license reflexives and be licensed as PRO in Control constructions. My focus in the discussion that follows will be mostly on the Topic marked argument, which I will consistently refer to throughout as the subject. As the discussion unfolds, I will argue that the subject argument is the only argument that moves to Spec, TP. In other words, I will argue that the subject argument is structurally the most prominent argument in the clause, and more prominent—syntactically speaking—than the verb.

Given this background, I now turn to the analytical problems posed by Tagalog clause structure, and my solutions to them.

2.2.1. Voice Agreement: Analytical Assumptions

An important question that has often been raised is what feature (or features) are relevant to the voice agreement between the subject and the verb. Two main proposals exist: One proposal states that the agreement between subject and verb is based on the feature of the semantic role of the subject (Kroeger 1993; Schachter and Otnes 1972; de Guzman 1978; Carrier 1985; Sells 1998). Under this proposal, the verb agrees with the subject for features like [Agent], [Theme], [Locative], etc. Alternatively, it has been argued that agreement between subject and verb is based on the Case features of the subject—e.g., [Nominative], [Accusative], [Oblique] (see Rackowski 2002, 2003; Pearson 2000; 2005).

For the purposes of this work, I will assume that agreement on the verb reflects agreement with the particular Case value born by the argument that the verb agrees with—i.e., following proposals of Rackowski (2002, 2003) and Pearson (2000, 2005).

I now make some specific proposals about abstract Case licensing more generally. I will assume that all DP arguments enter the syntax unvalued for Case, and that the values are filled in by virtue of the particular syntactic relationships that a DP enters into with a Case valuing head. The two kinds of Case assignment that I will be most concerned with in this dissertation are the ones that relate to the internal argument and to the external argument. I will be assuming a bi-partite structure for the verb phrase in which the familiar VP constituent that contains the verb's internal argument is embedded under a light verbal head (v^0) which is responsible for licensing the external argument in its specifier (see Larson 1988; Chomsky 1995; Arad 1998; among many others). Given this assumption (which will be extended, eventually, to deal with non-verbal predicates) I assume that the crucial configurations for Case assignment are those given in (11).

Case assignment configurations (Abstract)

- (11) a. T assigns/values Nominative ([Nom]) on an external argument DP (Spec, vP).
b. v assigns/values Accusative ([Acc]) on a DP that is a sister to V.

For the time being, I will assume that oblique arguments are inherently case marked, and therefore do not have a specific Case licensing configuration as do the external and internal arguments.

As we have discussed above, both Nominative and Accusative Case are spelled out by a homophonous morpheme—e.g., *ng/ni*. As we have also seen, however, this is only true when neither the Nominative external argument nor the Accusative internal argument serve as the subject of the clause—i.e., when neither controls voice agreement with the verb. Whenever a particular argument agrees with the verb, its Case feature is spelled out as the Topic case—e.g., *ang/si*.

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This simple description is not complete, however. Although it is true that when an argument controls voice agreement on a verb, the argument always bears Topic case. However, it is not true that Topic case *only* appears on arguments that control voice agreement on the verb. There are several contexts where Topic case shows up on an argument, even though there is no discernable agreement relationship to be found.

One such case involves clauses that have an AP as their main predicate. The single DP argument of an adjective always appears in the Topic case form, despite the fact that there is no distinguishable voice agreement on the adjectival predicate.

- (12) a. Hilaw pa ang mga saging.
unripe still T Pl. banana
'The bananas are still unripe.' (English: 624)
- b. Takot sa mga kalansay si Juan.
afraid Obl. Pl. skeleton T Juan
'Juan is afraid of skeletons.'

A second context is the possessive existential construction. Here, the possessed argument is always expressed as a Topic case-marked element. Consider the examples in (13).

- (13) May malit na bahay si Rosa sa iba-ng bayan.
?? small L house T Rosa Loc. other L town
'Rosa has a small house in another town.'

Note finally that there are also construction types where no argument can bear the Topic case morphology. For instance, in clauses where the verb is inflected for "Recent Perfective" aspect, no argument can appear marked with Topic case. These constructions will be discussed later on in more detail in sections 2.4.2., Chapter 4: section 4.3.1..

- (14) a. Ka-bi-bili lang ni Pedro ng tela.
Rec.Perf.buy just NS Pedro NS cloth
'Pedro just bought some cloth.'
- b. Ka-ba-basag lang ng pinggan ngayon.
Rec.Perf.broke just NS plate now
'The plate just now broke.'

For present purposes, therefore, I make the following assumptions regarding Topic case: When an argument agrees with a verb, the normal morphological spell out of its Case feature is overridden and replaced by Topic case. I state this as in (15).

Case realization (Morphological)

- (15) i. {[Nom], [Acc]} is spelled out as *ang/si* on a DP that agrees with T^0 ;
ii. {[Nom], [Acc]} is spelled out as *ng/ni* otherwise.

Returning to the clauses with adjectival predicates in (12) above, I will simply assume that the single DP argument of an adjective agrees with T^0 , even though the agreement does not appear to be reflected morphologically by voice agreement on the verb.

Finally, I assume that every argument DP must have morphological case.

Case Filter

- (16) Every DP argument must have morphological case.

This is like Chomsky's Case Filter, but differs in that the Chomsky's Case Filter refers only to Abstract Case, while the condition in (16) refers to morphological case (cf. Neelman and Weerman 2000).

Turning our attention now to the analysis of Voice agreement, I will follow Rackowksi (2003) and assume that agreement between an argument and the verb is a reflection of a syntactic agreement relation that holds between an argument and the

inflectional head of the clause— T^0 . This agreement, I assume, is subject to the locality condition *Closest* defined in (17).³

Closest

(17) A phrase X is closest to a head Y if and only if there is no other phrase X' such that X' c-commands X and is c-commanded by Y.

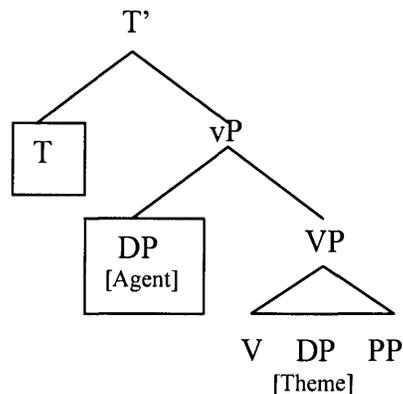
C-Command

(18) X C-commands Y if and only if every category that dominates X also dominates Y.

Let us concentrate first on cases where the external argument is the subject of the clause. Crucially, since the external argument c-commands the internal argument (contained within VP), it is the only argument that can agree with T^0 in accordance with the locality condition in (17).

Agreement with the External (Agent) argument

(19)



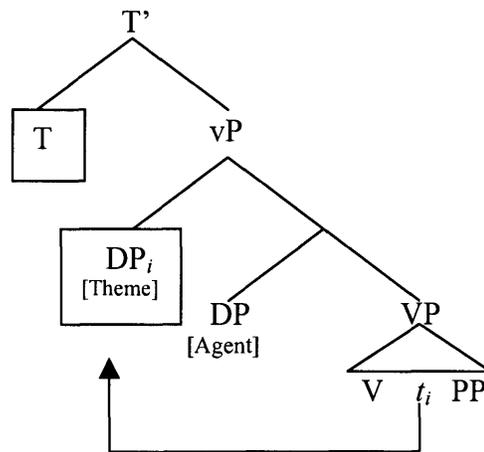
What about cases where an internal argument of the verb (e.g., the theme) agrees with the verb—as in (10b)? For such cases, I assume—once again following Rackowski's work—that the internal argument moves to an outer specifier position of vP, as the result of an operation of 'Object Shift' (Holmberg 1986; Holmberg and Platzack 1995; Holmberg 1999, and many others). The result of Object Shift, which is illustrated

³ Note, these definitions and assumptions are not explicitly part of Rackowski's discussion.

schematically in (20) below, is that the internal argument ends up occupying a position that is no longer c-commanded by the external argument.⁴ In fact, according to the definition of C-command given in (18) above, the external and internal arguments are equidistant from T^0 —i.e., assuming that the maximal vP in (20) is a segment of vP and therefore does not dominate the internal argument in the outermost Spec, vP.

Agreement with the Internal (Theme) argument

(20)



Although object shift produces a structure in which the external and internal argument are equally close to T^0 —thereby making either of them equal candidates for agreement—the ‘choice’ of which argument will function as the subject is determined by the agreement morphology. In other words, if T^0 ’s agreement features are valued for the feature [Nom], then it agrees with the external argument; If T^0 ’s agreement features are valued for [Acc], then T^0 agrees with the object-shifted internal argument.⁵

To summarize: I assume that voice agreement is between T^0 and one of the verb’s arguments, and that the relevant features involved in this agreement are those related to the argument’s abstract Case value. Because of the locality condition *Closest*, agreement

⁴ Following Rackowski (2003), I will assume that Object Shift occurs as a result of an optional [EPP] feature on v^0 . Rackowski also assumes that non-specific internal arguments cannot undergo Object Shift for semantic reasons. I remain agnostic on this point for the time being.

⁵ It is possible to formulate *Closest* in such a way that multiple specifiers are not equidistant. I will discuss such an approach later on in Section 2.5.1.

with an internal argument is only possible by virtue of an operation—Object Shift—which places the internal and external argument at equal distance with respect to T^0 .

2.3. Deriving Verb-Initial Clause Structure

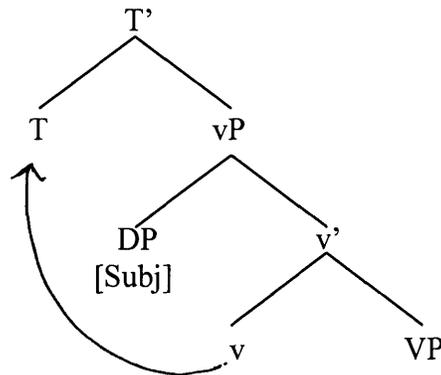
The account of Voice agreement presented above was given without specific attention to the word order of Tagalog clauses. The purpose of the next few sections is to address this issue. In particular, I will attempt to answer the question of how Tagalog clauses structure should be analyzed so that the verb-initial property is derived.⁶ In addition to this, we will also seek to account for the relatively free order of arguments in the clause.

The literature on Verb-initial languages has offered at least three important analytical possibilities for deriving Verb-initial order, and I will outline these here in their simplest form. The first possibility we can refer to as the “Verb-Raising” approach. Under this approach (Emonds 1980; Sproat 1985; Koopman and Sportiche 1991; McCloskey 1991), Verb-initial order is derived from an underlying SV(O) order by raising the verb to a position higher than the subject—which, on most accounts, occupies its vP-internal base position. This approach is illustrated schematically as in (21). This structure represent only those cases where the external argument is the subject of the clause.

⁶ More generally, I should say “Predicate Initial”, since the predicate is always initial regardless of its category type. Since most of the data below involve clauses whose main predicate is a verb, I will most often speak of the “Verb Initial” property.

“Verb-Raising”

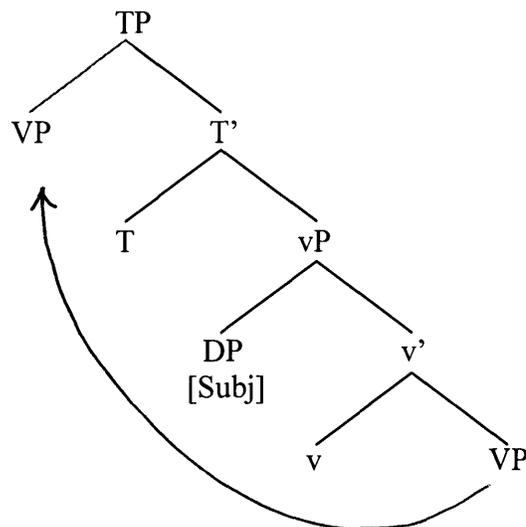
(21)



A second approach to deriving Verb-initial order is one that involves “VP-fronting” (Kayne 1994; Massam 1996, 2000; and others). This approach is similar to the V-Raising approach in that it assumes that Verb-initial order is derived from a base order that is subject-initial—i.e., SV(O). It differs from the V-raising analysis, however, in terms of the size of the constituent that is raised to the pre-subject position—i.e., whether it is V^0 or VP. This analysis is sketched in (22).

“VP-Raising”

(22)



One advantage of VP-fronting over Verb-raising is that it provides a straightforward way to analyze languages that are both Verb-initial and Subject final—i.e., VOS. In particular, assuming the VP contains the verb’s internal argument, the result of VP-

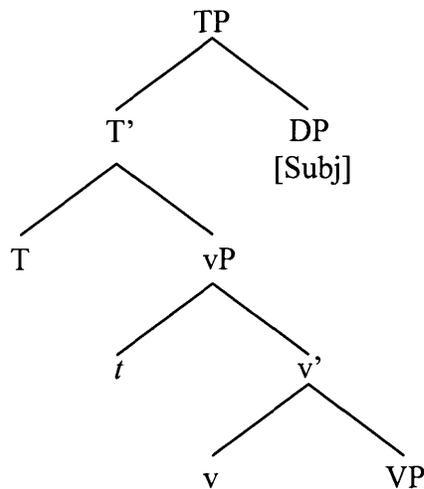
fronting is that it places both the verb and the object in front of the subject argument. In contrast, Verb-Raising alone only places the verb in front of the subject.

What is crucial to both of the approaches described above is that the Verb-initial order always results in a clause structure in which the verb ends up in a position in the clause that is higher than the subject. On either of these approaches, Verb-initial languages differ from Subject-initial languages (English, French, etc.) in which the subject occupies a position in the clause that is higher than the verb.

These approaches should therefore be contrasted with one final way of deriving Verb-initial order that does not rely on this assumption. In particular, it is possible to generate a Verb-initial clause structure where the subject is higher structurally than the verb if the subject occupies a specifier position that occupies a right branch.⁷ Such an approach can be represented as in (23).

“Subject Raising”

(23)



Observe that under this account, it is immaterial whether the verb has head-moved out of the vP or not. In other words, whether or not verb movement applies—e.g., raising V^0

⁷ In a moment, we will see that it is possible to derive Verb-initial order and assume a Subject-Raising analysis where Spec, TP is generated to the left. The possibility is available as long as we assume an operation of Subject-lowering (Choe 1986; Chung 1991, 1998).

to T^0 —plays no significant role in deriving the fact that the verb precedes the subject argument.

In what follows, I will argue for two points: First, I will provide evidence showing that the subject argument (the argument of the clause that agrees with the verb and is marked with Topic case) is structurally more prominent than the verb and the verb's other arguments. Accounting for this, I argue, requires Subject-Raising. I will also argue that in order to account for certain word order facts relating to the verb and the (non-subject) external argument, we will need to assume Verb-Raising as well—e.g., V-to-T movement. Finally, I will argue that although these operations are necessary to account for all aspects of the verb-initial property, they leave open the problem of accounting for all of the word order possibilities. I will suggest, therefore, that we need to assume one further operation—Subject Lowering (Choe 1986; Chung 1991, 1998)—a process that (optionally) lowers the subject from Spec, TP and right-adjoins it to some projection of vP.

2.3.1. Verb Initial Word Order and the Subject

Putting aside the VP-raising approach for the moment (see Appendix), let us focus first on a contrasting prediction of the Verb-Raising and Subject-Raising approaches. As noted above, these two analyses crucially differ with respect to the claims that they make regarding the relative structural prominence of the verb and the subject argument. Under the Verb-Raising analysis, the verb is higher than the subject argument. Under the Subject-Raising analysis, in contrast, the subject is claimed to be higher than the verb. These differences give us a prediction relating to constituency. Concretely, the Subject-Raising analysis predicts that there should be a constituent containing the verb and its arguments but excluding the subject. The opposite prediction is made by the Verb-Raising analysis. The facts that are relevant here, therefore, are the ones in (24)-(25). Observe that in the examples in (24)-(25), the verb and its internal argument are coordinated and the subject argument—i.e., the argument that agrees with the verb and

which is marked with Topic case morphology—appears to take scope over each conjunct, indicating that it is outside of the coordinate structure.

- (24) a. [Naka-kita ng kalansay]at [na-takot] *ang bawá't*
 A-t.perf.see NS skeleton and Perf.become-afraid T each
babae.
 woman
 'Each woman saw a skeleton and got scared.'
- b. Hindi' [p-um-unta sa tindahan] o [b-um-ili ng bigas] *ang*
 Neg A-t.perf.go Loc store or A-t.perf.buy NS rice T
kapatid ko.
 brother my
 'My brother didn't go to the store or buy any rice.'
- c. [Nag-luto' ng bigas] at [k-um-ain ng isda] *ang pareho-ng babae.*
 A-t.perf.cook NS rice and A-t.perf.eat NS fish T same L woman
 'The same woman cooked some rice and ate some fish.'

When the subject is an internal argument, it too may scope over a coordinate structure:

- (25) Hindi' [t-in-ukso ng mga kaibigan] o [k-in-agalit-an
 Neg. T-t.perf.tease NS Pl. friend or T-t.perf.scold
 ng kanya-ng guro] *si Juan.*
 NS his L teacher T Juan
 'Juan was not teased by his friends or scolded by his teacher.'

(Kroeger 1993:35, *adapted*)

It is unlikely that these any of these examples could involve coordination of full clauses in which the subject argument has been *pro*-dropped from the first conjunct under coreference with the subject that appears overtly at the right edge of the final conjunct. As Kroeger (1993:115) demonstrates, for instance, Tagalog observes a restriction on pronominal coreference that would make this style of analysis untenable (see also Chung 1991; 1998, who observes a similar constraint in Chamorro).

- (26) A (non-reflexive) pronoun must not take as its antecedent a phrase which neither precedes nor c-commands it.

Instead of repeating the evidence that Kroeger provides in support of (26), we can illustrate its validity with evidence from coordination. In particular, if the first conjunct of a coordinate structure contains an overt pronoun, it generally cannot be interpreted as coreferent with an NP antecedent contained in the second conjunct.

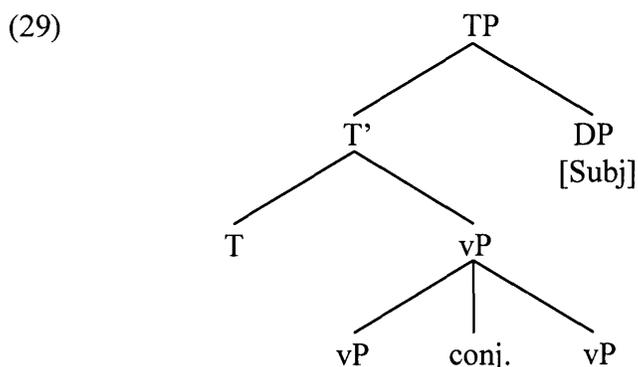
- (27) a. S-um-ayaw *si Maria_i* sa Santa Cruz at k-um-anta
 A-t.Perf.dance T Maria Loc Santa Cruz and A-t.Perf.dance
 din *siya_i* sa San Carlos.
 also she Loc San Carlos
 ‘Maria danced in Santa Cruz and also danced in San Carlos.’
- b. ?*S-um-ayaw *siya_i* sa Santa Cruz at k-um-anta
 A-t.Perf.dance she Loc Santa Cruz and A-t.Perf.sing
 din *si Maria_i* sa San Carlos.
 also T Maria Loc San Carlos
 ‘*She_i danced in Santa Cruz and Maria sang in San Carlos.’

Structures like (27b) are especially bad in cases when the pronoun in the first conjunct is interpreted as a bound variable antecedent by a quantified noun phrase in the second conjunct—as in (28), for instance.

- (28) *Naka-kita *siya_i* ng kalansay at na-takot
 A-t.Perf.see she NS skeleton and Perf.got-scared
 ang *bawa’t babae_i*.
 T each woman
 ‘*She_i saw a skeleton and each woman_i got scared.’

In the absence of positive evidence that null pronouns and overt pronouns obey different constraints with regards to these patterns of anaphora (I am not aware of any), the most

coherent analysis of these facts derives from an analysis of Tagalog clause structure in which the subject argument occupies a position that is structurally higher than the verb, as in the Subject-Raising analysis sketched in (23) above. Given this analysis, the examples in (24)-(25) can be analyzed simply as clauses with coordinated vP's in which one argument—the subject—stands outside of the coordinate structure. In other words, if the subject argument has moved to Spec, TP—as in the Subject Raising analysis—then the examples in (24)-(25) can be straightforwardly analyzed as in (29).⁸



An alternative analysis of these facts that may come immediately to mind is that they involve clausal coordination and across-the-board rightward movement—i.e., Right Node Raising. One reason for rejecting this analysis is that it does not provide a straightforward explanation for the fact that the same kind of coordination facts cannot be replicated for non-subject arguments. In other words, such an account would not immediately explain why it is impossible—as the examples in (30) below make clear—for a non-subject argument to be shared in coordination contexts (see also, Kroeger 1993):

⁸ Alternatively, if the verb moves to T⁰, we can analyze the examples in (24)-(25) as involving T'-Coordination or coordination of some intermediate category between T⁰ and vP. I return to this issue shortly.

- (30) a. *[Nag-bigay si Mike __ kay Juan] at [nag-padala si Jon __
 A-t.perf.give T Mike Obl. Juan and A-t.perf.send T Jon
 kay Maria] *ng liham*.
 Obl. Maria NS letter
 ‘Mike gave to Juan, and Jon sent to Maria, a letter.’
- b. *[Ni-luto __ ang pagkain] at [h-in-ugas-an __ ang mga pinggan]
 T-t.perf.cook T food and T-t.perf.wash T Pl. dish
ni Josie.
 NS Josie
 ‘Josie cooked the food and washed the dishes.’

One the other hand, assuming there is no rule of rightward extraposition that could place a non-subject internal argument at the right periphery of the clause—then it follows that constructions involving coordination with a shared argument will be limited to cases where the shared argument is the subject.⁹ I give one additional argument against a Right Node Raising analysis in the next section.

To summarize: evidence from coordination points to the conclusion that the subject argument is structurally higher than the constituent that contains the verb and the verb’s internal arguments.¹⁰ It seems that we are lead to a Subject-Raising analysis. If we assume that the position that the subject raises to is a right hand Spec, TP, this will be sufficient to derive verb-initial order. As we will see shortly, however, some aspects of verb-initial order, relating to the placement of the verb with respect to the (non-subject)

⁹ I do not have a complete account for the absence of rightward extraposition for DP’s. Cross-linguistically, it is not uncommon for DP’s to be restricted in this way. Many Germanic languages impose this constraint, for instance.

¹⁰ An additional piece of supporting evidence for this comes from the process of ellipsis, which will be discussed more briefly in Chapter 6. Briefly, it appears possible for the subject—but, generally speaking, no other arguments—to survive ellipsis (i.e., to remain overt after everything else has been elided. One example is given in (i). (Another type of ellipsis will be discussed shortly, in which the main predicate of the clause also survives ellipsis.

- (i) Nag-bigay si Juan ng aklat kay Norvin, at din si Maria.
 A-t.Perf.give T Juan NS book Obl. Norvin and too T Maria
 ‘Juan gave a book to Norvin, and Maria did too.’

external argument, will require a Verb-Raising analysis. Before getting to this point, I first examine the consequence of subject-raising for other aspects of clausal word order in Tagalog.

2.3.2. Subject Lowering

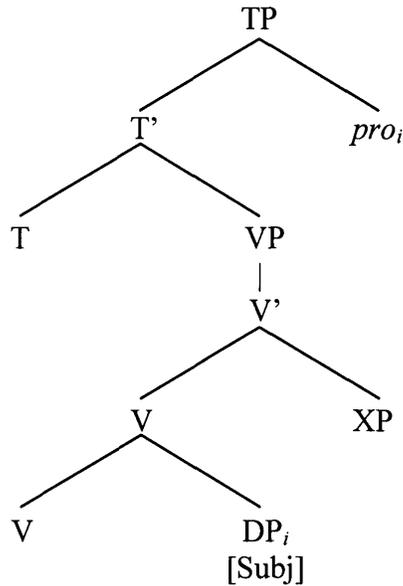
The conclusion that there is subject-raising encounters a problem in that the only word order which is derived under this analysis is V(O)S. The subject argument may, however, occur in virtually any position in the clause, as long as it follows the verb. I will account for this here by adopting Chung's (1991, 1998) "Subject Lowering" analysis (see Choe 1986 for precedent). Chung provides evidence from Chamorro that is similar to the kinds of evidence I have discussed here with respect to Tagalog. Concretely, Chung argues that, in terms of clause structure, the subject argument in Chamorro is structurally more prominent than the verb. This conclusion leads to a paradox, however, in that the subject may appear interpolated among vP-internal arguments—suggesting, in other words, that it is in fact quite low in the structure. Chung solves this paradox by assuming that the subject (optionally) lowers from its syntactically higher position (Spec, TP) and right-adjoins to any projection of the vP.

Under Chung's analysis, a VSO clause is derived from a VOS source via subject lowering. This operation is represented schematically in (31) below.¹¹

¹¹ According to Chung's account, a null expletive must be inserted into the position of the lowered subject in order to obviate the condition that traces of movement must be properly bound by a c-commanding antecedent.

Subject lowering

(31)



Once Subject Lowering is adopted, it is irrelevant for word order purposes whether or not the Spec, TP position that the subject occupies (before lowering) branches to the left or to the right. I will, however, return to this issue below when I provide an analysis of the Subject only restriction on Wh-extraction.

A strong argument for Subject Lowering comes from facts concerning word order in sentences containing coordination. Concretely, we saw in connection with the examples in (24)-(25), that it is possible for the subject argument to appear at the absolute periphery of the clause. Recall that the subject in these examples has scope over the entire coordinate structure. Now, in addition to the word order in which the subject is at the far right periphery, it is apparently also possible for the subject argument to surface in any position within any one of the conjuncts of the coordinate structure. Crucially, the subject in these examples still behaves as if it has scope over the entire coordinate structure. In each of the examples in (32), for instance, the subject argument appears interpolated among vP-internal elements within the second conjunct of the coordinate structure.

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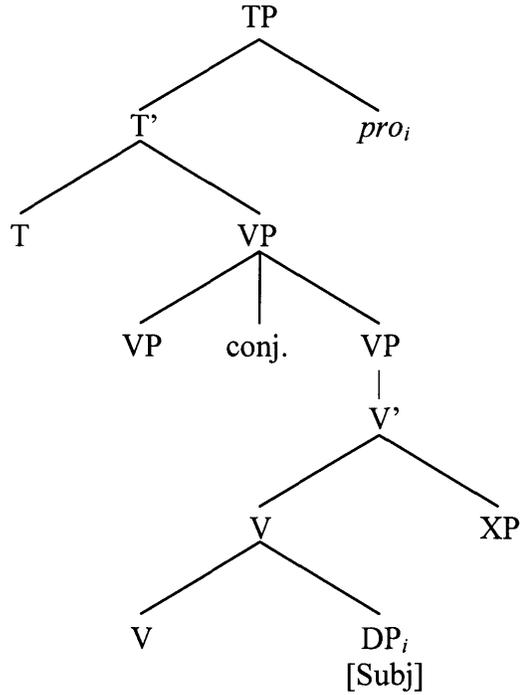
- (32) a. [Na-takot] at [naka-hulog *ang magnanakaw* ng pera].
A-t.Perf.got-scared and A-t.Perf.drop T thief NS money
'The thief got scared and dropped the money.' (Mercado 2005)
- b. [Nag-luto' ng bigas] at [k-um-ain *ang pareho-ng babae*
A-t.Perf.cook NS rice and A-t.Perf.eat T same L woman
ng isda].
NS fish
'The same woman cooked some rice and ate some fish.'
- c. Hindi' [t-in-ukso ng mga kaibigan] o [k-in-agalit-an *si Juan*
Neg T-t.perf.tease NS Pl. friend or T-t.perf.scold T Juan
ng kanya-ng guro].
NS his L teacher
'Juan was not teased by his friends or scolded by his teacher.'
(Kroeger 1993:35, *adapted*)
- d. [Bi-bili ng bangka] at [ba-balik *ang bawa't babae* sa Maynila].
A-t.Fut.buy NS boat and A-t.Fut.return T each woman Loc Manila
'Each woman is going to buy a boat and return to Manila.'

These orders are straightforwardly derived by applying Subject Lowering operating to a structure like (28) above. The structures it yields, for instance, would look like the one in (33).¹²

¹² The subject may also surface in the initial conjunct. I have not provided examples of this sort because of the potential ambiguity with full-clause coordination involving pro-drop of the subject from the final conjunct. Note, such structures would be licit in accordance with Kroeger's condition on anaphora given in (26) above.

VP-Coordination with Subject Lowering

(33)



One alternative way to approach these facts would be to say that the examples in (24)-(25) involve overt raising of the subject—e.g., to Spec, TP—while those in (32) do not. This analysis encounters the problem (already mentioned) that in order for it to be maintained, one would have to assume the presence of a null pronoun in the initial conjunct which would fail to be properly licensed—i.e., in accordance with Kroeger’s principle of coreference stated in (26).

As a final alternative, one might suggest that the argument in the examples in (32) that appears to the right of the subject has been extraposed to the right of the position (Spec, TP) that the subject occupies. The problem faced by this analysis is that it would have to involve movement from only a single conjunct—i.e., movement that violates the Coordinate Structure Constraint (CSC). To save this analysis, we might simply suppose that the CSC does not affect the kind of movement that is involved in placing the non-subject DP in (32a-c) and the oblique PP in (32d) to the right of the subject. This approach, however, poses a deeper mystery of why the same type of movement—e.g., of

a non-subject DP across the subject—cannot apply across-the-board from both conjuncts. This fact is shown by the ungrammaticality of examples like (34).

- (34) *[Nag-bigay __ kay Juan] at [nag-padala __ kay Maria] ang parehong babae
 A-t.Perf.give Obl. Juan and A-t.Perf.sent Obl. Maria T same woman
ng regalo.
 NS gift
 ‘The same woman gave to Juan, and sent to Maria, a gift.’

The example in (34) seems to suggest that movement of the non-subject DP past the position of the subject is simply ruled out in general (cf., also, the examples in (30) above).

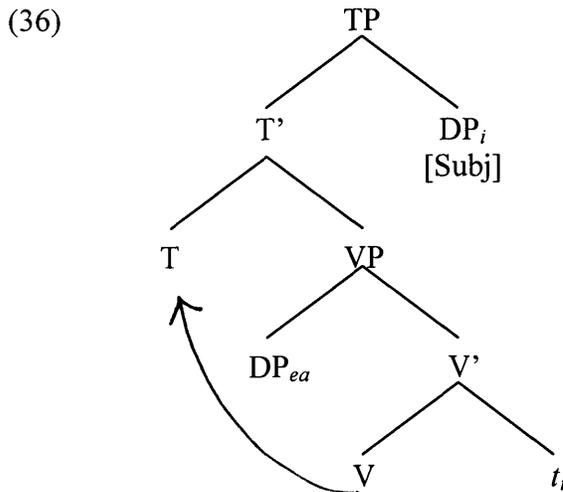
I conclude, therefore, that a Subject-lowering analysis provides the best account of the facts in (32). More generally, Subject-lowering can be assumed to be responsible for deriving all word orders in which the subject argument does not appear at the peripheral position of the clause.

2.3.3. Verb Initial Word Order and the External Argument

Although we now have an account of verb-initial word order as it pertains to the the subject argument, I will now show that verb-raising is necessary to account for verb-initial word order with respect to the non-subject external argument. Observe that in clauses where some argument other than the external argument is the subject, the verb still precedes the external argument. The examples in (9) above make this point, as do the additional examples in (35) immediately below.

- (35) a. B-in-asag ni Maria ang pinggan.
 T-t.Perf.break NS Maria T plate
 ‘Maria broke the plate.’
- b. I-b-in-uka ng mga ibon ang kanila-ng pakpak.
 T-t.Perf.extend NS Pl. bird T their L wings
 ‘The birds extended their wings.’ (E 220)

Assuming that the external argument resides in Spec, vP when it is not the subject of the clause, the word order that we predict if the verb does not raise out of vP (say, to Spec, TP) is: DP_{ea} V DP_{Subj} . This is a word order that is never attested, however. In order to derive the correct surface word order for clauses of this sort, it seems that we must appeal to Verb Raising. Assuming that the Verb moves—e.g., to T^0 —then sentences like the ones in (34) would have the representation shown in (36).



Alternatively, we might try to account for the verb-initial property of the clause with respect to the (non-subject) external argument by supposing that the Spec, vP position where the external argument is merged is a right-hand specifier. There are two reasons not taking this approach. First, the canonical position for the external argument in clauses where there external argument is not the subject is immediately following the verb. This is, for instance, the order that is given first in elicitation contexts, and is the order that is almost always found in texts. This follows as the unmarked word order on the assumption

that Spec, vP is left-branching—as in (36)—and thus linearly adjacent to the verb after Verb raising has applied (again, as represented in (36)).¹³

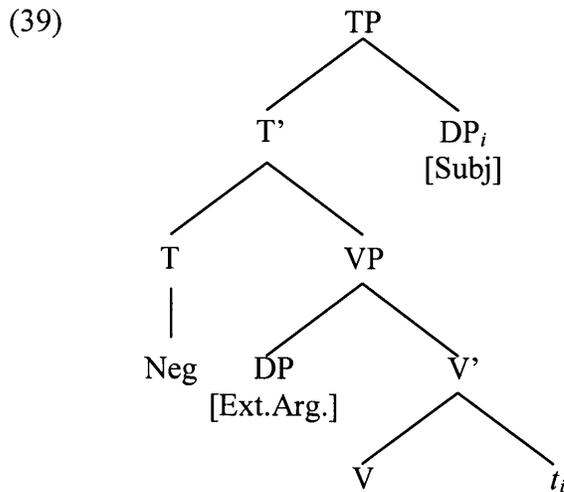
Another motivation for Verb-Raising comes from the word order options observed in clauses containing negation. In particular, in a negated clause, the non-subject external argument can appear either following negation and the verb as in (37a) below, or following negation and preceding the verb as in (37b). Additional examples of the second word order are given in (38) (see also, Maclachlan 1996).

- (37) a. Hindi' b-in-asag *ni Maria* ang pinggan.
 Neg T-t.Perf.break NS Maria T plate
 'Maria didn't break the plate.'
- b. Hindi' *ni Maria* b-in-asag ang pinggan.
 Neg NS Maria A-t.break T plate
 'Maria didn't break the plate.'
- (38) a. Hindi' *ni Rizal* ma-ta-tago ang kanya-ng damdamin...
 Neg NS Rizal Imperf.be-hidden T his L emotion
 'Rizal was not hiding his emotion.' (Web, 03/21/2005)
- b. Hindi' *ng lalaki* l-in-uto' ang adobo.
 Not NS man T-t.Perf.eat T adobo
 'The man ate the adobo.'

A straightforward account for these examples is possible if we suppose that the presence of negation renders V-to-T movement optional.¹⁴ Assuming this, the word order observed in the examples (37b) and (38) follows straightforwardly, as illustrated in (39).

¹³ It is, however, not ungrammatical for the external argument and the verb to be non-adjacent. However, many authors have indicated that informants find examples where the subject does not immediately follow the verb to be somewhat degraded. The degree of ungrammaticality is, however, nowhere near as severe as that reported for other Verb-initial Austronesian languages, e.g., such as Malagasy.

¹⁴ Alternatively, we might assume that Neg actually occupies a higher position than T⁰, and that it optionally lowers from this position onto T⁰. We might then say that when this optional lowering



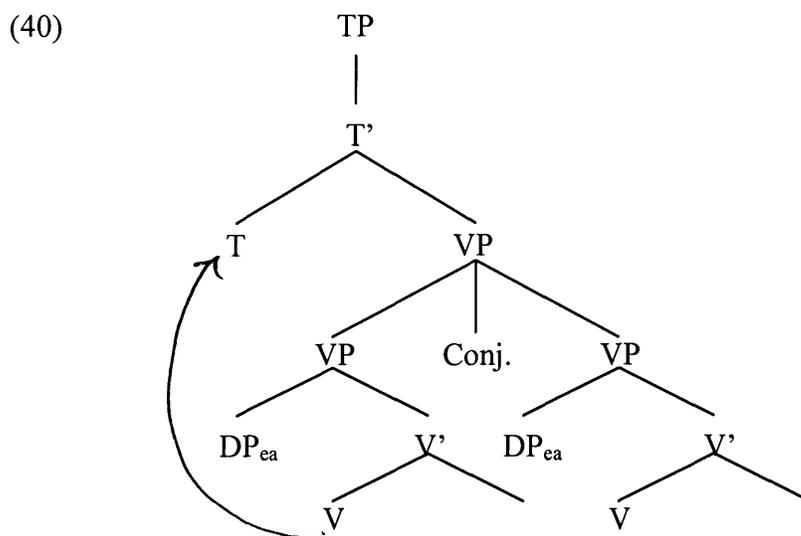
It is less obvious how to account for these word order facts if we were to assume that the external argument is merged into a right-hand Spec, vP position. If we assumed this, for instance, then the word order in which the external argument precedes the verb would have to be analyzed in terms of a preposing movement rule. The difficulty that comes with this analysis is that there is no obvious way to relate the pre-posing rule to the presence of negation. Why, for instance, should preposing be possible only when negation is present? The analysis of “preposing” in terms of optional Verb-Movement provides a more direct and transparent account.

To sum up: Verb-Raising provides the most straightforward account of the verb initial order with respect to the (non-subject) external argument in simplex clauses—in particular, for the fact that the verb precedes the external argument, except in negative clauses where Verb-Raising appears to be optional.

Given this conclusion, there is one loose thread to take care of before moving on. If Verb-Raising applies generally in simplex clauses, then the examples in (24)-(25) discussed above cannot involve vP-coordination. Observe, in particular, that the head

takes place, it blocks otherwise obligatory V-raising—e.g., because the landing site (T⁰) for V-raising has been filled.

verbs contained in each conjunct is distinct from the verb found in the other conjunct. Since the verbs are distinct, Verb-Raising—e.g., to T^0 —would be unable to apply Across-the-Board from both vP's, but would instead have to apply from only a single vP conjunct. Verb-Raising out of a single conjunct violates Ross' Coordinate Structure Constraint (CSC) (Ross 1967), which prohibits movement from a coordinate structure unless it applies from all conjuncts. Crucially, even if the CSC did not constraint head-movement, we would still need to say something special regarding cases like (25) where the external argument is not the subject of the clause. Concretely, if verb raising only took place from one conjunct—say, from the leftmost conjunct—then we would predict the verb to precede only the external argument in the first conjunct but not the second. The predicted structure is illustrated in (40).



The CSC problem, as well as the problem of getting the right word order with respect to the external argument can be solved if we assume that the relevant type of coordination of the examples in (24)-(25) is coordination of T' or some intermediate category between T^0 and vP—e.g., Asp(ect)P. As far as I can tell, this modification has not impact on the arguments made so far, nor does it affect the arguments to be made as we proceed.

2.4. Linear Order

I now want to place the analysis arrived at so far into a larger theoretical context of the principles of linear order in the syntax. Concretely, I will now situate the conclusions reached above in the context of recent proposals by Fox and Pesetsky (2003, 2005). My goal ultimately is to show how their proposal can be used to explain certain limitations on extraction in Tagalog.

The basic proposal is as follows: Building on recent ideas presented in Chomsky (2001, 2002), Fox and Pesetsky assume that the construction of a syntactic object involves the operations Merge and Move proceeding derivationally from the bottom up. At certain points in the derivation of a syntactic object, an operation of *Spell-Out* applies, which delivers a constructed object to the PF component of the grammar where certain morpho-phonological operations take place.¹⁵ Among other things, the operation of Spell-Out is the point in the derivation where the linear order of elements contained within a syntactic object is determined. Spell-Out may apply at multiple points in a given derivation. Typically, it is assumed that Spell-Out applies to specific syntactic categories called Phases or Spell-Out domains. The Spell-Out domains might be, for instance, categories like vP or CP.

The important aspect of Fox and Pesetsky's proposal for our purposes is the proposal that once linear order is determined at a given point in the derivation when Spell-Out applies, it is fixed once and for all and may not be altered. I refer to this principle (following Fox and Pesetsky 2003) as the *Order Preservation*. Abstractly speaking, the constraint is that if $A < B$ ("A precedes B") within a Spell-Out domain D , then $A < B$ in all Spell-Out domains ($D' \dots D^n$) that contain D .

¹⁵ The proposal that the derivation of a syntactic object is cyclic, and that idea that operations relevant to the phonology apply at the end of each syntactic cycle goes back at least as far as Bresnan (1972).

What follows from this proposal is that only elements that are linearized at the phonological edges of a Spell-Out domain will be able to extract out of a Spell-Out domain into a higher Spell-Out domain. For instance, when Spell-Out applies to the domain D in (41) below, the ordering that is obtained is $A < B < C$. If the element B extracts either to the left or to the right, then—at the next Spell-Out domain (D'), the order that was determined at D will no longer hold. Either of these derivations is ruled out by the principle of Order Preservation.

- (41) a. $[_D A B C]$ $A < B < C$
 b. $*[_{D'} B [_D A t C]]$ $B < A < C$
 c. $*[_{D'} [_D A t C] B]$ $A < C < B$

Suppose, on the other hand, that we have a derivation in which both A and B extract to the left (into the domain of D'). On such a derivation, there is no violation of Order Preservation since the linear order of elements remains constant.

- (42) a. $[_D A < B < C]$ $A < B < C$
 b. $[_{D'} A [B [_D t t C]]]$ $A < B < C$

What is significant here is that the derivation in (42b) is possible regardless of the syntactic position that B occupies within D. There is no reason why it could not be a sister to a verb, for instance. What is crucial in (42b) is that—after A has moved out of D—B is the edge-most element within D, and therefore B can move out of D as long as it does so without violating Order Preservation.

2.4.1. Linearizing Verb first: TP as a Phase/Spell-Out domain

Fox and Pesetsky's proposals have yet to be applied to a Verb initial language. Such languages have interesting consequences for their proposals and, potentially, for Phase-based theories of syntax more generally. I argued in the preceding section that Verb

Raising best explains certain aspects of the Verb-initial syntax of Tagalog—in particular the order between the verb and the external argument. According to Chomsky (2001, 2002) and others, the Phase/Spell-Out domain categories are vP and CP (and possibly DP as well). As I will now attempt to show, however, this cannot be right for the analysis of Tagalog that we have built up so far.

Here is why: suppose that vP is a Phase/Spell-Out domain, and that it has the minimal structure shown in (43a).

- (43) a. $[_{vP} DP_{ea} [v' [_{vP} V DP_{ia}]]]$
b. $DP_{ea} < V < DP_{ia}$

If the vP in (43) is a Phase/Spell-Out domain, then (43b) is the linear order that will be determined when Spell-Out applies to it. Suppose that, in the continuation of this derivation, T^0 is merged into the structure, and that the verb then moves to T^0 , as shown in (44a).

- (44) a. $T+V [_{vP} DP_{ea} [v' t_{[v+V]} [_{vP} t_V DP_{ia}]]]$
b. $V < DP_{ea} < DP_{ia}$

After Verb Raising occurs and the next Spell-Out applies—e.g., when the derivation reaches CP—the linear ordering that is established is the one given in (44b). This order is crucially different from the one in (43b). In (43b), the external argument preceded the verb, but in (44b) the verb precedes the external argument. Given Order Preservation as a constraint on derivations, this derivation is deemed illicit since it involves a reversal of linear order between points of Spell-Out.

One way for Order Preservation to be satisfied here would be for the external argument to raise to a position to the left of the landing site of the verb—e.g., as in a language, like French, which has both V-Raising to T^0 as well as Subject-Raising to Spec, TP. If the external argument were to raise to a left-branching Spec, TP or Spec,

CP—for instance—then the linear order of elements at the end of the derivation would be the same as the linear order of elements determined at the initial point of Spell-Out—namely, $DP_{ea} < V < DP_{ia}$. Of course, this derivation does not reflect the actual order of elements for Tagalog (or any other verb-initial language).

On the other hand, it is possible to have a derivation that both satisfies the Order Preservation and generates Verb-initial order by rejecting the assumption that vP is a Phase/Spell-Out domain for the relevant languages, and assume instead that TP is a Phase/Spell-Out domain. Assuming this, the first point where Spell-Out will apply in a simplex clause is the point where TP has been constructed. Continuing to assume that the Verb moves to T^0 , this entails that the linear order established at the first point of Spell-Out will be one in which the verb linearly precedes all other elements in the clause.

2.4.2. Interim Conclusion

Points (I)-(III) summarize the analysis so far.

- (I) The subject argument moves to Spec, TP . (Section 2.3.1., Coordination evidence)
- (II) The verb moves (at least as high as) to T^0 (Section 2.3.3., Word order of the verb with respect to the external argument)
- (III) The subject argument (optionally) lowers and right adjoins to a projection of vP . (Section 2.3.2., Deriving VSO; Word order in coordination)

We have already discussed the consequences for Verb-Raising with respect to Fox and Pesetsky's approach to Linearization and the constraint of Order Preservation. Before moving on, let us quickly point out that the assumptions regarding Subject-Raising and Subject-Lowering are also consistent with this model, as long as we continue to assume TP to be the minimal Phase/Spell-Out domain in a simplex clause. The only crucial thing here seems to be that Subject-lowering must apply before Spell-Out applies to TP —i.e., so that the subject does not get linearized at the far left periphery of the clause (if Spec,

TP projects to the left) or at the far right periphery (if Spec, TP projects to the right). Granting this, Subject-Raising and Subject-lowering seem to be consistent with the overall principles of linearization and Order Preservation. In the section immediately following this one, I will attempt to show how the points (I-III), in addition to the principle of Order Preservation, can help to derive a curious restriction on extraction in Tagalog and related languages.

2.4.3. The Subject Only Extraction Restriction

The conclusions that TP is a Phase/Spell-Out domain offers a unique account for the celebrated Subject-Only restriction on extraction observed in Tagalog and related languages. A simple paradigm illustrating the subject-only restriction on extracted is given below in the examples in (45)-(46). In (45a), we see that the external argument has been extracted licitly, but extraction of the Agent in (45b) is ungrammatical. The difference has to do with the fact that in (45b), the theme argument (*ang libro*) but not the agent argument is the subject of the clause. Similarly, (46a) shows licit extraction of the internal Theme argument, while (46b) shows illicit extraction of this argument. The contrast has to do with the fact that in (46b), the Theme is extracted from a clause in which the agent argument is the grammatical subject of the clause.

- (45) a. Sino ang b-*um*-ili ng libro sa tindahan?
Who T A-t.perf.buy NS book Loc store
'Who bought a book from the store?'
- b. *Sino ang b-*in*-ili sa tindahan *ang libro*?
Who T T-t.perf.buy Loc store T book
('Who bought a book from the store?')

Chapter 2

- (46) a. Ano ang *b-in-ili* ng maestro sa tindahan?
 What T T-t.perf.buy NS teacher Loc store
 ‘What did the teacher buy at the store?’
- b. *Ano ang *b-um-ili* sa tindahan ang maestro?
 What T A-t.perf.buy Loc store T teacher
 (‘What did the teacher buy at the store?’)

The Subject Only restriction can also be observed in other construction types as well. For instance, the only non-oblique argument that can be fronted in so-called *ay*-Inversion contexts is the subject argument. Consider the examples in (47).

- (47) a. Ang kawal ay hindi’ mag-bi-bintang ng heneral.
 T soldier Inv Neg A-t.Fut.accuse NS general
 ‘The soldier will not accuse the general.’
- b. *Ang heneral ay hindi’ mag-bi-bintang ang kawal.
 T general Inv Neg A-t.Fut.accuse T soldier
 (‘The soldier will not accuse the general.’)

There have been a few attempts to account for the subject-only restriction in the literature. The one I want to note here in particular is one put forward in Chung (1993, 1998). In these works, Chung proposes that the subject-only restriction might follow from a particular parameterization of the head government requirement, the requirement—within the Principles & Parameters framework—that all traces of extraction stand in a particular locality relation to particular licensing heads.

In particular, Chung claims that in languages of the type that have a Subject only restriction (Malagasy, Tagalog, etc.), every licensing head can only license traces of elements that the licensing head agrees with (or, in her terms, only elements that are *associates* of the licensing head, Chung 1998:179-182). If the language allows no other mode of head-government licensing for traces, then, since lexical heads like V^0 do not agree with their arguments (e.g., in the traditional sense of “Spec-Head agreement”, or in

the more contemporary terms of Chomsky's Agree relation) only Spec, TP (and possibly Spec, CP) will be positions in the syntax where traces can occur.

The details of Chung's discussion are fairly intricate and so I will not go into them in more detail here. Crucially for her, the head government requirement is parameterized in such a way that the only syntactic position that is head governed in a language like Tagalog is Spec, TP, while in a language like Chamorro or English, Spec, TP as well as the complement of lexical heads like V^0 are position that are head-governed. The analysis I will propose below comes very close to having the same effect—though my analysis will be stated in terms of the opacity of syntactic domains and how the identification of these domains might be different in different languages.

2.4.4. Phase Impenetrability: At the Phonology-Syntax Interface

The analysis I propose here is similar in interesting ways to Chung's with respect to the idea that the subject argument—the argument that agrees with the verb—occupies a position in the syntax that serves as an 'escape hatch' allowing it (and only it) to be extracted. My proposal differs, however, in that my goal is to explain the subject only restriction from a different sort of locality condition on movement than the head government requirement—namely, one that requires movement across a domain to apply in *successive-cyclic* steps (Chomsky 1977). In recent work within the Minimalist Program, for instance, it has been claimed that the requirement of successive cyclicity follows from a single requirement that all movement out of a Phase (e.g., vP or a CP) take place from the Phase edge. I will refer to this constraint as *Phase Impenetrability* (Chomsky 2000, 2001).

Significantly, Fox and Pesetsky's proposal (outlined above) derive Chomsky's Phase Impenetrability as a part of the more general condition on preserving Linear Order.¹⁶ Concretely, only those elements that stand at the phonological edge of a Phase/Spell-Out domain will be able to extract without reversing linear order. Recall now the claim that the subject argument always comes to occupy Spec, TP in the derivation of a simplex clause. Given this assumption, and given the conclusion reached above that TP is Phase, it follows that extraction of an argument—e.g., to Spec, CP—will be possible only from an element that occupies Spec, TP. Before illustrating this, let us first consider the alternative assumption whereby vP is a Phase/Spell-Out domain but TP is not.

Consider first what happens (on the assumption that vP is a Phase/Spell-Out domain) in a scenario where the external argument occupies the highest Spec, vP—i.e., where no object shift of the internal argument has applied. The structure generated in such a scenario is the one shown schematically in (48).

$$(48) \quad T \text{ [}_{vP} DP_{ea} \text{ [V DP}_{ia} X]] \quad \text{L.O.: } DP_{ea} < DP_{ia} < X$$

If DP_{ea} moves to Spec, CP, then—when the derivation reaches the next Spell-Out domain—the linear ordering in (49a) will obtain. This linear ordering is consistent with that in (48), so this continuation of the derivation is licit with respect to Order Preservation. On the other hand, if we extract DP_{ia} , then—when Spell-Out applies to CP—the linear ordering will be as shown in (49). This linear order crucially contradicts the linear ordering in (48), and so the principle of Order Preservation deems this derivation illicit.

$$(49) \quad \begin{array}{ll} \text{a. } DP_{ea} C \text{ [T [}_{vP} t \text{ [V DP}_{ia} X]]] & \text{L.O.: } DP_{ea} < DP_{ia} < X \text{ (}\checkmark\text{ Order Pres.)} \\ \text{b. } DP_{ia} C \text{ [T [}_{vP} DP_{ea} \text{ [V } t \text{ X]]]} & \text{L.O.: } DP_{ia} < DP_{ea} < X \text{ (}\times\text{ Order Pres.)} \end{array}$$

¹⁶ Other work tries to derive Phase Impenetrability as a syntactic constraint rather than a constraint relating the phonology-syntax interface. In particular, Rackowski and Richards (2005) have argued that the Subject-only restriction follows from Phase Impenetrability understood as a purely syntactic constraint. I discuss their proposal below after first presenting my proposal.

Consider next what happens when we start with a structure where the internal argument has object-shifted to the outermost Spec, vP, as in (20) above.

$$(50) \quad T \ [_{vP} DP_{ia} \ [_{vP} DP_{ea} \ V \ X]] \quad \mathbf{L.O.}: DP_{ia} < DP_{ea} < X$$

A problem now arises. Given Order Preservation, it follows that only the internal argument DP will be eligible for extraction—i.e., because it linearly precedes the external argument DP at the level of the the vP Spell-Out domain, and extraction of the external argument would alter this order. With respect to agreement with T^0 , however, both DP's are possible candidates. In other words, we do not have a way at this point to rule out the ungrammatical (46b)—where the internal argument is extracted in a clause that has the external argument as its subject. The problem, in short, is that we are deriving the English pattern of extraction and not the desired Tagalog one.

This problem is solved on the assumption that the argument that agrees with T^0 —i.e., the Subject—moves to Spec, TP, and that TP but not vP is the relevant Phase/Spell-Out domain. Crucially, although either the external argument or the object-shifted internal argument is equidistant to T^0 for purposes of agreement, the only one that will be able to move to Spec, TP is the one with features compatible with the features of T^0 .

Given this much, consider again the derivation of a sentence in which the internal argument agrees with T^0 . Crucially, we now derive the fact that the argument that agrees with the verb (with T^0) will be the only one that is eligible for extraction. Concretely, if the internal argument moves to Spec, TP, then—when Spell-Out applies to TP—it will be ordered before the external argument (in Spec, vP). Consider (51).

$$(51) \quad [_{TP} DP_{ia} \ T \ [_{vP} DP_{ea} \ V \ X]] \quad \mathbf{L.O.}: DP_{ia} < DP_{ea} < X$$

Crucially, of the two imaginable derivations involving movement of an argument to Spec, CP—only (52a) in which the internal argument is moved from Spec, TP is possible.

Extracting the vP internal external argument results in a linear order that contradicts the one in (48), thus violating the principle of Order Preservation.

- (52) a. [CP DP_{ia} C [TP t [vP DP_{ea} V X]] **L.O.:** DP_{ia} < DP_{ea} < X (✓ Order Pres.)
 b. [CP DP_{ea} C [TP DP_{ia} [vP t V X]] **L.O.:** DP_{ea} < DP_{ia} < X (✗ Order Pres.)

To briefly conclude: I argued in previous sections that in Tagalog, the verb moves out of vP to T⁰, and that the subject arguments moves also to Spec, TP. The former fact, I showed, had the consequence that TP (and crucially not vP) in Tagalog must be a Phase/Spell-Out domain from the point of view of Fox and Pesetsky's Order Preservation. The later fact, I also showed, allows for a simple account of the Subject Only restriction on extraction, which relied in an important way on the Fox and Pesetsky's proposed constraint—Order Preservation—on the mapping between the syntax and the phonology.

2.4.5. Alternative: A Syntactic Approach to Phase Impenetrability

I argued above how one of the main empirical conclusions of this discussion—namely, that the subject argument raises to Spec, TP—together with one of the major theoretical conclusions—that TP is a Phase/Spell-Out domain—come together so as to allow us to provide a straightforward account of the Subject only restriction on extraction in terms of Phase Impenetrability—understood in the present context as a constraint on linearization in a cyclic spell-out model of grammar.

There is another approach to Phase Impenetrability that treats the phenomenon as a syntactic constraint rather than a constraint related to the syntax-phonology interface. This is the approach argued for by Rackowski and Richards (2005) (hereafter, RR), which I will now outline.

RR adopt the basic analysis of Voice Agreement of Rackowski (2003), which was outlined earlier. In addition to this, they assume the following definition of Closest given in (53):

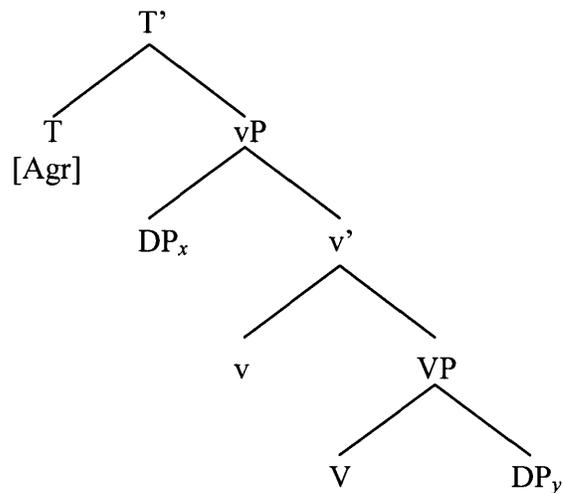
(53) *Closest* (Rackowski and Richards 2005)

A goal A is the closest one to a given probe if there is no distinct goal B such that for some X (X a head or maximal projection), X c-commands A but does not c-command B.

RR make two crucial assumptions (see RR for elaboration): First, vP (not TP) is a Phase; and second, Specifiers of a maximal projection—e.g., vP—are equidistant. RR also do not assume that the subject argument moves to Spec, TP in the derivation of simplex clauses. They assume instead that the subject—in fact all arguments of the verb—remain vP-internal (though the linear order of arguments with respect to one another can be derived by vP-internal scrambling).

There are two configurations to consider. One configuration is where the external argument occupies the highest Spec, vP position, and the internal argument remains in-situ.

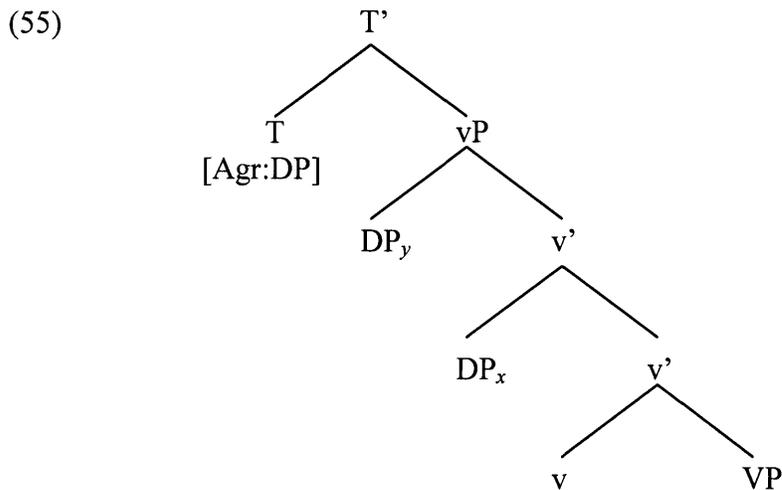
(54)



Considering the Probe-Goal relation between T and DP, it is clear from the definition in (53) that DP_x is closer to T^0 than DP_y . DP_y could not be the closest DP to a probe—e.g., T^0 —because there are two distinct goals, vP and DP_x , and there is an element X, DP_x , which c-commands DP_y but is not c-commanded by itself. Thus, DP_x is closer to T^0 than DP_y . DP_x is therefore the only argument that can agree with T^0 , and in addition, will be the only argument that can raise any higher—e.g., to C^0 .

Significantly, although vP counts as a distinct goal, it is not closer to T^0 than DP_x , and nor is DP_x closer to T^0 than vP. Concretely, every X that c-commands vP also c-commands DP_x , and vice-versa. Therefore, neither vP nor DP_x is closest to T^0 .¹⁷

Now consider a configuration where the internal argument moves to the highest Spec, vP position.



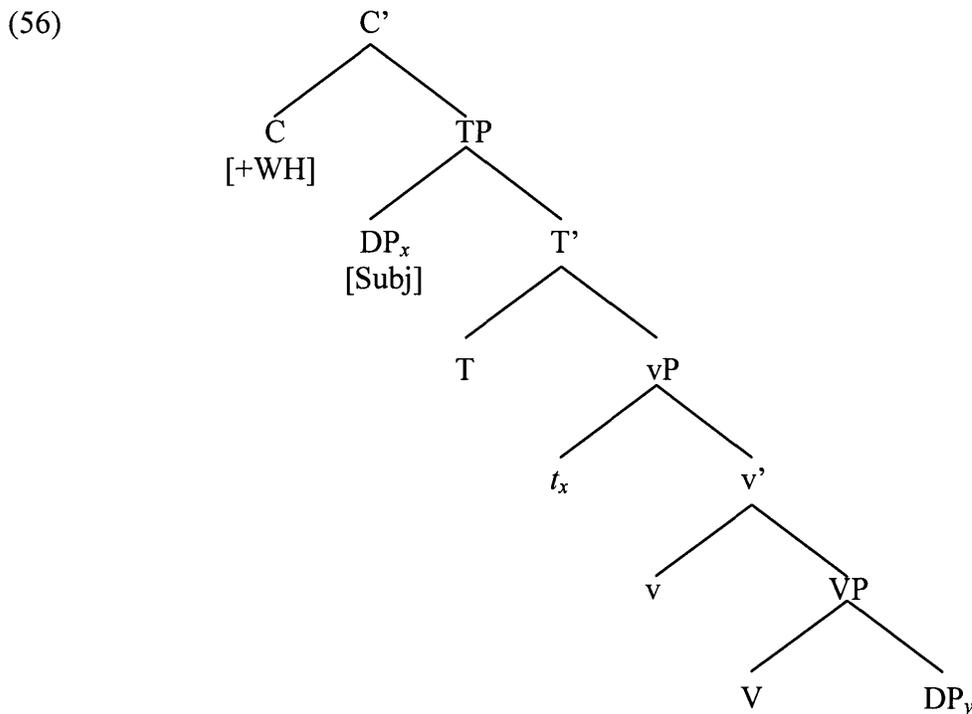
In this structure, DP_x , the external argument, is not the closest goal to T^0 , since there is a distinct goal, DP_y , and an X, DP_y again, such that DP_y c-commands DP_x but is not itself c-commanded by X—namely, by DP_y itself. Since DP_y , the Object shifted internal argument, is the closest goal to T^0 , it will agree with T^0 . Additionally, DP_y is the only argument that is accessible to any Probe-Goal relations—e.g., movement to C^0 .

¹⁷ The ‘choice’ of whether vP or DP moves presumably relates therefore not to which is closest, but to which element has the features that the probe is seeking.

While this analysis accounts straightforwardly for the Subject only restriction in Tagalog, I believe that its main difficulty is in providing a way for accounting for languages that do *not* exhibit a Subject only restriction—i.e., for languages, like English, where the argument that agrees with the verb (the Subject) is not the only argument that is eligible for extraction (e.g., as in *What did Joe buy __?*).

The problem for languages like English arises if it is also true for English that an internal argument that is to be extracted must raise to the outermost Spec, vP. In other words, if the external argument must raise, then it will block T^0 from agreeing with the external argument, just as it does in Tagalog.

Consider for instance the configuration in (56). Here, the external argument raises to Spec, TP but the internal argument remains in its base position within VP.



In this configuration where the direct object, DP_y , does not move, the external argument, DP_x , is closest to the probe T^0 . T^0 can therefore agree with DP_x and trigger movement of

DP_x to its specifier. DP_y is ineligible for movement when it comes to extraction to C^0 , however. In this configuration, vP is the closest goal in relation to C^0 . The reason for this has to do with the verb, which c-commands DP_y but does not c-command vP . According to RR's definition of Closest, this renders vP closer to C^0 than DP_y . This problem does not arise, however, if it is assumed that DP_y occupies vP 's highest Specifier—i.e., if we assume that it Object Shifts to this position just as we have assumed for Tagalog.¹⁸

If we make this assumption, however, then we will have for English the same configuration that we have for Tagalog as we build up a simplex clause—namely, the one in (55). But then, with respect to agreement with T^0 , the Object-shifted internal argument DP_y is closest to T^0 and should therefore control agreement. In other words, the external argument, DP_x is now inaccessible to T^0 . This is not the desired result, since T^0 clearly agrees with this DP in sentences like *What did Joe buy ___?*

One possible solution here might be to say that for English, Subject-verb agreement is a relation not between T^0 and a DP, but between v^0 and a DP. Assuming this, the Object shifted internal argument and the external argument would not be “competing” for closeness with respect to T^0 or, for that matter, C^0 . However, this solution requires abandoning the assumption that agree relations are defined as Probe-Goal relations in which Probes always c-command their Goals—i.e., since the external argument c-commands v^0 . Although this may not be a problem in general, it does significantly weaken the overall success of RR's analysis of Phase Impenetrability in terms of Closest, which is defined with respect to this understanding of Agree.

The analysis that I presented earlier avoids these problems by treating Phase Impenetrability as a constraint relating to the phonology-syntax interface, as opposed to a general syntactic constraint relating to Probe-Goal relations. In order to account for the difference between extraction patterns in English and Tagalog, I propose that vP is a Phase in English, while TP (and crucially not vP) is a Phase in Tagalog. Assuming vP to

¹⁸ This is assuming that there are no counter-cyclic derivations—i.e., which would allow the direct object to raise at a point in the derivation later than the point in the derivation where the subject argument raises to Spec, TP.

be a Phase/Spell-Out domain, let us consider the derivation of a sentence like *What did John buy ___*? For the internal argument to be extracted, it will have to raise to the outer Spec, vP, thus forming a structure like the one in (55) above, repeated below in (57). Since vP is a Phase/Spell-Out domain, the linear order that will be established after Object Shift is the one shown in (54b).

- (57) a. $[_{vP} DP_{Obj} [_{DP_{Subj}} [_{v'} v [_{VP} V t_{Obj}]]]]$
 [+Wh]
- b. Lin. Order: $DP_{Obj} < DP_{Subj} < V$
 [+Wh]

Since Agree relations are not constrained by the Order Preservation, T^0 —once it is merged into the structure—can agree with either the internal argument in the highest Spec, vP, or with the external argument in the lower Spec, vP. Suppose it agrees with the lower Spec, vP. Since this argument moves to Spec, TP in English, the structure formed will be as in (58).

- (58) $[_{TP} DP_{Subj} [_{T'} T [_{vP} DP_{Obj} [t_{Subj} [_{v'} v [_{VP} V t_{Obj}]]]]]]$
 [+Wh]

When C^0 is merged with the structure in (58), the direct object can move to its Specifier, forming the structure in (59a), to which Spell-Out will apply, giving the linear order in (59b).

- (59) a. $[_{CP} DP_{Obj} [_{C'} C [_{TP} DP_{Subj} [_{T'} T [_{vP} t_{Subj} [_{v'} v [_{VP} V t_{Obj}]]]]]]]]$
 [+Wh]
- b. $DP_{Obj} < DP_{Subj} < V$
 [+Wh]

Notice that the linear order at the end of the derivation of CP is the same as the linear order that was established at the intermediate vP stage of the derivation. Significantly, this is true despite the fact that there is an intermediate step where the subject DP raises above the object—i.e., when the subject moves to Spec, TP. The order $DP_{Subj} < DP_{Obj}$ would violate the Order Preservation, but since the object moves higher than the

subject—to Spec, CP—this order is not maintained. The overall derivation therefore works out in accordance with the Order Preservation.

Notice, finally, that it is crucial in English that vP and not TP is a Phase/Spell-Out domain. If TP were a Phase/Spell-Out domain, then—at the point in the derivation where the subject argument moves to Spec, TP—the order $DP_{\text{subj}} < DP_{\text{Obj}} < V$ would be established. Extraction of DP_{Obj} will always be blocked under this scenario since it will always involve a reversal of the subject-first order. Thus, TP could not be a Phase/Spell-Out domain in an English type language.

2.6. Conclusion

My account of Tagalog clause structure involves two main analytical points: First, the subject argument raises to Spec, TP, and second, the verb moves to T^0 . As was shown, the fact that the subject raises to Spec, TP creates a problem in accounting for word order in that the subject argument can appear interpolated among vP-internal arguments. I resolved this problem by appealing to Chung's hypothesis of Subject-Lowering.

From the perspective of the proposals of Fox and Pesetsky relating to linearization, I argued that these analytical points lead us to the conclusion that TP—not vP—must be recognized as the first Phase/Spell-Out domain in the derivation of a simplex clause. One of the advantages of this, I argued, was that it provided a straightforward account of the Subject-Only restriction on extraction that characterizes Tagalog and related languages.

Appendix: VP-Fronting

One approach to deriving verb initial order that was mentioned earlier in the discussion is the “VP-fronting” analysis. Recall that under this analysis, what fronts in a verb initial language is not V^0 alone, but rather a larger projection of V^0 , which may or may not contain any of the verb’s internal arguments (depending on whether these have scrambled out of VP prior to fronting). By looking back over the positive arguments for the alternative analysis of verb-initial word order provided (Sections X and X), I argue that a VP-fronting analysis does not provide a better account of verb initial word order and Tagalog clause structure more generally.

On the assumptions relating to linear order that we have been making, it would follow also from a VP-fronting analysis that TP is a Phase/Spell-Out domain. In particular, if vP were a Phase/Spell-Out domain, then—supposing that the subject argument occupies the highest Spec, vP—the subject will be linearized preceding the VP. VP-fronting, however, will reverse this order causing a violation of the Order Preservation. The illicit derivation below illustrates this point.

- (60) a. $[_{VP} DP [_{v'} \dots [_{VP} V XP]]]$
 [Subj]
 b. Lin. Order: DP < VP
 [Subj]
 c. $[_{TP} [_{VP} V XP] [_{T'} T [_{VP} DP [_{v'} \dots t_{VP}]]]]$ (VP-fronting)
 [Subj]
 d. Lin. Order: VP < DP (×Lin. Principle)
 [Subj]

On the other hand, if TP is a Phase/Spell-Out domain, then no problem arises for the VP-fronting analysis with respect to the Order Preservation—i.e., since the first application of Spell-Out in the derivation of a simplex clause will happen after VP-fronting.

The VP-fronting analysis encounters an immediate difficulty, however, accounting for the Subject only restriction on extraction. Recall that the Subject only restriction on

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extraction was attributed to the fact that, by virtue of the fact that the subject argument occupies Spec, TP, it is the only argument that can be ordered linearly preceding the verb and all of its arguments. Thus, only the subject can be extracted further to the right without violating Order Preservation (see Section 2.4 above). Since it is VP that occupies Spec, TP under the VP-fronting analysis, we expect only VP to be able to extract. This is obviously an incorrect result. Concretely, only the DP subject argument can extract, and—furthermore—there evidence seems to show that VP's are not possible targets for leftward extraction.

The examples in (61), for instance, involve attempts at fronting a VP before the inversion particle *ay*.

- (61) a. *[Mag-bi-bintang ng general] ay ang kawal ____{VP}.
A-t.Imperf.accuse NS general Inv. T soldier
'The soldier will not accuse the general.'
- b. *[P-um-upunta] ay si Juan dito ____{VP}.
A-t.Imperf.come Inv.T Juan here
'Juan comes here.'

In addition to the *ay*-inversion construction, Tagalog also appears to have a process of topicalization, as in the example in (62) below (see also Kroeger 1993).

- (62) a. Ito-ng tasa, b-in-ili ko sa tindahan.
This L cup T-t.Perf.buy I Obl. store
'This cup, I bought (it) from the store.' (Kroeger: 123, *adapted*)
- b. Sa Maynila, marami-ng kotse.
Loc Manila many L car
'In Manila, there are many cars.' (Kroeger: 214)
- c. Para sa iyo, b-in-ili ko ito.
for Obl you T-t.Perf.buy I this
'For you, I bought this.' (Schachter and Otones: 493)

VP's, on the other hand, cannot be topicalized in this fashion.

- (63) a. *[B-um-ili ng bago-ng kotse], hindi' kaya ni Manuel ____{VP}.
A-t.Inf.buy NS new L car Neg able NS Manuel
'Buy a car, Manuel was not able to.'
- b. *[K-um-a-kain ng pansit], si Maria naman ____{VP}.
A-t.Imperf.eat NS noodles T Maria also
'Eating noodles, Maria also was.'

Putting these observations aside for the moment, one might be tempted to suggest that the fact that non-subject arguments cannot extract follows from the fact that they are contained within the fronted VP, which occupies a specifier position. In particular, one might argue that the failure of non-subject arguments to extract is a consequence of the so-called "Freezing Effects" discussed by Wexler and Culicover (1981), or Huang's Condition on Extraction Domains (CED). This is not a very likely account, however. Although it is true that non-subject arguments that are of the category DP cannot extract, non-subject arguments that are oblique apparently can. Examples like (64) below illustrate this fact (from Rackowski and Richards 2005).

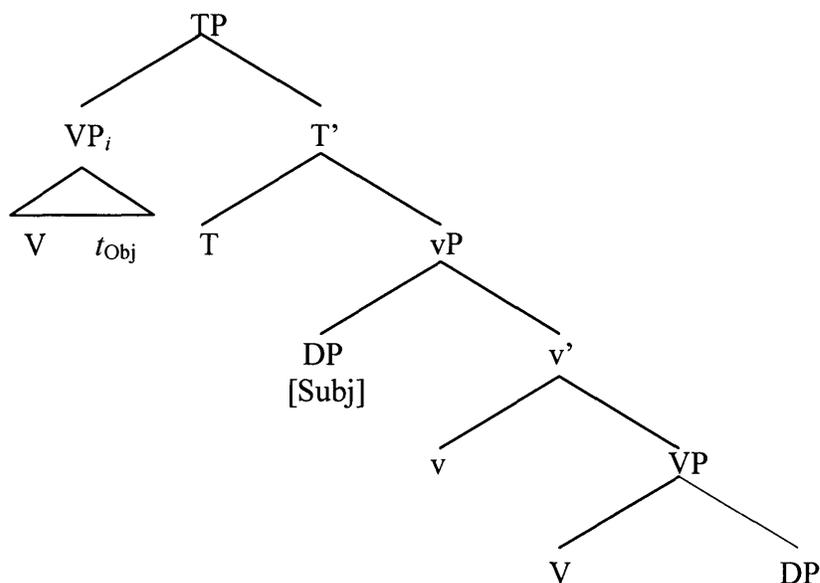
- (64) a. Sa ali -ng kalabaw i-binigay ng lalaki ang bulaklak?
Obl. which L water-buffalo Obl-T-gave NS man T flower
'To which water buffalo did the man give the flower?'
- b. Sa ali -ng kalabaw nag-bigay ang lalaki ng bulaklak?
Obl. which L water-buffalo A-t-gave T man NS flower
'To which water buffalo did the man give the flower?'

Like non-subject DP arguments, these oblique arguments are presumably also internal to the VP constituent that would putatively be fronted under a VP-fronting analysis. Thus, if the explanation for the ungrammaticality of extraction non-subject DP's is to be attributed to a freezing effect or the CED, then we would also predict oblique arguments to resist extraction, contrary to the fact.

One might propose here that the oblique arguments in (64) have moved out of the VP prior to VP-fronting, and that this is the reason why they escape the island effect of moving out of the fronted VP. Taking this line of thought one step further, one might claim that the one difference between obliques and DP's has to do with their ability to move out of VP—i.e., to undergo some sort of short-distance scrambling. This approach to the Subject-only restriction, and its exceptions relating to oblique arguments, cannot be maintained. Concretely, in order to derive VSO order in Tagalog, we must assume that non-subject DP's can be moved out of the VP prior to VP-fronting, otherwise, the only word order that could be derived would be VOS. The derivation of a VSO sentence under a VP-fronting account is schematized in (65).

VP-fronting Derivation for V-S-O

(65)



Given this, no positive argument for a VP-fronting analysis can be made on the basis of the Subject-only constraint on extraction—i.e., since the analysis fails to be able to distinguish between non-subject DP arguments and non-subject oblique (PP) arguments.

Earlier on in the discussion I argued that V-Raising was needed to account for certain aspects of verb initial order in Tagalog, relating specifically to the ordering relation

between the external argument and the verb. This evidence is incompatible with the VP-fronting account presented above.

Another problem for VP-raising analysis arises from the fact that Tagalog appears to have a process of V-raising that is arguably incompatible with VP-raising. The claim that there is V-raising in Tagalog is based primarily on the existence of a pattern of VP-ellipsis in Tagalog. Consider the example in (66) below. Observe that in both examples, the second conjunct of the coordinate structure has certain missing elements that are nonetheless understood as given from the content of the first conjunct. In (66), all of the verb's arguments with the exception of the subject are elided.

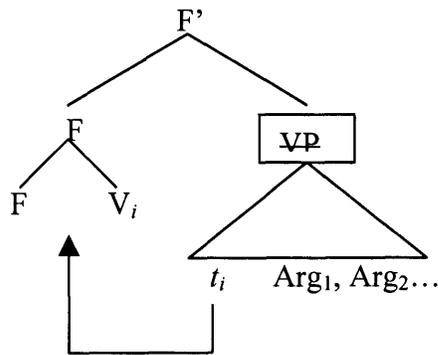
- (66) Nag-bigay si Juan ng aklat kay Norvin,
A-t.perf.give T Juan NS book Obl. Norvin
at *nag-bigay* *din* si Maria.
and A-t.perf.give too T Maria
'Juan gave a book to Norvin, and Maria did too.'

In this type of ellipsis, the overt verb in the second conjunct corresponds to an identical verb in the first conjunct. Evidence that this constructions should be identified with the same type of VP-ellipsis constructions found in English and other languages will be discussed more fully in Chapter 6 (see also, Richards 2003). Anticipating that discussion, let us focus on the theoretical significance of this type of ellipsis construction as it concerns the issue of verb-initial word order. Significantly, examples of the type in (66) correspond to what has been called 'Verb-Stranding VP-Ellipsis' (see Goldberg 2004; 2005 and references therein). Concretely, it is has been argued that this type of ellipsis is identical to the familiar English type in terms of the category that is elided (i.e., VP), but that the difference with English VP-ellipsis constructions is that the verb is always contained within the VP that is elided when VP-ellipsis applies, and it is therefore never overt. In a language that does have V-raising out of VP, on the other hand, the verb can raise out of the VP before ellipsis applies—thereby allowing it to escape the ellipsis and remain overt. In other words, what is elided in VP-ellipsis for a language that allows

Verb-raising out of VP is a VP constituent containing only a trace of the verb and its arguments. This is represented schematically in (67).

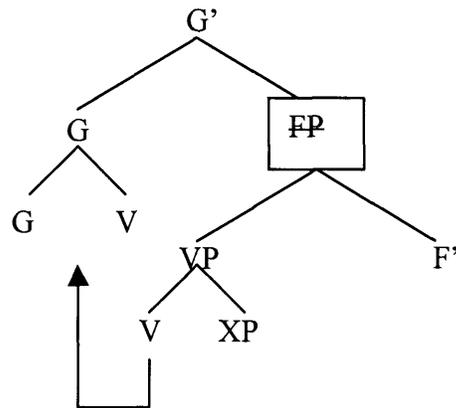
Verb-Stranding VP-ellipsis

(67)



Assuming this general analysis to be correct, let us now consider how this affects the claim about VP-fronting. There is only one possible way in which the analysis of VP-fronting can be reconciled with the existence of V-Stranding VP-ellipsis—namely, if V raises out of the VP after it has topicalized, and what is elided is the maximal projection to which VP-fronting targeted.

(68)



This analysis faces two challenges: First, it relies on V-raising out of a specifier position—Spec, FP—which is a rather unattested type of movement. In particular, it is a movement that is ruled out by Travis' Head Movement Constraint as well as by Huang's Condition on Extraction Domains (CED) (see also, Baker 1988 for discussion). Besides this, this account of the ellipsis construction fails to provide an account of the fact that the

subject argument in (66) is able to remain overt. Concretely, the projection that is elided dominates the surface position of the subject (be it internal to the VP or in Spec, TP)—and should therefore never be able to remain overt (compare to, e.g., ellipsis in Irish as discussed in McCloskey 1991).

In the absence of (68) as a way to derive VP-ellipsis, the VP-fronting analysis loses quite a bit of ground. In particular, the only other way to derive sentences like (66) would involve raising the verb out of the VP to the inflectional head of the clause T^0 , and then deleting VP. Following this derivation, however, we would still not derive a V-initial word order. The VP that would be fronted is deleted. If the subject is in Spec, TP (branching to the left) and the verb is in T^0 , then the word order we get is subject initial SV.¹⁹

To conclude, I have argued here that a VP-fronting analysis applied to Tagalog not only makes certain incorrect predictions—e.g., with respect to ellipsis—but that it also makes it difficult to explain the Subject-only restriction on extraction in a sufficiently general way. Furthermore, since VP-fronting operations are not independently attested, we can safely conclude at this point that this account of word order in Tagalog is not particularly well-motivated.

¹⁹ Note, if we assume on the basis of the example in (42) that V-raising out of VP is obligatory—then we might also have an explanation for the ungrammaticality of the examples in (38) and (40). In particular, if the verb raises out of VP, then there could be no constituents of the type involved in these examples.

Chapter 3.

Categories and Argument Structure

The focus of the next few chapters concerns the argument structure of verbal and non-verbal categories. In particular, I will be investigating a claim regarding the difference between verbs and non-verbal categories (particularly adjectives) that there are no unaccusative adjectives—i.e., no adjectives that can assign a single *theme* theta-role to an internal argument. If this claim were correct, in other words, a DP argument of an adjective (regardless of its thematic role) will always be licensed as an external argument of the adjective. This claim has appeared, for instance, in the work of Belletti and Rizzi (1981); Pesetsky (1982); Borer (1984); Levin and Rappaport (1986); Borer and Grodzinsky (1986); Burzio (1986); Stowell (1991); Borer (1991); Baker (2003). The empirical basis of this claim is usually straightforward. For the languages investigated by these authors, the diagnostics for unaccusativity (e.g., *Ne*-cliticization in Italian; Dative-possessives in Hebrew; Genitive of Negation in Russian; etc.) show that adjectives—as a systematic class—fail to display unaccusative behavior. Significantly, this fact is true even for those adjectives that are related morpho-syntactically to unaccusative or passive verbs—e.g., so called “adjectival passives”. This evidence is reviewed below.

To make the claim a bit more concrete, consider the pair of sentences in (1). The main predicate of the sentence in (1a) is a simple verbal passive, while in (1b) the main predicate is an adjective.

- (1) a. The door was opened by Mikey.
 b. The door is open now (#by Mikey).

The claim—according to the authors above—is that while the verbal passive in (1a) has the unaccusative argument structure like (2a), the adjective in (1b) has the argument structure in (2b) (Following Williams’ convention (1980), the external argument is indicated by underling the thematic role of the argument).

3.1. Absence of Unaccusative Adjectives

3.1.1. Ne-Cliticization in Italian

One piece of empirical support for the hypothesis regarding the argument structure differences between verbs and adjectives comes from Italian. The classic test for direct object status in Italian is the ability of a sub-part of an argument to be cliticized using *ne*- ('of them') (Belletti and Rizzi 1981; Burzio 1981, 1986). A paradigm that illustrates this generalization is given in (3) (Burzio 1986). The contrast between (3a, 3d-e) and (3b-c) show that the object of a transitive verb and the subject of an unaccusative or passive verb pattern together. This fact is taken to suggest that the subject of the and unaccusative or passive verb is underlyingly an internal argument (direct object) of the verb.

- (3) a. Giovanni *ne* inviterà molti _____. (obj. of V)
Giovanni of.them will.invite many
'G. will invite many of them.'
- b. **Ne* telefoneranno molti. (Subj. of unergative V)
of.them will.telephone many
'Many of them will call.'
- c. **Ne* esaminaranno il caso molti. (Subj. of transitive V)
of.them will.examine the case many
'Many of them will examine the case.'
- d. *Ne* sarebbero riconosciute molti (di vittime). (Subj. of passive V)
Of.them would.be recognized many of victims
'Many of the victims would be recognized.'
- e. *Ne* arriveranno molti. (Subj. of unaccusative V)
of.them arrive many
'Many of them arrived.'

Chapter 3

Significantly, the subject of an adjectival predicate fails to pass the *ne*-cliticization test for unaccusativity (from Cinque 1990) (There are apparent exceptions to this which we will return to shortly).

- (4) a. *Ne sono buoni pochi (dei suoi articoli).
Of.them are good few of his articles
'Few of them (his articles) are good.'
- b. *Ne sono spezzati due (di rami), purtroppo.
Of.them are broken two of branches unfortunately
'Two of them (branches) are broken, unfortunately.'

Given this, in particular the contrast between a sentence like (4b) and the one in (3d) or (3e), the argument structure differences posited in (2) above seem to be justified. In other words, it appears that the subjects of the adjectives in (4) behave syntactically like external arguments.

3.1.2. Dative Possessives in Hebrew

Another important piece of evidence comes from Hebrew. In Hebrew, a dative PP may be construed as the possessor of DP in direct object position, as in (5).

- (5) Ha-yalda kilkela *le-Dan* 'et ha-radio.
the.girl spoiled to.Dan Acc the.radio
'The girl broke Dan's radio.'

Subjects of transitive verbs and subject of intransitive unergative verbs pattern together in not permitting the dative possessive interpretation. Thus, (5) above can never mean "Dan's girl broke the radio". A sentence like (6) is also ungrammatical (Borer and Grodzinsky 1986: 182; Borer 1998).

- (6) *Ha-po'alim 'avdu *l-i*.
the.workers worked to.me
'My workers worked.'

On the other hand, subjects of unaccusative or passive verbs do permit dative possessive interpretations, as demonstrated by the examples in (7) (Borer and Grodzinsky 1986:184, 192-194).

- (7) a. Ha-maftexot naflu *l-i*.
the.keys fell to.me
'My keys fell.'
- b. Ha-matana hunxa *l-i* betox kufsa.
the.present was.placed to.me inside box
'My present was placed inside a box.'

It seems then that the dative-possessive interpretation is only possible when the dative PP is construed with direct object DP. The availability of the dative possessive interpretation with the examples in (7) follows straightforwardly from the fact that the verb is unaccusative in (7a), and passive in (7b). According to the standard analysis, the subject of both types of verbs is underlyingly an internal argument/direct object.

Significantly, the subject of an adjectival predicate, unlike the subject of an unaccusative verb, fails to exhibit properties of being direct object. In particular, the dative-possessive interpretation is impossible when the main predicate of the clause is an adjective. The examples in (8) illustrate.

- (8) a. *Ha-simla hayta lebana *l-i*.
 the.dress was white to.me
 ‘My dress was white.’
- b. *Ha-naheq-et hayta xola *le-Rina*.
 the.driver was sick to.Rina
 ‘Rina’s driver was sick.’
- c. *Ha-matana hayta munaxat *l-i* betox kufsa.
 the.present was placed_A to.me inside box
 ‘My present was placed inside a box.’

Similar to Italian, then, it looks as if adjectives in Hebrew project their arguments externally rather than internally. Consider especially the contrast between (8c) on the one hand and (7b) on the other. The predicates in both of these sentences share a common root—*h.n.x.*— yet they differ in that the predicate is a verb in (7b) and an adjective in (8c). The difference with respect to argument structure is therefore very apparent in these two examples. Although the semantic role associated with the verb in (7b) and the adjective in (8c) is presumably one and the same, the way in which semantic role is assigned to the argument (as an internal argument in (7b) and as an external argument in (8c)) appears to be fundamentally different.

3.1.3. Raising in English

The claim that there are no unaccusative adjectives has also been supported on the basis of data from English. Levin and Rappaport (1986) (L&R), for instance, claim that one aspect of the formation of adjectival passives in English (i.e., the formation of such adjectives as *broken*, *stuffed*, etc.) involves “externalization of an internal role of the base verb”. Crucially, the externalization that they refer to is not the same process that is assumed to be involved in the formation of verbal passive sentences, where the surface subject is assumed to have raised from an underlying direct object position of the verb. According to L&R, externalization in the formation of adjectival passives involves a

complete “re-mapping” of the way in which a predicate assigns its theta-role (see (2) above, for instance). For them, this re-mapping occurs as a consequence of the more general fact that adjectives as a class are “external predicators”.

L&R discuss an interesting set of observations relevant to the apparent non-existence of raising adjectival passives. They argue that if adjectival passives never receive an unaccusative analysis, then their subject position must always be thematic—i.e., filled by a non-idiomatic/non-expletive element. As partial support for this prediction, L&R point out that the subject of an adjectival passive cannot be part of an idiom-chunk (an observation attributed to Wasow 1977).

- (9) a. Tab_i seem [$__$ _{*i*} to have been kept on the suspect].
- b. * Tab_i remain [$__$ _{*i*} kept on the suspect].
- (10) a. Not much headway_{*i*} seems [$__$ _{*i*} to have been made today].
- b. *Not much headway_{*i*} seems [$__$ _{*i*} made today].

Furthermore, it appears that adjectival participles do not permit raising of the subject of an embedded clause which they select for, as shown by the deviance of the examples in (11)-(12).

- (11) a. Ralph_i is known [$__$ to be a reactionary].
- b. * Ralph_i is unknown [$__$ _{*i*} to be a reactionary].
- (12) a. Smith_i is believed [$__$ _{*i*} to have fled the country].
- b. * Smith_i seems believed [$__$ _{*i*} to have fled the country].

So far, this much seems to follow if the adjectives in the (b) sentences of (8)-(12) assign their semantic roles to external arguments—i.e., if they are unergative as opposed to unaccusative.

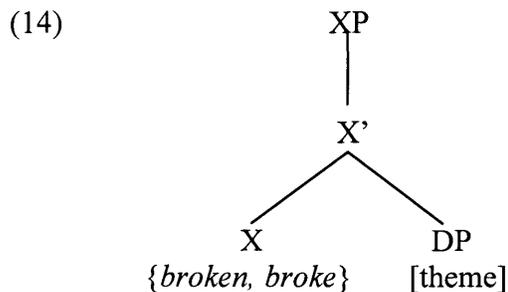
3.3. Accessing the Consequences

3.3.1. Internal Arguments Across Categories

The evidence reviewed above seems to show that adjectives and verbs differ—at least in some cases—with respect to their argument structure properties. Concretely, they seem to differ in terms of how they project their theme argument in the syntax, i.e., whether this argument is assigned as an internal theta-role or as an external theta-role. This evidence, therefore, seems to lead us to the following generalization (following Baker 2003:65).

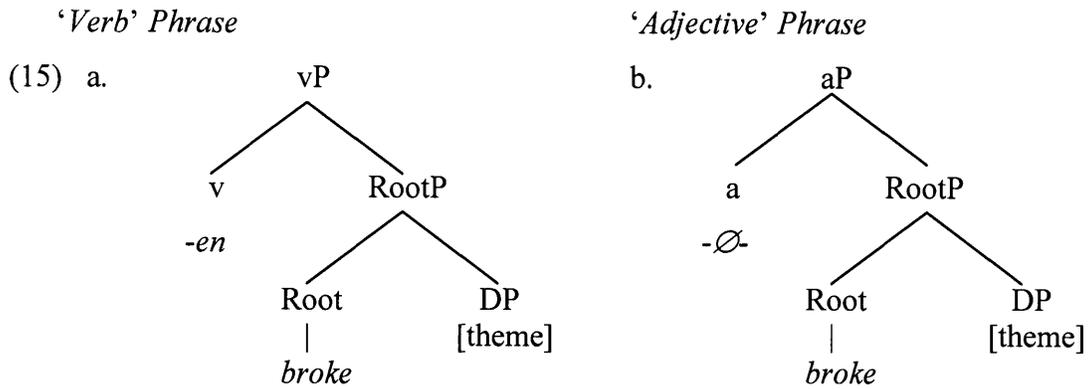
- (13) a. The theme argument of a verb is an internal argument.
 b. The theme argument of an adjective is an external argument.

What are the consequences of a generalization of this sort, if it happens to be true? One possible consequence, noted by Cinque 1990, is that if (13) is true, then it will be difficult to maintain an X-bar theoretical conception of phrase structure (Chomsky 1970). The most basic tenant of X-bar theory is that all phrasal categories should have the same internal structure. According to X-bar theory, in other words, there can be no category specific phrase structure rules. Consider, for instance, a morphologically related pair of verb and adjective like *broken* and *broke*. The single argument of both *broken* and *broke* is associated with the same semantic role (theme). If it is the case that adjectives and verbs project this argument as an internal argument, then we would be able to assume a common phrase structure for the two, as in (14).



On the other hand, if pairs of related verb and adjective do not have the same argument structure properties, then it does not seem as plausible that we could maintain that there are no category specific phrase structure rules. We might possibly assume that a generalization like (13)—once it is formalized in terms of a constraint or set of principles—functions as a filter to rule out undesired representations that would otherwise be licensed in accordance with X-bar theory. The problem encountered with this strategy, however, is that there have been few attempts to actually derive (13) from more general principles (though see below).

To put things in slightly different theoretical terms, a principle like (13) presents a challenge to frameworks for dealing with the morphology-syntax interface like Distributed Morphology (DM, see Halle and Marantz 1993; Marantz 1997; see also Borer 2000 for a different though similar set of proposals). According to this theory, the category that a lexical item has depends on its syntactic context. Suppose, for instance, that the extended projection of an adjective includes the functional projection DegP (DegreePhrase) (following Abney 1987). The category ‘adjective phrase’, then, is defined as the (category neutral) root phrase that occurs as the complement of the functional head Deg⁰. Similarly, suppose that the extended functional projection that is relevant to verbs is a AspP (AspectualPhrase) (see Borer 2000). The category ‘verb phrase’ might then be defined as the (category neutral) root phrase that occurs as the complement to either the functional head Asp⁰ or Voice⁰. Alternatively, categories are defined for category neutral roots by verbalizing heads like v⁰ or a⁰ (Marantz 2000). Using the later notation, the phrases corresponding to the projection of *broken* and *broke*, respectively, might be represented as in (15a) and (15b).



One of the possible advantages of this way of viewing things is that it allows a very simple view of the relationships between words of different lexical categories that share some common root. Like X-bar theory and the Lexicalist Hypothesis, this view allows us to express generalizations about the syntax that do not make reference to specific categories. Looking at things in this way, there are no ‘verbs’ or ‘adjectives’ strictly speaking on which a generalization like (13) to be stated, since these categories are relevant not to individual lexical items but rather to the larger phrasal context in which the lexical items occur.

On the other hand, if (13) is empirically valid as a cross-linguistic universal, then perhaps any theory of the syntax-morphology interface making use of category neutral roots has to be wrong. An important question to ask, then, is whether or not the principle in (13) follows from a larger architectural fact about grammar, or whether it is an idiosyncratic fact about adjectives in certain languages (or even, perhaps about certain classes of adjectives within a particular language).

3.3.2. Baker (2003)

In recent work, Mark Baker (Baker 2003, see also Baker 1996) develops a theory of lexical categories that depends significantly on the claim that (13) is a universally valid generalization. Baker's theory has many interesting aspects to it, but for the purposes of this dissertation, I will primarily focus on just one specific conclusion that develops from this work. In particular, I want to focus on the conclusion that the semantic roles that we commonly think of as associated with lexical items like *break* (e.g., agent, patient) are never assigned directly by these items. Instead, these semantic roles get assigned to arguments by 'light' verbal predicates (or, as we will soon see, by a generalized Predication operator). The conclusion is interesting because it raises the very real and interesting question of what kinds of elements are taken to be predicates in natural language.

This conclusion follows from the fact that, for Baker, the generalization in (13) reflects a more general defining property of the categorical differences between verbs on the one hand and adjectives on the other. Namely, he claims that the generalization in (13) follows from what it is—by definition—to be a verb. According to Baker's theory of lexical categories, the lexical category 'Verb' is defined as the lexical category that has an obligatory specifier.

Concretely, consider first the following observation from Baker's discussion. Baker observes (as many before him have) that—with the exception (according to (13)) of theme arguments—adjectives and verbs can appear with the same range of argument types. Adjectives and verbs can both take goal arguments as in (16), for instance. Verbs and adjectives can also both take what Baker calls 'Subject-matter' arguments, as in (17).

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- (16) a. Chris is generous to the students. (adjective: goal argument)
Chris is loyal to the king.
- b. Chris walked to the park. (verb: agent and goal)
Chris sent a letter to China. (verb: agent, theme and goal)
- (17) a. Chris is certain of this. (adjective: subject-matter argument)
It is clear that John will win.
- b. Chris spoke of love and duty. (verb: agent and subject-matter)
I suddenly realized that John will win.

Assuming the generalization in (13) still holds, the generalization based on the examples in (16)-(17) above is the following: The possible arguments of an adjective are a proper subset of the possible arguments of a verb.

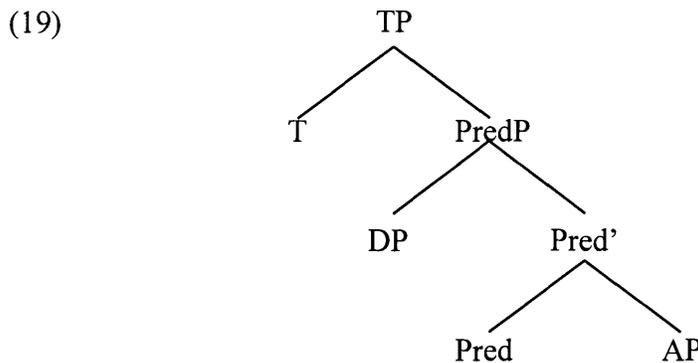
For Baker, the fact that adjectives and verbs select for all the same range of argument types—*except for the theme argument*, given (13)—is surprising. Given (13), in other words, one may wonder why adjectives and verbs do not differ in all sorts of other ways with respect to the possible types of arguments they can license. In order to account for this, Baker takes the point of view that Theme arguments are always assigned by a the specifier of a ‘light verb’ element that has an AP complement. Consider a transitive verb like *break* as used in a sentence like *John broke the vase*. According to Baker, this verb would be decomposed as in (18)—with the adjective functioning as the ‘core’ of the verb, but where the licensing of arguments is solely the responsibility of a small class of ‘light verb’ predicates. Notice—for instance— that in (18), the thematic roles of the agent and patient arguments are not assigned directly by the *broke*—but rather, are assigned by the ‘light-verbs’ $v\text{-}(\text{cause})^0$ (which licenses the agent role) and by $V\text{-}(\text{be}[\text{come}])^0$, which licenses the theme role.¹

¹ The proposal that Baker makes here is similar to Hale and Keyser’s (1993) proposal that the semantic roles Agent and Theme are defined as arguments that occupy Specifier positions of V’s that take complements of the type AP or PP. Baker explicitly makes a weaker claim (Baker 2003:26) the semantic role notions *correspond* with but are not defined by these particular structural configurations.

(18) [VP John [V' v-(cause) [VP the vase [V' V-(be) [AP broke]]]]]

Baker's proposal has two significant results: First, he maintains that there is one universally valid definition of verb—a verb is something that licenses a specifier. Thus, Baker significantly allows for a categorical distinction between verbs and adjectives. Secondly, Baker provides an account for the generalization noted above—namely, the generalization that the range of arguments that an adjective has are a subset of those that a verb has, including every argument type except for the theme argument (thus, accounting for (13)).

The crux of the analysis developed in (18) above is the claim that adjectives are not predicates in either a semantic or a syntactic sense—i.e., they do not require an argument to be composed with. According to Baker, in clauses where an adjective appears to be functioning as a predicate, the adjective's “argument” is licensed by the mediation of a functional head—Pred⁰ (see Bowers 1993). For him, the representation of a clause containing a non-verbal predicate—e.g., an adjective—is as shown in (19) below.



In addition to the prediction that we should never find adjectives with internal theme arguments, this representation predicts that adjectives should behave uniformly in the syntax with respect to any and operations that affect argument structure. This predication will be the specific focus of Chapters 4-5. In addition, Baker uses this representation to explain a number of inflectional differences between verbs and adjectives—relating to,

e.g., tense-aspect inflection, causative formation, and the like. These points will be reviewed in Chapter 6.

3.3.3. What is a Predicate?

To put things in a larger context, Baker's proposal is one that takes the idea of Kratzer (1996) (based on Marantz 1984) regarding external arguments a step further. Kratzer's work argues that the external argument of a verb is not a semantic argument of the verb at all. Rather, the external argument is composed with a verb phrase (or, more generally, to a Predicate Phase) through the mediation of a functional head and predicate—Voice (or, in other work by different authors, v^0). An important question is whether or not this approach should be extended to arguments that are traditionally referred to as internal arguments. In other words, should the theme argument also be “severed”?

I think it is important to point out that the kinds of arguments that have been given to motivate the claim that the external argument is not an argument of a verb (or any other type of predicate) have not been established for internal arguments as well. Significantly, Kratzer (2003) presents a number of arguments in recent work that theme arguments crucially should not be separated from the argument structure of the verb and analyzed as arguments of light-verb predicates (in her terms, as “Neo-Davidsonian” arguments), but rather—they should be analyzed (in most cases) as actual internal arguments in the traditional sense—e.g., that they compose directly with predicates like *break*, *construct*, etc.. Her arguments can be summarized as follows: If we assume that theme arguments (direct objects) are also ‘severed’ from the verbs, then the same kind of asymmetries that lead to the original hypothesis that the external argument is not an argument of the verb loses much significance.

Let us consider one of Kratzer's specific arguments. According to Kratzer's original analysis (Kratzer 1996), arguments that express the semantic role of agent are understood as relations between an individual (the agent) and an event. If the theme role is similarly

a relation between an individual and an event (e.g., as in (19), the event of having the property denoted by the AP), then we expect to find certain symmetrical properties between the two types of arguments. One such property that holds of agent arguments, according to Kratzer, is *Cumulativity*. An event like *plant the rosebush* can describe the accomplishment of several different individual agents. For examples, if Mike digs a hole, Sally buys the rosebush from the garden center, and Billy adds some compost—all of these individuals can be said to be agents of the event of planting the rosebush. The theme argument, on the other hand, is not conceptually independent of the event—it can be one and only one thing, namely the rosebush. In contrast to agent arguments, theme arguments cannot ‘summed up’ when the actions are complete.

The larger theoretical issue that is at stake with respect to (13), therefore, is the very question of what constitutes a predicate in natural language. By adopting (13), Baker ultimately comes to the conclusion that the only true predicates in a language are ‘light-verbs’ and functional elements like Pred^0 .

Crucially, the alternative to this conclusion is not a very attractive one. In order to capture (13), in other words, it would seem necessary to assume that morphologically related pairs of verbs and adjectives were listed as completely separate lexical items in the lexicon with their different sub-categorizations specified—as in (2) above, for example. The question of whether (13) is correct as a universal therefore has significant consequences for the theories of argument structure and the syntax-semantics interface more generally.

In the next few sections, I will discuss some initial reasons to be skeptical of the generalization in (13). I will argue, in particular, that there are many counterexamples to this generalization that cannot be satisfactorily explained without either giving up on (13) or drastically impoverishing the notion of thematic role. In the chapters that follow this one, I will present extensive evidence from Tagalog that also calls the generalization in (13) into question.

3.4. Problems and Solutions

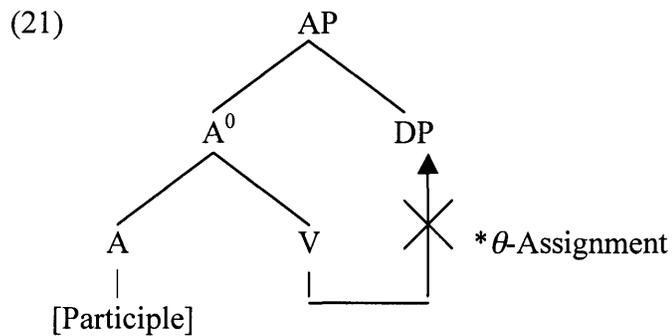
3.4.1. Cinque (1990)

Cinque (1990) argues that the generalization in (13) is not uniformly true. He points out that although some adjectives that one might have expected to be unaccusative are not—e.g., those that are related to unaccusative or passive verbs—there does exist a class of unaccusative adjectives. Cinque lists the following set of adjectives as those which display characteristic unaccusative behavior (i.e., with respect to *ne*-cliticization as well as other diagnostics for unaccusativity): *noto* ('well-known'), *chiaro* ('clear'), *certo* ('certain'), *sicuro* ('sure'), *oscuro* ('obscure'), *probabile* ('probably'), *gradito* ('welcome'), among others. The examples in (16) (from Cinque 1990:7) illustrate the compatibility of adjectives from this class with *ne*-cliticization. (See also, Bennis 2000 for similar evidence from Dutch.)

- (20) a. Ne sono note solo alcune (delle seu poesie).
of.them are well-known only some of his poems
'Only some of them (his poems) are well known.'
- b. Ne sono ormai probabili le dimissioni.
of.them are already probable the resignation
'The resignations of them are already likely.'
- c. Ne sono oscuri i motivi.
of.them are obscure the reasons
'The reasons of them are obscure.'

These facts seem to provide support showing that the generalization is not a generalization about all adjectives. The question that remains, therefore, is simply how to deal with the unexpected cases where the adjective does not show unaccusative behavior. Cinque's proposal for adjectives like *spezzati* ('broken') involves making crucial reference to the derivation involved in the formation of adjective participles/adjectival passives. Cinque proposes that the participle morphology of adjectives like *spezzati* (the

so-called ‘adjectival passives’) is responsible for the lack of unaccusative behavior. Concretely, he claims that participle morphology is added to a verbal root, and that the addition of participle morphology disrupts the sister-hood relation that is required for the verb to assign its theme theta-role of its internal argument. (As we will see in the discussion in Chapter 4, Kratzer 2000 proposes a semantic analysis of adjectival passive formation that meshes well with Cinque’s proposal from the semantic point of view).



Crucially, the failed unaccusative behavior of adjectival passives is related to the participle morphology that forms the adjective and not to the universality of (13). It is completely expected from this point of view that there should still exist a class of unaccusative adjectives. The adjectives that do show unaccusative behavior—as in (20)—are crucially not de-verbal adjectives formed by adding participle morphology to a verbal root. They are simply adjectives of a class that have an argument structure in which the adjective selects for a single internal argument. Given this, Cinque maintains X-bar theory in its most general form while still accounting for the properties of the adjectival participles.

3.4.2. English Adjectives and the Resultative Construction

Apart from Cinque's examples, it does not take long before we encounter other examples that appear to be problematic for (13). First, Baker himself notes examples like the ones in (22) (Baker 1996).

- (22) a. John is attractive to women.
(Cf., John attracts women.)
- b. John is impressive to younger women.
(Cf., John impresses younger women)
- c. The war was offensive to most Mennonites.
(Cf., The war offended most...)
- d. The regime was oppressive to women.
(Cf., The regime oppressed women.)

The solution that Baker gives to these apparent counterexamples involves the claim that "...the participants of the (potential) events in question are re-categorized conceptually as goals rather than themes". In other words, since the argument that follows the adjective in each of the examples in (22) is a goal and not a theme, the generalization in (13) still holds. There is one objection to this assertion that can be made. Consider the sentences (23), which contain a theme argument in addition to a goal argument. There is a difference in the interpretation of the goal argument in these sentences in that, when the goal argument is expressed syntactically as a PP headed by the preposition *to*, there is less of an implication that the argument expressed as the goal is affected by the action in any way described by the verb—i.e., it is not entailed, for instance, that the ball ever got to Bill, or that Bill was even aware that someone was throwing the ball to him (Green 1974). This is not so in (23b), where the goal argument is a direct object of the verb. In this example, there is a much stronger implication that the goal argument is affected—i.e., that he either caught the ball or at least was aware that the ball was being thrown to him.

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- (23) a. I threw the ball to Bill.
b. I threw Bill the ball.

Consider again the examples in (22) above. In contrast to (23a), it does not seem possible to interpret the putative goal argument in (22) as unaffected. For instance, it would not be possible to utter a sentence like (22c) if the Menonites were not aware of the war or if the war did not affect them in any way. It is not clear, therefore, what the justification is for the alleged re-categorization of the theme arguments in (22) as goal arguments. Since there is no obvious semantic sense in which the theme-like properties of the adjective's arguments in (22) (e.g., affectedness) are lost or re-conceptualized, the proposal does not seem to offer much more than a convenient way to save the generalization in (13).

In addition to this, there is a second set of examples that raise the same issue as the ones in (22), in which re-categorization of thematic roles seems again unjustified. Consider the examples in (24) (24a-c) from Baker 1996, most of the other examples are taken from published web sources).

- (24) a. John is *protective of his ideas*.
b. Marjorie is *supportive of my proposal*.
c. Buffy is *appreciative of your hard work*.
d. Paul is *suspicious of Bob*.
e. Iran is *dismissive of US military threats*.
f. Evil examples are *destructive to the morals of youth*.²
g. The weather of late has been notably *unpermissive of anything but hot coffee and croissants*.³
h. It is also *critical and corrective of the inadequacies, omissions, and distortions of mainstream American education leading into the 21st century*.⁴

² <http://elcs.neric.org/students/Code%20of%20Conduct/AppendixG1.htm>

³ <http://www.crystalcity.com/aurora/96mar.htm>

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- i. A disruptive pupil is...a student who is substantially *disruptive of the educational process* or substantially interferes with the teacher's authority over the classroom.⁵

Baker claims that the post-adjective arguments in these examples are “true obliques that result from recategorizing the theme of the verb as some other thematic role” (Baker 1996:24). This does not seem to be a very elegant solution to the problem. In particular, it is not clear what this new thematic-role could be that would crucially distinguish it in a coherent semantic way from the thematic role associated with theme arguments. In other words, it does not seem very meaningful to identify a new thematic role that is otherwise intuitively the same as another one just in order to preserve a generalization—i.e., the generalization in (13).

As a final point of fact, it is worth asking whether adjectival passives in English behave similarly to their Italian and Hebrew counterparts with respect to unaccusativity. One interesting fact about adjectival passives in English is that they can host secondary resultative predicates, as in (25).

- (25) a. This door should remain closed *shut*.
b. This metal is hammered *flat*.
c. The river became frozen *solid*.

Significantly, resultative secondary predicates can only be predicates of the direct object of another predicate. This is the so-called *Direct Object Restriction* discussed extensively by Levin and Rappaport 1995. The examples in (26) below illustrate this restriction.

⁴ <http://www.pitt.edu/~bjgrier/overvie.htm>

⁵ <http://elcs.neric.org/students/Code%20of%20Conduct/AppendixG1.htm>

- | | | | |
|------|----|---|---------------------------|
| (26) | a. | *Dora shouted <i>hoarse</i> . | (Subject of unergative) |
| | b. | *The silversmith pounded on the metal <i>flat</i> . | (Object of preposition) |
| | c. | Max licked his fingers <i>clean</i> . | (Direct Object) |
| | d. | The river froze <i>solid</i> . | (Subject of unaccusative) |
| | e. | My foot fell <i>asleep</i> . | (Subject of unaccusative) |

Significantly, the adjectival passive constructions in (25) pattern with the unaccusative verb constructions in (26d-e) in that they permit resultative secondary predication. By this diagnostic, it appears that adjectival passives in English are unaccusative (cf., however, Levin and Rappaport 2003; Embick 2003).⁶

The various types of examples presented above seem to present a challenge to the claimed universal status of the generalization in (13).⁷ Cinque’s proposal, on the other hand, allows enough flexibility to account for these facts. Consider first the examples in (24) above. Recall that, for Cinque, the reason why adjectival passives in Italian are not unaccusative is related to the participle morphology that is involved in deriving the adjective from a verb. Concretely, adding participle morphology to the verb destroys the

⁶ At this time, I do not know how this evidence should be reconciled with the Raising evidence discussed by Levin and Rappaport—e.g., (9)-(12) above. Perhaps one of them should be eliminated as a diagnostic, though I will not be able to settle this issue here.

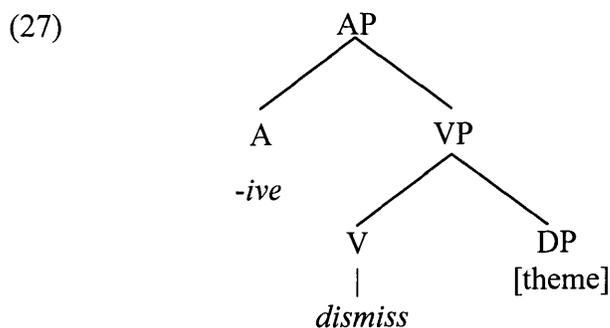
⁷ Even some of the data that are the basis of the generalization in (13) have been called into question. Bentley (2004), for instance, provides data showing that when an adjective is placed in a perfective context—as in (i)-(ii)—unaccusative properties emerge.

- | | | | |
|---------|----|---|--|
| (i) | Ne | sono stati spezzati molti.
of.them be been broken many
‘Many of them have been broken.’ | |
| (ii) a. | Ne | sono stati buoni molti.
of.them be been good many
‘Many of them have been good.’ | |
| b. | Ne | sono stati onesti molti.
Of.them be been honest many
‘Many of them have been honest.’ | |

Though I will not suggest an analysis of these facts here, I point them out as a potential objection to maintaining that (13) holds as a universal.

sister-hood relation between the verb and its internal theme argument, thus preventing semantic role assignment from going through.

The adjectives in the sentences in (22) and (24) are formed from the adjective-forming suffix *-ive*. One possibility that exists within a Cinque's style approach would be to say that, in contrast to the adjectival passive forming morpheme in Italian, the suffix *-ive* in English enters into the syntax *after* the verb has composed with its internal theme argument. This is represented schematically in (27).



The same suggestion can be made on the basis of adjectival passives in English—i.e., if the facts in (22) truly point to an unaccusative analysis. Assuming that there is no principled reason why adjectival passives in English would necessarily involve the same derivation as adjectival passives in Italian, we can assume a derivation similar to the one in (24) given as the analysis of *-ive* adjectives (see Kratzer 2000 for related proposal, and Chapter 4 for more discussion)⁸.

The general suggestion that I am making here is that adjective formation can apply at (at least) two different points in the syntax. It can apply at the lexical level of V (as in (21)), or at a higher phrase level—VP. If the later, the theta-role assignment problems noted by Cinque arise, but if adjective formation applies at the phrasal level—to VP—then no problem for theta-assignment arises.

⁸ Embick (2004) gives a more detailed analysis of adjectival passives in English that is consistent with the less-formal sketch that I have given here.

This proposal for adjectives is very similar in many ways to the analysis of gerunds presented by Abney (1987). In order to account for a variety of differences between the three types of gerunds given below (the so-called ‘Acc-ing’, ‘Poss-ing’, and ‘Ing-of’ gerunds), Abney proposes that the differences reside in the scope of attachment for the nominalizing morpheme *-ing*. Concretely, he proposes that in the ‘Ing-of’ gerund of (28a), *-ing* attaches at the level of the verbal root, V; In the ‘Poss-ing’ gerund, *-ing* is added to the syntax at the level of the VP; In the ‘Acc-ing’ gerund, finally, *-ing* nominalizes a full clause—TP.

- (28) a. John’s singing of the Marseillaise. (‘Ing-of’)
b. John’s singing the Marseillaise. (‘Poss-ing’)
c. John singing the Marseillaise. (‘Acc-ing’)

Roughly, the two types of adjective formation (Cinque’s derivation in (21), and my proposal for deriving *-ive* adjectives in English) parallel the ‘Ing-of’ and ‘Poss-ing’ formations of gerunds in English according to Abney. Although I will not compare these various constructions in any more detail, the important point here is just to note that the precedent exists for explaining certain morpho-syntactic differences among related types of construction.

3.5. Looking Forward

In the early part of this chapter, we began by looking at a small set of data that seemed to suggest that adjectives as a class of lexical category fail to be unaccusative—i.e., fail to have the ability to license their theme argument internally. Based on this data, I contrasted two competing proposals. One proposal (Cinque’s) claimed that the failed unaccusative behavior of some adjectives in Italian could be explained by looking at the derivational properties involved in adjective formation—in particular, by looking at how derivational morphology might affect argument structure. According to Cinque’s hypothesis, there is nothing inherent about adjectives as a grammatical class that

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distinguishes them from verbs with respect to argument structure—e.g., with respect to the ability to license internal theme arguments.

Baker (2003) proposes a very different view, on the other hand. According to him, verbs are crucially distinguished from all other categories in terms of their argument structure properties. In other words, the fact that verbs can select internal theme arguments but adjectives cannot is definitional for what it means to be a verb versus what it means to be an adjective. This view, when pushed even further—results in the view that the only types of predicates in language are the ‘light-verb’ predicates (*Be(come)*, *Cause, etc.*) and Pred^0 .

The goal for the remaining chapters of this dissertation is to investigate the questions raised here with data from Tagalog (Western Austronesian). I will provide two major pieces of evidence against the general validity of (13). First, on the basis of a detailed study of adjectives in Tagalog, I will argue that there are both unergative as well as unaccusative adjectives (Chapter 4). Second, I will also take a detailed look at the existential predicate in Tagalog (Chapter 5), which has come in both a verbal and non-verbal form. I will argue here that the single argument of this existential predicate—in both its verbal and non-verbal form—is an internal argument. Finally, in Chapter 6, I will consider some of Baker’s specific claims about how the generalization in (13) can be developed into an overall theory of category classes. I will argue that his data and conclusions do not necessarily mesh well with the Tagalog data.

Chapter 4.

Adjectives in Tagalog

The main goal of this chapter is to argue that adjectives in Tagalog should be divided into at least two distinct sub-classes. I provide a sample set of adjectives from both classes in (1) below. I will argue that the two classes of adjectives below are distinguishable in terms that are familiar from the extensive literature on verb classes. Concretely, the Class-I adjectives below are unergative, while the Class-II adjectives are unaccusative.

Two Adjective Classes

(1) a. *Class-I (Unergative):*

mahal ‘expensive’; ma-tahimik ‘quiet’; ma-ganda ‘beautiful’;
ma-sarap ‘delicious’; ma-bigat ‘heavy’; ma-samá ‘bad’; ma-init ‘hot’
ma-dalí ‘quick’

b. *Class-II (Unaccusative):*

basag ‘broken’; punit ‘torn’; sira ‘damaged’; putól ‘cut’; tapós ‘finished’
sunog ‘burned’; galit ‘angry’; bali ‘fractured’; hilo ‘dizzy’
pagod ‘tired’; abalá ‘busy, occupied’

As can already be observed, Class-I and Class-II adjectives contrast morphologically. Class-I adjectives tend to be morphologically complex, as they are typically prefixed with *ma-*. On the other hand, Class-II adjectives tend to be morphologically simplex—they never occur with the prefix *ma-*, for instance. Looking at the glosses of the two classes of adjectives in (1), one notices also a semantic difference between the two classes of adjectives. In particular, the Class-I adjectives appear to correspond to ‘Individual level’ adjectives, while the Class-II adjectives appear to correspond to ‘Stage level’ adjectives (Milsark 1974; Carlson 1977; Kratzer 1988; Diesing 1992).

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In addition to the morphological differences, I will also show that that two classes of adjectives contrast in syntactic ways as well. For instance, Class-I and Class-II adjectives contrast in their acceptability in certain construction types involving intensification and comparative constructions of equality (Sections 4.3.1 and 4.3.4.). Class-I and Class-II adjectives also differ in terms of whether or not they permit an additional external argument (Section 4.3.5.). I will argue that these contrasts can be best explained by appealing to the argument structure differences between the two adjective classes. Concretely, my account of the contrasts will be based on the claim that Class-I adjectives are unergative (projecting only a single external argument), while Class-II adjectives are unaccusative (projecting only a single internal argument).

If successful, the arguments to be presented in this chapter offer additional support for the claim (following Cinque 1990; Bennis 2003; and a few others) that the unergative-unaccusative dichotomy is as relevant in the adjectival domain as it is in the verbal domain. On its own, this may not seem like a surprising result. On the other hand, there have been significant claims to the contrary, in particular, by Belletti and Rizzi 1981; Pesetsky 1982; Borer and Grodzinsky 1986; Borer 1992; Levin and Rappaport 1986; Stowell 1987; Baker 2003. Each of these authors have claimed that there are no truly unaccusative adjectives—i.e., no adjectives that syntactically select only for an internal argument bearing the thematic role of theme.

Nevertheless, I will argue that there are unaccusative adjectives in Tagalog. After I present my arguments for this claim, I will then in the remaining pages of this chapter discuss one possible route to explaining cross-linguistic differences for adjectives with respect to their argument structure properties (relating to the issues raised in Chapter 3, for instance). In particular, I will develop Cinque's original proposal with the help of work by Kratzer (2000) and suggest that any cross-linguistic variation can be accounted for by looking at ways in which the morpho-syntax of adjective formation can have varying consequences for argument structure.

4.1. Adjectives as a Syntactic Class

Assuming that there is a genuine grammatical distinction in Tagalog between those elements that we might call adjectives and those that we might call verbs, then it is not a trivial matter to show that these two distinct grammatical categories have identical argument structure properties. This section is therefore devoted to motivating the distinction between adjectives and verbs as syntactically significant categories in the language.

The major criterion that we can use to differentiate adjectives on the one hand from verbs on the other is inflection for tense-aspect and voice. In other words, the class of elements that I refer to as adjectives are the ones that show no overt signs of inflection for tense-aspect or voice. More generally, the class of elements that are adjectival are those which appear either as simply bare—i.e., unaffixed—root, or a root prefixed with the non-inflecting prefix, *ma-*. A typical Tagalog verb has an inflectional paradigm of the sort illustrated in (2) below, showing the tense/aspect inflection paradigm for two different verb classes (*mag-* and *-um-*, respectively).

(2) <i>mag-sabog</i>	‘to scatter’	<i>k-um-ain</i>	‘to eat’
<i>mag-sá-sabog</i>	‘will scatter’	<i>ka-kain</i>	‘will eat’
<i>nag-sá-sabog</i>	‘scatters, is scattering’	<i>k-um-a-kain</i>	‘eats, is eating’
<i>nag-sabog</i>	‘scattered’	<i>k-um-ain</i>	‘ate’

An adjective, either of the bare root form or of the *ma-* prefixed form, cannot be inflected in this manner.

(3) <i>ma-sarap</i>	‘delicious’	<i>basag</i>	‘broken’
<i>*ma-sa-sarap</i>	‘will be delicious’	<i>*ba-basag</i>	‘will be, was broken, etc.’
<i>*na-sa-sarap</i>	‘is delicious’		
<i>*na-sarap</i>	‘was delicious’		

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Despite the fact that the class of adjectives does not exhibit overt morphology indicating tense-aspect, sentences containing adjectives as their main predicate apparently can be used to describe states that are located either in the present, past (as in 4a-b), or future (irrealis) (as in 4c-d). The following examples illustrate this.

- (4) a. Pabayá' siya sa pa-alaala sa kanya.
inattentive he Obl warning Obl him
'He *was* inattentive to this warning (given) to him.' (E 179)
- b. Biglá' ang kanya-ng pagkamatay.
sudden T his L death
'His death *was* sudden.' (E 194)
- c. Bastós ang tao kung t-um-i-tig sa kapwa-tao.
rude T person if A-t.imperf.stare Obl other person
'A person is rude if he stares at another person.' (E 166)
- d. Ma-halay namán sa Pangulo na siya ang lalapit
improper truly Obl president C he T A-t.imperf.come close
sa akin.
Obl me
'It would be truly improper for the president to come to me.' (E 574)

We might now wonder whether the contrast between elements that can inflect for tense-aspect and voice (i.e., verbs) and those that cannot (i.e., adjectives) correspond with other grammatical contrasts. Like many of the better-studied Indo-European languages, Tagalog adjectives can be naturally modified with degree modifiers of the sort *medyo* ('rather'), *totoó* ('quite, very'), etc.

Degree Modification

- (5) a. Medyo galit, 'rather mad'; medyo matibay 'rather strong';
medyo ma-hal 'rather expensive'; medyo pagod 'rather tired'
- b. Totoó-ng mahal 'quite expensive'; totoó-ng ma-sakit 'very sick'
totoó-ng ma-ganda 'absolutely beautiful'

In contrast to some other languages, however, the use of such modifiers cannot consistently be used to distinguish adjectives from verbs. In particular, the same degree modifiers that modify the adjectives above apparently also seem to be able to modify inflected forms related to these adjectives. Consider the examples in (6), for instance.¹

- (6) a. *Medyo* t-um-aba siya pero charming pa rin siya.
 rather perf.be-fat he but charming still also he.nom
 ‘He became rather fat, but still also charming.’
- b. Ako ’y totoó-ng *na-gá-galak* na t-um-ulong sa iyó.
 I Inv. too L Imerf.be.glad Comp. inf.help Obl. you
 ‘I am only too glad to help you.’ (E 1450)

There are two contexts, however, where a clear contrast between categories that are uninflected on the one hand (adjectives) and categories that are inflected on the other (verbs) emerges. First, only the class of non-inflecting elements can appear in the complement position to the verb *ma-ging* (‘to become’). Consider the contrast between (7) and (8), for instance. As the ungrammaticality of the examples in (8) show, the class elements that can inflect for tense-aspect cannot appear as the complement to *ma-ging*.

- (7) Na-ging tamad/ galit/ hilo’/ basag/ pagod ako.
 perf.become lazy angry dizzy broken tired I
 ‘I became....’
- (8) *Na-ging t-in-amad / ma-galit / ma-hilo / ma-pagod
 perf.become be.lazy be.angry be.dizzy be.tired
 ako.
 I
 ‘I became...’

¹ This is also true in languages like Hebrew, for instance (see Borer 1992).

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One might suspect that the ability to occur after *ma-ging* is not a property just of adjectives, but that it might be a property of ‘stative’ predicates more generally. It can be easily demonstrated, however, that this is not a correct characterization of *ma-ging* sentences. Stative verbs like *maka-alam* (‘to know’), for instance, are never found following *ma-ging*. This is shown in (9).

- (9) *Naging [maka-alam sa bagay na ito] si Nene.
Perf. Inf.know Obl. thing L this T mother
‘*Mother became to know about this thing.’

Given this observation, it is reasonable to conclude that this is not simply a stative context. Because the *maging* context seems to be the most reliable test for diagnosing adjectives that I have found, I will use it in the discussion to follow whenever the category status of a particular lexical item is in question.

In addition to this, there are a couple of other ways that we might distinguish verbs from adjectives. First—as noted above—verbs as well as adjectives—can be measured using words like *medyo* (‘rather’) and *totoó* (‘too, very’). However, when it comes to intensification, only adjectives can be intensified using a construction in which the adjective is fully reduplicated and each reduplicant is joined by a linker. Consider the contrast between the examples (10) and (11) below.

- (10) Ma-tabang ma-tabang ang kanya-ng daliri.
fat L fat T his L finger
‘His finger is very fat.’
- (11) *T-um-a-tabo -ng t-um-a-tabo ang kanya-ng daliri.
A-t.Imperf.be-fat L A-t.Imperf.be-fat T his L finger
‘His finger is very fat.’

Verbs and adjectives also differ with respect to the inflectional morphology involving plural formation. In particular, adjectives and verbs can both optionally be pluralized, but they differ with respect to the manner in which they encode plurality. Adjectives can be pluralized (optionally) by simple reduplication of the first CV syllable of their root, as in (12).

(12)	ma-ayos	‘orderly’	ma-a-ayos	‘orderly, pl.’
	ma-bagal	‘slow’	ma-ba-bagal	‘slow, pl.’
	ma-laki	‘big’	ma-la-laki	‘big, pl.’
	galit	‘angry’	ga-galit	‘angry, pl.’
	tulog	‘asleep’	tu-tulog	‘asleep, pl.’

Verbs, on the other hand, can be pluralized using the prefix *magsi-*, which attaches to a verbal stem, as the examples in (13) illustrate.

(13)	k-um-anta	‘sing’	magsi-kanta	‘sing, pl.’
	mag-aral	‘study’	magsi-pag-aral	‘study, pl.’
	mag-luto	‘cook’	magsi-pag-luto	‘cook, pl.’
	mang-isda	‘go fishing’	magsi-pang-isda	‘to go fishing, pl.’

Significantly, there do not seem to be any plural adjectives formed with *magsi-* (**magsi-galit* ‘angry, pl.’; **magsi-bagal* ‘slow, pl.’; **magsi-tulog* ‘asleep, pl.’, etc.). It appears therefore that the word formation rules involved in marking plurality are category sensitive—suggesting more generally that adjectives and verbs are categorically distinguished within the grammar.

Finally, there are also interesting phonological differences between the two classes of categories. In particular, verbs and adjectives differ and are distinguishable with respect to the behavior of their stress pattern under suffixation (see Sabbagh 2004 for discussion and analysis). For verbs and adjectives, the position of stress on a suffixed form can be described relative to the placement of stress on a related base form. For verbs, stress

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always appears one syllable to the right of the position of the stress of the base. Stress placement for adjectives (as well as nouns) is more complicated. If the base form that the adjective is related to has penultimate stress, then stress falls on the suffix (=final syllable) of the suffixed adjective. If stress of the base form is final, then stress falls on the penultimate syllable of the suffixed adjective.

Base with Final Stress

- (14) a. antók_B 'sleepiness'
antuk-ín_V 'to be overcome by drowsiness'
antúk-in_A 'always drowsy or sleepy'
- b. bigát_B 'heaviness'
bigat-án_V 'to make something heavy'
bigát-in_A 'of great weight'

Base with Penultimate Stress

- a'. ápat_B 'four'
apát-in_V 'to divide into four'
apat-án_A 'four by four'
- b'. gámit_B 'use'
gamít-in_V 'to use something'
gamit-ín_A 'useful, handy'

To briefly conclude: There appears to be a grammatical distinction between the class of inflected categories (verbs) on the one hand, and uninflected categories (adjectives) on the other.

4.2. Unaccusative Adjectives

4.2.1. Unaccusativity in the Verbal Domain

In order to demonstrate that the unergative-unaccusative distinction exists in Tagalog, I will be taking a close look at a type of sentence where the verb is inflected for ‘Recent Perfective’ aspect. Consider (15). What is significant about this construction for our purposes is the fact that these sentences appear to be subject-less. None of the arguments of a verb that is inflected for Recent Perfective aspect bear Topic case. In addition to this, none of the arguments of a Recent Perfective verb appear to trigger voice agreement on the verb.

Recent Perfective Aspect

- (15) Ka-bi-bili lang niya ng bago-ng kotse.
Rec.Perf.buy just NS.he NS new L car
‘He just bought a new car.’

In addition to transitive verbs, single argument taking verbs can also be inflected for Recent Perfective aspect. In particular, single argument verbs that take a single agentive argument as well as single argument verbs that take a single theme argument can both appear in the recent perfective aspect, as in (16).

- (16) a. Ka-ta-trabaho ko lang.
Rec-Perf.work NS.I just
‘I have just worked.’
b. Ka-ba-basag lang ng pinggan ngayon.
Rec-Perf.broke just NS plate now
‘The plate just broke right now.’

What is significant about the Recent Perfective construction is that no argument of a verb inflected for Recent Perfective Aspect is marked with Topic case. This does not

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mean, however, that an argument of a recent perfective verb fails to be Case licensed. Recall, in particular, the assumptions about Case licensing and realization from Chapter 2, repeated here.

Case Licensing (Abstract)

- (17) i. T assigns/values [Nom] on external argument (Spec, vP)
ii. v assigns/values [Acc] to the DP sister of V (Comp, VP).

Case realization (Morphology)

- (18) i. {[Nom], [Acc]} are spelled-out as *ang* or *si* on a DP that agrees with T^0 .
ii. {[Nom], [Acc]} are spelled-out as *ng* or *ni* otherwise.

Case Filter

- (19) Every DP argument must bear morphological case.

In sentences containing a verb inflected for Recent Perfective aspect as in (15), both arguments appear to satisfy the Case Filter. We can reasonably assume in such cases that the external argument is assigned Nominative Case by (17i), while the internal argument is assigned Accusative Case by (17ii). The morphological realizations of Case are dictated by (18)—in particular, (18ii).

Consider now the examples in (16), which both contain a single argument taking verb inflected for the Recent Perfective aspect. The case marking of the single argument in both examples is homophonous. According to (18), however, the case marking on the argument could be an indication of two distinct grammatical functions—i.e., direct object versus external argument. Therefore, it may be possible in principle to distinguish between the grammatical function born by the argument of these intransitive verbs. If we can do this, then we will have shown the unergative-unaccusative distinction is valid distinction in the grammar of Tagalog.

First, let us consider interesting fact about the word order of non-subject external arguments in clauses negated by *hindi*' (see Chapter 2 for original discussion). In particular, when negation is present in a clause in which the agent argument does not trigger voice agreement—i.e., where the verb is inflected for 'Theme-topic' voice—the non-subject external argument may appear following negation but preceding the main verb of the clause (in addition to the more canonical order following both the negation and the verb). The examples in (20) illustrate this phenomenon (see Maclachan 1996 for additional discussion of this phenomenon).

- (20) a. Hindi *ni Rizal* ma-ta-tago ang kanya-ng damdamin...
 not NS Rizal Imperf.be-hidden T his L emotion
 'Rizal was not hiding his emotion.'
 (Web, 03/21/2005)
- b. Hindi *ni Maria* b-in-asag ang pinggan.
 not NS Maria T-t.Perf.break T plate
 'Maria didn't break the plate.'
- c. Hindi' *ng lalaki* l-in-uto' ang adobo.
 Not NS man T-t.Perf.eat T adobo
 'The man ate the adobo.'

Crucially, a direct object in an active voice clause could never appear in this preverbal position, as the ungrammaticality of the example in (21) below shows.

- (21) *Hindi *ng pinggan* b-um-asag si Maria.
 not T plate A-t.Perf.break T Maria
 'Maria didn't break the plate.'
 (cf., Hindi b-um-asag si Maria *ng pinggan*.)

The word order that is observed in the sentences in (20) apparently extends to Recent Perfective clauses as well. Concretely, when the recent perfective clause is negated, the

external (Agent) argument may appear following the negation and preceding the verb. Consider (22).

- (22) Hindi *ni Maria* ka-ta-trabaho lang.²
 not NS Maria Rec-Perf.work just
 ‘Maria has not just worked.’

Significantly, for intransitive verbs, when the sole argument of a verb inflected for Recent Perfective aspect is a theme argument, then this argument cannot appear in the post-negation and pre-verbal position.

- (23) a. *Hindi *ng pinggan* ka-ba-basag lang ngayon.
 not NS plate rec.perf.broke just now
 ‘The plate did not just break.’
 (Cf., Hindi’ ka-ba-basag lang ngayon *ng pinggan*.)
- b. *Hindi *ng aki-ng damit* ka-pu-punit lang.
 not NS my-L dress rec.perf.tear just
 ‘My dress did not just tear.’
 (Cf., Hindi’ ka-pu-punit *ng aki-ng damit* lang.)

What the examples in (22)-(23) seem to be indicating is that, in the Recent Perfective, the argument of intransitive verbs like *trabaho* (‘work’) behave like external arguments (compare with the examples in (20)), while the argument of intransitive verbs like *basag* ‘break’ and *punit* ‘tear’ behave like internal direct objects (compare with the example in (21)). Overall, this paradigm seems to be offering a strong indication for a distinction among verbs involving unergative verbs on the one hand, and unaccusative verbs on the other.

² These sentences are usually judged awkward at first. When placed in a contrastive context (e.g., “Maria has not just worked, she has just slept.”), however, they are judged to be well-formed sentences. The ungrammatical sentences in (26), however, are judged not just awkward, but as ungrammatical no matter in what context they occur.

4.2.2. The ‘Intensification’ Construction

Having shown that the unergative-unaccusative distinction is relevant to the verbal domain, we can turn our attention to adjectives and ask whether the distinction is relevant in this domain as well. My first argument for classifying adjectives into an unergative and an unaccusative class is based on an observation about how they contrast in two important constructions. The first construction that I will concentrate on here is a construction that is used with adjectives to indicate ‘intensification’. (The second construction where the two classes of adjectives contrast is in comparative construction of equality, which will be discussed in section 3.3.4.)

There are at least two ways of intensifying an adjective in Tagalog. The first way involves full reduplication of the adjective, as in the examples in (24).³

- (24) a. Pagod na pagod ako.
tired L tired T.I
‘I am very tired.’
- b. Mataba-ng mataba si Juan.
fat L fat T Juan
‘Juan is very fat.’

In addition to this, there is another way to intensify an adjective in which the affix *napaka-* is prefixed to the adjective (more exactly, the root upon which the adjective is based). The most important property of these constructions to concentrate on here is that the single argument of the adjective appears in a non-subject case form. Consider, for instance, the examples in (25) (for the time being, I will gloss *napaka-* as simply, “intens(ification)”).

³ It is also possible for an adjective to be joined to its reduplicant without a linker—e.g., *pagod-pagod*. The meaning of such forms is one of moderation—e.g., ‘rather tired’.

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- (25) a. Napaka-mahal ng presyo. (cf. Mahal na mahal ang presyo.)
intens. expensive NS price 'The price is very high.'
'The price is very expensive.'
- b. Napaka-tahimik ng aso. (cf., Ma-tahimik na ma-tahimik *ang aso*.)
intens. quiet NS dog 'The dog is very quiet.'
'The dog is very quiet.'
- c. Napaka-sarap ng pansit. (cf., Ma-sarap na ma-sarap *ang pansit*.)
intens. delicious NS noodles 'The noodles are very delicious.'
'The noodles are very delicious.'

The crucial observation to be made concerns the acceptability of Class-II adjective in this construction. Concretely, it appears that only the adjectives in Class-I may be intensified using *napaka-*. Adding *napaka-* to any of the roots from the Class-II adjectives yields an ungrammatical sentence. The examples in (26) illustrate this fact.

- (26) a. *Napaka-basag ng salamin.
intens. broke NS mirror
'The mirror is very broken.'
- b. *Napaka-punit ng damit.
intens. torn NS dress
'The dress is very torn.'
- c. *Napaka-pagod ni Maria.
intens. tired NS Maria
'Maria is very tired.'
- d. *Napaka-sirá ng buhok nila.
intens. damaged NS hair their
'Their hair was very damaged.'
- e. *Napaka-abalá ni G. Cruz ngayon.
intens. occupied NS Mr. Cruz now
'Mr. Cruz is very busy right now.'

Quite significantly, there does not appear to be anything semantically wrong with intensification of these adjectives. That is, although Class-II adjectives fail to permit intensification by means of the *napaka-* prefix, they can be intensified by full reduplication—i.e., in the manner discussed in connection with the examples in (25) above. Thus, the examples in (27) below therefore stand out as an important minimal contrast with the deviant examples in (26) above.

- (27) a. Basag na basag ang salamin.
broke L broke T mirror
'The mirror is very brok(en).'
- b. Punit na punit ang damit.
torn L torn T dress
'The dress is very torn.'
- c. Pagod na pagod na raw siya.
tired L tired now evid. T.she
'She is very tired now (it was said).'
- d. Sira -ng sira ang buhok nila.
damage L damage T hair their
'Their hair was very damaged.'
- e. Abalá -ng abalá si G. Cruz ngayon.
occupied L occupied T Mr. Cruz now
'Mr. Cruz is very busy now.' (E 2)

Additionally, the adjectives in this class can appear in other contexts that involve degree gradation that is typical of adjectives. Consider the examples in (28).

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- (28) a. Basag-basag na ang mga salamin namin.
Broke-broke now T Pl. mirror our.gen
'Our mirrors are rather broken now.'
- b. Totoó-ng pagod kami galing sa biyahe
quite L tired T.we from Obl. trip
'We were quite tired from the trip.'
- c. Medyo sira -ng sira ang image niya.
rather damaged L damaged T image her
'Her image was rather damaged.'

What (27)-(28) strongly indicate is that the contrast is between Class-I and Class-II adjectives is most likely not semantic in nature. In the subsection that immediately follows, I offer an analysis in which the contrast follows from the hypothesis that Class-I adjectives are unergative, while Class-II adjectives are unaccusative.

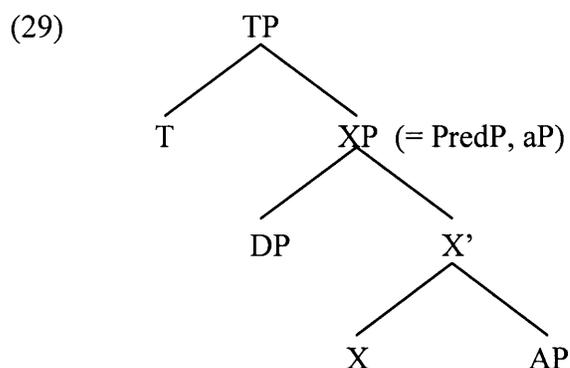
4.2.3. Accounting for the Contrast

What explains the contrasts observed above? Since the failure of having Class-II adjectives in the *napaka-* constructions does not seem to be semantically based (see the examples in (27)-(28)), we can reasonably conclude that the contrast between the two classes of adjectives must be structurally based. This is the approach I will take. Looking for a structural solution seems to be the most plausible route to take, moreover, given one of the key characteristics of the *napaka-* construction, namely, the apparent absence of Topic case indicating the absence of an agree relationship between T^0 and the single argument of the adjective.

Recall that Case assignment in Tagalog is structurally based. Case on an argument reflects an underlying structural position within the clause—i.e., the position where an argument is assigned its semantic role.

In the *napaka-* construction, much like in the Recent Perfective constructions, Topic case is not assigned—i.e., T^0 does not agree with the single argument of the adjective.⁴ Now, given that adjectives are known cross-linguistically to be non-Case assigners, let us ask the question of how the single argument of an adjectival *napaka-* construction passes the Case Filter—the condition that all DP arguments must bear morphological case (see above, and Chapter 2).

As currently formulated in (17), T^0 assigns Nominative case to an argument in Spec, vP. Suppose that we generalize this configuration, so that Nominative can be assigned to the argument that fills the specifier of T^0 's complement, whatever category that may be. Assuming this, we can assume the following minimal structure corresponding to examples like those in (25) (word order is not relevant here).



For Baker (2003), XP in (29) would presumably be identified with the functional projection, PredP. Recall that for him, adjectives never license DP arguments internal to the projection of the adjective (e.g., as a sister to A). Because of this deficiency in theta-assigning abilities, adjectives require the help of the function head Pred to get their theta-role assigned (see, e.g., Bowers 1993, who identifies Pred with predicate forming function originally proposed by Chierchia 1985).

⁴ I assume that T^0 agrees with the argument of an adjective predicate in exactly the same way as characterized for verbs in Chapter 2, even though this agreement is not reflected overtly for adjectives.

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Alternatively, we might suppose that XP is a projection of the adjective—aP—on analogy to the vP structure that we have assumed up to this point to be the projection associated with verbs. Completing the analogy with vP, we can assume that just as external argument of verbs like *run*, *cheat*, *etc.* are licensed in Spec, vP, we can say that the external argument of adjectives like *happy*, *rude*, *etc.* are licensed in Spec, aP.

Assuming the minimal structure in (29), we can account for the grammatical *napaka*-constructions in (25) as follows: If we assume that the (non-theme) argument of Class-I adjectives is licensed in Spec, aP (i.e., because it is unergative), then assignment of Case to the non-theme argument now follows from the reasonable assumption that aP is the complement of T^0 . In other words, if the argument of a Class-I adjective is licensed in Spec, aP, then the case assigner and assignee will be in the right locality relation for assignment of Nominative Case (viz. a viz. (17i)).

What about the ungrammatical *napaka*- examples based on Class-II adjectives, as in (26)? If we assume that adjectives always project their argument externally, then the contrast will be difficult to account for. Concretely, if Class-II adjectives project their argument in Spec, PredP/Spec, aP—just like Class-I adjectives—then Nominative Case assignment from T^0 should be available in these cases as well. This Nominative Case would be spelled-out as *ng*, thus satisfying the Case Filter. Things do not seem to be working out in this way, however.

Suppose, on the other hand, that the theme argument of Class-II adjectives is assigned its theta-role not in Spec, PredP/Spec, aP, where non-theme arguments are licensed, but instead that they are assigned their theta-role in the complement position of A. If the DP is a complement to A, it obviously cannot be assigned Nominative Case from T⁰. Given that these are adjectival constructions, moreover, there is presumably no source for accusative case—i.e., a⁰ unlike v⁰ cannot assign Accusative.⁵ Therefore, the complement position of A ends up being a position where Case cannot be assigned. If there were agreement between T⁰ and this DP, the Case value (which, we can assume to be unvalued, [0 Case]) could be spelled-out as Topic case, thus allowing it to pass the Case Filter. In the *napaka-* construction, however, there is no agreement with T⁰ and Topic case is therefore unavailable. Given this, we explain the failure of Class-II adjectives to participate in the *napaka-* intensification construction as a violation of the Case-Filter.⁶

This Case-theoretic account of the ungrammaticality of the examples in (26) crucially rests on the claim that Class-II adjectives are unaccusative, in the sense that they project their single (theme) argument as an internal argument of the adjective (i.e., as a sister to A). This explanation would not be possible, on the other hand, if Baker (2003) and others (e.g., Levine and Rappaport 1986; Borer 1992, etc.) are right to claim that adjectives can

⁵ It may be instructive at this point to compare the *napaka-* construction for adjectives with the Recent Perfective construction for verbs. In the preceding section, I argued that an unaccusative verb that is inflected with Recent Perfective aspect can license accusative case on its internal argument. The reason for this, presumably, is that in the verbal construction there is a source for accusative case—namely, the head of vP. In other words, the minimal contrast between the ungrammatical *napaka-* constructions in (24) and the Recent Perfective construction in (10-11) above hinges on the categorical status (adjective vs. verb) of the predicate and how this correlates with the ability to assign case.

⁶ If this analysis is right, furthermore, it may also speak against the syntactic analysis of the Stage-Individual level contrast proposed by Diesing (1992). Diesing proposes that the subject of an individual level predicate is base generated in Spec, TP, and that it binds a PRO that occupies a Predicate internal external argument position—as in (i). The subject of Stage level predicates, on the other hand, is an external argument occupying a predicate internal base position—as in (ii).

- (i) I-level: [_{TP} DP [T [_{PredP} PRO [Pred XP]]]]
 (ii) S-level: [_{TP} [T [_{PredP} DP [Pred XP]]]]

Crucially, the subject of both Stage and Individual level predicates is always external, in the sense that the argument is never generated as an internal argument/direct object of the predicate. The contrasts that have been described in the main text could not be accounted for on the basis of these representations.

only ever assign their theme theta-role externally to the projection of the adjective. In Baker's analysis, the external position where the adjective assigns its theta-role is the specifier of the functional head, Pred^0 . Under this analysis, Spec, PredP is the only position where the argument of both Class-I and the Class-II adjectives would be thematically licensed. If the theme argument of Class-II adjectives is licensed externally to the adjective—e.g., in Spec, PredP —then we would expect that it could be assigned Nominative Case from T^0 , just as the non-theme argument of Class-I adjectives apparently can, as we have seen. This is an incorrect prediction, however. In short, the assumption that all single argument licensing adjectives project their argument uniformly (in Spec, PredP) fails to distinguished adjectives with respect to their ability to be prefixed with *napaka-*.

On the other hand, by claiming that Class-II adjectives project their single (theme) argument internally we can give a coherent account of the contrasting behavior of the two classes of adjectives with respect to intensification with *napaka-*.

4.2.4. Comparative Formations

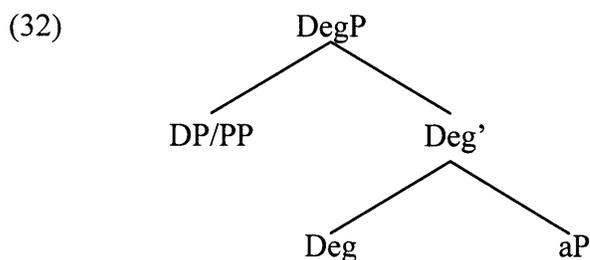
The two classes of adjectives also contrast with respect to another construction type—namely, comparative constructions. Like English, Tagalog uses different constructions for expressing comparisons of equality and comparisons of inequality (Cf. English, *as funny as vs. more funny than*). Comparisons of equality are formed with the construction type exemplified in (30), while comparisons of inequality are formed using the construction exemplified in (31).

- (30) a. May kakilala ka ba-ng kasing -bait niya?
have acquaintance you Q L is.equal kind he
'Do you know anyone as kind as he?' (Schachter and Otones, 1972)
- b. ...Hindi pa kasing -ganda ng Maynila ang Mandaluyong.
Not still is.equal beauty NS Manila T Mandaluyong
'Mandaluyong is still not as beautiful as Manila.' (*Kabayan* 8/31/2003)
- (31) a. Mas hirap sa negosyo si Benjie Paras
more hard Obl. business T Benjie Paras
kaysa pag-aartista.
than acting
'Benjie Paras works harder at business than acting' (*Kabayan* 8/17/2003)
- b. Mas init ang Boston kaysa San Francisco noong Lunes.
More hot T Boston than San Francisco last Monday
'Boston was more hot than San Francisco last Monday.'

Observe that there are two major formal differences between these two types of comparative construction. In the comparative construction expressing equality, the degree expression is a prefix *kasing-* that attaches directly to the adjectival root. In addition to this, the argument that is being compared (henceforth, the compared argument) is a case marked DP.

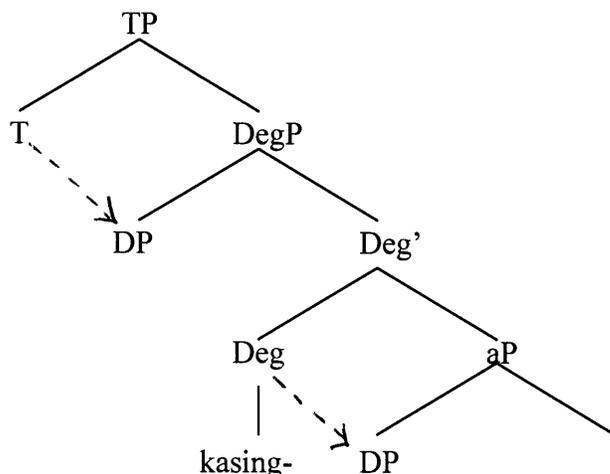
In comparative constructions expressing inequality, on the other hand, the degree expression is not prefixed to the adjectival root but appears rather to be a free-standing morpheme—*mas*. Observe, in addition to this, that the argument that is being compared appears as an oblique case marked PP headed by *kay(sa)*.

First and foremost, let us suppose that the compared argument in both types of comparative construction is introduced as the argument of a Degree head (Deg^0) which projects to DegP and is at the top of the adjective's *extended projection*, in the sense of Grimshaw (1990) (see also, Abney 1987; Larson 1988; Corver 1990; Kennedy 1999).



Assume finally that Deg^0 , like the functional head T^0 , can assign case to the specifier of its complement. Given these assumptions, the analysis of a *kasing-* comparative construction of equality runs as follows: First, T^0 agrees with the DP argument in Spec, DegP—this being the closest DP argument in its domain, assuming that Deg^0 does not license multiple specifiers—i.e., does not permit an argument that is internal to aP from raising. By virtue of this agreement relationship, the compared argument receives Topic case. The adjective's argument, on the other hand, is licensed internal to the aP. It is assigned Case from Deg^0 , which is realized morphologically as Non-Subject case. Focusing on the *kasing-* comparison of equality construction, the overall analysis is schematized in (33).

(33)

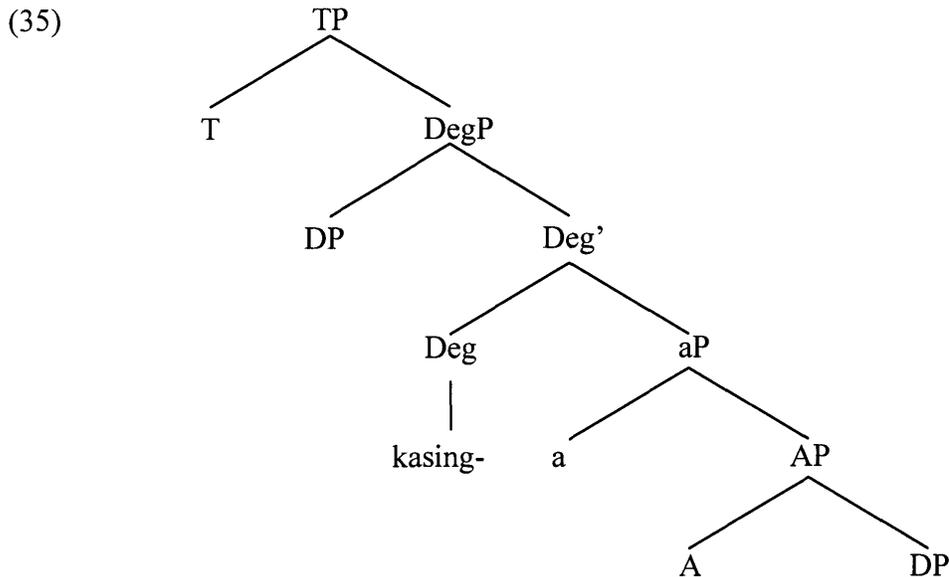


Given this minimal characterization of the syntax of the *kasing-* comparative, a straightforward prediction can be made with regards to our two adjective classes. Concretely, the adjective's argument in the comparative depends on local Case assignment from the degree head— Deg^0 . Thus, we predict that the only types of adjectives that would be permitted in this construction are those with an external argument. If adjectives that select a single argument *always* license that argument as an external argument, then we predict all adjectives to be possible in this construction—i.e., since all case licensing requirements would be satisfied. On the other hand, if there were a class of unaccusative adjectives—i.e., a class of adjectives that licensed their sole argument as an internal argument—then we predict these adjectives not to be possible in the *kasing-* comparative. The reason for this is that the adjective's argument would not be in a local enough relation to Deg^0 for it to be assigned Case, and since adjectives themselves do not assign Case, the single argument of the unaccusative adjective would fail to be licensed all together.

The facts seem to favor the claim that there is a class of unaccusative adjectives. The adjectives in the *kasing-* comparatives in (30) above are Class-I (unergative) adjectives. Significantly, it appears that Class-II (unaccusative) adjectives cannot appear in the *kasing-* comparatives. This fact is demonstrated by the ungrammatical examples in (34) (see also, Schachter and Otones 1972:237):

- (34) a. *Kasing-abalá ni Juan si Maria sa pag-aaral.
 is.equal busy Juan T Maria Obl. studying
 ‘Maria is as busy with studying as Juan now.’
- b. *Kasing-sirá’ ng kotse niya ang kotse ni Maria.
 is.equal damaged NS car his T car NS Maria
 ‘Mari’s car is as damaged as his car.’

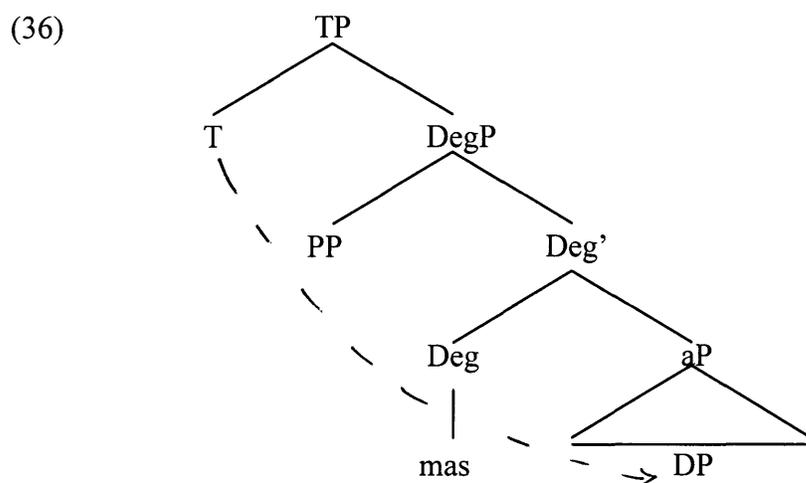
Since we have already seen that Class-II adjectives are gradable, the ungrammaticality of these examples is not likely to be semantic. As suggested above, a likely explanation for the ungrammaticality of these examples is a Case-theoretic one. Concretely, if the single argument of the adjectives in (34) is an internal argument, it will not be local enough to Deg⁰ to be Case licensed by it—i.e., since this Case is assigned only to the specifier of its complement (compare with the structure in (33) above, where the single argument of the adjective is an external argument of a Class-I unergative adjective).



There are two additional reasons why the adjective’s internal argument cannot be licensed. First, adjectives do not license Case. Second, T⁰ must enter into an agreement

relationship—and hence, a Case licensing relationship—with the closest DP in its domain, which, in this construction, is the compared argument in Spec, DegP.¹ Overall then, the reason why Class-II unaccusative adjectives fail to participate in the *kasing-*comparative construction is identical to the account of why they cannot be intensified with *napaka-*.

The Case theoretic account of the ungrammaticality of the examples in (34) makes a further prediction regarding the comparative constructions of inequality. Recall that, in these comparative constructions, the compared argument is an Oblique—i.e., a PP argument. As such, it cannot enter into an agreement relationship with T⁰. Given this, T⁰ will be capable of agreeing ‘past’ the compared argument with one of the adjective’s arguments, as schematized in (36).



Crucially, the DP argument within aP that T⁰ agrees with could be either an external or an internal argument. Either way, if the adjective selects only a single DP argument, this DP will be the closest to T⁰ in a comparative construction of inequality. The prediction, in other words, is that both Class-I unergative as well as Class-II unaccusative adjectives can appear in comparative constructions of inequality. This prediction is born

¹ This is assuming some version of a Relativized Minimality/Attract Closest type constraint on the agreement relationship that T⁰ enters into.

out. In particular, Class-I unergative adjectives can appear in these comparative constructions (as in (31b) above), and—significantly—Class-II unaccusative adjectives are also possible. Consider the examples in (37):

- (37) a. Mas abalá si Maria kay Juan sa pag-aaral.
 More busy T Maria than Juan Obl. studying
 ‘Maria is busier studying than Juan.’
- b. Mas sirá ang kotse ni Maria kaysa kotse niya.
 More damaged T car NS Maria than car his
 ‘Maria’s car is more damaged than his car.’

To summarize: Class-II unaccusative adjectives can appear in comparative constructions of inequality but cannot appear in comparative constructions of equality. This contrast is explained in terms of the argument structure of Class-II adjectives—i.e., the fact that they are unaccusative—and Case-theoretic principles. Concretely, in comparative constructions of equality, the single argument of the unaccusative adjective fails to be licensed since agreement with T^0 is unavailable, and since the argument is not local enough to Deg^0 to receive Case. In constraint, the single argument of an unaccusative adjective can be licensed in comparative construction of inequality since agreement with T^0 is possible—allowing the adjective’s arguments to receive Topic case. Crucially, the assumption that all adjectives project their single argument as an external argument would not allow us to capture these contrasts in a straightforward way, as it would predict all adjectives to behave uniformly in both types of comparative constructions.

4.2.5. Class-II adjectives with external arguments

In section 4.3.2., I proposed that an adjective's thematic-roles are assigned within an aP structure in structurally different position depending on the specific theta-role involved. In particular, non-theme arguments are assigned their theta-role by the head of aP (in Spec, aP), whereas theme arguments are assigned their theta-role by A (to A's complement position). This proposal contradicts the proposal of Baker (2003) and others, who claim that the non-theme and the theme arguments alike are uniformly licensed external to the adjective's projection. In this section, I discuss one addition set of facts that seems to provide further evidence against this later claim.

Consider the examples in (38). It seems that, in addition to the obligatory presence of the theme argument as subject (i.e., marked with Topic case), it is also possible to optionally express an external argument as well (which appears in the Non-Subject case form).¹⁰

- (38) a. Abot na ng ikalawá-ng kabayo ang nauuna
overtaken now NS second L horse T leading
'The leading horse is now overtaken by the second.' (E 5, modified)
- b. Ako'y hindi' alumana niyá.
T.I Inv. not attended-to NS.him
'I was not noticed by him.' (E 42)
- c. Karga niya ang bata.
carried NS.he T child
'The child was carried by him.' (E 307)
- d. Akay ni Maria ang matanda-ng babae'.
led-by-hand NS Maria T old L woman
'The old woman was led by the hand by Maria.' (E 9)

¹⁰ This is not freely available for all of the adjectives that I have grouped into the Class-II unaccusative class. The same fact about external arguments has also been shown for Malagasy (Travis 2005). In Malagasy, apparently, the class of adjectives that can take external arguments is much larger.

Chapter 4

- e. Kilala ko siya.
known NS.1 T.he
'He is known (by me).'
- f. Kapol ng putik ang aki-ng damit.
smeared NS mud T my L dress
'My dress is smeared with mud.' (E 302)

These are adjectives: They do not inflect for tense/aspect, for one thing. Also, they can occur in the pivot position of the verb *maging* 'to become' (see section 1).

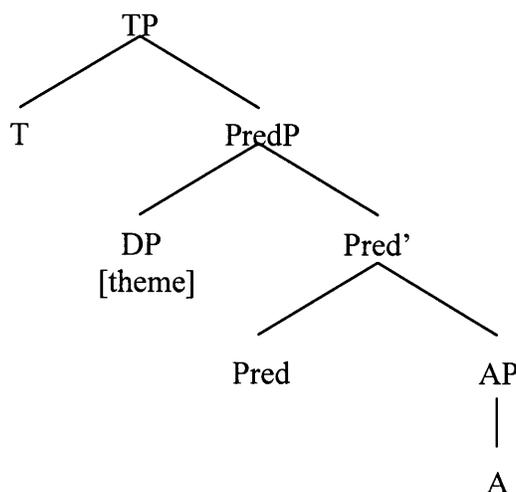
- (39) a. Na-ging [abot na ng ikalawá-ng kabayo ang nauuna].
Perf.become overcome now NS second L horse T first
(‘The leading horse became overtaken by the second.’)
- b. Na-ging [karga niya ang bata’].
Perf.become carried NS.he T child
(‘The child became carried by him.’)
- c. Na-ging [akay ni Maria ang matanda-ng babae’].
Perf.become led-by-hand NS Maria T old L woman
(‘The old woman became carried-by-hand by Maria.’)

Theoretically, the examples in (38) do not seem to pose any particular challenge on the assumption that adjectives project a bi-partite aP structure which has a thematic position for licensing both an external argument as well as an internal argument (i.e., exactly like vP). In fact, these examples seem to provide some additional positive support for this analysis, and at the same time they present a challenge for the idea that there are no adjectives that could license a theme argument as an internal argument.

Concretely, if the theme argument could only be licensed as an external argument—in the specifier of PredP, for instance—then there would be no obvious place to generate the non-theme argument that is realized in the examples in (38). Consider the PredP analysis on non-verbal clauses, for instance.

The PredP analysis

(40)



One might attempt to claim that the extra external argument in the examples is licensed by being adjoined to the clause or perhaps directly to PredP, This analysis, however, does not offer any explanation for why an additional non-subject argument in sentences like (41)—i.e., sentences composed from a Class-I (=unergative) adjective should be impossible.

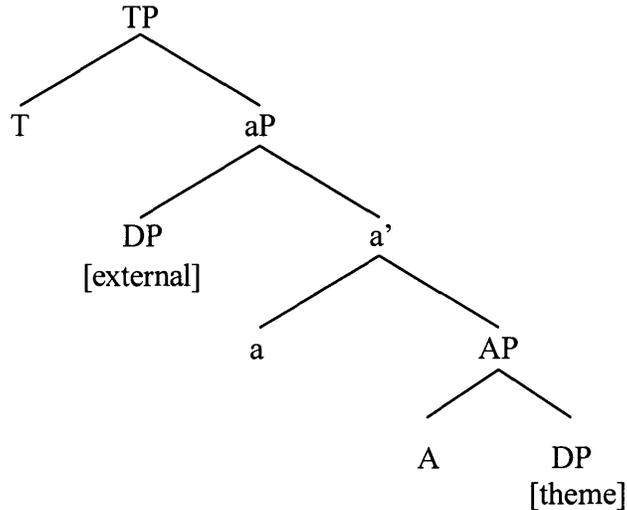
- (41) a. Tahimik ang aso (*ni Maria).
 quiet T dog NS Maria
 ‘The dog was quiet by Maria.’ (=Maria quieted the dog.)
- b. Ma-ganda ang damit (*ni Juan).
 beautiful T dress NS Juan
 ‘The dress was beautiful by Juan.’ (=Juan beautified the dress.)

It would not be a satisfactory approach to rule this sentence out by simply stipulating that a clause may not contain more than one non-theme argument, and that therefore, an extra non-theme argument could not be adjoined to the clause. Prohibitions of this type do not need to be stipulated, since they are facts about argument structure. On an analysis where adjectives project a bi-partite aP structure, on the other hand, we have a natural way of licensing both arguments in examples like (38). In addition, examples like (41) are correctly ruled out on the basis of the fact that the adjective *tahimik* is unergative and

therefore has no available semantic roles to assign to an additional argument—i.e., because its highest argument role is already taken up.

The aP analysis of Unaccusative A's with External Arguments

(42)



It seems reasonable to conjecture that the reason why it should be possible to allow an external argument to co-occur with an unaccusative adjective has to do with the special licensing properties of external arguments in general. That is, assuming that the external argument in the examples above occupies Spec, aP, we can assume that it is assigned Nominative case from T^0 (see (17)). As we have already seen, unless Accusative Case is available, the complement position of A is not a position where a DP can be licensed. In the general case, however, Topic case is available. The theme argument therefore enters into an agreement relationship with T^0 , thereby receiving Topic case and satisfying the Case Filter.

4.3. Theoretical Issues

I will take it to be established by now that adjectives in Tagalog fall into one of two classes: Unaccusative or Unergative. As has been noted several times throughout the discussion, the larger conclusion that must be drawn on the basis of this distinction is that adjectives as a class can not be claimed (for all languages) to be incapable of licensing a single internal theme argument. In other words, the unaccusative-unergative distinction familiar from the extensive work on verb classes is equally valid for adjectives as well.

From the point of view that there are principles like the UTAH—i.e., the principle that identical semantic roles are assigned to identical syntactic positions (Baker 1988 and much subsequent work)—the existence of an unergative class of adjectives alongside an unaccusative class is what we expect and hope to find. On the other hand, research on languages like Italian and Hebrew (as discussed in Chapter 2) reveal that this is not always what we find. Many of the adjectives that I have claimed to be unaccusative in Tagalog apparently fail to exhibit unaccusative behavior in other languages. In Italian, for instance, the adjective *spezzati* ('broken') fails to be diagnosed as unaccusative (Beletti and Rizzi 1981; Rizzi 1982). On the other hand, the Tagalog adjective *basag* ('broken') appears to be unaccusative with respect to the arguments that have been provided above.

Thus, although we have seen that adjectives cannot be claimed to be universally unergative either as a class or universally across languages, there still remains a problem of accounting for possible cross-linguistic variation with respect to the argument structure property of adjectives. Concretely, we may want to ask at this point why a given adjective can be unaccusative in one language but not in another. Below, I discuss two proposals which I will suggest might be elaborated upon in order to provide an answer to this question.

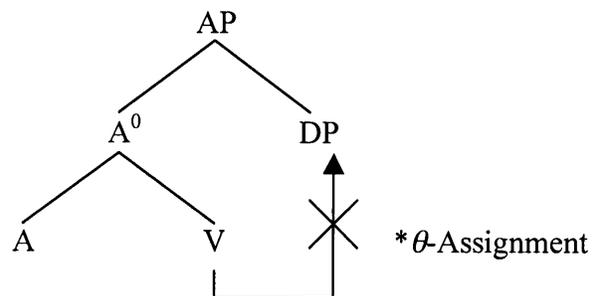
4.3.1. Cinque (1990)

Cinque's observations about unaccusative adjectives in Italian can be stated as follows: While it is apparently true that adjectives that are related to unaccusative or passive verbs are not themselves unaccusative or passive, there does a class of adjectives that show unaccusative behavior (e.g., *note* 'well known', *probabili* 'likely', *oscuro* 'obscure'). Given this, it therefore cannot be the case (contra, at the time, Burzio 1986, Levine and Rappaport 1986) that adjectives as an entire class are always unergative.

In the end of his paper, Cinque (1990) makes the following proposal regarding adjectives that are related to unaccusative and passive verbs. What he claims is that the absence of unaccusativity behavior for certain adjectives (namely, the loss of the ability to assign an internal theta-role) is related to the derivational formation of certain adjectives from verbal bases. Concretely, he proposes that adjectives like *spezzati* ('broken') in Italian are derived from unaccusative verbal bases. He proposes, furthermore, that in deriving an adjective from a verb, the verb no longer stands in the sisterhood relation to the direct object that is required for it to assign a theta-role. For Cinque, formation of an adjective involves an adjectivizing affix (which, we can represent for now as: A). Affixation of A directly to the root creates the structure in (43).¹²

Deriving an Adjective from Unaccusative Verb (Cinque 1990)

(43)



¹² Bear in mind that this analysis is only intended as an analysis of so-called 'adjectival passives', and is not meant—necessarily to also be an analysis of adjectives of the sort *good*, *smart*, etc., which, if they have related verb forms at all, have related verb forms that are also unergative.

Since DP in (43) (= the theme argument of V) is not a sister to the verb, it cannot receive a theta-role directly from it. The only way to license this DP, therefore, would be to license it externally. Although Cinque does not discuss any particular mechanisms for doing this, we might assume that the theme argument is licensed externally by the mechanism of predication as discussed in Williams (1981) (see also, Bowers (1993); Rothstein (2000); and Baker 2003).

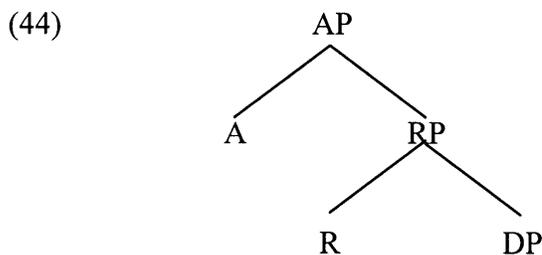
Cinque's proposal is similar in many respects to that of Borer (1984) and Levin and Rappaport (L&R) (1986). They also assume, for instance, that the loss of unaccusative behavior is the result of adjective formation from a verb. Their proposals differ, however, in that they further assume that the unergative properties of an adjective derived from an unaccusative verb follow from a systematic property of adjectives as a class—namely, that they must be 'external predicators'. Thus, if an adjective derived from an unaccusative verb were to remain unaccusative, it would have no external argument to predicate, and the resulting representation would be ill-formed by hypothesis. The general problem with these proposals is that the relevant property of adjectives—that they are obligatorily external predicators—has never been shown to follow from anything other than stipulation. Consider the following quote from Levin and Rappaport (1986:646), for instance:

“If all predicative XPs have external arguments, adjectives in general, and adjectival passives in particular, must have external arguments in their predicative use.”
(Levin and Rappaport, 1986)

However, since a verb is also part of a predicative XP, it too must have an external argument. Since there are unaccusative verbs, however, this must mean that the external argument requirement could be satisfied by an argument that is assigned a semantic role as an internal argument of the verb. But why, then, should the same not be true for adjectives. It is not clear, therefore, that the putative absence of unaccusative adjectives could follow from anything more than a stipulation.

Cinque's proposal is quite different from these proposals, however. He bases the unergative property of adjectives derived from unaccusative verbs on the interaction of theta-theoretic principles (locality of theta-assignment) and specific assumptions about the morpho-syntactic derivation of the adjectives. Crucially, his proposal permits much room for variation. In particular, suppose that the idea that adjectivization applies directly to the root is may simply be one 'parameter' of adjective formation that a language might employ. Significantly, this is not the only imaginable derivation of an adjective using Cinque's assumptions. It is also imaginable, for instance, that adjective formation could take place at a higher level than what is shown in the structure in (43) above. For instance, 'adjectivization' could occur after the verb (or whatever category the adjective is based on) has composed with its internal argument. Consider, the structure in (44) below, for instance. (I represent the adjective as formed from a category neutral root.) In this structure, the adjectivizing head is merged with a root element (possibly a verb) that has an internal argument. Since the adjectivizing head is merged after the root has composed with its direct object, it has no consequences for the sisterhood relation between the root and its object. Overall, this structure would yield—on the surface—what would be an adjective with an internal argument.^{13,14}

Forming an adjective with an internal argument



¹³ The idea that there are different heights of attachment for category forming morpho-syntactic processes was explored in the work of Abney (1987), where he proposed that different kinds of gerundive constructions are derived depending on the syntactic level at which nominalization applies to a verbal root.

¹⁴ Cinque does not actually provide empirical evidence showing that adjectives in Italian are derived as in (42), and I must admit that I also do not know of any evidence. Evidence of the sort described in Wasow (1979) might be helpful (see also, Kratzer 2000; and Anagnostopoulou 2004).

Let us suppose then that the argument structure properties of adjectives (whether or not they can license a theme argument internally) can be parameterized to with respect to the derivational properties of adjective formation—whether or not adjective formation applies directly at the root before the root composes with its direct object (as in (43)), or whether adjective formation applies after the root composes with its direct object (as in (44)). Taking certain proposals about theta-assignment and locality as given, the first path leads to a situation in which the internal argument of the root must be externalized. This possibly represents the situation for languages like Italian. The second path does not have these consequences for argument structure. We might therefore conjecture that this represents the formation of adjectives in Tagalog.

4.3.2. Kratzer (2000)

The idea that adjective formation can be formed either as in (43) or as in (44) has been proposed in other work as well. Kratzer (2000) has proposed, for instance, that adjective formation (in German) can be either ‘lexical’ or ‘phrasal’. Although her work does not explicitly address argument structure, her analysis seems to parallel Cinque’s theta-theoretic proposal in an interesting way.

Concretely, she claims that there is a stativizing morpheme that is crucially involved in certain kinds of adjective formation. This stativizer applies to roots that have a complex event structure involving an event and a state reached by the event. Roots like *break*, *hide*, *tear*, etc., for instance, are semantically represented as in (45).

$$(45) \quad \lambda x. \lambda s. \lambda e. [E(e) \ \& \ S(x)(s) \ \& \ \text{cause} \ (s)(e)]$$

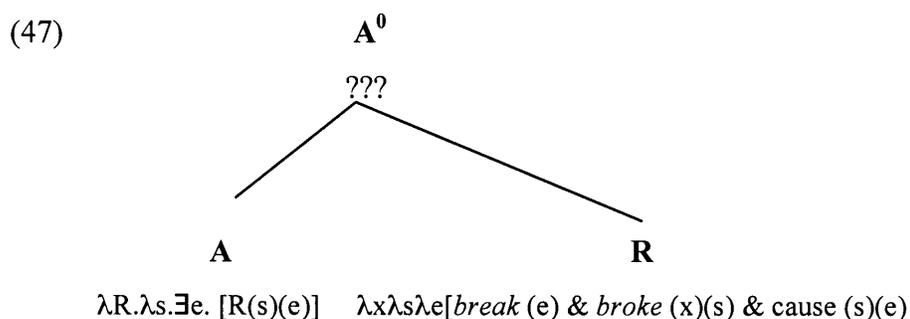
The stativizing morpheme that forms adjectives from roots that have the semantics given in (45) above is given below in (46). The stativizer is a function that requires an input that is of type $\langle s \langle st \rangle \rangle$ (a function ranging over eventualities). The output is also a property of eventualities (ranging over states). The crucial property of this function is that it

existentially closes (i.e., de-thematicizes) the event argument of the roots of the type in (45).

Stativizer (Kratzer 2000)

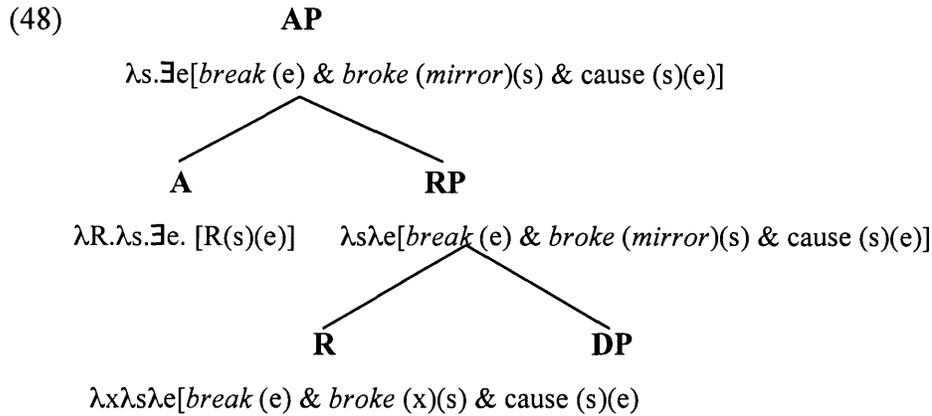
(46) $\lambda R.\lambda s.\exists e. [R(s)(e)]$ (where R is type $\langle s\langle st \rangle \rangle$, i.e., the type of (45))

According to Kratzer, the adjective-forming morpheme in (46) can attach either directly to the root in (45) or to a higher projection (her ‘lexical case’ and the ‘phrasal’ case, respectively). Both types of derivation are needed for German, according to Kratzer. However, although she does not point this out, the stativizer morpheme cannot be composed directly with the root until after the root has composed with its internal argument. The reason for this is that the root is of type $\langle e\langle s\langle st \rangle \rangle$, not of type $\langle s\langle st \rangle \rangle$ which is the type that the stativizing morpheme is looking to compose with. In other words, attempting to compose the stativizer directly with the root (i.e., before the root composes with its internal argument) should be impossible due to a type mismatch between the two elements being syntactically merged together. Consider (47).



If the language permits, the best possible way to derive the adjective would involve first composing the root with its internal argument, and then only after merging the adjective forming morpheme to the resultant phrasal constituent. This derivation is illustrated in (48).

Adjective Formation at the Phrasal Level



The issue that arises with Kratzer’s system is entirely parallel to Cinque’s theta-theoretic proposal concerning adjective formation in Italian (even if this was never intended). The question, then, is this: Suppose that as a matter of a language particular requirement, the stativizing morpheme could be syntactically composed only directly to the root. If this were the case, how could the type mismatch be resolved?

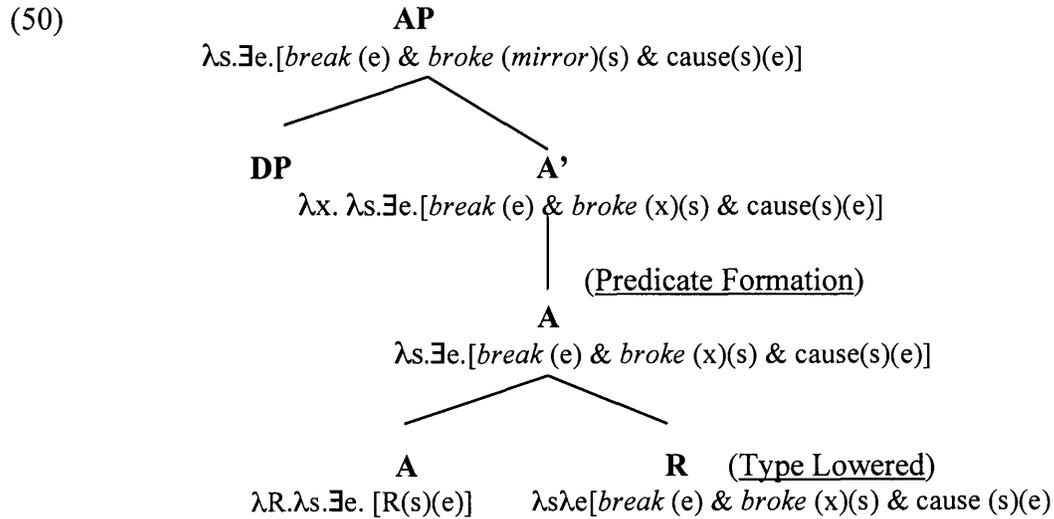
This can be achieved, for instance, by removing the individual argument corresponding to the roots internal argument—i.e., lowering the type from $\langle e \langle s \langle st \rangle \rangle$ to a type $\langle s \langle st \rangle \rangle$. Of course, even after lowering the type there will still remain a thematic role within the semantic representation of the root that will need to be saturated with an argument. This can be achieved if we assume, following Rothstein (2001), that there is a rule of Predicate Formation, as formalized in (49). The completed derivation would be as shown in (50).¹⁵

¹⁵ Rothstein actually proposes this rule as the way that subjects are introduced in all construction types. In other words, predicates contain semantic roles for their arguments, but these arguments are not included as part of the predicates type.

Predicate Formation (Rothstein 2001)

$$(49) \quad \alpha \rightarrow \lambda x. \alpha$$

Adjective formation at the Lexical Level



Just as in Cinque's proposal, the particular derivation that is involved in adjective formation (whether the adjective is formed at a lower level affecting the root, or whether the adjective is formed at a higher level affecting the root plus its internal argument) can be seen to have consequences for how a theme argument will be projected in the syntax—i.e., whether it can be projected as an internal argument or whether it will have to be projected as an external argument.

To summarize: Given certain assumptions about the semantics associated with adjective formation (i.e., from roots corresponding to eventive predicates), consequences for argument structure realizations can be seen to follow from the syntactic level at which adjective formation applies. If it takes place at the lexical level—externalization of the roots argument is required to save a type mismatch. On the other hand, it is also possible that adjective formation happens later, after the root predicate has composed with its internal argument.

If this general way of looking at things is on the right track, then it gives us a straightforward way to account for why an adjective can be unaccusative in one language (e.g., Tagalog) but not in another (e.g., Italian). In other words, we can now easily say that adjective formation in Italian is always lexical (following the derivational path in (50)), whereas adjective formation in Tagalog is always phrasal (following the derivational path in (48)). (Of course, the possibility exists also that both types of derivation exist within a single language.)

More crucially, this general approach gives us a way to account for the ‘unexpected’ unergative property of adjectives in certain languages without having to conclude anything about it being a universal property—thus allowing us also to account for the ‘expected’ unaccusative property or related adjectives in other languages.

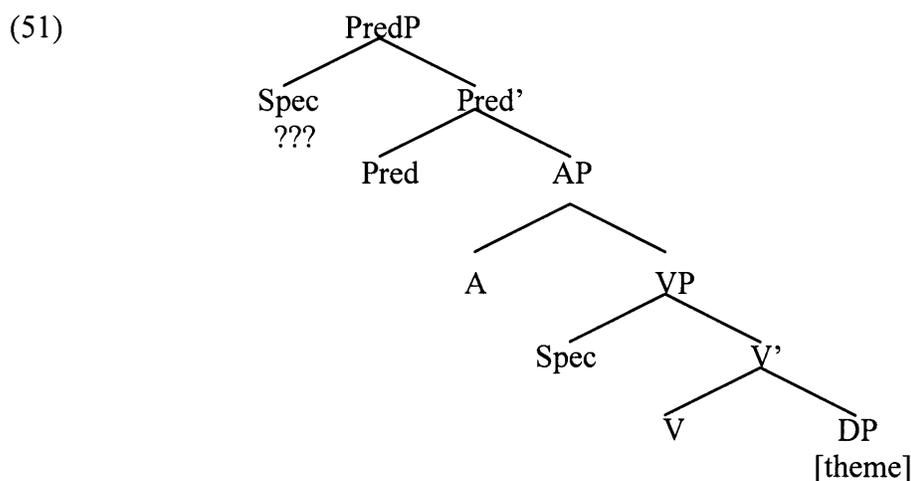
4.4. Relating the Adjective to the Verb

The main conclusion of the above discussion is that the licensing by an adjective of an internal theme argument is not universal (as is suggested by the work of Baker and others). Since some languages show signs of not allowing unaccusative adjectives where they might be expected (i.e., when they are related to unaccusative or passive verbs, for instance), I proposed a possible way of accounting for parametric variation between languages. I suggested, in particular, that the argument structure differences might be correlated with the morpho-syntactic derivation of the adjectives.

It is worth considering now whether the results discussed here are truly incompatible with a theory of lexical categories such as the one proposed by Baker. Could he, for instance permit adjectives (in certain languages) to be derived from phrasal structures that involve some non-adjective root composing with an internal argument (i.e., as in (44)/(48))? On the face of it, structures like the one (44)/(48) above do not seem to contradict the claim that adjectives cannot license internal arguments—i.e., because it is

the non-adjectival root (either a verb or a category neutral root) that takes the internal argument.

For Baker's theory, however, it would not make much sense to have an adjective formed from a VP constituent—that is, a structure like (38) where the RP is a VP. The reason for this is that, for Baker, a verb always projects a specifier that must host either an argument or an expletive. This much is not incompatible with the facts that we have seen here—for instance, the facts discussed in 3.3.5., which involved adjectives that permit external arguments. However, the adjective so formed would also presumably have to be embedded under the functional head Pred under Baker's analysis, and this Pred head would also require a specifier. Thus, an adjective formed from an underlying VP would end up requiring two subjects, one for Spec, VP and one for Spec, PredP (see (51) below). I know of no adjective in any language that has this kind of property.



The proposal that I offered at the end of section 2.4. is one that seems to fit most comfortably with the conception of lexical categories that has been proposed in the work of Distributed Morphology (Marantz 1997) as well as in work by Hagit Borer (Borer 2000). Under either of these theories, the category of a lexical item is never inherent, but always derived. Concretely, lexical items start off as category neutral roots that become categorized only once they are placed in the context of particular syntactic heads that are the actual determinants of category membership (e.g., *a* (for adjective); *v* (for verb); *n*

(for noun)). Under this conception of things, it is not very meaningful to talk about the argument structure properties of particular lexical categories. Arguments are licensed not by lexical items that have a particular lexical category, but by category neutral roots which acquire their category from functional elements in the syntax. These functional elements may have indirect consequences for the argument structure realization (in the ways discussed above, for instance), but this is never necessarily so.

It is less clear whether Baker's theory of lexical categories could be modified to allow for category neutral roots. On the other hand, if his theory did make room for category neutral roots, it is much less clear how it could be distinguished from a theory of the sort encountered within Distributed Morphology and related framework. As we have seen, for instance, Baker's view of adjectives as non-predicative leads to the ultimate conclusion that the only predicates are light-verb predicates and the functional element Pred^0 . The only way that Baker's theory could incorporate category neutral roots would be to say that these elements are non-predicative as well (Baker 2003:270-271) (see also Borer 2000; Marantz 2001). Significantly, however, this is exactly the claim that I have been arguing against (and will continue to do so in what follows).

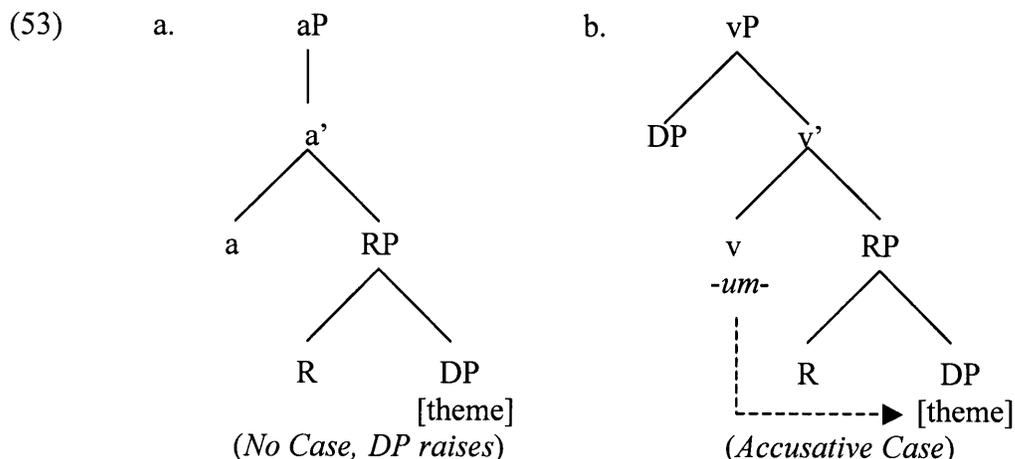
The advantages of taking the DM view of categories can be sharpened a bit by considering verb forms that are related to adjectives. In particular, the same root form that is used for adjectives is used for verbs as well. Consider the verbs in (52) below. All of these verbs have a common prefix, *-um-*. Assume for now that this particular *-um-* (much like the prefix *mag-*, following Travis 2000, 2003) is the morphological spell-out of the verbalizing head—*v*—which is responsible for adding an argument to the predicate it combines with. Notice that these verbs share a common root with one of the adjectives discussed above. Given this, it is unsurprisingly to find that a verbal form corresponding to a Class-I adjective is intransitive, while a verbal form corresponding to a Class-II adjective is transitive.

Chapter 4

	<i>Adjective</i>		<i>Verb</i>	
(52) a.	ma-tahimik	‘quiet’	t-um-ahimik	‘to become quiet’
	ma-ganda	‘beautiful’	g-um-anda	‘to become beautiful’
	ma-bigat	‘heavy’	b-um-igat	‘to become heavier’
	ma-dali	‘quick’	d-um-ali	‘to become quick or quicker’
<hr/>				
b.	basag	‘broken’	b-um-asag	‘to break something’
	sira’	‘damaged’	s-um-ira’	‘to damage something’
	pagod	‘tired’	p-um-agod	‘to tire someone’
	putol	‘cut off’	p-um-utol	‘to cut off something’

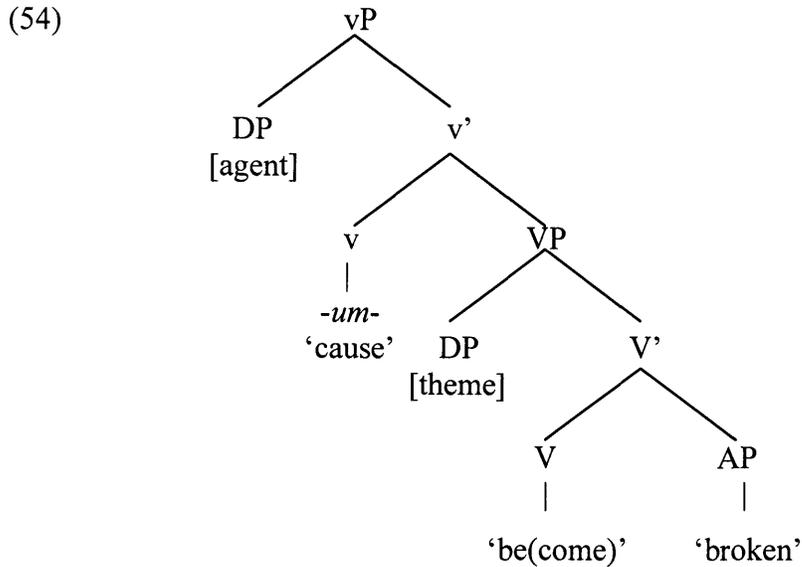
The first problem to solve here concerns the transitive verbs in (52b) which share a common root with Class-II adjectives. On the assumption that the same root is used in forming an adjective or a verb—and assuming furthermore that this root has the same argument structure (with respect to Licensing an internal argument)—then the fact that the subject of the adjective shows up as an internal argument of the verb should be unsurprising. The fact that the theme argument is a subject in a clause where the adjective is the main predicate simply follows from the fact that it cannot be assigned case in its underlying position as an internal argument. It must therefore agree with T^0 so that it can receive Topic case and satisfy the Case Filter. In the verbal construction, on the other hand, the theme argument can be assigned Accusative Case internal to the immediate projection of the root (say, by v^0) so it may remain in its underlying position as an internal argument. This simple way of contrasting the structure of a verb and an adjective based on the same root is schematized in (53).

Adjectives in Tagalog



If the adjective that is related to the verb has no internal argument, we might wonder where the internal argument for the verb comes from and why is it not there for the adjective. The question seems particularly important given that, in Tagalog at least, the verb and the adjective have a common root.

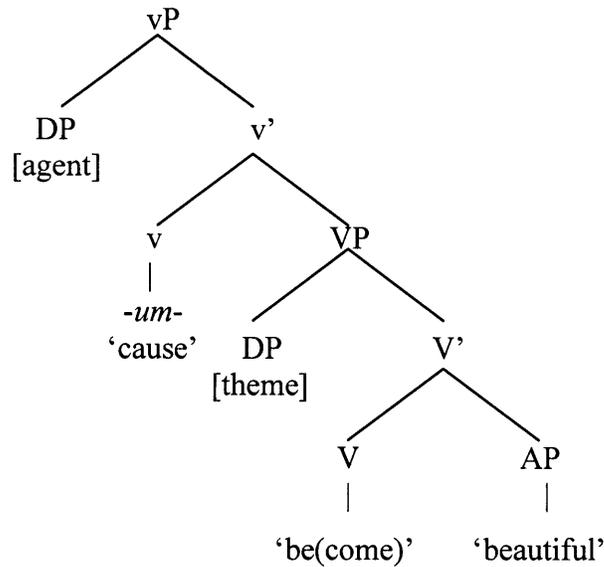
Baker actually provides a partial answer to this by proposing that all verb phrase structures have AP structure contained within them. In particular, he assumes a bi-partite vP structure in which the V (of the VP selected by v) selects an AP predicate. On this analysis, V functions much the same ways as Pred—i.e., it serves to license the theme argument of the adjective. The higher head, v, licenses an external argument. To put it in another way, the internal argument of the verbs in (53b) is actually just the subject of an adjectival predicate. This is represented in (54).



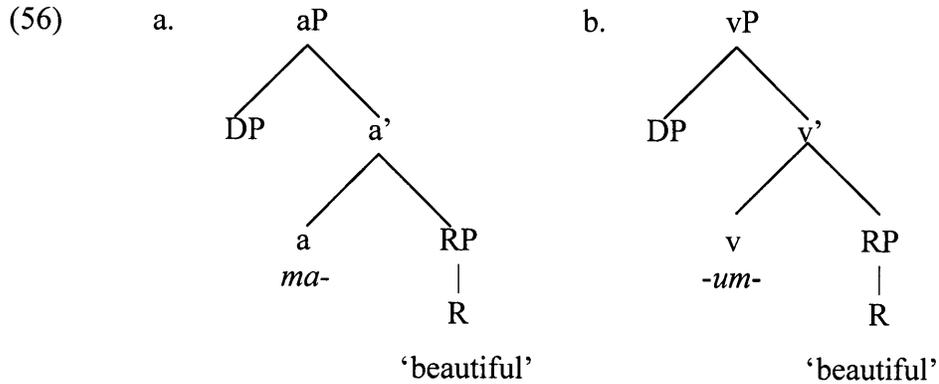
What Baker's analysis says, in other words, is that theme arguments are never licensed directly. Instead, they are uniformly licensed by means of a 'light' predicate. The hypothesis that the decomposition of a verb includes an AP projection also allows us a way to maintain a more or less transparent relationship between the direct object of a transitive verbs like 'break' with the subject of the related adjective without having to stipulate a major difference between verbs and adjectives concerning their abilities to directly license theme arguments.

A problem for this analysis, however, is that it fails to distinguish between the two classes of adjectives that we have been considering. In particular, it fails to provide a transparent account for why the verbs in (53a) which are related to the Class-I adjectives are not also transitive. That is, assuming a unified analysis of *-um-* (i.e., that it introduces an external argument), we would expect it to be possible to form structures like (55) parallel to (54) except that the adjectival root belongs to the Class-I adjective class.

(55)



This expectation is not born out. The problem, it seems, is a failure to recognize fundamental differences with respect to the argument structure of the roots involved. If we assume verbs and adjectives are both derived from the same (category neutral root), this problem does not arise and a much simpler picture emerges. That is, assuming that roots like *ganda* ('beautiful') do not have an internal argument, it will be the job of the verbal prefix *-um-* to add this argument. Similarly, we might assume that in the adjectival domain, it is the responsibility of the prefix *ma-* to license an external argument for such adjectives. Crucially, the relationship between the verb and the adjective is still quite transparent, and the expectation under this sort of analysis is that the two should have the same argument structure properties. The formation of the unergative adjective and the unergative verb is schematized in (56).



To summarize this discussion: Viewing verbs and adjectives as derived from a common (category neutral) root allows us to provide a straightforward account of the transparent relationship between the two categories—especially with respect to their argument structure. On the other hand, if we assume that adjectives and verbs differ with respect to their argument structure properties, it is not as straightforward to explain the transparent nature of the relationships between the two categories.

4.5. Conclusion

This chapter has discussed a number of syntactic contexts where the two classes of adjectives (presented in section 4.1.) contrast. I argued that each of the contrasts could be given a unified account if we assumed that the distinction between these adjectives related to their argument structure. Concretely, the contrasts followed assuming that the Class-I adjectives are unergative, while Class-II adjectives are unaccusative.

The most significant result of this chapter is the identification of unaccusative adjectives. The existence of unaccusative adjectives has been denied elsewhere in the literature. As discussed in Chapter 3, the denied existence of unaccusative adjectives can have significant consequences for the overall theory of what types of elements can serve as predicates in language. According to the conclusions reached here, there are predicates that are not simply the ‘light-verb’/Neo-Davidsonian type.

Adjectives in Tagalog

This conclusion left us with one open problem, however. The problem, in particular, was to find an explanation for why an adjective might be unaccusative in a language like Tagalog while a related adjective in another language like Italian might not be unaccusative. I claimed that the difference might simply relate to the different derivational histories of the adjectives in the two languages. Thus, building on Cinque's original proposal in addition to a proposal by Kratzer, I proposed that different argument structure properties might arise depending on whether or not adjective formation took place at the root level of the adjective—before the root has composed with its internal argument, or at the phrasal level—after the root has composed with its internal argument. This analysis, I claimed, could be best stated within a theory of lexical category distinctions that incorporated the principle of category neutral roots (e.g., as in Distributed Morphology), and I pointed to some additional advantages of this view in explaining the argument structure relatedness between verbs and adjectives.

Chapter 4

Chapter 5.

Existential Constructions in Tagalog

This chapter provides a case study of two types of existential constructions in Tagalog. I discuss two types of existential constructions in Tagalog—a non-verbal existential constructions and a verbal one. Both verbal and non-verbal existential sentences are formed around a common—though differently inflected—root predicate, *roón* (homophonous to the pro-form meaning ‘there’ or ‘in it’). I argue that this root has a consistent argument structure regardless of whether it is used non-verbally or verbally. In particular, I will argue that this predicate is unaccusative in the sense that selection for a single internal argument (a theme argument), and that it does not license a (thematic) external argument. If my arguments are correct, then we will have gained one additional piece of evidence for the general claim that verbal and non-verbal predicates are not differentiated from one another in terms of their argument structure (contra Baker 2003 and others, see Chapters 3-4), as well as for the more specific claim regarding the ability of non-verbal predicates to select for an internal (theme) argument.

Given the kinds of competing proposals that have been put forward for existential constructions in various different languages, the arguments that will lead me to the conclusions stated above will require some attention to the (often subtle) details. The majority of this chapter, therefore, will be focused on providing explicit syntactic arguments for what I will refer to as the *Direct Complement* analysis, which has its origins in the work of Jenkins (1972), Milsark (1974), Williams (1984), and others.¹ According to this analysis, the theme argument of an existential sentence (e.g., the underlined NP in: *There are ducks in the sink.*) is syntactically an internal argument to an existential predicate.

¹ This analysis involves a sub-set of the claims of the more general ‘NP analysis’ of existential constructions. The NP-analysis is usually associated with two spexistential constructionific claims about the structure of existential constructions. The first is that the Theme argument is a direxistential constructiont argument of the existential verb, and the sexistential constructionond is that the syntactic material following the NP forms a syntactic constituent with the theme NP. I will have little to say about this later part of the analysis here.

By arguing for a Direct Complement analysis of the existential construction in Tagalog, I will also be arguing against the ‘Small Clause analysis’ of Stowell (1982) (accepted in one form or another in much of the contemporary work on existential construction). According to this analysis, the theme argument is syntactically a subject of a small clause predicate, which—under most versions of this analysis—is the locative phrase that is often present in an existential sentence.

If the argumentation is sound, and the analyses correct, then the significant result that will emerge is one that is consistent with the results reached in the previous chapter. In particular, this investigation of existential constructions in Tagalog will provided us with reinforcement for the conclusion that verbal and non-verbal categories can have identical argument structure possibilities. More specifically, I will show that with respect to licensing an internal theme argument, there is no difference with respect to whether the existential predicate is verbal or non-verbal.

5.1. Introducing Existential constructions

I will be focusing on two major constructions associated with the meaning of existential assertion. The examples in (1)-(2) below exemplify these two types. For reasons that will bome clearer as the discussion unfolds, I classify the existential constructions into two types: Non-Verbal (as in (1)) and Verbal (as in (2)). This distinction is based on two properties that are immediately observable, and which will be the primary analytical focus of this chapter.

Taking a look first at Nonverbal existential constructions, we can observe that these contain the element *may* optionally followed by the element *roón* (discussed in greater detail below). Observe that *may(roón)* does not take tense/aspect inflection (there are, e.g., no forms such as: **may-may-roón/*may-ro-roón* (Contemplated); **nay-nay-roón/*nay-ro-roón* (Imperfective); **nay-roón* (Perfective)).

Non-verbal Existential constructions

- (1) a. May malaki-ng disyerto sa Australya.
?? big L desert Loc Australia
'There is a big desert in Australia.' (E 450)
- b. May-roó-ng aksidente dito kahapon.
??there L accident here yesterday
'There was an accident here yesterday.'
- c. May-roón pa ri -ng mga kumukontra sa mga
??there still also L Pl. A-f.Imperf.oppose Obl. Pl.
sinabi ni Bush
O-f.Perf.say NS Bush
'There are still also those who oppose the things Bush said.'
(<http://www.seasite.niu.edu>)

In verbal existential constructions, *may* is never present. In place of *may*, verbal existential constructions contain an element *nagka*, which is prefixed to *roón* (see the examples in (2)). This prefix inflects for tense/aspect—taking the form of: *nag-ka* in the Perfective, *nag-ka-ka* in the Imperfective, and *mag-ka-ka* in the Contemplative.

Verbal existential constructions

- (2) a. Mag-ká-ka-roón ng- [isá-ng rebisyón ng librón-ng iyán].
Cont.be+ there NS one L revision of book -L this
'There will be a revision of this book.' (E 1568)
- b. Nag-ka-roón ng giyera sa Europe.
Perf.be+there NS war Loc. Europe
'There was a war in Europe.' (Schachter and Otnes, 401)

Most previous discussions of existential constructions have focused on the non-verbal existential construction, and have usually assumed that *may* is the existential predicate (Schachter and Otnes 1972; English 1986). I will be arguing against this view shortly (to indicate that the analysis of *may* is at issue, I will simply gloss *may* as '??'). Observe for

now that the element that is common to both verbal and nonverbal existential constructions alike is *roón*, making it initially plausible that this element is the existential predicate.² As mentioned above, this element is homophonous with the element *roón* that functions as the (distal) deictic locative in the language—meaning ‘there’ or ‘in it’. In the context of an existential construction, however, *roón* crucially does not carry this same meaning. Consider again example (1b) above. This sentence contains the meaningful proximate locative pro-form *dito* (‘here’). If *roón* in the existential construction carried the meaning of the distal ‘there’, the co-occurrence of the two locatives would surely lead to a contradictory sentence. The sentence in (1b) is perfectly natural, however, leading to the conclusion that *roón* in the context of the existential is bleached of the same locative meaning found for *roón* in other contexts.

There is one other respect in which nonverbal and verbal existential constructions appear to differ grammatically. In particular, nonverbal existential constructions are negated with *walá’*, which—as a first approximation—we can characterize as the negative existential predicate. Verbal existential constructions, on the other hand, are negated by *hindí’*—the same negative element that is used to negate clauses that contain a verbal predicate.

² For reasons that are not completely clear at this time, *roón* is only optionally present in nonverbal existential constructions. I assume, however, that even when *roón* is not overtly pronounced, it is still present in the syntax. More details about this will emerge as the discussion unfolds.

Negative existential construction—Nonverbal

- (3) Walá'-ng maka-gá-gambalá sa kanyá.
?? L (one) A-f.imperf.annoy Obl. her
'There is nothing that can annoy her.' (E 502)

Negative existential construction—Verbal

- (4) Hindi' nag-ka-ka-roon ng anuma-ng problema rito.
Not Imperf.there NS any L problem here
'There isn't any problem here.'

I will not have much to say about negative existential sentences at this time.

5.1.1. Setting the stage

My main goal in what follows will be to develop a syntax for the existential constructions that has the following ingredients: (i) *roón* is the existential predicate, which—like most other predicates in the language—can be either verbal or nonverbal depending on its morpho-syntactic context (e.g., depending on whether there is a verbalizing prefix or not); (ii) the Theme argument—i.e., the nominal expression whose existence is being asserted—is syntactically an internal argument of *roón* in both the non-verbal as well as the verbal existential construction. Taken together, these two ingredients provide another argument for the more general empirical claim that nonverbal and verbal predicates are consistently identical in their argument structure properties. Specifically, verbal and nonverbal predicates can both license internal (theme) arguments.

In order to direct this discussion, I will set out to address a more specific set of theoretical questions concerning existential constructions in Tagalog. In particular, I want to focus on a contrast between verbal and nonverbal existential constructions that relates to Case licensing. Observe, for instance, that in the nonverbal existential constructions in (1), the theme argument appears bare—i.e., not overtly case marked. On the other hand,

the theme argument in the verbal existential construction in (2) bears Non-Subject case morphology—which I will argue shortly to be the spell-out of Accusative Case. Crucially, the theme argument of both types of existential construction is apparently not licensed by entering some kind of agreement relationship with T^0 —i.e., since it does not bear Topic case. The reasons for this, I argue below, concerns a conflict between the requirement on the one hand that Topic case marked arguments be definite/specific, and—on the other hand—the requirement that the theme argument of the existential sentence be indefinite/non-specific (as an instance of the so-called “Definiteness Effect”)

My specific proposal for addressing these questions runs as follows: In the case of the non-verbal existential construction, the need for Case licensing is obviated, following related proposals of Baker (1996), by incorporation of the theme argument’s determiner—*may*—into the existential predicate *roón* (i.e., forming *may-roón*). For verbal existential constructions, on the other hand, the theme argument receives accusative case from the verbalizing head—*v*—which is morphologically spelled-out as the prefix *mag-ka-*.

As the discussion will make clear, the ability to state these proposals straightforwardly depends to a large extent on showing that the Direct Complement analysis of both verbal and non-verbal existential constructions in which the theme argument is a direct object of the existential construction.

5.1.2. On the status of *roón* as a predicate

In this section, I focus on providing an analysis of *roón*. Recall that *roón* is the single element that is common to both nonverbal and verbal existential constructions alike. Recall also that *roón* is not associated with any specific locative meaning when used in the existential, though it does have the meaning of a distal deictic locative when found in other constructions. The presence of a semantically impoverished locative pro-form in the existential constructions of Tagalog is not actually surprising from a cross-linguistics

point of view. The presence of such a locative pro-form in existential constructions is well attested in many other languages, including, English (*There is...*); Italian (*Ci....*); and so on.

While the presence of such pro-forms is wide-spread, it remains far from clear whether or not this pro-form has exactly the same grammatical function in each language where it is found. In English, for instance, it is pretty clear that existential-*there* functions as a grammatical subject. This has also been proposed for other languages like Italian, where the element *ci* has been argued to be an expletive subject pro-form (Freeze 1992; Moro 1996). The question we are interested in, therefore, is what syntactic role *roón* has in the Tagalog existential construction.

Since *roón* appears to be semantically impoverished (at least with respect to locative meaning), it is rather unlikely that it could be analyzed syntactically as an argument (e.g., as subcategorized by some as yet identified predicate—possibly *may*). This leaves us with two other possibilities to consider. The first is to analyze *roón* as a modifier of some sort, or as an expletive subject (i.e., analogous to the syntactic function of existential-*there* in English). The second possibility is to analyze *roón* as the main predicate of the existential—i.e., as the existential predicate, to which the elements *may* and *mag-ka-* are prefixed.

In attempting to answer this question, an important observation to make about *roón* in is that its linear position in the clause is fixed. In particular, it can only occur immediately following *may* (in the nonverbal existential) or immediately following the prefix *nag-ka-* (in the verbal existential). This fact concerning the position of *roón* is consistent with either of the possibilities noted above. In particular, consider the possibility that *roón* is a modifier or expletive subject. Assuming either of these syntactic analyses, the word order restrictions on *roón* could be explained by assuming that *roón* is a prosodically dependent element, i.e., a clitic. Crucially, the existence of such elements is well-attested in the language (see, in particular, Sityar 1989; Kroeger 1993; Anderson 200?; and Billings

2003 for discussion). As the examples in (5) help to illustrate, clitics in Tagalog quite generally occur immediately after the main predicate of the clause.

Prosodically dependent elements

- (5) a. S-um-ulat *siya* kaagad ng liham (*?*siyá*).
 A-f.perf.write he.nom right.away acc. letter
 ‘He wrote a letter right away.’ (Billings 2003)
- b. S-um-su-lat *pa* si Juan ng liham (**pa*)
 A-f.imperf.write still nom. Juan acc. letter still
 ‘Juan is still writing a letter.’

If we suppose that *may* is the main predicate of the existential sentence, could we then say that *roón* has the status of one of these prosodically dependent elements? There is at least one reason to be doubtful of this analysis. In particular, *may* cannot host any type of prosodically dependent element such as the clitics in (5). This is shown by the ungrammaticality of the examples in (6). (NB., Possession in Tagalog is expressed using the same basic structure as an ordinary existential, except that there is also a Topic marked argument which expresses the role of the possessor—e.g., *siya* in (6a)).

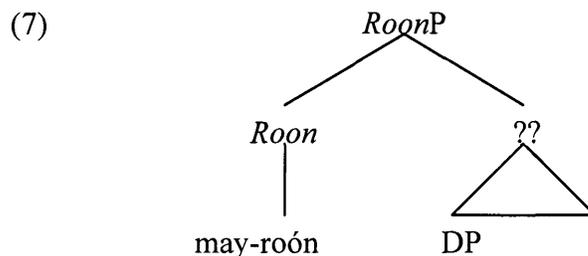
- (6) a. May-(**siya*) salubsób *siyá* sa kanya -ng daliri’.
 ?? T.he splinter he.nom Loc his.gen L finger
 ‘He has a splinter on his finger.’
- b. May-(**pa*) salubsób *pa* *siyá* sa kanya-ng daliri’.
 ?? still splinter still T.he Loc his L finger
 ‘He still has a splinter on his finger.’

As the examples above illustrate, pronouns like *siya* (‘he’) and particles like *pa* (‘still’) must follow the first word that comes after *may*. This pattern can be explained as follows: *may* is a pro-clitic, and it must therefore pro-cliticize to a (non-clitic) host to its right. pronouns like *siya* and particles like *pa*, on the other hand, are enclitics and therefore require a (non-clitic) host to their left. It therefore follows that *may* and these elements

will be incompatible—i.e., because of their conflicting prosodic requirements. As the closest alternative to this analysis, we might suppose that *roón* is simply listed in the lexicon with a feature that requires *may* (or *mag-ka-*, as in the verbal existential construction) to prefix to it (e.g., *roón*, [*{may-, mag-ka-}* ____]). Assuming that we would like to be able to have a more general account, however, I will consider different approach.

A more straightforward account of *roón* is possible if we adopt an analysis of *roón* as the syntactic predicate of the existential sentence, with *may* and *mag-ka-* behaving as prefixes (broadly construed). According to this analysis, the word order restrictions exhibited by *roón* can be simply explained as following from the general predicate-initial position of predicates with respect to the entire clause (see Chapter 2). Under this analysis, however, there is still an open question about how to analyze *may* and *mag-ka-*. I return to this issue shortly.

For now, the minimal conclusion seems to be that *roón* is syntactically the predicate of the existential clause, and we can assume at least a partial structure for the existential constructions as in (7). (NB., For now, I will assume the prefixes *may* and *mag-ka-* to be dominated by the head of *RoonP*, though I will temporarily leave this unanalyzed.)



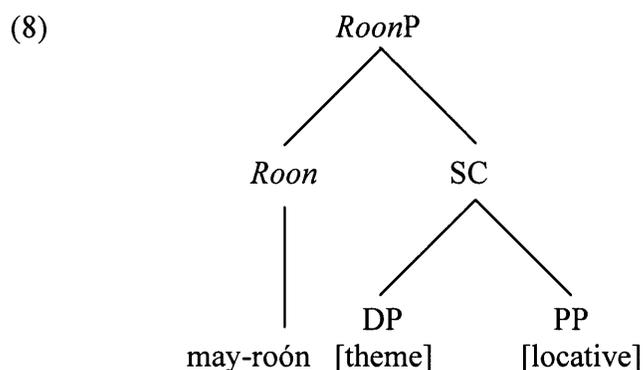
The question we must now turn to concerns the structure of *roón*'s complement. In particular, most of the existential constructions we have seen so far contain material in addition to the theme argument—e.g., a locative PP (though this is not an exclusive

possibility, as we shall see). We would like to know, in particular, how these elements are incorporated in the overall syntax of the existential construction.³

5.2. The Argument Structure of *roón*

This section is concerned with determining the structure of *roón*'s complement. There are a couple of initial possibilities to consider. To place this question in a larger context, consider a simple existential sentence from English such as: *There were several guests at the party*. One analysis of such sentences assumes that *be* is an existential verb which takes a small clause complement—*several guests at my party* (see Stowell 1981; Safir 1982; Huang 1987; Freeze 1992; Moro 1996; For Austronesian, see Paul 2000 for this analysis of existential constructions in Malagasy.)

Small Clause Analysis

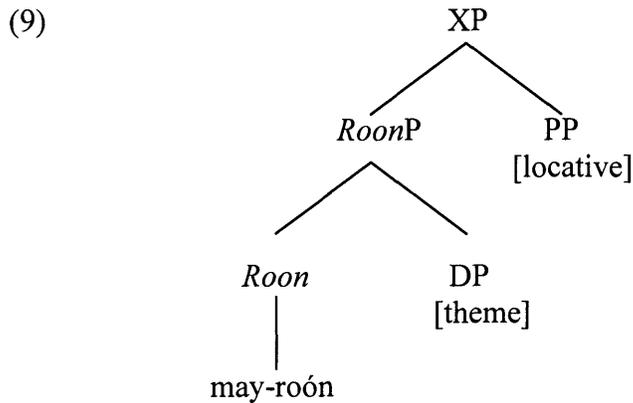


According to this analysis, the theme argument of the existential sentence is actually an argument of the locative PP, not of the matrix predicate (*roón*, or, for English—*be*).

³ For the moment, I remain agnostic about the precise meaning of *roón*. One possibility is that it has the meaning of a predicate of existence, and this is where the ‘existential force’ comes from (on semantic proposal, see McNally 1992; Musan 1996; van Geenhoven 1996, among others). On the other hand, it would be nice to correlate my syntactic analysis of *may* as a determiner with a semantic analysis. I have yet to undertake this task.

Another important analysis of the existential construction assumes that the theme argument of the existential sentence is a direct complement to the main predicate (e.g., *roón*) (see Milsark 1974; McNally 1992 (and references therein); With regards to Austronesian, see Chung 1987 for this analysis of existential constructions in Chamorro). Under this analysis, the existential predicate is analyzed as an unaccusative predicate. According to this analysis, furthermore, the locative PP is usually taken to be either a modifier to the projection of the main predicate, or it is taken to be a modifier of the theme argument (Jenkins 1972; William 1984). Schematically, this analysis is represented in (9).⁴

Direct Complement Analysis



In what follows, I will be arguing in some detail for an analysis of the Tagalog existential constructions that adopts the structure in (9) over the structure in (8).

⁴ I have chosen to analyze the locative as adjoined to the projection of *roon*. As an alternative analysis, it could also be adjoined to the theme argument directly to the theme argument. One reason for this is based on extraction. Extraction of the locative PP is fine in existential constructions, though extraction from DP's seems to be impossible.

- (i) *Saan nag-bigay [ng mga bulaklak ___] si Maria sa guro.
 Where A-t.perf.give Acc Pl. flower Nom Maria Obl teacher
 'Where did Maria give a flower from to the teacher?'

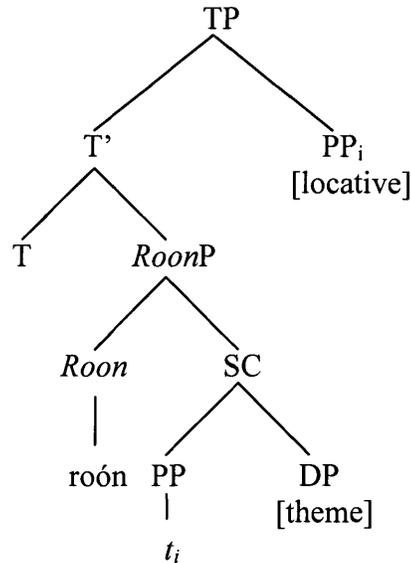
5.2.1. The Small Clause Analysis

According to the small clause analysis of the existential construction, the locative phrase is a predicate upon which the theme argument is predicated. For Tagalog, this assertion presents a problem: Tagalog is a predicate initial language—both matrix and embedded predicates must precede the subject and any other of the predicate’s arguments. In all of the existential constructions that we have seen so far, however, the locative phrase is final within the clause—appearing after the theme argument that is claimed to be its subject under the small clause analysis.⁵

This problem can be solved if we claim that the locative phrase is underlyingly a predicate, but superficially the syntactic subject of the clause. In fact, this is exactly the proposal put forward for Tagalog by Freeze (1992) (see also, Freeze and Georgopoulos (2000)). Freeze claims, in particular, that the surface-structure of an existential sentence is derived by raising the locative predicate to whatever subject position is canonical for a particular language. Thus, in a verb initial language like Tagalog, the locative predicate can be assumed to raise to Spec, TP, where the specifier branches to the right (see the discussion in Chapter 2). This analysis would give us a structure like the one shown in (10). (Alternatively, we could say that the locative raises to Spec, TP generated to the right, and then obligatorily lowers a right-adjoined projection of the predicate.)

⁵ A word order in which the locative precedes the theme is also possible. As we shall see in a later section, however, this must be a derived order and not a base order. This word order is therefore not indicative of an underlying Predicate-initial (small) clause structure.

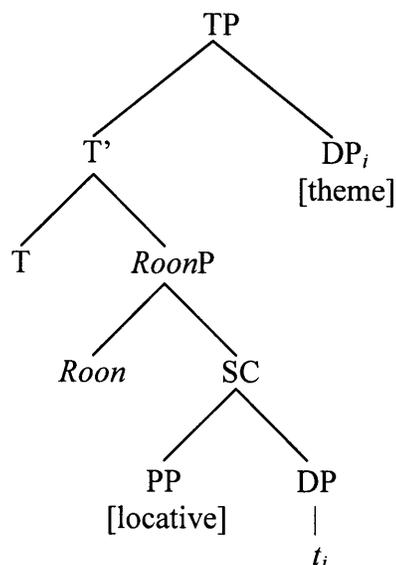
(10)



According to Freeze (1992), movement of the locative to Spec, TP is actually registered morphologically. In particular, when the locative moves to Spec, TP, it triggers voice agreement on T^0 —i.e., T^0 agrees with the [Locative] feature of the PP, which—according to Freeze—is spelled-out on T^0 as the particle *may*.⁶ Freeze contends that in addition to the possibility of T^0 agreeing with the locative, agreement with the theme is also possible. With respect to Rackowski’s treatment of voice agreement presented in Chapter 2, this is possible if the theme scrambles from its base position to a position that is close enough to T^0 . Consider the structure in (11).

⁶ Freeze does not discuss existential constructions with the prefix *mag-ka-* (i.e., verbal existential sentences). He also does not discuss existential constructions with *roon*. He assumes, on the other hand, that the predicate position of the clause is simply the locative phrase, and that what moves to subject position is a sub-constituent of the locative— P' .

(11)



Freeze argues that when the theme argument raises to Spec, TP, the result is a different construction from the existential—namely, a predicate locative construction. The predicate locative construction in Tagalog is exemplified by the examples in (12).

- (12) a. Na-sa likod ni Fe si Norma.
 Pred.Loc behind NS Fe T Norma
 ‘Norma is behind Fe.’
- b. Na-roon sa Maynila si Juan.
 Pred.there Loc Manila Juan
 ‘Juan is in Manila.’

According to Freeze, movement of the theme to Spec, TP results in agreement between T^0 and the theme argument, which is spelled-out as the particle *na* that is seen in the examples above.

The overall point here is that, according to the Small Clause/Predicate Raising analysis of existential constructions, the locative phrase is the designated subject of the clause by virtue of the fact that it enters into an agreement relationship with T^0 . Thus, existential constructions from this point of view are quite unlike subject-less clauses such

as clause types where the verb is inflected for recent perfective aspect (see Chapter 2). Rather, existential sentences are analyzed as a normal voice-alternating clause type. This point will become important shortly.

Since predicate raising seems to be the only way to account for word order under the Small Clause analysis, my assessment of the Small Clause analysis will be based primarily upon the predictions made on the assumption that predicate raising applies in the derivation of existential clauses in Tagalog.

5.2.2. Against the Predicate Raising analysis

I now present an argument against an analysis of Tagalog existential constructions involving predicate raising. This argument involves the well-noted restriction on extraction in the language, that only subjects and adjuncts may extract. The one exception to this generalization appears to involve ‘subject-less’ clauses. In subject-less constructions (e.g., as in the Recent Perfective constructions discussed in Chapter 4), any argument of a clause may be extracted. As we will shortly see, existential constructions in Tagalog seem to pattern with subject-less clauses with respect to the overall paradigm of extraction possibilities in the language. This observation will be my main argument that existential constructions in Tagalog are truly subject-less. If this conclusion is right, it crucially points to the conclusion that the locative PP cannot be the subject of existential sentences in this language.

Consider first the basic effects of the subject—adjunct restriction on extraction. The examples in (13) show that a direct object may not be extracted from a clause, unless the voice morphology on the verb reflects the fact that the direct object is functioning as the subject. (In other words, for the direct object to extract, the verb must be in the ‘passive voice’.)

Chapter 5

Subject Restriction on extraction

- (13) a. *Ano ang *nag-bigay* ang lalaki ___ kay Juan?
What Foc. A-t.Perf.give T man Obl. Juan
'What did the man give to Juan?'
- b. Ano ang *i-bigay* ng lalaki ___ kay Juan?
What Foc. T-t.Perf.give NS man Obl. Juan
('What did the man give to Juan?')

There is an exception (not noted in Chapter 2, where the restriction was first introduced) to this restriction, which concerns oblique arguments and adjuncts. An oblique argument or a modifier of the clause can be extracted no matter what voice form the verb is in. The examples in (14) illustrate this fact (examples from Rackowski and Richards 2003).

Oblique and adjunct extraction

- (14) a. Sa aling kalabaw *nag-bigay* ang lalaki ng bulaklak ___?
to which water-buffalo A-f.perf.give T man acc. flower
'To which water buffalo did the man give the flower?'
- b. Kailan *nag-bigay* ang lalaki ng bulaklak sa kalabaw ___?
when A-f.perf.give nom. man NS flower Obl. water-buffalo
'When did the man give the flower to the water-buffalo?'

Returning now to the existential constructions, observe that it is possible to extract either the locative or the theme argument. Consider first extraction of the locative argument, as in (16).

- (16) a. Saan may-roó-ng malaki-ng disyerto ___?
Where ?? .there L big L desert
'Where is there a big desert.'
- b. Saan may restaurant ___?
Where ?? restaurant
'Where is there a restaurant?'

The extractability of the locative argument could be consistent with the locative being either a subject or an adjunct. If the locative is the designated subject of the clause, however, then we do not expect it to be possible to extract the theme argument. This expectation is not borne out. As the examples in (17) show, extraction of the theme argument is also possible.

Extractability of theme argument

- (17) a. Ano ang mayroón sa bahay niya?
What Foc. ?? .there Loc house he
'What is there in his house?'
- b. Ano-ng uri ng mga serbisyo ang mayroón?
What L kind of Pl. service T ?? .there
'What kind of services are there?'
- c. Ano-ng uri ng tulong mayroon para sa mga pamilya-ng may
What L kind of assistance ?? .there for Obl. Pl. family L ??
bata o kabataan na may problema sa kalasuga-ng pangkaisipan?⁸
child or adolescent Rel. ?? problem Obl. health L intellectual
'What kind of assistance is there for families with children or adolescents
who have problems with mental health?'

Recall that according to Freeze's analysis, both the theme argument as well as the locative predicate can raise to Spec, TP. If the theme argument raises to Spec, TP—however—the raising results in a predicate locative construction, where T⁰ is spelled-out

⁸ (<http://www.tmhc.nsw.gov.au>)

as *na*. In the examples in (17), significantly, the locative is not ‘inflected’ in the way it would be if these were predicate locative constructions. According to Freeze’s raising analysis, then, this means that the locative PP must be the subject of the clause in the examples in (17) (see the representation in (10) above). But if so, then—continuing to assume (either one of) the Phase impenetrability analyses of the subject-only restriction from Chapter 2—this entails that the theme argument, which remains internal to *RoonP*, will be linearized as following the head of *RoonP*—namely, *roon*. Given this, we predict that extraction of the theme argument should give rise to a violation of Order Preservation. This prediction is not borne out by the data. In other words, that the locative PP cannot be the designated subject of the existential clause in Freeze’s sense, given the subject-only restriction on extraction.

By virtue of this conclusion, furthermore, we now have a strong reason to doubt the correctness of the predicate raising analysis—and hence, more generally, the Small Clause analysis—of existential constructions in Tagalog. Crucially, the extraction facts above follow from the Direct Complement analysis, which assigns neither the theme argument nor the locative PP subject-status.

5.2.3. Additional Arguments

At this point, we have reasonable grounds for rejecting the Small Clause analysis of existential constructions in favor of the Direct-Complement analysis. Some further advantages of this view will be presented in the next three sub-sections. These arguments are not quite as strong as the one just discussed involving extraction, but I do believe that they do show, significantly, that a generally simpler grammar results from adoption of the Direct-Complement analysis.

5.2.3.1. *Word order and Negation*

An additional argument disfavoring the small clause analysis concerns word order. Recall the observation from Chapter 4 regarding clauses with negation. As we saw, it is possible to place a non-Topic marked external argument (i.e., an agent) pre-verbally following negation, as in (18). Recall also that this same word order permutation is not available to non-Topic internal arguments (i.e., the theme), as the ungrammaticality of (19) demonstrates.

(18) a. Hindi' l-in-uto' *ng lalaki* ang adobo.

Neg T-t.Perf.eat NS man nom. adobo

'The man ate the adobo.'

b. Hindi' *ng lalaki* l-in-uto' ang adobo.

Neg NS man A-t.Perf.eat T adobo

('The man ate the adobo.')

(19) *Hindi *ng pinggan* b-um-asag si Maria.

Neg NS plate A-t.break T Maria

'Maria didn't break the plate.'

(cf., Hindi b-um-asag si Maria *ng pinggan*.)

According to the Small Clause analysis, the theme argument in an existential sentence is an external argument. Assuming that the paradigm in (18)-(19) is about structural relations and not thematic relations (see Maclachlan 1996:179-181), we might expect the theme argument (since it would be the external argument of the Small Clause's locative predicate) to also display the kind of word order permutability seen in (18). This is not the case, however. Verbal existential constructions are negated with *hindi'* exactly as in the above sentences. However, the theme argument can only appear following the predicate *mag-ka-roón*, and never before it.

- (20) a. Hindi' nag-ka-roón *ng gera* sa Europe.
 Not Past.be+there NS war Loc Europe
 'There wasn't a war in Europe.'
- b. *Hindi' *ng gera* nag-ka-roón sa Europe.
 Not NS war Imperf.be+there Loc Europe
 ('There wasn't a war in Europe.')

The facts in (20) are entirely consistent with the Direct-Complement analysis—in fact, they are exactly the facts that the Direct-Complement analysis would predict. (Notice, for example, that they argue for the claim that the case of the post-verbal theme argument is Accusative as opposed to, say, Nominative.) Less is certain about the Small Clause/Predicate raising analysis, however. What one would like to know—for instance—is exactly why the subject of a Small Clause does not have the privileged status with respect to its raising abilities. The difficulty, however, is that there are no truly well attested Small Clauses elsewhere in the language that we could even begin to base this question on.

5.2.3.2. *May* as a proclitic

Recall that in non-verbal existential constructions, the predicate *roón* can be unpronounced. There is an important exception to this. In clauses where the theme argument is extracted, *roón* is obligatorily overt.

- (21) *Ano_i ang may *t_i* sa bahay niya?
 What Foc. ?? Loc house he.gen
 'What is there in his house?'

Significantly, it seems that *roón* is obligatory only when extraction of the theme has taken place. When *may(roón)* is followed by another non-trace empty category, for instance, *roón* is not obligatory. Consider the examples in (22). Here, the theme argument of the

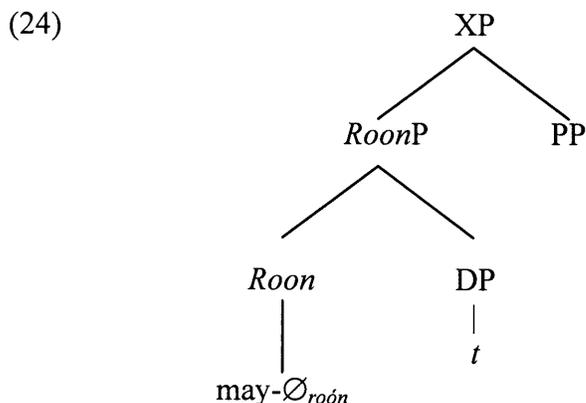
existential sentence is a headless relative clause, which we can assume to be an NP headed by a null NP head—*pro*.

- (22) a. May(roón-ng) [*pro* [darating bukas]].
 ??. there L one A-t.Perf.arrive bukas
 ‘Someone came by yesterday.’
 (Lit., ‘There is someone who came by yesterday.’)
- b. May(roón-ng) [*pro* [t-um-a-takbo sa kuwarto]].
 ??. there L one A-t.Imperf.run Loc room
 ‘Someone is running in the room.’ (Kroeger 1993, 49)
 (Lit., ‘There is someone who is running in the room.’)

Earlier, we saw reasons for analyzing *may* as a pro-clitic. Given this, how might we explain the paradigm above? If we adopt the Direct Complement analysis of existential constructions, an interesting and straightforward analysis is possible. Concretely, the generalization could be that pro-cliticization of *may* is impossible if *may* and its host are separated by a trace. That is, of the three environments listed below, only (23b,c) are possible.

- (23) a. *may *t* X
 b. may *pro* X
 c. may X

Under the Direct Complement analysis, the result of extracting the theme argument would be the structure in (24), which matches the configuration in (23a).



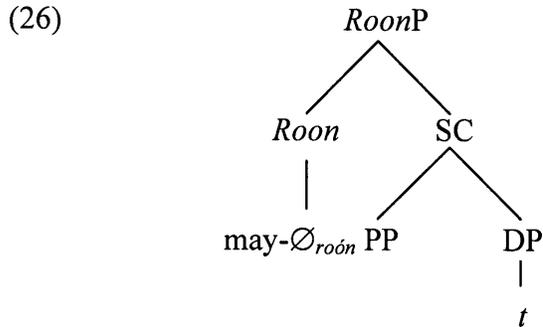
The contrast between (23a) and (23b) recalls in an interesting way the contrast in English with contraction of *want+to*. So-called “Wanna-contraction” is possible as long as *want* and *to* are not separated by a trace of extraction (Chomsky and Lasnik 1977).

- (25) a. Who do you_i want [PRO_i to invite t_i]?
 Who do you wanna invite?
 b. Who_i do you want [t_i to invite Bill]?
 *Who do you wanna invite Bill?

The same straightforward account is not possible under the Small Clause/Predicate Raising analysis. Under this analysis, existential sentences are derived by movement of the locative PP to Spec, TP from an underlying predicate initial position within a Small Clause (see (10) above). This movement routinely by definition leaves a trace that will intervene between *may* and any possible host for it. As we can see quite clearly from the examples in (16) above, moreover, Wh-extraction of the locative also does not force the presence of *roón* to support *may*.

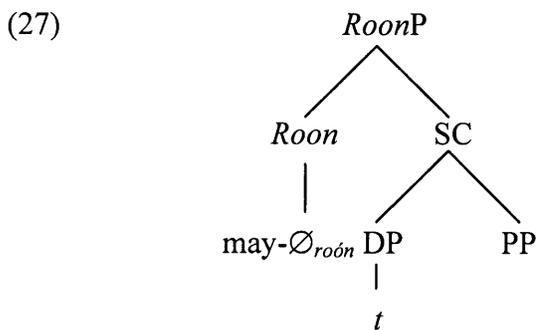
We noted in a section above that extraction of the theme argument should be blocked on the assumption that the locative phrase is the subject of the existential clause—i.e., because of the subject-only restriction on extraction. Suppose, on the other hand, that we make the assumption that when the theme extracts, the locative phrase remains in-situ. This may help explain the extractability of the theme, but will not explain the obligatory

presence of *roón* witnessed by the example in (21) above. In particular, extraction of the theme from the small clause will result in the structure in (26).



But given this structure, *may* should be able to find a host element within the PP which follows it, and since there are no intervening traces—the structure should be licit.

As a last resort, we could maintain the Small Clause analysis and explain the ungrammaticality of (21) if we assume that the Small Clause has a subject initial structure. Assuming this, the result of extracting the theme argument will be a structure like the one in (27).

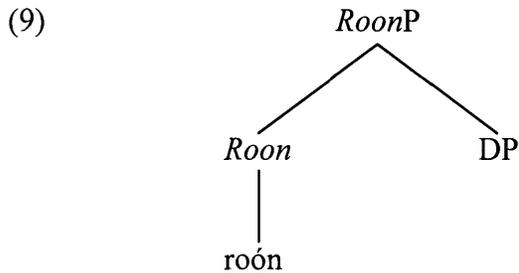


But to accept this would bring us back to the original problem that was noted in connection with the small clause analysis—namely, that it involves positing one and only one context where a clause is subject initial, rather than predicate initial.

5.3. Verbal and Non-Verbal Existential Constructions

From this point on, I will be assuming an unaccusative analysis of the predicate *roón*, as in (9) above—repeated below.

Roón as an unaccusative predicate



I will assume that this is basic argument structure of *roón* that is found in each of the existential constructions (1)-(2) as first described in section 5.2. The specific point that I will focus on for the remainder of this chapter is the differences between *non-verbal* existential constructions like (1) on the one hand, and *verbal* existential constructions like (2) on the other hand. In particular, much of the discussion below will be focused on justifying this distinction between nonverbal and verbal existential constructions, and also towards showing how this difference relates to other difference between the two types of existential constructions.

The main question I attempt to answer concerns Case assignment to the theme argument in both types of existential constructions. Recall that the theme argument of the verbal existential constructions is marked in a Non-Subject case form, which—based on the facts in (20) above (section 5.2.3.1)—we can assume to be the realization of Accusative Case. The theme argument of the non-verbal existential constructions appears not to bear any case marking at all—raising the question of how the Case Filter is satisfied in these constructions. Before getting to this contrast, however, let us ask a more general question about case marking in both types of existential constructions. With other unaccusative predicates in the language (both verbal as well as adjectival), the single

theme argument is generally marked in the Topic case (putting aside the Recent Perfective construction, see Ch. 4).

- (28) a. Baság ang tasa.
Broken T cup
'The cup is broken.' (E 164)
- b. Na-tapos ang tugtog.
Perf.ended T music
'The music ended.' (E 1383)

What accounts for the apparent deviance from this pattern in existential sentences? The most promising answer, I believe, involves the specificity/definiteness requirement on Topic marked elements (Schachter 1976; Keenan 1976; and, more recently—Richards 2000; Rackowski 2003). For instance, the Topic marked subjects in both of the examples in (28) are obligatorily assigned a specific/definite interpretation. As is quite common cross-linguistically, on the other hand, the theme argument of the existential sentence is obligatorily non-specific /indefinite. That this is true in Tagalog is shown by the examples in (29).

Definiteness Effect

- (29) a. May-roón ng manok /*ni Fred /*lahat ng mga manok
??there L chicken/ NS Fred/ all L Pl. chickens/
/*nito sa bahay
this Loc house
'There is a chicken/*Fred/*every chicken/*this in the house.'
- b. Nag-ka-roón ng gera/*(ng)lahat ng gera/*niyon sa Europe.
Perf. there acc. war/ NS every L war /*that Loc Europe
'There was (happened) a war/*the war/*every war/that in Europe.'

Since the specificity/definiteness of Topic marked arguments and the 'Definiteness Effect' of existential constructions conflict, the absence of the regular pattern of Topic

case marking on the theme intransitive theme argument of *roón* is—on the one hand—unsurprising. However, what remains to be explained is how the theme argument of the existential sentences can be licensed at all. This question is the focus of the next subsections.

5.3.1. The function of *may*

There are two central features of the non-verbal existential construction that we will be concerned with here, namely, the presence of *may* and the absence of any case marking on the theme argument. The best possible analysis of these two distinguishing factors, I argue, involves showing how these two properties are crucially related to one another. In particular, I will show that once we have a proper understanding of the function of *may*, we will also have an answer to the question of how the theme argument ends up satisfying the Case Filter.

Most descriptions of Tagalog have assumed *may* to be the main predicate of the non-verbal existential sentence. This assumption is hardly radical, given that the cognate of *may* in related Austronesian languages do seem to behave like a verbal predicate. In Malagasy, for instance, existential sentences are headed by the element *misy*. Unlike *may*, however, *misy* takes on the full range of tense/aspect inflection that is available to the language (examples from Paul 2000).

Malagasy Misy

- (30) a. Nisy zaza nitomany.
Pst.exist child crying
'There was a child crying.'
- b. Hisy zaza nitomany.
Fut.exist child crying
'There will be a child crying.'
- c. Misy zaza nitomany.
Pres.exist child crying
'There is a child crying.'

Despite the verbal properties that *may*'s cognate has in other Austronesian languages, I am going to argue that *may* in Tagalog is actually a determiner of the theme argument of the existential. The main argument for this conclusion is based on an observation that concerning those existential constructions that have both *may* and the overt predicate *roón*. In such sentences, in particular, one observes the presence of a linker element following *roón* and immediately preceding the (case-less) theme argument. (The examples below are repeated from above, with the linker element highlighted.)

- (31) a. Mayroó-*ng* aksidente dito kahapon.
??there L accident here yesterday
'There was an accident here yesterday.'
- b. May-roó-*ng* mga bargain sa Baclaran ngayón.
??there L Pl. bargain Loc Baclaran now
'There are now many bargains in Baclaran.'
- c. May-roó-*ng* manok sa bahay.
??there L chicken Loc house
'There is a chicken in the house.'

An important fact about this linker is that it systematically fails to show up in verbal existential constructions.

Chapter 5

- (32) Nag-ka-roón(*-ng) ng malaki-ng baha sa gitna -ng Luzon
Pst.there L NS big L flood Loc center L Luzon
'There was a big flood in the center of Luzon.'

The linker in Tagalog has at least two main functions. It serves as the 'link' between a noun phrase and its modifiers. For instance, the linker links a noun phrase to a simple adjectival modifier (33a), a determiner (33b), or a relative clause as in (33c).

Attributive, Determiner, and Relative Clause modification (respectively)

- (33) a. Buó' -ng koleksiyon ng mga nobela ni Dickens
complete L collection of Pl. novels NS Dickens
'complete collection of Dickens' novels.'
- b. Isa-ng pantalon
one L pants
'One (pair of) pants.'
- c. lalaki-ng nag-ta-trabaho dito.
man L A-f.Imperf.work here
'(the) man who works here.'

In its other function, the linker introduces embedded clauses (i.e., it is a complementizer).

Linker to embedded clause

- (34) a. Sinabi ko-ng [galit siya kay Maria].
Perf.said I L angry he Obl. Maria
'I said that he was mad at Maria.'
- b. Napansin niya-ng [um-i-iyak ang bata'].
Perf.notice he L A-f.imperf.cry nom child
'He noticed that the child was crying.' (Schachter and Otones, 178)

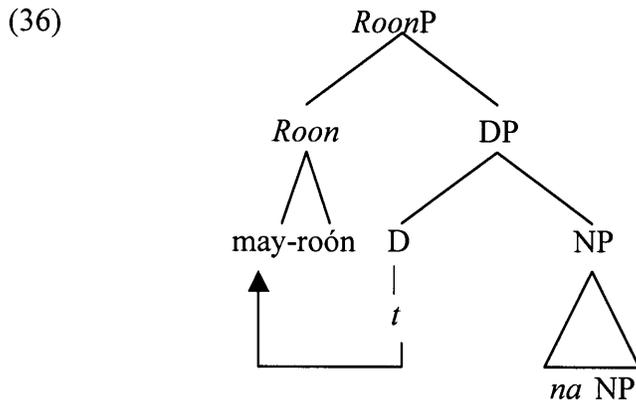
Now, we have already seen that the material following *roón* is not clausal in any respect. This means, therefore, that the linker in the examples in (31) is not functioning in the same way as in (34). It seems more likely that the linker in (31) is crucially involved in linking the theme NP to something that modifies it. Support for this conclusion comes in the form of the following observation: The linker in the examples in (31) is encliticized onto *roón*. This is only true, however, when *roón* and the theme argument are adjacent. Observe, for instance, that when *roón* and the theme argument are not adjacent, e.g., as when the locative argument comes between them, the linker stays with the theme NP.

- (35) a. May-roón sa Baclara [_{NP} -ng mga bargaen ngayón].
??there Loc Baclaran L Pl. bargain now
'There are bargains in Baclaran now.' (cf., (15b))
- b. May-roón sa bahay [_{NP} na manok].
??there Loc house L chicken
'There is a chicken in the house.' (cf., (15c))

What this seems to be telling us is that the linker is inextricably a part of the theme NP (*mga bargaen* 'bargains' and *manok* 'chicken') in these examples. Given this, it follows that the linker must be linking the NP to something. This something, I claim, is *may*.¹⁰

¹⁰ Though he does not provide any explicit arguments, Himmelman (to appear) also claims that *may* is a determiner—specifically, an existential quantifier.

Concretely, I propose that for the sentences in (31), *may* starts out as a constituent of the theme argument. In order to account for the surface word order, I assume that *may* head-moves onto *roón*, as illustrated in (36).^{11,12}



This analysis immediately explains the absence of a linker element in the verbal existential constructions, as in (31). In particular, since *may* is not present in verbal existential constructions, the linker has no function in these constructions.

Assuming this analysis to be correct, an important conclusion follows about the choice of argument structure for *roón*. In particular, the analysis of ‘*may*-incorporation’ would not have been possible under the Small Clause analysis, assuming—as in many traditional and contemporary theories of head-movement—that head movement from a non-complement position (i.e., from a subject) should be blocked (e.g., either by the CED

¹¹ Independently, it is possible for certain quantifiers to be stranded from the noun phrase that they modify. Consider the examples in (i)-(ii).

- (i) K-um-ain [ng [*marami-ng* mansanas]] si Maria.
 A-f.perf.eat NS many L apples T Maria
 ‘Maria ate many apples.’
- (ii) K-um-ain [ng [*marami t*] si Maria[-*ng* mansanas]].
 A-f.perf.eat NS many T Maria L apples
 (‘Maria ate many apples.’)

¹² Massam (2001) makes a suggestion regarding the existential predicate (*fai*) in Niuean that is very much in the spirit of the analysis I am proposing here. In particular, she suggests that the existential predicate—while a verb—is able to ‘confer referentiality on its internal argument’, essentially as if it were a determiner.

or the HMC). The proposed ‘*may*-incorporation’ therefore is quite closely dependent on the correctness of the Direct-Complement analysis for existential constructions.

5.3.2. Case, non-verbal predicates, and *may*

We have now arrived at a point in the discussion where we can put the pieces of the analysis together so as to address a couple of key questions. For instance, why does the theme argument of the non-verbal existential construction appear case-less? We have already discussed the reason for the absence of nominative case on the theme argument (e.g., specificity/definiteness), but why is Accusative also unavailable?

Recall from the previous chapter that an external argument is assigned Nominative Case from T^0 (realized as Non-Subject case unless it agrees with T^0). With respect to the present analysis of the existential construction, the theme argument is crucially an internal argument of the predicate *roón*. Given this assumption, it therefore follows that it is not assigned Nominative Case from T^0 —i.e., since this case is available only to external arguments of a predicate. Accusative Case is also unavailable. This also follows straightforwardly on the assumption that I have been maintaining so far—namely, that *roón* in non-verbal existential constructions is a non-verbal predicate. Non-verbal predicates (e.g., adjectives) cannot assign accusative case in general.

Overall then, there are straightforward reasons why all the typical Case licensing mechanisms for Nominative and Accusative Case are unavailable in the non-verbal existential constructions. And since there is no agreement with T^0 , Topic case cannot be assigned. How then does the theme argument satisfy the Case Filter? Let us suppose, following an idea of Aoun (1982) that the requirement that an argument be Case licensed is part of a more general condition on argument visibility. Following Baker (1996), we might also assume that Case licensing is not the only way for an argument to be ‘visible’. For instance, Baker proposes the condition in (37) as his *Polysynthesis Parameter*.

Morphological Visibility Condition (MVC, Baker 1996)

- (37) A phrase X is visible for theta-role assignment from a head Y only if it is co-indexed with a morpheme in the word containing Y by either:
- (i) an agreement relationship, or (ii) a movement relationship.

For Baker, the condition in (37) is intended to capture the observation that a number of so-called polysynthetic languages are heavily pro-drop and make extensive use of noun incorporation. Tagalog is not a polysynthetic language by any stretch of the imagination. It is possible to imagine, however, that in addition to its usual means of Case licensing to ensure visibility, Tagalog also allows visibility to be satisfied in one of the ways stipulated by the MVC in (37). Concretely, the movement relationship between the predicate *roón* and the determiner element *may* in (36) meets the second condition of (37)—i.e., visibility by movement.¹³ If we assume that Tagalog allows incorporation in principle as a means of satisfying visibility, then the issue how the Case Filter is satisfied is solved. In other words, the theme argument of the non-verbal existential constructions need not be Case licensed per se due to the fact that the visibility condition can be satisfied by alternative means—by incorporation of *may*.

5.3.2.1. Interlude

There are some complicated issues that arise given the analysis of *may* presented above. In this section, I will point out what these issues are, but I will not be able to offer a complete resolution of them.

A very simple prediction that follows from the analysis of *may* as a determiner of the theme argument is that *may* should not co-occur with other determiners. As far as I have been able to discover, this prediction appears to be partially borne out. It is certainly true, for instance, that when the theme argument in an existential sentence is quantified by one

¹³ Nichols (1998) also proposed that D-incorporation in a non-poly-synthetic language could satisfy the MVC.

of the cardinal determiners like *marami* ('many') or *ilan* ('a few'), *may* is not obligatorily present. The examples in (38) are representative.

- (38) a. Marami-ng sábwátab sa palasyo.
 much -L intrigue Loc palace
 'The palace was filled with intrigue.' (E 1122)
- b. Iilán na -ng bansá -ng [_ nasa kapangyarihan ngayón ng mga hari].
 few now L countries Rel. Loc rule now L Pl. king
 'Few countries now are under the rule of kings.' (E 1579)

My informant, for instance, judges these sentences as quite highly marked when *may* is present. On the other hand, it is not terribly difficult to find examples where *may* does precede another determiner. However, there are a few examples that I have found that seem to falsify this prediction.

- (39) a. ...[M]ay *marami*-ng mga tindahan ng "junk".
 may many L Pl. stores of junk
 'There are many stores (full of) junk.'
 (<http://www.airasia.com/>)
- b. May *ila* -ng mga genes na maaring mag-utos sa isa-ng selula ...
 may. A-few L Pl. genes that can A-f.inf.order Obl. one L cell...
 'There are a few genes that can order around a cell...'
 (*Ano ba ang kanser?*, <http://www.cancervic.org.au/cancer1/>)

One possibility here is that items like *marami* and *ilan* in (39) are being analyzed as adjectives (Higginbotham 1987). If so, there might then be no reason to expect them not to be compatible with *may*. Independently, *marami* and *ilan* (as well as a few other elements) can function as the main predicate of a clause—a fact that would be consistent with their adjectival status.

- (40) a. Marami ang mga bulaklak.
 many T Pl. flowers
 ‘There are many flowers’ (lit., ‘The flowers are many.’)
- b. Ilán ang kaibigan ni Jose.
 a-few T friends of Jose
 ‘Jose has a few friends.’ (lit., ‘The friends of Jose are a few.’)

One may wonder whether or not *may* can co-occur with a Negative Polarity item similar to English *any*. NPI *any* in English is rendered as *kahit* (‘even’) plus a particular form of wh-pronoun (*sino+man* ~ ‘whoever’; *ano+man* ~ ‘whatever’).

- (41) Hindi’ ma-bu-bu-hat ng kahit sinuman ang kaho-ng iyon.
 Not able.lift.Imperf NS even what+one T box L that
 ‘That box can’t be lifted by anyone.’ (S&O, 1976)

Apparently, it is possible also for *may(roón)* to co-occur with one of these NPI’s—though a bare infinite form may also be used to express the same meaning.

- (42) Hindi’ ko in-isip na mayroó -ng (kahit sino-ng)
 Not I Obj-f.past.thing that may.there L even who L
 tao doon.
 person there
 ‘I didn’t think that there was anyone there.’

It is not clear, however, that even an item like *kahit* should be incompatible with *may*. It can, for instance, appear in co-occurrence with other elements that might plausibly be analyzed as determiners.

- (43) Hindi pa ako na-ka-punta kahit isa-ng practice
 not still T.I Perf.able-go even one L practice
 ‘I wasn’t able to go to even one practice.’

(<http://greenarcher.yehey.com>)

Of course, examples like (43) could be consistent with an analysis in which *kahit* is a determiner, and *isa* an adjective. But, if this is so, then might be possible to claim that *may* is also an adjective, i.e., and not a determiner as proposed in the earlier discussion.

A resolution to these questions requires a systematic investigation into the structure of noun phrases and nature of determiner elements in Tagalog in general. Unfortunately, this task is beyond the scope of the present work, and will therefore have to be put aside for future work. Let me just note that, as far as I am presently concerned, it does not much matter whether *may* is actually a determiner or an adjective. All that is crucial is that it forms a constituent at some point with the theme argument of the existential construction.

5.3.3. The Verbal existential construction

Let us turn finally to verbal existential constructions. (Based on the discussion from section 5.3.2., I gloss the case marker on the theme argument as Accusative as opposed to, say, Nominative).

- (44) a. Mag-ka-ka-roón ng parada dito bukas.
 Imperf.be+there NS parade here tomorrow
 ‘There will be a parade here tomorrow.’
- b. Madalas na nag-ka-ka-roón ng lindol sa Japan
 frequent L Imperf.be+there NS earthquake Loc Japan
 ‘There are frequent earthquakes in Japan.’
- c. Nag-ka-roón din ng eksibit ng mga aklat at larawan...
 Perf.be+there also NS exhibit of Pl. book and painting
 ‘There was also an exhibit of books and paintings...’

(<http://www.dilnet.upd.edu.ph>)

The particularly interesting properties of verbal existential constructions—when contrasted with non-verbal existential constructions—are the absence of *may* and Accusative Case on the theme argument. Given the analysis of the non-verbal existential constructions above, however, the presence of these two properties together should come as no surprise. That is, since there is apparently a Case assigner available to license accusative on the theme, there is no need to employ ‘*may*-incorporation’—as is necessary in the non-verbal existential constructions where there is no Case assignment to the theme argument. (This, of course, also explains the absence of a linker in verbal existential constructions—e.g., as in (32) from above.)

The other noticeable thing about verbal existential constructions is the presence of the prefix *mag-ka*. With the exception of the recent perfective aspect, *mag-ka-* appears to be able to carry inflection for all the major tense/aspect distinctions. This is, in point of fact, my main motivation for calling them verbal existential constructions. One way of

thinking about *mag-ka-* is that it is to the verbal existential construction what *may* is to the non-verbal existential construction. In other words, *mag-ka-* is the crucial key to understanding how Case licensing is accomplished in the verbal existential construction.

As in Chapter 4, we can assume that the source of accusative case is the verbal head—*v* (see, e.g., Chomsky 1995; Arad 1998) which projects a *vP* structure. The Tagalog prefix *mag-*, in particular, seems to be a good candidate for expressing the content of this head. Many minimal verbs in the language consist simply of a root plus *mag-*. Consider, in particular, the corresponding pairs of verbal and non-verbal predicates in (45).

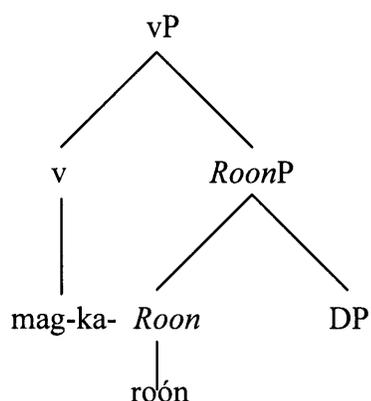
(45)	bago ‘new’	<i>mag-bago</i>	‘become new’
	abogado ‘lawyer’	<i>mag-abogado</i>	‘become a lawyer’
	sikíp ‘crowded’	<i>mag-sikíp</i>	‘become crowded’
	dilim ‘dark’	<i>mag-dilim</i>	‘become dark’
	langó ‘drunk’	<i>mag-langó</i>	‘become drunk’

The meaning of *mag-* in intransitive contexts such as these, therefore, seems to be that of inchoativity—i.e., *become* (cf., Travis 2000, 2003). Regarding *ka-*, this element has been analyzed in various works as a marker of telicity (Travis 2000, 2003; Dell 1983). It is commonly found, for instance, with psych-verbs, which are arguably inherently telic predicates. Compositionally then, the meaning of the verbal existential predicate presumably means something like: ‘become existent’.

Now, we can assume *mag-ka-* to represent the core content of the verbalizing head—*v*. Concretely, we can assume that verbal existential constructions are derived simply by placing *RoopP* in the context of this verbalizing head, as in (46).

The verbal existential construction

(46)



Adopting this structure, we can attribute the source of accusative case on the theme argument to the presence of *v*. Just as we pointed out in connection with non-verbal existential constructions, it is important to point out once again that the explanation of how the theme argument gets Case licensed is crucially consistent with the the Direct-Complement analysis that was argued for in preceding sections.

5.3.3.1. *Burzio's Generalization*

There is an interesting implication that should be pointed out with respect to the analysis of verbal existential constructions just presented. I have assumed so far, in a way that seems uncontroversial—that *roón* is unaccusative in the sense of not taking an external argument. I have also claimed in the analysis of verbal existential constructions that the theme argument is assigned accusative Case from *v*. The issue here concerns Burzio's Generalization—i.e., the generalization that only verbs that license an external argument can also license an accusative object (Burzio 1986). (See also Borer 1986, who discusses a case of the Hebrew existential predicate *yeS*, which, in certain dialects apparently, can assign accusative Case to its complement).

In much contemporary theorizing, on the other hand, it has been argued that Burzio's Generalization can (or should) be replaced by an analysis in terms of 'Dependent Case'.

Dependent case is the idea that accusative case can be assigned in a clause only once nominative case has been assigned. That is, for clauses containing only a single argument, nominative case ‘outranks’ accusative case. If we accept this as a correct generalization that holds for all languages, then—any way we look at the picture—Tagalog seems to be telling us something either about itself or about the theory.

The simple picture of dependent case can be maintained if we assume that nominative case is assigned in existential sentences in Tagalog—not to an argument, per se, but to a (null) expletive. This would give us the rather well-documented ‘impersonal’ analysis of existential sentences.

Alternatively, we might conclude that the theory of dependent case is not so simple. We might have to say, for instance, that the “nominative outranks accusative” pattern interacts with other constraints of the language. In particular, we have already seen that nominative case in Tagalog typically entails specificity/definiteness, but that this requirement conflicts with the requirement that the theme argument in an existential sentence be non-specific/indefinite. To make these independent constraints interact with one another in a way that derives the correct surface pattern seems to call for a somewhat more ‘Optimality Theoretic’ approach than I am prepared to give here.

5.5. Conclusion

This investigation into the syntax of existential construction in Tagalog has provided us with a fairly narrowed and controlled testing ground for investigating hypotheses concerning the argument structure principles of non-verbal and verbal predicates. Concretely, I hope to have shown by now that the Direct-Complement analysis is the best available analysis for both non-verbal and verbal existential constructions alike. On the side of non-verbal existential constructions, the Direct-Complement analysis allowed us to give a fairly straightforward analysis of ‘*may*-incorporation’, which I claimed was responsible for the peculiar Case licensing properties of non-verbal existential

constructions as well as for the peculiar linker facts. On the side of verbal existential constructions, the Direct-Complement allowed us to provide a simple story to explain the source of accusative Case licensing for the theme argument.

According to the story I have told here, therefore, the difference between a non-verbal category and a verbal category cannot be stated in terms of differential argument structure properties: Non-verbal *roón* and verbal *roón* have identical argument structures—they differ only in the morpho-syntactic context in which they are found. This view differs sharply from other views of how non-verbal and verbal categories are related to one another. Recall, for instance, the analysis of adjectival passives proposed by Levine and Rappaport (1986). For them, adjectival passives are derived from verbal passives, and one of the effects of this is an obligatory ‘externalization’ of the verb’s internal argument. For them, this is a consequence of the assumption that adjectives are obligatorily ‘external predicators’. Baker (2003) takes this idea further, as we have discussed. Based on these kinds of assumptions, therefore, we might have expected to find some difference between non-verbal and verbal existential constructions with respect to *roón*’s argument structure. But, in fact, it was the opposite conclusion that was reached.

Chapter 6.

Phrase Structure of Non-Verbal Clauses

6.1. What is At Stake?

In the previous chapters, we have reviewed evidence from Tagalog showing that Non-verbal and Verbal categories do not differ with respect to the ways they project their argument structure. We have seen, in particular, that both verbal as well as non-verbal categories (e.g., pairs like *basag* (adjective, ‘broken’) and *ma-basag/b-um-asag* (verb, ‘be broken/break’); *may-roon* (non-verbal, ‘there is’) and *mag-ka-roon* (verbal, ‘there is’)) share identical argument structures with respect to selection for an internal theme argument.

An important question to ask at this point is whether or not anything is lost by rejecting the assumption that verbal and non-verbal categories universally differ with respect to their argument structure properties—specifically with respect to the ability of verbal but not non-verbal categories to license internal theme arguments. In particular, does this assumption about verbal and non-verbal argument structure differences help us to explain other properties of verbal and non-verbal categories that go beyond argument structure differences? In most cases where the claim has been made, the answer seems to be no. The claimed difference between adjectives and verbs with respect to the ability to license an internal theme argument is not explicitly correlated in these works with any other major differences between the two categories.

An important exception to this, however, is the work of Baker (2003). Baker offers the first attempt to show how argument structure differences between verbs and adjectives might also help to explain differences in clausal architecture between verbal and non-verbal sentences. Concretely, Baker aims to show how differences in argument structure (i.e., with respect to internal theme argument licensing) also might provide an

explanation for why, for instance, verbs can inflect for tense/aspect, but adjectives cannot.

Baker's main claim is that since adjectives are incapable of licensing a theme argument internally, an argument bearing this role must be licensed in the specifier of a functional projection—PredP. Baker takes this proposal one step forward, claiming that it is the presence of this functional projection that explains why adjectives (as well as nouns) cannot inflect for tense in many languages. Concretely, Baker claims that tense (syntactically, the head of a clause— T^0) can only be combined with lexical categories (e.g., V^0 , A^0 , N^0 ; but never, say, C^0 , D^0 , or even Pred^0 —assuming this to be a functional category). He states this constraint (or rather, tendency) as in (1).

- (1) (In certain languages, certain) tenses must attach to a lexical category.

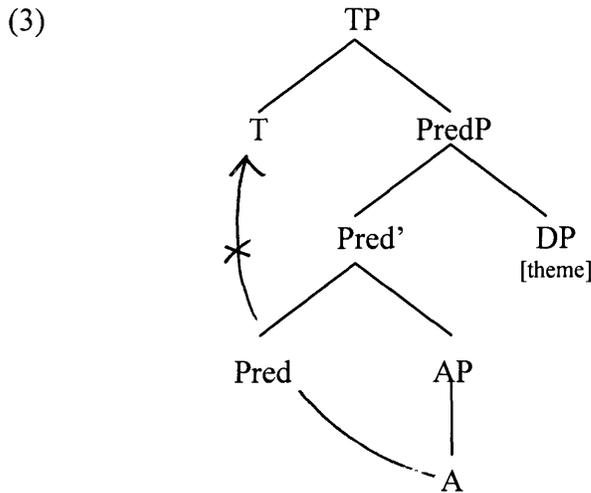
Suppose the language in question—e.g., Tagalog—is a language where T^0 can only combine syntactically with lexical categories. Assuming this, and assuming that AP predicates are always contained within a PredP structure, it follows for Baker that T^0 could combine with an adjective, A^0 , only if A^0 were to move directly to T^0 (or T^0 to lower directly to A^0) without first moving to the intervening function head— Pred^0 . This movement, however, violates a well-known constraint on head-to-head movement relationships—namely, the Head Movement Constraint of Travis (1984), Baker (1988), and Chomsky (1986).

The Head Movement Constraint

- (2) A word-level category X can move and adjoin to another word-level category Y
Only if the phrase headed by X is immediately dominated by a projection of Y.

Since Tagalog appears to be a language where adjectives do not have the same inflectional properties as verbs—i.e., they do not inflect for tense or voice—we can put aside any questions that might arise with respect to the parenthetical condition in (1). All things being equal, Baker's proposal can straightforwardly be applied to Tagalog

(assuming the presence of PredP) to provide the basis for explaining the absence of tense inflection on adjectives. Concretely, assuming that Tense can only be related to a lexical category in Tagalog according to (1), and assuming the constraint on head-movement in (2), then the derivation in (3) can be ruled out.



The primary goal of this chapter will be devoted to asking whether the picture in (8) could be right for Tagalog as well. Given that Tagalog verbs and adjectives also differ with respect to their inflectional properties (with respect to aspect, on which see below), the question I want to ask is whether or not there is a process of head movement involving both verbs and adjectives, targeting some position within the functional domain of the clause. Significantly, the evidence that I present below will show that both verbs and adjectives can raise, and that they must be raising at least as high as some position in the functional domain of the clause. Overall, what the data below will show is that there is no evidence for positing functional structure in clauses with a non-verbal predicates that is not also present in clauses with a verbal predicate.

6.1.1. Tense vs. Aspect

Baker's proposal sketched above concerns tense inflection on verbs and adjectives. Thus, for him, the motivation for positing functional structure (PredP) in non-verbal clauses specifically concerns the relationship between non-verbal predicates and T^0 . In particular, if a non-verbal element can raise to T^0 (as it can in some languages, according to him), then it should take tense inflection morphology. A problematic case for Baker would involve a language where non-verbal elements raise to T^0 but crucially *do not* wind up with tense inflection morphology.

There is a difficulty involved in evaluating Baker's proposal with respect to Tagalog. In particular, it is claimed in most descriptions of Tagalog that the verbal morphology that is found on verbs is inflection for aspect. It is often claimed—in other words, that Tense is actually never morphologically marked in Tagalog—for either verbal or non-verbal categories. Thus, although most Tagalog verbs can be translated into an English verb indicating tense, what a verb actually inflects for in Tagalog is whether an event is begun or ongoing (Imperfective), completed (Perfective) or not yet begun (Contemplated). A verb like *k-um-anta* ('sing') in the imperfective (*k-um-a-kanta*) can be used either as a past progressive ('She was singing.') or as a present progressive ('She is singing.').

The important fact is that verbs and adjectives in Tagalog do differ with respect to inflection for aspect. Verbs do, but non-verbal categories do not inflect for aspect. Suppose, then, that the question we are ultimately interested in is whether or not verbs as well as non-verbal elements raise to a functional head in the clause that encodes aspect—say, Asp(ect)⁰. Assume, for instance, that ApsP dominates vP in addition to Baker's PredP.

Overall then, in evaluating Baker's proposal, the only change we are making is one that involves the characterization of the specific category (Tense versus Aspect) relevant to the inflectional differences between the verbs and non-verbal categories. The predication

that we are testing, however, is fundamentally the same. Namely, if verbs inflect for aspect but non-verbal categories do not, this should be encoded in the syntax with respect to the heights to which head movement of the different categories can reach. The evidence that I present with respect to Tagalog crucially shows that the verbs as well as non-verbal categories (namely, adjectives) can raise out of the thematic domain of the clause where they are based generated to a position that is—in all likelihood—in the functional layer of the clause—e.g., either as far as T^0 or as low as Asp^0 .

6.2. Evidence for ('Verb-Stranding') Verb Phrase Ellipsis

I will start by reviewing the evidence for the existence of VP-ellipsis in Tagalog, as presented most fully in the work of Richards (2003). Recall from Chapter 2 that there are basically two types of elliptical constructions in Tagalog—or, more generally—two ways of expressing 'redundant' information. Consider, for instance, the possible continuations (4a,b) to the first conjunct of the sentence. In (4a), the antecedent VP—*nag-bigay ng aklat kay Norvin* ('gave a book to Norvin')—supplies the meaning if *e*, though nothing in the continuation corresponds to overtly to the antecedent VP. In (4b), on the other hand, *e* is understood in the same way, but in this case the verb of the antecedent clause—*nagbigay* ('give')—is overt.

(4) Nag-bigay si Juan ng aklat kay Norvin...

A-t.perf.give T Juan NS book Obl. Norvin

a. ...at ganoon din [*e*] si Maria.

and same also T Maria

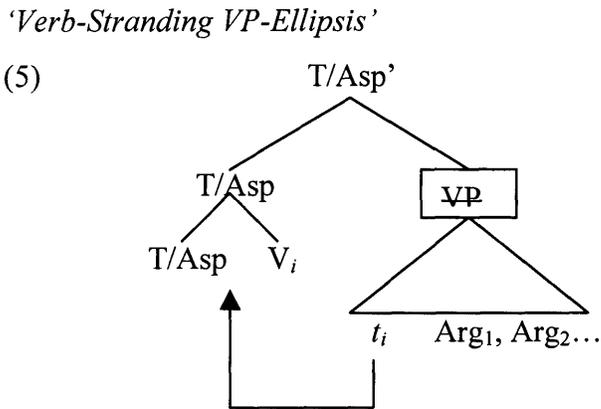
b. ...at *nag-bigay* din [*e*] si Maria.

and A-t.perf.give also T Maria

'Juan gave a book to Norvin, and so did Maria.'

It is structures of the kind shown in (4b) that we will be primarily interested in here. In the ellipsis literature, this type of ellipsis has received the name ‘Verb-Stranding VP-ellipsis’ (Goldberg 2003; 2005 for detailed discussion and references). This type of ellipsis has been documented now for a number of unrelated languages: Hebrew (Doron 2000, Goldberg 2003); Irish (McCloskey 1991; 2004); and Swahili (Ngoyani 1996). In addition to having this type of ellipsis, all of these languages have been demonstrated to be languages where Verb-raising—i.e., V-to-T/Asp movement—occurs.

The fact that languages with this type of VP-ellipsis construction also have Verb-movement provides the basis for an understanding of why ellipsis in these languages appears to be a formally different type of construction, even though it displays many—if not all—of the same properties of VP-ellipsis in a languages like English. Concretely, it has been proposed that VP-ellipsis in these languages—just as in English—targets a VP, but that instead of deleting a VP containing the verb (as in English), VP-ellipsis in these languages targets a VP from which the verb has overtly raised, prior to deletion. The structure in (5) immediately below provides a schematic illustration of how these VP-ellipsis structures are formed.



This analysis accords with the basic structural condition on ellipsis discussed in work by Lobeck (1990, 1991) and others (Merchant 1998). Concretely, the elided category is licensed by virtue of being governed by the head of the clause, T^0 (cf., in English, **Bob loves music and Mary *(does) too*). Now that it is clear what kind of syntactic

configuration we are interested in, let us turn to some of the empirical evidence that verifies that this examples like (4b) above genuinely do instantiate VP-ellipsis—i.e., of the Verb-stranding type—for Tagalog.

6.2.1. Richards (2003)

Richards (2003) presents three kinds of evidence to support the claim that Tagalog has V-stranding VP-ellipsis. Two types of evidence that he provides are interpretational: First, VP-ellipsis in Tagalog shows the same ambiguous pattern of ‘strict’ and ‘sloppy’ readings for pronouns contained within ellipsis sites. Second, Richards shows that other interpretations for pronouns contained in the site of ellipsis that would be consistent with a *pro*-drop analysis of ellipsis (see below) are unavailable. Third and finally, Richards also presents syntactic evidence on the basis of clitic behavior to argue that VP-ellipsis in Tagalog does indeed exist.

The first type of evidence that indicates that elliptical constructions like (4b) are genuine cases of VP-ellipsis comes from interpretive properties of the elided category. In particular, VP-ellipsis in Tagalog displays a characteristic kind of ambiguity with respect to pronouns contained within the elision site. Using the terminology of Sag (1974), a pronoun contained within an elided category can receive either a ‘strict’ or ‘sloppy’ interpretation. Consider the sentence in (6), from Richards (p. 230, example (8)).

‘Strict’—‘Sloppy’ Ambiguity

- (6) Nag-bigay si Juan ng bulaklak sa kanya-ng asawa,
A-t.perf.give T Juan NS flower Obl. his L wife
at nag-bigay din [e] si Bill.
and A-t.perf.give also T Bill
‘Juan gave a flower to his wife, and Bill did too.’

The second conjunct of this sentences may be interpreted either as: Bill gave a flower to Juan’s wife (=the ‘strict’ reading); or as Bill gave a flower to his own wife (=the ‘sloppy’ reading).

On the face of it, the existence of both strict and sloppy readings could in principle be consistent with an alternative analysis of (6)—namely, one which does not involve VP-ellipsis but rather *pro*-drop of the verb’s arguments. Richards discusses an additional interpretive fact that makes this possibility rather dubious. In particular, a prediction that follows from a VP-ellipsis analysis (on most accounts) is that elements in the ellipsis site should be syntactically parallel to elements in the antecedent. Consider, then, the examples in (7) below. (Richards 2003: p. 232, example (14))

- (7) S-in-untok ni Mike ang anak niya, at s-in-untok
 T-t.perf.hit NS Mike T child his and T-t.perf.hit
 din ni Jeanne [*e*].
 also NS Jeanne
 ‘Mike hit his child, and Jeanne did too.’

The ellipsis in this example can only be interpreted in one of two ways. It could mean that Jeanne hit Mike’s child (=the strict reading), or it could mean that Jeanne hit her own child (=the sloppy reading). What it cannot mean is that Jeanne hit Mike. This fact is rather mysterious if it were the case that the missing direct object of the second conjunct is simply a null pronoun—e.g., *pro*.

This fact should follow straightforwardly if there is a syntactic parallelism condition on ellipsis. Assuming such a condition, the reason why the absent reading is bad is due to the fact that the DP in the direct object position of the ellipsis site must be syntactically parallel to the DP in direct object position of the antecedent—i.e., it must of the form: $[DP\ D\ [D\ [NP\ son]]\ pro]$. Arguably, a noun phrase headed by a simple proper name does not have the same syntactic form as a possessive noun phrase of this sort. Thus, the absent reading can be ruled out by appealing to syntactic parallelism.

A final piece of evidence for treating the constructions in question as ellipsis comes from the obligatory presence of clitics. Richards notes, for instance, that when the antecedent clause of ellipsis contains a clitic (see (8a-b)), the clause containing the elided category must also have this clitic. When the antecedent clause does not contain a clitic as in (8c), then having a clitic in the second conjunct is optional.

- (8) a. S-in-abi ko-ng mag-bi-bigay *ako* ng pera sa simbahan
 T.t-perf.say I C A-t.fut.give I money Obl. church
 at nag-bigay nga [e] **(ako)*.
 and A-t.perf.give indeed I
 ‘I said that I would give money to the church, and indeed I did.’
- b. S-in-abi ni Juan na mag-bi-bigay *siya* ng pera sa simbahan
 T.t-perf.say Juan C A-t.fut.give he money Obl. church
 at nag-bigay nga [e] **(siya)*.
 and A-t.perf.give indeed he
 ‘Juan said that he would give money to the church, and indeed he did.’
- c. S-in-abi ko-ng mag-bi-bigay si Juan ng pera sa simbahan,
 T.t-perf.say I L A-t.fut.give Juan money church
 at nag-bigay nga [e] (siya).
 And A-t.perf.give indeed he
 ‘I said that Juan would give money to the church, and indeed he did.’

The important observation that Richards makes is that with other types of ellipsis—e.g., Complement of negation ellipsis and Sluicing—the facts concerning the obligatory presence of clitics are reversed. When the complement of negation is elided, as in (9) below, a pronominal clitic is not allowed near the site of ellipsis (Richards 2003: p. 235, example (21a)).¹

¹ One might wonder why, given (8c), it should not be possible in sentences like (8a,b) for the second conjunct to have an R-expression (name) in the elided conjunct instead of a pronoun. Plausibly, the reason why this is not possible has to do with the facts discussed in Chapter 2 which showed that a pronoun cannot precede its antecedent in coordinate contexts.

- (9) Hindi' ko alam kung nag-bigay ako ng pera sa simbahan,
 not I know if A-t.perf.give I money Obl. church
 pero sinabi ni Maria na hindi' (*ako) [e].
 but say NS Maria C not I
 'I don't know if I gave money to the church, but Maria said that I didn't.'

On the view that the sentences in (8) involve VP-ellipsis, the contrast between (8) and (9) can be accounted for in the following way: Supposing that the verb raises out of the VP to T⁰/Asp⁰, the clitic, assuming it to be an affix adjoined to the verb, will obligatorily also occur in T⁰/Asp⁰. Suppose that in the ellipsis in (9), on the other hand, that the verb remains inside the VP. If so, then the obligatory non-occurrence of the clitic flows from the fact that the verb and the clitic are contained within the elided constituent.²

If one were to assume that that the ellipsis constructions that we have been looking at are simply instance of the *pro*-drop of a verb's arguments, then it would be necessary to block *pro*-drop of pronominal clitic arguments whenever the verb is overt, and to force it whenever the verb is not. This is not something that we want to do in general. In particular, in contexts that do not involve what I have so far been identifying—along with Richards—as ellipsis, dropping a pronominal argument is licit. As pointed out in Richards (2000), for instance, the sentence in (10) with or without the pronoun is a perfectly licit response to the question 'Why is Juan sick?'

- (10) Baka k-um-ain (siya) ng tambakol.
 Maybe A-t.perf.eat he NS mackerel
 'Maybe he ate a mackerel.'

² Possible evidence for this analysis might be based on data discussed Chapter 4. Recall, for instance, that non-subject external arguments can appear pre-verbally in sentences containing negation. We can account for this by saying that when negation is present, verb-raising is optional. If so, then—assuming the external argument remains in-situ in Spec, vP—it will appear before the (unraised) verb. Assuming no movement of the internal argument (when non-subject), crucially, the internal argument will always appear post-verbal.

- (i) Neg+T [_{VP} DP_{ea} [V DP_{ia}]] (No V-raising, Neg-DP_{ea}-V order)
 (ii) Neg+T+V [_{VP} DP_{ea} [t_v DP_{ia}]] (V-raising, Neg-V-DP_{ea} order)

Thus, the paradigm represented by the examples in (8)-(9) cannot be satisfactorily explained under a *pro*-drop analysis of them.

6.2.2. Verbal Identity

In addition to Richards' arguments, there is one final empirical argument that we can give to support a VP-ellipsis analysis of sentences like (4b) above. Observe, in particular, that many of the examples of ellipsis considered so far involve an antecedent VP that contains an oblique argument. For an oblique element to be omitted under control from an antecedent, it must be omitted along with additional material. As the examples in (11) show, for instance, omitting just an oblique argument from the second conjunct is impossible. Although the examples below are grammatical, neither of them have an interpretation where the second conjunct includes the oblique argument of the first conjunct.

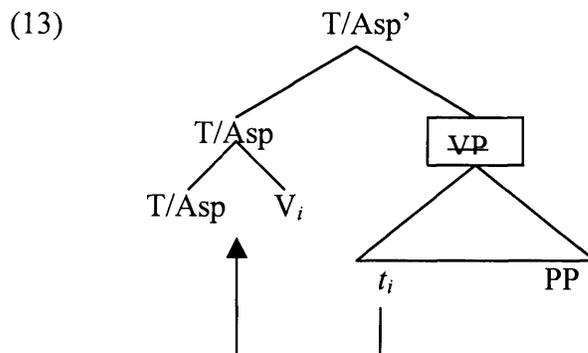
- (11) a. L-in-uto' ni Pedro ang pagkain para kay Maria,
T-t.perf.cook NS Pedro T food for Obl. Maria
at h-in-ugas-an niya ang mga pinggan.
and T-t.perf.wash he T Pl. dishes.
'Pedro cooked food for Maria, and he washed the dishes.'
(≠ ...he washed the dishes *for Maria*)
- b. Nag-bigay ng regalo si Maria kay Juan, at nag-padala
A-t.perf.give NS present T Maria Obl. Juan and A-t.perf.sent
ng liham ang mga bata.
NS letter T Pl. children
'Maria gave a present to Juan, the children sent a letter.'
(≠ ...the children sent a letter *to Juan*)

What the examples in (11) seem to show is that it is not possible to omit an oblique argument on its own. In other words, an oblique cannot be realized in the syntax as a null argument (e.g., *pro*). The only way to omit an oblique argument, in other words, is to

elide some larger constituent—e.g., VP—that contains the oblique. Significantly, if we construct an example that structurally parallels the examples in (11) in all respects except that we make the verbs identical—the resulting sentence is perfectly grammatical. In (12) below, for instance, the oblique argument is the only element omitted from the second conjunct (as in (11)), but in contrast to the examples in (11), its meaning is fully recoverable.

- (12) Nag-bigay si Maria ng aklat kay Juan, at nag-bigay
 A-t.perf.give T Maria NS book Obl. Juan and A-t.perf.give
 din si Norvin ng aklat.
 also T Norvin NS book
 ‘Maria gave a book to Juan, and Norvin also did (give a book *to Juan*)’

This paradigm follows as long as we make the natural assumption that VP-ellipsis requires the verb of the elided constituent to be identical with the verb of the antecedent VP. Concretely, in the example (12), the verbs are distinct making it impossible for VP-ellipsis to be involved. As such, the only way for the PP to be omitted is for it to be *pro*-dropped—an operation that is apparently unavailable to PP’s in general. In the examples in (11), on the other hand, there is verbal identity between the antecedent verb in the first conjunct and the stranded verb in the final conjunct. This fact means that VP-ellipsis could have taken place. In these cases then, omission of verb’s PP argument in the final conjunct is a not the result of *pro*-drop, but is rather the result of the omission of the larger VP-constituent that contains the PP argument. The structure in (13) will help to illustrate.



6.2.3. Interim Conclusion

I take it to be established at this point that the constructions like (4b), repeated here as (14), do represent genuine cases of VP-ellipsis.

- (14) Nag-bigay si Juan ng aklat kay Norvin
 A-t.perf.give T Juan NS book Obl. Norvin
 at nag-bigay din [e] si Maria.
 and A-t.perf.give also T Maria
 ‘Juan gave a book to Norvin, and so did Maria.’

Concretely, examples like (14) represent a type of VP-ellipsis (‘Verb-Stranding VP-ellipsis’) that is found in other languages that permit (or require) Verb-raising (V-to-T/Asp movement).

The question we want to ask now is whether or not this type of ellipsis is also attested for clauses whose main predicate is non-verbal—e.g., with adjectives. I will show in the next section that ellipsis is attested for non-verbal predicates as well. Crucially, I show that predicate ellipsis of non-verbal categories is fully parallel to VP-ellipsis—specifically, with respect to the ability to strand the head of the predicate.

6.3. Ellipsis of Non-Verbal Predicates

The examples in (15)-(16) below show that, as with clauses whose main predicate is a VP, an AP predicate can be either omitted entirely (as in (15,16a) under identity with an antecedent AP, or the head of the AP may remain overt while its arguments are omitted (see (15,16b)).³

- (15) S-in-abi ko-ng [takot si Maria sa iyo], at
 T-t.perf.say I L afraid T Maria Obl. you and
 a.tunay nga [e].
 true indeed
 b.tunay nga -ng takot siya [e].
 true indeed L afraid she
 ‘I said that Maria is angry with you, and she truly is (*angry with you*).’

³ It also appears to be possible for the head noun of a NP predicate to be stranded, as shown in (i).

- (i) Q: Iyan ba ay dahilan um-alis? A: Oo, iyan ay dahilan.
 that Q Inv. reason A-t.inf.leave Yes, that Top reason
 ‘Is that a reason to leave?’ ‘Yes, it is (a reason for leaving).’

The head of a PP predicate cannot be stranded, however.

- (ii) Q: Tungkol ba sa Ireland ang aklat na ito. A: Oo, tungkol *(sa Ireland).
 About Q Obl Ireleand T book L this yes about Obl Ireland
 ‘Is that a book about Ireland?’ ‘Yes, it is (a book about Ireland).’

I have not yet been able to investigate the properties of ellipsis with noun phrase predicates in much detail. For this reason, my main discussion of ellipsis with non-verbal predicates will focus on adjectives.

- (16) S-in-abi ni Maria-ng [galit ako sa bata-ng iyan], subalit
 T-t.perf.say NS Maria L angry I Obl. child L that but
- a. ...hindi' naman [*e*].
 Not really
- b. ...hindi' naman ako galit [*e*].
 not really I angry
- ‘Maria said that I am angry with that child, but I am not really
 (*angry with that child*)’

As in the previous section, we will be interested in the type of ellipsis represented by the (b) sentences, where the predicate remains overt. Just as we saw with the cases of VP-ellipsis, the elided category of an ‘A-stranding AP-ellipsis’ construction also show interpretation ambiguity with respect to having either strict or sloppy readings for pronouns contained within the ellipsis site. This fact is illustrated with the examples in (17).

- (17) a. [Abalá siya sa kanya-ng trabaho], at abalá ako din [*e*].
 busy he Obl. his L work and busy I too
 ‘He is busy with his work, and I am too.’
 (‘...I am also busy with my work’ (=sloppy); or
 ‘...I am also busy with his work’ (=strict))
- b. Si Maria ay [pagod na mag-linis ng kanya-ng kuwarto], at
 Maria Top tired C A-t.inf.clean NS her L room and
 pagod din [*e*] ako.
 tired also I
 ‘Maria is tired of cleaning her room, and I am too.’
 (‘...I am also tired of cleaning *my* room’ (=sloppy); or
 ‘...I am also tired of cleaning *her* room’ (=strict))

Notice that in the examples seen so far, the complement of the adjective that is omitted—i.e., by AP-ellipsis—can be an oblique PP argument (15, 16, 17a). This fact

provides us with further indication that we are dealing with ellipsis in these examples, and not, say, a construction that simply involves *pro*-drop of the adjective's arguments. As we saw earlier, oblique arguments cannot be omitted unless they are omitted by virtue of being contained in a larger ellipsis site. We can demonstrate that this is also true for adjectives. Omission of an adjectives oblique argument is impossible when the adjective in the second conjunct of a coordinate structure is not identical with the adjective in an antecedent conjunct. This is shown in (18).

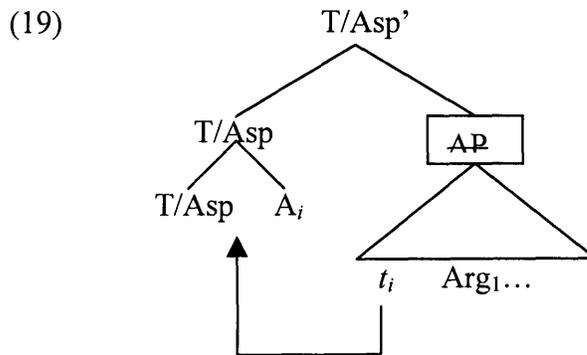
- (18) S-in-abi ko-ng [galit si Maria sa iyo], subalit
 T-t.perf.say I L angry T Maria Obl. you but
 tunay, takot siya.
 actually afraid she
 'I said that Maria is angry with you, but she is actually afraid.'
 (≠ '...but she is actually afraid *of you*')

Because an elided category must have an identical antecedent, the sentence in (18) cannot be an instance of ellipsis. Given the observation that an oblique argument cannot be dropped unless they it is contained within a larger constituent that is itself elided (see the discussion surrounding (11)-(12)), it follows that the PP argument of the adjective contained in the first conjunct (*galit* 'afraid') cannot be understood also as an argument of the adjective contained in the second conjunct (*takot* 'afraid'). Crucially, this observation provides us with strong justification for assuming that (16)-(17) involve AP-ellipsis.

6.4. Summary

Since Tagalog has ‘A-stranding AP-ellipsis’ in addition to ‘V-Stranding VP-ellipsis’, the conclusion that we can safely make is that, alongside (optional) V-to-T/Asp movement, Tagalog also has (optional) A-to-T/Asp movement. In other words, the derivation and structure of the AP-ellipsis constructions that were the focus of the preceding section can be represented schematically as in (19).

‘Adjective Stranding AP-ellipsis’



To summarize: It appears that with respect to the relative height that verbs and adjectives can reach in the clause, there is no significant or detectable difference between the different lexical categories.

We can now bring the discussion back to Baker’s analysis of non-verbal predication (by adjectives in particular). For Baker, an AP predicate is selected by the functional head— Pred^0 , which is required because adjectives are not predicates and therefore cannot be composed with a DP argument on their own. Crucially, Baker assumes that the property that a category inflects for tense and/or aspect is crucially determined by the ability of the category to be associated (e.g., by head-movement) with the tense head of the clause— T^0 . The reason why adjectives do not bear inflection for tense and/or aspect, recall, is due to the presence of the functional head Pred^0 which intervenes between T^0/Asp^0 and the AP.

If the argument from ellipsis presented above is correct, however, than this story cannot be the right one in general for why adjectives do not bear tense-aspect inflection. In other words, we have direct evidence for a movement relationship in Tagalog holding between T and the head of the AP—yet still, adjectives do not bear tense-aspect. To state the conclusion in another way, it would appear that the syntactic relationship of T^0/Asp^0 with a predicate head is unrelated to whether or not the predicate bears inflection for tense/aspect. Of course, Baker does keep open the possibility that T^0/Asp^0 could adjoin to other functional heads like Pred. If this were so for Tagalog, one could imagine that the head of A^0 (the head of AP) first raises to $Pred^0$, and then the complex head $Pred^0+A^0$ raises further to T^0/Asp^0 . Allowing this, however, would mean losing the generalization that Baker is attempting to capture—namely, that $Pred^0$ block the relationship between T^0/Asp^0 and A^0 in languages where adjectives do not inflect for tense-aspect, but while it does not for languages that do seem to have adjectives with tense-aspect inflection. Allowing Tagalog A^0 's to raise to T^0/Asp^0 via $Pred^0$ would entail a third type of language—i.e., a language where A^0 is able to reach T^0/Asp^0 , but where A^0 still is not able to bear the morphological spell-out of T^0/Asp^0 's features. I assume that admitting this third type of languages is not a desired result of Baker's system, and that—at least as far as Tagalog is concerned—the evidence seems to be lacking that clauses with non-verbal AP predicates do not also contain the function projection $PredP$.

6.5. What Determines a Category?

We saw in the previous section that verbal as well as non-verbal predicate heads (V^0 and A^0 , for instance) can raise to somewhere in the functional domain of the clause, e.g., to T^0/Asp^0 . Although this fact was used to argue that Baker's account of the different inflectional properties of verbs and adjectives cannot be right for Tagalog, it does raise the question of what is the right account for this grammatical difference between verbal and non-verbal categories. In particular, one of the successful aspects of Baker's proposal is that he is able to account for differences between verbs and non-verbal categories without recourse to the stipulation of constraints like the one that says that Tense only attaches to elements that are [+V], etc. Instead, he is able to provide a principled structural reason why generalizations of this sort might emerge. If the conclusions that I have reached above are correct, it seems that I will have to be comfortable stipulating that, although adjectives can raise to T^0/Asp^0 , they cannot morphologically spell-out the features of this inflection.

Although I am skeptical that all differences between verbs and non-verbal categories can be given a structural account—in particular, in terms of the presence or absence of $Pred^0$ —I do want to offer a tentative suggestion about how one might approach this problem. I also discuss another differences between verbal and non-verbal categories argued by Baker to follow from his proposal—namely, the difference between verbs and non-verbs with respect to the ability to form lexical causatives.

6.5.1. Aspect

Why can verbs but not adjectives inflect for aspect in Tagalog? In the previous two chapters of this dissertation, I made a point regarding the transparent relationships between most verb-adjective pairs. In particular, we saw in Chapter 4 (section 4.2.) that adjectives and verbs are distinguished categorically in a number of grammatical contexts (e.g., ability to occur after *maging* ('to become'); with respect to plural formation morphology, and with respect to intensification). From a narrower morphological point of view, however, the difference between a verb and an adjective seems to simply be about whether the category in question inflects for aspect or not. This observation raises the following possibility: Instead of stipulating that only verbs can combine with aspect, suppose we say that the result of combining aspect with a (possibly category neutral) root is what we call a 'verb'.

Concretely, suppose we take the view that a lexical item is categorized as a verb only when it is the complement to a syntactic head that crucially encodes Aspect. For instance, we might assume that some instantiations of v^0 are listed in the lexicon as (20a), while a^0 is listed as in (20b) (where F_x stands for other possible features that might be associated with the verbal or adjectival head):⁴

- (20) a. v : [α Aspect, ... F_x]
 b. a : [0Aspect, ... F_x]

According to this view, predicates themselves are unspecified with respect to whether or not they denote states or events. This is an important point to make in light of one of Baker's arguments in support of his proposal. In particular, Baker claims that his proposal has advantages over 'functionalist' views of the difference between verbs and

⁴ I say 'some instantiations' of v^0 since it need not be that all elements that are verbs bear aspect. Verbs like *dapat* ('must'), *gusto* ('want'), *maaari* ('can'), etc. (what Koreger 1993 refers to as "Modal Verbs") do not inflect for aspect but at the same time do not appear to behave categorically like verbs.

adjectives, which might claim that verbs bear tense/aspect inflection because they refer to “transitory events”, and therefore must be located in time. Adjectives, on the other hand, typically refer to permanent states and therefore do not need to be located in time (hence, they do not inflect for tense/aspect). Baker’s reason for rejecting this view is based on the existence of stative verbs like *exist*, *love*, *equals*, etc., which refer to permanent properties (i.e., they are stative) but nonetheless are verbal and inflect for tense. The perspective that I am proposing is different, however, in that it views all predicates as unspecified with respect to whether they denote events or states. A predicate like *bigat* (‘heavy’), for instance, can be expressed as a state when placed into an adjectival context (*ma-bigat* (‘heavy’)) or can express an event when placed into a verbal context (*b-um-igat* ‘to become heavy’). In other words, it is the function of the verb forming or adjective forming heads (a^0 or v^0)—but not the predicates themselves—to ‘package’ the predicate with respect to its aspectual categorization.

A piece of supporting evidence that this general view is correct comes from coordination. In Chapter 2, we encountered several instances of sentences with coordinated VP’s. All of these examples involved coordinated VP’s where the verb in each of the conjuncts had exactly the same aspectual feature. It is apparently not required for the VP’s to have identical aspect, however. Consider the examples in (21), for instance.

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- (21) a. [K-um-a-kanta sa San Carlos] at [s-um-ayaw sa Santa Cruz]
A-t.Imperf.sing Loc S. C. and A-t.Perf.dance Loc S. C.
ang pareho-ng babae.
T same L woman
'The same woman is singing in San Carlos and has danced in Santa Cruz.'
- b. [Ka-kanta sa San Carlos] at [s-um-ayaw sa Santa Cruz]
A-t.Cont.sing Loc S. C and A-t.perf.sing Loc S. C.
ang pareho-ng babae.
T same L woman
'The same woman is going to sing in San Carlos and has sung in Santa Cruz.'

If the inflection seen on verbs were the morphological spell out of the features contained within the inflectional head of the clause T^0 —then these examples might have posed a serious problem for the claim that they involved vP-coordination as opposed to, say, TP-coordination. From the point of view that the inflection seen on verbs is a spell-out of an aspect feature on the head of vP (v^0), this problem does not arise.

6.5.2. Causatives

In addition to explaining why tense inflection cannot combine with non-verbal categories, Baker also attempts to explain other inflectional differences between verbal and non-verbal categories. In particular, using very much the same logic as he did to explain why non-verbal categories cannot combine with tense, Baker also seeks out to explain why non-verbal categories can also not—in general—combine with causative morphemes in languages that have them. In Chichewa, for instance, the causative morpheme *-ets-* can combine with verbs to form words like: *a-ku-dets-a* ('make clothes dirty'); but the same morpheme cannot combine with verbs to form words like: **zi-na-kali-its-a* ('make fierce').

In Tagalog, the question of whether there is a difference between verbs and adjectives with respect to forming causative is difficult to answer, but for a very interesting reason. Consider the paradigm in (24) below.

	<i>Adjective</i>	<i>Intransitive Verb</i>
(22) a.	ma-tahimik ‘quiet’	t-um-ahimik ‘to become quiet’
b.	ma-bigat ‘heavy’	b-um-igat ‘to become heavier’
c.	tapos ‘finished’	ma-tapos ‘to be finished’
d.	tumba ‘fallen down’	t-um-umba ‘to fall down’

Causative Verb

mag -pa-tahimik	‘to make quiet’
mag -pa-bigat	‘to make heavier’
mag -tapos	‘to finish something’
mag -tumba	‘to knock down.’

One generalization that we can extract here is that the prefix *mag-* is crucially involved in forming the causative. If we abstract away from the *pa-* morpheme in the (a) and (b) causative forms, it appears that the rule of forming a causative involves simply prefixing *mag-* to a root. Significantly, we cannot, like Baker, demonstrate that adjectives cannot take causative morphology. This is because if we take an adjective like *tapos* (‘finished’) and added causative *mag-* to it, we get a verb. To put it in another way, the causative morpheme in Tagalog seems to be crucially involved in determining category—either because it changes the category of the root it is combined with or because it provides the category neutral root with a category.

Travis (2000) analyzes the causative morpheme as the instantiation of the verbal head v^0 (see also Rackowski (2003), who makes a similar proposal, except that she analyzes *mag* (<*pag*) as a spell-out of the functional head Voice⁰). If this is right, then we arrive at a conclusion very similar to the conclusion based on the question of aspect. Namely,

causative morphology is not sensitive to the category of the element it attaches to—rather, it defines the category it attaches to.⁵

6.6. Conclusion

This chapter has demonstrated that there is a certain uniformity between clauses with a main predicate that is a verb and clauses with a main predicate that is non-verbal (adjectival). The uniformity had to do with the scope of movement of the predicate head. In particular, based on facts involving ellipsis, I showed that verbs as well as adjectives appear to be able to move out of the thematic domain where they originate and into the functional domain of the clause. On the basis of this evidence, I conclude that there is no motivation for positing a functional projection PredP in non-verbal clauses. The results of this investigation dovetail with those of the previous two chapters. Concretely, the fact that there seems to be no evidence for the presence of the functional element Pred⁰ in clauses with non-verbal (adjectival) predicates also points to the conclusion that non-verbal predicates are ‘self-sufficient’ in their ability to compose with arguments.

On the other hand, not having PredP in the syntax of non-verbal clauses means that we cannot explain, as Baker was able to, why verbs but not adjectives inflect for aspect, and—in addition—why verbs but not adjectives cannot take causative morphology. I suggested, however, that it is not necessary to stipulate this difference. Rather, I suggested (tentatively) that we might assume this particular class of inflections is included in the feature content of the verbalizing head—v⁰. Assuming this, we need not

⁵ This proposal (in addition to the one relating to aspect) might be framed differently. We might suppose, for instance, that the difference between Tagalog and the languages Baker describes is that aspect inflection and causative formation are part of the language’s *Derivational Morphology* as opposed to their *Inflectional Morphology*. Classically, one difference between the two types of morphology has to do with the ability to change or assign category: Derivational morphology can but inflectional morphology cannot change or assign category to the item it combines with. The distinction between derivational and inflectional morphology is either not recognized or denied in recent work, and so taking up this issue with all its implications will have to be placed outside of the scope of the present work.

Phrase structure of non-verbal clauses

say that only verbs take aspect and have the ability to form causatives. Rather, since aspect and causative semantics are associated with v^0 (and not a^0), it follows by definition that elements with aspect or causative semantics will be verbal.

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Chapter 7.

Conclusion

The conclusion of this dissertation is that non-verbal predicates—namely, adjectives—are predicative categories in the sense that they can select (syntactically and semantically) for internal (DP) arguments. The argument for this conclusion was based on the existence, in Tagalog, of an unergative-unaccusative distinction within the adjectival domain that parallels this distinction within the verbal domain (Chapter 3). In addition to this, I argued for this conclusion on the basis of the existential constructions in Tagalog, showing that the existential predicate of the language to be unaccusative in both its verbal as well as (crucially) its non-verbal form.

From larger theoretical perspective, I suggested that this conclusion should make us skeptical of attempts to extend the hypothesis that external arguments are not true arguments of verbs/adjectives to internal arguments. In particular, I argued that it is not correct to claim that lexical roots like *broke*, *open*, etc. (in Tagalog) are associated with no arguments. The reason for this—I argued—was that many grammatical phenomena can be best accounted for by making reference to the argument structure proper of these roots (e.g., differences between *broke* vs. *beautiful*), but this would not be possible if the roots themselves had no specific argument structure. Put in other words, I have argued that while it may be the case that the external argument is not part of the argument structure of roots, the internal argument is.

In addition to the argument structure similarities between verbal and non-verbal predicates, I also attempted to demonstrate that there did not appear to be any significant clausal structure differences between clauses headed by verbal predicates on the one hand, and non-verbal predicates on the other hand. This point was argued on the basis of the process of head movement in which the head predicate of the clauses moves from its ‘theta-domain’ into the ‘functional domain’ of the clause.

This dissertation has focused most directly on data from Tagalog. One might very well ask at this point how significant the results obtained are for other languages. With respect to the issues of argument structure, the Tagalog evidence I have provided—e.g., for the unaccusative/unergative distinction—are arguably not that surprising. As we saw, the evidence against this distinction on the basis of other languages has typically centered on one sub-class of adjectives, namely, the adjectival passives. Even in languages where such adjectives seem to be (unexpectedly) unergative, other classes of adjectives that display unaccusative behavior can be found (Cinque 1990).

The real challenge of cross-linguistic variation might concern clausal structure. Many languages seem to have a different ‘style’ of syntax for clauses with non-verbal predicates than they do for clauses with verbal predicates. Carnie (1995, and reference there, see also Doherty 1996; Legate 1997; McCloskey 2005) note a number of differences between verbal and non-verbal clauses (mainly, contrasting verbal clauses with clauses with nominal predicates). Within Austronesian as well, differences between verbal and non-verbal clauses can be found. Chung (1990, 1998) notes, for instance, that clauses with non-verbal predicates in Chamorro have a uniform subject-final word order: Pred—Object—Subject, whereas clauses with a verbal predicate have a more flexible word order with respect to post-predicate elements. Although none of these differences have been correlated with differences in argument structure, the question remains whether or not there is something here in need of reconciliation with the Tagalog evidence I have presented. I leave this question an open one for the next stage of research.

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