The Structure of Tagalog:

Specificity, Voice, and the Distribution of Arguments

by

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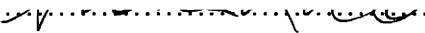requirements of the degree of

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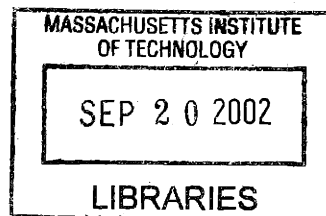September 2002
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Abstract

This thesis examines the syntax of Tagalog with a particular focus on argument structure and its implications for clause structure. Through cross-linguistic comparison I show that Tagalog syntax is not as exotic as is often assumed and that it can be straightforwardly accounted for using available syntactic tools, primarily the theory of phases and Agree of Chomsky (1999, 2001). This study shows that there is no need to appeal to new parameter settings or new components of the grammar in order to account for the syntactic behavior of Tagalog (cf. Sells 1998, Speas 1998, Carrier-Duncan 1985, Kroeger 1993).

In this work I show that, contrary to widespread assumptions, the voice system of Tagalog does not reflect the thematic role of the subject argument. Instead, returning to the insight of Ramos 1974, I argue that voice morphology on the verb reflects the case that the subject argument receives in its base position. I also argue that the specificity properties of subjects and objects in Tagalog resemble those motivating object shift in Germanic languages; therefore, I conclude that Tagalog instantiates a system of generalized 'argument shift'. I show that the shift of specific arguments to the edge of the phase is strictly constrained by locality.

The analysis of voice and locality-constrained shift relies on a detailed study of argument positions in Tagalog. Using tests for hierarchical structure such as reflexive and pronominal variable binding, I examine the structural relations among external arguments, applicative arguments, direct objects, and adjuncts and show them to be in accordance with what is known about structural argument asymmetries cross-linguistically.

Thesis Supervisor: Alec Marantz
Title: Professor of Linguistics

Contents

Abbreviations

?	Question particle
Acc	Accusative agreement
ANG	Subject Marker
APPL	Applicative
Asp	Aspect
AY	AY (clefting) particle
Ben	Benefactive
CS	Case (default, structural)
CT	Circumstantial Topic
Dat	Dative agreement
DAT	Dative case marker
dem.	Demonstrative
DET	Determiner
DO	Direct object
EA	External argument
Inst	Instrument(al)
LK	Linker
Nom	Nominative agreement
Obl	Oblique agreement
P	Preposition
Pag	Pag (transitivity) morpheme
Pl.	Plural
PST	Past
State	Stative

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Finally, I would like to thank my grandparents Jennie and Cas for their love and faith in me. This thesis is dedicated to them.

Chapter 1: Introduction

This thesis examines the clause structure of Tagalog with a particular focus on argument structure and verbal morphology. Through cross-linguistic comparison I demonstrate that the syntactic and morphological properties of Tagalog follow from a combination of analyses of already familiar phenomena and do not require for their explanation any radical modifications of syntactic theory. The first goal of this study is thus to show that Tagalog syntax is not as exotic as is often assumed, and the second is to add to the cross-linguistic inventory of implementations of familiar constructions through a detailed examination of a language that seems radically different on the surface.

The first area where the issue of Tagalog's uniqueness arises is in the structural relations among arguments. Various theories put forward in the past assume that, since there is no fixed word order among arguments in Tagalog, VPs must have a flat, nonconfigurational structure (Kroeger 1993, Sells 1998, Speas 1998). Such theories, however, wrongly predict that there should be no observable asymmetries among VP arguments in Tagalog not reducible to thematic hierarchies and/or word order. As I demonstrate in chapter 2, Tagalog shows quite robust reflexive and variable binding asymmetries for arguments within the verbal domain. That such structural relations can be shown to hold even in Tagalog supports the view that grammatical hierarchy is truly universal and also allows us to analyze Tagalog as a more or less well-behaved language whose structures and processes can be added to the cross-linguistic inventory of known syntactic systems.

Once the basic argument configurations in the verbal domain have been described, it is possible to ask what happens when more structure is added, i.e. when T (Tense) is merged into the clause. In chapter 3 I argue that there is a highly constrained process of argument shift for specific DPs that feeds an Agree relation (Chomsky 2001) between T and a shifted argument. The subject properties of arguments are consequences of this Agree relation, which triggers voice marking on the verb and *ang* (subject) marking on the shifted phrase. This analysis of Tagalog respects a strict view of locality in which only the highest/closest potential satisfier may enter into an Agree relation with a higher head. The account draws heavily on observed similarities between properties of Tagalog subjects and properties of shifted objects in Germanic

languages, further reinforcing the view that Tagalog is not so syntactically unusual and also obviating the need to appeal to completely new parameters to account for its characteristics.

Chapter 4 discusses the issue of voice in Tagalog: the morphological encoding on the verb of certain features of the subject argument. Voice is an area of much disagreement in the literature on Austronesian languages. Much work assumes that the voice markers themselves trigger the promotion to subject of certain arguments, or, similarly, that the voice markers map semantic arguments to the subject position. Such analyses typically encounter problems once they are expanded beyond the basic Actor and Patient roles, since it is difficult to reduce the appearance of voice-markers down to either the thematic role of the subject argument (Schachter and Otanes 1972) or to the case-checking head for the subject argument (Pearson 2001 on Malagasy). Problems like these have led some researchers to claim that structural syntactic analyses must be abandoned for Philippine languages in favor of non-structural approaches making use of thematic hierarchies (Carrier-Duncan 1985) or lexical mapping principles (Sells, Speas 1998). As I argue in this thesis, however, if voice morphemes are not analyzed as *causing* changes in the argument structure, but rather as *reflecting* such changes (making use of the theory of Distributed Morphology of Halle and Marantz 1993), many of the problems encountered by previous theories do not arise. For instance, I show in chapter 2 that Tagalog has a dative shift alternation and argue that this process affects the choice of subject argument. It is then possible to recognize that the structural difference between the dative-shifted and non-dative shifted clauses is what is reflected by the voice marking on the verb, rather than the voice marking triggering the change itself. A structural analysis such as this one is flexible enough to allow for alterations in the argument structure of the clause, while still maintaining the power to predict the correlation between voice markers and structural configuration.

In this thesis I build upon much previous work on Tagalog. Schachter and Otanes (1971), Schachter (1976, 1996), Ramos (1971, 1974), Travis (2000, 1996), Maclachlan (1996), Nakamura (1996), Kroeger (1993), and Richards (1993, 2000), among others, have established many of the basic properties of the language that I discuss here. In addition, the analyses of Malagasy clause structure proposed by Paul 1999 and Pearson 2001 provide valuable comparisons, since they discuss many similar aspects of the structure of Malagasy, although there are some points of variation between the languages.

The remainder of this chapter presents the theoretical framework used in this thesis, followed by some background on aspects of Tagalog clause structure that will be referred to in later chapters.

1.1 Theoretical Orientation

1.1.1 Phases and Voice

This thesis adopts the phase theory of clause structure of Chomsky 1998, 2001. According to this theory, the syntax is computed in chunks, or phases and once a phase is completed, it is sent to phonological and semantic spell-out at once, before the syntactic computation proceeds to higher portions of the clause. Phases are defined as complete propositions, and as such the phase boundaries proposed by Chomsky are vP and CP.

In this thesis I assume VoiceP as the phrase projecting the external argument, separate from the verbalizing head *v* (Kratzer 1996, Pylkkänen 2002). VoiceP is different from the vP assumed by Chomsky, which both introduces the external argument (EA) and verbalizes the root. According to the VoiceP theory, the root first merges with *v* to create a verbal projection. This phrase then merges with the voice head into whose specifier the EA merges. The difference in clause structure (vs. Chomsky's theory) means that in this work VoiceP, not vP, must be the phase boundary, since the proposition is not complete until the EA is merged in.

1.1.2 Agree and Move

A second important aspect of the framework adopted here is the theory of Agree from Chomsky 2001. In the Agree relation, a head which has an uninterpretable feature to be checked acts as a "probe" for some element with the interpretable value of that feature (the "goal") within its domain, which can check off the feature on the head. Uninterpretable features are deleted once they are checked in this way.[1] Since the search direction is always downward, within the c-command domain of the probe , and since the relation is established as soon as an eligible goal is encountered, Agree always obtains between the probe and the *closest* potential satisfier of the relation. This ensures that locality (shortest) is always obeyed.

In this system, Agree of a special type is also responsible for triggering phrasal movement. When a head has an [EPP] feature to check, it Agrees with some phrase within its domain in

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[1] Actually, they are 'marked for deletion' but not erased, according to Pesetsky and Torrego 2001 (see discussion in chapter 3).

order to satisfy it, just as it checks other features, but, unlike other features, the [EPP] feature is unique in that its satisfaction requires that the element agreed with must move into the specifier position of the head. It is the [EPP] feature, not the need for spec-head agreement, that triggers phrasal movement in this system.[2]

Importantly, Agree always occurs as soon as possible, i.e. as soon as the probe head is merged into the syntax. Immediate Agree means that, in principle, the probe can initiate a search within its domain even before its specifier (or anything higher) is merged into the structure, as diagrammed in (1a&b).

(1)　　a. *Agree Immediately*

$$H_{[uF]} \quad XP$$
$$X \quad DP_{[F]}$$

　　b. *Merge Specifier*

$$HP$$
$$DP$$
$$H_{[uF]} \quad XP$$
$$X \quad DP_{[F]}$$
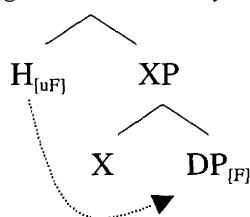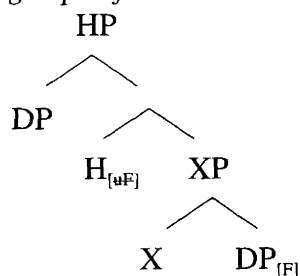
The requirement that Agree must occur immediately has consequences for the theory of multiple specifiers and tucking-in. As Richards 1997 argues, when multiple phrases move into the specifier of the same head, they 'tuck-in', meaning that the first movement occupies the highest specifier and subsequent movements merge into to lower specifiers, as shown in (2).

---

[2] Note that the [EPP] feature is unique in not being an uninterpretable feature, which raises the question of how it targets a goal. This issue is discussed below in section 1.2.

13

(2)   XP

DP1

DP2

X   ...

t_{DP1}

t_{DP2}
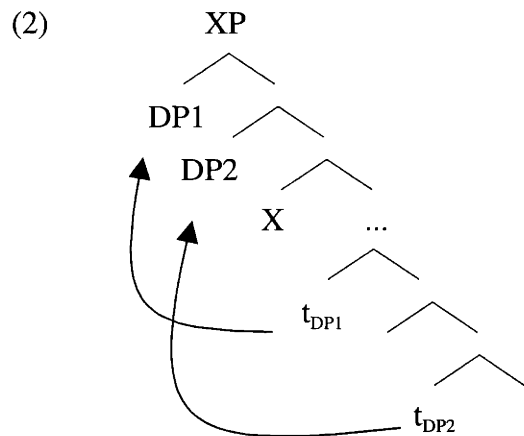
Immediate Agree and tucking-in together have an important consequence for multiple Agree configurations. In a structure where a head has an [EPP] feature to check and also licenses a thematic specifier, immediate Agree predicts that the [EPP] feature should be checked before the thematic specifier is merged in, triggering movement of the goal into a specifier, as shown in (3).

(3)   *Agree immediately*

XP

DP1

$X_{[+EPP]}$

t_{DP1} ...
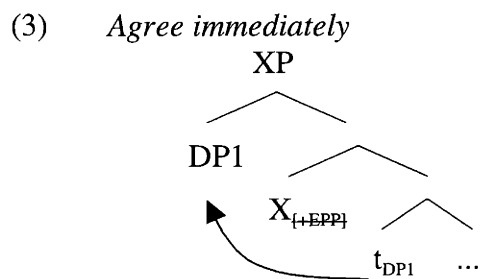
In addition, tucking-in predicts that the thematic specifier, when it merges in, will be the lowest specifier of the head, as shown in (4).

(4)   *Merge Thematic Spec*

XP

DP1

$DP_{them.}$

$X_{[+EPP]}$

t_{DP1} ...
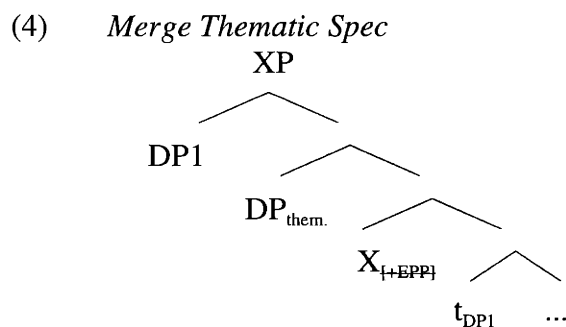
This ordering thus guarantees that thematic specifiers are lower than moved specifiers, which is important for the analysis of object shift presented in chapter 3.

1.1.3 Case

Another important aspect of the theory used in this thesis is the mechanism of structural case valuation. I assume the theory of Chomsky 2001 in which structural case features are unvalued for either nominative or accusative before they enter into an Agree relation. Agree with a probe is what values the case feature of a DP: nominative for T and accusative for *v*. In other words, a DP is merged into the structure with an unvalued [uCase] feature, and only when it 'matches' or enters into Agree with a higher probe is its case feature checked and valued as either nominative, if the probe is T, or accusative, if the probe is *v*. As for the T and *v* heads, they check and value DP case when they are merged into the structure bearing a case-valuing feature which I refer to as "CV".[3] Nominative and Accusative case valuation are sketched in (5) and (6).

(5)   *Agree with T = Nominative*
      a.   TP

       $T_{[uCV]}$ VoiceP

           $DP_{[\emptyset CASE]}$

             voice   ...

      b.   TP

       $T_{[uCV]}$ VoiceP

           $DP_{[NOM]}$

             voice   ...
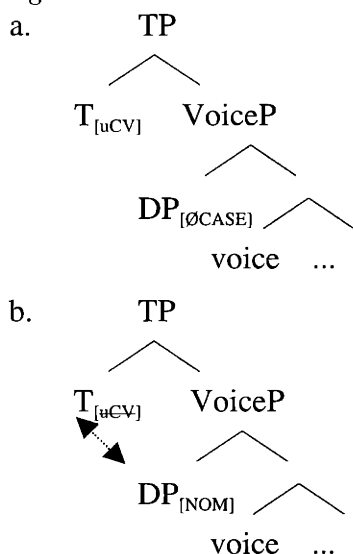
(6)   *Agree with v = Accusative*
      a.   vP

       $V_{[uCV]}$ VP

           $DP_{[\emptyset CASE]}$ V

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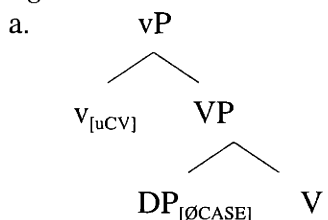
[3] It is possible that this feature could be further specified as "NOM" for T and "ACC" for *v*, but for now I leave it as a single undifferentiated feature, assuming that it is the nature of the head that determines the value of the case on the argument.

b.   vP

$V_{[uCV]}$ VP

         $DP_{[ACC]}$ V
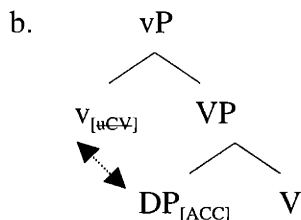
This case valuation process can occur separately from the other processes of Agree that may be required by the probe. That is, it is possible for the probe's case checking requirement to be fulfilled by Agreeing with an argument different from the phrase that checks other probe features, like the [EPP], as the consequence of an independent Agree relation.

The possibility of multiple independent Agree relations for a single probe is relevant in a language like Icelandic that allows a nominative object when the subject bears quirky dative case.

(7)   *Icelandic*:
       Henni   leidist   Haraldur
       her.Dat is.bored.by Harald.Nom
       "She is bored by Harald."   (Maling and Sprouse 1995)

Schütze 1997 proposes the Accord Maximization Principle to account for such constructions (p. 113). Informally, this principle states that if T can enter into a case-checking relation with an argument, it must do so, but the relation is not required if there is no argument in the clause that needs case valuation. Accord Maximization has the effect that, even if T has already Agreed with a subject argument, if there is another argument in the clause that could have its case checked by T, then T must enter into the second Agree relation as well. If T first Agrees with a dative subject, as in (7), it still retains an unvalued case checking feature, which it can use by Agreeing also with an object whose case feature is as yet unvalued. On this analysis, the Icelandic example in (7), would proceed as in (8).

(8)   TP

DP~subj~

T~[EPP], [CV]~   VoiceP

(i)~[EPP]~

t~subj~

voice   vP

(ii)~[CV]~   v   VP

V   DP~[NOM]~
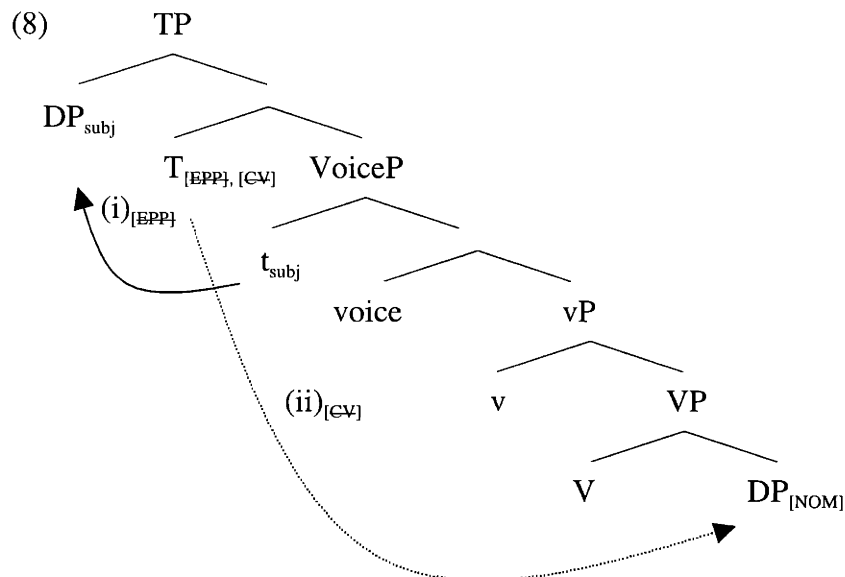
A very similar configuration of multiple Agreement occurs in Tagalog as well, as discussed in chapter 4.

1.1.4 Distributed Morphology

This thesis also assumes the framework of Distributed Morphology. The most important aspects of this theory for this thesis are late insertion and underspecification, summarized below (from Halle and Marantz 1994 pp. 275-277):

> *Late Insertion:* The terminal nodes that are organized into the familiar hierarchical structures by the principles and operations of the syntax proper are complexes of semantic and syntactic features but systematically lack all phonological features. The phonological features are supplied by the insertion of Vocabulary Items into the terminal nodes....
>
> *Underspecification:* In order for a Vocabulary Item to be inserted in a terminal node, the identifying features of the Vocabulary Item must be a subset of the features at the terminal node....

In this theory, vocabulary items compete for insertion into a particular node, with the most highly specified item 'winning' and being realized as the output of the node. Priority for insertion is often represented by the arrangement of vocabulary items in a hierarchy of most to least specified. For instance, the list in (9) is the one I propose in chapter 3 for the spell-out of the voice head in Tagalog. The first vocabulary item is the most specified, occurring either in the context of a [+EPP] feature or in the context of the listed verb roots. The second item, *pang*, is only inserted if the head has a [+instrument] feature, while the third item, *pag* is the default insertion for this head, appearing in all other contexts.

(9)   Spell-out of voice:
         Ø   ↔   {[+EPP];
                         /__ LIST (*huli* 'catch', *amoy* 'smell', *inom* 'drink', ...)}
         pang   ↔   /[instr.]__
         pag   ↔   <elsewhere>

1.2 The EPP and (quirky) case in Tagalog

As mentioned above, in this thesis I argue that specific arguments in Tagalog are required to shift
to the edge of the phase, the specifier of VoiceP. This shift is triggered by the presence of an
[EPP] feature on the voice head. When T is merged into the structure, it initiates an Agree
relation with the closest DP to satisfy an uninterpretable [uCase] feature. The closest DP is the
shifted argument if one has shifted; otherwise, it is the EA. The result of Agree with T is the
overt spell-out of [case] agreement (voice marking) on the verb (see section 1.3.1 below). The
configuration with a shifted argument is shown in (10).

(10)
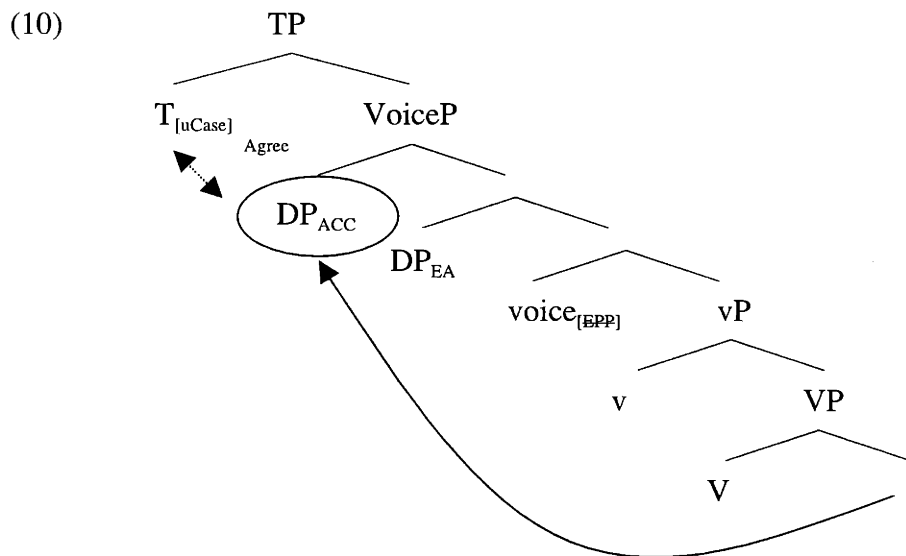
There are two initial theoretical questions raised by this analysis. First, what is the nature of the
EPP feature on voice such that it only attracts DP arguments? Second, why must the two Agree
relations be split between different heads – EPP on voice and [uCase] on T– since both involve
Agree with the same argument? This question basically reduces to why subject agreement must
be appearing on T rather than on voice since, in other languages, it is common for an [EPP]
feature to be contingent upon checking another agreement feature on the same head.

I begin with the first question. Since, in the system proposed here, specificity shift only
applies to DPs, not to adjuncts or PPs, the [EPP] feature on voice must somehow be constrained

to allow Agree only with DPs. One way of capturing this restriction is to assume that the [EPP] feature is contingent upon a [uCase] feature on the voice head, so that only elements with a visible case feature are eligible matches for satisfying the [EPP] requirement of the head. In other words, the voice head can probe only for an argument with an 'active' case feature – a case feature that has been valued but is still visible – and only arguments that can satisfy this feature are eligible to then move to satisfy the EPP requirement. Arguments with an 'active' case feature will be basically the same as the class of possibly quirky case-marked DPs found in, e.g., Icelandic – direct objects, high applicative arguments, and low applicative arguments. In Icelandic, these are the DPs eligible to become quirky case marked subjects, i.e. they are eligible for [EPP]-triggered movement to the specifier of TP. For example, in the structure in (11), the closest DP is an applied argument with a visible oblique case feature, which means that it is eligible to check the features of voice (the structural positions are motivated in chapter 2).

(11)   VoiceP
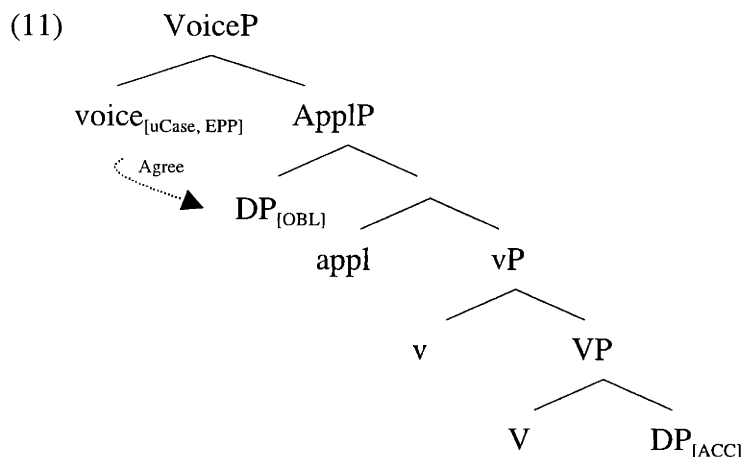
Objects of prepositions are not 'active' in the same way (also true in Icelandic), and, on the assumptions laid out here, that means they do not have a visible case feature and are not eligible to check a [uCase] feature on a higher head, making them also ineligible to check the [EPP] feature. (For the remainder of the thesis, I simply refer to the [EPP] feature on voice, rather than specifying the visible case restriction.)

The existence of a [uCase] feature on voice that is checked by the shifted argument relates to the second question raised above: could this [uCase] feature be the one responsible for overt subject agreement on the verb, rather than a different [uCase] feature on T? There are two major reasons to believe that this is not the case and that subject agreement is located in T instead of voice. First, as stated above, Agree is always downward, which means that specifiers

are not eligible to Agree with the head that introduces them. If, in Tagalog, the Agree relation responsible for subject-verb agreement were a property of the voice head, this would predict that the external argument should never be able to enter the Agree relation for subject and so should never trigger subject agreement itself. This prediction is false, however, as demonstrated by the appearance of nominative agreement (*-um-*) for the external argument subject in the sentence in (12).

(12)   B-**um**-ili   ng bigas <u>ang   babae</u>.
        Nom.asp-buy CS rice   ANG woman
        "<u>The woman</u> bought some rice."

The second reason that subject agreement must occur on a different head than the shift-triggering [EPP] feature is that subject agreement and shift can occur independently of one another, as exemplified by the recent perfective (RP) construction. As will be discussed in detail in chapter 3, the verbal morphology that occurs in the RP indicates that specific arguments shift just as in any other clause, but verbs in the RP always lack subject agreement, as illustrated in (13).

(13)   Ka-**pag**-li-linis   lang ni Luis ng kusina para kay Juan
        ka-PAG-RED-clean just CS Luis CS kitchen P DAT Juan
        "Luis just cleaned a kitchen for Juan."

In chapter 3 I suggest that the absence of subject agreement in this construction is the result of a defective T that does not initiate any Agree relation. The relevant point for now, however, is that subject agreement and the [EPP] feature are able to operate independently of one another, which suggests that the [EPP] is not contingent on the Agree for [uCase] that is overtly spelled-out on T and that the shift-triggering [EPP] feature and subject agreement [uCase] features can therefore be located in different heads.

1.3 Tagalog Essentials

1.3.1 Voice

In Tagalog, any argument DP may be the subject of the clause. Subjecthood of a DP is signaled by the appearance of the particle *ang* on the DP and a correlating voice morpheme on the verb, which has a different morphophonological form depending on which argument is subject. In (14a), for instance, the external argument (agent) is the *ang*-marked element and the verb has an *-um-* infix that agrees with it. In (b), the direct object (theme) is *ang*-marked and the verb has the

(Ø allomorph of the) -*in* suffix. The verbs in (c) and (d) agree with an applied directional and benefactive, respectively, with voice markers –*an* or *i*- (all in bold). (Throughout the thesis, the subject argument is underlined and the voice markers are glossed as 'case' agreement, an analysis I will argue for in chapter 4.)

(14)   a. *External argument subject:*
B-**um**-ili   <u>ang   bata</u> ng tela sa palengke para sa   Nanay
Nom.asp-buy ANG child CS cloth DAT market P   DAT mother
"<u>The child</u> bought cloth at the market for mother."

b. *Direct object subject:*
B-in-ili-**Ø**   ng bata <u>ang   tela</u> sa   palengke para sa Nanay
asp-buy-Acc CS child ANG cloth DAT market P   DAT mother
"The child bought <u>the cloth</u> at the market for mother."

c. *Directional subject:*
B-in-ilih-**an** ng bata ng tela   <u>ang   palengke</u> para sa   Nanay
asp-buy-Dat CS child CS cloth ANG market   P   DAT mother
"The child bought cloth <u>at the market</u> for mother."

d. *Benefactive subject:*
I-b-in-ili   ng bata   ng tela sa   palengke <u>ang   Nanay</u>
Obl-asp-buy CS child CS cloth DAT market ANG mother
"The child bought (the) cloth at the market <u>for mother</u>."(Maclachlan 1992)

As is evident in the glosses for these examples, the *ang*-marked DP is always interpreted as specific, which is not true for other arguments.

Ang has several different allomorphs, depending on the category of the element it precedes. In most cases, it is simply realized as *ang* on the subject argument. Proper names, however, are marked with *si* as subjects, and pronouns also have special *ang* forms different from their regular non-subjects forms. Each of these options is illustrated in (15). (I gloss all *ang* allomorphs as ANG, whatever their surface form.)

(15)   a.   B-**um**-ili   ng bigas <u>ang   babae</u>.
Nom.asp-buy CS rice   ANG woman
"<u>The woman</u> bought some rice."

b.   B-**um**-ili   ng bigas <u>si   Rosa</u>
Nom.asp-buy CS rice ANG Rosa
"<u>Rosa</u> bought some rice."

c.   B-**um**-ili   <u>ako</u>   ng bigas.
Nom.asp-buy ANG.I CS rice
"<u>I</u> bought some rice."

      d.   B-**um**-ili   ng bigas <u>iyon</u>.
               Nom.asp-buy CS rice   ANG.that
               "<u>That one</u> bought some rice." (S&O)

The status of *ang*-marked elements (as subject or topic, in an A or A' position) is the subject of much debate in the literature on Western Austronesian. Section 1.4 addresses these issues in the context of the larger debate on subjecthood.

1.3.2 Word Order and Scrambling

In Tagalog, the verb must generally precede all arguments. Exceptions include adjuncts, which may be optionally fronted, as in (16a), and *ay*-clefted subjects (argued by Kroeger 1993 to be instances of a focus construction), illustrated in (16b).[4]

(16)   a.   [Para kay Pedro] ko binili-**Ø**   <u>ang laruan</u>.
              P   DAT Pedro I   asp.buy-Acc ANG toy
              "For Pedro I bought <u>the toy</u>."

        b.   <u>Itong   damit</u> ay binili-**Ø**   ko.
              ANG.this-LK dress AY asp.buy-Acc I
              "<u>This dress</u>, I bought."

There are also various pre-verbal particles and second-position clitics that have fixed positions in the clause. For example, sentential negation is signalled by *hindi*, which must precede the verb. Also, as illustrated in (17), pronominal clitics occupy second-position in the clause and must follow some other initial element.

(17)   Hindi *ko <u>siya</u>* na-kita   kahapon.
         Neg I   3.ANG asp.stat-see yesterday
         "I didn't see <u>him</u> yeseterday."(Kroeger 1993)

Kroeger 1993 argues on the basis of several processes that the verb raises to T in Tagalog. These processes include *ay*-clefting (focus), topicalization, adjunct fronting, the position of

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[4] Maclachlan 1996 also notes a specialized construction in which the non-subject EA can precede the verb when it is itself preceded by the negative marker *hindi*. This construction seems to be sensitive to the heaviness of the noun phrase and is dispreferred for non-proper nouns.
(i)   ?? Hindi ng lalaki lulutu-**in**   <u>ang adobo</u>.
           NEG CS man asp.cook-Acc ANG adobo
           "The man will not cook <u>the adobo</u>."
(ii)   Hindi ni Juan lulutu-**in**   <u>ang adobo</u>.
           NEG CS Juan asp.cook-Acc ANG adobo
           "Juan will not cook <u>the adobo</u>."

negation, and clitic placement.[5] One of Kroeger's main arguments is based on the fact that second-position clitics must be second within TP and that CP material does not count for determining second position (see Kroeger for details). Kroeger then argues that, since fronted adjuncts 'count' for determining second position, the adjunct-fronting construction must involve movement to a position below C but above the position of the verb, as shown in (16) above (the first person pronoun *ko* is a second position clitic). Since the fronted material in TP precedes the verb, the verb must also be within TP. However, the verb also must generally precede all arguments, indicating that it does not remain in V. The most natural assumption is thus that it raises to T in the syntax.

Post-verbal word order in Tagalog is relatively free. All of the sentences in (18) are grammatical and have the same basic meaning, although the first is the most natural in a neutral context.

(18) a. Nag-bigay ng libro sa babae <u>ang lalaki</u>.
Nom.asp.PAG-give CS book DAT woman ANG man
"<u>The man</u> gave the woman a book."

b. Nagbigay ng libro <u>ang lalaki</u> sa babae.

c. Nagbigay sa babae ng libro <u>ang lalaki</u>.

d. Nagbigay sa babae <u>ang lalaki</u> ng libro.

e. Nagbigay <u>ang lalaki</u> sa babae ng libro.

f. Nagbigay <u>ang lalaki</u> ng libro sa babae.   (Kroeger 1993)

Order is not completely random, however. When the external argument is not the subject, it is preferred in immediately post-verbal position. There is also a preference for the *ang*-marked subject to appear after other DPs.

(19) a. Sinulat-Ø ni Juan <u>ang liham</u>.
Asp.write-Acc CS Juan ANG letter
"Juan wrote <u>the letter</u>."

b. ?Sinulat-Ø <u>ang liham</u> ni Juan.
Asp.write-Acc ANG letter CS Juan
"Juan wrote <u>the letter</u>."   (Kroeger 1993)

---

[5] Kroeger actually argues that the verb is in I, but since I assume TP throughout this work I have adapted the terminology.

Benefactive and other adverbial or prepositional elements are most natural in sentence-final position, following the *ang*-marked subject.

(20) a.   Binisita-**Ø**   ni Juan <u>ang hari</u> sa   palasyo.
            Asp.visit-Acc CS Juan ANG king DAT palace
            "Juan visited <u>the king</u> in the palace." (Kroeger 1993)

     b.   Nagluto   ng adobo <u>si   Romeo</u> para sa   isang babae.
            Nom.asp.PAG-cook CS adobo ANG Romeo P   DAT one   woman
            "<u>Romeo</u> cooked adobo for some girl."

These word order facts together clearly show that Tagalog is not a completely non-configurational language, since there are some strict requirements on both verb and argument placement. The variability of post-verbal word order, however, must still be explained. As discussed in Richards 1993, what the post-verbal variability resembles most is A' scrambling (e.g. as in German or Japanese). As in other languages with arguably A' scrambling, scrambling in Tagalog does not affect anaphor binding or weak crossover.

(21)   *Scrambling does not affect anaphor binding:*
     a.   *B-**um**-atikos   <u>ang mga artikolo tungkol sa kanyang sarili</u> sa Pangulo
            Nom.asp-criticize ANG pl. article about DAT poss. self DAT president
            "<u>The articles about herself</u> criticized the president."

     b.   * B-**um**-atikos   sa Pangulo <u>ang mga artikolo tungkol sa kanyang sarili</u>.
            Nom.asp-criticize DAT president ANG pl. article about Dat poss. self
            "<u>The articles about herself</u> criticized the president." (Richards 1993)

(22)   *Scrambling has no effect on weak crossover:*
     a.   *Nagmamahal   <u>ang kanyang ama</u> ng bawat anak.
            Nom.asp-PAG-love ANG poss. father CS every child
            "<u>Her$_i$ father</u> loves every child$_i$."

     b.   *Nagmamahal   ng bawat anak <u>ang kanyang ama</u>.
            Nom.asp-PAG-love CS every child ANG poss. father
            "<u>Her$_i$ father</u> loves every child$_i$."   (Richards 1993)

Suggestive support for the existence of scrambling in Tagalog comes from VP ellipsis, as discussed by Richards 2002. Richards notes that, when a VP is elided, the object may still be overt, as in (23b), which suggests that the object must have the option of scrambling out of the VP before it is elided.

(23)   Nag-bigay   <u>si   Juan</u> ng bulaklak sa   kanyang asawa....
         Nom.asp.PAG-give ANG Juan CS flower DAT poss.   spouse
         "<u>Juan</u> gave flowers to his wife..."

a.　　... at　**n**ag-bigay　　　din　<u>si　Bill</u>.
　　　　And Nom.asp.PAG-give also ANG Bill
　　　　"...and <u>Bill</u> did too."

b.　　... at　**n**ag-bigay　　　naman　<u>si　Bill</u> *ng tsokolate.*
　　　　And Nom.asp.PAG-give NAMAN ANG Bill CS chocolate
　　　　"...and <u>Bill</u>, on the other hand, gave (her) chocolate."　　(Richards 2002)

If scrambling is available in this configuration, it is plausible to assume that it also occurs in clauses without ellipsis. On the other hand, if it is already necessary to posit scrambling in order to account for examples such as (23b), it costs nothing more theoretically to assume that scrambling is possible in other clauses as well.

Since word order is not the main focus of this work I will not go into any further detail here, but simply note that scrambling seems to be a reasonable assumption for how the surface word order of Tagalog is created. I will, however, briefly note the problems encountered by other types of word order analyses.

Kroeger 1993 argues for a non-configurational "S" constituent embedded under a configurational IP in Tagalog. The "S" constituent is a small clause made up of an XP predicate and an NP subject.

(24)　　　IP
　　Spec　　I'
　　　　I　　S
　　　　XP　　NP
　　　(PRED)　(SUBJ)
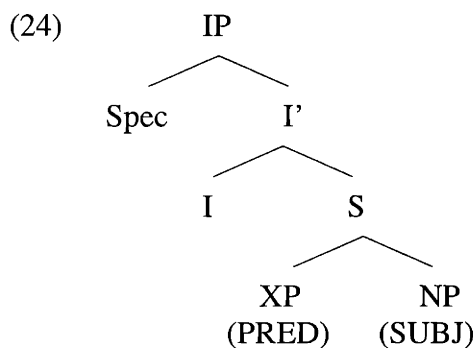
By partitioning the tree in this way Kroeger attempts to account for the fact that second position clitics and fronted elements, which presumably appear outside of the S, obey certain word order requirements while post-verbal elements (within the S) are more free. There is evidence from anaphoric and pronominal variable binding, however (to be discussed in some detail in chapter 2), that suggests that there must be some structure within the "S" constituent, and thus that Kroeger's appeal to a non-configurational, exocentric S level constituent is unnecessary.

Guilfoyle, Hung, and Travis 1992 analyze Malagasy and Tagalog as having a rightward specifier of IP, which they argue is the landing site for the subject (*ang*-marked element). This structure accounts for both the subject-final preference and the preference for non-subject

external arguments to occur immediately post-verbally, since this is the order naturally obtained from verb movement to I when the EA remains in its base position.

(25)　　　　　　IP
```
              ╱‾‾‾‾‾‾╲
           I'          Spec
        ╱‾‾‾‾‾╲
    Infl       VP
            ╱‾‾‾‾╲
        Spec        V'
         |       ╱‾‾|‾‾╲
        NP    V   NP   NP
```
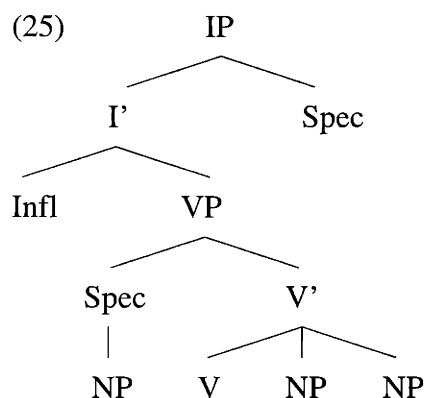
While the structure in (25) predicts the word order of Malagasy, which is strongly subject-last, it does not correctly predict the Tagalog preference for clause-final PPs illustrated in (26).

(26)　　Mag-luluto　　　　　　ang lalaki ng adobo [para sa　　asawa]
　　　　Nom.PAG-asp.cook ANG man CS adobo [P　　DAT spouse]
　　　　"The man will cook adobo [for his wife]."

In order to account for the location of PPs, GHT would presumably have to posit long-distance rightward scrambling of PPs to a position above IP. However, once scrambling must be invoked for PPs, it can also be used to explain the flexible post-V word order of arguments, eliminating the need for the ternary-branching flat VP they posit. So, while the GHT structure would account for many properties of Tagalog word order, its predictions are too strict to account for all of them.

　　　　The clause structure argued for in this thesis is actually quite similar to the GHT analysis, with two important differences. The first is that arguments begin in a hierarchical arrangement, with post-merger scrambling creating the flexible surface word order. The second difference is that the subject does not raise to a rightward Spec, IP in Tagalog – it moves only as high as the (left) edge of VoiceP, as shown in (27).

(27)

TP

T   VoiceP

DP$_{DO}$ DP$_{EA}$

SUBJECT

voice   vP

v   VP

V   t$_{DO}$
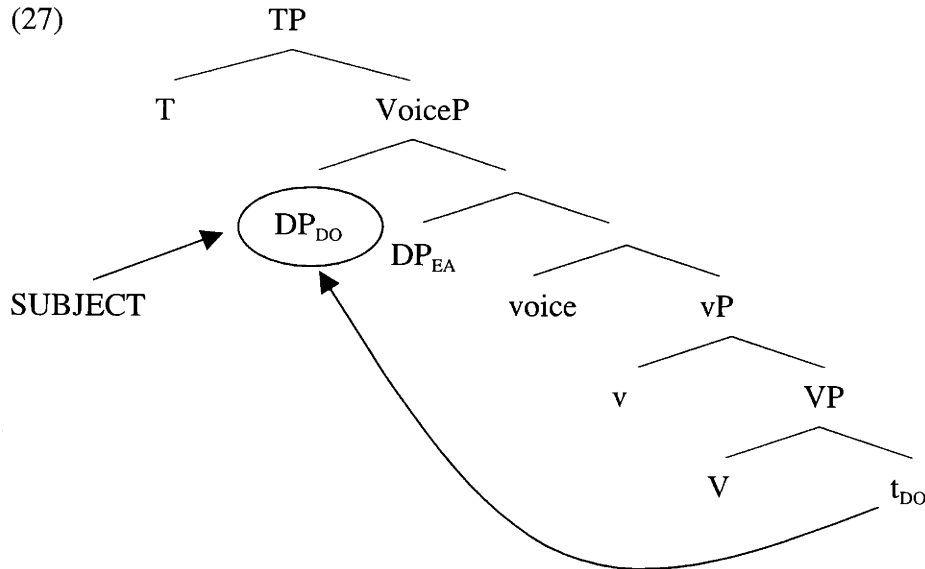
Further details of the subject movement analysis are discussed in Chapter 3.

1.3.3 Aspect

Tagalog employs aspect rather than tense marking to express the location of events in time. As Kroeger notes (following Schachter and Otanes):

> "Tagalog is a 'relative tense' language; thus the imperfective form could be used as a past progressive ("She was singing the Ave Maria when I arrived") as well as the present progressive ("She is singing the Ave Maria") or present habitual ("She sings the Ave Maria beautifully")" (p. 15).

Aspectual marking is accomplished through combinations of two morphemes: the infix –*in*– encodes the feature [+begun] and a CVV reduplicant encodes [-complete] (Maclachlan 1992, Kroeger 1993, Rackowski 1999). Some possible combinations are illustrated in (28) for the oblique voice form of 'buy'.

(28)   *Aspectual forms of oblique voice* bili *'buy'*

Aspectless	
Morphological form	i-bili
Surface form	i-bili
Meaning	buy for
Perfective [+begun]	
Morphological form	i-**in**-bili
Surface form	i-b-**in**-ili
Meaning	bought for
Imperfective [+begun, -complete]	
Morphological form	i-**in**-*bii*-bili
Surface form	i-*b*-**in**-*ii*-bili
Meaning	is/are buying for
Contemplated [-complete]	
Morphological from	i-*bii*-bili
Surface form	i-*bii*-bili
meaning	will buy for

There is a great deal of allomorphy in the spell-out of the morpheme *–in-*. When combined with the nominative voice prefix combination of *m+pag* (=*mag*) *–in-* is realized as the replacement of initial *m-* with *n-*. When *–in-* would be combined with the nominative voice infix *–um-*, *-in-* is not spelled-out overtly, but *–um-* is retained. For the same verbs in the contemplated aspect, the absence of the feature [+begun] is signaled by deletion of *-um-*. Also, when the *–in-* aspectual infix is added to an accusative voice stem, the *–in* voice suffix is realized as the null allomorph, *-Ø*. Examples of each of the forms just discussed are given in (29) (based on Maclachlan 1992) (allomorphs of *-in-* are in bold, reduplication is in italics, voice marking is underlined, roots are written in standard orthography).

(29)

	Clean, NomV		Buy, NomV	Buy, AccV	Buy, DatV
Aspectless	<u>m</u>aglinis	(<u>m</u>+pag)	b-<u>um</u>-ili	bilh-<u>in</u>	bilh-<u>an</u>
Perfective	<u>n</u>aglinis	(<u>m</u>+in+pag)	b-<u>um</u>-ili	b-**in**-ili-Ø	b-**in**-ilh-<u>an</u>
Imperfective	<u>n</u>ag-*lii*-linis (<u>m</u>+in+pag)		*b*-<u>um</u>-*ii*-bili	*b*-**in**-*ii*-bili-Ø	*b*-**in**-*ii*-bilh-<u>an</u>
Contemplated	<u>m</u>ag-*lii*-linis	(<u>m</u>+pag)	*bii*-bili	*bii*-bilh-<u>in</u>	*bii*-bilh-<u>an</u>

1.3.4 Nominal Case

Case is marked on non-subject nominal elements in Tagalog by two types of case particles. Subjects have no case marker as they are always preceded by a form of *ang* (argued here to be a reflex of an Agree relation with Tense). Dative case is signaled by *sa* on common nouns and *kay* on proper nouns. Accusative and nominative are both marked by *ng* on common nouns. Nominative proper nouns are marked with *ni*.[6] In addition to the case particles on full noun phrases, pronouns and deictics have different dative and *ang*-phrase forms. Several nominal case marking possibilities are illustrated below.

(30) a.   I-nihagis   ko   *sa aso*   <u>ang bola</u>.   *Dative, common*
           Obl-asp.throw I   DAT dog ANG ball
           "I threw <u>the ball</u> *to the dog*."

     b.   I-nihagis   ko   *kay Carmen*   <u>ang bola</u>.   *Dative, proper*
           Obl-asp.throw I   DAT Carmen ANG ball
           "I threw <u>the ball</u> *to Carmen*."

     c.   I-nihagis   ko   *sa*   *inyo* <u>ang bola</u>.   *Dative, pronoun*
           Obl-asp.throw I   DAT you ANG ball
           "I threw <u>the ball</u> *to you*."

(31) a.   I-niabot   *ng bata* sa   Nanay <u>ang asin</u>.   *Nominative, common*
           Obl-asp.pass CS child DAT mother ANG salt
           "*The child* passed Mother <u>the salt</u>."

     b.   I-niabot   *ni Mr. Cruz* sa   Nanay <u>ang asin</u>.   *Nominative, proper*
           Obl-asp.pass CS Mr. Cruz DAT mother ANG salt
           "*Mr. Cruz* passed Mother <u>the salt</u>."

---

[6] Due to the specificity restriction on objects, proper nouns and pronouns (always specific) do not occur in the accusative case.

    c.   **I**-niabot   *niya* sa Nanay <u>ang asin</u>.   *Nominative, pronoun*
         Obl-asp.pass CS.he DAT mother ANG salt
         "*He* passed Mother <u>the salt</u>."

(32) a.   Inabut-**an**   ko *ng karne* <u>ang bisita</u>.   *Accusative, common*
         Asp.hand-Dat I CS meat ANG visitor
         "I handed *some meat* <u>to the guest</u>."

    b.   Inabut-**an**   ko *niyan* <u>ang bisita</u>.   *Accusative, deictic*
         Asp.hand-Dat I CS.that ANG visitor
         "I handed *some of that* <u>to the guest</u>."   (S&O 1972)

The fact that *ng* is used to mark both (nominative) external arguments and (accusative) direct objects, as in (31a) and (32a), suggests that it is simply the default form for structural case on nominals. (As such I gloss *ng* and its allomorphs as undifferentiated "CS" for "case".)

1.3.5 Extraction

In Tagalog, as in many Austronesian languages, in order to question an argument, it must first be promoted to subject of the clause. Questions take the form of pseudo-clefts in which the wh-word is predicated of a headless relative clause acting as the subject (see Kroeger 1993, Richards 1996, Paul 1999, Nakamura 1996 for much discussion; see also chapter 3). It is ungrammatical to question an argument when the verb does not bear agreement for that argument, as shown in (33b).

(33) a.   Sino ang **n**agnakaw   ng kotse mo?
         Who ANG Nom.asp-steal CS car   2.poss.
         "<u>Who</u> stole your car?"

    b.   *Sino ang   ninakaw-Ø   <u>ang kotse mo</u>?
         Who ANG asp.steal-Acc ANG car   2.poss.
         "Who stole <u>your car</u>?"

Importantly, however, adjuncts may be questioned without first becoming subjects. When an adjunct in questioned it is moved to the front of the sentence without creating the cleft-structure of argument questions.

(34) a.   Bakit ba <u>siya</u>   **um**-uwi?
         Why ques. ANG.he Nom.asp-go.home
         "Why did <u>he</u> go home?"

    b.   [Mula kailan] <u>siya</u>   **n**agtrabaho?
         Since when   ANG.he Nom.asp-work
         "Since when has <u>he</u> been working?"

c.   [Ayon   daw kanino] Ø-darating   <u>siya</u>   bukas?
according to   who   Nom.asp.come ANG.he tomorrow
"According to whom is <u>he</u> coming tomorrow?"   (S&O p. 513)

1.4 On Subjects

There are three main questions involved in the debate over subjecthood in Austronesian:

1. Should the 'Actor' or the *ang*-phrase be considered the true subject of the clause (Schachter 1976, 1996, Kroeger 1993, GHT 1992)?

2. Is the *ang*-phrase a topic or a subject (Kroeger 1993, Carrier-Duncan 1985, McKaughan 1958, McKaughan 1962, on Malagasy: Pearson 2001, Paul 1999)?

3. What is the status of the *ang* particle itself: nominative case (Kroeger 1993), or a specificity-related [+subject] feature (Ramos 1974)?

The last two questions are more relevant to the issues discussed in this thesis than the first one, and in the next section I present a sketch of the topic vs. subject debate, summarizing arguments from Kroeger 1993 against the topic analysis. I then briefly turn to the issue of *ang*-marking as nominative case or a specificity/[+subject] feature, although since that issue consumes a large part of the discussion in chapter 3, I will not say much about it here. Finally, I briefly discuss the 'true subject' issue, summarizing some of the discussion from Schachter 1976, 1996 and GHT 1992 and suggesting a way in which the theory presented in this thesis is consistent with a division of subject properties.

1.4.1 Topic vs. subject

Arguments for the topichood of *ang*-phrases center mainly around the fact that these arguments are obligatorily specific (as can be seen in the glosses for (14) above). There are, however, several problems with the *ang*-as-topic analysis. First, it is unusual for a language to exhibit verbal agreement with a true topic, which is what would be necessary if these arguments were topics in Tagalog (Li & Thompson 1976). More importantly, on the basis of the definitions of topic and focus taken from Bresnan and Mchombo 1987, Kroeger 1993 establishes that Tagalog *ang*-phrases actually do not have the properties of true topics. The definitions are given in (35).

(35)   **Topics** are "what is under discussion, whether previously mentioned or assumed in discourse" and are presupposed information.

Focus "expresses CONTRAST, in the sense of Chafe 1976; it designates something that is NOT presupposed (relative to some context)" (Bresnan & Mchombo 1987, p. 746).

31

As Kroeger argues, topic and focus are mutually incompatible, since the same phrase cannot be presupposed and not presupposed at the same time. Kroeger then demonstrates that putative 'topics' in Tagalog can bear pragmatic focus. For instance, the answer to a wh-question carries pragmatic focus because it is new information. In Tagalog this answer is perfectly compatible with *ang*-marking (as in (36a)) or not (as in (36b)).

(36)　Ano　ba　　ang　binili-Ø　　mo sa　　pamilihan?
　　　　what　QUES ANG　asp-buy-TV you DAT market
　　　　"What did you buy at the market?

　　　a.　　Binili-Ø　　ko itong　　　　damit.
　　　　　　asp.TV-buy I　this.ANG-LK dress
　　　　　　"I bought this dress."

　　　b.　　B-**um**-ili　　ako　　ng gatas.
　　　　　　asp.AV-buy I.ANG CS milk
　　　　　　"I bought some milk."　　　　(Kroeger 1993, p. 63)

Similarly, selective contrast of the kind shown in (37) denies a presupposition and bears focus, but it too is compatible with *ang*-marking in Tagalog.

(37)　Q:　　Na-kita　　　　mo ba　　si Armand?
　　　　　　Stat.asp.Acc-see you QUES ANG Armand
　　　　　　"Did you find Armand?"

　　　A:　　Hinahanap-Ø ko si　　Bing, hindi si　　Armand,
　　　　　　asp.search　　I　　ANG Bing　NEG ANG Armand
　　　　　　"I am looking for Bing, not Armand."　　　　　(Kroeger 1993, p. 63)

I thus conclude with Kroeger 1993 that Tagalog 'topics' are actually not topics in the pragmatic sense.

1.4.2 Nominative vs. other

If *ang*-phrases are not topics, then at least one analysis of the *ang* particle can be ruled out: it is not a topic marker. This leaves two other possibilities that have been proposed by various researchers: nominative case (Kroeger 1993) or subject marker (Ramos 1974).

　　　As I will show in chapter 4, on the analysis of verbal voice morphology as case agreement, nominative case must be separate from *ang*-marking, since nominative is available for all types of external arguments and unaccusative subjects, even when some other argument bears the *ang* particle in a particular clause. A preferable analysis for *ang*-marking is thus that it simply signals subjecthood, as argued by Ramos 1974. In this thesis I argue that subject status is the

result of an Agree relation between T and an argument, so I analyze *ang* as the morphological reflex on the DP of that Agree relation.

1.4.3 External argument vs. *ang*-phrase

Once the *ang*-phrase is identified as the subject, the status of the "Actor" phrase (external argument) is called into question. The status of the EA has been extensively argued over in the literature (mainly Schachter 1976, 1996, Kroeger 1993) because of its subject-like properties of serving as a reflexive antecedent and equi target. The debate, however, seems to rest on the assumption that there is a primitive notion of 'subject' and that only one argument per clause should be identified with the role. As Schachter points out, both the *ang*-phrase and the EA exhibit some properties that are associated with subjects in other languages and it is not necessarily possible to definitively choose one or the other phrase as "subject". Furthermore, as hypothesized by GHT, it may simply be that different processes are sensitive to different aspects of the structure than others.

Interestingly, the split in subject properties receives a natural explanation on the argument shift analysis presented in chapter 3. There, I argue that *ang*-marking results from an Agree relation between T and the closest argument in its domain. If the closest argument is one that has shifted, then Agree with T picks out that argument rather than the EA as the subject of the clause. I also argue, however, that T enters into a second Agree relation with the EA in order to value its case feature as nominative. The existence of these two independently motivated Agree relations with T allows for a natural account of the fact that in Tagalog two separate clausal elements may have certain properties associated with subjects in other languages. In Tagalog, properties associated with nominative case pick out the nominative argument while properties associated with T agreement pick out the *ang*-phrase instead. In most languages these two functions of T are not separated, so both pick out the same argument as 'subject' (which is also what occurs when the EA is closest to T and satisfies both requirements in Tagalog), but in a Tagalog clause where a non-EA argument is the subject, the two operations are teased apart, creating the appearance of split subjecthood.

Chapter 2: Distribution of Arguments

2.1 Introduction

This chapter motivates the basic clause structure for Tagalog sentences, which will serve as a basis for the analyses of voice and specificity presented in subsequent chapters. I provide evidence here for the base positions of arguments listed in (1), in accordance with much recent work on clause structure (Chomsky 2001, Kratzer 1996, Pylkkänen 2001, building on others).[1]

(1)

a. *Complement of verb:*

```
        VP
       /  \
   V_root   DP
```

b. *External argument:*

```
.      VoiceP
       /  \
    DP    /  \
        voice  vP
              /  \
             v
```

---
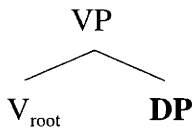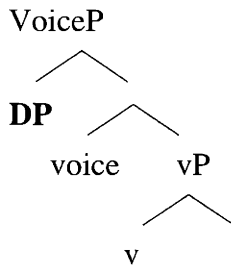
[1] I use the label VP for the phrase consisting of the verb and its complement. It would also be consistent with the theory presented here to refer to this phrase as a category-less root phrase, but since the issue has no real bearing on the analysis of this chapter, I continue to label it as VP for ease of reference.

c. *High Applicative:*

```
        VoiceP
        /\
   DP_EA   /\
            ApplP
            /\
        DP    /\
           appl   vP
                  /\
                 v
```

d. *Low Applicative:*

```
        VP
        /\
   V_root   ApplP
            /\
        DP1   /\
            appl
   DP2
```
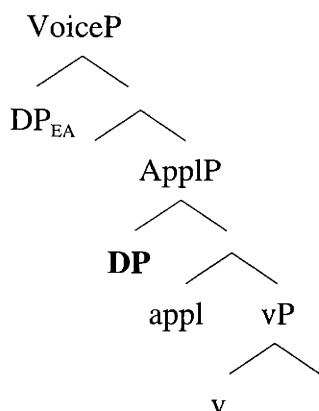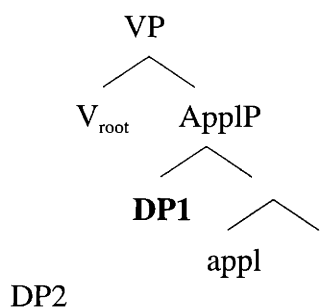
e. *Object of Preposition:*

```
        VP
        /\
   V_root   PP
            /\
           P    DP
```
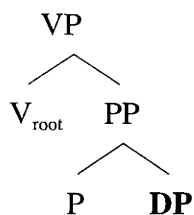
I begin with a discussion of simple transitive clauses and an introduction to the structural tests I will use in the rest of this chapter to determine argument positions. I then turn to an examination of applicative and ditransitive clauses, followed by an analysis of both productive and lexical causative constructions in Tagalog.

2.2 Transitive Clauses

In this analysis of Tagalog clause structure, I adopt the framework of VoiceP (Kratzer 1996) and vP (Marantz 1997) in which all verbs are combinations of category-less roots and a verbalizing head, *v*. Above vP is a VoiceP whose purpose it is to relate an individual to the event described

by the vP which it embeds and whose specifier hosts the external argument.[2] In transitive clauses such as the ones in (2), the external argument is thus predicted to be in a position above the verb phrase, where it c-commands the direct object.

(2)   a.   D-**um**-udurog   <u>ang lalaki</u> ng salamin.
                Nom.asp-smash ANG man CS mirror
                "The man is smashing a mirror."

        b.   D-in-udurog-Ø ng lalaki <u>ang salamin</u>.
                Asp-smash-Acc CS man ANG mirror
                "The man is smashing the mirror."   (Maclachlan 1996)

Because word order is generally not available as a structural diagnostic in Tagalog, in order to determine the relative positions of arguments, we must turn instead to other tests. One useful diagnostic for argument position is pronominal variable binding. As shown in (3a), it is impossible for a quantifier in direct object position to bind a pronominal variable embedded in the external argument, but, as (3b) shows, a quantifier in the external argument position can bind a variable in direct object position.

(3)   a.   *Nagmamahal   <u>ang kanyang$_i$ ama</u> ng bawat anak$_i$.
                Nom.asp-pag-love ANG poss.   father CS every child
                "<u>Her$_i$ father</u> loves every child$_i$."   (Richards 1993)

        b.   Nagmamahal   <u>ang bawat ama$_i$</u> ng kanyang$_i$ anak.
                Nom.asp-pag-love ANG every child CS poss.   father
                "<u>Every father$_i$</u>" loves his child$_i$."

The variable binding relations are altered with the promotion of the direct object to subject position, as discussed in the context of weak crossover by Richards 1993 (this is much like cases of A-movement in English). Thus, a derived subject can bind into the external argument even if it begins as an underlying object

(4)   Minamahal-Ø ng kanyang$_i$ ama   <u>ang bawat anak$_i$</u>.
        Asp.love-Acc CS poss.   father ANG every child
        "<u>Every child$_i$</u> her$_i$ father loves."

---

[2] In some work (e.g. Chomsky 2001), vP is assumed to be the same phrase which projects the agent, but this type of analysis runs into problems when more arguments, such as applicatives, are added into the verbal domain between the EA and the verb (see Pylkkänen 2002 for discussion).

These binding facts show that the landing site for derived subject must be structurally higher than the starting position for the external argument, since the pronoun inside the external argument is grammatically bound by the moved direct object.[3]

Importantly, pronominal variable binding is not affected by scrambling. That is, scrambling neither creates new binding possibilities, (5), nor destroys binding relations that are licensed from either the base position or the subject position, (6).[4]

(5)   a.   *Nagmamahal   <u>ang kanyang ama</u>   ng bawat anak.
               Nom.asp-pag-love ANG poss.   father CS every child
               "<u>Her$_i$ father</u> loves every child$_i$."

       b.   *Nagmamahal   ng bawat anak <u>ang kanyang ama</u>.
               Nom.asp-pag-love CS every child ANG poss.   father
               "<u>Her$_i$ father</u> loves every child$_i$."

(6)   a.   Minamahal-Ø ng kanyang ama   <u>ang bawat anak</u>.
               Asp.love-Acc CS poss.   father ANG every child
               "<u>Every child$_i$</u> her$_i$ father loves."

       b.   Minamahal-Ø <u>ang bawat anak</u> ng kanyang ama.
               Asp.love-Acc ANG every child CS poss.   father
               "<u>Every child$_i$</u> her$_i$ father loves."

Reflexive binding is also useful as a probe into the structural relations among arguments, since in Tagalog it is sensitive only to base positions, not to derived ones (Schachter 1976, 1996, Guilfoyle, Hung, and Travis 1992, Kroeger 1993, Richards 1993). An argument that begins in a structurally higher position can always bind something that begins in a lower position, regardless of which is the syntactic subject. In (7a), for example, the reflexive element is the underlying direct object which has been promoted to subject position, yet binding from the external argument is perfectly grammatical (in fact this is the preferred expression for this interpretation). Conversely, a reflexive that begins in external argument position is ungrammatical, even if the direct object raises to a position above it when it becomes the subject, as in (7c).

---

[3] As stated in chapter 1, I assume the surface word order of Tagalog is derived by scrambling, so this analysis of structural relations should not make any strong predictions about the order of elements in the clause.

[4] There is, however, something of a precedence effect. That is, all else being equal, it is preferred for the quantifier to linearly precede the variable. The precedence effect sometimes interferes with binding judgments, but it cannot completely determine or account for the pattern.

(7) a. P-in-una-Ø   ng babae   <u>ang kanyang sarili</u>.
        Asp-criticize-Acc CS woman ANG poss.   self
        "The woman criticized <u>herself</u>."

     b. ?P-**um**-una   <u>ang babae</u> sa   kanyang sarili.[5]
        Nom.asp-criticize ANG woman DAT poss.   self
        "<u>The woman</u> criticized herself.

     c. *P-in-una-Ø   ng kanyang sarili <u>ang babae</u>.
        Asp-criticize-Acc CS poss.   self ANG woman
        "Herself criticized <u>the woman</u>."

     d. *P-**um**-una   <u>ang kanyang sarili</u> sa   babae.
        Nom.Asp-criticize ANG poss.   self DAT woman
        "<u>Herself</u> criticized the woman."

Both pronominal variable binding and reflexive binding are consistent with the prediction for Tagalog that the external argument originates in a structurally higher position than the complement of the verb, since in both cases there is a clear contrast between the external argument binding the direct object and vice versa. Having established the basic properties of simple clauses and the properties of the structural diagnostics, we can now turn to more complex argument structures involving applicatives, ditransitives, and causatives.

2.3 Applicatives

Pylkkänen 2001, 2002 argues for a split between 'high' and 'low' applicatives (building on previous observations in the literature, e.g. Baker 1988, Marantz 1993). A high applicative is located above the verb phrase but below the position of the external argument, where it relates an entity to the event denoted by the verb phrase. A low applicative, by contrast, relates two entities in a possessor relationship, creating a complex object made up of the theme and goal as the complement to the verb root. The relation between the two objects is mediated by a preposition-like head which takes both as arguments.

One diagnostic which can be used to differentiate between the two kinds of applicatives is the possibility of forming them on unergative verbs (Pylkkänen 2001). Since low applicatives

---

[5] This example is judged "awkward" as is. However, due to the subject extraction restriction in Tagalog (see section 2.3.2.2.1 below), this voice is obligatory in order to extract the external argument and the sentence is perfect in the form of a question:
(i)   <u>Sino</u> ang p-**um**-una   sa   kanyang sarili.
     Who ANG Nom.asp-criticize DAT poss.   self
     "<u>Who</u> criticized herself?"

are generated as complex objects, they require the presence of an underlying direct object, while high applicatives, given their structure, have no such requirement, requiring only a vP. This means that only high, and not low, applicatives may be formed on unergative verbs. In English, this test can be used to show that benefactive applicatives are low, since they are ungrammatical when the DO is not present.

(8)   Elissa baked Vivian *(a cake).

The opposite situation obtains in Kinyarwanda, where the unergativity test shows that benefactive applicatives are high.

(9)   *Kinyarwanda*:
        Umugabo a-rá-som-<u>er</u>-a umugóre.
        Man   SP-pres-read-<u>appl</u>-asp woman
        "The man is reading for the woman."   (McGinnis 2001)

Applying this diagnostic to Tagalog, we can see that benefactive and instrumental applicatives are high (for reasons to be discussed below this test is only relevant when the verb is in the voice corresponding to the applicative argument).

(10)   a.   I-tinakbo   niya <u>ang kanyang asawa</u>   *unergative with benefactive*
            Obl-asp-run he   ANG poss.   wife
            "He ran for his wife."
            (lit.: "His wife he ran-for.")

       b.   I-pinangtulog   niya <u>ang   bata</u>.   *unergative with instrumental*
            Obl-asp-pang-sleep he   ANG robe.
            "He used <u>his robe</u> for sleeping."
            (lit: "His robe he slept-by.")   (Ramos 1974)

This data suggests the high structure in (11) for benefactive and instrumental applied arguments in Tagalog.

(11) VoiceP

```
        VoiceP
        /\
      EA   /\
        voice  ApplP
                /\
          Ben/Instr  /\
                  appl   vP
                          /\
                        v    VP
                             /\
```
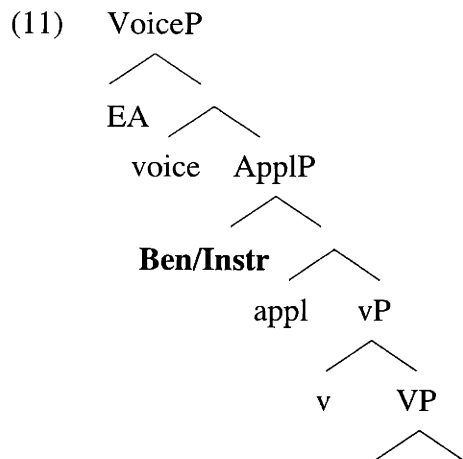
The same sort of transitivity test can be used to show that goal applicatives are low in Tagalog. As the following examples show, it is ungrammatical to have an applicative goal without a direct object, implying that goals in Tagalog are not possible on verbs without direct objects. (This holds only for a neutral context which does not favor pro-drop, i.e. when there is no overt antecedent for the absent argument.)

(12) a. Binigy-**an**   ko <u>ang ama</u> ng anak.   √*transitive with goal*
          Asp-give-DAT I ANG father CS child.
          "I gave <u>the father</u> his child."

      b. *Binigy-**an** ko <u>ang ama</u>.   **intransitive with goal*
          asp-give-Dat I ANG father
          "I gave (to) <u>the father</u>."

The structure suggested for goal constructions by these data is the low applicative one, as in (13).

(13) a.   VP
          /\
         V   ApplP
               /\
           DP_{goal} /\
                   appl   DP_{DO}
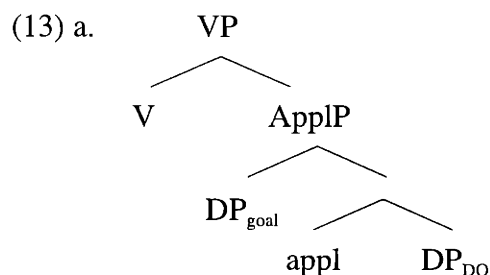
In the remainder of this section I discuss the properties of both kind of applicatives in Tagalog.

2.3.1 High Applicatives

2.3.1.1 Benefactives

The structure in (11) is not the only way to introduce a benefactive phrase in Tagalog. As shown in (14), when another argument is the subject (marked with *ang*), a benefactive is introduced by a

preposition and the applicative construction (with the benefactive not marked by a preposition) is impossible. I will discuss this restriction on applied non-subject arguments and suggest some possible reasons for it in the next section, but for present purposes, it is important just to be aware of the contrast in (14).

(14) a.   <u>Ang lalaki</u> ay t-**um**-awa   [para sa kanyang asawa]
            ANG man AY Nom.asp-laugh P DAT poss. spouse
            "<u>The man</u> laughed for his wife."

     b.   *Nagluto   ng adobo ng babae   <u>si   Romeo</u>.[6]
            Nom.asp-cook CS adobo CS woman ANG Romeo
            "<u>Romeo</u> cooked adobo for a woman."

Turning now to pronominal variable binding, consider the following benefactive sentences.

(15) a.   B-**um**-antay   <u>ako</u>   ng bawat anak$_i$ [para sa kanyang$_i$ magulang].
            Nom.asp-watch ANG.I CS every child   P DAT poss. parent
            "<u>I</u> watched every child$_i$ for his$_i$ parents."

     b.   Binantay-**an** ko <u>ang bawat anak</u>$_i$ [para sa kanyang$_i$ magulang].
            asp-watch.Dat I ANG every child   P DAT poss.   parent.
            "I watched <u>every child</u>$_i$ for his$_i$ parents."

The sentence in (15a) has a prepositional benefactive containing a pronominal variable that is grammatically bound by the quantifier direct object 'every child'. This indicates that the prepositional phrase must originate lower in the structure than the direct object, as diagrammed in (16). The sentence in (b) shows the same fact with the direct object acting as the sentential subject.

(16)

```
        /\
       v    VP
            /\
  every child  /\
             V    PP
                  /\
                 P   his parents
```

---
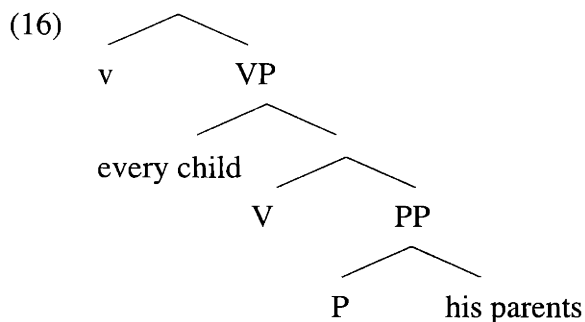
[6]This sentence is grammatical if *ng adobo ng babae* is interpreted as a possessive construction, with the meaning "Romeo cooked the woman's adobo."

Pronominal variable binding in a benefactive voice clause such as (17) exhibits a different pattern. It is impossible for a direct object quantifier to bind a variable inside the benefactive argument.

(17) *I-binantay ko ng bawat anak$_i$ ang kanyang$_i$ magulang.
      Obl-asp-watch I CS every child ANG poss.   parent.
      "I watched every child$_i$ for his$_i$ parents."

The impossibility of direct object binding in this example contrasts with the possibility for the direct object in the accusative (DO) voice to bind a variable in the EA, and vice versa. The example in (18a) shows that the derived subject position of the DO must be higher than the position of the EA, since the DO quantifier can bind a variable contained in the EA. The example in (18b), however, in which a quantifier EA binds a variable contained in the subject DO, shows that reconstruction of the derived subject to its base position must also be possible, since, given the data in (18a), the derived subject position is higher than the EA and should not therefore be able to be bound by it.

(18) a. Minamahal-Ø ng kanyang$_i$ ama   ang bawat anak$_i$.
          Asp.love-Acc CS poss.   father ANG every child
          "Every child$_i$ her$_i$ father loves."

      b. Minamahal-Ø ng bawat ama$_i$ ang kanyang$_i$ anak..
          Asp.love-Acc CS every father ANG poss. child
          "His$_i$ child every father$_i$ loves."

The grammaticality of these examples suggests that the ungrammaticality of the sentence in (17) cannot simply be due to a general prohibition on binding from the DO position.

The ungrammaticality of pronominal variable binding of the benefactive by the direct object in (17) indicates instead that the subject benefactive must have originated in a position higher than the direct object. In this configuration, the quantifier is unable to c-command the pronominal variable, as shown in (19).

(19)   ApplP

    his$_i$ parents

         appl   vP

             v   VP

               V   every child$_i$
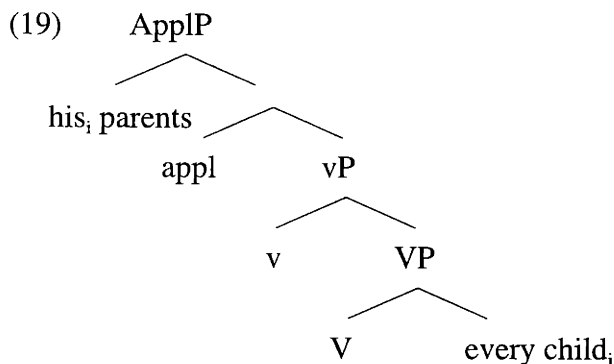
Together, the sentences in (15) and (17) suggest that prepositional benefactives originate lower in the structure than direct objects, as expected given their prepositional status, while benefactives in the benefactive voice are located above the direct object, in a high ApplP, in accordance with the unergativity test for high applicatives.

Variable binding also indicates that the agent originates higher than the benefactive in either of its positions, since it is grammatical for a quantifier in external argument position to bind a variable inside both a prepositional and an applicative benefactive, as shown in (20a&b).

(20)   a.   T-**um**-akbo <u>ang   bawat esposo</u>$_i$ para sa   kanyang$_i$ asawa.
               Nom.asp-run ANG each   spouse P DAT poss.   spouse
               "<u>Every husband</u>$_i$ ran for his$_i$ wife."

       b.   **I**-tinakbo   ng bawat esposo$_i$ <u>ang   kanyang$_i$ asawa</u>.
               Obl-asp-run CS each spouse   ANG poss.   spouse
               "Every husband$_i$ ran for <u>his$_i$ wife</u>."

       c.   **I**-niiyak   ng kanyang$_i$ esposo <u>ang   bawat asawa</u>$_i$.
               Obl-asp.cry CS poss.   spouse ANG each   spouse
               "Her$_i$ spouse cried for <u>each wife</u>$_i$."

The availability of the bound variable reading in the sentence in (20b) also shows that reconstruction of derived subjects to their base positions is possible, since the only way to obtain the bound variable reading is for the benefactive to be c-commanded by the agent, and the example in (18b) above indicated that the derived subject position is higher than the EA position. The contrast between (20b) and (20bc) shows that reconstruction is not obligatory, however, since it is also possible for the benefactive subject to bind into the agent after it is promoted.

Reciprocal binding also leads to the conclusion that the agent originates higher in the clause than benefactives, since agent phrases can bind benefactive reciprocals in either the prepositional or applicative positions.

(21)　a. *Applicative benefactive:*

　　　　I-pinag-luto　　　　　ni　Bing at Alex$_i$　　ng adobo　<u>ang isa't isa$_j$</u>.
　　　　Obl-asp.PAG-cook CS Bing and Alex CS adobo ANG each other
　　　　"Bing and Alex$_i$ cooked adobo <u>for each other$_j$</u>."

　　b. *PP benefactive:*

　　　　Nag-luto　　　　　<u>si　Bing at Alex$_i$</u>　　ng adobo para sa isa't isa$_j$.
　　　　Nom.asp.PAG-cook ANG Bing and Alex CS adobo　P DAT each other
　　　　"<u>Bing and Alex$_i$</u> cooked adobo for each other$_j$."

The data in this section confirms that benefactives in benefactive subject clauses originate in a high applicative position above the verb phrase but below the external (agent) argument, yielding the structure in (22a). In the other voices, however, the benefactive is introduced in a low PP within the verb phrase, as in (22b).

(22)　a. *Benefactive subject, applicative structure*

VoiceP

DP$_{EA}$

　　voice　　ApplP

　　　　DP$_{ben}$

　　　　　appl　　vP

　　　　　　　　VP

　　　　　　　V　　　DP$_{DO}$
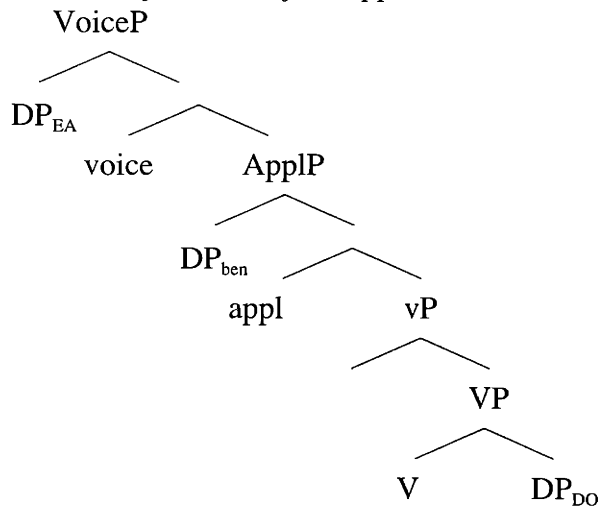
　　b. *Other subject, PP benefactive*

VP

DP$_{DO}$

　　V　　　PP

　　　　P　　　DP$_{ben}$
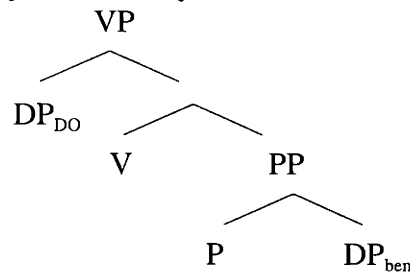
2.3.1.1.1 Obligatory Subjects

One issue raised by the benefactive data is the somewhat mysterious ban on applicativized benefactives when another argument is subject, as repeated in (23).

(23) a. *Nagluto   ng adobo ng babae <u>si Romeo</u>.
           Nom.asp-cook CS adobo CS woman ANG Romeo
           "Romeo cooked a woman adobo."

      b. *Ni-luto-Ø   ni Romeo ng babae <u>ang adobo</u>.
           Asp-cook-Acc CS Romeo CS woman ANG adobo
           "Romeo cooked a woman adobo."

Travis 2001, observing the widespread lack of applicative objects like these in Austronesian languages, suggests that the reason for their absence is that these languages do not license a derived object position. Thus, processes like applicativization, possessor raising, and object shift which in other languages target a derived object position require movement all the way to subject position in Austronesian. For instance, the Malagasy example in (24) has an applicative benefactive argument, but, as in Tagalog, it also must be the subject rather than an extra object in the clause.

(24) *Applicative in Malagasy*
      Nividian'ny   lehilahy lamba   <u>ny ankizy</u>
      PST-CT-buy-DET man   clothing DET child
      "The man bought the clothing for the children."   (Travis 2001)

Pearson 2001 arrives at a similar conclusion: applicativized arguments in Malagasy (and, by extension, Tagalog) cannot stay in situ and are only licensed if they raise further in the derivation. Pearson cites similar restrictions on French inifinitival subjects (Kayne 1981, others) and Swahili instrumental applicatives (citing Ngonyani 1996). In French, for example, bare infinitival complements may only host an overt subject if it undergoes movement to a higher position, as illustrated in (25).

(25) a. Je crois [PRO avoir   fait une erreur].
           I believe   have.inf made a   mistake
           "I believe myself to have made a mistake."

      b. *Je crois [Jean être   le plus   intelligent de tous.
           I believe Jean be.inf the most intelligent of all
           "I believe Jean to be the most intelligent of all."

      c. Quel garçon$_i$ crois-tu [t$_i$ être le plus intelligent de tous]?
           Which boy   believe-you be.inf the most intelligent of all
           "Which boy do you believe to be the most intelligent of all?"
                                                              (Pearson 2001)

It thus appears to be the case that, cross-linguistically, there are certain constructions in which it is ungrammatical *not* to move an argument and that some positions cannot be occupied by overt

material at spell-out. Although the reasons for this restriction are unclear, its existence allows the Tagalog applicative facts to be recognized as part of this larger pattern. In what follows I present two areas of speculation for why in situ applicatives should be disallowed, but I will not attempt to decide between them.

The first potential explanation involves the cross-linguistic tendency for applicative arguments to be affected (e.g. Marantz 1993). In English, for example, there is a contrast in affectedness between applicative and prepositional goal arguments in sentences such as the ones in (26).

(26) a. I threw *Geoff* the ball.

  b. I threw the ball *to Geoff.*

In (26a), the applicative goal is affected in the sense that it must have actually received the ball, whereas, in the sentence in (b), there is no implication that the intended goal actually caught the ball, and therefore it is not necessarily affected by the action.

In Tagalog, according to Ramos 1974, there is a requirement that an affected argument must be the subject of the clause.

(27) a. Na-walan <u>siya</u> ng pera.
    State.asp-lose ANG.he CS money
    "<u>He</u> lost some money."
    (He was adversely affected by the loss of his money.)

  b. Na-bali-**an** <u>siya</u> (ng binti).
    State-broke-Dat ANG.he (CS leg)
    "<u>His</u> leg was broken." (Ramos 1974, p. 130)
    (He was adversely affected by the breaking of his leg.)

  c. #Na-bali-**Ø** niya ang binti.
    State-broke-Acc he ANG leg
    for: His <u>leg</u> was broken.
    (can mean something like: "He broke (someone's) leg.")

The language-specific requirement on affected arguments, in combination with the cross-linguistic generalization that high applied arguments are affected might thus conspire to force applicative arguments to raise to subject.

Another possible reason for the impossibility of non-subject applicative arguments is that applied arguments are obligatorily specific. As I argue in the next chapter, specificity requires arguments to shift to the edge of the phase and thus puts them in the subject configuration. Some

support for the idea that applicatives must be specific comes from the fact that English applied arguments are also preferentially specific, as illustrated in (28).

(28) a.   ?Brendan gave *a girl* the book.

b.   Brendan gave *the girl* a book.

c.   Brendan gave the book *to a girl.*

If the English *preference* for specific applicatives is translated into a Tagalog requirement for specific applicatives, then the absence of non-subject benefactive applicatives follows.[7] Since I argue elsewhere on the basis of independent considerations that Tagalog has a more formalized system of specificity marking, the obligatory specificity of applied arguments is a highly plausible explanation for the impossibility of leaving an applicativized argument in situ.

Suggestive evidence for this analysis comes from Spanish dative constructions. In Spanish, clitic-doubling an argument indicates specificity and benefactive datives are obligatorily clitic-doubled and specific, as shown in (29).

(29) Carlos *(les)   constuyo una casa   a los suegros.
      Carlos CL.Dat built   a   house his parents-in-law.Dat
      "Carlos built his parents-in-law a house."   (Cuervo, ms.)

The fact that applicative arguments are obligatorily specific in another language lends support to this account of Tagalog applicatives and further serves to assimilate Tagalog syntax into the wider cross-linguistic pattern.

This approach to obligatory subjects encounters one problem. As will be discussed in chapter 3, the specificity restriction on arguments is obviated in cases of extraction. Just in the case where an external argument is extracted from the clause, the in situ direct object can be interpreted as specific.

(30) <u>Sino</u> ang b-**um**-ili ng damit?
      who ANG Nom.asp-buy CS dress
      "<u>Who</u> is the one that bought a/the dress?"   (Nakamura 1996)

---

[7] In fact, in Tagalog, non-specific benefactives always occur as objects of prepositions.
(i)   G-**um**-agawa   <u>siya</u>   ng laruan [para sa   mga bata].
        Nom.asp-make ANG.he CS toy   P   DAT pl.   child
        "<u>He</u> makes toys [for children]."

The specificity requirement approach to high applicatives predicts that the obligatory subject effect should also be obviated for applicatives when some other argument is extracted, but this prediction is incorrect, as demonstrated by the examples in (31), since non-subject high applicatives are still ungrammatical when the subject is extracted.

(31)   a.   #<u>Sino</u> ang **nag**-luto   ng adobo ng babae?
               Who ANG Nom.asp.pag-cook CS adobo CS woman
               ≠"Who cooked adobo for the woman?"
               Means: "<u>Who</u> cooked the woman's adobo?"

        b.   *<u>Ano</u> ang niluto-∅   ni Romeo ng babae?
               What ANG asp-cook-Acc CS Romeo CS woman
               "<u>What</u> did Romeo cook the woman?"

Thus there are some aspects of the obligatory subjects requirement that might be accounted for on the basis of specificity, but clearly there is more to be understood before a complete analysis is possible. For now, I leave the issue open and simply take it as a fact that high applicatives cannot remain in situ, following Pearson 2001.

2.3.1.2 Instrumentals

Instrumental arguments, like benefactives, can originate in a high applied position, as indicated by their ability to appear with unergative verbs, (32a). They may also appear as adjuncts, as in (32b).

(32)   a.   I-pinang-lakad   ng lalaki <u>ang   tungkod</u>.
               Obl-asp.inst-walk CS man ANG stick
               "The man walked <u>with a stick</u>."

        b.   K-**um**-uha   <u>siya</u>   ng sabaw [sa   pamamagitan ng sandok].
               Nom.asp-take ANG.he CS soup DAT use   CS ladle
               "<u>She</u> took some soup with the ladle."   (Kroeger 1993)

As in other languages (e.g. Kinyarwanda, Baker 1988), there are semantic restrictions on which verbs allow an instrumental applied argument. As discussed by Marantz 1984 and Baker 1988, there is a difference between instruments which are 'intermediary agents' and those that are 'facilitating'. For instance, in English the first kind may appear in subject position, but the second cannot, as in (33).

(33)   a.   Elmer unlocked the porcupine cage *with a key*.   *Intermediary Agent*

        b.   *A key* unlocked the porcupine cage.

        c.   Elmer examined the inscription *with the magnifying glass. Facilitating*

d.   *The magnifying glass* examined the inscription.   (Marantz 1984)

Intermediary agents are also the only kind of instrumentals which are possible as applied objects in Kinyarwanda, from which Baker 1988 concludes that there is a difference in argument structure between the two types of instruments. According to Baker, intermediary agent instrumentals are true arguments of the verb but facilitating instrumentals are more like adjuncts.

The same contrast between instrumental types observed in English exists in Tagalog as well, as illustrated in (34). Intermediary agent instrumentals are possible as subjects, but facilitating instrumentals are not.

(34)   a.   **I-pinam-pigil**   ni Bing <u>ang straightjacket</u> kay Alex.
        Obl-asp.inst-restrain CS Bing ANG straightjacket DAT Alex
        "Bing restrained Alex <u>with the straightjacket</u>."

        b.   ****I-pinang-salita**   ni Alex <u>ang mikropono</u>   sa   kumperensya.
        Obl-asp.inst-speak CS Alex ANG microphone DAT conference
        "Alex spoke <u>with the microphone</u> at the conference."

Since in general derived objects in other languages correspond to derived subjects in Tagalog, this contrast fits in exactly with the analysis of instrumental subjects as applicatives. There are semantic restrictions on which verbs may take which instruments as arguments, just as in other languages with object applicative instrumentals. (See also Paul 1999 on a similar contrast in Malagasy.)

Instruments, unlike benefactives, can appear as bare NPs when they are non-specific, as shown in (35a). In order for a non-subject instrument to be specific, it must occur in an adjunct adverbial, as in (35b).

(35)   a.   Dadalh-**in**   ko *ng sipit*   <u>ang isda</u> sa   mesa.
        Asp.bring-Acc I   CS chopsticks ANG fish DAT table.
        "I'll take <u>the fish</u> to the table *with chopsticks*." (Kroeger 1993)

        b.   K-**um**-uha   <u>siya</u>   ng sabaw [sa   pamamagitan ng sandok]
        Nom.asp-take ANG.3 CS soup   DAT   using   CS ladle.
        "<u>She</u> took some soup [with the ladle]."

This data is consistent with two possible analyses. The first is that bare instruments are generated in the high applied position like instrumental subjects and that they remain in their base position there when they are non-specific. The second is that instruments, like benefactives, can only begin in the high applicative position when they are further promoted to subject, which means that bare instrumentals like the one in (36a) must be in a different position, such as a low

applicative within the verb phrase along the lines of Marantz 1993. I will argue for the second analysis as a better account of the data.

As discussed by Marantz 1993, in Chichewa and Chaga instrumental applicatives, either the theme-instrument order or the instrument-theme order is grammatical.

(36) *Chichewa*:
    a.   Anyani   a-ku-phwany-**ir**-a   *mwala* dengu.
        Baboons SP-prs-break-APPL-fv stone basket
        "The baboons are breaking the basket with a stone."

    b.   Anyani   a-ku-phwany-**ir**-a   dengu *mwala*.
        Baboons SP-prs-break-APPL-fv basket stone
        "The baboons are breaking the basket with a stone."

This is in contrast to applied benefactives, which must always precede the direct object.

(37) *Chichewa*:
    a.   Chitsiru chi-na-gul-*ir*-a   *atsikana* mphasto.
        Fool   SP-pst-buy-APPL-fv girls   gift
        "The fool bought a gift for the girls."

    b.   *Chitsiru chi-na-gul-ir-a   mphasto *atsikana*.
        Fool   SP-pst-buy-APPL-fv gift   girls
        "The fool bought a gift for the girls."

On the basis of this difference, Marantz proposes that instrumental (and locative) applicative arguments and themes in these languages can be generated in two different orders within the VP. In other words, these sorts of applicatives alternate in directionality – whether the instrument is higher (*use* instrument *on* theme) or lower (*act on* theme *with* instrument).

(38)   a.   VP

    b.   VP
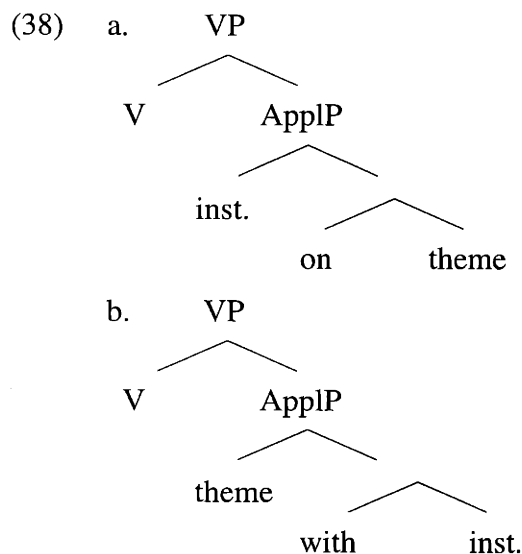
I would like to suggest here that the structure underlying Tagalog bare instrumental arguments is the same as the second variant proposed by Marantz (also similar to the conclusion reached for bare instruments in Malagasy by Travis 2001). To be more precise:

1. Instrumental subjects begin in a high applicative position from which they must move, exactly like high benefactives.

2. Instrumental adverbials are located within the verb phrase, like prepositional benefactives.

3. Bare instruments are licensed in a low applicative structure.

Pronominal variable binding data suggests that high instrumental applicatives (those that must become subject) begin in a position higher than that of the direct object, since they may not be bound by a quantifier in the direct object, as shown in (39).

(39)   *?I-pinang-baril   ko <u>ang   kanyang baril</u> ng bawat sundalo.[8]
       Obl-asp.inst-shoot I ANG poss.   gun CS every soldier.
       "I shot every soldier <u>with his gun</u>."

This fact, in accordance with the possibility of adding instruments to unergatives in this construction, suggests that these instrumental subjects are high applicatives in Tagalog, originating in a position outside the verb phrase as in (40).

(40)   VoiceP

DP$_{EA}$

voice   ApplP

DP$_{inst}$

appl   vP

VP

V   DP$_{DO}$

---
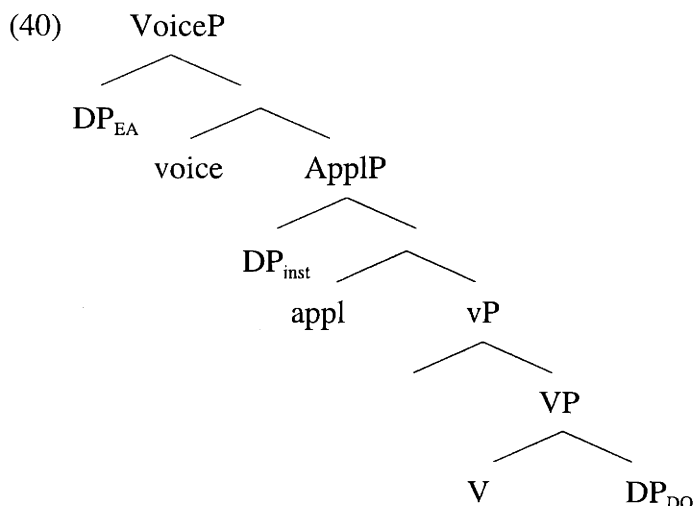
[8] Since Taglaog lacks a straightforward inaminate pronoun it is not possible to test pronominal variable binding from the applied instrumental into the direct object. Semantic implausibility also rules out using a personal pronoun (#?I shot his soldier with every gun).

As for adverbial instruments, pronominal variable binding indicates that these are, like PP benefactives, lower than direct objects, since instrumental pronominal variables may be bound by direct object quantifiers.

(41)   P-**um**-igil   <u>ako</u>   sa bawat pasyente$_i$ [gamit ang kanyang$_i$ straightjacket.]
       Nom.asp-restrain ANG.I DAT every patient   using ANG poss.   straightjacket
       "<u>I</u> restrained every patient$_i$ with his$_i$ straightjacket."

This data suggests the low position in (42) for adjunct instruments.

(42)

```
          /\
         /  \
        V    /\
            /  \
          DO   /\
              /  \
           instrument
```
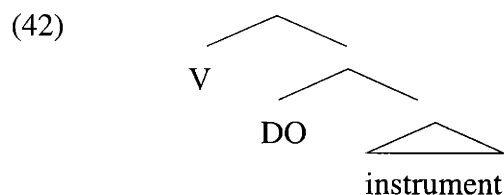
If bare instruments are generated in the same position as subject instruments, they should also be possible with unergative verbs, since there is no direct object requirement on high applicatives. On the other hand, if bare instruments form part of a low applicative structure, they should be impossible with unergative verbs. With these predictions in mind, compare the sentences in (43).

(43)   a.   **I**-pinang-lakad   ng lalaki <u>ang tungkod</u>.   √ *subject (high) instrument*
            Obl-asp.PANG-walk CS man ANG stick
            "The man walked <u>with a stick</u>."

       b.   *Naglakad   ng tungkod <u>ang lalaki</u>.   *bare instrument*
            Nom.asp.PAG-walk CS stick   ANG man
            "<u>The man</u> walked with a stick."

       c.   *Sino ang **n**aglakad   ng tungkod?   *bare instrument*
            Who ANG Nom.asp.PAG-walk CS stick
            "Who walked with a stick?"

As shown in (c), even when use of the nominative voice is forced by questioning the subject, a bare instrument is ungrammatical with an unergative verb, suggesting that the low applicative analysis of bare instruments is the correct one.

Another prediction made by the analysis of bare instrumentals as low applicatives is that binding of a pronominal variable within a bare instrument should pattern with binding into adjunct instrumentals rather than into high applicative instrumentals. This is indeed the case, as shown by possibility of the direct object binding into the bare instrument in (44a), parallel to the binding for adverbial instruments in (44b) and unlike high applicative instruments, (44c).

(44)   a. *Bare instrument:*

<u>Sino</u> ang **pum**igil   sa bawat pasyente_i ng kanyang_i straightjacket?
Who ANG Nom.asp.restrain DAT each patient   CS poss.   straightjacket
"<u>Who</u> restrained every patient_i with his_i straightjacket?"

b. *Adverbial instrument:*

<u>Sino</u> ang **pum**igil   sa bawat pasyente_i [gamit ang kanyang_i straightjacket]?
Who ANG Nom.asp.restrain DAT each patient using ANG poss. straightjacket
"<u>Who</u> restrained every patient_i [using his_i straightjacket]?"

c. *High applicative instrument:*

*I-pinam-pigil   ko <u>ang kanyang_i straightjacket</u> ng bawat pasyente_i.
Obl-asp.pang-restrain I ANG poss.   straightjacket CS every patient
"I restrained every patient_i <u>with his_i straightjacket</u>."

The data in this section has demonstrated the different possible structures for instruments in Tagalog: high applicatives, low adverbials, and low applicatives that surface as bare DPs. I have argued that bare instrumentals form part of an applicative complex object and as such originate in a position below that of the direct object. It is important to note that this analysis extends the structural parallel between benefactives and instrumentals, since both benefactive and instrumental high applicatives must become subjects when they are present in the structure.

2.3.1.3 Locatives

Locative subjects, like benefactives and instrumentals, can also be found with unergative verbs, indicating that they also fall into the class of high applicatives.

(45)   a.   Pinamamangka-**an** mo ba   <u>ang ilog</u>?
              Asp-boat-Dat   you ? ANG river
              "Do you go boating <u>on the river</u>?" (S&O 1971)

       b.   Pinag-sulat-**an** ko <u>ang desk na ito</u>.
              Asp.pag-write-Dat I ANG desk dem.
              "I wrote <u>on this desk</u>."   (S&O 1971)

As with instrumental subjects, there are semantic restrictions on the combinations of verbs and locatives. Applied locatives are only possible with some combinations of verb and location (intuitively, when the locations are closely connected to the action described by the verb) .

(46)   a.   Mag-pa-pahinga <u>si Armand</u> sa   upuan.   *Non-applicative locative*
              Nom-asp-rest   ANG Armand DAT chair
              "<u>Armand</u> will rest in a chair."

       b.   Pagpa-pahingah-**an** ni Armand <u>ang upuan</u>.   *Applicative locative*
              Asp-rest-Dat   CS Armand ANG chair
              "Armand will rest <u>in the chair</u>."

(47) a. k-**um**-anta <u>si Maria</u> sa saluhan. *Non-applicative locative*
     Nom.asp-sing ANG Maria DAT party
     "<u>Maria</u> sang at the party."

   b. *kinantah-**an** ni Maria <u>ang saluhan</u>. **Applicative locative*
     asp.sing-Dat CS Maria ANG party
     "Maria sang <u>at the party</u>."
     (can mean: Maria sang TO the people at the party.)

This restriction is similar to the one on locative applicatives in Kinyarwanda, as discussed by Baker 1988. So-called "inner locatives" are grammatical as applicativized arguments in Kinyarwanda, as shown in (48); however, "outer locatives" of the type exemplified in (49) are more adjunct-like and cannot be applicativized, regardless of the verb used.

(48) *Kinyarwanda*:
   a. Abaana b-iica-ye *ku meeza*. *Non-applicative locative*
     children SP-sit-ASP on table
     "The children are sitting on the table."

   b. Abaana b-iica-ye-**ho** *ameeza*. *Applicative locative*
     Children SP-sit-ASP-on table
     "The children are sitting on the table." (Kimenyi 1980)

(49) *Kinyarwanda*:
   a. Abaana b-iica-ye *ku musozi*. *Non-applicative locative*
     children SP-sit-ASP on mountain
     "The children are sitting on (on top of) the mountain."

   b. *Abaana b-iica-ye-**ho** *umusozi*. **Applicative locative*
     Children SP-sit-ASP-on mountain
     "The children are sitting on the mountain." (Kimenyi 1980)

The same contrast exists in Tagalog as well. The so-called inner locative "on the table" is grammatical as a subject, but as in Kinyarwanda, the outer locative "on the mountain" is impossible.[9]

(50) a. In-uupu-**an** ng mga bata <u>ang lamesa</u>. *Non-applicative locative*
     Asp-asp.sit-Dat CS pl. child ANG table
     "The children are sitting <u>on the table</u>."

---

[9] For some speakers it is possible to force applicativization just in case the locative argument is being extracted. Thus, the question in (i) is grammatical, in contrast to the declarative in (50b).
(i) (%) <u>Anong bundok</u> ang inuupu-**an** ng mga bata?
    What-LK mountain ANG asp.sit-Dat CS pl. child
    "<u>Which mountain</u> are the children sitting on?"

b.   *?In-uupu-**an**   ng mga bata   <u>ang bundok</u>.[10]   **Applicative locative*
Asp-asp.sit-DAT CS pl.   child ANG mountain
"The children are sitting <u>on the mountain</u>."

2.3.2 Low Applicatives and the Dative Alternation

As discussed above, goal applicatives in Tagalog are low, as demonstrated by the

ungrammaticality of the intransitive goal applicative repeated in (51b).

(51)   a.   Binigy-**an**   ko <u>ang ama</u>   ng anak.
Asp-give-Dat I ANG father CS child.
"I gave <u>the father</u> his child."

b.   *Binigy-**an**   ko <u>ang ama</u>.   **intransitive with goal*
asp-give-Dat I ANG father
"I gave (to) <u>the father</u>."

In this section, I show that the syntax of goal constructions is more complex than it at first

appears. Like English, Tagalog exhibits a dative shift alternation for ditransitive verbs which has

not previously been noted because of the unavailability of the usual cues of word order and overt

prepositions. Evidence from question formation, adjunct fronting, and binding, however, all

point to the conclusion that there is a structural difference between the dative voice construction

in which the goal is the subject (*ang*-marked) and the oblique voice construction in which the

theme is the subject. The latter, I argue, is actually a prepositional construction like the English

to-variant of double-object verbs, in contrast to the low applicative structure of the dative voice

clause.

(52)   a.   B-in-igy-**an**   ng babae   ng liham <u>ang kapit-bahay</u>.   *Applicative goal*
Asp-give-Dat CS woman CS letter ANG neighbor
"The woman gave <u>the neighbor</u> a letter."

b.   I-b-in-igay   ng babae   <u>ang liham</u> sa kapit-bahay.   *Prepositional goal*
Obl-asp-give CS woman ANG letter DAT neighbor
"The woman gave <u>the letter</u> to the neighbor."

I begin with a discussion of the properties of the dative alternation in other languages, and then

return to the Tagalog data.

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[10] The only possible interpretations for this sentence are either that there is a tiny toy mountain or
that the children are giants who use mountains as chairs.

2.3.2.1 Dative Alternation Cross-linguistically

2.3.2.1.1 English

Ditransitive verbs in English exhibit a dative alternation in which the goal argument may either be expressed as a DP preceding the direct object DP, as in (53a), or may be the complement of a prepositional phrase which follows the direct object, as in (53b).

(53) a. Ben sent <u>the girl</u> a book.

   b. Ben sent a book <u>to the girl</u>.

As discussed by Aoun & Li 1989, Bruening 2001, the double-object variant exhibits scope-freezing, meaning that the higher quantifier must always take scope over the lower one, while the prepositional construction has no such restriction and allows scope ambiguity for the two arguments, as shown in (54).

(54) a. I gave a child each doll.   a > each, *each > a

   b. I gave a doll to each child.   a > each, each > a (Bruening 2001)

Bruening argues that the scope freezing facts can be explained if quantifier raising obeys the locality condition shortest attract/shortest move (Richards 1997), in which the closest potential satisfier of an Agree relation must be the first element to enter into that relation and to move as a result. Only after the first quantifier raises may the second do so and, following tucking in (Richards 1997), the relative order of the two quantifiers will be preserved even after they both raise. This analysis only predicts a frozen order of quantifiers, however, if there is a structural asymmetry between the two quantifier arguments to begin with, as shown in (55).

(55)

```
              VoiceP
              /\
           Q1   /\
              Q2   /\
                 EA  /\
                  voice  vP
                        /\
                      v    VP
                          /\
                        V    ApplP
                             /\
                          t_Q1  /\
                              appl   t_Q2
```
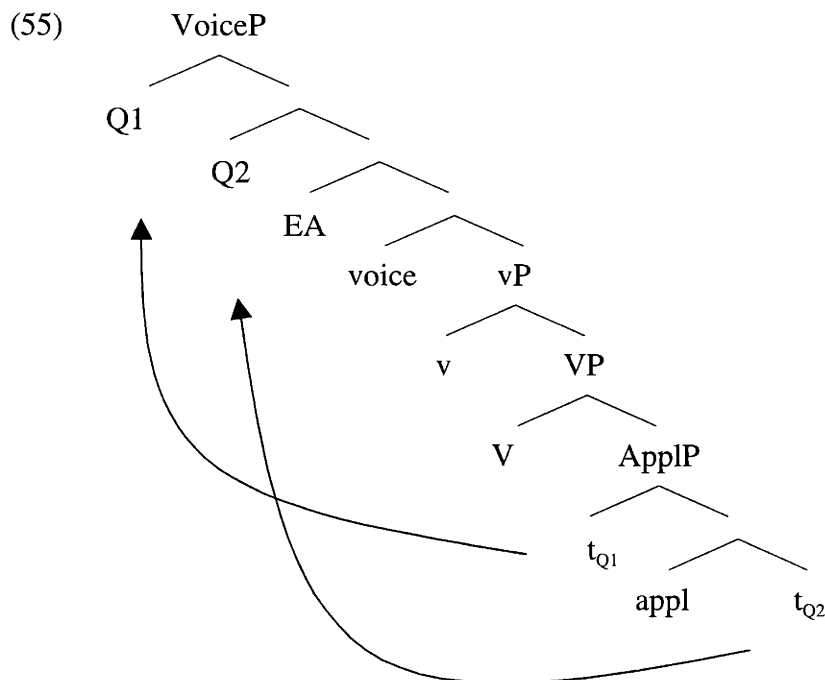
If there is no asymmetry between the base positions of the quantifiers to begin with, as in the prepositional construction, no argument is closer than the other, and there is no superiority effect.

Bruening suggests that the structure of the prepositional variant could either be a small clause in which the two arguments mutually c-command each other, as in (56), or perhaps a ternary-branching structure, as in (57).

(56)

```
           VP
          /\
         V    ?P
       send   /\
            DP   PP
           book  /\
                P    DP
                to  /\
                   the girl
```

(57)

```
              VP
          /  |  \
         V   DP   PP
      send  book  /\
                 P    DP
                 to  /\
                    the girl
```
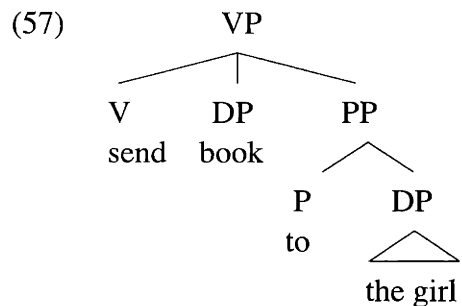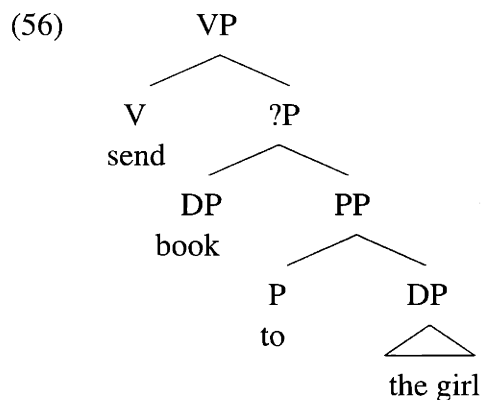
In either case, the PP and the DP are at the same relative distance from a higher head and thus neither is 'closer' than the other. This lack of asymmetry accounts for the absence of scope freezing in the prepositional dative construction.

2.3.2.1.2 Icelandic

An alternation like the one in (56)-(57) is argued also to exist in Icelandic by Collins and Thráinsson 1996 on the basis of word order and object shift facts (also discussed by Zaenen, Maling, and Thráinsson 1985, Falk 1990, Holmberg 1991, Holmberg & Platzack 1995, Ottósson 1991, 1993). The two variants are illustrated in (58).

(58)   a.   Hann gaf <u>konunginum</u>   ambáttina.   *IO-DO*
               He   gave the king(DAT) the maidservant(ACC)
               "He gave the king the maidservant."

       b.   Hann gaf ambáttina   <u>konunginum</u>.   *DO-IO*
               He   gave the maidservant(ACC) the king(DAT)
               "He gave the maidservant to the king."   (Collins & Thráinsson 1996)

Although the labels on their structures are somewhat different from Bruening's, Collins and Thráinsson argue for a similar structural difference between the two types of clause. They actually assume a higher position for the direct object in the DO-IO ("inverted") order, as illustrated in (59) (as opposed to the mutual c-commanding relation of Bruening's analysis). A null preposition introduces the IO in the "inverted" order. In the IO-DO order, they argue that the IO originates in a higher position, (59b).

(59)   a. *DO-IO "inverted" order*

$$
\begin{array}{c}
\text{VP}_2 \\
\diagdown \\
\text{NP}_{\text{DO}} \quad \text{V'} \\
\diagdown \\
\text{V}_2 \quad \text{PP} \\
\diagdown \\
\text{P} \quad \text{NP}_{\text{IO}} \\
\varnothing
\end{array}
$$

b. *IO-DO order*

```
        VP₂
       /  \
    NP_IO   V'
           /  \
         V₂    NP_DO
```
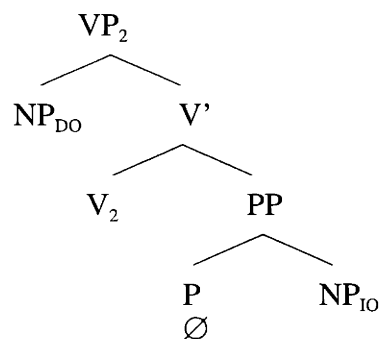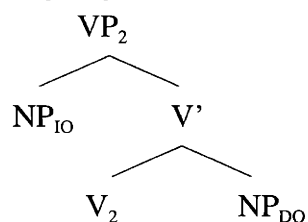
Collins and Thráinsson observe that in the inverted order the normal locality condition that requires that the indirect object always shifts before the direct object is obviated. Instead, the direct object may shift past negation even when the indirect object does not do so.

(60) Ég gaf ambáttina   **ekki** konunginum
      I   gave the maidservant(ACC) **neg**   the king(DAT)
      "I did not give the maidservant to the king."

Thus, in Icelandic the inverted base order gives rise to a difference in object shift possibilities, which is very significant when compared to Bruening's analysis of English superiority effects in ditransitives. In both languages differences in structure unsurprisingly correlate with differences in locality-constrained movement operations.

2.3.2.2 Tagalog revisited

This section explores the dative alternation in Tagalog with evidence from question-formation, adjunct fronting, optionality, and pronominal variable binding. Drawing on the analyses presented above for the dative alternation in other languages, I will argue that, in Tagalog:

1. The dative voice (goal-topic) has the structure in (61) in which the goal is the higher argument in a low applicative phrase.

2. The oblique voice (theme-topic) has the structure in (62), in which the goal is introduced inside a low prepositional phrase.

(61) *Dative Voice, Applicative goal_DP*

```
              VP
             /  \
            V    ApplP
                /  \
              DP    \
             /      / \
          goal   appl   DP
                        theme
```

(62) *Oblique Voice, goal$_{PP}$*

```
                    VP
                  /    \
                 V      ?P
               give    /   \
                     DP      PP
                   theme    /   \
                          P      DP
                          to     goal
```
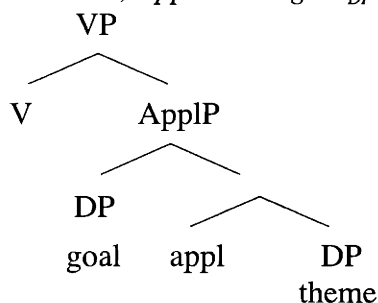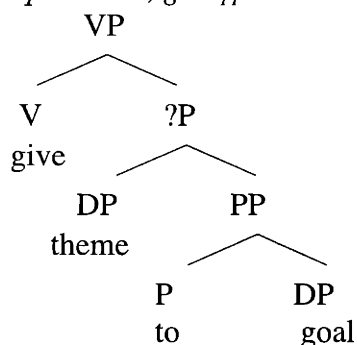
2.3.2.2.1 Question formation

As noted in chapter 1, in Tagalog, it is ungrammatical to question an argument when the verb does not bear subject agreement for that argument. Argument wh-questions are formed as pseudo-clefts.

(63) a.   Sino [ang **nagnakaw** ng kotse mo]?
        Who ANG Nom.asp-steal CS car 2.poss.
        "<u>Who</u> stole your car?"

      b.   *Sino [ang ninakaw-**Ø** <u>ang kotse mo</u>]?
        Who ANG asp.steal-Acc ANG car 2.poss.
        "Who stole <u>your car</u>?"

For adjuncts, however, the same restrictions do not hold: adjuncts can be questioned without being subjects and are fronted to the beginning of the clause rather than clefted.

(64) a.   Bakit ba <u>siya</u> **um**-uwi?
        Why ? ANG.he Nom.asp-go.home
        "Why did <u>he</u> go home?"

      b.   [Mula kailan] <u>siya</u> **nagtrabaho**?
        Since when ANG.he Nom.asp-work
        "Since when has <u>he</u> been working?"

      c.   [Ayon daw kanino] **Ø**-darating <u>siya</u> bukas?
        according to who Nom.asp.come ANG.he tomorrow
        "According to whom is <u>he</u> coming tomorrow?"   (S&O p. 513)

The subject restriction on question formation also holds for ditransitive verbs, with one important exception to be discussed below. To question either the external argument or the direct object, the argument must first be promoted to subject, as shown in (65).

(65) a.   <u>Ano</u> ang **i**-binigay mo kay Bing?
        What ANG Obl-asp.give you DAT Bing
        "<u>What</u> did you give Bing?"

> b.   *Ano ang binigy-**an** mo <u>si Bing</u>?
> What ANG asp.give-Dat you ANG Bing
> "What did you give <u>Bing</u>?"
>
> c.   <u>Sino</u> ang **n**ag-bigay   kay Bing ng laruan.
> Who ANG Nom.asp.pag-give DAT Bing CS toy
> "<u>Who</u> gave Bing a toy?"
>
> d.   *Sino ang **i**-binigay   kay Bing <u>ang laruan</u>.
> Who ANG Obl-asp.give DAT Bing CS toy
> "<u>Who</u> gave Bing <u>a toy</u>?"

There are, however, two ways to question the goal argument of a ditransitive verb. The first is to promote the goal to subject, as in (66).

(66)   <u>Sino</u> ang binigy-**an**   mo ng pera?
       Who ANG asp.give-Dat you CS money
       "<u>Who</u> did you give money to?"

The second way is only possible when the goal is not the subject of the clause. In this case, the goal can be questioned with the adjunct question-word *kanino*. The clause does not take the form of a pseudo-cleft, but rather involves simple fronting, as occurs in the adjunct questions in (64) above.

(67)   Kanino mo **i**-binigay   <u>ang pera</u>?
       To-who you Obl-asp.give ANG money
       "To whom did you give <u>the money</u>?"

It is ungrammatical to question the goal in this manner when the verb is inflected to agree with it as the subject.

(68)   *Kanino mo binigy-**an**   ng pera?
       To-who you asp.give-Dat CS money
       "To whom did you give the money?"

The possibility for a goal to be questioned like an adjunct when the direct object is the subject provides evidence that the goal in these clauses is prepositional, parallel to the English and Icelandic constructions in which the goal is introduced in a prepositional phrase. Furthermore, the fact that the goal must be questioned as an argument when the verb agrees with it as the subject indicates that the structure for these clauses must be different: the goal is generated as a dative applicative argument, parallel to the 'dative-shift' construction in the other languages.

2.3.2.2.2 Adjunct Fronting

Adjunct-fronting in Tagalog is another construction which, as the name suggests, applies to adjuncts as opposed to arguments. As Kroeger 1993 characterizes it, "only non-terms (i.e. obliques, adjuncts, or adverbials) can undergo Adjunct Fronting" (p. 43). The first example in (69) illustrates well-formed adjunct-fronting, and (b) and (c) show the impossibility of fronting either subject or non-subject arguments. [11]

(69) a. [Para kay Pedro] ko binili-Ø   ang laruan.
          P   DAT Pedro I asp-buy-Acc ANG toy
          "For Pedro I bought the toy."

      b. *Ang libro-ng ito ko binili-Ø   para kay Pedro.
          ANG book-LK this I asp-buy-Acc P   DAT Pedro
          "This book I bought for Pedro."

      c. *Ng Nanay siya   pinalo-Ø.
          CS mother ANG.3 asp-spank-Acc
          "By mother he was spanked."   (Kroeger 1993, p. 44)

Importantly, the goal argument in a theme-topic clause can be adjunct-fronted, again patterning with adjuncts rather than with arguments.

(70) [Sa akin] nila i-binigay   ang premyo. [12]
      DAT me 3pl Obl-asp-give ANG prize
      "To me they gave the prize."   (Kroeger 1993, p. 44)

Goals contrast with direct objects and external arguments, which cannot be fronted in this manner.

(71) a. *Ni Maria i-binigay   ang premyo sa akin.
          CS Maria Obl-asp.give ANG prize   DAT me
          "Maria gave the prize to me.

      b. *Ang premyo nila i-binigay   sa akin.
          ANG prize   3p Obl-asp.give DAT me
          "They gave the prize to me."

---

[11] Since adjunct questions also involve simple movement to the front of the clause, it is possible that they instantiate a specialized type of adjunct fronting.

[12] As Kroeger observes, the location of the second-position clitic *nila* in this example shows that fronting is to a position within the clause.

2.3.2.2.3 Optionality

Another piece of evidence for the difference between possible structures for ditransitives is the relative acceptability of omitting either the goal or the theme when they are not the subject. This test for argument-hood must be used with caution, since some prepositional phrases might be arguments for some verbs and it is not entirely clear what pragmatic factors condition the acceptability of dropping an argument or an adjunct; However the following sentences are at least consistent with the analysis presented here in which the goal is an adjunct PP when the theme is the subject of the clause, while the theme is always an argument. It is ungrammatical to omit the theme when the goal is the subject, but possible to omit the goal when the theme is the subject, as shown in (72). (As with the examples discussed in section 2.3, this holds only for neutral contexts which do not favor pro-drop.)

(72) a. *Binigy-**an** ko <u>ang ama</u>.   *Goal = subject*   **omit theme*
          Asp-give-Dat I ANG father
          "I gave <u>to the father</u>."

      b. ?I-binigay ko <u>ang pera</u>.   *Theme = subject*   √*omit goal*
          Obl-asp.give I ANG money
          "I gave <u>the money</u>."

This contrast is not very strong and does not hold for clauses in which the external argument is the subject, but it is at least suggestive of a difference in structure between these two voices.

2.3.2.2.4 Binding

Pronominal variable binding for ditransitive verbs is also consistent with the existence of a dative alternation. As in English, the goal in the applicative structure (dative voice) can reliably bind into the theme, but the theme cannot bind into the goal.

(73) a. Binigy-**an**   ko <u>ang bawat bata</u>$_j$ ng kanyang$_j$ laruan.
          Asp-give-Dat I ANG every child CS poss.   toy
          "I gave <u>every child</u>$_j$ his$_j$ toy."

      b. *Binigy-**an**   ni Maria ng bawat anak$_j$ <u>ang kanyang$_j$ ama</u>.
          Asp-give-Dat CS Maria CS each child ANG poss.   father
          "Maria gave <u>his$_j$ father</u> each child$_j$."

Importantly, the impossibility of binding the pronoun in (73b) is not due to some restriction on binding into the derived subject The sentences in (74), in which the base position of the quantifier (external argument) c-commands the base position of the variable (direct or indirect

object), show that the bound variable reading is grammatical even when the bound variable occurs within the derived subject.

(74) a. I-binigay   ng bawat ama$_j$ ang kanyang anak kay Maria$_i$.
          Obl-asp.give CS every father ANG poss.   child DAT Maria
          "Every father$_j$ gave his$_j$ child to Maria$_i$."

      b. Binigy-**an**   ng bawat ama$_j$ ang kanyang anak ng laruan.
          Asp.give-Dat CS every father ANG poss.   child CS toy
          "Every father$_j$ gave his$_j$ child a toy."

In the prepositional structure in (74a), the bound variable is within the direct object phrase which is functioning as the subject (*ang kanyang anak*). Its status as subject means that this phrase has raised into a position above the external argument, since, as we saw from the transitive examples in 2.2, promotion to subject creates new variable binding possibilities (the direct object can bind into the external argument). This example shows that it is possible for the subject to reconstruct into its base position, in this case below the external argument, thus creating the configuration for variable binding. The example in (74b) shows a similar fact for the dative-shifted dative voice clause, except that the subject is the goal and it is this goal which must reconstruct into its base position in order to be bound by the external argument.

The binding pattern is different with a prepositional goal (oblique voice), where judgments vary. For at least some speakers, the goal can still bind into the theme, as in (75a). The theme can also bind into the goal, as shown in (75b), but it is impossible to tell if this is a result of the arguments' base positions, since promotion to subject creates new variable binding possibilities regardless of base position.

(75) a. (%) (i)-binigay ko sa   bawat ama$_i$ ang kanyang$_i$ bata. (judgements vary)
              Obl-asp-give I DAT every father ANG poss. child
          "I gave his child to each father"

      b. (i)-binigay   ko sa   kanyang$_i$ ama ang bawat bata$_i$.
          Obl-Asp.give I DAT poss.   father ANG every child
          "I gave each child to his father."

The ambiguity of binding in this type of sentence is similar to structural ambiguities found in other prepositional dative structures. As discussed above, superiority effects for quantifier scope interactions disappear in the prepositional variant in English. Also, "backwards binding" of reciprocals is possible: the PP goal is able to bind into the theme which precedes it, as shown in (76).

(76)   I showed each other$_i$'s houses to [Cara and Jenny]$_i$.

Note that, in order to account for the binding from the prepositional goal into the theme in both English and Tagalog, it must be assumed that the goal DP can c-command out of this type of prepositional phrase; the P must be transparent for c-command (a similar situation arises for Japanese postpositions in the causative, as discussed below in section 2.4.1). In this respect, the facts of Tagalog once again pattern with the properties of dative-shift that are familiar from other languages.

When the external argument is subject, binding is possible in both directions. That is, the goal can bind into the theme and vice versa. This suggests that both underlying structures are possible when neither internal argument is shifting, as expected.

(77)   a.   Nag-bigay   <u>ako</u>   sa bawat bata$_j$ ng kanyang$_j$ laruan
              Nom.asp.pag-give ANG.I DAT each child CS poss.   toy
              "<u>I</u> gave each child$_j$ his$_j$ toy."

        b.   Nag-bigay   <u>ako</u>   ng bawat anak$_j$ sa kanyang$_j$ ama.
              Nom.asp.pag-give ANG.I CS each child DAT poss.   father
              <u>I</u> gave each child$_j$ to his$_j$ father."

A more striking example of binding relations in the Oblique voice is provided by the sentence in (78), which shows that it is ungrammatical for the fronted PP goal to bind into the DO subject.

(78)   *Kanino mo **i**-niabot   <u>ang kanyang laruan</u>?
        who   you Obl-asp.hand ANG poss.   toy
        "To whom did you hand <u>his toy</u>?"

The ungrammaticality of this sentence could be the result of two related problems, both of which indicate that the goal must originate below the theme. The first is that *kanino* originates below the theme in a position that does not c-command the variable (and wh-fronting does not create a new binding possibility to fix it), but this analysis would make the wrong prediction for those speakers who do allow binding from the goal into the theme (see (75) above). Even supposing that the structure is not asymmetrical in that way, however, the sentence is still predicted to be ungrammatical because the movement of *kanino* creates a weak crossover violation (Lasnik and Stowell 1991, Richards 1993, Barss and Lasnik 1986), which results when a coindexed pronoun intervenes between a moved element and its trace.

(79) a. *WCO configuration*
          *XP$_i$ pro$_i$ t$_i$

      b. *Who$_i$ did you hand his$_i$ toy to t$_i$?

The ungrammaticality of (78) thus indicates that the goal indeed does originate lower than the theme in the oblique voice.

The binding data in this section, together with the other types of evidence presented above, are consistent with the analysis of ditransitive verbs as alternating between a low applicative and a prepositional structure. The low applicative variant is used in the dative voice (when the goal is promoted to subject) while DO-subject clauses have a prepositional goal, similar to the English *to*-dative construction.

2.4 Causatives

Tagalog has two basic types of causative constructions: a productive "syntactic" causative and a transitivizing "lexical" causative. This section discusses each, beginning with the productive causative.

2.4.1 Productive Causative

The productive causative is illustrated in (80). The causative morpheme *pa* is added before the verb root and a causer argument is added to the sentence. As in many other languages (e.g. Turkish, Romance, Japanese), the case-marking on lower arguments depends on the transitivity of the lower verb. The causative of an intransitive verb marks structural (accusative) case on the causee , while the causative of a transitive requires the causee to be marked with dative.

| (80) | a. | T-**um**-akbo <u>ang batang   lalaki</u>.
Nom.asp-run ANG child-LK man
"<u>The boy</u> ran." | *Non-causative* |

b. Nag-pa-takbo   <u>ako</u>   *ng* batang lalaki.   *Cause, intrans.*
    Nom.asp.PAG-CAUSE-run ANG.I CS child man
    "<u>I</u> made the boy run."

(81) a. Nag-linis   <u>si   Fe</u> ng bahay.   *Non-causative*
          Nom.asp.PAG-clean ANG Fe CS house
          "<u>Fe</u> cleaned the house."

      b. Nag-pa-linis   *ng* bahay <u>si   Fe</u> *sa* babae. *Cause, trans.*
          Nom.asp-PAG-CAUSE-clean CS house ANG Fe DAT woman
          "<u>Fe</u> made the woman clean the house."

I assume that the causative morpheme heads its own vP projection and requires an outer VoiceP to introduce the causer agent (Pylkkänen 2002). As for the lower EA, the causee, I present evidence here that there are two kinds of voice phrases which can introduce it into the structure. The difference between them is that one has the ability to check inherent (dative) case on the causee argument while the other does not. The tree in (82) shows the basic structure underlying both causative types.

(82)　　VoiceP

```
           VoiceP
          /\
    causer   /\
         voice  vP
              /\
         V_cause  VoiceP
           pa    /\
             causee  /\
                 voice  vP
                      /\
                     v   VP
                        /\
                   V_root  DO
```
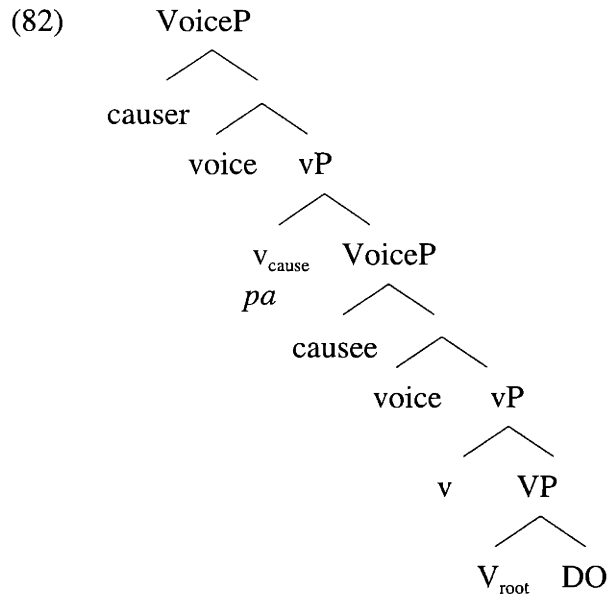
The non-inherent-case voice head introduces causee arguments in causee-subject clauses such as the one in (83).

(83)　　Pina-pag-ayos-Ø　　　　　　ko <u>si　Carlos</u> ng kanyang sariling kotse.
　　　　Asp.CAUSE-PAG-repair-Acc I ANG Carlos CS poss.　　self　　car
　　　　"I made <u>Carlos</u> repair his own car."

Since the causee does not check inherent case with voice, it is eligible to check its case with the higher *v*, which values its case feature as accusative (by definition, accusative is a result of Agree with *v*). That the case is accusative is apparent from the voice morphology on the verb when the causee is subject; voice in these causee-subject constructions spells-out the accusative agreement marker, –*in/Ø*. This agreement marker is normally restricted to (accusative-marked) direct objects, as exemplified in (84) (see chapter 4 for details).

(84)　　D-in-urudog-Ø　ng lalaki <u>ang　salamin</u>.
　　　　Asp-smash-Acc CS man ANG mirror
　　　　"The man is smashing the mirror."　　(Maclachlan 1996)

The second way to introduce a causee argument in Tagalog is with an inherent-case checking voice head. It underlies both causer-subject and (lower) DO-subject clauses, which are exemplified in (85).

(85) a.   **I-pina-ayos**   ko kay Carlos <u>ang kanyang sariling kotse</u>
            Obl-asp.Cause-repair I Dat Carlos ANG poss.   self   car
            "I made Carlos repair <u>his own car</u>."

      b.   **Nag-pa-ayos**   <u>ako</u>   kay Carlos ng aking kotse.
            Nom.asp.PAG-Cause-repair ANG.I Dat Carlos CS my.gen.LK car
            "<u>I</u> made Carlos repair my car."

Causees in this construction are marked with (nominal) dative case when the lower verb is transitive. This dative case marking is suggestive of adjuncthood for the causees, but actually, the situation is more complex: Dative-marked causees pattern in some respects with adjuncts and in others with arguments. On the adjunct side, a causee in this structure can be adjunct-fronted, as shown in (86), and questioned as an adjunct, as shown in (87).

(86)   [Sa iskultor na taga-bayan] **(i)pinatayo**   ng alkalde <u>ang monumento</u>.
        DAT sculptor LK community Obl-asp.cause-build CS mayor ANG monument
        "The mayor had [the community sculptor] build <u>the monument</u>."

(87)   Kanino **(i)pina-tayo** ng alkalde <u>ang monumento</u>?
        Who   asp.Cause-build CS mayor ANG monument
        "Who did the mayor have build <u>the monument</u>?"

On the other hand, causees in the causer-subject and DO-subject voices are still able to bind reflexives (as in (85) above) and pronominal variables contained in the lower object, (88), properties which suggest that causees are still in an argument position that c-commands the lower object.

(88)   **Pina-halik-an** ni Berto sa bawat babae$_i$ <u>ang kanyang$_i$ Nanay</u>.
        Asp.Cause-kiss-Dat CS Berto DAT every girl AND poss. mother
        "Berto made every girl$_i$ kiss <u>her$_i$ mother</u>."

The Tagalog pattern in which causees seem to have some properties of both adjuncts and arguments has an interesting parallel in Japanese. In Japanese, a dative-marked causee can serve as the antecedent for the reflexive anaphor *zibun*, as shown in (89) (on both the "make" and the "let" interpretation).

(89)   Tanaka$_i$-ga Suzuki$_j$-ni zibun$_{i/j}$-no hon-o yom-ase-ta.
        Tanaka-Nom Suzuki-Dat self-Gen book-Acc read-Cause-Past
        "Tanaka$_i$ made/let Suzuki$_j$ read self$_{i/j}$'s book."   (Kuroda 1965)

However, as has been argued by Harley 1995, and Miyagawa 2001, the 'dative' marker –*ni* that occurs in the "let" interpretation of the causative is actually a postposition. These two properties are seemingly in conflict – ability to antecede a reflexive suggests that the causee is in an argument position, or at least a structural position which can c-command into the direct object, but the status of the causee as a postpositional phrase suggests adjunct status for the causee. The Japanese dative-marked causees thus seem to exactly parallel the Tagalog dative causees.

A possible solution for this apparent contradiction is that causees in these sentences are introduced in a VoiceP that can check the inherent case of its argument, thus accounting for the appearance of dative case. The inherent case checked on the causee, like the case checked by adpositions, is what allows it to behave like an adjunct for purposes of fronting and question formation; however, since the causee is still introduced in a VoiceP, rather than, for example, an adjoined PP, its structural position allows it to c-command the direct object, thus accounting for the structural properties of the causees. This gives us the revised structure in (90) for causer- and DO-subject clauses.

(90) VoiceP

causer

    voice   vP

         V_{cause} $VoiceP_{inherent}$

         pa

           $causee_{[DAT]}$

                voice   vP

                    v   VP

                        V_{root} DO
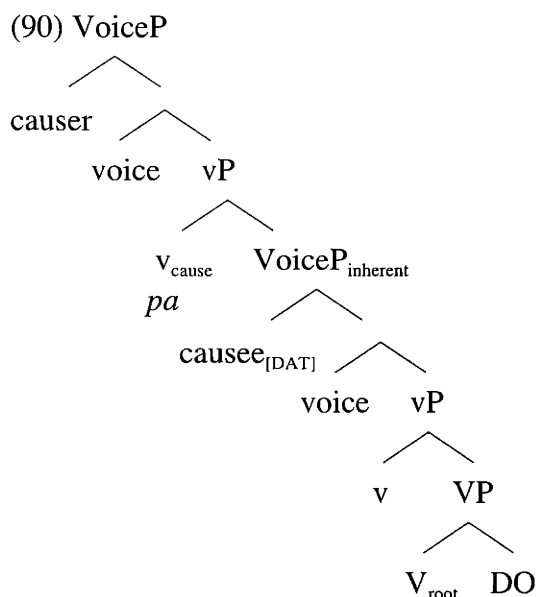
If there are two ways to introduce the causee into the structure, it is somewhat mysterious that the inherent-case version is only available for causer- and DO-subject clauses and the accusative-case version is only available for causee-subject clauses. Another way to state this is that the accusative-case version of VoiceP is only employed when the causee raises out of the specifier of VoiceP to become the subject of the clause and is impossible when the causee remains in situ. Just as with the obligatory subjectivization of high applicative arguments, there

is no obvious reason that this should be true, but it is possible that whatever requirement forces high applicative arguments to raise also accounts for the obligatory raising of causee subjects without inherent case.

The inherent-case VoiceP analysis does not explain the fact that causees of intransitive verbs are always marked accusative, even in causer- and DO-subject clauses. What exactly is responsible for the transitivity-induced case alternation in Tagalog is unclear, but it is at least possible to note that it is the same causative case alternation found in Romance and other languages (the Japanese facts are similar for transitives but slightly different for intransitives). In Italian, for example, causees of intransitive verbs are marked with accusative case, while causees of transitives are marked with an oblique case (dative).

(91) a. Maria **lo**   ha fatto piangere.
          Maria him(ACC) made   cry
          "Maria made him cry."

      b. Ho fatto riparare la macchina **a Arturo**.
          (I) made repair the car   to Arturo
          "I made Arturo repair the car."   (Ippolito 2000)

The case marking in these sentences is clearly very similar to the facts of Tagalog presented above in (80)-(81) and, although there is not yet an obvious analysis of the transitive/intransitive case alternation in any language, the Tagalog pattern can at least be assimilated to the cross-linguistic generalization that causees in transitive and intransitive clauses often surface with different case marking.

2.4.2 'Lexical' Causative

In addition to the productive causative, Tagalog also has a morpheme which is sometimes referred to as a "lexical" causative (e.g. Travis 2000). Many verb roots which alternate between transitive and intransitive uses take the pre-verbal morpheme *pag* only in the transitive (Maclachlan 1989, Travis 2000), as illustrated in (92). Several other roots which alternate in this way are listed in (93).

(92) a. T-**um**-umba   ang bata
          Nom.asp-fall ANG child
          "The child fell."

      b. Nag-tumba   ng bata   si Rosa.   (um+in+pag-tumba)
          Nom.asp.PAG-fall CS child ANG Rosa   (Nom+asp+pag-fall)
          "Rosa knocked the child down."   (Travis 2000)

(93)   *Alternating roots:*
      bukas 'open' (intr.) vs. (m)agbukas 'open (trans.)'
      hagis' 'be thrown' vs. (m)aghagis 'throw'
      handa' 'get ready' vs. (m)aghanda 'prepare'
      higa 'lie down (intr.)' vs. (m)aghiga'place in a reclining position'
      hinga 'breathe' vs. (m)aghinga'reveal one's feelings'
      hinto' 'stop' vs. (m)aghinto'stop (trans.)'
      ingay 'become noisy' vs. (m)agingay'make noise'
      init 'become hot' vs. (m)aginit'heat'
      intindi 'understand' vs. (m)agintindi'attend to, take charge of'

Pag also surfaces on many verb roots which are solely transitive and do not alternate, while it is rarely present on intransitive roots.[13]

(94)   *Transitive roots that take* pag*:*
      ligpit 'put away', luto' 'cook', mahal 'love', nakaw 'steal', pinta 'paint', plantsa 'iron', punas 'wipe', regalo 'give a gift', sabi 'say', sauli' 'return something borrowed or taken'...

(95)   *Intransitive roots that don't take* pag*:*
      galing 'become well, good', ganda 'become pretty', gising 'wake up', haba' 'become long', iyak 'cry', kilos 'move, do something', lakad 'walk', lakas 'become strong', laki 'become big', lamig 'become cold', langoy 'swim' ...

There are also some transitive verbs that do not take *pag* and, while there may be some semantic coherence to the non-pag class of verbs, for present purposes I assume that they are idiosyncratically marked not to take it (the mechanics of this assumption are elaborated in chapter 3). [14]

Travis 2000 argues that *pag* is located in a lower verbal shell, where the external argument is merged, since in the general case *pag* seems to signal the transitivity of the clause. Similarly, Ramos 1974 classes those verbs which take the nominative form of *pag* as referring to "agents as subjects that perform actions away from or external to them" (p. 122), as opposed to

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[13] At least this is true for intransitive roots that are used as unaccusatives, with the possible exception of *pag-mukha* 'seem'. More investigation into the properties of 'seem' in Tagalog is necessary, however, before a definitive analysis of why *pag* appears there will be possible. *Pag* also appears with several unergative verbs, a pattern which is actually predicted by the analysis of *pag* as the default head of voice, as discussed below.

[14] *Pag* is also sometimes used as a marker of reflexivity on the verb. It is relatively common, cross-linguistically, for reflexive morphemes to occur in voice, so this use of *pag* is not inherently inconsistent with the description of its properties in the text. The reflexive fact could perhaps be accounted for if the head of voice is also conditioned as *pag* in the context of a reflexive feature.

verbs without *pag* (the "–*um*- forms"), which are a more heterogeneous class, including verbs whose subjects are actually the undergoers of the action. Descriptively, *pag* appears on verbs with agentive external arguments. Since the location of external arguments is argued to be VoiceP, this description suggests that *pag* is in the head of voice, which is basically the conclusion reached by Travis 2000, although the labels used are different. In the absence of evidence to the contrary, I therefore assume that this is the case. The conditions on the appearance of *pag* in voice will be discussed further in the context of the theory of specificity shift presented in chapter 3.[15]

Like lexical causatives in many languages (e.g. Hebrew (Doron 1999), Japanese (Miyagawa 1999)), there is some degree of unpredictability in the combinations of *pag*+root and some alternating verbs in Tagalog undergo a semantic shift depending on the presence of *pag*. For example, the unaccusative use of the root *bagsak* means 'to fall', but the transitive version with *pag* conveys an additional sense of intentionality or intensity which is not present in the unaccusative.

(96) B-**um**-agsak   ang baso.
      Nom.asp-drop ANG vase
      "The vase fell/dropped."   (L&N 2000)

(97) **Nag**bagsak   ng baso ang bata.
      Nom.asp.PAG-drop CS vase ANG child
      "The child slammed down the vase."

Maclachlan 1992 (and Travis 2000) also gives the following example of semantic shift with the transitive use of *sabog* 'explode'. The transitive version cannot have the compositionally transparent meaning of the agent causing the explosion, and instead leads to an odd reading in which the agent 'scatters' the bomb.

(98) a.   S-**um**-abog   sa Boston ang bomba.
           Nom.asp-explode DAT Boston ANG bomb
           "The bomb exploded in Boston."

      b.   #Nag-sabog   ng bomba sa Boston   ang terorista.
           Nom.asp.PAG-explode CS bomb DAT Boston ANG terrorist
           "The terrorist scattered the bomb."
           Cannot mean: "The terrorist exploded the bomb."   (Travis 2000)

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[15] *Pag* also appears on verbs derived from nouns (e.g. mag-rollerblade 'to rollerblade'), which is consistent with the analysis of *pag* as the head of voice, since derived verbs also need to have external arguments licensed by VoiceP.

Furthermore, in a few cases, the addition of *pag* to a root correlates with no change in the valency of the verb, but only with a semantic shift.

(99) a.   Binilh-**an** niya <u>ako</u> ng tinapay.
            Asp.buy-Dat he ANG.I CS bread
            "He bought bread <u>from me</u>." (English 1986)

      b.   **I**-p-in-ag-bili   niya sa   kanila <u>ang kasangkapan</u>.   (i+in+pag+bili)
            Obl-asp.PAG-sell he DAT them ANG furniture
            "He sold them <u>the furniture</u>." (S&O)

In order to understand the exact nature of the interaction between *pag* and verb roots a theory of semantic decomposition would be useful, but such a proposal is well beyond the scope of this work. In what follows I simply offer some observations and speculations.

Much recent work, including Travis 2000 that deals explicitly with this Tagalog alternation (also Miyagawa 1980, 1989, Marantz 1997), converges on an analysis of idiosyncratic meanings and idiom formation that locates the boundary of possible unpredictable meanings as somewhere below the position of the external argument around the *v*/voice heads. The semantic shift in the Tagalog "lexical" causative is consistent with this idea, since *pag* is plausibly argued to be the head of VoiceP. This contrasts with the higher, productive causative *pa* which only affects the semantics in predictable, transparent ways. The presence of semantic shift in the alternating verbs thus provides further evidence for locating *pag* in the head of VoiceP.

Doron 1999 discusses a similar alternation in Hebrew., where the lexical causative template is largely systematic and predictable, as shown in (100a&b) below. The example in (100c) demonstrate, however, that for some roots there is no valency alternation associated with the lexical causative, although there is a difference in the interpretation. Also, as in (d) and (e), some verbs do not alternate and appear only in the causative form, although they do not necessarily have a causative meaning.

(100) *root*   *simple verb*   *causative verb*

	root	*simple verb*		*causative verb*	
a.	[q][p][c]	[q]a[f]a[c]	*jump*	hi[q][p]i[c]	*make jump*
b.	[m][t]	[m]e[t]	*die*	he[m]i[t]	*kill*
c.	[n][sˇ][r]	[n]a[sˇ]a[r]	*fall of from*	hi[][sˇ]i[r]	*shed*
d.				hiqsˇiv	*listen*
e.				hifcir	*urge*

Hebrew also has a separate 'intensive' template which shares some properties with *pag* in Tagalog. Like the causative template, the combination of the intensive with the root sometimes

contributes just a meaning shift, as in (101a-c), but when added to an unaccusative root, intensive results in the addition of an extra argument to the verb, as shown in (d-e).

(101) *root*   *simple verb*   *intensive verb*
a.   [q][p][c]   [q]a[f]a[c]   *jump*   [q]i[p]e[c]   *jump up and down*
b.   [sˇ][b][r]   [sˇ]a[v]a[r]   *break*   [sˇ]i[b]e[r]   *actively break*
c.   [p][g][']   [p]a[g]a[']   *hit*   [p]i[g]ea[']   *commit terrorist act*
d.   [g][d][l]   [g]a[d]a[l]   *grow(intr.)*   [g]i[d]e[l]   *grow(tr.)*
e.   [p][x][t]   [p]a[x]a[t]   *decrease*   [p]i[x]e[t]   *devaluate*

Doron's analysis of these facts is basically that the intensive and the causative are two separate heads that are merged into the structure to first determine "whether the verb is a verb of action, a causative verb, or a verb unclassified for these dimensions" (p. 8). Their second function is to determine the external argument. The intensive head syntactically requires an agent, regardless of whether the verb root it combines with already takes one. This means that unaccusative verbs, which have no agent on their own, have an agent added in the structure by the intensive, but transitive or unergative verbs, which already take agents, have only the intensive meaning added. The causative head functions similarly to guarantee a causer in the syntax, although this argument may be "identified with an internal argument if the latter is assigned the compatible source role by the root" (p. 11), as in the case of "fall off from" vs. "shed" in (100c).

The Hebrew split between causative and intensive shares many similarities with Tagalog productive and 'lexical' causatives and it seems highly plausible that the same process could be responsible for both systems, but since the data available at this point does not argue conclusively for this conclusion, I leave it open as a promising direction for future investigation. For the purposes of this chapter, which is to present the structural configurations of Tagalog, the important aspects of the lexical causative are its location in voice and the semantic shift in the meaning of the root that frequently accompanies it.

2.5 Conclusion

This chapter has demonstrated the hierarchical arrangement of arguments in Tagalog. Data from anaphor binding, pronominal variable binding, and applicative formation all support the conclusion that there are structural asymmetries among the base positions of arguments in Tagalog and all argue against a flat, non-configurational analysis. With these structural positions

in mind, we can now turn to how the structures motivated here are affected by further syntactic operations, which is the subject of the next chapter.

Chapter 3: Subject and Specificity

3.1 Introduction

In Tagalog, subjects (*ang*-marked elements) are obligatorily specific while direct objects are obligatorily non-specific, as shown in (1).

(1)   a.   *agent = subject*
        m-pag-luluto   <u>ang lalaki</u> ng adobo   para sa asawa (=magluluto)
        Nom.PAG-asp.cook ANG man   CS adobo   P DAT spouse
        "<u>*The* man</u> will cook adobo for his wife."
        (*A man will cook adobo for his wife.)
        (*The man will cook *the* adobo for his wife.)

        b.   *direct object = subject*
        Ø-lulutu-**in**   ng lalaki <u>ang adobo</u> para sa asawa
        asp.cook-Acc CS man   ANG adobo P DAT spouse
        "The man will cook <u>*the* adobo</u> for his wife."[1]
        (*The man will cook adobo for his wife.)

The pattern does not hold, however, when a (high) applicative argument is present. A benefactive subject clause allows for a specific direct object, as shown in (2).

(2)   *benefactive = subject*
        I-pag-lu-luto   ng lalaki   ng adobo   <u>ang asawa</u>
        Obl-PAG-asp-cook CS man   CS adobo ANG spouse
        "The man will cook <u>his wife</u> (the) adobo."

        The requirement that subject elements be specific has led to the claim that these 'subjects' are not subjects at all, but rather are some kind of topic phrase (Carrier-Duncan 1985, McKaughan 1958, McKaughan 1962, Schachter and Otanes 1972, Schachter 1976, 1996). As discussed in chapter 1, however, Kroeger 1993 showed that the interpretation of *ang*-marked elements is not consistent with topic status. The topic analysis also does not account for either the obligatory non-specificity of un-promoted direct objects or the obligatory presence in every clause of an *ang*-marked element, since true topics are generally not required in every clause in the same way subjects are.

        Another phenomenon illustrated in the above examples is the dis/appearance of the *pag* morpheme, which correlates with the specificity and subjecthood of the direct object (DO). *Pag* is present on the verb when the direct object is not the subject, as is evident in (1a), but it is obligatorily absent when the direct object has become subject in (1b). In the oblique voice in (2) it surfaces again.

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[1] This sentence can also mean "A man will cook the adobo for his wife". There is no specificity restriction on non-subject agents, as discussed below in section 3.3.1.

One of the most well-known aspects of Austronesian syntax is also evident in the example in (2): the promotion of some 'extra' or oblique phrase to subject, in this case a benefactive. In Tagalog, promotion of adjunct-like or oblique elements is widespread and productive. As discussed by Travis 2001, in the more familiar case of Bantu applicatives these constructions seem to create objects, but in Austronesian a derived subject results instead.

(3) a. *Applicatives in Chichewa*
    M̲l̲i̲m̲i̲ a-ku-dul-**ir**-a **nkhandwe** mitengo
    farmer cut-for fox trees
    "T̲h̲e̲ f̲a̲r̲m̲e̲r̲ is cutting trees **for the fox**."

  b. *Applicatives in Malagasy*
    Nividian'ny lehilahy lamba n̲y̲ a̲n̲k̲i̲z̲y̲
    PST-CT-buy-DET man clothing DET child
    "The man bought the clothing f̲o̲r̲ t̲h̲e̲ c̲h̲i̲l̲d̲r̲e̲n̲." (Travis 2001)

Travis 2001 also notes that specificity restrictions in other languages generally correlate with shifting of objects, while in Austronesian, specificity seems rather to be a subject property. Travis suggests that the unexpected behavior of Austronesian results from the lack of a derived object position; in the absence of an available object position, processes such as applicativization and object shift must target the subject position instead.

In this chapter I argue for a unified account of these phenomena as resulting from a generalized process of 'object' shift for specific arguments. In chapter 1 I reviewed arguments from Kroeger 1993 that Tagalog subjects are not topics in the pragmatic sense. If they are not topics, their obligatory specificity must be explained by other factors. In this chapter I argue that subjects shift in a manner familiar from object-shift in Germanic languages. I further argue that it is this process of shifting that puts these arguments in a position to Agree with T, thus giving rise to the voice agreement pattern. The apparent lack of derived objects follows from this analysis: Austronesian languages appear to lack derived objects precisely because the derived object position is the one that leads to subject agreement on T. Tagalog provides morphological evidence for object shift in the form of the *pag* morpheme, which, I argue here, is an anti-EPP morpheme whose absence indicates the occurrence of object-shift.

This analysis also accounts for the difference between the Tagalog voice system, which is passive-like in its promotion of an object to subject, and passive constructions in a language like English. In Tagalog there is no absorption of case or demotion of arguments to oblique status as there is in English, and, conversely, there are no specificity requirements on arguments in the English passive. Thus, I argue that the reason these two constructions have such different properties despite their surface similarity is because they result from different processes – passivization in English and argument shift in Tagalog.

One important aspect of the generalized argument shift analysis presented here is that it allows Tagalog to be recognized as strictly obeying superiority/shortest (Richards 1997, Bruening 2001) in the movement of arguments. With argument shift accounting for the promotion of arguments to subject, Tagalog appears to be a very well-behaved language, always Agreeing with and moving only the highest potential satisfier of an Agree relation initiated by a higher probe (in terms of Chomsky 2001). This is an important result, since many previous analyses of Austronesian (e.g. Pearson 2001, Paul 1999, GHT 1992) do not consider superiority in attempting to account for the syntax of clauses.

3.2 Similarities to Germanic

In this chapter I suggest that *ang*-phrases bear a close resemblance to shifted objects in Germanic in their sensitivity to specificity. In Germanic languages, specific objects must shift out of their base position while non-specifics must remain within the VP; this pattern is strikingly similar to the Tagalog requirement that direct objects in their base position be non-specific while subject elements (which presumably have moved from their base position) must be specific. This section explores this parallel by presenting the facts of Icelandic object shift, to be compared with Tagalog in the next section.

In Icelandic, specific objects shift out of VP and nonspecifics do not. Pronouns obligatorily shift because they are obligatorily specific, as seen in (4c) and (4d). Shifting is to a position to the left of VP-adjoined adverbs and negation.

(4) a. Nemandinn las bokkina **ekki**
         students-the-NOM read book-the-ACC **not**
         "The students didn't read the book."   (Thráinsson 2000)

     b. Hann las **ekki** baekur
         he read **not** books
         "He didn't read books."

     c. ?*Hann las baekur **ekki**
         he read books **not**   (Diesing 1995)

     d. Nemandinn las hana **ekki**
         students-the-NOM read it **not**
         "The students didn't read it."

     e. *Nemandinn las **ekki** hana
         students-the-NOM read **not** it
         "The students didn't read it."   (Thráinsson 2000)

Chomsky 2001 analyzes object shift of this sort as follows: *v* is generated with an EPP feature that requires some element within its domain to raise into its specifier. This feature is present only when it will have an effect on the semantic interpretation of the sentence, as in the case

of a wh-word that must raise to the EPP position of vP in order to be able to further raise to C, or for a specific object which must raise in order to receive the correct interpretation (see Chomsky 2001 for details). The specific interpretation of a shifted object is brought about because, at LF, the position at the edge of the phase is assigned a specific interpretation and elements internal to the phase are assigned a non-specific one. This analysis thus requires that any specific argument must raise to a specifier of vP in order to receive the correct interpretation (the same intuition captured in Diesing 1992). A rough diagram of the resulting structure is given in (5).

(5)
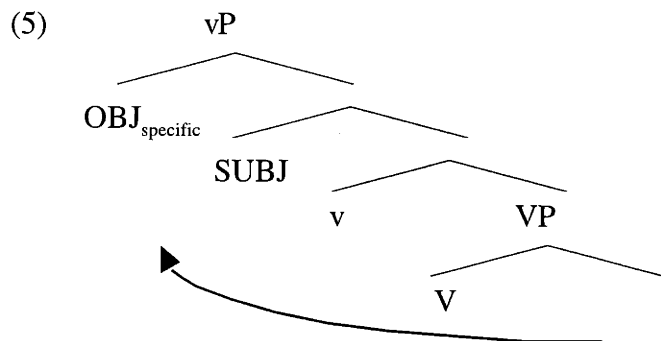
This analysis must be modified slightly in the context of the separate VoiceP/ vP framework adopted here on the basis of Kratzer 1996, Pylkkänen 2002. Shifted arguments must actually move to the edge of VoiceP, rather than vP. This is because, if a phase is defined as in Chomsky 2001 as a complete proposition (i.e. a predicate plus all of its arguments), the phase boundary must occur after the external argument is merged in, and in this framework that configuration obtains at the edge of VoiceP rather than vP. I therefore refer to voice as the phase head throughout this chapter.

In the case of verbs with more than one object in Icelandic , the higher argument must shift first (Collins & Thráinsson 1996, McGinnis 1998, Bruening 2001). This means that if an indirect object shifts, the direct object may also do so, but without shifting the higher argument the lower one cannot move, on the relatively standard assumption that the indirect object begins in a position higher than the direct object (Marantz 1993, Bruening 2001, Pylkkänen 2001, among others; see also chapter 2). As observed by Richards 1997, this means the movement obeys Superiority/Shortest.

(6)   Eg lana Mariu   baekurnar   **ekki**
        I   lend   Maria the books not
        "I do not lend Maria the books."   (judgments vary according to intonation)

(7)   a.   ?*Eg lana baekurnar   **ekki** Mariu.
               I   lend   the books not   Maria

        b.   Eg lana Mariu **ekki** baekurnar.
               I   lend Maria not   the books
               "I do not lend the books to Maria."   (Collins and Thráinsson 1996)

In clauses with two objects, the indirect object is closer to the attracting voice head and must therefore be attracted first. Once the indirect object raises, the direct object may raise and tuck-in (in the sense of Richards 1997) to a specifier below it. This double-argument shifting results in a structure something like the one in (8).

(8)
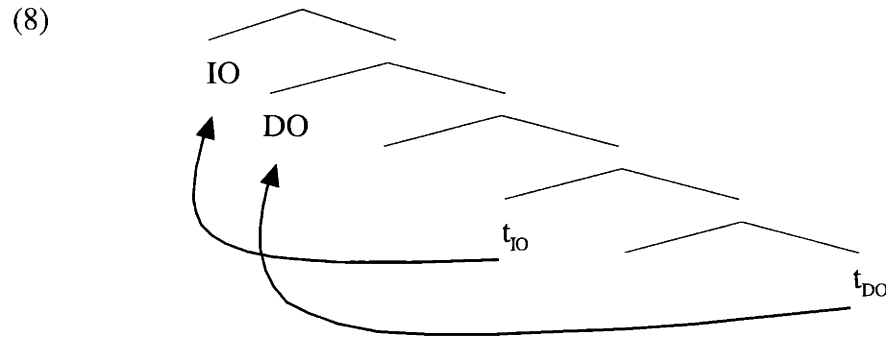
3.3 Shift in Tagalog[2]

In light of the Germanic pattern of object shift, the Tagalog system is relatively easy to account for. In fact, almost everything needed to explain the Tagalog pattern is already present in Chomsky's analysis of object shift.

3.3.1 The direct object as subject

In DO-subject clauses the direct object is the *ang*-phrase with which the verb agrees, as repeated in (9).

(9)   Lulutu-**in**   ng lalaki   <u>ang adobo</u>
        asp.cook-Acc CS man   ANG adobo
        "The man will cook <u>the adobo</u>."

Applying an object shift analysis to this sentence requires that the voice head establish an Agree relation with the specific direct object, as shown in (10).

(10)   VoiceP

---
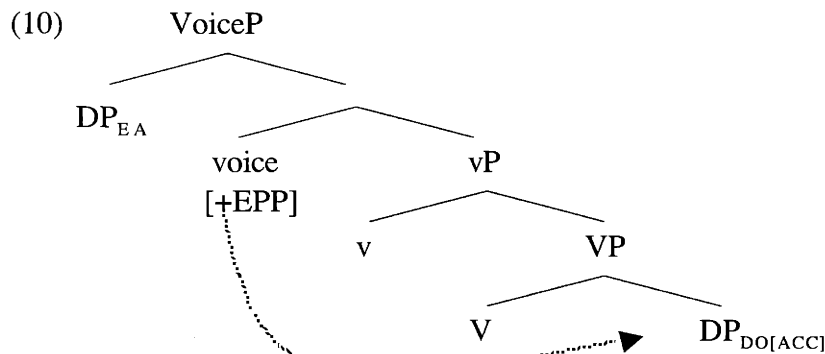
[2] See also Richards (in progress) for a similar analysis.

Next, since voice has an [EPP] feature in this case (because it is necessary for the correct semantic interpretation) the direct object must raise into to the specifier position to check it. At this point, the case features of the DP are marked for deletion (through previous Agree with *v*) in the sense of Pesetsky and Torrego 2001 but are not deleted until the next phase level, CP.[3] When the DO shifts it merges into a specifier above the EA, due to the requirement for immediate Agree discussed in chapter 1 that forces a merged specifier to occur below a moved one (technically, as explained in chapter 1, the EA will not merge until after the DO moves; then, the EA will tuck in below the moved DO). (Chomsky 2001 hypothesizes also that there is a (perhaps universal) requirement that moved arguments occur in specifiers outside of thematic specifiers.)

(11)

$$VoiceP$$

$$DP_{DO[ACC]}$$

$$DP_{EA}$$

$$voice \quad vP$$

$$v \quad VP$$

$$V \quad t$$
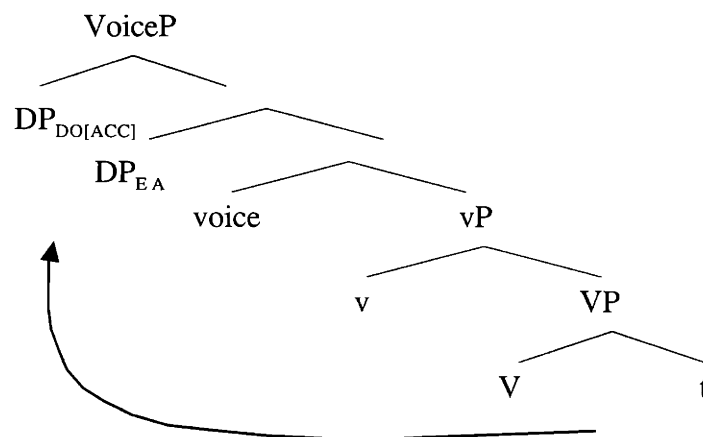
In the next step in the derivation, T is merged in above VoiceP. T, once present, requires an Agree relation with a DP to check its uninterpretable case feature (see chapter 4), so it probes for a goal DP in its domain. As a result of shift, the closest DP in this structure is the direct object that has raised to the edge of VoiceP, so Agree obtains between T and the object.

---

[3] See Chomsky 2001, Pesetsky and Torrego 2001, and Bruening 2001 for discussion of other cases where features are "marked for deletion" (P&T) through Agree but not erased until the phase level, and are thus free to participate in subsequent Agree relations.

(12)

```
                    TP
              ╱‾‾‾‾‾‾╲
         T_[uCase]        VoiceP
          ╲          ╱‾‾‾‾‾╲
           ◥◣  DP_DO[ACC]   ╱‾‾‾╲
              DP_EA        ╱‾‾‾‾‾╲
                    voice        vP
                             ╱‾‾‾‾‾╲
                            v        VP
                                 ╱‾‾‾‾‾╲
                                V        t
```
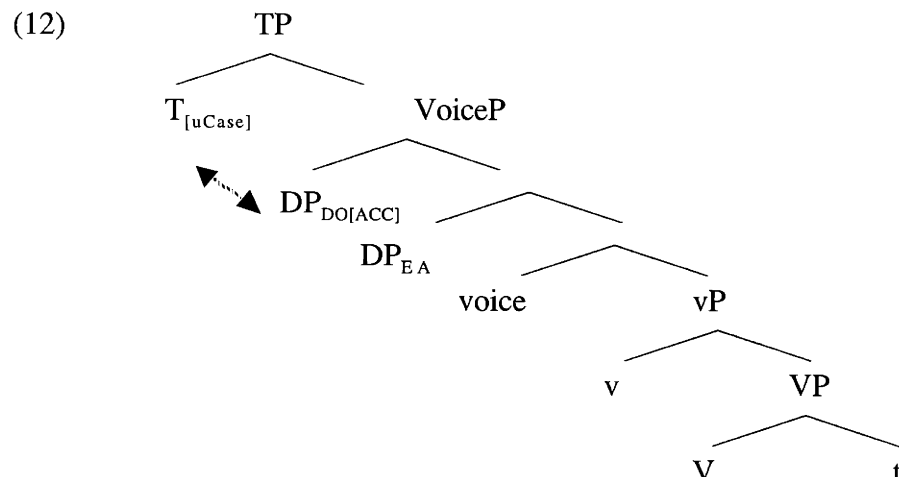
Agree between T and the DO results in the spell-out of DO features on T (which is voice agreement) and *ang*-marking on the theme. (I will argue in chapter 4 that T also initiates a second, separate Agree relation with the external argument.)

Notice that this configuration is exactly like the one discussed by Chomsky 2001 as a case where the shifted XP would block matching of the Spec (subject) with a higher probe (his (47)):

(13) $[_{ZP} ... P ...[_{HP}XP [Spec [H YP]]]]$

The difference is that in Tagalog this blocking does not lead to deviance, since the shifted element is free to Agree with the Probe itself rather than causing a crash by preventing match with the subject. In this way Tagalog actually provides a clearer case of argument shift than other languages do, since no extra operations (such as Chomsky's (2001) "TH/Ex") are required to explain why this shifting does not in fact block Agree with the subject; it does block Agree but the result is grammatical in Tagalog. Tagalog can in this sense be seen as the default case, while Icelandic and English are marked in not allowing this type of construction.

At this point, it may be useful to examine further the mechanism of specificity interpretation in the context of the particular facts of Tagalog. According to Chomsky's analysis of shift in Germanic, elements at the edge of the phase are assigned a specific interpretation and elements left in the VP are non-specific. In Tagalog, however, this account is not sufficient to account for the full range of specificity facts. First of all, the external argument begins in a specifier at the edge of the phase, but, contrary to the prediction of Chomsky's theory, it can optionally be interpreted as non-specific when it is not the subject, as exemplified in (14a).

(14)   a.   Ø-lu-lutu-**in**   ng lalaki   <u>ang adobo</u> para sa asawa
             asp-cook-Acc CS man   ANG adobo P DAT spouse
             "*A/The* man will cook <u>the adobo</u> for his wife."
             (Not: *The man will cook adobo for his wife.)

    b.   **m-pag**-lu-luto   <u>ang lalaki</u> ng adobo   para sa asawa
            Nom.PAG-asp-cook ANG man   CS adobo   P DAT spouse
            "<u>*The* man</u> will cook adobo for his wife."
            (Not: *A man will cook the/Ø adobo for his wife.)

The fact that a non-subject EA can be non-specific indicates that the assignment of a specific interpretation cannot simply apply to everything at the edge of the phase, since it does not necessarily affect the EA that is located there.

        Another important fact is that the subject argument (the argument that Agrees with T) is always obligatorily specific, as is also evident in (14a&b). Also, finally, an argument like the DO in (14b) that does not shift to a specifier of VoiceP and remains in the VP is obligatorily interpreted as non-specific (i.e. is subject to existential closure, Diesing 1992).

        To capture these facts, I propose the more elaborated system of specificity interpretation given in (15).

(15)   *Interpretation of Arguments:*
        (1)   A specific interpretation is assigned to the argument located in the outermost specifier of the phase (VoiceP) (the argument that agrees in Case with T).
        (2)   Existential closure applies to the complement of the voice head, resulting in non-specific interpretation for any argument that remains below the voice head.

Since nothing is specified for the interpretation of elements not described by conditions (1) and (2) (i.e. elements that are neither the subject nor remain in vP), they are predicted to be freely interpretable as specific or not, accounting for the optionality of interpretation for the non-subject external argument.

3.3.2 External argument clauses

In external argument (nominative) subject clauses the theme is non-specific, which means that it must not raise to the EPP position at the edge of the phase.

(16)   mag-luluto   <u>ang lalaki</u> ng adobo
        Nom.PAG-asp.cook ANG man   CS adobo
        "The man will cook (*the) adobo."

In this construction, voice is merged in without an EPP feature, allowing the direct object to remain in it original position within VP. When T is merged into the structure and must Agree with some DP, the EA is the closest potential satisfier of the relation, so it is the argument that Agrees with T. This Agree relation results in EA agreement morphology on T and *ang* marking on the DP.

(17)

```
                    TP
          ┌─────────┴─────────┐
          T                 VoiceP
          ▼·····▲    ┌─────────┴─────────┐
              DP_agt                      
                    voice                vP
                          ┌───────────────┴────────┐
                          v                        VP
                                          ┌─────────┴─────────┐
                                          V                  DP_DO
```
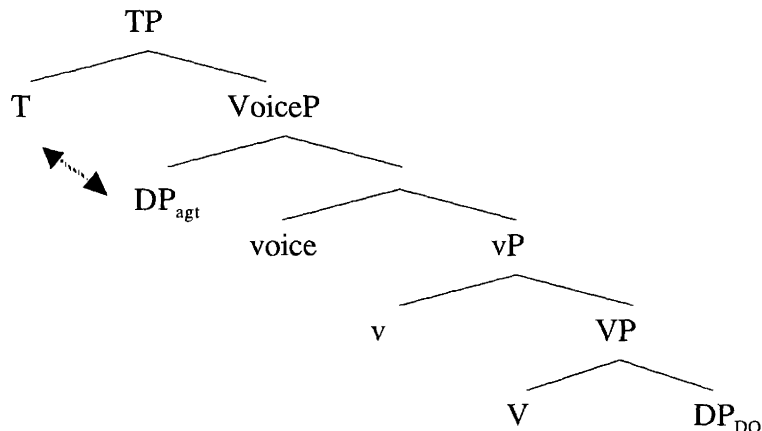
The obligatory non-specificity of the theme in external argument voice sentences follows directly from this account, because if the theme were specific it would have raised and thus destroyed the configuration necessary for nominative (EA) voice. This allows a 'free' account of the apparent specificity requirements on themes (as opposed to subjects), something which is unexplained on the *ang*-as-topic hypothesis.

3.3.3 Benefactives

High applicative benefactive arguments are introduced in the benefactive voice without any preposition (18a), while in non-applicative clauses they are introduced in PPs (18b) (see chapter 2).

(18) a.   I-tinawa   ng lalaki <u>ang kanyang asawa</u>.
             Obl-asp.laugh CS man ANG his wife
             "The man laughed <u>for his wife</u>."

      b.   <u>Ang lalaki</u>   ay t-**um**-awa   [para sa kanyang asawa]
             ANG man AY Nom.asp-laugh P DAT his spouse
             "<u>The man</u> laughed for his wife."

As in the transitive clauses discussed above, in (18a) voice has an [EPP] feature and, when it probes for a DP to check it, the benefactive argument is closest. The benefactive is thus forced to raise to the edge of the phase. From there, the derivation proceeds as before: T is merged in and Agrees with the closest DP, which is the shifted one, resulting in agreement for the benefactive on T and in *ang*-marking on the benefactive itself. This is daigrammed in (19) for the sentence in (20).

(19)

```
                 TP
              ╱      ╲
          T            VoiceP
          ⋮         ╱        ╲
          ⋮      DP_ben
          ⋮      ╱      ╲
              DP_EA
              ╱      ╲
          voice_[+EPP]    ApplP
                        ╱      ╲
                    appl          vP
                               ╱      ╲
                            v            VP
                                      ╱      ╲
                                  V          DP_DO
```
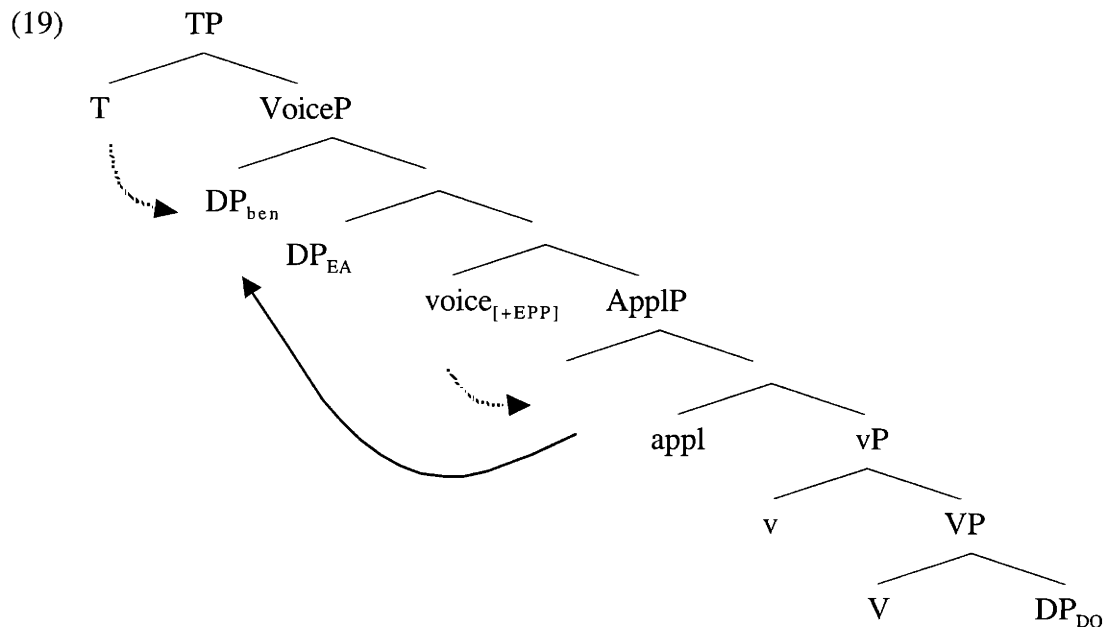
(20) **I-pag-luluto**   ng lalaki   ng adobo   <u>ang asawa</u>
      Obl-PAG-asp.cook CS man   CS adobo   ANG spouse
      "The man will cook <u>his wife</u> (the) adobo."

As mentioned above, clauses with a benefactive subject optionally allow a specific direct object. With the object shift analysis in place, this initially surprising fact is recognizable as just another case of a second object tucking-in below an already-shifted object, as occurs in Icelandic ditransitives. The DO is optionally specific in benefactive-subject clauses because once the features of voice have been checked by the raising of the benefactive DP, the object DP is free to raise to that position (if it is specific) and tuck-in below the benefactive, as shown in (21). However, even after both arguments have shifted, T agreement will still spell-out the features of the benefactive, since the benefactive is still the closest argument to T.

(21)
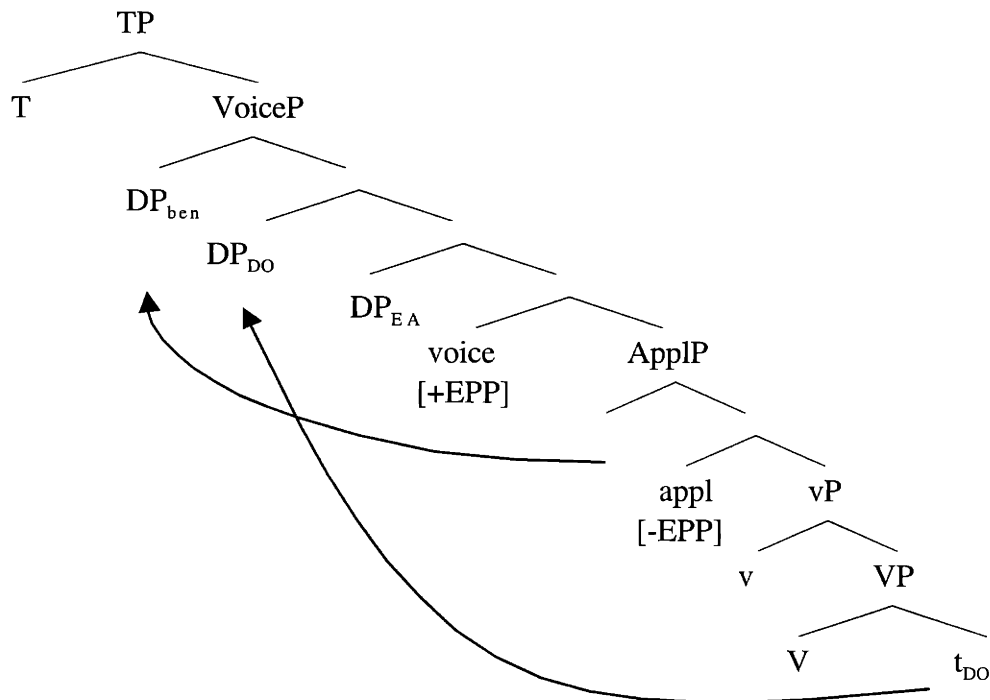
Importantly, argument shift in Icelandic and Tagalog is constrained by exactly the same superiority condition: the higher argument must shift first in order to license shifting of the lower one. Since shift results from an Agree relation initiated by the voice head, the higher argument will always be closer and thus will always Agree first; there is no way for the lower argument to Agree before the higher argument.

3.3.4 Ditransitives

As discussed in chapter 2, Tagalog ditransitives exhibit a dative alternation much like the one in English. The goal and theme arguments are generated in one of two structures: in a low applicative in which the goal c-commands the theme, as in (22a), or, alternatively, in a prepositional phrase in which the goal is either lower than or mutually c-commanding the theme, as in (22b).

(22)   a. *Applicative goal*

b. *Prepositional goal*
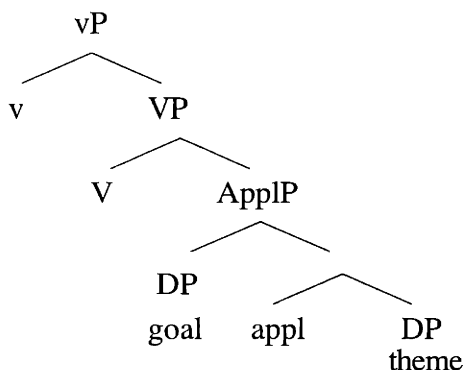
```
                    vP
                   /  \
                  v    VP
                      /  \
                     V    ?P
                   give  /  \
                      DP     PP
                    theme   /  \
                           P    DP
                          to   goal
```
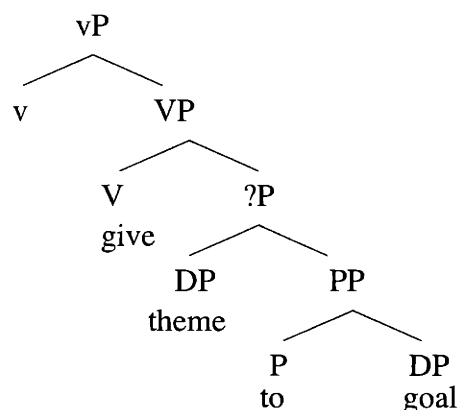
When it comes to argument shift, the analysis presented here predicts that in the first structure only the goal can be the subject: since the goal is higher and thus a closer potential satisfier of the [+EPP] features on *v*, the theme should never be able to shift past the goal. Argument shift also predicts that the theme is the only potential subject in the prepositional variant, since it is the only accessible DP. (Holmberg 1999 points out that objects of overt prepositions do not shift in Germanic, so on the default assumption that shift works the same in both languages, we do not expect it in Tagalog either.) Both predictions are borne out. As discussed in chapter 2, the low applicative structure is only possible in the dative (goal topic) voice in which the goal shifts and becomes subject, while DO-subject clauses have the prepositional structure shown in (22b).

(23)   a.   B-in-igy-**an** ng babae ng liham <u>ang kapit-bahay</u>.   *Applicative goal*
                Asp-give-Dat CS woman CS letter ANG neighbor
                "The woman gave <u>the neighbor</u> a letter."

        b.   **I**-b-in-igay ng babae <u>ang liham</u> sa kapit-bahay.   *Prepositional goal*
                Obl-asp-give CS woman ANG letter DAT neighbor
                "The woman gave <u>the letter</u> to the neighbor."

This analysis also predicts that a specific theme should be possible in dative voice clauses where the goal has shifted into subject, since the theme can raise and tuck-in below it. This is indeed the case, as shown in (24). In the context of a specific book, it is possible to use the dative voice (goal subject), although the oblique voice (theme subject) is preferred because it conveys obligatory specificity for the theme subject). The important contrast is the one between the dative voice and the nominative, which is completely unacceptable when the theme should be interpreted as specific.

(24) Maria wanted to read War & Peace, so…

        a.   (**I**-)binigay ko kay Maria <u>ang libro</u>
                Obl-asp.give I DAT Maria ANG book
                "I gave <u>the book</u> to Maria."

  b. Binigy-**an** ko ng libro <u>si Maria</u>.
     asp.give-Dat I CS book ANG Maria
     "I gave <u>Maria</u> (the) book."

  c. #Nagbigay <u>ako</u> kay Maria ng libro.
     Nom.asp-give ANG.I DAT Maria CS book
     "<u>I</u> gave Maria a book." (GB)

The choice of subjects and the specificity pattern that occurs in the dative alternation provide further support for the analysis of Tagalog argument shift presented here, since the possibility of shift is constrained by superiority, and the superiority relations predict different subjects depending on which of the available argument structures is used.

3.4 Pronouns

Pronouns in Tagalog are second-position clitics (when not dative). As in Germanic, they are obligatorily specific. When both the subject and the object are pronouns, the use of DO-voice is forced, signalling that the DO must shift to the EPP position. It is ungrammatical to use the un-shifted DO (Nominative) version of the verb, as shown in (25b).[4]

(25) a. Sinampal-Ø niya <u>ako</u>.
      Asp.slap-Acc he I.ANG
      "He slapped <u>me</u>."

  b. *S-**um**-ampal ko <u>siya</u>.
     Nom.asp-slap me 3SG.ANG
     "<u>He</u> slapped me."

These examples demonstrate the robustness of the shifting requirement: pronouns cannot remain unshifted inside VP. Even if they are 2nd position clitics and always move to a higher position in the morphological or phonological component, they are still impossible as unshifted objects in the syntax and so the presence of a pronominal theme forces the form of the verb that corresponds to object shift.

3.5 The importance of *pag*

Tagalog, unlike Germanic, offers overt evidence for the [EPP] feature on the head which triggers specificity-shift: the *pag* morpheme. This morpheme is present in clauses with external argument subjects and is absent with DO subjects.

---

[4] If the use of nominative voice is forced because of some other condition (e.g. extracting the agent) a dative alternant of the pronoun may be used to circumvent this requirement.

(i) Sino ang s-**um**-ampal sa akin.
  Who ANG AV.asp-slap DAT me
  "<u>Who</u> slapped me?"

(26) a. Mag-luluto   <u>ang lalaki</u> ng adobo para sa asawa   *um+pag+lu+luto*
        Nom.PAG-asp.cook ANG man   CS adobo P DAT spouse
        "The man will cook adobo for his wife."

    b. Ø-lu-lutu-**in** ng lalaki <u>ang adobo</u> para sa asawa
        asp-cook-Acc CS man ANG adobo P   DAT spoust
        "The man will cook the adobo."

As discussed in chapter 2, *pag* has been characterized as a 'lexical' causative and seems to be connected to transitivity (Travis 1999, Maclachlan 1992), properties which suggest its location as the head of VoiceP.

Given these two properties – transitivity and sensitivity to unshifted objects – I propose that the spell-out of *pag* is actually conditioned according the presence or absence of the [EPP] feature on the voice head. In other words, *pag* is the default spell-out of voice and is blocked by a competing contextually conditioned Ø allomorph in the presence of a [+EPP] value. The structural conditions for *pag*/Ø vocabulary insertion are diagrammed in (27) and the vocabulary items are listed (in order of insertion) in (28).

(27) a.

    b.
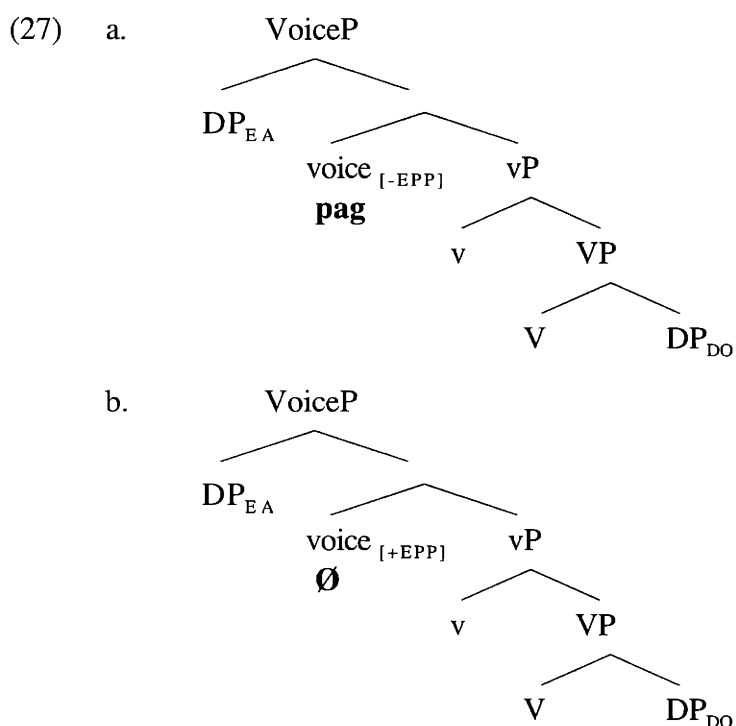
(28) Spell-out of voice:
    Ø   ↔   [+EPP]
    pag ↔   <elsewhere>

The presence of an overt anti-EPP marker in the voice head thus provides evidence that is not available in previously-examined languages (such as Germanic) in favor of Chomsky's analysis of object shift as resulting from an EPP feature on the phase head.

As discussed by Maclachlan 1992, some transitive verbs do not take *pag* in any voice. While there may be some semantic coherence to this class of verbs (see Ramos 1974), its precise characterization is well beyond the scope of this thesis. For present purposes I simply assume that there is a list of verb roots specified to take the Ø allomorph of voice in all contexts. This yields the more complete list of vocabulary items in (29).

(29) Spell-out of voice:

       Ø   ↔   {[+EPP];

                     /__ LIST (*bili* 'buy', *huli* 'catch', *amoy* 'smell', ...)}

       pag   ↔   <elsewhere>

The *pag* deletion pattern for ditransitives is shown in (30). As with transitive verbs, *pag* is present when the external argument is the subject, but is absent when *either* object (goal or theme) is the subject.

(30)   a.   Nag-abot <u>siya</u> sa akin ng sulat.   *(in+um+pag+abot)*
                Nom.asp.PAG-hand ANG.he DAT I CS letter
                "<u>He</u> handed me a letter."

       b.   **I**-ni-abot niya sa akin <u>ang sulat</u>.   *(i+in+Ø+abot)*
                Obl-asp-hand he DAT I ANG letter
                "He handed <u>the letter</u> to me."

       c.   In-abut-**an** niya <u>ako</u> ng sulat.   *(in+Ø+abot+an)*
                Asp-hand-Dat he ANG.I CS letter.
                "He handed <u>me</u> a letter."

This pattern is predicted by the structures given in (22) above. In the dative voice, the goal shifts to the edge of VoiceP, which means that head must have the [+EPP] value, resulting in a null spell-out. In the oblique voice, it is the theme that must shift, and the head must also have the positive value of the [EPP] feature. These sentences contrast with the nominative (external argument) voice in which no internal argument shifts, and voice thus has no [EPP] feature, in which case voice is realized in the morphology as *pag*.

Now consider again the appearance of *pag* when there is a benefactive (i.e. high applicative) subject:

(31)   **I-pag-lu-luto**   ng lalaki   ng adobo   <u>ang asawa</u>
        Obl-PAG-asp-cook CS man   CS adobo   ANG spouse
        "The man will cook (the) adobo <u>for his wife</u>."

If the spell-out of *pag* in nominative clauses is conditioned by the absence of an [EPP] feature, then the question arises of whether it has the same function when it occurs on benefactive-subject verbs. In order to maintain the most constrained analysis of Tagalog morphosyntax, it would be best to find unified conditions on the appearance of *pag* in benefactive- and external argument-subject clauses. As has been noted by Pylkkänen (2001, 2002) and Anagnostopoulou 2000, (high) benefactives and agents are both introduced outside VP and in some sense form a class of external

arguments (crucially different from internal arguments). In present terms, this means that the appl or voice heads that introduce them can be of the same type, a general sort of EA projector located above VP. Exploiting this similarity, I would like to suggest that on a benefactive verb *pag* occurs as the head of an ApplP that, just like the non-[EPP] version of voice, lacks an [EPP] feature,. The feature must be absent because the theme does not have to be specific and so does not have to shift. The higher voice head in a benefactive-subject clause, by contrast, has a [+EPP] feature, evidenced by its spell-out as Ø. This higher [+EPP] feature on voice attracts the specific benefactive and triggers the Ø spell-out, while the lower head has no [EPP] feature and is realized as *pag*.

Support for the analysis of *pag* as the head of ApplP in benefactive applicative constructions comes from the very similar instrumental clauses: when ApplP introduces an instrumental argument, its head is always realized as *pang* rather than *pag* or Ø.

(32) a. **I**-pinang-tulog niya <u>ang bata</u>.   *(i+in+pang+tulog)*
          Obl-asp-PANG-sleep 3rd ANG robe.
          "He used <u>his robe</u> for sleeping."   (Ramos 1974)

      b. **I**-pinam-pigil ni Bing <u>ang straightjacket</u> kay Alex.   *(i+in+pang+pigil)*[5]
          Obl-asp.PANG-restrain CS Bing ANG s.j. DAT Alex
          "Bing restrained Alex <u>with a straightjacket</u>."

The fact that the realization of the voice head is directly affected by the presence of a specific type of applicative argument offers suggestive support for the idea that the appearance of the overt prefixes is connected to the presence of an applicative projection in the structure.

Also interesting is the fact that the same verbs that take Ø rather than *pag*, even in the nominative voice, also take Ø rather than *pag* when a benefactive argument is subject, as illustrated in (33).

(33) a. B-**um**-ili <u>ka</u>   ng sapatos para sa   akin.
          Nom-buy ANG.you CS shoes P   DAT me.
          "Buy (<u>you</u>) shoes for me."   (Ramos 1971)

      b. **I**-bili   mo <u>ako</u>   ng sapatos.
          Obl-buy you ANG.I CS shoes
          "Buy <u>me</u> shoes."

This parallel further supports the idea that the appl head is of the same type as voice and that its features are realized in the morphology by the same vocabulary items.

This leaves the final list of vocabulary items for voice/appl in (34).

(34) Ø   ↔   {[+EPP];
                   /__ LIST (*bili* 'buy', *huli* 'catch', *amoy* 'smell', …)}
      pang   ↔   [instr.]
      pag   ↔   <elsewhere>

---

[5] *Pang* is realized as *pam* when the root begins with a non-nasal labial consonant (S&O 1972).

Viewing *pag* distribution as the result of a feature on the head of voice provides empirical support for the [EPP] analysis of shift adopted here from an unexpected source, the morphology. Additionally, this analysis allows for a more elegant and complete account of these facts than has previously been possible (e.g. Travis 2000), since it can account for distribution of applicative *pag* in addition to transitive *pag*.

3.6 Causatives

Shift in causative constructions can be analyzed in basically the same manner as in regular transitive clauses, assuming that each VoiceP marks the edge of a phase. The structure of productive (non-lexical) causatives is given in (35), repeated from chapter 2.

(35)   VoiceP

NP$_{causer}$

　　　voice　vP

　　　　V$_{cause}$　VoiceP
　　　　pa

　　　　　NP$_{causee}$

　　　　　voice　vP

　　　　　　v　VP

　　　　　　V$_{root}$　DO
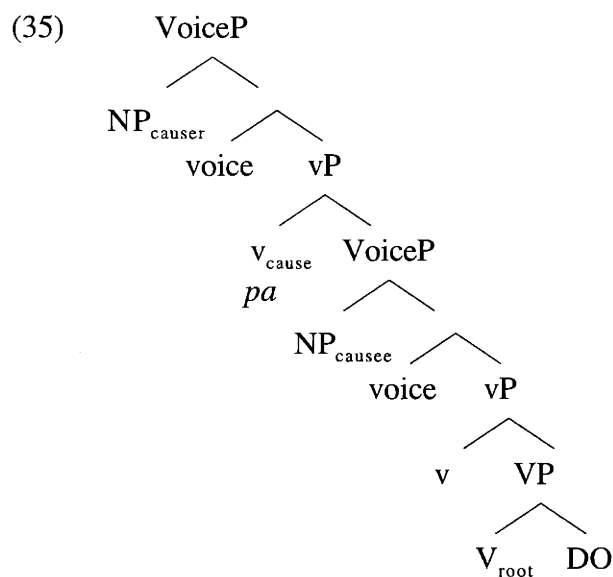
In the case where the causee argument is specific, the higher voice head must have a [+EPP] feature in order to attract the causee to the edge of the phase, while the lower voice head must not have an [EPP] feature, since it does not attract the DO for specificity. The pattern of *pag* spell-out supports this: when the causee is subject there is no *pag* above the causative *pa*, but there may be one below it if the verb root normally takes *pag* in the transitive, as discussed by Travis (to appear).

(36)　a.　　Pa-pag-tuturu-**in**　　　　　nila <u>siya</u>　　ng aritmetika sa　mga bata.
　　　　　　Cause-PAG-asp.teach-Acc they ANG.he CS arithmetic DAT pl.　child
　　　　　　"They'll have <u>him</u> teach the children arithmetic."

When the causee is not specific, it should not shift and therefore it is predicted that pag should be possible on the higher voice head. This is indeed what occurs when the causer can is the subject, as shown in (37). In this type of clause, *pag* occurs above the causative *pa*, indicating, as expected, that the higher voice head does not have an [EPP] feature.

(37)   Nag-pa-pupunta   <u>siya</u>   ng bata   sa   tindahan.
         Nom.PAG-Cause-asp.go ANG.he CS child DAT store
         "<u>He</u> had a child go to the store."   (S&O 1972)

If each VoiceP is a phase, then in order for the DO to become the subject of the clause, it must shift twice – once to the edge of the lower VoiceP and then to the edge of the higher VoiceP. Again, the distribution of *pag* supports this conclusion – neither voice head is overtly spelled-out when the DO is subject, as shown in (38), indicating that both have a [+EPP] feature.

(38)   (I)pina-ayos   ko kay Carlos <u>ang   sarili niyang kotse</u>.
         Obl-asp.cause-repair I   DAT Carlos ANG self   he-LK car
         "I made Carlos repair <u>his own car</u>."

3.7 Recent Perfective

The "recent perfective" (RP) construction (Schachter and Otanes 1972) in Tagalog offers further support for the analysis of argument shift and the spell-out of voice presented here. The construction has the properties listed in (39) and is illustrated in (40).

(39) *RecentPerfective:*
         1.   Interpretation of recent completion of action
         2.   No voice marking
         3.   No *ang*-phrase
         4.   Morphology: *ka* + aspectual reduplication

(40)   Ka-li-linis   lang ni Luis   ng kusina para kay Juan
         ka-∅-RED-clean just CS Luis CS kitchen P DAT Juan
         "Luis just cleaned the kitchen for Juan."

What I would like to suggest here is that the recent perfective construction has the same basic properties as other clauses, with the important difference that T is defective (in the sense of Chomsky 2001), lacking the uninterpretable case feature that in other clauses forces it to initiate an Agree relation. Within the domain of the lower phase, however, the syntax proceeds in the same way as for other clauses.

In the RP clause in (40), the theme argument is interpreted as specific, as reflected in the English gloss. The sentence in (41) is slightly different: the theme is non-specific and *pag* is present on the verb.

(41)   Ka-**pag**-li-linis   lang ni Luis ng kusina para kay Juan
         ka-PAG-RED-clean just CS Luis CS kitchen P DAT Juan
         "Luis just cleaned a kitchen for Juan."

This is a pattern familiar from the nominative and accusative voice clauses discussed above: the presence of *pag* correlates with a non-specific theme. Applying the analysis given above to the RP sentences is straightforward: *pag* is overt in (41) because there is no [+EPP] feature on the phase head to force the (here non-specific) DO to shift. In the other case, when the [+EPP] value of the

feature is present, as in (40), the null allomorph of the head is spelled-out. The behavior of *pag* in the RP construction thus provides evidence, even in the absence of voice marking and nominal marking clues, that the specific theme shifts to the edge of the phase.

The absence of voice marking and an *ang*-phrase in the RP indicates the lack of an Agree relation with T, since those are the two overt consequences of Agree for uninterpretable case in other clauses. A natural account of this construction is thus that there is a defective T head that does not have an uninterpretable case feature and so does not initiate Agree in order to check it. Furthermore, *ka* in the RP can then be analyzed as the spell-out of this defective T head.

There is one other property of this construction worth noting. External arguments in the RP are not volitional agents, as evidenced by the impossibility of modifying them with an agentive adverb like 'eagerly' or 'willingly'.

(42) a. *Ka-lilinis lang ni Luis ng kusina para kay Juan ng kusang loob.
KA-asp-clean just CS Luis CS kitchen P DAT Juan LK willingly
"Luis just cleaned the kitchen for Juan willingly."

  b. *Sinadyang ka-lilinis lang ni Luis ng kusina para kay Juan
eager.LK KA-asp-clean just CS Luis CS kitchen P DAT Juan
"Luis just cleaned the kitchen for Juan eagerly."

This suggests that the phrase introducing external arguments in this construction is not an agentive VoiceP , but some other sort of EA-introducing phrase – perhaps a non-agentive VoiceP or an ApplP. Either possibility is consistent with the fact that *pag* is conditioned in the same way as for the agentive VoiceP, since we have seen that *pag* may spell-out both appl and voice heads.

Taken together, the data in this section converge on an analysis of the RP construction as basically like a normal clause, at least up to the level of vP. Rather than an agentive VoiceP, there is a non-agentive EA introducer, and above this is a defective T head which is spelled-out as *ka*. Defective T initiates no Agree relation with an argument in its domain, thus conditioning no *ang*-marking or voice morphology on the verb, but this has no effect on the shifting of the lower argument, which is conditioned by the [EPP] feature on voice.

(43)

TP
├── T_{def}
│   *ka*
└── VoiceP
    ├── DP_{EA}
    └── *pag*
        └── vP
            ├── v
            └── VP
                ├── V_{root}
                └── DP_{DO}
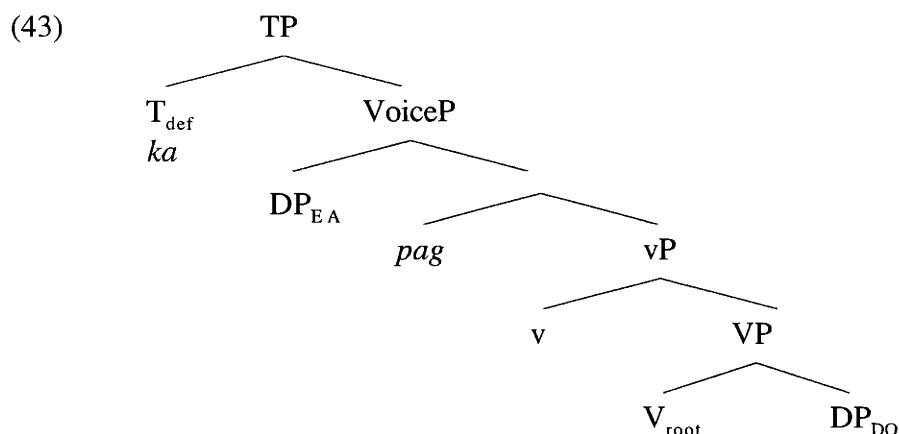
3.8 When there is no specific argument

All of the examples discussed thus far illustrate clauses that contain at least one specific argument. This raises the following question: if every clause requires a subject and if all subjects are obligatorily specific, does that mean that every clause in Tagalog must have some specific argument? The answer is no, but not because the rules of specificity shift are broken. In clauses without any specific argument, an existential construction is used: an existential predicate – either *May(roon)* 'exist' or *Wala* 'not exist' – is followed by a headless relative functioning as the subject of the clause as a whole, as illustrated in (44).

(44)   Mayroong [t-**um**-a-tawa]
        exist-LK Nom.asp-asp.laugh
        "There is someone laughing"

3.9 Clausal Subjects

It is possible for CPs in Tagalog to function as subjects, as shown in (45).

(45)   a.   Noong araw ay pinaniniwala-**an** ng mga tao   [na ang mundo ay lapad].
               One-LK time AY asp.think-Dat   CS pl. person LK ANG world AY flat
               "People used to think [that the world was flat]."

        b.   I-pinalagay niya-[-ng kailangang **i**-pagbili ang lupa].
             Obl-asp.deem he-LK necessary Obl-PAG-sell ANG land
             "He deemed [it necessary to sell the land]."   (English 1986)

The existence of such subjects shows that CPs, like DPs, can satisfy the [EPP] feature on voice. If a voice head has a [+EPP] feature, a CP can check the feature by moving to its specifier. As with other arguments, this checking puts the CP in the position to Agree with T and become the subject of the clause. Note that this checking does not require CPs to be specific, but does indicate that voice can be freely generated with an [EPP] feature and that this feature can sometimes be checked by a CP rather than a DP. Note that CP subjects also exist in English, where they also raise to check an [EPP] feature on a head (T in that case).

(46)   [That Sue will buy the book] was expected by everyone.   (Pesetsky & Torrego 2001)

Richards (in progress) argues for a different analysis of CP subjects in clauses with long-distance wh-extraction. Richards notes that extraction in Tagalog is licensed only from subjects, rather than from objects, the opposite of a common cross-linguistic pattern. In order to extract out of an embedded clause in Tagalog, that clause must be the subject of the higher clause, (47a). It is ungrammatical to extract out of a non-promoted clause, (47b).

(47)   a.   Ano ang   sinabi-Ø   ni Juan [na kinain   ni Maria *e*]?
             what ANG asp.say-Acc CS J. that asp.TV-eat CS M.
             "What did Juan say [that Maria ate]?"

b.   *Ano ang   **nag**-sabi   <u>si Juan</u> [na kinain   ni Maria *e*]?
             what   ANG Nom.asp.PAG-say ANG J. that asp.TT-eat CS M.
             "What did <u>Juan</u> say that Maria ate?"

Building on work by Ceplova (2001), Richards argues that CPs and DPs are transparent to extraction only if they are in a position to move to the edge of a phase (see those papers for arguments about why this should be so). Since subjects in Tagalog are precisely those elements that have moved to the edge of a phase, the pattern of extraction only out of subjects is exactly what is predicted by the Richards/Ceplova theory. After movement of the CP to the edge of the phase, the merger of T and the establishment of voice agreement will proceed as in the cases of DP subjects discussed above. Richards' analysis of extraction clauses thus illustrates a second possible reason for the movement of CPs into the subject configuration in extraction clauses, but in both extraction and non-extraction environments, CP subjects are still argued to move to the same position as other subjects, the edge of the phase.

3.10   Obviating the specificity effect in extraction environments

As discussed by Schachter and Otanes 1972, Macfarland 1978, Nakamura 1996, and Maclachlan and Nakamura 1997, the specificity restriction on the direct object is obviated in extraction environments. That is, when the external argument is extracted and the voice marking on the verb agrees with that argument, the direct object may be interpreted as specific, as exemplified in (48).

(48)   a.   <u>Siya</u>   ang b-**um**-ili   ng kotse.
             ANG.he ANG Nom.asp-buy CS car
             "<u>He</u> is the one who bought a/the car." (Maclachlan & Nakamura 1997)

       b.   <u>Sino</u> ang b-**um**-ili   ng damit?
             who ANG Nom.asp-buy CS dress
             "<u>Who</u> is the one that bought a/the dress?"   (Nakamura 1996)

This fact initially appears incompatible with the analysis of argument shift and voice marking presented in this chapter, but I will show that, once the syntax of these constructions is made explicit, a structural account that is consistent with the specificity pattern of previous sections is possible.

It has been widely argued that wh-extraction in Tagalog (and in Western Austronesian more generally) takes the form of pseudo–cleft constructions (Kroeger 1993, Richards 1996, Georgopoulous 1991, Cole, Hermon, and Aman 1997, Paul 1999). As Paul 1999 argues, the extracted element acts as the predicate and is followed by a relative clause that functions as the subject of the clause. The tree in (49) is based on Paul's (the precise labels of the nodes are not crucial for the present discussion).

(49)   FocusP

   predicate

   sino 'who'   XP

        Subject

        DP   .....

     DP$_i$ CP

   det *e* op$_i$......vbl$_i$
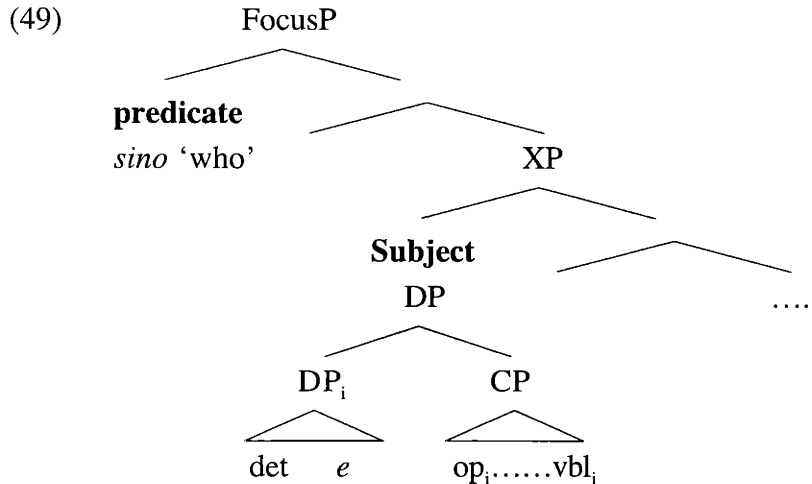
The relevant aspect of this analysis for the issue of specificity is that the subject has the form of a headless relative clause with a null subject, as sketched in (50).

(50) [[ang *"one"*] [Op$_i$ verb t$_i$]]

An approximation of the question in (51a) is sketched in (51b).

(51) a. [Sino [ang b-**um**-ili ng damit]]?
    who ANG Nom.asp-buy CS dress
    "[*The* (one who) bought a/the dress] is who?"

  b. [$_{FocusP}$[$_{DP}$The (one who) [$_{CP}$Op$_i$ t$_i$ bought the dress]] is who]?

Importantly, the operator subject in pseudo-cleft clauses agrees with T in the normal manner for subjects. Voice marking is exactly parallel to agreement for overt arguments: it depends on the base position of the subject. For instance, when the direct object is the null argument, voice marking is the same as for overt direct objects. The same parallel holds for external arguments, as shown in (52) - (53).

(52) a. Binili-∅ ng lalaki <u>ang isda</u>.
    Asp.buy-Acc CS man ANG fish
    "The man bought <u>the fish</u>."

  b. <u>Ano</u> ang binili-∅ ng lalaki?
    What ANG asp.buy CS man
    "<u>What</u> is *the thing that* the man bought?"

(53) a. B-**um**-ili <u>ang lalaki</u> ng damit.
    Nom.asp-buy ANG man CS dress
    "<u>The man</u> bought a dress."

  b. <u>Sino</u> ang b-**um**-ili ng damit?
    who ANG Nom.asp-buy CS dress
    "<u>Who</u> is *the one who* bought a/the dress?"

Recall that voice marking on T in normal clauses results from T probing for a goal DP to check its uninterpretable features (the goal is the closest potential satisfier of the relation, i.e. the

closest DP with all the relevant features). Once T finds a goal with matching features, it establishes an Agree relation with it and copies the features of the argument, as shown in (54), eventually spelling them out as voice marking. As I argue in chapter 4, voice marking actually realizes agreement with the case of the subject DP.

(54)

$$
\begin{array}{c}
\text{TP} \\
\end{array}
$$

T$_{[uCase]}$ VoiceP

DP$_{th\ [ACC]}$

DP$_{EA[NOM]}$

voice   vP
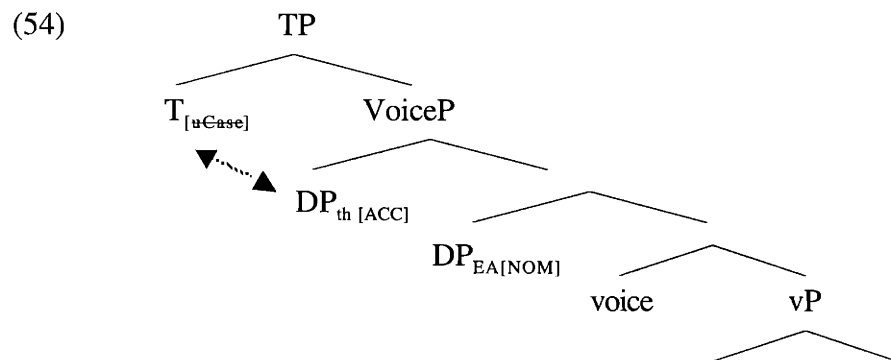
I propose as a preliminary account of extraction clauses that operators in Tagalog are licensed by a special Agree relation with T and it is this Agree relation that accounts for the obviation of the specificity effect. In clauses containing operators, T must have an uninterpretable [uOp] feature that requires it to Agree with an argument bearing an interpretable [Op] feature, analogous to the [+wh] C that occurs in languages that form questions by wh-movement to C. Suppose further that the [uOp] feature must be bundled with the [uCase] feature when it is present. This has the effect of requiring T to probe for a goal that can satisfy both features at once. Now the the only argument that can check T's uninterpretable features is an operator, which .means that only the operator can be the subject of the clause. The structure of a DO question is sketched in (55).

(55)

$$
\begin{array}{c}
\text{TP} \\
\end{array}
$$

T$_{[uOp,uCase]}$ VoiceP

DP$_{DO\ [ACC,Op]}$

DP$_{EA\ [NOM]}$

voice   vP
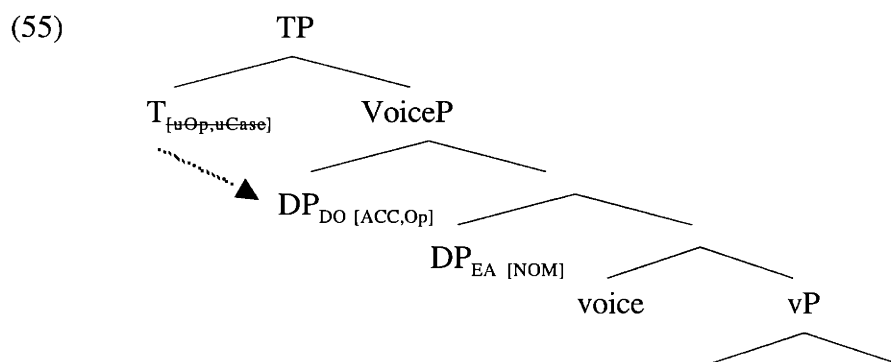
The bundled [uOp, uCase] features on T create a situation where T cannot Agree with the closest DP if that DP is not an operator. For example, if the empty category is the EA, T must Agree with only that argument. If the specific DO were to shift past the EA, as it does in non-extraction clauses, however, it would intervene between T and the EA. Maintaining strict locality, as I have done throughout this chapter, if the object shifted, it would then prevent Agree between T and the operator and cause the derivation to crash.

(56)
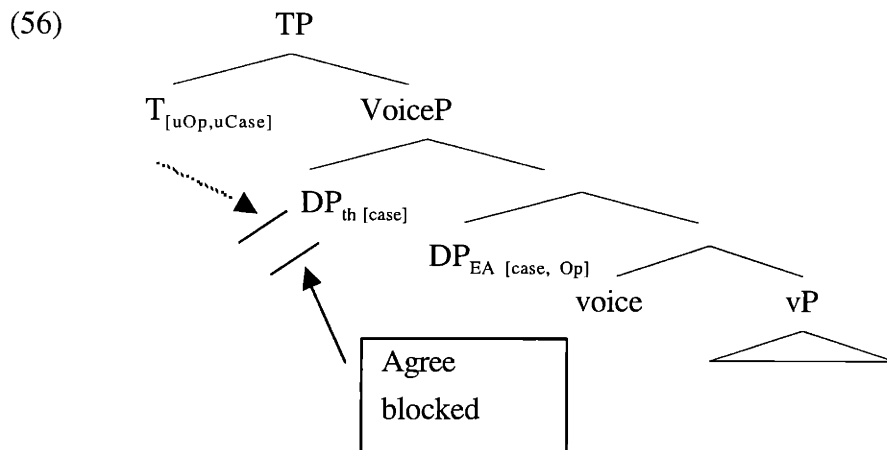
Therefore, since any shifted argument would block the necessary Agree relation between T and the operator, shift (of any argument other than the operator) must be prohibited in clauses where operator Agree must take place. Interestingly, the distribution of *pag* in extraction clauses supports the conclusion that arguments do not shift in precisely this environment — *pag* remains overt even in the presence of a specific DO, contrary to the pattern for non-extraction clauses.

(57)   <u>Sino</u> ang **nag**-luto ng adobo?   *in+um+pag+luto*
       Who ANG Nom.asp.PAG-cook CS adobo
       "<u>Who</u> cooked (the) adobo?"

Despite being unable to shift, however, arguments can still be interpreted as specific in extraction clauses in Tagalog, as exemplified in (57). At this point, a parallel with Germanic object shift emerges. In Germanic, if object shift cannot occur for some reason, then only in that case can an argument be interpreted as specific in its base position, without shifting. This occurs, for instance, when object shift is blocked due to a lack of verb raising (known as "Holmberg's Generalization"— see for discussion Holmberg 1999, Bobaljik 1995, among others). For example, in the Danish sentence in (58a), object shift is prevented because the verb remains in situ and the (specific) pronoun must therefore remain within the verb phrase. This contrasts with the sentence in (58c) where object shift is not blocked, and where the pronoun must shift out of the VP.

(58)   *Danish*:
       a.   Hvorfor har Peter [$_{VP}$ ikke købe **den**]?
               Why   has Peter   not bought it
               "Why hasn't Peter bought **it**?"

       b.   *Hvorfor har Peter **den** [$_{VP}$ ikke købe]?
                Why   has Peter **it**   not   bought
               "Why hasn't Peter bought **it**?"

       c.   Peter købte   **den** [$_{VP}$ikke]?
               Peter bought **it**   not
               "Peter didn't buy **it**?"   (Bobaljik 1995)

These data lead to the descriptive generalization that if specificity-related shift is blocked for some reason, an argument may still be interpreted as specific in its base position, even if it would otherwise receive a non-specific interpretation in that position (see Bobaljik 1995 for one analysis of the generalization).

This generalization can also describe the specificity pattern in Tagalog extraction: if shift is blocked for some reason, i.e. if it would interrupt a necessary Agree relation between T and the EA, an argument may be interpreted as specific in its base position. Since the pattern of shift in Tagalog is explained partly on the basis of the similarities to specificity effects in Germanic, the existence of the same kind of specificity effect obviation in both languages is consistent with the analysis proposed here.

On this theory of extraction, long-distance extraction proceeds in basically the same way as for other extraction. The extracted element must be the subject of the lower CP, which must in turn be the subject of the higher CP, as exemplified in (59) (section 3.9 above).

(59)   <u>Ano</u> ang   sinabi-∅   ni Juan [<u>na kinain-∅</u>   ni Maria *e*]?
        what ANG asp.say-Acc CS J.   that asp.eat-Acc CS M.
        "The *thing that* [Juan said <u>that Maria ate</u>] was <u>what</u>?"

This configuration is sketched in (60) (ignoring word order, as usual).

(60)
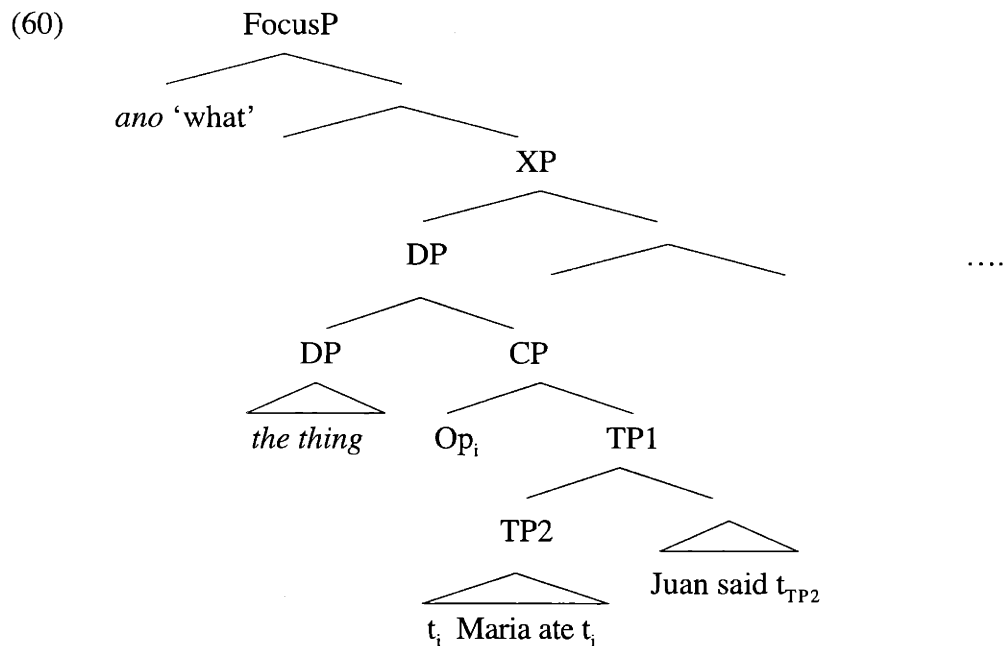
The operator becomes the subject of the lower clause in TP2, and this clause then becomes the subject of the higher TP1 (as discussed above, the subject requirement is analyzed by Richards as a result of extraction having to occur from the edge of the phase). The operator at the edge of TP2 is then able to raise out to the specifier of the CP, just as for any other relative clause, creating the structure in (60).

The analysis of extraction presented here accounts for the subject question restriction in Tagalog by bundling together in T the [+Op] 'extraction' feature with the uninterpretable case feature that triggers the subject relation, thus ensuring that the subject of the relative will always be the null element that is 'extracted'.[6]   Also, the tools required for this analysis of extraction environments are not exotic. The parallel with [wh] features on C in languages that form questions through movement to C is intuitively plausible: questions sometimes require special features on the head of the clause, so the presence of a special [Op] feature in Tagalog questions is not surprising.

3.11   Conclusion

In this chapter I have argued that Tagalog subjects are the product of a combination of object shift and T agreement with the closest DP. Once they are viewed in this manner, the specificity requirements on subjects and direct objects fall into place. In addition, Tagalog provides new morphological evidence for the [EPP] feature on voice and its relevance to object shift, a feature that is hypothesized to exist in the theory of Chomsky 2001, but is not overt in previously examined languages.

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[6] I am abstracting away from the issue of how the operator of the relative clause is associated with the wh-word predicate of the clause because it is not directly relevant to the issue of specificity, but see Paul 1999 for details.

Chapter 4: The Case of Voice

4.1 Introduction

In this chapter I argue that Tagalog verbal voice affixes such as those in (1) (in bold) reflect the case of the subject argument marked with the *ang* particle (underlined).

(1)   a.   B-**um**-ili   <u>ang bata</u>   ng   tela   sa   palengke para sa Nanay   *Agent*
              AV.prf-buy ANG child CS cloth DAT market   P DAT mother
              "<u>The child</u> bought cloth at the market for mother."

      b.   B-in-ili-Ø   ng bata   <u>ang tela</u>   sa   palengke para sa Nanay   *Theme*
              TV.prf-buy CS child ANG cloth DAT market   P   DAT mother
              "The child bought <u>the cloth</u> at the market for mother."

      c.   B-in-ilh-**an**   ng bata   ng tela   <u>ang palengke</u> para sa Nanay   *Directional*
              DV.prf-buy CS child CS cloth ANG market   P DAT mother
              "The child bought cloth <u>at the market</u> for mother."

      d.   **I**-b-in-ili   ng bata   ng tela   sa   palengke <u>ang Nanay</u>   *Benefactive*
              BV-prf-buy CS child CS cloth DAT market ANG mother
              "The child bought (the) cloth at the market <u>for mother</u>."

                                                          (Maclachlan 1992)

In the previous chapter I argued that argument features are associated with T through an Agree relation which obtains between T and some argument within its domain, subject to conditions of locality and specificity. Crucially, this Agree relation has two results: the relevant argument is marked with *ang*, and features of the argument are copied onto T and spelled-out as voice agreement.

A common assumption in much of the Austronesian literature is that voice agreement is thematic-role-based, signifying the theta-features of the *ang*-argument (Kroeger 1993, Schachter & Otanes 1972, de Guzman 1978, Carrier 1985, Sells 1998). The evidence discussed in this chapter, however, falsifies the theta-agreement hypothesis and shows rather that Tagalog voice agreement more closely resemble case patterns in other languages (following Ramos 1974). Through a cross-linguistic comparison of case marking, I show that a case agreement analysis of the Tagalog voice marking facts is both theoretically and empirically preferable to the theta-agreement alternative.

This chapter begins with some background on Tagalog voice morphology, followed by a presentation of the evidence that voice is not theta-role agreement. Next, I present a theory of

configurational case assignment and illustrate how it can account for the voice system of intransitive and transitive verbs. Following that is an extension of the theory to ditransitive and applicative clauses and finally a discussion of voice marking in clauses which take PRO and sentential subjects.

4.2 Voice Markers

The first issue to be settled when looking at the Tagalog voice pattern is exactly which elements are voice markers. Schachter and Otanes 1972 and Ramos 1971 each list dozens of different morphemes, but, along with de Guzman 1978, Maclachlan 1992, and Latrouite and Naumann 2000, I believe the number of voice markers to be much fewer, including only the four listed in (2).[1]

(2)   -um-   external argument
        -in   complement of verb
        -an   goals, locatives, IO of ditransitives
        i-   benefactives, instruments, some objects, DO of ditransitives

The inventory can be reduced to four partly through a reanalysis of the multi-morphemic traditional 'voice markers' into their component parts. The most notable absence from this list of a morpheme traditionally considered to be a voice marker is that of *mag*, which is usually classed as an agent voice marker. Also missing are the related *pag-...-an*, and *ipag* markers, all illustrated in (3).

(3)   a.   Mag-tayo   <u>ka</u>   ng bahay.   *m+pag+tayo*
            Nom.PAG-build ANG.you CS house
            "(<u>You</u>) Build a house."

      b.   P-in-ag-lutu-**an**   niya <u>ang palayok</u>.   *in+pag+luto+an*
            asp-PAG-cook-Dat he   ANG pot
            "S/he cooked <u>in the pot</u>."

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[1] This shorter list of voice morphemes brings the voice system of Tagalog into a close parallel with the related language Malagasy. Inspection of these voice markers reveals not only that the number of morphemes is similar, but also that the voice morphemes correspond to similar typse of arguments. The Malagasy voice markers are listed in (i), adapted from Paul 1999 and Pearson 2001 (abstracting away, as in Tagalog, from co-occurring prefixes).
(i)   m-   external argument
        -in   complement of verb
        -an   dative arguments, obliques, IO of ditransitives
        a-   locata, instrumentals, certain objects, DO of ditransitives

    c.   **I**-pag-laba   mo <u>siya</u> ng damit.
            Obl-PAG-wash you ANG.he CS clothes
            "Wash the clothes <u>for her</u>."   (Ramos 1971)

Its co-occurrence with many different voice markers and its systematic semantics (Maclachlan 1992, Travis 2000) strongly argue that *pag* should be recognized as a morpheme separate from the voice markers, as in the present analysis. Maclachlan 1992 further suggests that, because they are in complementary distribution, the *m-* which combines with *pag* and the infix *–um–* which appears on *pag*-less roots are allomorphs of the same voice marker. Since the distribution of the two allomorphs is predictable it is not necessary to list them as two separate items and only one external argument agreement marker is needed, as shown in (2).

      Similarly, the so-called 'instrumental voice' marker *ipang* can be analyzed as the combination of the voice marker *i-* with *pang*, which is the allomorph of appl that is conditioned in the context of an instrumental applicative (as discussed in chapter 3).

(4)   **I**-p-in-ang-alis   niya sa   Amerika <u>ang terno</u>.   *i+in+pang+alis*
       Obl-asp-PANG-go he   DAT America ANG terno
       "She went to America <u>in her terno</u>." (Ramos 1971)

      Another set of morphemes which can be separated from voice are the abilitative/stative affixes *ma* and *ka*, which are actually part of the aspectual system (see Travis (to appear) on the aspectual nature of *ka*) and co-occur with some voice markers (see appendix). (In the following examples, *ma-* combines with the aspectual infix *–in-* to yield *na-*.)

(5)   a.   Na-ka-gamit   <u>siya</u>   ng manggang hilaw.
            Asp.Stat-asp-use ANG.he CS mango   green
            "<u>He</u> was able/happened to use a green mango."   (S&O)

    b.   Na-**i**-pag-laba   ko <u>ang Nanay</u>   sa ilog.
            Asp/Stat-Obl-PAG-wash I   ANG mother DAT river.
            "I was able to wash clothes <u>for Mother</u> at the river   (Ramos 1971)

Excluding *pag* and *ma/ka* from the voice system allows the shortening of the list of voice markers to those in (2) above.

      There is one important instance of allomorphy to keep in mind when examining the voice morphology of Tagalog. As noted in chapter 1, the accusative ('theme') voice marker *–in* is realized by a null allomorph in the context of the aspectual infix *–in-*. Therefore the *–in* voice marker is absent in the perfective and imperfective aspect forms but present in contemplative and imperative constructions. I mark the morpheme as Ø when it is not spelled-out as *-in*.

(6)   a.   a-awit-**in**
               RED-sing-Acc
               "will sing"

       b.   *in*-a-awit-**Ø**
               asp-RED-sing-Acc
               "is/are singing"

       c.   *in*-awit-**Ø**
               asp-sing-Acc
               "sang"

4.3 Theta-Agreement and Counter-evidence

Austronesian voice marking is commonly referred to as a system of thematic role agreement, meaning that the voice markers signal the semantic function of the subject NP (e.g. Kroeger 1993, Schachter & Otanes 1972, Schachter 1996, de Guzman 1978, Carrier 1985). In the context of this hypothesis, *-um-* would agree with an agentive theta-role, *-in* with a theme theta-role, and *i-* with a benefactive theta-role.

(7)   a.   **mag-lu-luto**   <u>ang lalaki</u> ng adobo para sa asawa   *Agent, -um-*
            Nom.PAG-asp-cook ANG man CS adobo P DAT spouse
            "<u>The man</u> will cook adobo for his wife."

       b.   lu-lutu-**in**   ng lalaki <u>ang adobo</u> para sa asawa   *Theme, -in*
            asp-cook-Acc CS man ANG adobo P DAT spouse
            "The man will cook <u>the adobo</u> for his wife."

       c.   **i**-pag-lu-luto   ng lalaki ng adobo <u>ang asawa</u>   *Benefactive, i-*
            Obl-PAG-asp-cook CS man CS adobo ANG spouse
            "The man will cook (the) adobo <u>for his wife</u>."

The correlation of agreement with thematic roles assumed by this type of analysis is summarized in (8).

(8)

Agreement marker	Theta-role of argument
-um-	Agent
-in	Theme/Patient
-an	Goal/Locative
i-	Theme, Benefactive, Instrument

Leaving aside the serious conceptual issues raised by theta-agreement (see footnote), this analysis could account for many sentences where subject agreement does indeed correlate with the semantic function of the subject NP.[2] For instance, theme subjects tend to occur with the *-in* voice marker, locative subjects co-occur with *-an*, and benefactive subjects take *i-* as a voice marker, all illustrated in (9) - (11).

(9) a. Kudkur-**in** mo <u>ang niyog</u>.   *Theme, -in*
         Grate-Acc you ANG coconut.
         "Grate <u>the coconut</u>." (S&O)

     b. Patay-**in** mo <u>siya</u>.   *Theme, -in*
         Kill-Acc you ANG.he
         "Kill <u>him</u>."   (L&N 1999)

(10) a. P-in-amamangka-**an** mo ba <u>ang ilog</u>?   *Locative, -an*
         Asp-boat-Dat   you ? ANG river
         "Do you go boating <u>on the river</u>?"

     b. P-in-agsulat-**an** ko <u>ang desk na ito</u>.   *Locative, -an*
         Asp-write-Dat I ANG desk dem.
         "I wrote <u>on this desk</u>."   (S&O)

(11) a. **I**-pagluluto   ko ng pagkain <u>si Maria</u>.   *Benefactive, i-*
         Obl-asp-cook I CS food ANG Maria
         "I'll cook some food <u>for Maria</u>."

     b. **I**-pipirma   ko <u>ang Tatay</u>.   *Benefactive, i-*
         Obl-asp-sign I ANG father
         "I'll sign (as proxy) <u>for Father</u>."   (S&O)

These few examples demonstrate that the theta-agreement hypothesis does in many cases capture the semantic integrity of the classes of arguments that take the same voice markers.

There are other cases, however, where theta-roles and voice marking diverge, and such examples clearly demonstrate that the theta-agreement hypothesis cannot be correct. First, the same voice morpheme may agree with subject arguments that bear different theta roles. For instance, the 'agent voice' marker *–um-* often corresponds to agent subject, as illustrated in (12).

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[2] From a theoretical perspective, the concept of theta-agreement is already problematic, since it seems to require the use of theta features on arguments, along the lines of Hornstein 2001. These features are conceptually difficult to justify, and are explicitly contrary to any configurational theory of semantic roles, such as Hale and Keyser 1993. Verbal agreement for case, by contrast, is relatively common (found in Icelandic, for instance, as shown in (23) below).

(12) **Um**-i-inom   <u>ako</u>   ng gatas.   *Agent, um*
      Nom-asp-drink I.ANG CS milk
      "<u>I</u> am drinking milk."   (Ramos 1974)

Agents are not the only arguments which co-occur with *–um–* when promoted to subject,

however. Animate and inanimate theme subjects of unaccusatives, (13), also correlate with this

affix.

(13) a.   B-**um**-agsak <u>siya</u>   sa putik.   *Animate Theme, um*
            AV.asp-fall ANG.he DAT mud-puddle
            "<u>He</u> fell in the mud puddle."

      b.   K-**um**-ulo   <u>ang tubig</u>.   *Inanimate Theme, um*
            AV.asp-boil ANG water
            "<u>The water</u> boiled."   (Ramos 1974)

The examples in (13) illustrate a many-to-one relation between theta-roles and voice-

marking. The opposite situation also occurs: different voice markers can be used to express

agreement with the same thematic role, creating a double dissociation of theta-roles from voice

markers. In transitive/ditransitive alternations as in (14), for example, the same goal subject

corresponds to both *–in* and *–an* voice agreement on the verb, depending on the presence of other

arguments in the clause.

(14) a.   Akyat-**in**   mo <u>ang kanyang kuwarto</u>.   *Goal, -in*
            Go.up-Acc you ANG poss.   room
            "Go up <u>to his room</u>."

      b.   Akyat-**an**   mo <u>ang kanyang kuwarto</u> ng mga libro.   *Goal, -an*
            Go.up-Dat you ANG poss.   room   CS pl. book
            "Bring the books up <u>to his room</u>."   (L&N 1999)

Similarly, the intransitive and transitive uses of an unaccusative root correspond to different

voice agreement for the very same argument.

(15) a.   B-in-uks-**an**   ni Aida <u>ang pintuan.</u>   *Theme, -an*
            asp-open-Dat CS Aida ANG door
            "Aida opened <u>the door</u>."

      b.   B-**um**-ukas   <u>ang pintuan</u>.   *Theme, -um-*
            Nom.asp-open ANG door
            "<u>The door</u> opened."

Another problematic case for the theta-agreement hypothesis is the voice marking for

causee-subjects in causative constructions. These are marked with what would be the 'theme'

voice marker (*–in*), rather than what would be considered the agent voice marker (*–um–*) on a theta-agreement analysis.

(16)   a.   **T-um-**akbo   ang batang lalaki.   *Agent, -um-*
                Nom.asp-run ANG child-LK man
                "The boy ran."

       b.   P-**in**-atakbo-Ø   ko   ang batang lalaki.   *Agent, -in*
                asp-cause-run-Acc I   ANG child-LK man
                "I made the boy run."

Finally, as discussed by Latrouite and Naumann 2000, certain verbs admit a choice of voice markers even when all arguments are held constant, also pointing to an imperfect correspondence between thematic role and voice marking.[3]

(17)   a.   **I-**bukas   mo ang pinto.   *Theme, i-*
                Acc-open you ANG door
                "Open the door."

       b.   Buks-**an**   mo ang pinto.   *Theme, -an*
                open-Dat you ANG door
                "Open the door."   (L&N 2000)

The data in this section show that while the theta-agreement hypothesis may be able to account for some of the voice marking facts of Tagalog, it cannot explain the full pattern of agreement. However, it is important to note that in many cases the theta-agreement hypothesis does correctly predict the correlation between the theta-role of the subject and the voice marker which appears on the verb. In the next section I argue that this correlation is a result of the structures in which both case and theta-roles are assigned, and it is the structural basis for both which creates a resemblance between theta- and case-agreement for most arguments.

4.4 Case and configuration

The subject agreement pattern in Tagalog exhibits certain similarities to case marking phenomena in other languages, where in many but not all instances case and theta-roles pattern together. In this section I first examine the case assignment possibilities for each structural position in Tagalog, and then demonstrate the correlation between predicted case assignment to a particular position and voice agreement markers. Teasing case and theta-roles apart in this way

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[3] Judgments vary for these sentences.

allows a more complete and explanatory account of voice agreement as resulting from the case rather than the theta-role available for a given position.

Some of the basic vP configurations of Tagalog are listed in (18), as discussed in chapter 2.

(18) a. *Direct Object*

```
          vP
         /  \
        v    VP
            /  \
           V   DP_DO
```

  b. *External Argument*

```
          VoiceP
         /    \
     DP_EA    \
            /   \
         voice   vP
               /   \
              v    VP
```

  c. *High Applicative*

```
          ApplP
         /    \
  DP_ben/inst.  ApplP
              /   \
           appl   vP
                 /   \
                v    VP
```
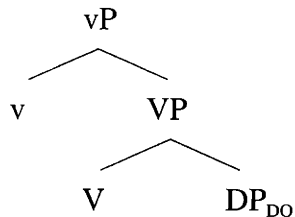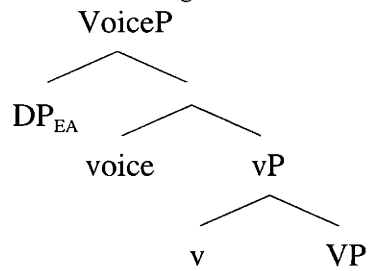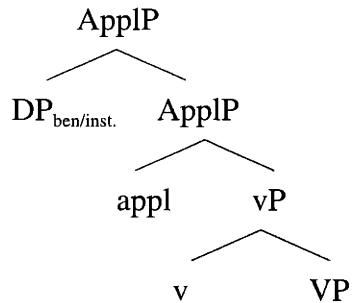
  d. *Double-object Dative/Low Applicative*

```
          VP
         /  \
        V   ApplP
           /    \
        DP_goal  \
               /   \
            appl   DP_DO
```

e. *Object+PP Goal*
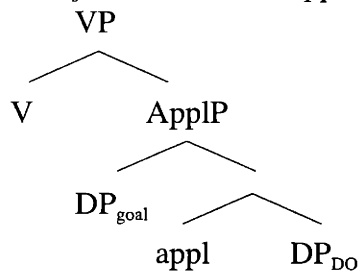
```
              VP
            /    \
          V        ?P
                 /    \
             DP_DO     PP
                     /    \
                    P      DP_goal
```
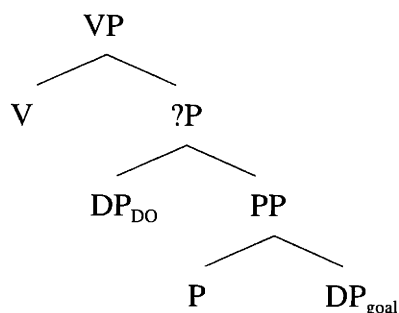
With these as the basic structural positions of arguments in Tagalog, we can now turn to the question of what case arguments receive in these positions. On the basis of case-marking in other languages I assume that arguments can receive different types of case depending on their position, either inherently from the licensing head, or structurally, in the case of nominative and accusative, from a higher head. Typical cases for each position are listed in (19).

(19)   *Type of Argument*   *Type of Case*
       a. Complement of verb   Accusative (from *v*)
       b. External argument   Nominative (from T)
       c. High Applicative   Dative/Oblique (from appl)
       d. Low Applicative   Dative (from appl)

The case pattern and Tagalog voice marking patterns correlate strikingly, as shown in the table in (20).

(20)

Predicted System		Tagalog Marking
Type of Argument	**Type of Case**	**Voice Marker**
a. Complement of verb	Accusative	-in (i-, -an)
b. External argument	Nominative	-um-
c. High Applicative	Dative/Oblique	i-
d. Low Applicative	Dative	-an

The complement of verb position, which can plausibly be expected to receive accusative case (when the structure obeys "Burzio's Generalization"), generally takes *–in* voice agreement, as in (21a) (with exceptions to be discussed below). The external argument that gets nominative case corresponds to *–um–* on the verb, (21b). High applicative arguments (e.g. benefactives and

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instruments) that might be expected to get oblique case from the introducing applicative head take *i-* voice agreement, (21c-d), and low applicatives that might be expected to get dative case correspond to *–an* voice marking, (21e).

(21)   a.   Bi-bilh-**in**   ng bata <u>ang tela</u> sa palenke para sa Nanay   *Compl. Of V*
               prf-buy-Acc CS child ANG cloth DAT market P DAT mother
               "The child will buy <u>the cloth</u> at the market for mother."

       b.   B-**um**-ili   <u>ang bata</u>   ng tela sa palenke para sa Nanay *External Arg.*
               Nom.prf-buy ANG child CS cloth OBL market P DAT mother
               "<u>The child</u> bought cloth at the market for mother." (Maclachlan 1992)

       c.   **I**-t-in-akbo ni Cory <u>ang asawa</u> para sa pagkapresidente.   *High Appl.*
               Obl-asp-run CS Cory ANG spouse P DAT president
               "Cory ran <u>for her husband</u> for president."

       d.   **I**-p-in-ang-balot   ko sa libro <u>ang diyaryo</u>.   *High Appl.*
               Obl-asp-PANG-wrap I DAT book ANG newspaper.
               "I wrapped the book <u>with the newspaper</u>."

       e.   B-in-igy-**an** ko <u>ang   bawat ina</u>   ng laruan   *Low Appl.*
               asp-give-Dat I ANG each mother CS toy
               "I gave <u>each mother</u> a toy."

The configurational case hypothesis can now be elaborated as follows: First, all arguments receive case in their base positions, assigned either by the licensing head (inherent case) (e.g. Pesetsky 1982, Schütze 1997) or through a structural case mechanism (accusative and nominative). Next, one argument becomes subject after Agreeing with T, resulting in the case feature of that argument being copied onto T. The case feature is then spelled out on the verb as subject marking (voice). The case features and the correlating voice agreement morphemes are presented more precisely in (22).

(22)

Type of Case	Subject Marker
Accusative (*structural*)	-in
Nominative (*structural*)	-um-
Dative (*inherent*)	-an
Oblique (*inherent*)	i-

Note that case agreement is not a novel or exotic innovation found only in Tagalog; case agreement is also found in Icelandic, where participles agree with the case of the subject. The example in (1a) shows agreement for a nominative subject and (1b) shows agreement for an accusative subject.

(1)   *Icelandic*:

    a.   Strakarnir   voru kitlaðir.
           The-boys(N-masc-pl) were tickled(N-masc-pl)

    b.   þeir telja   drengina   hafa   verið kyssta.
           They(N)   believe the-boys(A) to-have been   kissed(A-masc-pl)
                                                                     (Schütze 1997)

4.4.1 Accusative Derivation

The derivation of an accusative voice clause such as the one in (2) begins with case checking of the direct object in its base position, as shown in (3).

(2)   Lu-lutu-**in**   ng lalaki <u>ang adobo</u>.
          Asp-cook-Acc CS man   ANG adobo
          "The man will cook the adobo."

(3)   VoiceP

    man

           voice   vP

                $v_{[CV]}$ VP

                    cook   adobo$_{[ACC]}$
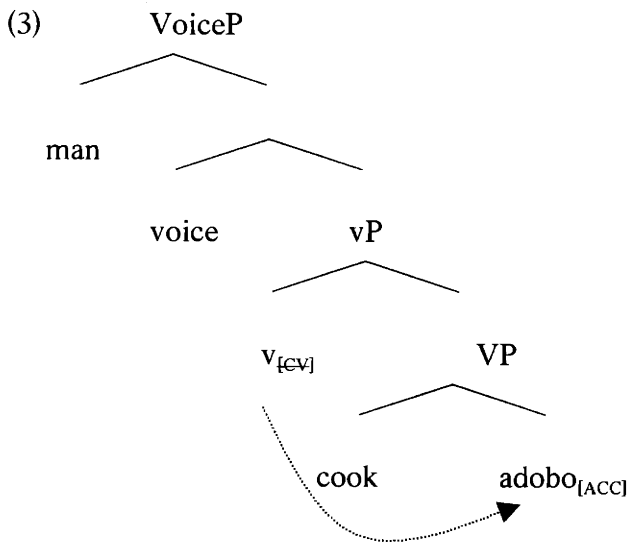
Because the DO is specific, it then shifts to the edge of the phase, which is the specifier of VoiceP (which has a [+EPP] feature).

(26)   VoiceP

ang adobo[ACC]

        man

        voice[EPP]   vP

                v   VP

                    cook   t_adobo
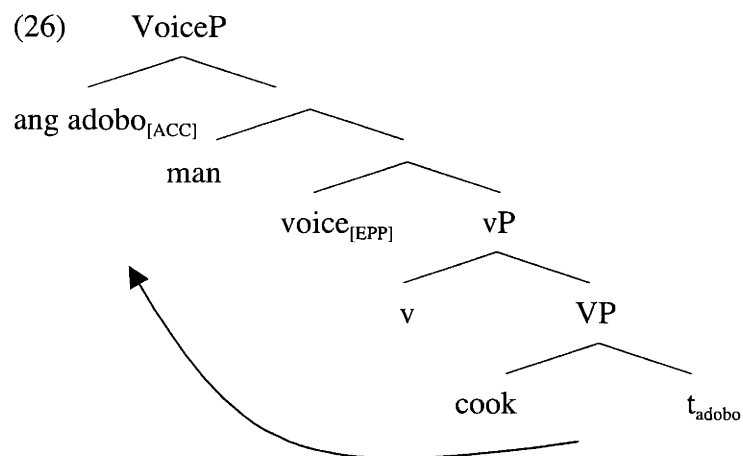
Next, T is merged into the structure. Once present, it requires Agree with the closest DP, whose case feature it copies.

(27)   TP

cook+T[uCase]   VoiceP

        ang adobo[ACC]

            man

            voice[EPP]   vP

                    v   VP

                        t_cook   t_adobo
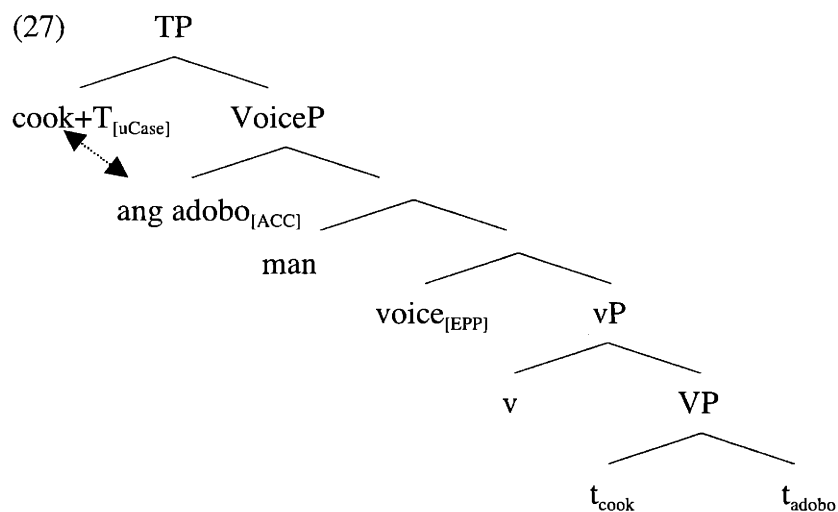
Finally, as a result of the Agree relation between T and the direct object, the accusative case feature of the DO is spelled-out on the verb as verbal agreement.

(28)   TP
        ┌───────┴───────┐
        T   VoiceP
     ┌──┴──┐   ┌────┴────┐
  cook+T agr[ACC] ang adobo ┌──┴──┐
         -in   man ┌──┴──┐
                         voice[EPP] vP
                              ┌──┴──┐
                              v   VP
                                 ┌──┴──┐
                              t_cook t_adobo
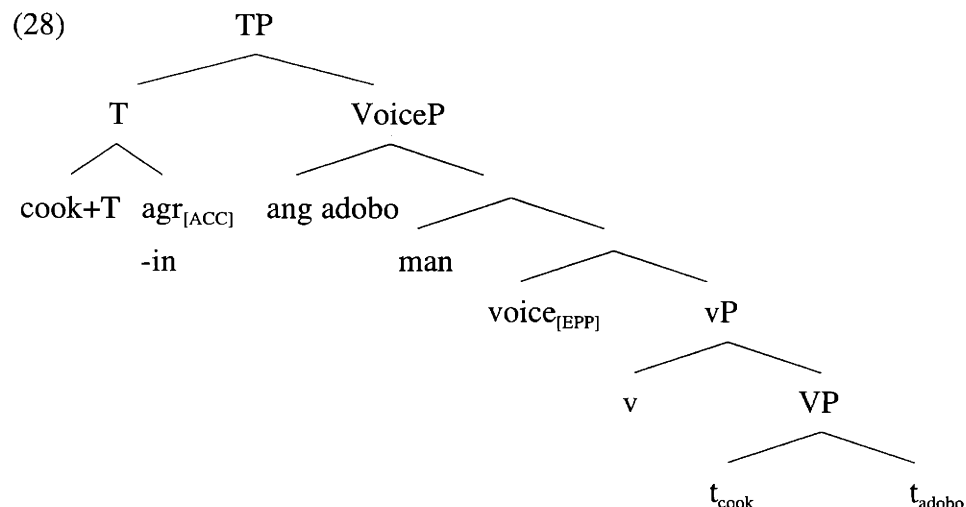
4.4.2 External Arguments

A priori there are two possibilities for how the external argument checks its case. The first is that the EA gets inherent case from its licensing head, VoiceP, yielding an ergative analysis similar to that proposed by, e.g. Maclachlan 1992, 1996, Nakamura 1996. The second possibility is that the EA gets structural case from T, which is defined as nominative (as discussed in chapter 1, cf. Chomsky 2001). Once the implications of both options are examined, however, it is clear that Tagalog external arguments must have nominative rather than ergative case, because the ergative analysis makes incorrect predictions for unaccusative subjects (also causatives, which will be discussed in section 4.5.3 below).

If ergative is an inherent case licensed by VoiceP, it should be available for all and only those external arguments merged in as specifiers of VoiceP. An ergative analysis thus predicts that there should be different cases for external arguments of transitive verbs on the one hand and subjects of unaccusatives on the other, since the latter begin in a different position. As the following examples show, however, the case reflected by the voice marking is the same for both sorts of subjects, indicating that there is no such split among arguments.

(29) a. **Um**-i-inom   <u>ako</u>   ng gatas.   *Agent, -um-*
          Nom-asp-drink ANG.I CS milk
          "<u>I</u> am drinking milk."

      b. B-**um**-agsak   <u>siya</u>   sa   putik.   *Theme, um-*
          Nom.asp-fall ANG.he DAT mud-puddle
          "<u>He</u> fell in the mud puddle."

c.   K-**um**-ulo   <u>ang tubig</u>.   *Theme, -um-*
      Nom.asp-boil ANG water
      "<u>The water</u> boiled."   (Ramos 1974)

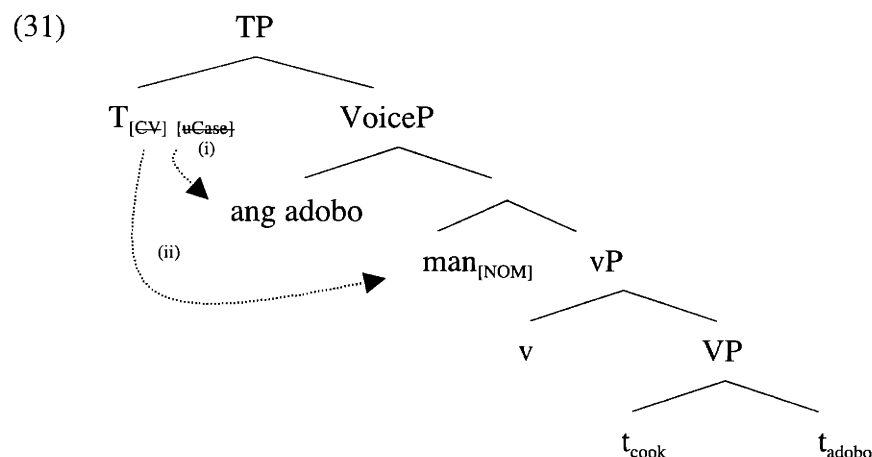On the other hand, if the EA case is nominative, it necessarily implies an Agree relation between T and the EA in order to value the argument's case feature. In sentences where the object is nonspecific and does not shift to the edge of the phase, this is unproblematic since, in these sentences, T simply Agrees with the closest argument. Agree in these clauses allows T both to check nominative case on the DP and to satisfy its own uninterpretable case feature, so that all of the feature requirements of T are satisfied through Agree with just one argument, as sketched in (30).

(30)   TP

cook+T$_{[CV, uCase]}$ VoiceP

         ang man

              voice   vP

                      v   VP

                           t$_{cook}$ adobo
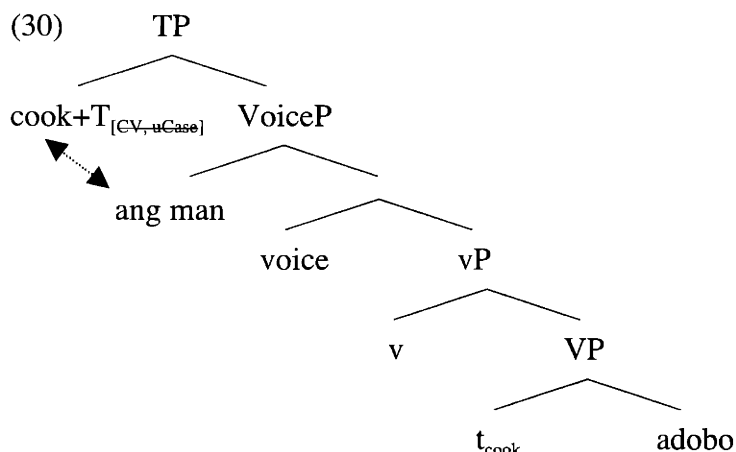
When the direct object does shift, however, Multiple Agree (Richards 1997, Chomsky 2001) of the T head is necessary in order to account for the nominative case marking on the Agent. Multiple Agree means that the head may enter into more than one Agree relation with an argument in its domain if uninterpretable features are left on the head after the first instance of Agree. In the case of Tagalog, T performs two separate Agree relations: (i) checking case (nominative) on an argument and (ii) checking its own uninterpretable case feature by copying the case feature of some argument. It is possible for T to perform both Agree relations with the same argument, if that argument is a good candidate for both (the EA when closest), but it is also possible for T to Agree more than once if the first Agree relation leaves it with leftover features to check, i.e. if the first Agree is with an argument like the direct object which already has case and T still has a case valuation feature available. For instance, in a structure such as the one in (28) where the object has shifted, once T has copied the case feature of *ang adobo* in order to check its uninterpretable case feature, it still has an unchecked NOM feature, so it may probe for

another DP past the closest one, resulting in NOM case checking with the external argument *man*.

(31)

```
                TP
            ┌────┴────┐
    T[CV] [uCase]    VoiceP
          (i)     ┌────┴────┐
          ▲   ang adobo   ┌──┴──┐
      (ii)         man[NOM]    vP
          ▶                ┌───┴───┐
                           v      VP
                              ┌────┴────┐
                            t_cook    t_adobo
```

A similar operation of Multiple Agree obtains in Icelandic dative subject constructions. When the subject bears inherent dative case, the object can still have its case valued as nominative, as shown in (32), which is by definition the result of Agree with T.[4] In such sentences, however, the dative subject must also be entering into Agree with T, since it moves to the specifier of T position, and such movement is, in this system, a result of Agreeing in order to check the [EPP] feature of T. (See also Zaenen, Maling, and Thráinsson 1985, McGinnis 1998 for arguments that the dative subjects occupy the regular structural subject position.)

(32)   *Icelandic*:
        Henni   leidist   Haraldur
        her.Dat is.bored.by Harald.Nom
        "She is bored by Harald."   (Maling and Sprouse 1995)

The existence of Multiple Agree with T in other languages makes the existence of the process in Tagalog less than surprising. Actually, the parallel between Icelandic and Tagalog is even stronger, since multiple agree in both languages is related to T's checking case on a non-subject argument.

Since ergativity seems to be untenable for Tagalog (Kroeger 1993 also gives strong arguments against it based on completely different considerations), multiple agree with T gives a more satisfactory account of the apparent structural case on all external arguments and

---

[4] See discussion in chapter 1 of Shütze's (1997) Accord Maximization Principle.

unaccusative subjects.[5] In addition, viewing external argument case as nominative and checked by T allows a tidy characterization of the similarities among those true external arguments that begin in VoiceP and unaccusative subjects that begin as arguments in the VP but shift into the external argument position (this is discussed in more detail in the next section).

4.5 Solving the Theta Problems

This section reviews the configurational case analysis in the context of those structures that are problematic for the theta-agreement hypothesis, as well as several other constructions that receive neat analyses in the configurational case agreement framework.

4.5.1 External Arguments

The sentences in (33) were a problem for the theta-agreement hypothesis because the arguments that correspond to the *–um-* subject agreement morpheme bear different theta-roles.

(33) a.   **Um**-i-inom   <u>ako</u>   ng gatas.   *Agent, -um-*
           Nom-asp-drink ANG.I CS milk
           "<u>I</u> am drinking milk."

      b.   B-**um**-agsak   <u>siya</u>   sa   putik.   *Theme, um-*
           Nom.asp-fall ANG.he DAT mud-puddle
           "<u>He</u> fell in the mud puddle."

      c.   K-**um**-ulo   <u>ang tubig</u>.   *Theme, -um-*
           Nom.asp-boil ANG water
           "<u>The water</u> boiled."   (Ramos 1974)

However, the case agreement hypothesis offers a natural explanation for the appearance of *–um-* in these clauses. In all three, the argument that is subject receives nominative case from T. The (a) case is straightforward – the subject is generated as the external argument and checks nominative case in its base position, as illustrated in the structure below.

---

[5] Kroeger's main argument is that what is claimed to be an antipassive on the ergative analysis (nominative voice) actually does not have antipassive characteristics. On the basis of argument tests (adjunct fronting and participial control clauses) Kroeger demonstrates that the object in external argument voice clauses does not have the properties of a demoted oblique and behaves instead like a normal argument.

(34)   TP
        /‾‾\ .
      T   VoiceP
      ⁝   /‾‾\
    ◄ **I**   /‾\
          voice vP
              /‾‾\
            v   VP
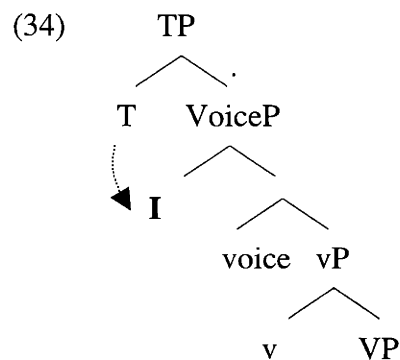
The unaccusative verbs in (33b,c) also take nominative agreement for their subjects (*um*). Unaccusatives in general are characterized by the unavailability of accusative case for the direct object, and in a Tagalog unaccusative clause, this DO, when specific, raises to the edge of VoiceP as a result of the semantic requirement on specific arguments discussed in chapter 2 (see chapter 2 also for unaccusative sentences with no specific argument). In that edge position, the direct object is eligible to check case with T, resulting in the valuing of that argument's case features as nominative. Then, just as for the first type of subject, T copies the argument's (interpretable) case feature and registers nominative agreement.

(35)   TP
           /‾‾\ .
         T   VoiceP
         ⁝(ii)   /‾‾\
       ◄ **water** /‾\
              voice   vP
                    /‾‾\
                      VP
                     /‾\
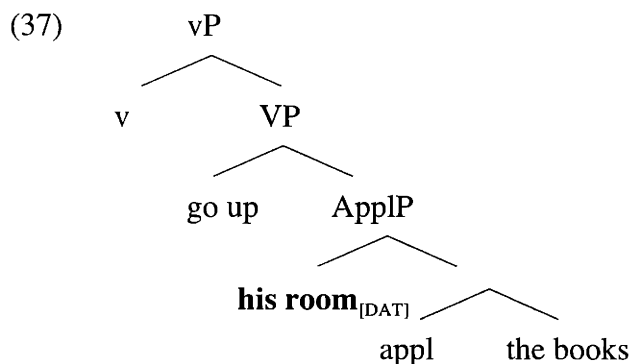   (i)   V   t_water
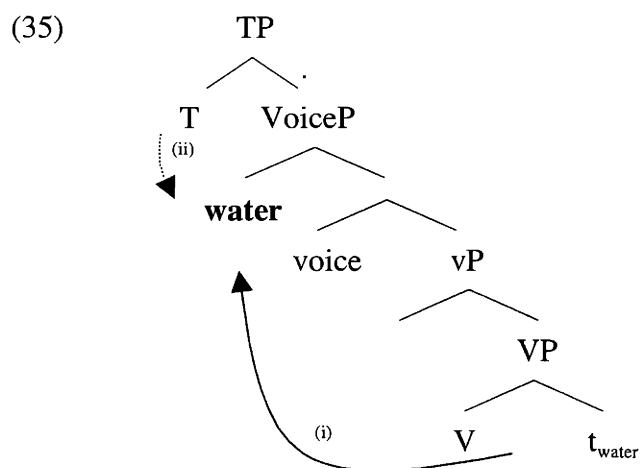
The case agreement hypothesis thus naturally accounts for the behavior of unaccusative subjects in Tagalog. They may be semantically object-like because of their base positions, but as far as case is concerned they are classed with subjects. Their agreement is determined according to their case, rather than the object theta-role they bear by virtue of their base position.

4.5.2 Alternations

Another situation in which the theta-agreement hypothesis runs into problems is in valency alternations such as the one in (36).

(36) a.   Akyat-**in**   mo <u>ang kanyang kuwarto</u>.   *Goal, -in*
     Go.up-Acc you ANG poss.   room
     "Go up <u>to his room</u>."

   b.   Akyat-**an**   mo <u>ang kanyang kuwarto</u> ng mga libro.   *Goal, -an*
     Go.up-Dat you ANG poss.   room   CS pl. book
     "Bring the books up <u>to his room</u>."   (L&N 1999)

The alternation in voice marking is easily explained on the basis of case alternations, however. Given the different structures for the two sentences, we expect different cases to be available for the arguments. Beginning with the ditransitive construction in (b), the goal forms a part of a low applicative construction, with the goal argument in the applied position (meaning something like "the books go up to his room").

(37)

```
              vP
            /    \
          v       VP
                /     \
            go up     ApplP
                    /      \
         his room[DAT]      \
                      /          \
                   appl      the books
```

In this position, the applied argument has inherent dative case from the appl head, so T agreement with this argument spells-out the dative agreement marker *–an*. (Note that it is very common cross-linguistically for goal arguments of low applicatives to bear dative case, (e.g. Icelandic, Greek, Albanian, as discussed by McGinnis 1998).)

  In contrast, in the (a) sentence, I assume the goal 'his room' is introduced by a null preposition which licenses accusative case on its argument and then incorporates into the verb (a process which will be discussed in more detail in the next section).[6]

---

[6] It is quite common cross-linguistically for the complements of endpoint-of-motion prepositions to be marked with accusative case, as shown here for German and Russian.

(38)

```
            vP
           /  \
         you    \
               /  \
              v    VP
                  /  \
              go up   PP
                     /  \
                    P    his room[ACC]
```
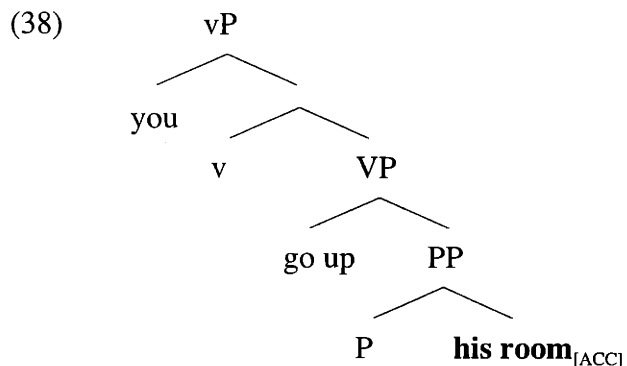
Once this directional goal shifts into subject position and Agrees with T, the [ACC] feature is copied onto the verb complex and results in agreement for accusative on the verb.

4.5.3 Causee Agents

Causees trigger accusative subject agreement on the verb, as demonstrated in (39b), repeated from (16) above.

(39) a. T-**um**-akbo   ang batang lalaki.   *Agent, -um-*
          Nom.asp-run ANG child-LK man
          "The boy ran."

      b. P-in-atakbo-**Ø**   ko ang batang lalaki.   *Agent, -in*
          asp-cause-run-Acc I   ANG child-LK man
          "I made the boy run."

This voice pattern can also be accounted for on the basis of the case available for the arguments. As discussed in chapter 2, the causee-subject is located in the specifier position of the lower VoiceP. The causative *v* has the ability to check and value accusative case (this is *v*'s normal function in transitive clauses) for the nearest case-less argument, which in this type of clause is the causee.

(i)   *German:*
      Er ist ins Zimmer gegangen.
      He is in-the-ACC room gone
      "He went into the room."
(ii) *Russian:*
      Ya idu v sad.
      I go in garden-ACC
      "I'm going into the garden."

(40)　　　VoiceP

```
              VoiceP
             /\
       Causer  /\
            voice  vP
                  /\
             v[CV]  VoiceP
              ⌇     /\
              ▲ Causee[ACC] /\
                boy      vP
                        /\
                       v   VP
                           |
                          run
```
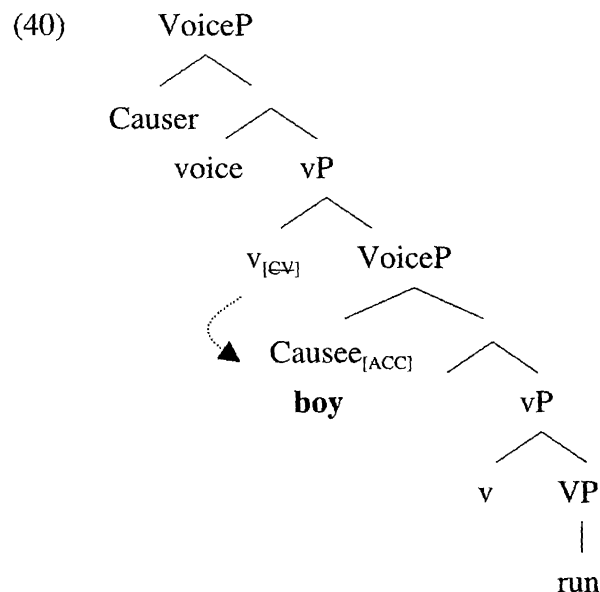
In contrast, in the non-causative sentence in (39a), 'boy' is the external argument and is valued with nominative case from T in the normal manner for external arguments. Nominative is then registered on the verb as the subject agreement for 'boy'.

(39a')　　　TP

```
            TP
           /\
      T[CV]  VoiceP
        ⌇    /\
        ▲ DP[NOM]  /\
          boy  voice  vP
                     /\
                    v   VP
                        |
                        V
                       run
```
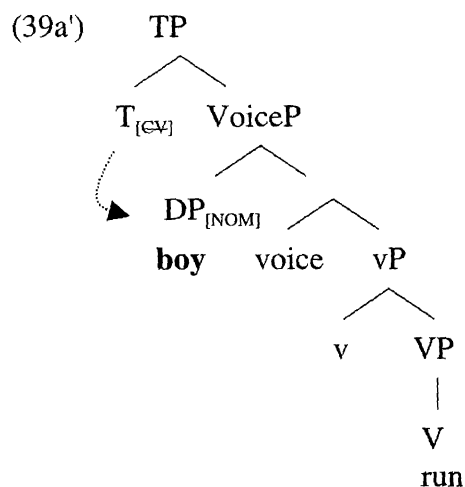
4.5.4 High and Low Applicatives

Applicative constructions are divided into two types in Tagalog (as in many other languages, see Pylkkänen 2001, 2002). As discussed in chapter 2, benefactives in Tagalog are high, introduced above the vP, while goals are low, introduced as part of a complex direct object.

Given that there are different structures for each of type of applicative, we might expect that the case possibilities would also be different. As is evident from the sentences in (41) and (42), this prediction is borne out by the appearance of different case agreement markers on the

verb. High benefactive applicatives trigger agreement for oblique case, while, as also seen in the previous section, dative case agreement occurs on verbs with low goal applicative subjects.

(41)   **I**-tinawa   ng lalaki <u>ang kanyang asawa</u>.   *High, Benefactive*
       Obl.asp-laugh CS man ANG his wife
       "The man laughed <u>for his wife</u>."

(41') VoiceP

```
        /\
   man    /\
          ApplP
          /\
   wife[OBL]  /\
       appl    vP
              /\
             v   VP
                 |
               laugh
```
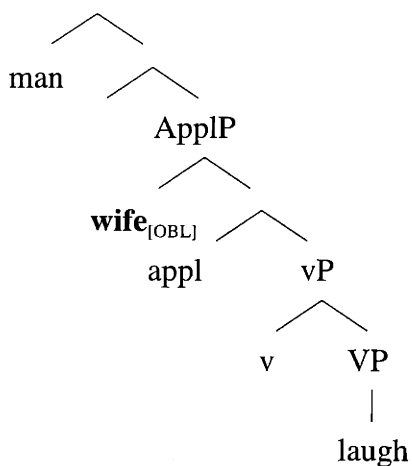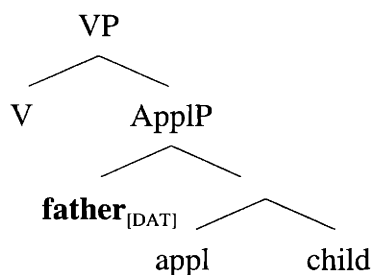
(42)   In-abut-**an**   ko <u>ang ama</u> ng kanyang anak.   *Low, Goal*
       asp-hand-Dat I ANG father CS poss.   child.
       "I handed <u>the father</u> his child."

(42')   VP

```
        /\
   V     ApplP
         /\
  father[DAT]  /\
      appl    child
```

This result is completely in accordance with the prediction that different cases should be available for different positions and provides further support for the case agreement hypothesis.[7]

---

[7] Locative applicatives are also high, as demonstrated in chapter 2, but they trigger dative rather than oblique agreement on the verb. This suggests that different high applicative heads can license different cases on their arguments. That locative high applicatives have the same case as low ones does not contradict the interesting result that at least *some* high applicatives get different case than low applicatives do.

4.6 Unexpected Dative Objects

Two kinds of transitive verbs do not spell-out *–in* (ACC) as the subject marker for the complement of V. Instead they take *–an* (DAT). The first class consists of verbs that alternate between a completive and a partitive interpretation of the direct object, with a concomitant change in voice marker on the verb. As discussed by Latrouite and Naumann 1999, the (a) sentence below implies completion of fish-eating, but the (b) sentence contains no such implication.

(43)   a.   Kain-**in** mo <u>ang isda</u>.   *implies completion of eating fish*
              Eat-Acc you ANG fish
              "Eat the fish up."

        b.   Kain-**an** mo <u>ang isda</u>.   *no implication of completion*
              Eat-Dat you ANG fish
              "Eat some/part of the fish."   (L&N 1999)

A similar alternation occurs in English, where the presence or absence of a preposition correlates with differing degree of completion of action.

(44)   a.   Matt walked the Appalachian Trail.   *implies completion of whole trail*[8]
        b.   Matt walked **on** the Appalachian Trail.   *no implication of completion*

Finnish also has a well-known partitive alternation in which, depending on the case marking, the verb phrase may have either a completive or a partitive reading.

(45)   *Finnish*:
        a.   Ammu-i-n   karhu-**a**.   *no implication of the bear's deadness*
              shoot-Pst-1Sg bear-Part
              "I shot at the (a) bear."

        b.   Ammu-i-n   karhu-**n**.   *implies the bear was shot dead*
              shoot-Pst-1Sg bear-ACC
              "I shot the (a) bear." (Kiparsky 1998)

Taking the cross-linguistic pattern into consideration, I suggest that Tagalog contains elements of both the English and the Finnish partitive alternations: Partitive results from the presence of a null preposition ('of') in the structure that licesnes dative case on its object.

---

[8] Like Tagalog, English also marginally allows such examples with "eat". These sentences improve with the addition of a temporal adverbial.
(i) Kari ate the cake.
(ii) Kari ate at the cake (all afternoon).

(46) VoiceP

```
         VoiceP
        /\
     you  /\
       voice  vP
             /\
            v   VP
               /\
             eat  PP
                 /\
              P (of) /\
                    the fish[DAT]
```
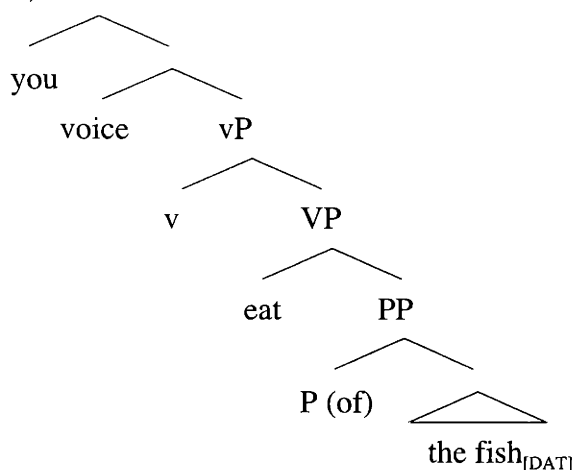
Since Tagalog does not allow PP objects to become subjects, as shown in (47), this analysis requires that the preposition must incorporate into the verb before its argument can shift.

(47) *I-tinakbo   ng lalaki <u>ang para sa   asawa</u>
      Obl-asp.run CS man   ANG P   DAT spouse
      "The man ran <u>for his wife</u>."

Thus, in order for 'the fish' to become subject in (43b), it must be a DP argument of the verb, which is made possible by preposition incorporation or reanalysis into the verb, a process commonly argued to exist for the English pseudo-passive construction by, e.g., Hornstein & Weinberg 1980 and Stowell 1981. English allows the pseudo-passive of sentences like (48a), as in (48b). In such cases, the P is reanalyzed as part of the verb, thus allowing its argument to raise in the same way as a direct object.

(48) a.   Sarah slept in this bed.

      b.   This bed was slept in (by Sarah)

Reanalysis of the partitive P in Tagalog similarly creates a structure that allows the movement of the argument to subject position, and since this subject bears dative case, dative agreement is registered on the verb, spelled-out as -*an*.

The second class of transitive verbs which take dative objects is related to the first. It consists of verbs that have been described by Ramos 1974 and Latrouite & Naumann 1999 as not wholly affecting the object or as affecting only its surface.

(49) a.   O Maria, tulung-**an** mo po   <u>kami</u>   sa   oras ng panganib.
            Oh Mary, help-Dat you PRT ANG.us DAT hour CS danger
            " Oh Mary, help <u>us</u> in the hour of danger."   (English 1986)

b.   Labh-**an**   mo   <u>ang marumi-ng damit</u>.
        Wash-Dat you ANG dirty-LK clothes
        "Wash <u>the dirty clothes</u>."   (L&N 1999)

This class of verbs consists mainly of 'non-core transitive verbs' in the sense of Levin 1999.

Cross-linguistically, non-core transitive verbs exhibit much variation in the case-marking on

their arguments. For comparison, consider the German quirky object verbs that take dative

objects instead of accusative (also widespread in Icelandic, e.g. Svenonius 2001, Maling 2001):

(50) *German*:
        a.   Sie hilft **ihm**.
                She helps him-DAT
                "She helps him."

        b.   **Ihm**   wird geholfen.
                Him-DAT is   helped.
                "He is helped."

        c.   *****Er**   wird geholfen.
                He-NOM is   helped
                "He is helped."   (Haegeman 1991, p. 174)

Sentences like these illustrate the fact that some objects of transitive verbs take cases other than

structural accusative. Therefore, since it is apparent that there have to be case mechanisms

besides structural accusative available in order to account for quirky objects, the existence of

such objects in Tagalog can be handled in the same way as dative objects of transitives more

generally. For instance, to capture the generalization that case marking often correlates with the

measuring out or boundedness of events (discussed by, e.g. Kiparsky 1998), one analysis

proposed recently is that morphological dative case is assigned by an aspectual projection,

(Svenonius 2001 on Icelandic, Pearson 2001 on Malagasy). On an aspectual-licensing type of

analysis, the two classes of unexpected dative objects (those that give rise to a partitive reading

and those that are not wholly affected) may be reducible to the same phenomenon, since in both

situations dative correlates with the aspectual property of incompleteness.

An alternative analysis is that dative objects are introduced by null prepositions which

assign inherent dative case to their complements and incorporate into the verb (Emonds 1985,

1987, Nikanne 1993, McFadden 2002). Such an account is attractive for Tagalog dative objects

as well, since it is already motivated on the basis of comparison with English pseudopassives for

the partitive datives discussed above. If both types of dative objects result from the same

prepositional structure it would obviously simplify the grammar considerably. For present

purposes, however, the mechanics of the analysis are less important than noticing that once again Tagalog subject agreement patterns with what we know of the connection between dative case marking and the aspectual interpretation of the verb phrase in other languages.

4.7 Oblique Objects

Counter to expectations, in certain constructions with a DO subject the verb registers agreement for oblique case; direct objects are generally expected to check accusative, not oblique, case if it is available. Ditransitives, causativized unaccusatives, and causativized unergatives all display this pattern of oblique agreement for direct objects and, as I will show in this section, the property that all of these constructions share is that the object is introduced in a predication structure, rather than a simple complement of V relation. The appearance of oblique agreement in these constructions can thus be analyzed as a result of their structure.

4.7.1 Ditransitives

The agreement pattern of ditransitive verbs is shown in (51). The goal argument corresponds to dative agreement on the verb while the direct object argument corresponds to oblique agreement on the verb.[9]

(51) a. B-in-igy-**an**   ng babae   ng liham <u>ang kapit-bahay</u>.
          Asp-give-Dat CS woman CS letter ANG neighbor
          "The woman gave <u>the neighbor</u> a letter."

      b. **I**-b-in-igay   ng babae   <u>ang liham</u> sa   kapit-bahay.
          Obl-asp-give CS woman ANG letter DAT neighbor
          "The woman gave <u>the letter</u> to the neighbor."

---

[9] The verb *kuha* 'get/take' also has 2 internal arguments (theme and source) but the theme argument takes accusative (*-in*) while the source takes dative (*-an*).

(i)   a. Kun-**in**   mo sa   kaniya <u>ang   lapis</u>.
          Get-Acc you DAT him   ANG pencil
          "Get <u>the pencil</u> from him."   (L&N 2000)

      b. Kun-**an** mo <u>siya</u>   ng dugo.
          Get-Dat you ANG.he CS blood
          "Take blood <u>from him</u>."

It is likely that the difference in case-marking possibilities between *kuha* on the one hand and other ditransitive verbs on the other is structural, but I leave the exact details open for now.

The trees in (52) show the possible structures for ditransitives in Tagalog, motivated in detail in Chapter 2. The first is the double-object variant, which has a low applicative structure, and the second is the prepositional variant that employs a small-clause structure.

(52) a.

```
                    vP
                   /  \
                  v    VP
                      /  \
                   give   ApplP
                         /  \
                      goal   \
                            /  \
                         appl   DO
```

b.

```
                    vP
                   /  \
                  v    VP
                      /  \
                   give   ?P
                         /  \
                       DP    PP
                      /\    /\
                     DO   to goal
```
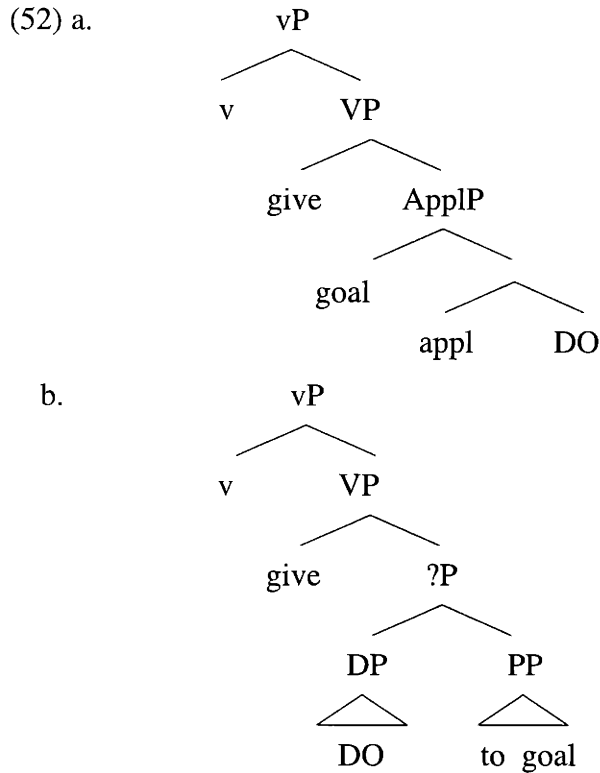
The applicative structure in (a) underlies the dative voice clause where the goal becomes the subject. In contrast, the prepositional variant is the one that gives rise to the oblique agreement sentence where the theme is the subject. (As discussed in chapter 3, these structures account for why the DO can raise to the EPP position of the phase in the oblique voice clause and the indirect object is able to raise in the dative voice clause – locality is obeyed by raising only the highest DP in each clause.)

With respect to case, in the low applicative structure, Tagalog behaves like other languages where the low applicative head assigns dative case to the goal argument, as exemplified in (53) for German and Russian.

(53) a. *German*:
        Bitte, schreib **dem**   **Vorsitzenden** einen   Brief!
        Please, write the-DAT chairman   a-ACC letter
        "Please write **the chairman** a letter."   (Maling 2001)

b. *Russian*:
Ja   dal   **Ivanu**   knigu
I-Nom give-pst Ivan-Dat book-Acc
"I gave **Ivan** the book."   (Levin & Rappoport Hovav 2001)

Thus, the appearance of dative agreement on the verb for the goal argument in the Tagalog example in (52a) is expected.

As argued in chapter 2, however, the arguments in the oblique voice clause are in a small clause configuration (see Bruening 2001 for discussion). The existence of a special structure for these constructions immediately suggests the possibility that oblique case is conditioned by the small clause structure. In other words, the realization of the argument's case takes the form of oblique as a result of the context of the predication structure in which it originates, although the object still checks "accusative" case with *v* like other direct objects. On this analysis of object case, *v* Agrees with the object in its base position and checks its case, but in the context of the predicational structure the valuation is different than for complement-of-V objects. Rather than being realized as [accusative], the default [oblique] case value is filled in. Once the object shifts and Agrees with T, the presence of this feature results in the insertion of the oblique morpheme *i-* as case agreement on the verb.

There are two ways to implement this analysis technically. On the first, the case valuation procedure is affected in the syntax by the small clause structure and so, although the case of the argument is still valued structurally by *v*, in the environment of a predicational structure the valuation is impoverished and results in the default oblique case value being filled in on the argument. The second possibility is that the case valuation proceeds exactly as it does for other object arguments in the syntax, but at the level of the morphology the case feature on the argument is impoverished and in that situation the oblique allomorph is spelled-out rather than the accusative allomorph *–in*. Either account is possible and I leave both options open for future investigation.

4.7.2 Lexical Causatives

In the intransitive use of certain verbs the sole argument is a theme, which must raise for nominative case, as discussed above in section 4.5.1.

(54)   B-**um**-agsak   <u>ang baso</u>.
        Nom.asp-drop ANG vase
        "<u>The vase</u> fell/dropped."   (L&N 2000)

In their transitive use (the "lexical" causative), these verbs takes *pag* in the nominative voice, but a DO subject corresponds to oblique rather than accusative case agreement on the verb, as shown in (55b).

(55) a.   Nag-bagsak   ng baso <u>ang bata</u>.   *in+um+pag+bagsak*
        Nom.asp.PAG-slam CS vase ANG child
        "<u>The child</u> slammed down a vase."

     b.   **I**-b-in-agsak ng bata <u>ang   baso</u>.   *i+in+Ø+bagsak*
        Obl-asp-drop CS child ANG vase
   "The child slammed down <u>the vase</u>."

Additionally, these verbs imply an intensive manner or direction of action, as is clear in (55) where the lexical causative is not simply the causativized version of the stem meaning 'cause to fall' but further implies an intensive 'slamming down' direction/manner.

The same case pattern holds for unergative verbs. When transitivized, the undergoer of the action is marked with oblique case. Like the causativized unaccusatives, the transitive use implies a resulting direction for the action, even if the direction is not spelled-out overtly, as shown in (56b).

(56) a.   T-**um**-akbo <u>ako</u>.
        Nom.asp-run ANG.I
        "<u>I</u> ran."

     b.   **I**-takbo mo <u>ang   gamot</u>.
        Obl-run you ANG medicine
        "Run (away) with <u>the medicine</u>."   (L&N 2000)

     c.   Nag-takbo   <u>ako</u>   ng gamot   (sa hospital).
        Nom.asp.PAG-run ANG.I CS medicine DAT hospital
        "<u>I</u> ran the medicine (to the hospital)."

Intuitively, causativizing an unergative verb means adding an argument as the undergoer of the action described by the verb, not a causer/agent. This added object is not only semantically, but also morphologically object-like, since its promotion to subject conditions the absence of *pag*, just like direct objects of transitive verbs, as is evident in (56b) (see chapter 3 for analysis). Since the added argument is not a causer, it does not make sense for it to be added by an extra VoiceP above the vP, but it also cannot simply be added as the complement of the verb, since it is not part of the inherent meaning of a verb like 'run' to have an undergoer argument. Since, based on their meanings, these constructions also require a directional to be present, a small clause/predicational structure is suggested. In the small clause structure the DO occupies

the internal subject position and the directional result is predicated of that argument, as shown in (57).

(57)
```
        /\
       /  \
     run    SC
           /\
          /  \
     medicine  /\
              /  \
           to (away)
```
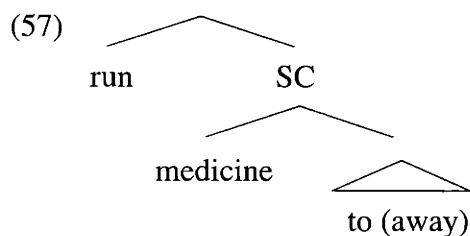
Similarly, (the relevant) unaccusatives can be analyzed as small clause constructions in which the root is predicated of the undergoer argument and the resulting small clause combines with the verbal head that adds the agent/causer to the structure.

(58)
```
        /\
       /  \
      DO    SC
           /\
          /  \
       vase   /\
             /  \
            drop
```
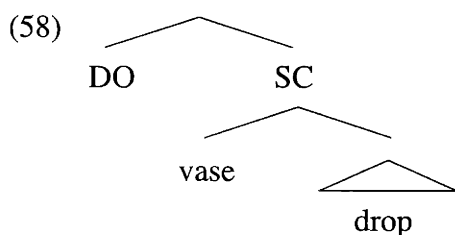
With these structures in place, it is easy to see why oblique agreement would be spelled-out for the objects of such verbs. As with ditransitives, once these predicational phrases are embedded under *v*, Agree proceeds for case checking on the object, but results in the realization of oblique rather than accusative agreement because of the small clause structure that embeds the object.
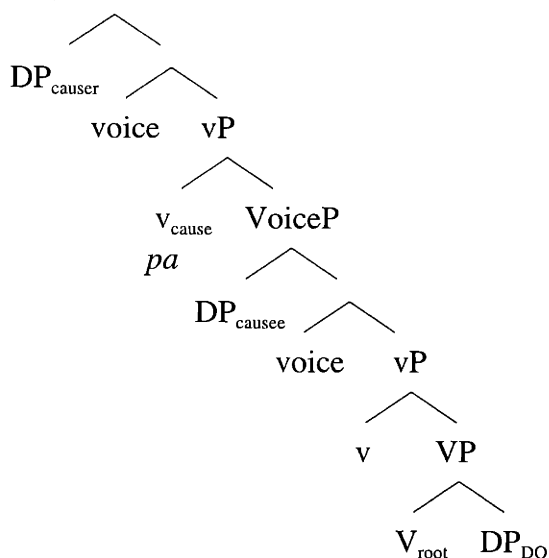
4.7.3 Productive Causative

Oblique case agreement also occurs in the syntactic causative for a DO subject.

(59)   **I-pa-susulat**   ni Fe kay Juan <u>ang tula</u>.
        Obl-cause-asp.write CS Fe DAT Juan ANG poem
        "Fe will make Juan write <u>the poem</u>."   (Maclachlan 1996)

This realization of agreement patterns with the predicational structures discussed above, even though it is not obvious that the productive causative has a small clause structure like the other constructions. The causative structure motivated in chapter 2 assumed that the lower DO of a syntactic causative was in complement of V position, as repeated in (60).

(60) VoiceP

```
                VoiceP
               /\
        DP_causer  /\
              voice   vP
                     /\
                 V_cause   VoiceP
                  pa      /\
                     DP_causee  /\
                            voice   vP
                                   /\
                                  v   VP
                                     /\
                                 V_root  DP_DO
```

The re-appearance here of oblique case agreement for a DO subject is suggestive that the structure of the causative is more complicated than it initially appears and may involve something more similar to the predication formations discussed above, but I will not speculate on the possibilities here.

4.7.4 Against a Purely Semantic Analysis

An alternative proposal sometimes suggested to account for the difference between *–in* and *i-* voice marking is that *i-* signals centripetal movement (movement away from the external argument) while *–in* is either the default marker or else signals centrifugal movement (movement towards the EA) (Pittman 1966 on nominative voice versions with *–um-* vs. *mag-*, Ramos 1974). This analysis is potentially viable for the ditransitive alternations and even to some extent for the transitive alternations. For instance, the object of a ditransitive verb like 'give' does indeed move away from the external argument who is the giver, so the appearance of *i* - voice marking for the theme (as in (51) above) fits with this account. Also, 'the medicine' in (56) is moving away from the EA, and similarly 'the vase' in (55) can be construed as moving away from the Agent as it is slammed down.

There are, however, several counterexamples to the generalization of directionality. First, it seems impossible to assimilate the fact that benefactives and instrumentals also take *i* - voice agreement to the centripetal movement analysis, as shown in (61).

(61) a.   **I-tinakbo**   niya <u>ang kanyang asawa</u>   *Benefactive*
          Obl-asp-run he   ANG poss. wife
          "He ran for <u>his wife</u>."

     b.   **I-pinangtulog**   niya <u>ang bata</u>.   *Instrumental*
          Obl-asp-pang-sleep he   ANG robe.
          "He used <u>his robe</u> for sleeping."   (Ramos 1974)

In addition, as noted by Latrouite and Naumann 2000, it is difficult to see how verbs like 'mix' or 'bring up' encode movement away from the agent, and yet both of these take *i-* when their themes are subject, as in (62).

(62) a.   **I-ni-halo**   ni Genara <u>ang   langka</u>   sa ginatan.
          Obl-asp-mix CS Genara ANG jackfruit Dat ginatan
          "Genara mixed <u>the jackfruit</u> into the ginatan."

     b.   **I-akyat**   mo <u>ang   mga libro</u>.
          Obl-go.up you ANG pl.   book
          "Bring <u>the books</u> up (stairs)." (L&N 2000)

Latrouite & Naumann 2000 attempt to overcome these limitations with a purely semantic analysis of voice marking. Intuitively, their analysis is that events with an endpoint 'admit' *i-* as a voice marker. While this characterization may overcome the issue that objects that agree with *i-* are not necessarily moving away from the 'actor', their analysis still encounters several problems. First and most obviously, it does not take into account that *i-* appears with benefactive arguments (as in (61a) above) and it is unclear how such arguments could be assimilated to an analysis which relies on the objecthood and end state of *i-* agreeing arguments.

A more conceptual problem with this analysis is that it does not actually account for how any of the voice markers come to be spelled-out in certain configurations. Noticing that they correlate with certain interpretations may be useful and interesting from a semantic perspective, but it does not answer the syntactic question of what the status of the voice markers is before the level of the semantics.[10] Regardless of whether the Latrouite & Naumann analysis of voice markers is a plausible account of the semantic correlates of the voice markers, its aim is not to account for the syntactic behavior of the voice affixes and, as such, it makes no proposal for how they are conditioned or what their grammatical status is. The semantic analysis of L&N is thus a

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[10] Latrouite &Naumann imply that the voice markers themselves are responsible for adding arguments to the clause, but since the correlation between arguments and voice markers is not one-to-one, as discussed above, this analysis, when spelled-out, would become quite complicated.

supplement to rather than a replacement for a syntactic account of voice agreement (similar to other semantic studies on the correlates of oblique cases (like Svenonius 2001 on dative)).

4.8 PRO subjects

As Sigurdsson 1991 has shown, it is possible for PRO to bear structural case just like an overt DP. This is evident in Icelandic from the case agreement marked on floated quantifiers, as shown in (4b) (it is also evident in, e.g., secondary predicate agreement).

(4)   *Icelandic*:
    a.   Strakarnir   komust allir   i skola.
        The-boys-Nom got   all(N-masc-pl) to school
        "The boys(N) all(N) managed to get to school."

    b.   Strakarnir   vonast til aö   komast allir   i skola.
        The-boys-Nom hope for to [PRO(N)] get   all(N-masc-pl) to school
        "The boys(N) hope [PRO(N)] all(N) to get to school."

Thus it is unsurprising that clauses with PRO subjects in Tagalog trigger case agreement on the verb just like any other subject phrase. The sentence in (5a) illustrates nominative agreement with PRO and (5b) illustrates dative agreement.

(5)   a.   Nag-umpisa   <u>si   Mariang</u> [**mag-aral**   <u>PRO</u> ng Ingles].
        Asp.Nom.PAG-start ANG Maria-LK Nom.pag-study [PRO] CS English
        "Maria started [PRO] to study English." (Raphael Mercado, p.c.)

    b.   Nagpilit   <u>si   Mariang</u> [bigy-**an** <u>PRO</u> ng pera ni Ben].
        Asp.Nom.PAG-insist ANG Maria-LK give-Dat [PRO] CS money CS Ben
        "Maria insisted on [PRO] being given money by Ben."   (Kroeger 1993)

4.9 Clausal Subjects

Since Tagalog allows clauses as well as DPs to function as subjects, the approach to voice marking argued for in this chapter requires that at least some CPs in Tagalog must bear case features. Voice agreement for clausal subjects supports the existence of case-marking on CPs, since it varies according to the verb, just as DP complements may be differently case-marked depending on the verb. For instance, the verb *paniwala* 'think' requires dative case on its CP complement, while the semantically similar verb *palagay* 'deem/consider' takes an oblique-marked CP, as reflected by the case agreement when the clause functions as the subject.

(65) a. Noong araw ay pinaniniwala-**an** ng mga tao [na ang mundo ay lapad].
   One-LK time AY asp.think-Dat   CS pl. person LK ANG world AY flat
   "People used to think [that the world was flat]."

   b. **I**-pinalagay niya-[-ng kailangang **i**-pagbili ang lupa].
   Obl-asp.deem he-LK necessary Obl-PAG-sell ANG land
   "He deemed [it necessary to sell the land]."

The idea that CPs may sometimes check case has been suggested in several other contexts. Pesetsky and Torrego 2001, for instance, in a discussion of clausal subjects in English, argue for (the equivalent of) a nominative case feature on CPs and Plann 1986 also discusses the phenomenon of CPs receiving case in Spanish. I therefore take the appearance of case agreement for CP subjects as both unsurprising and unproblematic for the theory of Tagalog case agreement presented here.

4.10 Conclusion

In this chapter I have argued that the voice agreement on Tagalog verbs is a reflex of the case of the subject argument. The widely assumed thematic role agreement hypothesis has been shown to be incapable of accounting for the voice marking pattern of Tagalog. In addition, it has been demonstrated that viewing the Tagalog voice pattern as reflecting case marking aligns the behavior of Tagalog with what is known about case marking in other languages, thus allowing the maintenance of a constrained cross-linguistic theory of case and agreement systems.

Appendix: Stative and Abilitative

The purpose of this appendix is to provide evidence for the differentiation of the stative/abilitative markers from the voice markers, contra Schachter and Otanes 1972, who collapse all the prefixes together into the category of "focus markers". In what follows I do not attempt to provide an analysis of the stative/abilitative construction, but see Travis (to appear) for a detailed discussion of the construction.

Verbs in Tagalog may occur with a *maka-* prefix complex which, as described by Ramos 1971, "indicates ability to undergo the action named by the verb root...it indicates a state of being rather than the dynamic nature of the *mag-/-um-* affixes" (p. 59). Examples of stative and abilitative uses are given in (66a&b), and should be compared with the related non-stative form in (c). (As with *mag-* forms, the initial *m-* of the prefix is realized as *n-* in the context of the [+begun] aspectual marker.)

(66) a.   Na-pagod   <u>ako.</u>
                Asp.MA-tired ANG.I
                "<u>I</u> got tired."

      b.   Na-ka-sa-sayaw   <u>ako</u>
                Asp.MA-KA-asp-dance ANG.I
                "I can dance; I have the ability to dance."

      c.   Nag-sa-sayaw   <u>ako.</u>
                Asp.Nom.PAG-asp-dance ANG.I
                "<u>I</u> am dancing."   (Ramos 1971)

For abilitatives, when the nominative argument is subject, both the *ma-* and *-ka-* prefixes are present and (recognizable) nominative agreement is absent. When the direct object is the subject, *-ka-* is null and there is again no overt case agreement on the verb.

(67) a.   Na-ka-gamit   <u>siya</u>   ng manggang hilaw.
                Asp.NA-KA-use ANG.he CS mango   green
                "<u>He</u> was able/happened to use a green mango.

      b.   Na-Ø-gamit   niya <u>ang manggang hilaw</u>.
                Asp.NA-Ø-use he   ANG mango   green
                "He was able/happened to use <u>the green mango</u>."   (S&O)

When arguments other than the EA or DO are subject, however, case agreement is present on the verb, as exemplified for benefactive, locative, and instrumental subjects in (68).

(68) a.   *Benefactive*:
                Na-**i**-bili   ko <u>siya</u>   ng baro.
                NA-Obl-buy I ANG.she CS dress
                "I was able to buy <u>her</u> a dress."

      b.   *Locative*:
                Na-pag-lutu-**an**   niya ng ulam <u>ang maliit na palayok</u>.
                MA.asp-PAG-cook-Dat he CS food ANG small LK pot
                "He was able to cook some food <u>in the small pot</u>."

      c.   *Instrumental*:
                Na-**i**-pang-basa   niya ng dyaryo   <u>ang aking salamin</u>.
                MA.asp-Obl-INST-read he CS newspaper ANG my.Dat glasses
                "He was able to read the newspapers <u>with my eyeglasses</u>." (Ramos 1971)

These examples demonstrate that *ma-* cannot itself be a marker of voice, due to its co-occurrence with other voice markers. They also demonstrate that the *m-* portion of *ma-* cannot be nominative agreement, since it also co-occurs with non-nominative voice verbs, as in (68).

Based on the co-occurrence restrictions with case agreement, a plausible analysis is that structural case features – nominative and accusative – are neutralized in the context of the

stative/abilitative markers. If this occurs in the morphology, it would mean that these case features are impoverished in the context of a [stative] feature, but I leave the precise formulation of this morphological process open for now.

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