

Locality in exceptional Tagalog A'-extraction*

Henrison Hsieh

henrison.hsieh@polyu.edu.hk

To appear in *Linguistic Inquiry*

Abstract

This paper investigates Tagalog A'-extraction, considering cases conforming with and cases violating the well-known Tagalog extraction restriction. A unified analysis is proposed using properties of the lower phase and ways this boundary can be circumvented. Two mechanisms are available for this purpose. First, arguments may escape the lower phase through independently attested operations. Second, the phase is transparent to clause-peripheral A'-probes when material from the inflectional domain is absent. This proposal accounts for the expanded range of phenomena considered, which poses problems for the predominant approach to Tagalog A'-extraction, where A'-probes must target the highest c-commanded DP.

Keywords: A'-extraction, relativization, syntactic ergativity, locality, Tagalog.

1 Introduction

Tagalog, like many other languages of the Austronesian family, is known for its restrictions on A'-extraction. Given a clause like (1), we see that the pivot,¹ which bears nominative marking (i.e., *ang bata*), can be targeted for relativization, while the genitive-marked argument (i.e., *ng aso*)

*I would like to thank Kenyon Branan, Michael Yoshitaka Erlewine, Yining Nie, the NUS Syntax-Semantics Lab, the audience at AFLA 28 (May 2021), and two anonymous *LI* reviewers for helpful comments and discussion relating to this paper, which builds on parts of my dissertation. This research was supported by the Singapore Ministry of Education under the grant "Subjecthood in Southeast Asia" (MOE2017-T2-2-094) and by the National University of Singapore under grant #A-0007220.

¹In this paper, I use the term *pivot* to refer to the nominative-marked (i.e., introduced by *ang* or equivalent) argument in a Tagalog clause. Note, however, that various other labels have been used in the literature, each with particular theoretical motivations. These labels include 'subject', 'topic', and 'trigger' (see [Schachter 1976, 1996](#); [Guilfoyle, Hung, and Travis 1992](#); [Kroeger 1993](#)). Under ergative approaches, *ang* is also treated as absolutive case ([de Guzman 1988](#); [Aldridge 2004](#)).

cannot, as the pair in (2) shows. One common understanding of this restriction is as stated in (3).²

- (1) Nag-laba ang bata ng damit.
 AV.PFV-laundry NOM child GEN clothes
 ‘The child washed clothes.’
- (2) a. bata=ng [nag-laba <ang bata> ng damit]
 child=LK AV.PFV-laundry GEN clothes
 ‘child that washed clothes’
- b. *damit na [nag-laba ang bata <ng damit>]
 clothes LK AV.PFV-laundry NOM child
 Intended: ‘clothes that the child washed’

(3) TAGALOG EXTRACTION RESTRICTION

Among DPs, only the pivot argument of a clause can be targeted for the formation of A'-dependencies such as relative clauses, focus constructions, and *wh*-questions.

This restriction is one of the central topics in the syntax of Tagalog, and is intertwined with other major phenomena in the language, including the Austronesian-type “voice system,” which determines the choice of pivot argument. As such, a large body of work on the syntax of Tagalog has been dedicated to the analysis of this restriction, or otherwise deals with the restriction indirectly (Nakamura 1996; Aldridge 2002, 2004, 2017; Rackowski and Richards 2005; Erlewine and Levin 2018). A common approach taken in the current literature argues that the restriction is the result of the interaction of two properties of Tagalog. First, the A'-extraction of DPs involves a probe that specifically seeks a DP (Aldridge 2004, 2017). Under this view, the extraction restriction reflects relative locality constraints on probing (see e.g., Relativized Minimality in Rizzi 1990, Minimal Link Condition and Attract Closest in Chomsky 1995, 2000).³ Second, Tagalog can promote a wide range of nominals to a syntactically prominent position. The choice of nominal is subsequently reflected in verbal morphology (voice) and on the nominal itself (pivot marking). This results in the pivot argument being the highest DP in a clause, and therefore the sole argument that may be A'-extracted.

²All uncited Tagalog data comes from primary elicitation work with native speakers of Tagalog, most of whom were living in or originally from the Manila area, as well as from the native speaker judgments of the author. Examples in this paper follow the Leipzig Glossing Conventions, with the following additions: AV = Actor Voice, CV = Conveyance/Circumstantial Voice, EXCL = exclamative, GER = gerund formative, LK = linker, LV = Locative Voice, NVOL = nonvolitional form, PV = Patient Voice, RPFV = Recent Perfective

³Note that A'-extraction of non-DPs in Tagalog proceeds quite differently from that of DPs, resulting in distinct structural and distributional properties. As such, the former phenomenon warrants separate study and falls outside the scope of this paper. See Nakamura 1996; Aldridge 2002, 2003b; Mercado 2004; Hsieh 2020 for further discussion of these two types of A'-extraction.

This paper argues against this type of “highest-DP” approach and instead proposes that A'-extraction in Tagalog reflects *absolute* locality constraints. Under this alternative view, the pivot argument is privileged for extraction not because it is necessarily the highest DP in a clause, but because it has escaped an opaque domain: the lower phase. This “domain-based” approach is similar in spirit to some previous work on this topic, such as Rackowski and Richards 2005, but differs in its empirical scope. Whereas previous approaches have assumed that the extraction generalization as stated in (3) holds, I argue for the analysis proposed here on the basis of the exceptions to this generalization.

Such exceptions are not unknown in the literature, but they appear in scattered sources and lack a unified analysis. For example, recent work has highlighted the possibility—contrary to previous assumptions—of A'-dependencies that target genitive-marked (i.e., nonpivot) agents (Tanaka et al. 2016; Pizarro-Guevara and Wagers 2018; see also Erlewine and Lim 2021 on Bikol). In (4), we see that changing the verb from *naglaba* in (1) to *nilabhan* changes the pivot from agent to theme. We now expect this pivot theme argument to be accessible to relativization, following the restriction stated in (3). This expectation is borne out, as (5b) shows. What is unexpected is that the nonpivot agent relative clause (5a) is not judged to be ungrammatical to the same degree as the nonpivot theme relative (2b) despite the fact that both have genitive-marked targets, as confirmed by Pizarro-Guevara and Wagers (2018) (see section 2.3 below).

- (4) Ni-labh-an ng bata ang damit.
 PFV-laundry-LV GEN child NOM clothes
 ‘The child washed the clothes.’
- (5) a. ?bata=ng [ni-labh-an <ng bata> ang damit]
 child=LK PFV-laundry-LV GEN child NOM clothes
 ‘child who washed the clothes’
- b. damit na [ni-labh-an ng bata <ang damit>]
 clothes LK PFV-laundry-LV GEN child NOM clothing
 ‘clothes that the child washed’

The range of exceptions to the pivot-only extraction restriction is varied, and it is not obvious at first whether or not we can understand their behavior through the lens of a single general mechanism. In this paper, I argue that the domain-based approach to Tagalog extraction developed here allows us to analyze the (apparently) exceptional examples as resulting from the same mechanisms that give rise to the well-studied cases that do obey the extraction restriction. At the same time, I will show that the behavior of such exceptions poses problems for highest-DP approaches. The kinds of data considered in this paper are distinct from each other in substantive ways, forming two broad classes. However, both classes support the domain-based

approach, as they show two different ways that the lower phase boundary affects or interacts with A'-extraction in this language.

The first class of data is represented by the nonpivot agent relativization in (5a). I posit that these are examples where the extraction target comes to occupy a position outside the lower phase at some intermediate stage of the derivation through syntactic operations other than A'-extraction. In other words, A'-extraction can be fed by other processes in Tagalog. For example, nonpivot agents are proposed to be accessible for extraction because their escape from the lower phase is facilitated by an independent and understudied syntactic operation, which I refer to here as GENITIVE INVERSION. Similarly, I argue the canonical extraction of pivots—as in (5b)—is possible because promotion of an argument to pivot (PIVOT MOVEMENT) is to a position also outside the lower phase. Proposing that an operation moves an extraction target to a higher position results in structural configurations that are similar in many ways to what has been proposed under highest-DP approaches. However, we will see evidence that when both of these operations apply in a construction, either a pivot or a nonpivot agent can be extracted. Neither DP blocks the accessibility of the other, contrary to what we would expect under a highest-DP approach.

The second class of data involves extraction from environments that disallow both Pivot Movement and Genitive Inversion, and where we do not find evidence for arguments having moved out of their base positions. Included in this class are Recent Perfective clauses previously noted by McGinn (1988) and Schachter (1996) as well as less well-known data from exclamative adjective forms. In such environments, extraction of any argument—regardless of its height relative to other DPs—is possible only if the construction lacks an inflectional layer. I propose that this pattern is best accounted for via a particular timing for the Spell-Out of the lower phase. Concretely, I posit that the θ -role-assigning domain of the clause (conventionally understood to be vP for verbal predicates) undergoes Spell-Out when material from higher (e.g., inflectional) domains enters the derivation. The consequence of this is that if a construction lacks an inflectional layer, its θ -domain will not have undergone Spell-Out by the time a clause-peripheral A'-probe enters the derivation. Consequently, this probe may freely target any argument within the θ -domain. Crucially, we also find at least one environment that disallows the movements that regularly feed A'-extraction, yet still has the inflectional layer present. In this environment, no extraction is possible as predicted, because the lower phase is opaque for extraction without any way for DPs to have independently escaped this domain.

2 Background and Puzzle

In this section, I introduce some background necessary for understanding the extraction patterns in Tagalog. I first present the extraction restriction as it is commonly understood in the literature,

briefly introducing the voice and argument marking systems in the language. Then, I present the range of exceptional behaviors that I consider in this paper. We will see that these exceptions show a diverse range of properties, resisting immediately obvious unified analyses.

2.1 Voice System and Extraction Restriction

Tagalog A'-extraction is usually understood to only be able to target the nominative-marked pivot argument in a clause. In turn, the thematic role of the pivot is determined by the voice morphology found on the verb. This Austronesian-type voice morphology is a prominent feature of Tagalog morphosyntax, and is illustrated below in (6). Here, we see that a wide range of arguments can become pivots, including core arguments (6a-b) and peripheral argument such as receptacles (6c) and beneficiaries (6d). In each case, a different voice morpheme appears on the verb *luto* 'cook': Actor Voice (AV) *m(ag)-* with agents as pivot, Patient Voice (PV) *-in* with themes, Locative Voice (LV) *-an* with receptacles, and *i-* with beneficiaries. When not marked as the pivot, arguments receive default marking depending on grammatical role (see, e.g., [Carrier-Duncan 1985](#)). For example, nonpivot core arguments are usually marked genitive (*ng* /*nan*/ for common nouns), and nonpivot locations are prepositional, bearing oblique marking (*sa* for common nouns).

(6) VOICE MORPHOLOGY AND THE PIVOT

- a. Mag-lu~luto **ang bata** ng sabaw sa palayok.
 AV-FUT~cook NOM child GEN soup OBL clay.pot
 'The child will cook soup in the *palayok*.'
- b. Lu~luto-in ng bata **ang sabaw** sa palayok.
 FUT~cook-PV GEN child NOM soup OBL clay.pot
 'The child will cook **the soup** in the *palayok*.'
- c. Pag-lu~luto-an ng bata ng sabaw **ang palayok**.
 pag-FUT~cook-LV GEN child GEN soup NOM clay.pot
 'The child will cook soup **in the palayok**.'
- d. I-pag-lu~luto ng bata ng sabaw **ang magsasaka**.
 CV-pag-FUT~cook GEN child GEN soup NOM farmer
 'The child will cook soup **for the farmer**.'

The voice system as a whole is complex, and a number of factors are relevant for determining the choice of pivot, including the class of the verbal root, overt transitive or causative morphology (e.g., *pag-*), as well as the voice morpheme itself. As such, this area of Tagalog syntax has been the subject of much research and attempts at categorization ([Cruz 1975](#); [McFarland 1976](#);

Schachter 1976; a.o.). For current purposes, it is sufficient to know that such alternations involve changes in the verb form with concomitant changes in the choice of nominative argument.

Extracting the pivot in a clause is always possible, as (7) shows. On the other hand some nonpivot arguments cannot be extracted. For example, (8) shows that nonpivot themes cannot be relativized. In this case, the PV form *lulutu* must be used, as in (7b).

(7) PIVOTS CAN BE RELATIVIZED

- a. bata=ng [mag-lu~luto <ang bata> ng sabaw sa palayok]
 child=LK AV-FUT~cook GEN soup OBL clay.pot
 ‘child that will cook soup in the *palayok*’
- b. sabaw na [lu~lutu-in ng bata <ang sabaw> sa palayok]
 soup LK FUT~cook-PV GEN child OBL clay.pot
 ‘soup that the child will cook in the *palayok*’
- c. palayok na [pag-lu~lutu-an ng bata ng sabaw <ang palayok>]
 clay.pot LK pag-FUT~cook-LV GEN child GEN soup
 ‘*palayok* that the child will cook soup in’
- d. magsasaka=ng [i-pag-lu~luto ng bata ng sabaw <ang magsasaka>]
 farmer=LK CV-pag-FUT~cook GEN child GEN soup
 ‘farmer that the child will cook soup for’

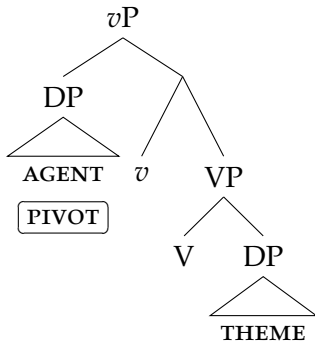
(8) NONPIVOT THEMES CANNOT BE RELATIVIZED

- a. *sabaw na [mag-lu~luto ang bata <ng sabaw> sa palayok]
 soup LK AV-FUT~cook NOM child OBL clay.pot
 Intended: ‘soup that the child will cook in the *palayok*’
- b. *sabaw na [pag-lu~lutu-an ng bata <ng sabaw> ang palayok]
 soup LK pag-FUT~cook-LV GEN child NOM clay.pot
 Intended: ‘soup that the child will cook in the *palayok*’
- c. *sabaw na [i-pag-lu~luto ng bata <ng sabaw> ang magsasaka]
 soup LK CV-pag-FUT~cook GEN child NOM farmer
 Intended: ‘soup that the child will cook for the farmer’

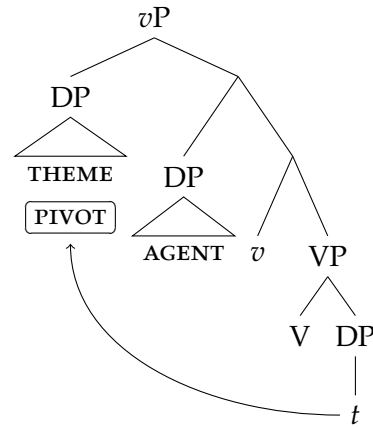
2.2 Previous Approaches

A number of works in Tagalog syntax accounting for the patterns described above (e.g., [Nakamura 1996](#); [Aldridge 2004](#)) share a central idea. Under these approaches, the pivot is privileged because it is the highest DP in the clause, and thus the closest goal for an A'-probe with particular properties (see [Branan and Erlewine 2020](#) for related discussion of A'-probing of this form). This structural height is achieved through syntactic operations that move arguments out of their base positions and which are proposed to underlie the Tagalog voice system. Two general configurations result from these operations: that of Actor Voice clauses ([9a](#)), and that of non-Actor Voice clauses ([9b](#)).

(9) a. ACTOR VOICE CLAUSE



b. NON-ACTOR VOICE CLAUSE



To provide a concrete example, let us consider [Aldridge's \(2004\)](#) analysis. [Aldridge](#) proposes that in non-Actor Voice clauses, the highest internal argument moves to the outer Spec,*v*P due to an EPP feature on v^0 ; this feature is absent from v^0 in Actor Voice clauses, leaving the agent base-generated in Spec,*v*P as the highest DP in the clause. She further proposes that C^0 in Tagalog probes for DPs, therefore only the highest DP in a particular structure can be extracted, following Attract Closest. This rules out extraction of not only the nonpivot theme in ([9a](#)) (deriving the ungrammaticality of ([8](#))), but crucially also the nonpivot agent in the inner Spec,*v*P in ([9b](#)).

Interestingly, [Aldridge's](#) proposal is described as relying on the phasehood of *v*P, for example to derive the inaccessibility of the theme in configurations like ([9a](#)). However, an appeal to phases is not necessary, strictly speaking, as such cases are accounted for equally well by Attract Closest if C^0 in Tagalog is assumed to probe for DPs rather than *wh*-phrases. In turn, Attract Closest is necessary to derive the nonextractability of agents in configurations like ([9b](#)), since their position in the phase edge would otherwise make them accessible for extraction. Thus if we consider more closely the proposed movement of internal arguments to a higher position, it is natural to raise the following question: What aspect of this movement is the key factor to

allowing extraction: (i) being the highest DP in the clause or (ii) escaping the lower phase?

In this paper, I argue on the basis of apparent exceptions to the pivot-only extraction restriction that the answer to this question is the latter. For example, highest-DP approaches successfully predict the ungrammaticality of nonpivot theme extraction such as in (8), but they do not—under many formulations of “highest”—straightforwardly account for the possibility of nonpivot *agent* extraction, which we saw in (5). While this contrast might be captured using a different formalization of “highest,” we will see that other data poses different problems. Instead, I argue that a fuller range of the exceptional data can be accounted for under an analysis where the primary driver of DP extraction patterns in Tagalog is the phasehood of the θ -domain, and ways in which the phase can be escaped or the phase boundary can be rendered inactive. Let us now turn to the relevant exceptions to the pivot-only extraction restriction and how they are problematic for highest-DP approaches.

2.3 Exceptions to the Restriction

There are a number of environments where nonpivot DP arguments may be A'-extracted, contrary to the widely cited generalization just reviewed. A fully adequate analysis of Tagalog syntax should seek to explain this behavior, but this task has thus far not been given much attention in the literature. Part of the problem, as we will see, is that these exceptions show a range of different properties, making it difficult to form a generalization regarding where nonpivot extraction is possible and where it is not.

To begin, let us consider the case of nonpivot external arguments in some more detail. In typical voice-marked declarative clauses, we find that this type of argument may undergo extraction, contrary to what we expect from the ‘pivot-only’ generalization stated in (3). We see in (10) that such cases of extraction are judged to be marginal: native speakers find such examples less acceptable on average than the pivot-extraction examples. Nevertheless, extraction of nonpivot external arguments is judged better than the nonpivot *theme* extraction that we have just seen in (8). Pizarro-Guevara and Wagers (2018, 2020) provide experimental confirmation of this three-way contrast in judgments,⁴ and naturally occurring examples such as (11) are also attested.

⁴Their experiment only investigated this behavior for monotransitive clauses, but in traditional elicitation work, the effect appears to generalize to other argument structural configurations (e.g., ditransitives) and to other types of external arguments (e.g., nonpivot causers).

(i)?*propesor na [i-p<in>a-ayos <ng propesor> ang kompyuter sa akin]*
 professor LK CV-<PFV>CAUS-fix GEN professor NOM computer OBL 1SG.OBL
 ‘professor who had me fix the computer’

(10) NONPIVOT AGENT EXTRACTION

- a. ?bata=ng i-ta~tanim <ng bata> ang bulaklak sa bakuran.
 child=LK CV-FUT~plant NOM flower OBL yard
 ‘child who will plant the flower in the yard’
- b. ?bata=ng ta~tanim-an <ng bata> ng bulaklak ang bakuran.
 child=LK FUT~plant-LV GEN flower NOM yard
 ‘child who will plant the yard with flowers’
- c. ?bata=ng i-pag-ta~tanim <ng bata> ng bulaklak ang magsasaka.
 child=LK CV-pag-FUT~plant GEN flower NOM farmer
 ‘child who will plant flowers for the farmer’

- (11) single parent na [pa-tuloy na b<in>u~buhay <ng single parent> ang mga anak
 single parent LK ADV-continue LK IPFV~life[PV] GEN single parent NOM PL offspring
 niya]
 3SG.GEN
 ‘single parent who continually provides for their children’

(Hsieh 2020, 174, slightly modified)

This behavior is problematic for the highest-DP approaches to Tagalog A'-extraction described above, as deriving it would involve a high A'-probe ignoring the structurally higher pivot (see 9b) to target the agent in the (lower) Spec,vP. We may be able to account for such behavior under a highest-DP approach by relaxing the definition of “highest” to make multiple specifiers of a projection equidistant to a higher probe. The result would be that pivot arguments and nonpivot agents may A'-extract since they are both specifiers of vP, while nonpivot themes may not since there would always be a higher DP in a clause (i.e., the pivot). However, an alternative is to consider the structural asymmetry between internal and external arguments that is tied to their position relative to a phase boundary rather than each other. Thus among genitive-marked nonpivots, we might posit that external arguments can undergo A'-extraction because they occupy a position at the edge of the lower phasal domain, while internal arguments occur inside it (see also Rackowski and Richards 2005; Erlewine and Lim 2021 on Bikol).

One way to distinguish between these two approaches would be to control for the effect of the phase boundary by considering contexts where both internal and external arguments occur in the same domain (i.e., with no intervening phase boundary). In such contexts, a highest-DP approach predicts that we would still observe an internal-external argument asymmetry, while a domain-based approach predicts that we should find the asymmetry neutralized. Data of this type comes from the Recent Perfective (RPFV) construction, which exhibits behavior that violates the pivot-only extraction restriction. We see in (12) that this construction lacks a pivot argument

altogether; no argument can be *ang*-marked (pace Odango and Otsuka 2015). However, (13) shows us that A'-movement out of this type of clause is nevertheless possible (see also McGinn 1988; Schachter 1996). Here we find a crucial difference from previous examples. We see in (13a-b) that A'-extraction is possible not only for external arguments, but also for internal arguments.⁵ There is no argument-structural asymmetry.

- (12) Kai~inom lang ng baboy ng tubig.
 RPFV~drink only GEN pig GEN water
 'The pig has just drunk the water'

Baseline Recent Perfective

(13) EXTRACTION FROM RECENT PERFECTIVE

- a. baboy na [kai~inom lang <ng baboy> ng tubig]
 pig LK RPFV~drink only GEN water
 'pig that has just drunk (the) water'
- b. tubig na [kai~inom lang ng baboy <ng tubig>]
 water LK RPFV~drink only GEN pig
 'water that the pig has just drunk'

As mentioned above, this behavior poses a problem for highest-DP approaches. The most natural way to account for the data in (13) under the highest-DP view is to posit that the RPFV form allows for configurations where the external argument c-commands the internal argument and vice versa, deriving (13a) and (13b) respectively. However, I argue in section 5.1 that evidence for this is lacking, and that the external argument necessarily c-commands the internal argument in this environment.

I propose instead that a domain-based approach—closer to the classical generative analysis for A'-movement involving an A'-probe that can skip intervening DPs to reach its goal—provides a more straightforward account. In the specific case of the RPFV construction, I propose that the internal argument becomes accessible because this construction has reduced structure of a specific kind. This in turn causes the lower phase associated with the θ -domain to have not yet undergone Spell-Out by the time a C^0 head bearing an A'-probe enters the derivation. This effectively renders the lower phase boundary inactive for the purposes of A'-extraction.

The details of this proposal are spelled out in later sections, but we will see a key indicator for this reduced structure is the absence of the inflectional layer. Further support for this idea comes from exclamative adjective constructions, where we find an asymmetry in extraction be-

⁵Effectively, this statement about internal arguments only applies to themes. When other types of internal arguments, such as ditransitive goals or recipients, are not the pivot of a clause, they surface as PPs (i.e., marked with *sa*), which are known to have a different extraction profile from DPs in Tagalog (Aldridge 2002; Mercado 2004). Significantly, I report in Hsieh 2020 that extraction of PPs out of the Recent Perfective is ungrammatical.

havior that is tied to differences not in argument structure but in the structure of the constructions themselves.

Tagalog has a number of exclamative adjective forms, shown in (14), which exhibit some morphosyntactic differences from plain positive forms, in (15). Comparing (14a) and (15a), we see differences in the morphology appearing on the root *taba* ‘fat’: *ma-* for the positive form and *napaka-*, *kay*, and *ang* for the exclamative forms.⁶ We also find different case marking on the clausal subject: nominative for the positive form and genitive for the exclamatives. As (15b) shows, the positive form exhibits behavior that is expected under the pivot-only extraction restriction in (3): the nominative-marked argument is a valid target for A'-extraction. On the other hand, we find slightly more complex behavior in the exclamative forms. Extraction is possible with the *napaka-* and *kay* forms, as in (14b), but impossible with the *ang*-form, as in (14c).

(14) EXCLAMATIVE ADJECTIVES

- a. {**Napaka-/Kay/Ang**} *taba ng baboy!*
 EXCL- EXCL EXCL fat GEN pig

‘The pig is {so/very} fat!’

- b. *baboy na [napaka-/kay } taba]*
 pig LK EXCL- EXCL fat
 ‘pig that is very/so fat’

- c. **baboy na [ang taba]*
 pig LK EXCL fat

Intended: ‘pig that is so fat’

(15) POSITIVE ADJECTIVES

- a. **Ma-***taba ang baboy.*
 ADJ-fat NOM pig

‘The pig is fat.’

- b. *baboy na [ma-tab]*
 pig LK ADJ-fat
 ‘pig that is fat’ / ‘fat pig’

The primary explanatory mechanism of a highest-DP approach does not shed light on the contrast between (14b-c). Why should the sole—and necessarily highest—argument in this type of clause be unable to undergo A'-extraction when the same argument faces no restrictions with *napaka-* and *kay*-exclamatives? The reason for the observed difference cannot be tied to a c-command relation between DPs since there is only one DP. The more natural explanation would instead be to say that there is some other structural property that holds of *ang*-exclamatives but not of *napaka-* and *kay*-exclamatives, causing the observed difference in behavior. The specific proposal I advance in this paper is that the same mechanism that allows extraction from the RPFV form is also involved in creating the observed contrast in exclamative adjectives. However, let us first discuss two alternative hypotheses for this contrast that can be rejected straightforwardly.

First, we might wonder whether these adjectival forms are truly exclamatives (which are

⁶In the conventional orthography of Tagalog, *napaka-* is written as an affix (i.e., ⟨*napakataba*⟩), while *kay* and *ang* are written as separate words (i.e., ⟨*kay taba*⟩, ⟨*ang taba*⟩). I follow these orthographic conventions here without making any claims about underlying morphophonology.

crosslinguistically restricted with respect to syntactic operations) while the others are simply regular adjectives with different degree-marking morphology (which we would expect to pattern with plain *ma*-adjectives). Some basic tests for exclamatives suggest that we cannot appeal to this line of reasoning. Kaufman (2011) points out that yes-no question formation with the particle *ba* is possible with plain *ma*-adjectives but incompatible with *kay*-exclamatives.⁷ This is shown in (16), which also shows that *napaka*- and *ang*-exclamatives pattern with *kay*-exclamatives. This is argued to show that the semantic content of the relevant forms is primarily nonassertive, in line with exclamatives crosslinguistically.⁸

- (16) a. Ma-tabā ba ang baboy?
 ADJ-fat Q NOM pig
 ‘Is the pig fat?’
- b. *{Napaka- / Ang / Kay} tabā ba ng baboy?
 EXCL EXCL EXCL fat Q GEN pig
 Intended: ‘Is the pig {very / so} fat?’

A second initial hypothesis that can be rejected has to do with the form of the *ang*-exclamative. *Ang* in this construction is homophonous with the common noun nominative marker, so we might appeal to this homophony and say that this exclamative is formally a DP. Consequently, the ill-formedness of extraction out of *ang*-exclamatives could be tied to a more general opacity of DPs for extraction. This hypothesis is attractive because adjectival roots such as *tabā* can indeed appear in clearly nominal contexts, resulting in constructions like the bracketed DP in (17), which are string identical to *ang*-exclamatives like in (14a). However, further probing shows that the *ang*-exclamative exhibits behavior that is not found in nominal constructions. For example, plural agreement in adjectives is marked by CV-reduplication on the adjectival root and is available with *ang*-exclamatives, as (18a) shows (see section 5.2 for further discussion). However as (18b) shows, this process is impossible in the clearly nominal construction.⁹ Similarly, (19) shows that it is possible to embed *ang*-exclamatives with the complementizer-like linker morpheme, while similar complementation with a nominal disallows this morpheme.

⁷However, Kaufman 2011, fn. 16 notes that *ba* may be marginally possible in cases where the communicative intent is not purely information seeking, such as echo questions.

⁸Similarly, there is some evidence to suggest that these constructions are restricted in terms of clausal embedding (cf. Potsdam 2011 and references therein). However, there appears to be some variability in acceptability between constructions as well as between speakers. Preliminary data suggests that *napaka*-exclamatives are the most free with respect to embedding, followed by *ang*-exclamatives, then by *kay*-exclamatives (which are the least free). While we could tie the embeddability of *napaka*-exclamatives to their compatibility with relativization shown in (14), the behavior of *ang*- and *kay*-exclamatives does not correspond in the same way. I leave the study of this behavior for future work.

(i) Naniniwala ako na [{}[✓]napaka- / ?ang / *kay } tabā ng baboy].
 AV.IPFV.believe 1SG.NOM LK EXCL EXCL fat GEN pig
 Intended: ‘I believe that [the pig is {very / so} fat].’

⁹See Kaufman 2011; Hsieh 2020 for further discussion of the nonnominal properties of *ang*-exclamatives.

- (17) I-k<in>agulat ko [ang taba ng baboy].
 CV-<PFV>be.surprised 1SG.GEN NOM fat GEN pig
 ‘I was surprised by [the pig’s fat(ness)].’
- (18) a. Ang **ta~**taba ng mga baboy!
 EXCL PL~fat GEN PL pig
 ‘The pigs are so fat!’
- b. I-k<in>agulat ko [ang (***ta~**)taba ng mga baboy].
 CV-<PFV>be.surprised 1SG.GEN NOM PL~fat GEN PL pig
 ‘I was surprised by [the pigs’ fat(ness)].’
- (19) a. S<in>abi ko **na** ang taba ng baboy.
 <PFV>say[PV] 1SG.GEN LK EXCL fat GEN pig
 ‘I said that the pig was so fat.’
- b. S<in>abi ko (***na**) ang pangalan ng guro.
 <PFV>say[PV] 1SG.GEN LK NOM name GEN teacher
 ‘I said the teacher’s name.’

Having rejected these possibilities, I will argue in section 5.2 that the structural property responsible for the difference in behavior among the exclamative adjectives is the presence or absence of the inflectional layer. That is, I show that extraction out of exclamatives is possible just in case adjectival inflectional morphology is unavailable. This in turn can be understood under the broader proposal that the absence of the inflectional layer renders the θ -domain transparent for extraction, in line with the proposal for the RPFV form.

To sum up this section, we have seen data that constitutes exceptions to the Tagalog pivot-only extraction restriction stated in (3). I have argued that this behavior poses problems for the prevailing highest-DP approaches to A'-extraction in the language, which derive the extraction restriction as a result of locality among DPs. Instead, I suggested that an approach relying solely on the presence or absence of phasal barriers is better suited to account for the observed pattern. The intuition here is that when A'-extraction is impossible, the relevant extraction target is trapped within the lower phase, corresponding specifically to the θ -domain. On the other hand when A'-extraction is possible, either the target has escaped the θ -domain, or the θ -domain is not active as a phase. I spell this proposal out in more detail in the following sections.

3 Analysis Overview

This paper proposes an analysis of DP A'-extraction in Tagalog that unifies the behavior of the A'-extraction cases that obey the pivot-only extraction restriction as well as those that have been observed to violate it. The central claim of the proposal is that the crucial factor responsible for the attested extraction patterns is the phasehood of the domain of θ -role assignment (i.e., *vP* and—following Sabbagh (2005)—*aP*). This proposal thus contrasts with prior work that puts the explanatory burden on the structural position of a target DP in relation to other DPs in a clause (e.g., Aldridge 2004), and instead follows the extensive body of work in A'-movement that argues for the existence of a phasal domain lower than the level of the full clause. However, the current analysis departs from this existing work in the details of how A'-extraction processes circumvent this phase boundary.

I argue that there are two main ways that the lower phase boundary may be circumvented to allow a higher A'-probe to target a DP, resulting in two distinct types of behavior. First, extraction can be fed by independently available processes that facilitate escape from the θ -domain. I propose that there are two such processes in Tagalog: PIVOT MOVEMENT and an understudied phenomenon I refer to as GENITIVE INVERSION. These independent processes give us behavior that is reminiscent of successive-cyclic movement with the key difference that movement to the intermediate landing site is independently attested outside of extraction contexts. Second, the θ -domain is transparent to a clause-peripheral A'-probe when inflectional structure is absent, obviating the need for the feeding processes mentioned above. This is formalized by adopting a particular timing for the Spell-Out of a phase similar in spirit to that of Bošković 2014. The claim is that the θ -domain undergoes Spell-Out when the first syntactic head not part of this domain enters the derivation, so that if an A'-probe-bearing C^0 is the first such syntactic head, it is able to probe into the θ -domain.

The two types of derivations—extraction via feeding operation and extraction via θ -domain transparency—account for two largely distinct types of extraction patterns, as we will see. However, both provide evidence in favor of this proposal over existing highest-DP approaches. We find environments arising from interactions between the mechanisms outlined above where syntactic height relative to other potential targets cannot be the main factor that determines extractability. On one hand, we will see contexts where (a) both Pivot Movement and Genitive Inversion apply and (b) no feeding process applies but the θ -domain is transparent to A'-probing due to the absence of inflectional structure. In such contexts, the choice of extraction target is free and is not limited to the highest DP. On the other hand, in contexts where no feeding process applies, and the θ -domain is *opaque* to A'-probing, extraction is impossible even though there is necessarily a highest DP.

I discuss the two independent feeding processes and θ -domain transparency in turn, and

show how they apply to the different attested cases of A'-extraction introduced in the previous section. Before we proceed, a few preliminaries are worth mentioning. In this paper, I focus on the behavior of relativization as a proxy for DP A'-extraction in general. This is motivated by previous observations that *wh*-questions and focus constructions in Tagalog are structurally pseudoclefts, which contain relative clauses (Richards 1998; Aldridge 2003a; Mercado 2004; Hsieh 2020; see also Potsdam 2009). I assume that relative clauses in Tagalog are formed by standard A'-movement involving a clause peripheral probe specified for an A'-feature, rather than a [D] or [ϕ] feature as is common among highest-DP approaches (Aldridge 2004, 2017; Branagan and Erlewine 2020). I also assume that in such dependencies, the element undergoing A'-movement is always a null *Op*.

4 Extraction by Escaping the Phase

In the first class of data we consider, extraction is possible because the target (i.e., *Op*) comes to occupy a position outside of the lower phase, the θ -domain. I propose that Tagalog has two processes that result in arguments occupying such positions, in turn feeding A'-movement.

(20) EXTRACTION-FEEDING MOVEMENTS

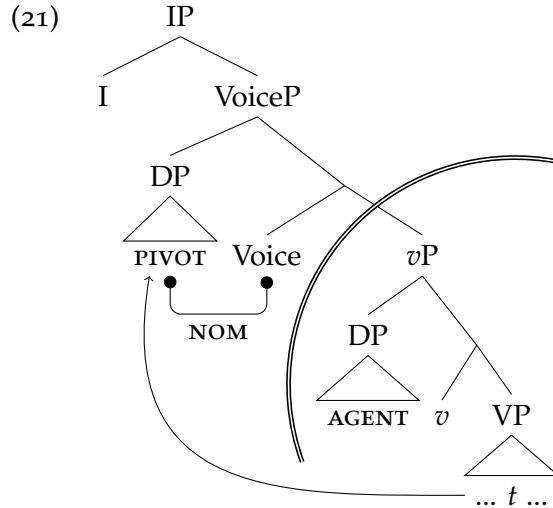
- a. PIVOT MOVEMENT: promotion of an argument to the nominative-marked, pivot position
- b. GENITIVE INVERSION: a process whereby genitive pronominal arguments appear preceding their lexical head

In this section, I discuss these operations in turn. I highlight a few of their relevant properties—particularly their landing sites outside the domain of θ -role assignment—and then show how they derive some basic cases of A'-extraction in Tagalog. We will see that deriving the basic cases with these processes is in principle compatible with either the domain-based approach developed in this paper or the highest-DP approaches found in prior work. This is because in the relevant derivations, the argument targeted for A'-movement necessarily becomes the highest DP in the clause through one of these operations. However, evidence in favor of the domain-based approach comes from contexts where both operations occur. In such contexts, we find optionality in the choice of extraction target.

4.1 Pivot Movement

Pivot Movement—as its name suggests—is the process by which an argument becomes the pivot of a clause. I argue that the landing site of Pivot Movement is the specifier of a projection VoiceP, departing from previous accounts (e.g., Aldridge 2004; Rackowski and Richards 2005; Erlewine

and Levin 2018), which place the pivot in the outer Spec,*v*P position.¹⁰ This projection lies between IP, whose head I assume spells out aspectual morphology, and *v*P, which is the domain of argument introduction and θ -role assignment in verbal predicates. The head Voice⁰ has two main functions: (i) it is spelled out as one of the Tagalog voice morphemes (i.e., <um>/m-, -in, -an, i-; see Wolff 1973; Ross 2002, 2009; Chen 2017), and (ii) it assigns nominative case to the pivot in its specifier. The tree in (21) illustrates.¹¹



Evidence for the position and function of Voice⁰ comes from patterns of co-occurrence between the voice morphemes and the other relevant clausal elements. With regards to the position of Voice⁰, we observe an implicational hierarchy in the verbal forms that are selected by various elements, illustrated below. First, a full verbal form, which appears in independent clauses, is illustrated by *ipapakain* ‘will feed (cv)’ in (22). This verb form bears three overt morphemes attached to the root *kain* ‘eat’ (see Schachter and Otones 1972, §§2.7–8 for more discussion). Linearly from left to right, these are: (i) the conveyance voice morpheme *i-* spelling out Voice⁰, (ii) consonant-vowel (CV)-reduplication marking future aspect spelling out I⁰, and (iii) the productive causative morpheme *pa-* spelling out *v*⁰.

(22) **I-pa~pa-kain** ko sa mga pusa ang isda.

CV-FUT~CAUS-eat 1SG.GEN OBL PL cat NOM fish

‘I will feed the fish to the cats.’

Full verbal form

In addition to the fully inflected form, some environments in Tagalog also select for verbal forms that are reduced, as diagnosed by the fact that certain classes of morphemes cannot appear

¹⁰This follows previous work (Hsieh 2020, ch. 3), where I label this projection AgrP, and is conceptually similar to the VoiceP projection of Collins (2005).

¹¹I follow prior work in assuming that verb-initial word order is derived by head movement of the lexical verb in V⁰ to a higher position such as I⁰ (Guilfoyle, Hung, and Travis 1992; Kroeger 1993; Massam 2000; Aldridge 2004; a.o.). Word order in the postverbal field is relatively free and is generally treated as a kind of scrambling (Kroeger 1993, ch. 5; Rackowski 2002, sec. 1.3.2; Manuelli 2010; Erlewine, Levin, and van Urk 2020).

on them. The attested selection patterns are what provide evidence for the structure proposed in (21). In (23), we see that the prepositional element *para* ‘for, in order to’ requires its complement to be in the aspectless form. In this and similar environments, verbs may not bear aspect morphology (which I attribute to I^0), but are marked with voice and optionally argument-introducing morphemes such as the causative. On the other hand, (24) shows an example of a gerund, where neither voice nor aspect morphology are allowed, but argument-introducing morphology is.

- (23) U~uwi na ako [para {**i-pa-kain** / *i-pa~pa-kain } sa mga pusa ang
 FUT~go.home already 1SG.NOM for CV-CAUS-eat CV-FUT~CAUS-eat OBL PL cat NOM
 isda=ng ito].
 fish=LK PROX

‘I’m going home now to feed this fish to the cats.’

Aspectless form

- (24) H<in>i~hintay niya [ang {**pagpa~pa-kain** / *i-(pa~)pa-kain } ko sa mga pusa
 IPFV~wait[PV] 3SG.GEN NOM GER~CAUS-eat CV-FUT~CAUS-eat 1SG.GEN OBL PL cat
 ng isda].
 GEN fish

‘He’s waiting for my feeding of fish to the cats.’

Gerund form

Crucially, these are all the possible selectional combinations between these three types of morphemes. That is, we find no environments that, say, allow aspect morphology but prohibit either voice or argument-introducing morphology. This constitutes an implicational hierarchy that is readily captured by the structure in (21), where VoiceP lies in between IP and v P. Environments that select IP will allow for all three morphemes to appear, those that select VoiceP will necessarily exclude aspect on I^0 , and those that select v P will further exclude the voice morphemes that are spelled out on Voice⁰.¹²

Having established the position of Voice⁰, we now turn to its function. The data in (22–24) also supports the claim that Voice⁰ is the source of nominative case in Tagalog (see also McGinn 1988). In these examples, we see that the availability of nominative case for the arguments of a particular clause correlates exactly with whether or not that clause has a VoiceP layer.¹³ We see in (24) that the highlighted verb lacks any voice morphology, and none of its arguments are marked

¹²Despite this distributional evidence, the reader may notice that aspectual CV-reduplication is closer to the root than the voice morpheme *i-*, apparently violating the Mirror Principle. I do not have anything substantial to say about this discrepancy, but instead note related works on this issue. For instance, Travis (2010, 60–) posits different syntactic positions for different Tagalog aspectual morphemes (see table 1 below). These morphemes are also sensitive to the morphophonology of their environment, suggesting that a nonsyntactic explanation is available (Schachter and Otones 1972, sec. 5.19–21; Carrier 1979; Rackowski 1999).

¹³This claim only holds of predicates that are eventive. That is, nominal and adjectival predicates in stative uses (i.e., ‘be tall’ vs ‘become tall’) are not obviously marked with voice morphology, yet clauses with such predicates have a nominative-marked argument, as (i) shows. Note that Tagalog has no overt copula.

nominative. In contrast, the verb of interest in (22-23) bears the voice morpheme *i-*, and nominative appears on *isda* ‘fish’. Note that for (23), the source of nominative on *isda* cannot be the full verb *uuwi* ‘will go home (AV)’. This is because nominative case also appears on an argument in the main clause (i.e., *ako* ‘1SG.NOM’), and we do not find clear cases in Tagalog of multiple instances of nominative assignment from a single source, especially in verbally predicated clauses. This rules out the possibility that the source of nominative case is a different (higher) functional head—such as I^0 —that is only found in the main clause.

We have thus seen that the Tagalog clause has a syntactic projection, VoiceP, outside the θ -domain that is intricately tied to the syntactically prominent pivot argument. Following the general intuition of prior work, I propose below that movement of the pivot to this projection facilitates subsequent A'-extraction. To see how, let us consider a few concrete examples that obey the pivot-only restriction. As previously mentioned, the derivations of these examples are compatible with both the domain-based view proposed here and the prior highest-DP approaches. That said, I briefly present them here for completeness and to illustrate some basic assumptions about clause structure.

The relevant examples are given in (25). I assume that arguments are generated within *v*P following the UTAH (Baker 1988), and that one argument bears a [PIVOT] feature, which is probed for by Voice⁰ (see also Chen 2017 for a similar idea). Here, we consider cases where this feature appears on the null *Op* involved in relative clause formation (as outlined in section 3). Voice⁰ enters the derivation bearing a [*u*PIVOT] feature that probes for a suitable goal, triggering movement to Spec,VoiceP. The trees in (26) illustrate.

- (25) a. *ibo[n]=ng*¹⁵ [*mag-ha~hanap <ang ibon> ng mani*]
 bird=LK AV-FUT~search NOM bird GEN peanut
 ‘bird that will look for peanuts’
- b. *mani=ng* [*ha~hanap-in ng ibon <ang mani>*]
 peanut=LK FUT~search-PV GEN bird NOM peanut
 ‘peanut that the bird will look for’

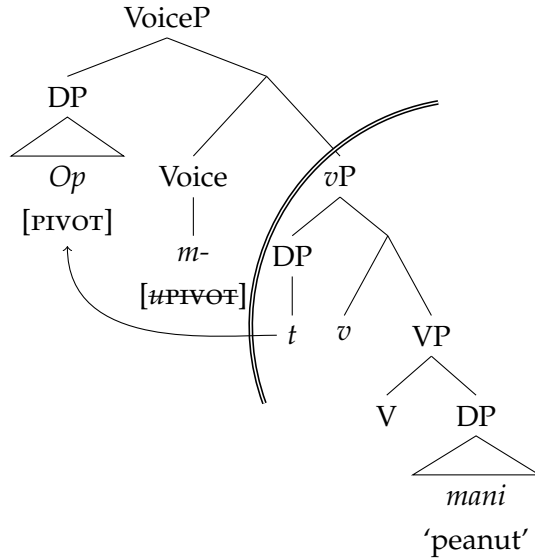
(i) {Guro /Ma-tangkad} ang pinsan ko.
 teacher ADJ-tall NOM cousin 1SG.GEN
 ‘My cousin is {a teacher/tall}.’

(ii) Alam ng bata ang sagot.
 know GEN child NOM answer
 ‘The child knows the answer.’

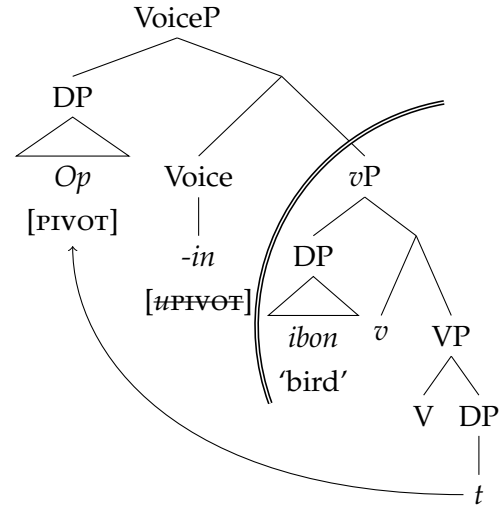
Similarly, bare verbal predicates arguably have a stative interpretation. These predicates bear *no* verbal morphology (including argument-introducing morphology), yet clauses with such predicates also have a nominative-marked argument, as (ii) shows. See also Schachter and Otnes 1972, sec. 4.21 on so-called *pseudoverbs* for further examples and discussion. I leave open the question of how nominative case is assigned in such clauses.

¹⁵I use the notation ‘[n]’ to indicate that a stem-final /n/ has been deleted before a following linker morpheme (=ng).

(26) a. ACTOR VOICE



b. PATIENT VOICE



In addition to the inherent functions of Voice⁰ outlined above, I assume that this head is part of the inflectional domain.¹⁶ Its position as sister to *vP* therefore makes it the lowest syntactic head outside the θ -domain. Under the current proposal, this means that Voice⁰ effectively functions as a phase head in this context, triggering Spell-Out of its complement, *vP*, after Pivot Movement has occurred. Thus, the pivot *Op* in both structures shown in (26) is accessible to an A'-probe on C⁰ as it lies outside *vP*. This also means that any in-situ arguments within *vP* are inaccessible to such a probe. This derives the ill-formedness of nonpivot theme extraction examples like (27a), but incorrectly predicts that nonpivot agent extraction examples like (27b) should be similar. To derive such examples, we turn to Genitive Inversion.

(27) ASYMMETRY IN NONPIVOT DP A'-EXTRACTION

a. **mani=ng* [mag-ha~hanap ang ibon <*ng mani*>]

peanut=LK AV-FUT~search NOM bird GEN peanut

Intended: 'peanut that the bird will look for'

see also (8)

b. ?*ibo[n]=ng* [ha~hanap-in <*ng ibon*> ang mani]

bird=LK FUT~search-PV GEN bird NOM peanut

'bird that will look for the peanut'

see also (10)

¹⁶Following one thread of prior work in Philippine-type voice systems, the inflection here may be agreement with some subset of properties of the pivot including theta role or abstract Case (see Chung 1994, 1998; Rackowski 2002; Pearson 2005; Chen 2017).

4.2 Genitive Inversion

A second process responsible for feeding A'-extraction in Tagalog is one I term Genitive Inversion. This is a process by which certain pronominal arguments may precede rather than follow the lexical head they are dependents of, as illustrated in (28). The fronted pronoun appears in the oblique form (e.g., genitive *ko* ~ oblique *akin*), and the linker morpheme *na/=ng* intervenes between it and the lexical head.¹⁷

(28) GENITIVE INVERSION

- a. Schematic: [V/N GEN ...] → [OBL=LK V/N ...]
- b. **Aki[n]=ng** bi~bilh-in <*ko*> ang damit.
 1SG.OBL=LK FUT~buy-PV 1SG.GEN NOM clothes
 'I will buy the clothes.'
- c. Ma-laki [ang **kanila=ng** bahay <*nila*>]
 ADJ-big NOM 3PL.OBL=LK house 3PL.GEN
 'Their house is big.'

There is limited prior research on this process, especially from a formal standpoint. [Schachter and Otones \(1972, sec. 3.20, 5.25\)](#) briefly describe this construction in both nominal and verbal contexts, and [Culwell-Kanarek \(2005\)](#) sketches a formal analysis for verbal environments. While a formal analysis and in-depth discussion of Genitive Inversion lie outside of the scope of this paper, I discuss two facts of this process in the verbal domain that will be crucial for current purposes. First, inverted material occupies a syntactically high position, crucially outside the θ -domain, and is therefore accessible to a high A'-probe.¹⁸ Second, Genitive Inversion may only apply to genitive-marked pronominal arguments, limiting the types of arguments that may escape the θ -domain through this mechanism.

Support for the high position of the inverted pronoun outside the θ -domain comes from its word order relative to other elements in the clause. Consider that verb-initial word order in Tagalog is commonly derived by head movement of the verb to a head in the inflectional

¹⁷Speakers do not report any change in meaning from Genitive Inversion, though some perceive the result to be of a more formal register, especially in the verbal case. The more formal register may cause some speakers to disprefer this construction, especially in elicitation settings.

¹⁸This claim contradicts that of [Culwell-Kanarek \(2005\)](#), who proposes that the inverted pronoun is in a low position, motivated by data showing that the preverbal pronoun is degraded when preceding negation. However, he does not discuss the reverse word order and notes that the judgments from his consultants were inconclusive. Speakers I have consulted consistently prefer the pronoun-negation order over the reverse (see (29) below), and naturalistic data such as (i) from an online article also suggests that this word order is indeed possible.

(i) ...na **kanya=ng hindi** pa~payag-an ang pag-renew ng ABS-CBN...
 LK 3SG.OBL=LK NEG FUT~allow-LV NOM renewal GEN ABS-CBN
 '...that he would not allow the renewal of ABS-CBN...'

([Hsieh 2020](#), 166, truncated)

domain, such as T^0/I^0 (Guilfoyle, Hung, and Travis 1992; Aldridge 2004; *et seq.*). Material linearly preceding the verb—such as the inverted pronoun—could therefore be assumed to occupy a position at least as high as the inflectional head occupied by the verb.

Moreover, the inverted pronoun also precedes other functional heads from outside the θ -domain. In verbal environments, the negation particle *hindi* must follow the inverted pronoun, as (29) illustrates. Assuming that negation is generated outside the θ -domain, we again come to the conclusion that the inverted pronoun must occupy an even higher position.¹⁹

(29) GENITIVE INVERSION PRECEDES NEGATION

- a. **Hindi ko** bi~bilh-in ang damit.
 NEG 1SG.GEN FUT~buy-PV NOM clothes
 ‘I won’t buy the clothes.’ Baseline
- b. **Aki[n]=g hindi** bi~bilh-in ang damit.
 1SG.OBL=LK NEG FUT~buy-PV NOM clothes
 ‘I won’t buy the clothes.’
- c. ***Hindi aki[n]=g** bi~bilh-in ang damit.
 NEG 1SG.OBL=LK FUT~buy-PV NOM clothes
 Intended: ‘I won’t buy the clothes.’

In terms of its distribution, Genitive Inversion is quite limited, as it must target pronominal genitive-marked external arguments. That is, nominative- and oblique-marked arguments cannot participate in Genitive Inversion, as (30) shows with an agent and a causee, respectively. Note that the ungrammaticality of these examples cannot be because the fronted pronoun appears in the wrong form. The bare oblique form (*akin*) and the postverbal forms (*ako* and *sa akin*) are all ungrammatical in the preverbal position. These examples are grammatical without inversion, with the material in angle brackets indicating the noninverted form and position.

(30) NO GENITIVE INVERSION OF NONGENITIVE PRONOUNS

- a. *{**Akin /Ako** }=ng bi~bili <ako> ng damit.
 1SG.OBL 1SG.NOM =LK FUT~buy[AV] 1SG.NOM GEN clothes
 Intended: ‘I will buy clothes.’
- b. *{**Akin /Sa akin** }=ng mag-pa~pa-bili ka <sa akin> ng damit.
 1SG.OBL OBL 1SG.OBL =LK AV-FUT~CAUS-buy 2SG.NOM OBL 1SG.OBL GEN clothes
 Intended: ‘You will have me buy clothes.’

¹⁹Note that the postnegation position of the genitive pronoun *ko* in (29a) is a second position slot, occupied by second position clitics in Tagalog. Aside from the difference in pronoun form, (29c) can be distinguished from (29a) by the presence of the linker morpheme. While this morpheme is sometimes found on second position clitics, its presence or absence in such cases is conditioned by the host of cliticization, and negation does not occur with a linker.

Nonpronominal external arguments, such as full DPs, also may not appear in the inverted position even when genitive-marked in their base position, as (31) shows.

- (31) *{Ng /Sa } **guro=ng** bi~bilh-in <ng guro> ang damit.
 GEN OBL teacher=LK FUT~buy-PV GEN teacher NOM clothes
 Intended: ‘The teacher will buy the clothes.’

Similarly, internal arguments also cannot participate in Genitive Inversion, as in (32a). It is perhaps worth noting that they may not surface as genitive-marked pronominals (see Ramos 1974; Latrouite 2012; Sabbagh 2016; Collins 2019) as (32b) shows. We might therefore attribute this restriction to independent factors. Nevertheless, the crucial result remains that internal arguments are ineligible for this process.

- (32) NO GENITIVE INVERSION OF THEMES
- a. *Ako ang (sa) **inyo=ng** nag-huli.
 1SG.NOM NOM OBL 2PL.OBL=LK AV.PFV-catch
 Intended: ‘It was me who caught you all.’
- b. Ako ang nag-huli {sa inyo /*ninyo }.
 1SG.NOM NOM AV.PFV-catch OBL 2PL.OBL 2PL.GEN
 ‘It was me who caught you all.’

We have so far seen that Genitive Inversion is limited to external arguments of a specific type (pronominal, genitive marked) and that the inverted pronoun occupies a structurally high position. The precise mechanisms that result in these properties are still poorly understood due to the lack of research on this topic. As a full analysis of this process lies outside the immediate scope of this paper, I tentatively assume for concreteness that Genitive Inversion is a form of control: a null PRO appears in the base position of the agent and is coindexed with the higher oblique-marked pronoun. This idea is motivated by the fact that agents (or external arguments more generally) have a special status in relation to other syntactic processes in Tagalog. Most well established is the fact that Tagalog control verbs target the agents rather than the pivots of their complement clauses (Schachter 1976; Guilfoyle, Hung, and Travis 1992; Kroeger 1993); see (33).

- (33) a. Gusto ko_i=ng [hulih-in PRO_i ang magnanakaw].
 want 1SG.GEN=LK catch-PV NOM thief
 ‘I want to catch the thief.’
- b. *Gusto ko_i=ng [hulih-in ng magnanakaw PRO_i].
 want 1SG.GEN=LK catch-PV GEN thief
 Intended: ‘I want to be caught by the thief.’

That said, the details of these processes differ. Most significantly, Tagalog control verbs can target pivot (nominative) agents as in (34) and in contrast to Genitive Inversion in (30a).²⁰ Control verbs also assign their own θ -roles, whereas Genitive Inversion only involves the external θ -role of the lexical verb. Accounting for these differences is left to a more in-depth investigation of Genitive Inversion.²¹ What is crucial for current purposes are the various properties highlighted earlier, as I argue that these allow Genitive Inversion to feed A'-extraction in a manner parallel to what we saw with Pivot Movement.

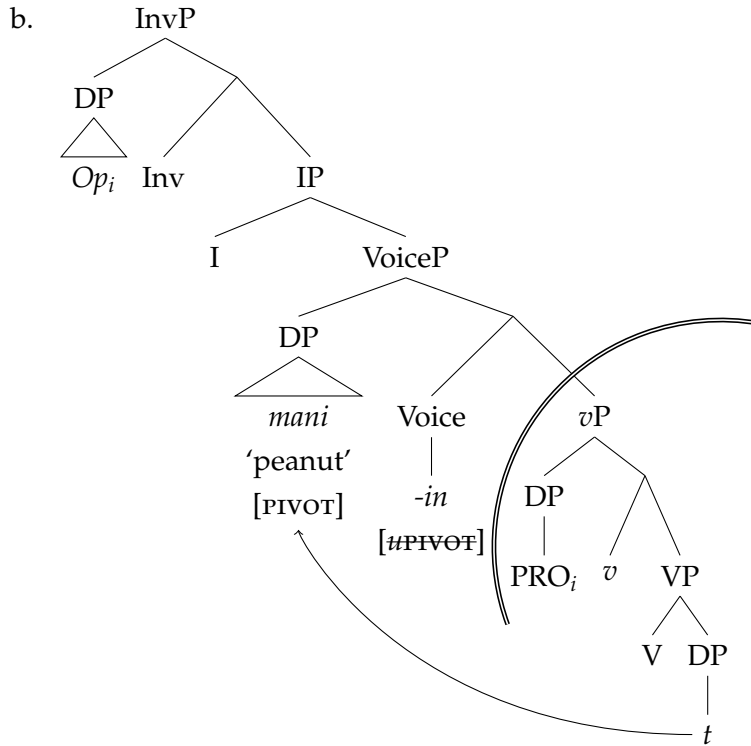
- (34) Gusto ko_i=ng [b<um>ili PRO_i ng damit].
 want 1SG.GEN=LK <AV>buy (NOM) GEN clothes
 'I want to buy clothes.'

Recall again that the inverted pronoun occupies a high position outside the θ -domain (i.e., the lower phase). This makes it accessible to a clause-peripheral A'-probe, thus feeding A'-extraction. To demonstrate, consider the genitive agent relative clause in (35a). This construction contrasts with the pivot extraction examples in that [PIVOT] appears not on *Op* but on a full argument (in this case the internal argument). Thus, this full argument is what undergoes Pivot Movement, while the external argument *Op* must participate in Genitive Inversion to escape the θ -domain and subsequently become accessible to a clause-peripheral A'-probe. The result is illustrated in (35b).

- (35) GENITIVE INVERSION FEEDS A'-EXTRACTION
 a. ibo[n]=ng [*Op*_i ha~hanap-in PRO_i ang mani]
 bird=LK FUT~search-PV NOM peanut
 'bird that will look for the peanut'

²⁰Kroeger (1993) also points out that control verbs can also target nonagent pivots of nonvolitional forms.

²¹Note that a movement analysis of Genitive Inversion would be incompatible with the overall proposal for A'-extraction in this paper. This is because the analysis I adopt for how the lower phase edge is formed only allows for one DP to escape the *vP*, this DP being the pivot in a typical clause.



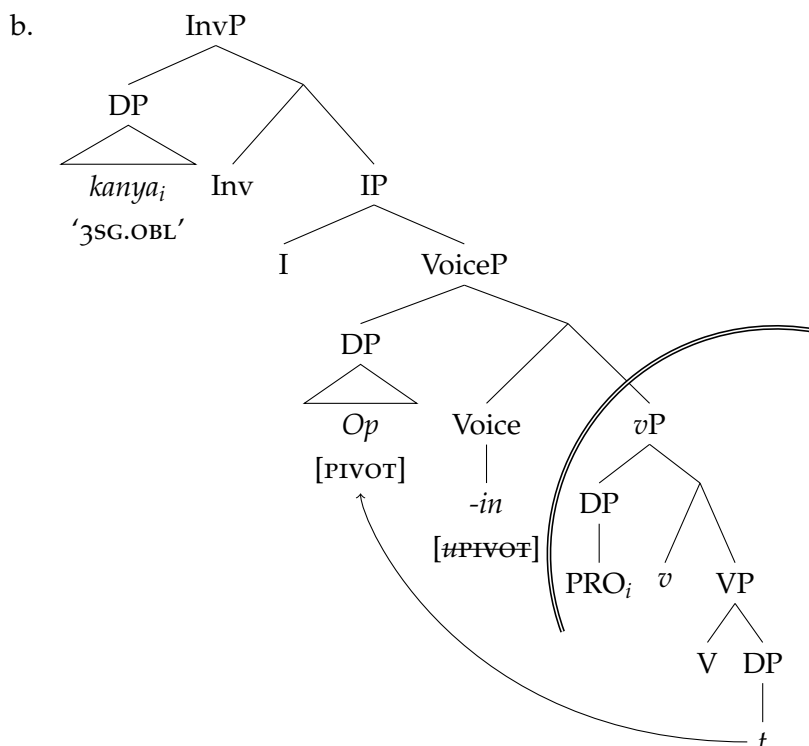
A few details about this derivation are worth noting here in relation to the properties of Genitive Inversion discussed above. First, previous work on null operators has argued that they are pronominal in nature (e.g., [Browning 1987](#)). It is thus fairly unsurprising that *Op* should be able to appear in the position occupied by Genitive Inversion. Second, because distribution of Genitive Inversion is limited to external arguments we can make sense of why nonpivot agents may be A'-extracted but nonpivot themes may not.

As with the examples discussed in the previous subsection, the derivation above is also compatible with a highest-DP approach since Genitive Inversion results in *Op* being the highest DP in the clause, higher even than the pivot argument. However, consider (36b), which differs minimally from (35b) in that *Op* is the pivot rather than the inverted agent. The result is a grammatical relative clause that contains an overt inverted agent, as in (36a). This result is predicted under the domain-based analysis developed here, since *Op* in (36) has escaped the opaque domain and is therefore accessible for A'-probing. In contrast, a highest-DP approach incorrectly predicts examples like (36a) to be impossible, since a higher DP (i.e., the inverted pronoun) intervenes between *Op* and the clause-peripheral A'-probe. Crucially, positing a lower position for Genitive Inversion (i.e., c-commanded by the pivot) to solve this problem simply recreates the problem for the original case of genitive agent extraction in (35). The availability of both (35) and (36) thus poses a more general problem for highest-DP approaches, as there will always be one configuration where a lower DP can be extracted over a higher one.²²

²²For this reason, I do not explore further the question of the relative c-command between the pivot and inverted

(36) PIVOT THEME EXTRACTION + GENITIVE INVERSION

- a. mani=ng [kanya=ng ha~hanap-in <niya> <ang mani>]
 peanut=LK 3SG.OBL=LK FUT~search-PV 3SG.GEN NOM peanut
 ‘peanut that he will look for’



4.3 Long-Distance Extraction

Having discussed how the proposal applies to monoclausal instances of extraction, let us now turn to the more complex case of long-distance extraction. It is well known in the research on Tagalog that the extraction restriction is also active in long-distance contexts, such that embedded CPs along the path of extraction must function as the pivot of their containing clause (see, e.g., Nakamura 1996; Rackowski and Richards 2005).

The basic pattern is illustrated in (37). In both examples, the embedded clause (in brackets) is the same, while the matrix clause varies with respect to its voice specification. Long distance extraction of the embedded clause pivot is possible when the matrix clause selects the embedded clause as its pivot, as in (37a), and not when a different argument is selected instead, as in (37b).

agent. Frustratingly, many of the standard tests are either incompatible because of the morphological restriction on Genitive Inversion (e.g., variable binding, weak crossover) or behave the same between inverted and noninverted structures (e.g., reflexive binding).

- (37) a. tao=ng i-p<in>angako ng alkalde[=ng ta~takbo ulit <ang tao>]
 person=LK CV-<PFV>promise GEN mayor =LK FUT~run[AV] again
 ‘person that the mayor promised would run again’
- b. *tao=ng n-angako ang alkalde[=ng ta~takbo ulit <ang tao>]
 person=LK AV.PFV-promise NOM mayor =LK FUT~run[AV] again
 Intended: ‘person that the mayor promised would run again’

To account for this behavior under the current proposal, I follow [van Urk and Richards’s \(2015\)](#) approach to long-distance extraction in Dinka. They propose that Spec,*v*P (their lower phase edge) in Dinka is associated with an EPP property that can be satisfied by movement of either a DP or a CP. They further posit that extraction out of an embedded CP in this language is mediated the CP moving to Spec,*v*P and satisfying this EPP property. Following this, I assume that licit instances of long-distance extraction in Tagalog such as (37a) involve Pivot Movement of the embedded CP to a parallel position, Spec,VoiceP. The crucial result of this movement for current purposes is that the embedded CP escapes the lower phase before Spell-Out, so that it remains accessible for extraction.

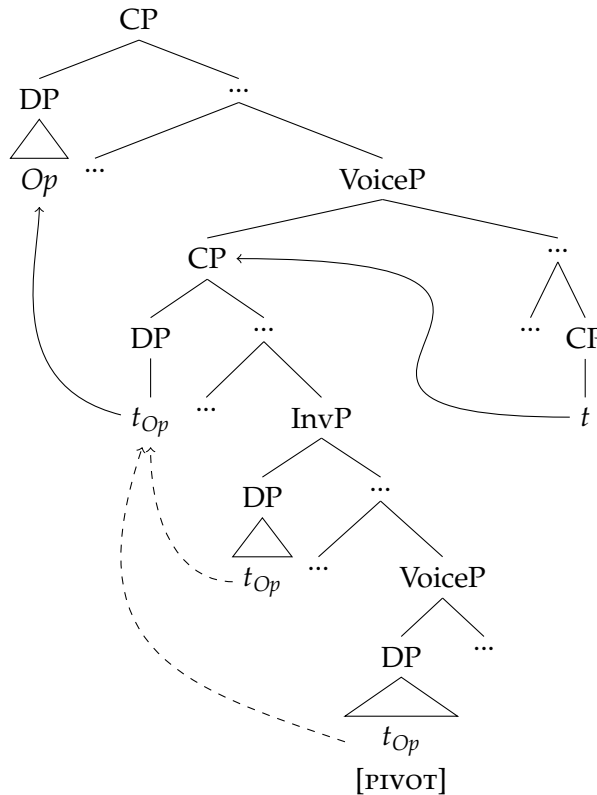
There is good evidence for the claim that CPs can be pivots, despite the fact that they do not bear pivot marking (i.e., nominative *ang*) as shown in (37). First, pivot marking does not appear on any other coargument of the embedded CP when it is the pivot, as in (37a); compare this with (37b) where the agent *alkalde* ‘mayor’ is marked *ang*. Second, voice alternations occur independently of extraction, as (38) shows. Finally, for a given verb, the voice form corresponding to a CP pivot is the same form that is used with a DP theme; compare (37a) and (38a) with (39) where the pivot is a gerund and bears *ang*. These strong parallels with the behavior of DPs suggest that CPs also participate in the Tagalog voice system (see also [Rackowski and Richards 2005](#)).

- (38) a. I-p<in>angako ng alkalde [na ta~takbo ulit ang tao=ng iyon].
 CV-<PFV>promise GEN mayor LK FUT~run[AV] again NOM person=LK DIST
 ‘The mayor promised [that that person would run again].’
- b. N-angako ang alkalde [na ta~takbo ulit ang tao=ng iyon].
 AV.PFV-promise NOM mayor LK FUT~run[AV] again NOM person=LK DIST
 ‘The mayor promised [that that person would run again].’
- (39) I-p<in>angako ng alkalde [ang muli=ng pag-takbo niya].
 CV-<PFV>promise GEN mayor NOM again=LK GER-run 3SG.GEN
 ‘The mayor promised [her running again].’

Within the embedded CP, we can assume that accessibility is determined in the same way as in matrix clauses. In other words, extraction out of an embedded CP requires the target to lie outside of the (lower/embedded) θ -domain so that it may then undergo movement to the embedded Spec,CP. Once the target is in the embedded Spec,CP, and the embedded CP itself is in the matrix Spec, VoiceP, the target becomes accessible to an A'-probe in the matrix clause and can therefore move to Spec,CP. Concretely, (37a) shows us an example where *Op* undergone Pivot Movement, resulting in long-distance extraction of an embedded pivot. On the other hand, we also expect Genitive Inversion to be possible in the embedded clause to give us long-distance extraction of a nonpivot agent. As (40) shows, this expectation is borne out.²³ A schematic for long-distance extraction possibilities is shown in (41), where dashed arrows indicate the different options for moving to embedded Spec,CP.

- (40) ?Nagta~tago ang bata=ng [na-panaginip-an ko=ng [h<in>a~habol ang duwende]].
 AV.IPFV~hide NOM child=LK PFV.NVOL-dream-LV 1SG.GEN=LK IPFV~chase[PV] NOM dwarf
 'The child [who I dreamt [was chasing the dwarf]] is hiding.' (Hsieh 2020, 175)

- (41) SCHEMATIC FOR LONG-DISTANCE EXTRACTION



²³Note that the matrix verb *napanaginipan* bears the LV marker *-an*, unlike *ipinangako* in the previous examples bearing the CV marker *i-*. The particular voice form that selects CP pivots varies among verbs (see also Rackowski and Richards 2005, 586–7).

We have now seen two processes in Tagalog that are independent from but facilitate A'-extraction. These are Pivot Movement (following the general intuition of prior work in this area) and a process that I termed Genitive Inversion. I demonstrated how these processes feed A'-extraction in Tagalog by moving the relevant targets out of the lower phase corresponding to the θ -domain. While much of the analysis presented in this section was compatible with the existing view in the literature that A'-extraction in Tagalog is subject to a relative locality constraint whereby only the highest DP in a clause is accessible, I showed that certain configurations containing both Pivot Movement and Genitive Inversion were problematic for such accounts. Specifically, we saw that A'-extraction of a pivot was possible even in the presence of a higher pronoun resulting from Genitive Inversion. Under the current domain-based approach, this behavior is expected, since what matters for A'-extraction is simply that the target is not within a lower, inaccessible domain.

The natural question to ask at this point is what happens in environments where neither feeding process is available? The straightforward prediction is that A'-extraction should not be possible. As we will see, this turns out to only be partially true. I show that in environments where feeding is not possible, the possibility of extraction is modulated by the presence or absence of a phase boundary at the point of A'-probing, which in turn is diagnosed by the presence or absence of an inflectional layer. Thus, we have an alternative route to extraction, resulting in distinct behaviors. We consider this type of extraction in the next section, where I argue that it provides further support for the domain-based approach.

5 Extraction Before Lower Phase Spell-Out

In this section, we consider environments where the independent means for escaping the θ -domain are not possible. In a number of these environments, extraction is still possible. I show that the common denominator among such environments is their lack of an inflectional layer, manifesting as the absence of voice and aspect morphology on verbs, number agreement on adjectives, as well as negation. I argue that the absent inflectional layer in these constructions leads to C^0 being the first syntactic head outside the θ -domain to enter the derivation. Any material within this domain would thus be accessible to an A'-probe on this head, as the θ -domain would not yet have undergone Spell-Out at this point. The domain-based approach developed in this paper is thus able to handle such behavior, which is in turn challenging for highest-DP approaches.

5.1 Recent Perfective

As was shown in (13), repeated here as (43), the RPFV construction does not show an argument-structural asymmetry in A'-extraction: both core arguments can be A'-extracted.²⁴ This contrasts with what we saw in the previous section with fully inflected verbal clauses, where nonpivot (i.e., genitive marked) agents could undergo extraction but nonpivot themes could not.

- (42) Kai~inom lang ng guro ng kape.
 RPFV~drink only GEN teacher GEN coffee
 'The teacher has just drunk coffee.' Baseline
- (43) a. guro=ng [kai~inom lang <ng guro> ng kape]
 teacher=LK RPFV~drink only GEN teacher GEN coffee
 'teacher who has just drunk coffee'
- b. kape=ng [kai~inom lang ng guro <ng kape>]
 coffee=LK RPFV~drink only GEN teacher GEN coffee
 'coffee that the teacher has just drunk'

The grammaticality of both examples in (43) appears to pose problems for both domain-based and highest-DP approaches to Tagalog A'-extraction. One reason for this is that neither one of the proposed feeding operations is possible in this environment. We see in (42) that the morphological markers of Pivot Movement are missing: voice morphology (i.e., <um>/m-, -in, -an, i-) and a nominative-marked argument. In fact, (44) shows that nominative marking on either core argument is ungrammatical in this construction. Genitive Inversion is also unavailable, as (45) shows. For a domain-based approach, this raises the question of how an A'-probe can target DP arguments within the θ -domain in RPFV clauses but not in other kinds of verbally predicated clauses.

- (44) NO PIVOT MARKING IN RECENT PERFECTIVE
- a. *Kai~inom lang ang guro ng kape.
 RPFV~drink only NOM teacher GEN coffee
 Intended: 'The teacher has just drunk coffee.'
- b. *Kai~inom lang ng guro ang kape.
 RPFV~drink only GEN teacher NOM coffee
 Intended: 'The teacher has just drunk coffee.'

²⁴Kroeger (1993) notes a dispreference for extracting themes out of Recent Perfective clauses in instances where the agent is a common noun, but adds that the dispreference may be because of ambiguity. That is, common noun agents and themes are both marked *ng*, so it may not be clear what θ -role the nonextracted argument has.

(45) NO GENITIVE INVERSION IN RECENT PERFECTIVE

a. Kai~inom lang nila ng kape.

RPFV~drink only 3PL.GEN GEN coffee

‘They have just drunk coffee.’

Baseline

b. *Kanila=ng kai~inom lang <nila> ng kape.

3PL.OBL=LK RPFV~drink only 3PL.GEN GEN coffee

Intended: ‘They have just drunk coffee.’

For highest-DP approaches, the accessibility of the RPFV theme is problematic because the mechanism normally responsible for raising the theme above the agent—Pivot Movement—is unavailable, as the lack of morphological evidence in (42) and (44) suggests. Moreover, we find no syntactic evidence that the theme can independently move to a position c-commanding the agent through other means (e.g., “covert” Pivot Movement). For example, we see in (46) that variable binding can occur from the agent to the theme but not vice versa. This contrasts with what we find with the Patient Voice examples in (47), where binding can *also* occur from the theme to the agent (see also Rackowski 2002). Given this evidence that the theme in an RPFV clause may not be higher than the agent, a highest-DP approach also does not have a straightforward explanation for why A'-extraction of the theme is possible.

(46) VARIABLE BINDING IN RECENT PERFECTIVE

a. Kaba~bati lang ng bawat_x anak sa kanya_x=ng magulang.

RPFV~greet only GEN every offspring OBL 3SG.OBL=LK parent

‘Every_x child has just greeted their_x parent.’

b. *Kaba~bati lang sa bawat_x magulang ng kanya_x=ng anak.

RPFV~greet only OBL every parent GEN 3SG.OBL=LK offspring

Intended: ‘Every_x parent has just been greeted by their_x child.’

Grammatical as: ‘Every_x parent has just been greeted by their_y child.’

(47) VARIABLE BINDING IN PATIENT VOICE

a. B<in>ati ng bawat_x anak ang kanya_x=ng magulang.

<PFV>greet[_{PV}] GEN every offspring NOM 3SG.OBL=LK parent

‘Every_x child greeted their_x parent.’

b. B<in>ati ang bawat_x magulang ng kanya_x=ng anak.

<PFV>greet[_{PV}] NOM every parent GEN 3SG.OBL=LK offspring

‘Every_x parent was greeted by their_x child.’

I argue that the problems outlined above can be resolved under the domain-based view but not the highest-DP view, giving further support to the former as the correct approach to Tagalog A'-extraction more generally. Concretely, the freedom of both agent and theme to extract out of RPFV clauses, shown in (43), is what we expect if no phase boundary intervenes between the A'-probe and the relevant arguments at the time of probing. I propose here that in environments that lack all structure from the inflectional domain, the lowest projection to merge outside the θ -domain is C^0 , so this syntactic head triggers Spell-Out of the θ -domain, following the proposal from the previous section. An important consequence of this is that an A'-probe on C^0 would be able to probe into the θ -domain before Spell-Out occurs.

Evidence for the absence of inflectional structure in the RPFV form is primarily morphological. This form is marked by a prefix *ka-* in addition to CV-reduplication.²⁵ Absent from this form are the Tagalog voice morphemes *<um>/m-*, *-in*, *-an*, or *i-*. Following the discussion in section 4.1, I take this to mean that VoiceP is absent, a conclusion that is also supported by the lack of a nominative-marked pivot argument.

I also argue that despite its intuitive meaning, the RPFV form does not formally bear a specification for temporal aspect (*pace* McGinn 1988). This is because this form does not bear any morphology from the regular Tagalog aspectual paradigm, summarized in table 1. This paradigm can be broken down into the interaction of two morphemes: *n-/<in>* and CV-reduplication. Between these, only CV-reduplication is shared with the RPFV form, though closer inspection shows that they have different semantic contributions. CV-reduplication in the regular aspectual paradigm corresponds to noncompleted aspects: imperfective and future. This is at odds with the intuitive completed/perfective meaning conveyed by the RPFV form, so it is difficult to argue that the two instances of CV-reduplication represent the same morpheme. I thus take this as evidence that the RPFV construction also lacks IP.

Table 1: Regular aspectual paradigm (root *bili* 'buy')

	CV-Redup.	
	[+COMPL]	[-COMPL]
[+BEGUN]	<i>bilh-an</i> (Aspectless)	<i>bi~bilh-an</i> (Future)
<i>n-/<in></i>	<i>b<in>ilh-an</i>	<i>b<in>i~bilh-an</i>
[-BEGUN]	(Perfective)	(Imperfective)

Finally, negation is impossible with the RPFV form, as (48) shows.

²⁵CV-reduplication can apply to either the verbal stem or *ka-*. For example, *inom* 'drink' and *bati* 'greet' may surface as *kaiinom* and *kababati*, as above, or as *kakainom* and *kakabati*.

(48) *Hindi lang kai~inom ng guro ng kape.

NEG only RPFV~drink GEN teacher GEN coffee

Intended: ‘It’s not the case that the teacher has just drunk coffee.’

In contrast to the absence of voice, aspect, and negation from the inflectional domain, the RPFV form does show reflexes of structure from the θ -domain. For example, (49) shows the causative *pa-*. This presence of argument-introducing morphology but not of voice and aspect morphology is parallel to the behavior of gerunds, as (50) shows (recall also (24)).

(49) Kapa~pa-inom ko lang ng gamot sa aso ko.

RPFV~CAUS-drink 1SG.GEN only GEN medicine OBL dog 1SG.GEN

‘I’ve just given medicine to my dog.’ / ‘I’ve just made my dog drink/take medicine.’

(50) ang pagpa~pa-inom ko ng gamot sa aso ko

NOM GER~CAUS-eat 1SG.GEN GEN medicine OBL dog 1SG.GEN

‘my making my dog take medicine’

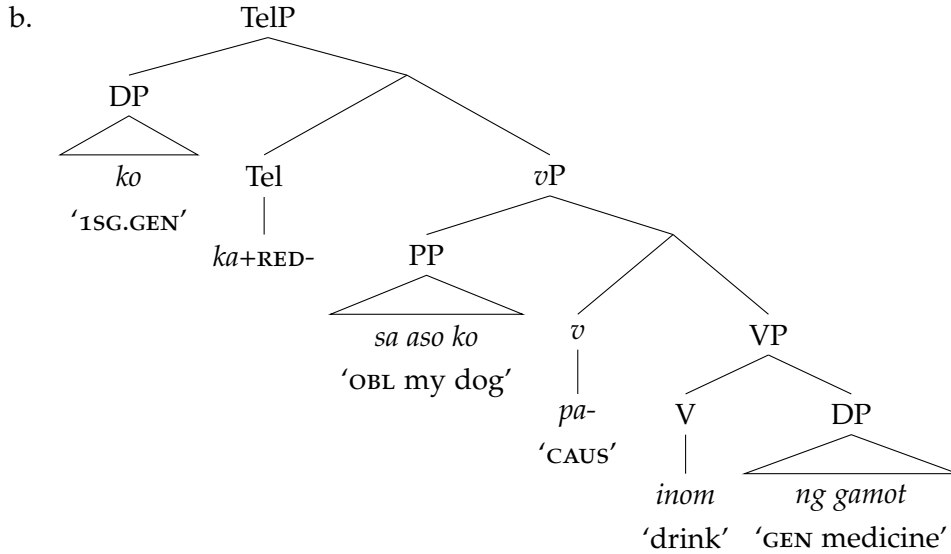
Given this evidence, I propose the structure for RPFV clauses exemplified in (51). I propose that RPFV morphology (*ka+RED-*) spells out a head that I label Tel^0 that encodes telicity and introduces an external argument. As we saw previously, the RPFV form lacks the morphological reflexes of $Voice^0$ and I^0 , so I assume that those projections are absent here. This leaves $TelP$ as the highest projection.

(51) RECENT PERFECTIVE STRUCTURE

a. Kapa~pa-inom ko lang sa aso ko ng gamot.

RPFV~CAUS-drink 1SG.GEN only OBL dog 1SG.GEN GEN medicine

‘I have just made my dog take medicine.’



The natural question to ask now is whether TelP is part of the inflectional domain or the θ -domain. In other words, is Tel⁰ primarily associated with argument- and event-structural operations? While I have assumed in (51b) that TelP does introduce an external argument in its specifier, such an assumption is perhaps nontrivial. I therefore argue that Tel⁰ is an instance of a morpheme found in a different context that has been argued in earlier works to show these properties.

In the context of the so-called Ability/Involuntary Action (AIA) form exemplified in (52a), Travis (2000, 2010, 2016) proposes that the morpheme *ka-* introduces nonvolitional agents and contributes telic semantics, following Dell (1983) who shows that such forms assert the endpoint of an event. Interestingly, other instances of *ka-* with a similar semantic function are found in other contexts in Tagalog. For example, Schachter and Otnes (1972, sec. 3.26) note that “perfective” gerunds like (52b) encode that an “action is viewed as complete” and can be distinguished from aspectless gerunds, which lack *ka-*. A similarly telic meaning is also conveyed by the construction in (52c), which is morphologically parallel to the RPFV but appears in a nominal environment, here marked with the oblique marker *sa*. Along the same lines, Kaufman (2011, 2012) argues that *ka-* was historically an existential or possessive morpheme denoting HAVE, which subsequently developed other functions relating to different thematic roles and event structure.

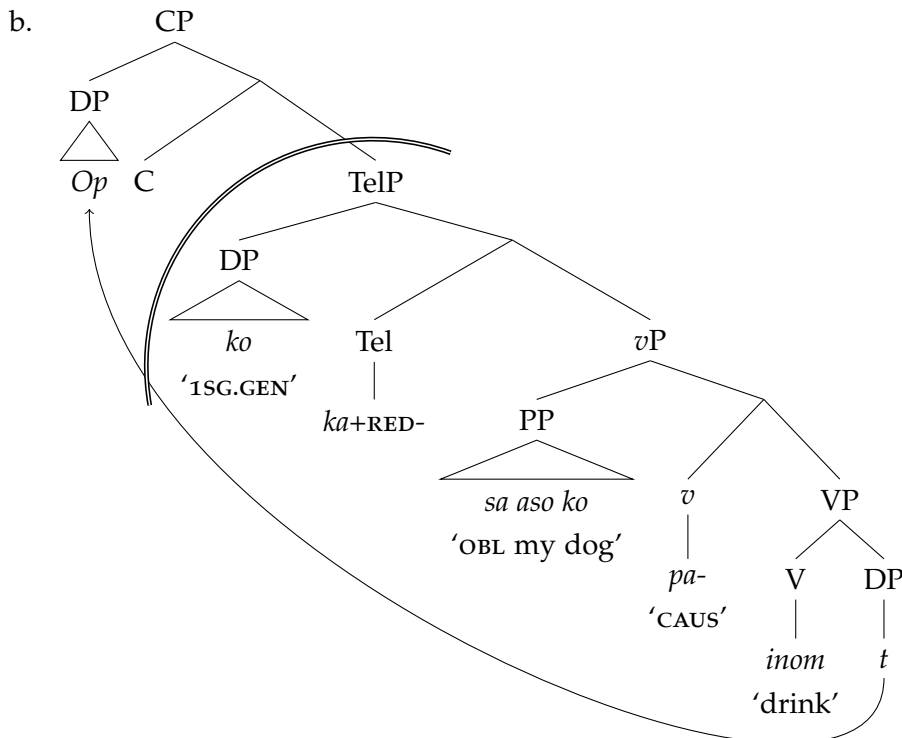
- (52) a. Naka-bili ako ng prutas kanina.
 AV.PFV.NVOL-buy 1SG.NOM GEN fruit earlier
 ‘I managed to buy some fruits earlier.’
- b. Mali ang pagka(~ka)-sulat mo sa pangalan ko.
 wrong NOM GER-write 2SG.GEN OBL name 1SG.GEN
 ‘{Your writing of/The way you wrote} my name is incorrect.’

- c. Na-ubus-an ng tinta ang bolpen sa **kaka**-sulat niya.
 PFV.NVOL-use.up-LV GEN ink NOM pen OBL *kaka*-write 3SG.GEN
 ‘The pen ran out of ink from {her having written so much/all her writing}.’

I take the morphological and semantic similarities between *ka-* found in the above examples and in the RPFV form as evidence that these are formally the same morpheme, and, following the previous work discussed above, that TelP is part of the θ -domain.²⁶ Consequently, C^0 is the first syntactic head outside the θ -domain to enter the derivation, as in (53b), and thus effectively serves as the phase head in this construction, parallel to the function of Voice⁰ in voice-marked clauses. Upon merging, the A'-probe on C^0 may first probe for a goal within TelP, including the internal argument as in (53). Subsequently, TelP undergoes Spell-Out and becomes inaccessible to further syntactic operations.

(53) RELATIVIZATION WITH RECENT PERFECTIVE

- a. gamot na kapa~pa-inom ko lang sa aso ko
 medicine LK RPFV~CAUS-drink 1SG.GEN only OBL dog 1SG.GEN
 ‘medicine that I have just made my dog drink’



A domain-based approach to Tagalog A'-extraction thus allows us to understand behavior that initially seems paradoxical in RPFV clauses: arguments are accessible to an A'-probe even

²⁶More work is needed to iron out a number of details, particularly the role of morphology that often co-occurs with *ka-* (e.g., *pag-* and CV-reduplication). Answering these questions requires a deeper investigation of the forms that bear *ka-*, and is thus left for future work.

if they demonstrably must remain in their base positions within a domain that we have seen to be opaque in other contexts. As we saw, this paradox is easily resolved under a particular view regarding the timing of the Spell-Out of this phasal domain. This contrasts with highest-DP approaches, which rely on operations that alter the relative positions of DPs within a clause to facilitate extraction. Under a highest-DP approach, a DP that is structurally lower than another DP in a clause cannot undergo A'-extraction unless it is able to move to a higher position. This leaves the behavior of nonpivot themes in RPFV clauses unexplained.

We have now seen parallel behavior from two environments in the verbal domain that support the domain-based analysis developed here. Both illustrate the activity of the lower phase boundary by showing how it can be circumvented, potentially leading to multiple candidate extraction targets. Arguments may escape the phase through independent operations, and if multiple arguments do so (e.g., with simultaneous Pivot Movement and Genitive Inversion) then they are all accessible for extraction. Alternatively, there may be no lower phase boundary at the point when an A'-probe probes for a goal, as with RPFV clauses, in which case all arguments within the θ -domain are accessible. This kind of pattern is difficult to account for under a highest-DP approach without some mechanism for a lower argument to become the higher one in some relevant domain.

Now I turn to further evidence from outside the verbal domain in support of the domain-based analysis. Whereas we have so far seen ways that the lower phase boundary associated with the θ -domain can be circumvented, we will see environments where such circumvention is impossible. Specifically, exclamative adjective constructions show us that whether the sole (and therefore highest) argument of the adjective can undergo A'-extraction is determined by the presence or absence of (adjectival) inflectional structure.

5.2 Exclamative Adjectives

Recall again from section 2.3 that we observe an asymmetry with respect to the extractability of the subjects of clauses with exclamative adjective predicates. This asymmetry is illustrated again below. We see in (54) that extraction can target the subject of *kay*- and *napaka*-exclamatives but not of *ang*-exclamatives (see also Kaufman 2011). This is despite the fact that the subject in all these exclamatives bears genitive marking when it is not extracted, as (55) shows.

(54) ASYMMETRY IN A'-EXTRACTION FROM EXCLAMATIVES

- a. manunulat na [{*kay* /*napaka*-} galing <*ng manunulat*> sa paglu~luto]
 writer LK EXCL EXCL- skillful GEN writer OBL GER~cook
 'writer who is very/so good at cooking'

- b. *manunulat na [ang galing <ng manunulat> sa paglu~luto]
 writer LK EXCL skillful GEN writer OBL GER~COOK

Intended: ‘writer who is so good at cooking’

- (55) {Ang/Kay/Napaka-} galing ng manunulat sa paglu~luto!
 EXCL EXCL EXCL- skillful GEN writer OBL GER~COOK

‘The writer is very/so good at cooking!’

Baseline

As we saw previously with RPFV clauses, the independent operations of Pivot Movement and Genitive Inversion are unavailable in these exclamative constructions. The lack of Pivot Movement can be seen in (55) where the subject of the clause *manunulat* ‘writer’ is marked genitive. This contrasts with what we find with plain positive adjectives, exemplified in (56), where the subject is marked nominative. Similarly, (57) shows that Genitive Inversion is impossible even though postverbal pronominal subjects are possible and are marked genitive. I take this to mean that the subject in these exclamative adjective constructions remains in its base position within the θ -domain (see also Sabbagh 2011). Consequently, the explanation for the observed asymmetry must lie in some structural difference between the different exclamatives.

- (56) Ma-galing ang manunulat sa paglu~luto.
 ADJ-skillful NOM writer OBL GER~COOK

‘The writer is good at cooking.’

- (57) NO GENITIVE INVERSION IN EXCLAMATIVES

- a. {Ang/Kay/Napaka-} galing nila sa paglu~luto!
 EXCL EXCL EXCL- skillful 3PL.GEN OBL GER~COOK

‘They are very/so good at cooking!’

- b. *Kanila=ng {ang/kay/napaka-} galing <nila> sa paglu~luto!
 3PL.OBL=LK EXCL EXCL EXCL- skillful 3PL.GEN OBL GER~COOK

Intended: ‘They are very/so good at cooking!’

I argue that this asymmetry in exclamative adjectives is parallel to the asymmetry in the verbal domain between fully inflected verb forms and the RPFV form. For those constructions, we saw that extraction of arguments within the θ -domain is free in the absence of inflectional structure (i.e., in RPFV clauses, which lack voice, aspect, and negation). Otherwise, this extraction is blocked, and arguments must first escape the θ -domain through independent means. This link between inflectional structure and A'-extraction can also be seen in the adjectival domain.

The clearest instance of adjectival inflection in Tagalog is optional plural agreement, which surfaces as CV-reduplication on the root. We see this with plain positive adjectives in (58), where

reduplication is only possible with a plural subject. Crucially, adjectival plural agreement is also possible in *ang*-exclamatives but not in *kay*- and *napaka*-exclamatives, as (59) shows.²⁷

(58) PLURAL AGREEMENT IN POSITIVE ADJECTIVES

- a. Ma-(**bi~**)bigat ang mga sako.
 ADJ-PL~heavy NOM PL sack
 ‘The sacks are heavy.’
- b. Ma-(***bi~**)bigat ang sako.
 ADJ-PL~heavy NOM sack
 ‘The sack is heavy.’

(59) PLURAL AGREEMENT IN EXCLAMATIVES

- a. Ang **bi~**bigat ng mga sako!
 EXCL PL~heavy GEN PL sack
 ‘The sacks are so heavy!’
- b. *{Kay /Napaka-} **bi~**bigat ng mga sako!
 EXCL EXCL- PL~heavy GEN PL sack
 ‘The sacks are so/very heavy!’

Furthermore, negation also signals the absence of inflectional structure, though the pattern is slightly different from what we saw with number. We see in (60b) that negation is impossible not only with *kay*- and *napaka*-exclamatives, but also with *ang*-exclamatives. Thus, we have varying degrees of amount of inflectional structure. *Kay*- and *napaka*-exclamatives lack an inflectional layer altogether, positive adjectives realize it fully, and *ang*-exclamatives exhibit some but not all of the structure.

- (60) a. Hindi ma-bigat ang mga sako.
 NEG ADJ~heavy NOM PL sack
 ‘The sacks are not heavy.’
- b. *Hindi {ang /kay /napaka-} bigat ng mga sako!
 NEG EXCL EXCL EXCL- heavy GEN PL sack
 Intended: ‘It’s not the case that the sacks are so/very heavy!’

Under the current proposal, the presence of any inflectional structure will trigger Spell-Out of the θ -domain, affecting extraction possibilities in a parallel way to what we have seen in the

²⁷Schachter and Oتان (1972, 233) state that plural agreement is available in *napaka*-exclamatives, though my consultants do not accept such forms.

verbal domain. Specifically, the availability of number in *ang*-exclamatives renders extraction of arguments from within the θ -domain impossible, explaining (54b). On the other hand, the same kind of extraction is possible in environments like *kay*- and *napaka*-exclamatives, where there is no evidence of inflectional structure, deriving (54a).

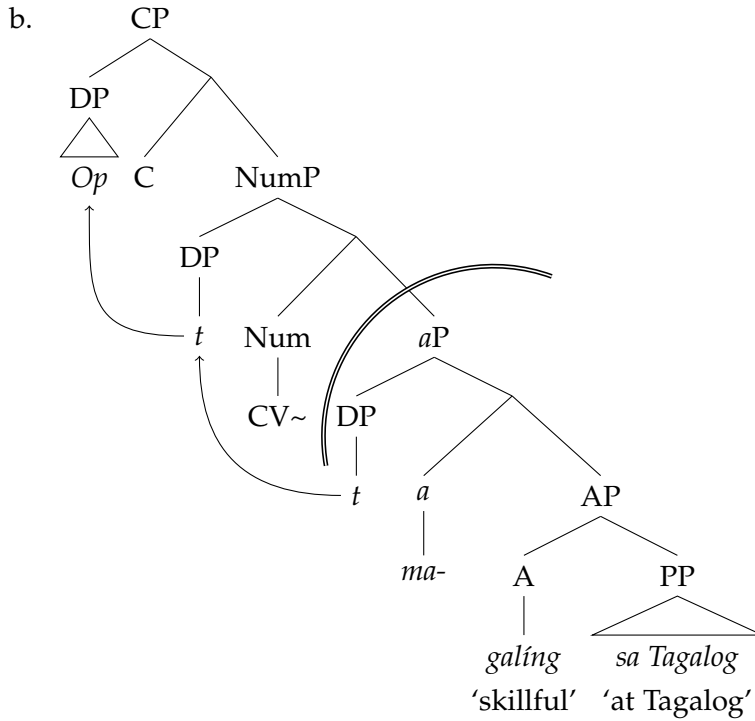
To account for the behavior illustrated thus far, let us now turn to the formal proposal for each adjectival structure in turn. We begin with plain positive adjectives, which have the most articulated structure. An example and corresponding tree are given in (61). I follow Sabbagh (2005, 2011) in assuming that adjectives have an *aP* projection, parallel to *vP*, which introduces the clausal subject as an external argument in its specifier position.²⁸ For concreteness, I assume that *ma-* is spelled out in a^0 . Some adjectives select internal arguments, which are always PPs and are generated within AP. Above *aP*, we have the inflectional domain consisting of NumP. Num⁰ spells out optional plural agreement in the form of CV-reduplication. In plain positive adjectives, Num⁰ also triggers movement of the external argument to its specifier position and assigns it nominative case, giving us Pivot Movement in the adjectival domain. Subsequently, Spell-Out of *aP* is triggered because Num⁰ is the first syntactic head outside of the θ -domain to enter the derivation. As in the verbal domain, Pivot Movement in the adjectival domain feeds A'-extraction by allowing the target to escape the lower phase so that it is visible to a higher A'-probe.²⁹

(61) EXTRACTION FROM PLAIN POSITIVE ADJECTIVES

- a. mga estudyante=ng [ma-ga~galing <ang mga estudyante> sa Tagalog]
 PL student=LK ADJ-PL~skillful NOM PL student OBL Tagalog
 'students who are good at Tagalog'

²⁸Specifically, this is the case for *ma-* adjectives, which Sabbagh (2005, 2011) analyzes as unergative adjectives. These contrast with adjectival passives, which are formed from verbal roots via stress shift and are analyzed as having unaccusative structure.

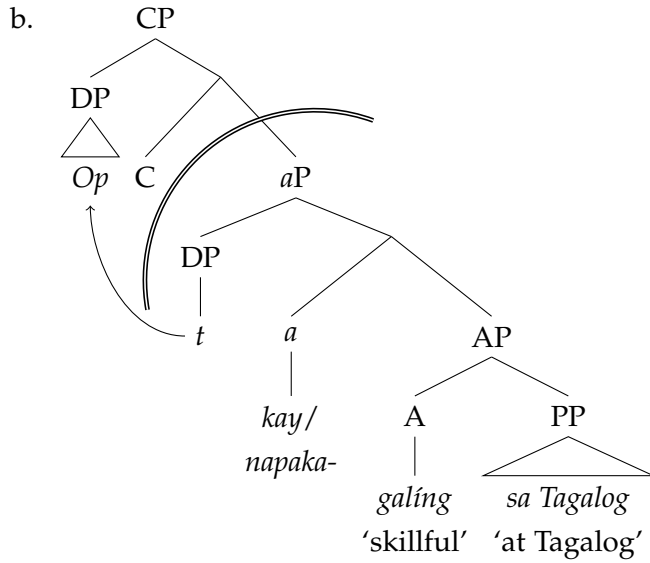
²⁹I assume that adjective-initial word order is derived by head movement of A⁰ to a position c-commanding NumP (not shown), parallel to the derivation of verb initial word order.



Next are the *kay-* and *napaka-*exclamatives. The behavior in these constructions is parallel to the Recent Perfective construction: absence of the inflectional domain obviates the need for A'-extraction targets to escape the θ -domain. An example is provided in (62) below. The structure up to *aP* is parallel to what we have seen with plain positive adjectives, with *a*⁰ now spelling out *kay* or *napaka-*. In contrast, projections from the inflectional domain such as NumP are absent from these constructions, as evidenced by the unavailability of plural agreement. This means that the adjectival external argument does not undergo Pivot Movement, remaining in Spec,*aP*. However, the absence of projections from the inflectional domain above *aP* also means that C⁰ is the first syntactic head not from the θ -domain to enter the derivation. An A'-probe on C⁰ is then able to probe into the θ -domain to extract the adjectival external argument before *aP* subsequently undergoes Spell-Out. This probing behavior of C⁰ is thus parallel to what we saw with Num⁰ in (61) above.

(62) EXTRACTION FROM KAY/NAPAKA-EXCLAMATIVES

- a. mga estudyante=ng [{kay /napaka-} galing sa Tagalog]
 PL student=LK EXCL EXCL- skillful OBL Tagalog
 'students who are very good at Tagalog'



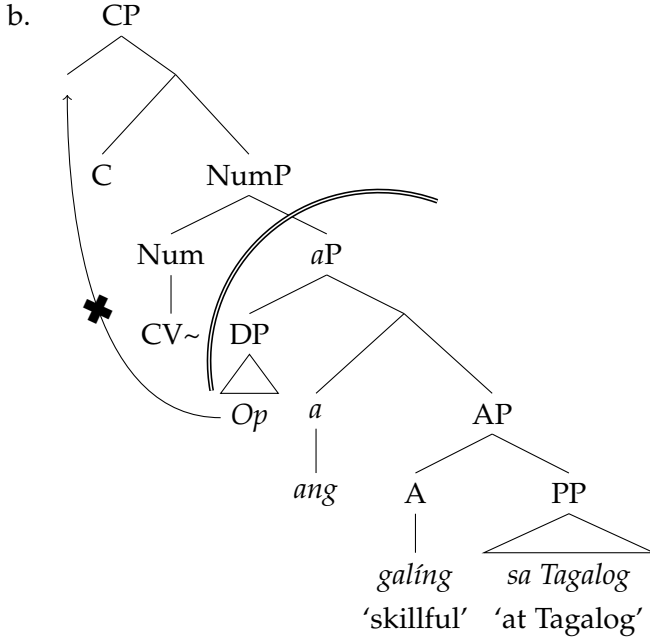
Finally, we turn to *ang*-exclamatives, which represent a structurally intermediate case between plain positive adjectives and *kay/napaka*-exclamatives. Here, neither of the mechanisms that facilitate A'-movement in Tagalog—intermediate movement or reduced structure—are available. Extraction out of this construction is ill formed as a consequence, as (63) shows. As before, all arguments are introduced in *aP*, with the external argument in Spec,*aP*. Since this construction allows optional plural agreement, we have evidence for NumP, similar to what was proposed for plain positive adjectives. Unlike plain positive adjectives, however, Pivot Movement is unavailable, so I assume that Num⁰ in these constructions lacks the relevant movement probe. This defectivity in Num⁰ is the crucial factor for accounting for the lack of extraction in *ang*-exclamatives. As with plain positive adjectives in (61), Num⁰ triggers Spell-Out of *aP*. Since *Op* remains in Spec,*aP*, it cannot be probed by C⁰.

(63) NO EXTRACTION FROM ANG-EXCLAMATIVES

a. *mga estudyante=ng [ang ga~galing sa Tagalog]

PL student=LK EXCL PL~skillful OBL Tagalog

Intended: ‘students that are so good at Tagalog’



The domain-based analysis proposed for behavior in the verbal domain thus applies to the adjectival domain as well. In contrast, the facts just discussed are problematic for highest-DP approaches. Appealing solely to relative height among DPs cannot distinguish between the relevant cases above, since there is only a single DP in the clause. Such approaches must therefore appeal to some alternative mechanism, such as the presence or absence of phase boundaries, in order to derive the asymmetry in adjectival clauses. The overall picture that forms is then that appealing to phases tied to the edge of the θ -domain gives us wider empirical coverage than adopting an approach based on probing sensitive to relative locality.

6 Conclusion

This paper has proposed a general approach to A'-extraction in Tagalog that accounts for a broader range of the attested phenomena than previous analyses have. Such phenomena include both canonical A'-extraction of pivots as well as exceptions to the commonly assumed pivot-only extraction restriction. The analysis proposed here contrasts with previous approaches that appeal to a relative locality restriction whereby A'-probes must target the highest DP in a clause for extraction. Instead, it was argued that what was crucial for deriving the attested A'-extraction

patterns was the opacity of phases and how they were circumvented—either through escape or as a result of the phase boundary being absent at the point of A'-extraction. Crucial evidence supporting this view came from data where the highest-DP view either undergenerates (as with pivot theme extraction with concurrent Genitive Inversion and theme extraction in the Recent Perfective form) or overgenerates (as with ungrammatical extraction out of *ang*-exclamatives).

References

- Aldridge, Edith. 2002. Nominalization and *wh*-movement in Seediq and Tagalog. *Language and Linguistics* 3:393–426. URL <https://www.ling.sinica.edu.tw/item/en?act=journal&code=directory&volume=3&period=2>.
- Aldridge, Edith. 2003a. Remnant movement in Tagalog relative clause formation. *Linguistic Inquiry* 34:631–640. URL <http://dx.doi.org/10.1162/002438903322520179>.
- Aldridge, Edith. 2003b. Wh-movement in Seediq and Tagalog. In *Proceedings of AFLA 8*, ed. Andrea Rackowski and Norvin Richards, 1–28. Cambridge, MA: MIT Working Papers in Linguistics.
- Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. Doctoral Dissertation, Cornell University, Ithaca, NY.
- Aldridge, Edith. 2017. ϕ -feature competition: A unified approach to the Austronesian extraction restriction. In *Proceedings of CLS52*, ed. Jessica Kantarovich, Tran Truong, and Orest Xherija, 313–326. Chicago Linguistics Society.
- Baker, Mark C. 1988. *Incorporation: a theory of grammatical function changing*. University of Chicago Press.
- Bošković, Željko. 2014. Now I'm a phase, now I'm not a phase: On the variability of phases with extraction and ellipsis. *Linguistic Inquiry* 45:27–89. URL https://doi.org/10.1162/ling_a_00148.
- Branan, Kenyon, and Michael Yoshitaka Erlewine. 2020. A'-probing for the closest DP. URL <https://ling.auf.net/lingbuzz/005211>, ms., National University of Singapore.
- Browning, Marguerite. 1987. Null operator constructions. Doctoral Dissertation, MIT. URL <http://dspace.mit.edu/handle/1721.1/14701>.
- Carrier, Jill. 1979. The interaction of morphological and phonological rules in Tagalog: A study in the relationship between rule components in grammar. Doctoral Dissertation, MIT, Cambridge, MA. URL <http://hdl.handle.net/1721.1/16199>.

- Carrier-Duncan, Jill. 1985. Linking of thematic roles in derivational word formation. *Linguistic Inquiry* 16:1–34. URL <https://www.jstor.org/stable/4178418>.
- Chen, Victoria. 2017. A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping. Doctoral Dissertation, University of Hawai'i at Manoa.
- Chomsky, Noam. 1995. *The Minimalist program*. Cambridge, MA: MIT Press. URL <https://muse.jhu.edu/book/36980>.
- Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays on Minimalist syntax in honor of Howard Lasnik*, ed. Howard Lasnik, Roger Martin, David Michaels, and Juan Uriagereka, chapter 3, 89–156. Cambridge, MA: MIT Press.
- Chung, Sandra. 1994. Wh-agreement and “referentiality” in Chamorro. *Linguistic Inquiry* 25:1–44. URL <https://www.jstor.org/stable/4178847>.
- Chung, Sandra. 1998. *The design of agreement: Evidence from Chamorro*. University of Chicago Press.
- Collins, Chris. 2005. A smuggling approach to the passive in English. *Syntax* 8:81–120. URL <https://doi.org/10.1111/j.1467-9612.2005.00076.x>.
- Collins, James N. 2019. Definiteness determined by syntax. *Natural Language & Linguistic Theory* 37:1367–1420. URL <https://doi.org/10.1007/s11049-018-9436-x>.
- Cruz, Emilita L. 1975. *A subcategorization of Tagalog verbs*. Quezon City, Philippines: University of the Philippines.
- Culwell-Kanarek, Nathan. 2005. Pre-verbal pronouns in Tagalog syntax. In *Proceedings of the Twelfth Annual Conference of the Austronesian Formal Linguistics Association*, ed. Jeffrey Heinz and Dimitrios Ntelitheos, number 12 in UCLA Working Papers in Linguistics, 49–56.
- Dell, François. 1983. An aspectual distinction in Tagalog. *Oceanic Linguistics* 22/23:175–206. URL <https://www.jstor.org/stable/20172314>.
- Erlewine, Michael Yoshitaka, and Theodore Levin. 2018. Clitic pronouns and the lower phase edge. In *Heading in the right direction: Linguistic treats for Lisa Travis*, ed. Laura Kalin, Ileana Paul, and Jozina Vander Klok, volume 25, 136–145. Montreal, Quebec: McGill Working Papers in Linguistics. URL http://people.linguistics.mcgill.ca/~mcgwpl/McGWPL/2018v25n01/2018-25-1_Erlewine_Levin.pdf.
- Erlewine, Michael Yoshitaka, Theodore Levin, and Coppe van Urk. 2020. The typology of nominal licensing in Austronesian voice system languages. In *Proceedings of the Twenty-Sixth*

- Meeting of the Austronesian Formal Linguistics Association (AFLA)*, ed. Ileana Paul, 71–87. URL <https://ir.lib.uwo.ca/afla/aflaxxvi/meeting/5/>.
- Erlewine, Michael Yoshitaka, and Cheryl Lim. 2021. Bikol clefts and topics and the Austronesian extraction restriction. URL <https://ling.auf.net/lingbuzz/004181>, lingbuzz/004181, October 2021.
- Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and spec of VP: Two subjects in Austronesian languages. *Natural Language & Linguistic Theory* 10:375–414. URL <https://doi.org/10.1007/BF00133368>.
- de Guzman, Videa P. 1988. Ergative analysis for Philippine languages: An analysis. In *Studies in Austronesian linguistics*, ed. Richard McGinn, number 76 in Monographs in International Studies Southeast Asia Series, chapter 11, 323–347. Athens, Ohio: Ohio University.
- Hsieh, Henrison. 2020. Beyond nominative: A broader view of A'-dependencies in Tagalog. Doctoral Dissertation, McGill University, Montreal, Quebec. URL <https://escholarship.mcgill.ca/concern/theses/2z10ww16v>.
- Kaufman, Daniel. 2011. Exclamatives and temporal nominalizations in Austronesian. In *Nominalization in Asian languages: Diachronic and typological perspectives*, ed. Foong Ha Yap, Karen Grunow-Hårsta, and Janick Wrona, volume 96 of *Typological Studies in Language*, 721–754. John Benjamins Publishing Company. URL <https://doi.org/10.1075/tsl.96.25kau>.
- Kaufman, Daniel. 2012. Predicate classes and PAn *ka-. Presentation at the 19th meeting of the Austronesian Formal Linguistics Association, June 2012.
- Kroeger, Paul. 1993. *Phrase structure and grammatical relations in Tagalog*. Dissertations in Linguistics. Center for the Study of Language and Information.
- Latrouite, Anja. 2012. Differential object marking in Tagalog. In *Proceedings of AFLA 18*, ed. Lauren Eby Clemens, Gregory Scontras, and Maria Polinsky. URL <https://ir.lib.uwo.ca/afla/aflaxviii/meeting/6/>.
- Manueli, Maria Khristina S. 2010. A Minimalist account of scrambling and word order in Tagalog: Testing its grammaticality. *Philippine Social Sciences Review* 62. URL <http://journals.upd.edu.ph/index.php/pssr/article/view/2110>.
- Massam, Diane. 2000. VSO and VOS: Aspects of Niuean word order. In *The syntax of verb-initial languages*, ed. Andrew Carnie and Eithne Guilfoyle, 97–116. Oxford University Press.
- McFarland, Curtis D. 1976. *A provisional classification of Tagalog verbs*. Number 8 in Study of Languages & Cultures of Asia & Africa Monograph Series. Tokyo: Institute for the Study of Languages and Cultures of Asia and Africa.

- McGinn, Richard. 1988. Government and Case in Tagalog. In *Studies in Austronesian linguistics*, ed. Richard McGinn, number 76 in Monographs in International Studies Southeast Asia Series, chapter 9, 275–293. Athens, Ohio: Ohio University.
- Mercado, Raphael. 2004. Focus constructions and WH-questions in Tagalog: A unified analysis. *Toronto Working Papers in Linguistics* 23:95–118. URL <https://twpl.library.utoronto.ca/index.php/twpl/issue/view/472>.
- Nakamura, Masanori. 1996. Economy of chain formation. Doctoral Dissertation, McGill University.
- Odango, Emerson Lopez, and Yuko Otsuka. 2015. *Ang*-marked NPs in recent perfective in Tagalog. Presentation slides, AFLA 22, McGill University.
- Pearson, Matthew. 2005. The Malagasy subject/topic as an A'-element. *Natural Language & Linguistic Theory* 23:381–457. URL <https://doi.org/10.1007/s11049-004-1582-7>.
- Pizarro-Guevara, Jed, and Matt Wagers. 2018. Agent extraction under patient voice in Tagalog is acceptable: Evidence from acceptability ratings in various A'-dependencies. Paper presented at the 25th Annual Meeting of the Austronesian Formal Linguistics Association (AFLA 25).
- Pizarro-Guevara, Jed Sam, and Matthew Wagers. 2020. The predictive value of Tagalog voice morphology in filler-gap dependency formation. *Frontiers in Psychology* 11. URL <http://doi.org/10.3389/fpsyg.2020.00517>.
- Potsdam, Eric. 2009. Austronesian verb-initial languages and *wh*-question strategies. *Natural Language & Linguistic Theory* 27:737–771. URL <https://doi.org/10.1007/s11049-009-9078-0>.
- Potsdam, Eric. 2011. Expressing exclamatives in Malagasy. In *Nominalization in Asian languages: Diachronic and typological perspectives*, ed. Foong Ha Yap, Karen Grunow-Hårsta, and Janick Wrona, volume 96 of *Typological Studies in Language*, 659–683. John Benjamins Publishing Company. URL <https://doi.org/10.1075/tsl.96.23pot>.
- Rackowski, Andrea. 1999. Morphological optionality in Tagalog aspectual reduplication. In *Papers on morphology and syntax, cycle two*, ed. Vivian Lin, Cornelia Krause, Benjamin Bruening, and Karlos Arregi. MIT Working Papers in Linguistics.
- Rackowski, Andrea. 2002. The structure of Tagalog: Specificity, voice, and the distribution of arguments. Doctoral Dissertation, MIT.
- Rackowski, Andrea, and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36:565–599. URL <http://doi.org/10.1162/002438905774464368>.

- Ramos, Teresita V. 1974. *The case system of Tagalog verbs*, volume 27 of *Pacific Linguistics Series B*. Canberra: Department of Linguistics, Research School of Pacific Studies, Australian National University. URL <http://hdl.handle.net/1885/145134>.
- Richards, Norvin. 1998. Syntax vs. semantics in Tagalog wh-extraction. In *Recent papers in Austronesian linguistics*, ed. Matthew Pearson, volume 21 of *UCLA Occasional Papers in Linguistics*, 259–275. Los Angeles: UCLA.
- Rizzi, Luigi. 1990. *Relativized minimality*. Cambridge, MA: MIT Press.
- Ross, Malcolm. 2002. The history and transitivity of Western Austronesian voice and voice-marking. In *The history and typology of Western Austronesian voice systems*, ed. Fay Wouk and Malcolm Ross, 17–62. Canberra: Pacific Linguistics. URL <https://doi.org/10.15144/PL-518>.
- Ross, Malcolm. 2009. Proto Austronesian verbal morphology: A reappraisal. In *Austronesian historical linguistics and culture history: A festschrift for Robert Blust*, ed. Alexander Adelaar and Andrew Pawley, 295–326. Canberra: Pacific Linguistics. URL <https://doi.org/10.15144/PL-601.295>.
- Sabbagh, Joseph. 2005. Nonverbal argument structure: evidence from Tagalog. Doctoral Dissertation, MIT.
- Sabbagh, Joseph. 2011. Adjectival passives and the structure of VP in Tagalog. *Lingua* 121:1424–1452. URL <https://doi.org/10.1016/j.lingua.2011.03.006>.
- Sabbagh, Joseph. 2016. Specificity and objecthood in Tagalog. *Journal of Linguistics* 52:639–688. URL <https://doi.org/10.1017/S0022226716000025>.
- Schachter, Paul. 1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above? In *Subject and topic*, ed. Charles Li, 491–518. New York: Academic Press.
- Schachter, Paul. 1996. The subject in Tagalog: Still none of the above. *UCLA Occasional Papers in Linguistics* 15:1–61.
- Schachter, Paul, and Fe Otnes. 1972. *Tagalog reference grammar*. Berkeley, CA: University of California Press.
- Tanaka, Nozomi, William O’Grady, Kamil Deen, Chae-Eun Kim, Ryoko Hattori, Ivan Paul M. Bondoc, and Jennifer U. Soriano. 2016. An agent advantage in Tagalog relative clause comprehension. In *Proceedings of AFLA 22*, ed. Henrison Hsieh, 191–201. Asia-Pacific Linguistics.
- Travis, Lisa. 2000. Event structure in syntax. In *Events as grammatical objects: The converging perspectives of lexical semantics and syntax*, ed. Carol Tenny and James Pustejovsky, chapter 4, 145–186. Stanford: CSLI Publications.

- Travis, Lisa. 2010. *Inner aspect: The articulation of VP*, volume 80 of *Studies in Natural Language and Linguistic Theory*. Springer. URL <https://doi.org/10.1007/978-90-481-8550-4>.
- Travis, Lisa deMena. 2016. The what and where of Out of Control morphemes in Tagalog and Malagasy. In *Proceedings of the 42nd Annual Meeting of the Berkeley Linguistics Society*, 369–386.
- van Urk, Coppe, and Norvin Richards. 2015. Two components of long-distance extraction: Successive cyclicity in Dinka. *Linguistic Inquiry* 46:113–155. URL https://doi.org/10.1162/ling_a_00177.
- Wolff, John. 1973. Verbal inflection in Proto-Austronesian. In *Parangal kay Cecilio Lopez: Essays in honor of Cecilio Lopez on his seventy-fifth birthday*, ed. Andrew B. Gonzalez, number 4 in *Philippine Journal of Linguistics Special Monograph*, 71–91. Quezon City: Linguistic Society of the Philippines.