Locality in exceptional Tagalog A′-extraction

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Draft of October 2021

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

[1] In 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 throughout the literature, each with particular theoretical motivations. These labels include 'subject', 'topic', and 'trigger' (see Schachter 1976, 1996; Guilfoyle et al. 1992; Kroeger 1993). Under ergative approaches, *ang* is also treated as absolutive case (Aldridge 2004; de Guzman 1988).

[2] All 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 = non-volitional form, PV = Patient Voice, RPFV = Recent Perfective,

(1) Nag-laba ang bata ng damit.
AV.PFV-launder NOM child GEN clothes
'The child washed clothes.'

(2) a. bata=ng [nag-laba <*ang bata*> ng damit]
child=LK AV.PFV-launder GEN clothes
'child that washed clothes'

b. *damit na [nag-laba ang bata <*ng damit*>]
clothes LK AV.PFV-launder 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 existing 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] Due to these structural differences, the second group warrants separate study and falls outside the scope of this paper. Second, Tagalog can promote a wide range of nominals to a syntactically prominent position. The choice of nominal is subsequently reflected in verbal morphology (so-called *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.

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. I argue for this "domain-based" approach on the basis of exceptions to the generalization formulated in (3).

[3]Note 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 separates 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.

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., non-pivot) agents (Tanaka et al. 2016; Pizarro-Guevara and Wagers 2018; see also Erlewine and Lim 2021 on Bikol). In (5), we see that changing the verb from *naglaba* in (2) to *nilabhan* changes the pivot from agent to theme. The grammatical theme pivot relative (5b) is thus expected from the formulation of the restriction in (3). What is unexpected is that the non-pivot agent relative (5a) is not judged to be ungrammatical to the same degree as the non-pivot theme relative (2b) despite both having genitive-marked targets (see Sec. 2.2).

(4) Ni-labh-an ng bata ang damit.
PFV-launder-LV GEN child NOM clothes
'The child washed the clothes.'

(5) a. ?bata=ng [ni-labh-an <*ng bata*> ang damit]
child=LK PFV-launder-LV GEN child NOM clothes
'child who washed the clothes'

b. damit na [ni-labh-an ng bata <*ang damit*>]
clothes LK PFV-launder-LV GEN child NOM clothing
'clothes that the child washed'

The range of exceptions is varied, and it is not obvious at first whether or not a unified account can capture the sum of their behavior. Nevertheless, I argue that the domain-based approach to Tagalog A′-extraction accounts for the many types of exceptions to the pivot-only extraction restriction described here, which are problematic for highest-DP approaches. Aside from examples like (5a) where a genitive agent has been A′-extracted, crucial data takes the form of A′-extraction from environments that *lack* pivot arguments altogether. This consists of Recent Perfective clauses previously noted by McGinn (1988) and Schachter (1996) as well as less well-known data from exclamative adjective forms.

Concretely, I propose that the theta-role-assigning domain of the clause (conventionally understood to be *v*P for verbal predicates) undergoes Spell-Out when material from higher (e.g., inflectional) domains enter the derivation. This has two main implications for A′-extraction via high/clause-peripheral probes in Tagalog, which I show to be borne out in the data to be considered.

First, any DP that originates within the θ-domain must first escape this domain through some means other than via the A′-probe (or intermediate movement that it may trigger). That is, A′-extraction in many cases must be fed by other processes in Tagalog. I argue here that two processes in Tagalog fit this description: (i) promotion of arguments to pivot—giving us

pivot-extraction cases like (2a) and (5b)—and (ii) an understudied process that I term Genitive Inversion, whereby pronominal genitive agents may appear in a high preverbal position, deriving cases like (5a). While these operations are parallel to what has been proposed under highest-DP approaches, I present novel data from their interaction showing that a DP (i.e., the pivot) can be A′-extracted even if there is a structurally higher DP (i.e., the target of Genitive Inversion) as long as the lower DP has escaped the θ-domain.

Second, in environments where the inflectional layer is demonstrably absent, the θ-domain has not undergone Spell-Out by the time a clause-peripheral A′-probe enters the derivation, allowing probing for any argument within it regardless of structural height (i.e., with no extraction restriction). We will see that these environments disallow both Pivot Movement and Genitive Inversion, and generally do not show evidence that arguments have moved out of their base positions. I therefore argue that the transparency of the θ-domain is what accounts for the behavior observed in Recent Perfective clauses, as well as a subset of the adjectivally predicated clauses. Crucially, we also find environments that disallow the movements that regularly feed A′-extraction, yet still have the inflectional layer present. Specifically in such environments, no extraction is possible as predicted, because the lower phase is opaque for extraction without any way for DPs to escape 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, extraction restriction, and previous approaches

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.

A prominent feature of Tagalog morphosyntax is its Austronesian-type voice system, where morphological marking on the verb in a clause determines the thematic role of the pivot argument. A simple illustration is provided 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, non-pivot core arguments are usually marked genitive (*ng* /naŋ/ for common nouns), and non-pivot 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~lutu-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~lutu-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; Schachter 1976; McFarland 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 non-pivot arguments cannot be extracted. For example, (8) shows that non-pivot themes cannot be relativized. In this case, the CV form *itatanim* 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) NON-PIVOT THEMES CANNOT BE RELATIVIZED

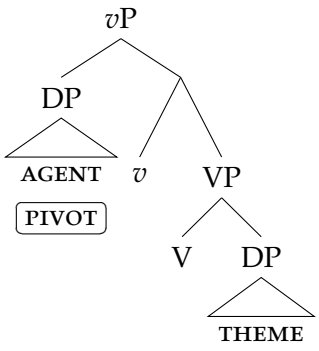
a. *sabaw na [mag-lu~luto ang bata <*ng sabaw*> sa palayok]
soup LK AV-FUT~cook NOM child OBL clay.pot
Intended: 'soup that the child will cook in the *palayok*'

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*'

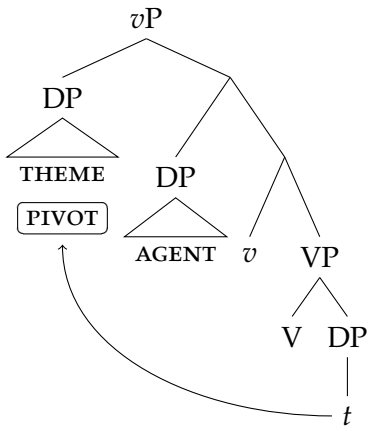
c. *sabaw na [i-pag-lu~luto ng bata <*ng sabaw*> ang magsasaka]
soup LK CV-*pag*-FUT~cook GEN child NOM farmer
Intended: 'soup that the child will cook for the farmer'

A number of competing analyses have been previously proposed in the literature on Tagalog syntax to account for these patterns (e.g., Nakamura 1996; Aldridge 2004; Rackowski and Richards 2005), however many share a central intuition. 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 attracts DPs, therefore only the highest DP in a particular structure can be extracted, following Attract Closest. This rules out extraction of not only the non-pivot theme in (9a) (deriving the ungrammaticality of (8)), but crucially also the non-pivot 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. In turn, Attract Closest is necessary to derive the non-extractability 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 non-pivot theme extraction such as in (8), but they do not—under many formulations of "highest"—straightforwardly account for the possibility of non-pivot *agent* extraction, which we saw in (5). While this contrast might be captured using a different formalization of "highest", we will see that other exceptional data poses even greater 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.

2.2 Exceptions to the restriction

There are a number of environments where, contrary to the widely cited generalization just reviewed, non-pivot DP arguments may be A′-extracted. 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 "exceptional" examples show a range of different properties, making it difficult to form a generalization regarding where non-pivot extraction is possible and where it is not.

To begin, let us consider the case of non-pivot 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 non-pivot external arguments is judged better than the non-pivot *theme* extraction that we have just seen in (8). Pizarro-Guevara and Wagers (2018) provide experimental confirmation of this three-way contrast in judgments,[4] and naturally occurring examples such as (11) are also attested.

(10) Non-pivot 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'

[4]Their 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., non-pivot 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'

(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
'single parent who continually provides for their children' (Hsieh 2020, p.174, 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 (*cf.* 9b) to target the agent in the (lower) Spec,*v*P. 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 non-pivot agents may A′-extract since they are both specifiers of *v*P, while non-pivot themes may not since there would always be a higher DP is 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 non-pivots, 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 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).[5] 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.[6] There is no argument-structural asymmetry.

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

[5]Note that in addition to the morphological marking on the verb itself, RPFV clauses obligatorily bear the clitic *lang/lamang* 'only' (Schachter and Otanes 1972).

[6]Effectively, 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, Hsieh (2020) reports that extraction of PPs out of the Recent Perfective is ungrammatical.

(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 external argument. A highest-DP approach would then need to stipulate some way to relax the relative locality constraints on an A′-probe in this environment.

I argue 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 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 behavior 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 adjectival stem *taba* 'fat': *ma-* for the positive form and *napaka-*, *kay*, and *ang* for the exclamative forms.[7] We also find different case marking

[7]In 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. That said, it is notable that *ang* is homophonous with the common noun nominative marker. An intuitive hypothesis about the asymmetry in (14) would be to appeal to this homophony and say that the exclamative is in fact formally a DP ('the pig's fatness!'). While this may have been the diachronic origin of the *ang*-exclamative, Kaufman (2011) and Hsieh (2020) show that this construction shows properties that are only found in adjectives synchronically. (See also Kaufman 2011 for an analysis of the origin of *kay*.)

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-taba]
pig LK ADJ-fat
'pig that is fat' / 'fat pig'

As with the RPFV form, the behavior we see here is not readily accounted for by a highest-DP approach to the Tagalog extraction restriction. Specifically, the impossibility of extraction out of an *ang*-exclamative clause is mysterious. 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? In other words, the reason for the difference cannot be tied to some c-command relation between DPs, since there is only one DP. The more natural explanation would then be to say that there is some structural property that holds of *ang*-exclamatives but not of *napaka-* and *kay*-exclamatives, causing the observed difference in behavior. I will argue that this structural property is parallel to the one proposed for the RPFV form: the absence of an inflectional layer (in *kay-* and *napaka*-exclamatives but not in *ang*-exclamatives, as I argue below) effectively renders the θ-domain transparent to A′-extraction.

In 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 that 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 theta-role assignment (i.e., *v*P, and as we will see, *a*P (following Sabbagh 2005)). This proposal thus contrasts with prior work that puts this explanatory burden on the structural position of a target DP in relation to other DPs in a clause (Aldridge 2004; Rackowski and Richards 2005), 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. 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. 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 crucial evidence in favor of this proposal over the highest-DP approaches found in previous work comes from considering the interactions between the mechanisms outlined above that result in environments where syntactic height relative to other potential targets cannot be the main factor determining extractability. On one hand, we will see contexts where (a) both Pivot Movement and Genitive Inversion apply and (b) no independent 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 independent movement 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 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 pseudo-clefts, 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; Branan and Erlewine 2020). I also assume that in such dependencies, the element undergoing A′-movement is always a null *Op*.

4 Independent movement feeds extraction

I propose that Tagalog has two processes which result in arguments occupying positions outside of the θ-domain, in turn feeding A′-movement out of fully inflected predicates.

(16) 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 theta-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 (Aldridge 2004, 2017; Erlewine et al. 2015; Rackowski and Richards 2005, a.o.). 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.

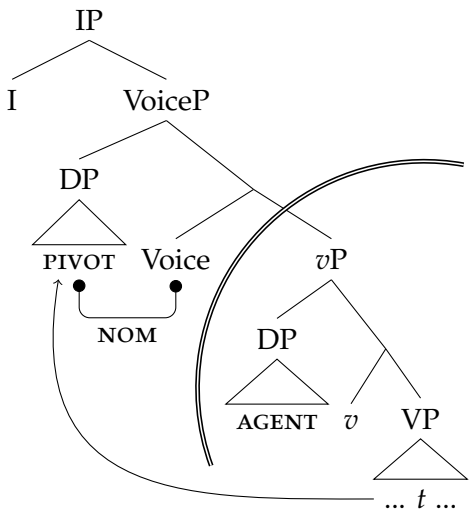
4.1 Pivot Movement

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.[8] This projection lies between IP, whose head I assume spells out aspectual morphology, and *v*P, which is the

[8]This follows Hsieh (2020, chap.3) who labels this projection AgrP, and is conceptually similar to the VoiceP projection of Collins (2005).

domain of argument introduction and theta-role assignment in verbal predicates. The head Voice^0 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 (17) illustrates.[9] Evidence for the position and function of Voice^0 comes from patterns of co-occurrence between the voice morphemes and the other relevant clausal elements.

(17)



Support for the position of VoiceP illustrated in (17) comes from the kinds of verbal forms that are selected by various environments in Tagalog, illustrated below. First, a full verbal form, which appears in independent clauses, is illustrated by *ipapakain* 'will feed (CV)' in (18). This verb form bears three overt morphemes attached to the root *kain* 'eat' (see Schachter and Otanes 1972, §§2.7-8 for more discussion). Linearly from left to right, these are: (i) the conveyance voice morpheme *i-* spelling out Voice^0, (ii) consonant-vowel (CV-)reduplication marking future aspect spelling out I^0, and (iii) the productive causative morpheme *pa-* spelling out v^0.

(18) **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 on them. The attested selection patterns are what provide evidence for the structure proposed in (17). In (19), we see that the prepositional element *para* 'for, in order to' requires its complement

[9] I follow prior work in assuming that verb-initial word order is derived by head movement of the lexical verb in V^0 to a higher position such as I^0 (Guilfoyle et al. 1992; Kroeger 1993; Massam 2000; Aldridge 2004, a.o.). Word order in the post-verbal field is relatively free and is generally treated as a kind of scrambling (Kroeger 1993, ch.5; Rackowski 2002, §1.3.2; Manueli 2010; Erlewine et al. 2020).

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, (20) shows an example of a gerund, where neither voice nor aspect morphology are allowed, but argument-introducing morphology is.

(19) 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

(20) 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
'She'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 (17), 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 $Voice^0$.

The data in (18-20) also supports the claim that $Voice^0$ 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.[10] We see in (20) that the highlighted verb lacks any voice morphology, and *none* of its arguments are marked nominative. In contrast, the verb of interest in (18-19) bears the voice morpheme *i-*, and nominative appears on *isda* 'fish'. Note that for (19), the source of nominative on *isda* cannot be the full verb *uuwi* 'will go home (AV)'. This is because nominative

[10]This 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.

(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 Otanes 1972, §4.21 on so-called "pseudo-verbs" for further examples and discussion. I leave open the question of how nominative case is assigned in such clauses.

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.

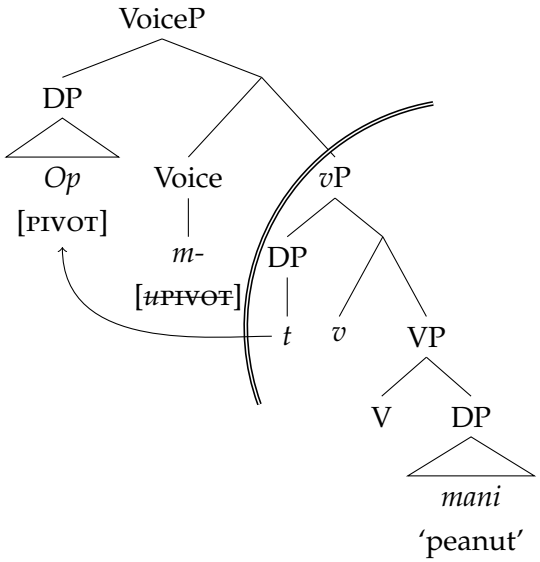
We have thus seen that the Tagalog clause has a syntactic projection, VoiceP, outside the θ-domain that is intricately tied to the syntactically prominent pivot argument. Following the general intuition of prior work, I propose below that movement of the pivot to this projection facilitates subsequent 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 (21). I assume that arguments are generated within *v*P following UTAH (Baker 1988), and that one argument bears a [PIVOT] feature, which is probed for by Voice^0 (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 Sec. 3). Voice^0 enters the derivation bearing a [*u*PIVOT] feature that probes for a suitable goal, triggering movement to Spec,VoiceP. The trees in (22) illustrate.

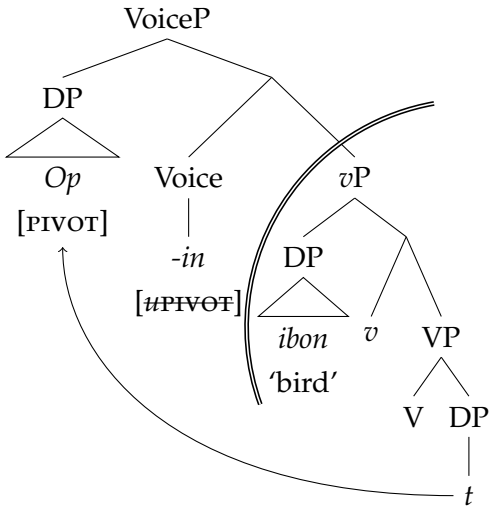
(21) a. ibo[n]=ng [mag-ha~hanap <*ang ibon*> ng mani]
bird=LK AV-FUT~search NOM bird GEN peanut
'bird that will look for peanuts'

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'

(22) a. ACTOR VOICE



b. PATIENT VOICE



In addition to the inherent functions of Voice^0 outlined above, I assume that this head is part of the inflectional domain.[11] Its position as sister to *v*P therefore makes it the lowest syntactic head outside the θ-domain. Under the current proposal, this means that Voice^0 effectively functions as a phase head in this context, triggering Spell-Out of its complement, *v*P, after Pivot Movement has occurred. Thus, the pivot *Op* in both structures shown in (22) is accessible to an A′-probe on C^0 as it lies outside *v*P. This also means that any in-situ arguments within *v*P are inaccessible to such a probe. This derives the ill-formedness of non-pivot theme extraction examples like (23a), but incorrectly predicts that non-pivot agent extraction examples like (23b) should be similar. To derive such examples, we turn to Genitive Inversion.

(23) ASYMMETRY IN NON-PIVOT 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)*

[11] Following 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 (24). 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.[12]

(24) 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 Otanes (1972, §3.20) describe this construction in nominal contexts, where it is perhaps more common, 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.[13] 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. First, consider that verb-initial word order in

[12]Speakers 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.

[13]This claim contradicts that of Culwell-Kanarek (2005), who proposes that the inverted pronoun is in a low position, with word order being derived via tense/aspect lowering to the verb. He motivates this analysis with data showing that the preverbal pronoun cannot precede negation, though he does not give evidence that the reverse word order is possible. Moreover, he notes that the judgments for the data he gives are inconclusive, and speakers I have consulted who accept Genitive Inversion in verbal contexts also consistently prefer the pronoun-negation order (discussed below). The possibility of this word order is also corroborated by naturalistic data such as (i) from an online article.

(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, p.166, truncated)

Tagalog is commonly derived by head movement of the verb to a head in the inflectional domain, such as T^0/I^0 (Guilfoyle et al. 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.

Second, 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 (25) 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.[14,15]

(25) 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 arguments that are both pronominal *and* genitive-marked. This limits its application to non-pivot external arguments, as we will see. Non-pronominal arguments, such as full DPs, may not appear in the inverted position even when genitive-marked in their base position, as (26) shows.

(26) No Genitive Inversion of full DPs

a. Bi~bilh-in **ng guro** ang damit.
FUT~buy-PV GEN teacher NOM clothes
'The teacher will buy the clothes.' Baseline

[14]Note that the post-negation position of the genitive pronoun *ko* in (25a) is a second position slot, occupied by second position clitics in Tagalog. Aside from the difference in pronoun form, (25c) can be distinguished from (25a) 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.

[15]In nominal environments, we observe parallel word order facts with the plural marker *mga*.

(i) ang **aki[n]=ng mga** damit <*ko*>
NOM 1SG.OBL=LK PL clothing 1SG.GEN
'my clothes'

(ii)*ang **mga aki[n]=ng** damit <*ko*>
NOM PL 1SG.OBL=LK clothing 1SG.GEN
'my clothes'

b. *{**Ng** / **Sa** } **guro=ng** bi~bilh-in ang damit.
GEN OBL teacher=LK FUT~buy-PV NOM clothes
Intended: 'The teacher will buy the clothes.'

Arguments that are nominative- and oblique-marked (i.e., not genitive-marked) also cannot participate in Genitive Inversion, as (27) shows with nominative-marked agents and oblique-marked causees. Note that the ungrammaticality of the examples in (27) cannot be because the fronted pronoun appears in the wrong form. The bare oblique form (*akin*) and the post-verbal forms (*ako* and *sa akin*) are all ungrammatical in the pre-verbal position. As with (26), the examples in (27) are grammatical without inversion, with the material in angle brackets indicating the position and form of the pronoun that would be grammatical. Similarly, internal arguments, which may not surface as genitive-marked pronominals (see Ramos 1974; Latrouite 2012; Sabbagh 2016; Collins 2019), also cannot participate in Genitive Inversion, shown in (28).

(27) No Genitive Inversion of non-genitive pronouns

a. *{**Ako** / **Akin** }**=ng** bi~bili <*ako*> ng damit.
1SG.NOM 1SG.OBL =LK FUT~buy[AV] 1SG.NOM GEN clothes
Intended: 'I will buy clothes.'

b.* **(Sa) Aki[n]=ng** mag-pa~pa-bili ka <*sa akin*> ng damit.
OBL 1SG.OBL=LK AV-FUT~CAUS-buy 2SG.NOM OBL 1SG.OBL GEN clothes
Intended: 'You will have me buy clothes.'

(28) No Genitive Inversion of themes

a. 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.'

b. *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.'

This distribution is somewhat reminiscent of the distribution of control targets in Tagalog. Specifically, it is well-established that in Tagalog, control constructions target agents/actors (i.e., thematic subjects) rather than pivots (Schachter 1976; Kroeger 1993; Guilfoyle et al. 1992); see (29). For concreteness, I thus treat Genitive Inversion as an instance of control, where a null PRO appears in the base position of the agent. Within the same clause, a coindexed controller appears in a higher position that I posit may only be occupied by pronouns, as will be illustrated below. For considerations of space, I do not flesh out this account further but develop it further

in ongoing work.[16] However, it is worth noting that the special behavior of agents (or external arguments more generally) is found in other contexts as well, such as in existential constructions (Law 2010; Aldridge 2011; see also Wellstood 2021 on Aklanon).

(29) CONTROL IN TAGALOG

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.'

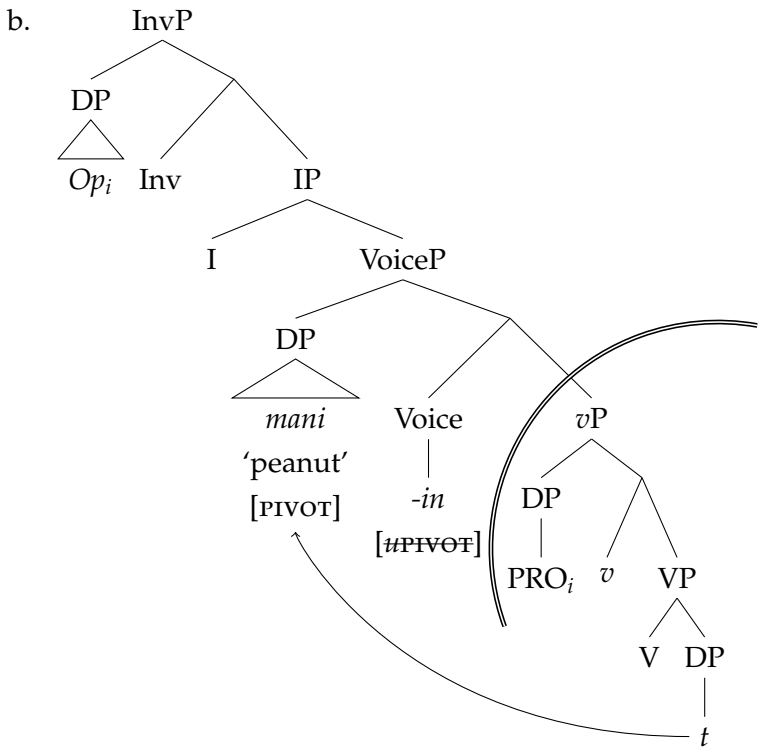
I propose that Genitive Inversion feeds A′-extraction in a manner parallel to what we saw with Pivot Movement. The inverted pronoun is in a position outside the θ-domain (i.e., the lower phase) and is therefore accessible to a clause-peripheral A′-probe. To demonstrate, consider the genitive agent relative clause in (30a). 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 (30b).

(30) 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'

[16] However, there is a major difference worth pointing out between the distributions of control and Genitive Inversion. The latter cannot target pivots as we saw in (27a), whereas the former can target agent pivots, and as Kroeger (1993) points out, non-agent pivots of non-volitional forms.

b.



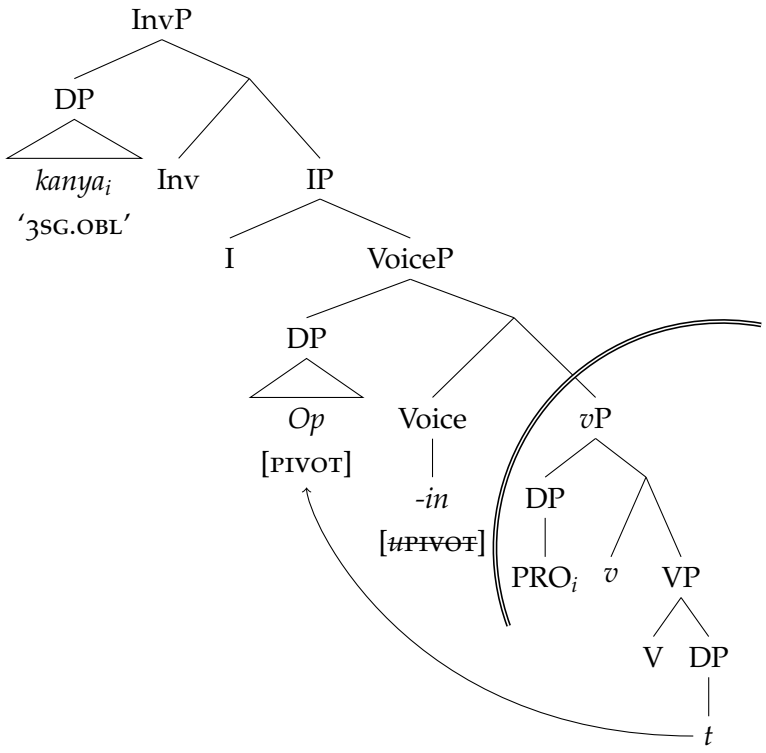
A few details about this derivation are worth noting here. First, previous work on null operators has argued that they are pronominal in nature (e.g., Browning 1987). It is thus fairly unsurprising that *Op* should be able to appear in the position occupied by Genitive Inversion. Second, because distribution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

Finally, it also bears noting that as with the examples discussed in the previous subsection, the derivation above is compatible with the alternative highest-DP approaches since Genitive Inversion results in *Op* being the highest DP in the clause, higher even than the pivot argument. However, there is a configuration minimally different to (30b) that *does* provide evidence to adjudicate between highest-DP approaches and the current domain-based approach. As illustrated in (31a), we can consider the configuration where *Op* is a theme that bears [PIVOT], and an overt pronoun appears as an agent that has participated in Genitive Inversion. This gives us the reverse configuration from (30b) between *Op* and its co-argument. Under the domain-based analysis developed here, A′-probing for *Op* in the structure in (31a) is not problematic, as *Op* has escaped the opaque domain. The predicted result is a theme relative clause with an inverted agent pronoun. As (31b) shows, this prediction is borne out. In contrast, highest-DP approaches incorrectly predict examples like (31b) to be impossible, since a higher DP (i.e., the inverted pronoun) intervenes between *Op* and the clause-peripheral A′-probe.[17]

[17]This problem is not solved by positing a lower position (i.e., c-commanded by the pivot) for Genitive Inversion. While this would resolve the problem with cases like (31), we would lose the explanation for why examples like (30)

(31) PIVOT THEME EXTRACTION + GENITIVE INVERSION

a.



b. mani=ng [kanya=ng ha~hanap-in <*niya*> <*ang mani*>]
peanut=LK 3SG.OBL=LK FUT~search-PV 3SG.GEN NOM peanut
'peanut that she will look for'

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.[18] 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

are possible.

[18]This analysis should also readily extend to more complex cases such as long-distance extraction and possessor subextraction, although I do not discuss them for reasons of space. The proposal here should be broadly compatible with existing analyses of this kind of complex A′-extraction behavior (e.g., van Urk and Richards 2015; Branan 2018). Hsieh (2020) develops an analysis for long-distance extraction examples under the same domain-based approach as this paper which differs in the formal details.

lower, inaccessible domain. In the next section, we will see further evidence for the domain-based approach from environments where the inflectional layer is absent.

5 Reduced structure circumvents locality restriction

So far, we have seen the behavior of DP extraction in Tagalog clauses that exhibit inflectional structure. I argued that in such contexts, a DP target must escape the θ-domain through independent means (i.e., Pivot Movement and Genitive Inversion) in order to be A′-extracted. In this section, we consider environments where such independent means for escaping the θ-domain are not possible, yet extraction is still possible. I show that the common denominator among these environments is their lack of an inflectional layer. I argue that the absent inflectional layer in these constructions results in 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 shown in Section 2.2 and repeated in (33), the RPFV construction does not show an argument-structural asymmetry in A′-extraction: both core arguments can be A′-extracted. This contrasts with what we saw in the previous section with fully inflected verbal clauses, where non-pivot (i.e., genitive marked) agents could undergo extraction but non-pivot *themes* could not.

(32) Kai~inom lang ng guro ng kape.
RPFV~drink only GEN teacher GEN coffee
'The teacher has just drunk coffee.' Baseline

(33) 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 (33) 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. The unavailability of Pivot Movement can be seen in (32), which lacks voice morphology (i.e., *<um>/m-*, *-in*, *-an*, *i-*) and a nominative-marked argument. In fact, (34) shows that nominative marking on either core argument is ungrammatical in this construction. Genitive Inversion is also unavailable, as (35) 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.

(34) 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.'

(35) 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 seen in (32) and (34). Moreover, we find no evidence that the theme can move to a position c-commanding the agent through other means. For example, we see in (36) 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 (37), where binding can *also* occur from the theme to the agent (see also Rackowski 2002). Given this evidence that the agent in an RPFV clause must be higher than the theme, a highest-DP approach also does not have a straightforward explanation for why A′-extraction of the theme is possible.

(36) 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.'

(37) 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 (33), 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.[19] 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 "non-completed" 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

[19] CV-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*.

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')

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

In contrast to the absence of VoiceP and IP, the RPFV form does show reflexes of structure from the θ-domain. For example, (38) 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 (39) shows (recall also (20)).

(38) 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.'

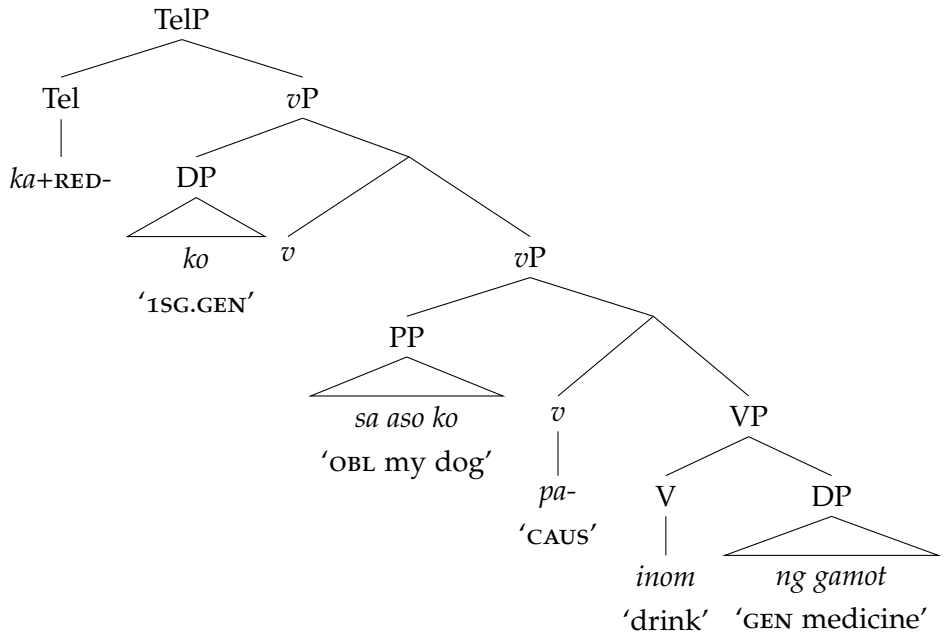
(39) ang pagpa~pa-inom ko ng gamot sa aso ko
NOM GER~CAUS-eat 1SG.GEN GEN medicine OBL dog 1SG.GEN
'my making my dog take medicine'

Given this evidence, I propose the structure for RPFV clauses exemplified in (40). I propose that RPFV morphology (*ka*+RED-) spells out a head that I label Tel^0 that encodes telicity and selects *v*P as its complement. As we saw previously, the RPFV form lacks projections from the inflectional layer such as VoiceP and IP, so TelP is the extent of the structure in this construction. This leaves the question of what domain TelP belongs to.

(40) 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.'

b.



I follow and extend earlier work by Travis (2000, 2010, 2016), and take Tel^0 to have argument-introducing functions. In the context of the so-called Ability/Involuntary Action (AIA) form exemplified in (41a), she proposes that the morpheme *ka-* introduces non-volitional agents and contributes telic semantics, following Dell (1983) who shows that such forms assert the endpoint of an event. Morphemes with a similar semantic function are found in other contexts in Tagalog, an example of which is the "perfective" gerund form in (41b). Schachter and Otanes (1972, §3.26) note that this form encodes that an "action is viewed as complete" and is distinguished from aspectless gerunds by bearing *ka-*. A similar completive meaning is also conveyed by the construction in (41c), which is morphologically parallel to the RPFV but appears in a nominal environment, here marked with the oblique marker *sa*. I take the morphological and semantic similarities between *ka-* found in these examples and the morphology of the RPFV form as evidence that these are formally the same morpheme.[20]

(41) a. Na**ka**-bili ako ng prutas kanina.
AV.PFV.NVOL-buy 1SG.NOM GEN fruit earlier
'I managed to buy some fruits earlier.'

b. Mali ang pag**ka(~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.'

[20]More work is needed to iron out a number of details. For example, while my structure in (40) shows TelP as the highest projection in the θ-domain before C^0 merges, Travis (2010, 2016) puts the equivalent projection (labeled AspP) in between two verbal projections. Also to be explained are differences in accompanying morphology (e.g., *pag-* and CV-reduplication) as well as when the projection introduces an argument. Answering these questions requires a deeper investigation of the forms that bear *ka-*, and is thus left for future work.

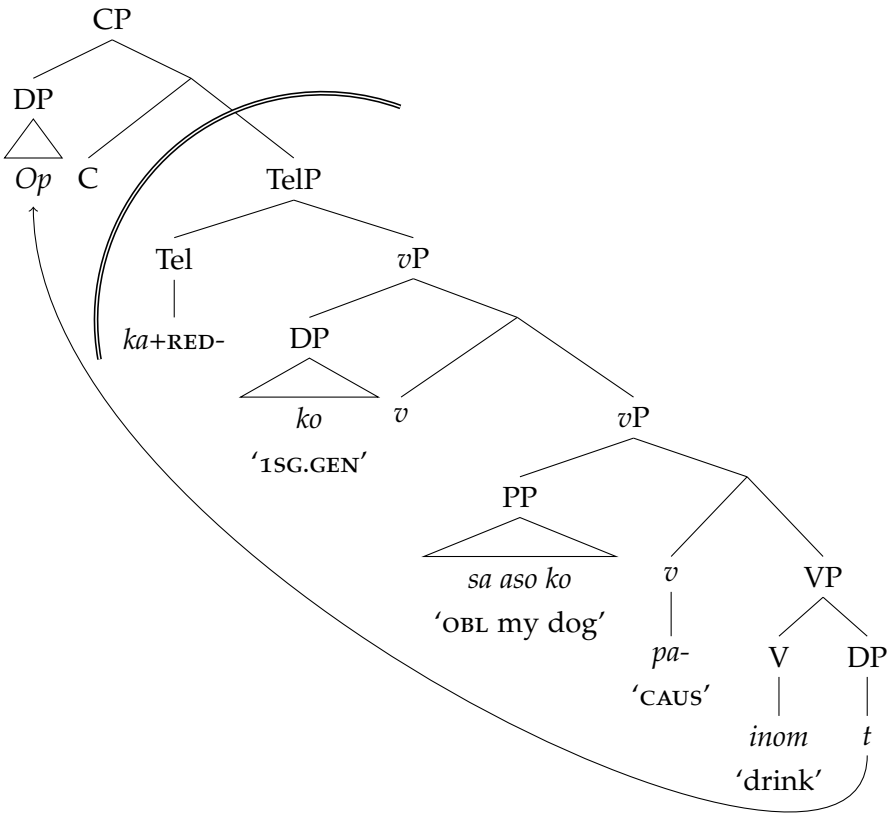
c. Na-ubus-an ng tinta ang bolpen sa **kaka**-sulat niya.
PFV.NVOL-use.up-LV GEN ink NOM pen OBL *kaka*-write 3SG.GEN
'The pen ran out of ink from {her having written so much/all her writing}.'

TelP being part of the θ-domain means that C^0 is the first syntactic head outside the θ-domain to enter the derivation, as in (42b), and thus effectively serves as the phase head in this construction, parallel to the function of $Voice^0$ 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 (42). Subsequently, TelP undergoes Spell-Out and becomes inaccessible to further syntactic operations.

(42) 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'

b.



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 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 non-pivot 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 potential extraction targets. Arguments may escape the phase through independent operations, and if multiple arguments do so such as 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 2.2 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 (43) 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 (44) shows.

(43) 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'

(44) {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 (44) where the subject of the clause *manunulat* 'writer' is marked genitive. This contrasts with what we find with plain positive adjectives, exemplified in (45), where the subject is marked nominative. Similarly, (46) 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.[21] Consequently, the explanation for the observed asymmetry must lie in some structural difference between the different exclamatives.

(45) Ma-galing ang manunulat sa paglu~luto.
ADJ-skillful NOM writer OBL GER~cook
'The writer is good at cooking.'

(46) 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 and aspect). 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 (47), 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 (48) shows.[22]

[21] Sabbagh (2011) comes to a similar conclusion.

[22] Schachter and Otanes (1972, p.233) note that plural agreement is available in *napaka*-exclamatives, though my consultants do not accept such forms.

(47) 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.'

(48) 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!'

This availability of inflectional structure in turn correlates with the possibility of extraction in a parallel way to what we have seen in the verbal domain. When inflectional structure is present, as (48a) shows for *ang*-exclamatives, extraction of arguments from within the θ-domain is impossible, explaining (43b). On the other hand, when such structure is absent, as (48b) shows for *kay-* and *napaka*-exclamatives, the same kind of extraction is possible, deriving (43a).

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 (49). I follow Sabbagh (2005, 2011) in assuming that adjectives have an *a*P projection, parallel to *v*P, which introduces the clausal subject as an external argument in its specifier position.[23] 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 *a*P, we have the inflectional domain consisting of NumP. Num^0 spells out optional plural agreement in the form of CV-reduplication. In plain positive adjectives, Num^0 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 *a*P is triggered because Num^0 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

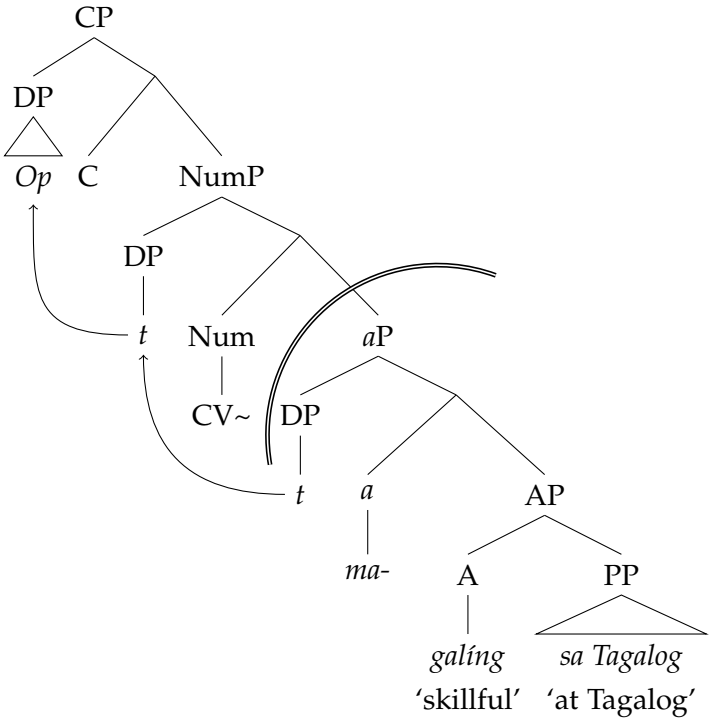
[23] Specifically, this is the case for *ma-* adjectives, which Sabbagh (2005, 2011) analyzes as unergative adjectives. These contrast with adjectival passives, which are formed from verbal roots via stress shift and are analyzed as having unaccusative structure.

A′-extraction by allowing the target to escape the lower phase so that it is visible to a higher A′-probe.[24]

(49) 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'

b.

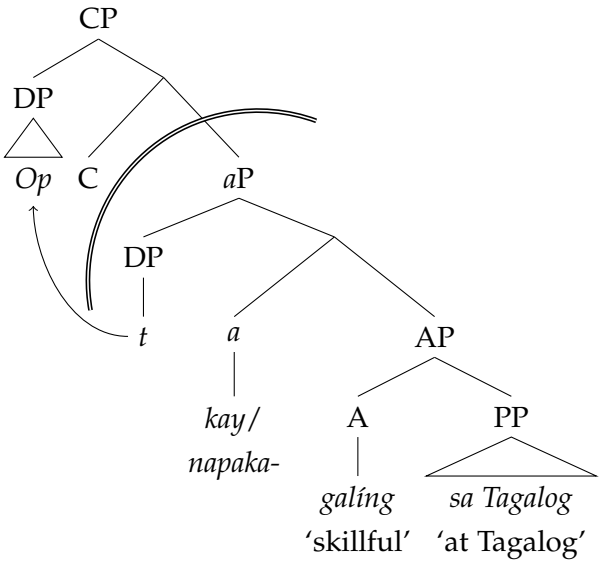


Next are the *kay-* and *napaka*-exclamatives. The behavior in these constructions is parallel to the Recent Perfective construction: absence of the inflectional domain obviates the need for A′-extraction targets to escape the θ-domain. An example is provided in (50) below. The structure up to *a*P is 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,*a*P. However, the absence of projections from the inflectional domain above *a*P also means that C^0 is the first syntactic head not from the θ-domain to enter the derivation. An A′-probe on C^0 is then able to probe into the θ-domain to extract the adjectival external argument before *a*P subsequently undergoes Spell-Out. This probing behavior of C^0 is thus parallel to what we saw with Num^0 in (49) above.

[24] I assume that adjective-initial word order is derived by head movement of A^0 to a position c-commanding NumP (not shown), parallel to the derivation of verb initial word order.

(50) 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'

b. 

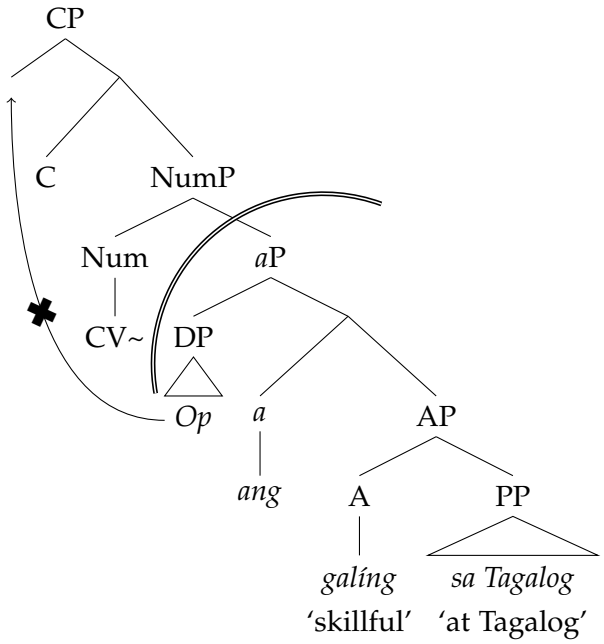
Finally, we turn to *ang*-exclamatives, which represent a structurally intermediate case between plain positive adjectives and *kay/napaka*-exclamatives. Here, neither of the mechanisms that facilitate A′-movement in Tagalog—intermediate movement or reduced structure—are available. Extraction out of this construction is ill-formed as a consequence, as (51) shows. As before, all arguments are introduced in *a*P, with the external argument in Spec,*a*P. 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 Num^0 in these constructions lacks the relevant movement probe. This defectivity in Num^0 is the crucial factor for accounting for the lack of extraction in *ang*-exclamatives. As with plain positive adjectives in (49), Num^0 triggers Spell-Out of *a*P. Since *Op* remains in Spec,*a*P, it cannot be probed by C^0.[25]

(51) 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'

[25] As mentioned in fn.7, an alternative account that ties the ban on extraction out of *ang*-exclamatives to this construction being formally nominal is not trivial, because of the uniquely adjectival behaviors (e.g., plural agreement) it exhibits (Kaufman 2011; Hsieh 2020).

b.



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 unified analysis for a broader range of A′-extraction phenomena in Tagalog than previous work has accounted for, including both canonical A′-extraction of pivots and 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 the role of opaque domains (i.e., phases) was the crucial factor for determining the attested A′-extraction data. 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.

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, volume 44 of *MIT Working Papers in Linguistics*, 1–28.

Aldridge, Edith. 2004. Ergativity and word order in Austronesian languages. Doctoral Dissertation, Cornell University.

Aldridge, Edith. 2011. Event existentials in tagalog. In *Proceedings of the 18th Meeting of the Austronesian Formal Linguistics Association*, ed. Lauren Eby Clemens, Gregory Scontras, and Maria Polinsky (dir.), 16–30. URL https://ir.lib.uwo.ca/afla/aflaxviii/meeting/11/.

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.

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. 2018. Attraction at a distance: Ā-movement and case. *Linguistic Inquiry* 49:409–440.

Branan, Kenyon, and Michael Yoshitaka Erlewine. 2020. A′-probing for the closest dp. URL https://ling.auf.net/lingbuzz/005211, lingbuzz/005211.

Browning, Marguerite. 1987. Null operator constructions. Doctoral Dissertation, MIT. URL http://dspace.mit.edu/handle/1721.1/14701.

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.

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. 2015. What makes a voice system? on the relationship between voice marking and case. In *Proceedings of AFLA 21*, ed. Amber Camp, Yuko Otsuka, Claire Stabile, and Nozomi Tanaka, 51–67.

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.

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-bar dependencies in Tagalog. Doctoral Dissertation, McGill University, Montreal, Quebec.

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.

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/.

Law, Paul. 2010. The impersonal construction in Tagalog. In *Austronesian and theoretical linguistics*, ed. Raphael Mercado, Eric Potsdam, and Lisa deMena Travis, volume 167 of *Linguistik Aktuell*, 297–326. John Benjamins. URL https://doi.org/10.1075/la.167.17law.

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.

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).

Potsdam, Eric. 2009. Austronesian verb-initial languages and *wh*-question strategies. *Natural Language & Linguistic Theory* 27:737–771.

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.

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.

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.

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.

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 Otanes. 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.

Wellstood, Zachary. 2021. A relative clause analysis of event existential constructions in Aklanon. Paper presented at the 28th Meeting of the Austronesian Formal Linguistics Association (AFLA 28). URL https://lingconf.com/afla28/program/.

Wolff, John. 1973. Verbal inflection in Proto-Austronesian. In *Parangal kay Cecilio Lopez*, ed. Andrew B. Gonzalez, number 4 in Philippine Journal of Linguistics Special Monograph, 71–91. Quezon City: Linguistic Society of the Philippines.