

Tagalog voice as four bundles of Agree relations: Insights from binding

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1. Introduction

A central question in Austronesian syntax concerns a typologically peculiar four-way voice system found in Tagalog and similar languages, where a change in verbal morphology correlates with a distinct argument-marking pattern and \bar{A} extraction restrictions. As seen in (1), with verbal morphology altering between *Actor Voice* (AV), *Patient Voice* (PV), *Locative Voice* (LV), and *Circumstantial Voice* (CV), the sole phrase in the clause eligible for \bar{A} extraction shifts from the external argument (1a) to the internal argument (1b) and different types of adjunct-like phrases (1c-d), respectively. This syntactically pivotal phrase bears a distinct marker, labeled as PIVOT hereafter.¹

- (1) a. B⟨**um
 buy⟨AV⟩ [PN.PIVOT AJ]ID.CM₂ cake P₁ PN.CM₂ Lia P₂ PN.CM₂ Joy
 ‘AJ bought cake from Lia for Joy.’ (ACTOR VOICE)**
- b. Bi-bilih-**in** ni AJ ang keyk mula kay Lia para kay Joy.
 CONT-buy-PV PN.CM₁ AJ [PIVOT cake]P₁ PN.CM₂ Lia P₂ PN.CM₂ Joy
 ‘AJ will buy cake from Lia for Joy.’ (PATIENT VOICE)
- c. Bi-bilih-**an** ni AJ ng keyk si Lia para kay Joy.
 CONT-buy-LV PN.CM₁ AJ ID.CM₁ cake [PN.PIVOT Lia]P₂ PN.CM₂ Joy
 ‘AJ will buy cake from Lia for Joy.’ (LOCATIVE VOICE)
- d. **I**-bi-bili ni AJ ng keyk mula kay Lia si Joy.
 cv-CONT-buy PN.CM₁ AJ ID.CM₂ cake P₁ PN.CM₂ Lia [PN.PIVOT Joy]
 ‘AJ will buy cake from Lia for Joy.’ (CIRCUMSTANTIAL VOICE)

Under the traditional view, voice alternation in (1) correlates with a change in argument structure, enabling phrases of different types to move to the edge of VoiceP and participate in \bar{A} extraction. On this assumption, the four voice affixes in (1) have been claimed to instantiate *valency-indicating morphology* that spells out different flavors of Voice and applicative heads (Aldridge 2004) or *agreement morphology* that indicates the case of the phrase that occupies the VoiceP phase edge and agrees with Voice (Rackowski & Richards 2005)².

In this paper, I argue instead that voice alternation in Tagalog (1a-d) has no correlation with argument structure alternation, but indicates a change in *topic selection*, whereby (1c) and (1d) are clauses with an adjunct topic, rather than applicative constructions. Support for this claim comes from novel data from

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² List of abbreviations: CONJ: conjunction; CONT: contemplated aspect; DF: definite; DOM: differential object marking; ID: indefinite; P: preposition; PN: personal name; PRF: perfective; RED: reduplication; REFL: reflexive.

Tagalog's three-place constructions, which reveals (i) voice alternation in Tagalog does not trigger a change in binding relations, and (ii) CM₁ and CM₂ show the hallmarks of nominative and accusative case, whereas PIVOT is a topic marker that overrides morphological case. I argue accordingly that Tagalog's four-way voice morphology is best analyzed as the spell-out of *four different bundles of abstract Agree relations* that target the topic (i.e. PIVOT-marked phrase) of a clause. This analysis is outlined in (2).

- | | | |
|-----|--------------------------|---|
| (2) | a. ACTOR VOICE: | bundle of (abstract) topic agreement and subject agreement |
| | b. PATIENT VOICE: | bundle of (abstract) topic agreement and object agreement |
| | c. LOCATIVE VOICE: | bundle of (abstract) topic agreement and locative agreement |
| | d. CIRCUMSTANTIAL VOICE: | (abstract) topic agreement |

In this view, Tagalog voice indicates four types of topics: (i) subject topics (1a), the shared goal of [u ϕ] on T and [uTOP] on a different head, (ii) direct object topics (1b), the shared goal of [u ϕ] on matrix Voice (i.e. trigger of object agreement) and [uTOP]; (iii) locative topics (1c), which agrees with both [uTOP] and a locative-selecting preposition, P_{LOC}, and (iv) topics that agree only with [uTOP] and not any other probes (1d). Accordingly, Tagalog constitutes a typical topic-prominent discourse configurational language as per Li & Thompson (1985), Kiss (1995), and Miyagawa (2010, 2017).

This paper is structured as follows. In the next section, I lay out basic facts of Tagalog and review two previous approaches to its voice system. Section 3 presents new binding evidence that undermines both approaches. Sections 4 and 5 demonstrate how the new binding data in §3 motivates the analysis in (2). Section 6 concludes. Except where otherwise indicated, the data presented in this paper come from primary fieldwork on Manila Tagalog.

2. Previous accounts of Tagalog voice

2.1. Tagalog voice basics

Tagalog syntax is crosslinguistically unusual in several regards. First, with appropriate verbal morphology, phrases ranging from core arguments to adjunct-like phrases can render the syntactic pivot of the clause and bear PIVOT-marking, giving rise to a typologically rare case pattern in (3).

		a. AV	b. PV	c. LV	d. CV
(3)	EXTERNAL ARGUMENT	PIVOT	CM ₁	CM ₁	CM ₁
	INTERNAL ARGUMENT	CM ₂	PIVOT	CM ₂	CM ₂
	LOCATIVE	P ₁	P ₁	PIVOT	P ₁
	INSTRUMENT/BENEFACCTOR	P ₂	P ₂	P ₂	PIVOT

Second, it exhibits a fluid extraction asymmetry whereby all non-pivot phrases are banned from \bar{A} extraction (relativization), known in Austronesian literature as 'PIVOT-only.' Third and most importantly, the mapping between voice and pivot selection cannot be attributed to any single condition such as the thematic role or case status of the pivot phrase; rather, it roughly reflects the relative structural height of the pivot with other arguments in the same clause: AV \rangle PV \rangle LV \rangle CV (high to low), as seen in (3). For instance, possible pivots in AV include not only agents (4a) but also themes of unaccusatives (4b); on the other hand, not all agents/external arguments can obtain pivot status under AV morphology. In AV-marked productive causatives, for example, only the causer and not the causee is eligible for PIVOT-marking (5), despite both being agentive and encoded as external arguments (see §3.2).

- | | | |
|-----|---|---|
| (4) | a. K/um/anta si Aya. | b. D/um/ating/*in si Aya. |
| | sing⟨AV⟩ PN.PIVOT Aya | arrive⟨AV⟩/*⟨PV⟩ PN.PIVOT Aya |
| | 'Aya sang.' | 'Aya arrived.' |
| (5) | Nag-pa-basa si Aya {kay/*si} | Pedro ng libro. |
| | AV-CAU-read PN.PIVOT Aya {PN.CM ₂ /*PN.PIVOT} | Pedro ID.CM ₂ book |
| | 'Aya made Pedro read a book.' | |

Given the above, any successful account of Tagalog's voice system has to answer three questions: (i) the property of PIVOT, CM₁, and CM₂, (ii) the nature of the voice affixes, and (iii) the nature/mechanism of the four-way voice alternation. In 2.2, I review previous approaches to these questions.

2.2. Two previous approaches to Tagalog voice

To answer (i)-(iii), a key question must first be clarified: are the adjunct-like pivot phrases in LV/CV clauses (e.g. (1c-d)) adjuncts or arguments? If PIVOT marks a type of structural case, then, these phrases must render as an *argument*, i.e. applied object, in LV/CV clauses. If, however, they remain as an adjunct, we can conclude that PIVOT does not mark case—given its compatibility with both arguments (3a-b) and adjuncts (3c-d). In what follows, I review two well-adopted approaches to Tagalog voice, both assuming that all pivot phrases are *arguments*.

Under the syntactically ergative approach to Tagalog, PIVOT marks absolute case from T assigned to the highest caseless DP. Accordingly, an adjunct-like pivot phrase in LV/CV clauses is an absolute-marked applied object base-generated in the highest internal argument position, from where it undergoes object shift to the VoiceP phase edge and checks absolute case. On this assumption, LV/CV morphology realizes the applicative head that introduces the pivot phrase (Aldridge 2004, 2012, 2017).

In this view (e.g. Mithun 1994; MacLachlan 1996; Aldridge 2004 2012), Tagalog's voice affixes are four *valency-indicating morphemes* that promote different types of phrases to the edge of VoiceP (6): spell-out of intransitive Voice ("AV"), spell-out of transitive Voice ("PV"), and spell-out of high applicative head ("LV/CV"). Object shift and CM₁ are assumed to be present only in PV/LV/CV clauses on assumption that all AV clauses are syntactically intransitive, lacking ergative case (CM₁) and an EPP feature on Voice (which triggers object shift) (e.g. Aldridge 2004, 2012, 2017).

(6) THE ERGATIVE APPROACH TO TAGALOG VOICE

PIVOT	ABS from T	AV AFFIX	reflex of intransitive Voice
CM ₁	ERG from transitive Voice	PV AFFIX	reflex of transitive Voice [with EPP on Voice]
CM ₂	OBL from V	LV AFFIX	reflex of HIGH APPL [with EPP on Voice]
		CV AFFIX	reflex of HIGH APPL [with EPP on Voice]

The case agreement approach to Tagalog voice argues instead that Tagalog has an accusative case system with two types of inherent cases—dative and oblique—assigned by low and high applicative, respectively (Rackowski 2002; Rackowski & Richards 2005). On this assumption, Tagalog's four voice affixes are *case agreement morphology* that inflects for four possible cases borne by the phrase occupying the VoiceP phase edge and agreeing with Voice: *nominative* (1a), *accusative* (1b), *dative* (1c), and *oblique* (1d). The proposed mechanism of voice alternation goes as follows: whenever object shift does not occur, the nominative external argument agrees with Voice, with the Agree relation realized as AV morphology; whenever object shift occurs, either an accusative object or an applied object (inherently case-licensed with dative or oblique) raises to the outer Spec, VoiceP, whose Agree relation with Voice is spelled out as PV, LV, or CV morphology, respectively. This analysis is summarized in (7).

(7) THE CASE AGREEMENT APPROACH TO TAGALOG VOICE

PIVOT	marker for the goal that agrees with Voice	AV AFFIX	Voice agreement with NOM phrase
CM ₁	NOM from T	PV AFFIX	Voice agreement with ACC phrase
CM ₂	ACC from Voice	LV AFFIX	Voice agreement with DAT applied object
		CV AFFIX	Voice agreement with OBL applied object

3. Against previous approaches to Tagalog voice

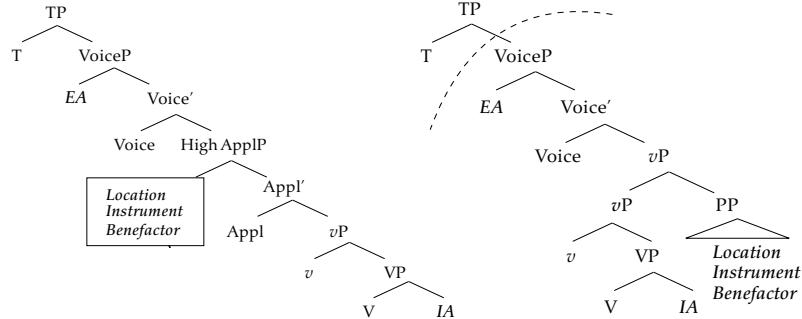
Contra the shared assumption of previous approaches (6)-(7) that the adjunct-like pivot in LV/CV clauses is an applied object, I demonstrate below that possible pivots in LV/CV clauses are not applied objects, but phrases ranging from adjuncts adjoined to VoiceP to DPs that are not the highest internal argument. Evidence for this claim comes from Tagalog's three-place constructions: clauses with an adjunct-like pivot (3.1), causatives (3.2), and ditransitives (3.3).

3.1. Transitive clauses with an adjunct-like pivot

If LV/CV morphology indeed indicates the presence of an applied object occupying the highest internal argument position, any pivot phrase in LV/CV clauses is supposed to asymmetrically c-command the theme, schematized in (8a). If, however, the pivot phrase remains as an adjunct adjoined to VoiceP,

as in (8b), a theme should be able to bind into the pivot in LV/CV clauses—as the two are in sisterhood under the same phase (Bruening 2014).

- (8) a. LV/CV PIVOT AS AN APPLIED OBJECT b. LV/CV PIVOT AS AN ADJUNCT



Quantifier-variable binding tests indicate that (8a) is untenable. As (9a-b) show, in both LV and CV clauses, a quantificational theme can bind into a pronominal pivot with the latter interpreted as a bound variable. This, contra previous assumptions, demonstrates that the pivot is not base-generated in the highest internal argument position, and may remain as an adjunct adjoined to VoiceP (8b).³

- (9) a. Ni-lutu-an=ko [ng isda ng bawat babae] [ang kanyang kawali].
PRF-cook-LV=1S.CM₁ [ID.CM₂ fish LK every woman] [PIVOT 3S.POSS pot]
'I cooked every woman's_(j) fish in her_(j/k) pot.' (LOCATIVE VOICE)
b. I-p(in)ampalo=ko [ang kanyang pamalo] [ng bawat bata].
CV-hit=1S.CM₁ [PIVOT 3S.POSS hiting.stick] [ID.CM₂ every child]
'I hit every child_(j) with their_(j/k) stick.' (CIRCUMSTANTIAL VOICE)

3.2. Productive causatives

Productive causatives provide another ideal testing ground for examining the applicative analysis of the LV/CV affixes. As seen in the table below, in Tagalog, all three arguments in a productive causative may render the pivot phrase under appropriate voice-marking. PV morphology correlates with a pivot *causee* (10b), whereas CV morphology correlates with a pivot *theme* (10c).

	a. AV	b. PV	c. CV
(10)	CAUSER	Pivot	CM ₁
	CAUSEE	CM ₂	Pivot
	THEME	CM ₂	Pivot

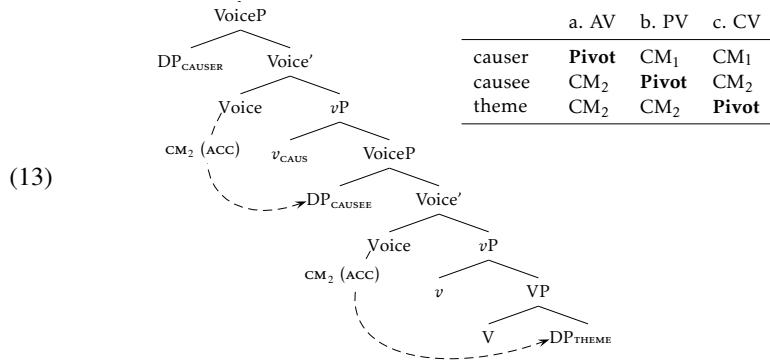
If CV morphology indeed marks a high applicative head as argued in previous work (6)-(7), a pivot-marked theme in CV-marked causatives (10c) must render as an applied object base-generated in the highest internal argument position *above* the causee. If, however, LV/CV clauses show no evidence of applicativization of the pivot phrase, as observed in §3.1, the pivot-marked theme in (10c) should remain as an internal argument—as it normally is in causative constructions across languages.

Reflexive binding tests indicate that the second hypothesis is correct. As seen in (11a-c), a causee can consistently bind into the theme regardless of voice alternation—even when the theme is PIVOT-marked under CV-morphology (11c). This is in line with the observations in §3.1 that (i) LV/CV morphology has nothing to do with applicativization of the pivot, and (ii) voice alternation in Tagalog does not correlate with argument structure alternation.

³ Rackowski & Richards (2005:578) argues for the applicative analysis of LV/CV clauses based on one CV example where a quantificational theme fails to bind into the pivot. According to my consultants, the unacceptability of that example has to do with the low frequency of the verb *bantay* ‘watch’ in CV form (*ibinatay*). According to my fieldwork, a non-pivot internal argument can freely bind into the pivot in LV/CV clauses as long as the verb allows an LV/CV form and the context is appropriate. See Chen (2017) for details. See also §3.2 and 3.3 for more evidence.

This conclusion is supported by one other observation: regardless of voice, the causee in Tagalog causatives (10a-c) behaves consistently like an external argument—rather than a *by*-phrase or an applicative phrase. This is evidenced by its compatibility with agent-oriented adverbs and the adverb of frequency ‘again,’ exemplified with the CV example (12). This indicates that the caused event in all three types of causatives (10a-c) is encoded as an independent active VoiceP with the causee introduced as its external argument, as in (13). The fact that it consistently binds into the theme regardless of voice (11a-c) follows from this analysis. Note, additionally, that the fact that CM₂-marking is available to both the external-argument causee and the internal-argument theme (see the table in (13)) lends novel support to a structural accusative analysis of this case marker (see (6)) and argues against a lexical oblique case analysis (see (7)), as lexical oblique case is assigned only to internal arguments along with θ -licensing (Woolford 2001; Aldridge 2004 *et seq.*).

- (12) I-p⟨in⟩a-li-linis=ko (ulit) kay Sue **ang** kanyang sarili (nang CV-CAU⟨PRF⟩-RED-clean=1S.CM₁ (again) PN.CM₂ Sue **PIVOT** 3S REFL (CONG palihim). secretly)
 ‘I made **Sue_k** clean herself (**again_k**) (**secretly_k**).’ (CIRCUMSTANTIAL VOICE)



3.3. Ditransitives

Just like the causatives, ditransitives provide another ideal environment for examining the applicative analysis for LV/CV clauses, where PIVOT-marking alters between different types of internal arguments following voice alternation, as seen in (14). Note, importantly, that PV morphology is not an option for ditransitives. This asymmetry will be revisited in section 5.

	a. AV	b. LV	c. CV
(14) AGENT	Pivot	CM ₁	CM ₁
RECIPIENT	CM ₂	Pivot	CM ₂
THEME	CM ₂	CM ₂	Pivot

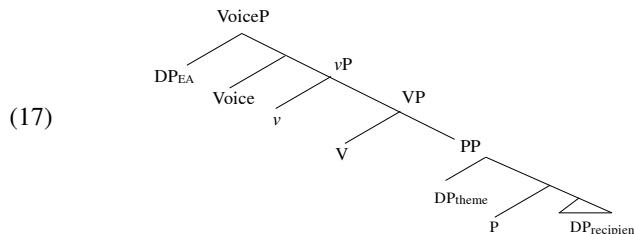
If LV/CV morphology indeed indicates applicativization of the pivot phrase as argued in previous work, the fact that PIVOT-marking falls on the *recipient* (14b) in LV-ditransitives and the *theme* (14c)

in CV-ditransitives entails that the two constructions possess distinct structures and binding relations. If, however, voice alternation between LV and CV has no impact on argument structure (as observed in §3.1-2), the binding relation between the recipient and the theme should remain the same.

Binding diagnostics indicate the second scenario is correct. As exemplified in (15)-(16), the recipient and the theme can mutually bind into each other regardless of voice alternation.

- (15) a. I-b(in)igay ni Joy kay Lia **ang** sarili niyang larawan.
CV-give-PRF PN.CM₁ Joy PN.CM₂ Lia **PIVOT self 3S.POSS picture**
‘Joy_(j) gave Lia_(k) a picture of herself_(j/k).’ (CIRCUMSTANTIAL VOICE)
I-b(in)igay=ko [sa kanilang nanay] [ang sweldo ng bawat
CV-give-PRF=1S.CM₁ [DOM.CM₂ 3P.POSS mother] [PIVOT wages LK every
manggagawa].
laborer]
‘I gave their_(j) mother every laborer’s_(j/h) wages.’ (CIRCUMSTANTIAL VOICE)
- (16) a. B(in)igy-an ni Joy si Lia **ng** sarili niyang larawan.
give-PRF-LV PN.CM₁ Joy PN.PIVOT Lia **ID.CM₂ self 3S.POSS picture**
‘Joy_(j) gave Lia_(k) a picture of herself_(j/k).’ (LOCATIVE VOICE)
b. B(in)igy-an=ko [ang kanilang nanay] [ng sweldo ng bawat manggagawa].
give-PRF-LV=1S.CM₁ [PIVOT 3P.POSS mother] [ID.CM₂ wages LK every laborer]
‘I gave their_(j) mother every laborer’s_(j/k) wages.’ (LOCATIVE VOICE)

The binding fact above suggests that Tagalog ditransitives are invariably *prepositional datives* regardless of voice, possessing a structure illustrated in (17) (e.g. Hoekstra & Mulder 1990; Den Dikken 1995; Harley 1997, 2002). This is in line with the observations in §3.1 and §3.2 that voice alternation in Tagalog is not accompanied by argument structure alternation, reinforcing the claim that the applicative approach to LV/CV morphology (6)-(7) is difficult to maintain.⁴



4. The nature of PIVOT, CM₁, and CM₂

In section 3, we have seen that possible pivots in LV/CV clauses range from adjuncts adjoined to VoiceP (8b), DPs that are not the highest internal argument (e.g. theme in productive causatives (13)), to DPs embedded inside a PP (e.g. theme in prepositional datives (17)). This, along with the invariable binding facts of these constructions regardless of voice, indicates that (i) PIVOT does not mark absolute case (or any type of structural case)—as absolute Case assignment should respect locality and be restricted to DPs, and (ii) the applicative analysis of LV/CV clauses is untenable—which undermines the shared assumption of the ergative analysis and the case agreement approach to Tagalog voice.

An important question arising from this conclusion is the nature of PIVOT, CM₁, and CM₂. Given PIVOT marker's compatibility with both arguments and adjuncts, we can first conclude that it does not mark case, and is likely to be a marker associated with informational structure status. In line with previous topic analysis of pivot phrases (Schachter 1976; Shibatani 1998; Richards 2000, Chen 2017 a.o), I argue that (i) PIVOT is a topic marker that overrides morphological case, and (ii) CM₁ and CM₂ mark nominative and accusative case, respectively. This analysis is illustrated in (18).

⁴ Other than the binding facts in (15)-(16), Tagalog ditransitives show one other hallmark of prepositional dative: the recipient slot can be occupied by an inanimate locative NP (i.e. goal) regardless of voice-marking.

	a. AV	b. PV	c. LV	d. CV
(18)	EXTERNAL ARGUMENT	NOM topic	NOM	NOM
	INTERNAL ARGUMENT	ACC	ACC topic	ACC
	LOCATIVE	P ₁	P ₁	P_T topic
	INSTRUMENT/BENEFATOR	P ₂	P ₂	P₂ topic

This analysis allows for two testable predictions: (i) pivot phrases should behave like *topics* and not *subjects*, and (ii) CM₁ should behave like nominative case (structural case from C/T). The first prediction is borne out by the binding facts shown in section 3, which indicate that pivot phrases consistently behave like topics and not subjects, manifesting reconstruction effects and being interpreted in their theta position (see (9), (11), (15)). In addition, as (19) shows, the pivot phrase in LV/CV clauses manifests Weak Crossover effects (Lasnik & Stowell 1991), in which a quantificational benefactive/instrument may bind into a theme with marginal acceptability only when it renders the pivot (topic).

- (19) I-p⟨in⟩ag-luto=ko [ang bawat bata] [ng kanilang isda].
CV-PAG⟨PRF⟩-cook=1S.CM₁ [PIVOT every child] [ID.CM₂ 3PL.POSS fish]
'I cook their_(k) fish for every_(j/?k) child.'

Consistent with the observation above that pivots behave like topics and not *subjects*, CM₁ does show the hallmarks of structural nominative case, evidenced by (i) its compatibility with both the highest external arguments and unaccusative themes (20), (ii) its distribution as unique per CP, and (iii) its unavailability to external arguments in nonfinite clauses (e.g. causee in causatives, as seen in (10)).

- (20) K⟨in⟩amatay-an {ni/*kay} Raul ang eskuwelahan.
die⟨PRF⟩-LV {PN.NOM/*PN.ACC/DAT} Raul PIVOT school
'Raul died in the school.' (LOCATIVE VOICE)

Evidence for the accusative case analysis of CM₂ can be seen in §3.2.

5. Tagalog voice as marking four bundles of Agree relations

The observations so far enable five generalizations (21a-e), supplemented with the table in (22), which outlines the mapping between voice and pivot selection noted in (21).

- (21) a. Voice-marking roughly manifests the relative structural height between the pivot and other phrases in the clause: AV > PV > LV > CV (with AV indicating that the pivot is the *highest DP*; it is, on the other hand, not conditioned by the *thematic role* or *case* of the pivot).
b. Possible pivots in AV are equivalent with *subjects* in accusative languages (e.g. external argument in unergatives/transitives; internal argument in unaccusatives) (22a).
c. Possible pivots in PV are consistently the *second highest DP* in the clause (e.g. causee in causatives; theme in simple transitives) (22b).
d. Possible pivots in LV include both locative adjuncts and the recipient/goal in prepositional datives (22c).
e. Possible pivots in CV range from DPs that are structurally low (e.g. theme in causatives), DPs embedded inside a PP (e.g. theme in prepositional dative), to adjuncts (e.g. instrument, benefactor) (22d).

- (22) MAPPING BETWEEN VOICE AND PIVOT SELECTION IN TAGALOG
- | | a. AV | b. PV | c. LV | d. CV |
|---------------|----------------------|----------------------|------------------------|-------------------------------------|
| UNERGATIVES | EA | * | PP _{locative} | PP _{benefactor/instrument} |
| UNACCUSATIVES | IA | * | PP _{locative} | PP _{benefactor/instrument} |
| TRANSITIVES | EA | IA | PP _{locative} | PP _{benefactor/instrument} |
| DITRANSITIVES | EA | * | PP _{goal} | IA _{theme} |
| CAUSATIVES | EA _{causer} | EA _{causee} | * | IA _{theme} |

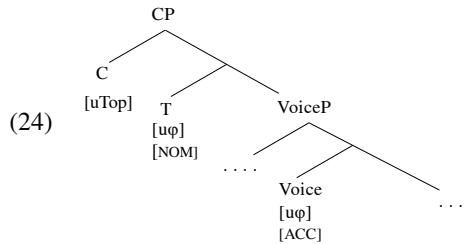
These generalizations reveal several important facts. First, the distribution of AV morphology patterns consistently with that of *subject agreement* (i.e. abstract Agree relation between [u ϕ] on T and the closest

DP), both targeting the highest DP. Second, the distribution of PV morphology patterns consistently with *object agreement* (i.e. abstract Agree relation between $[u\phi]$ on matrix Voice and the closest DP). Both target the highest DP *below* the matrix voice and are (i) unique per clause, (ii) sensitive to phase-like conditions and cannot agree with PPs, and (iii) restricted to the *causee* and not the *theme* in productive causatives (Baker 2012; Amberber 2002; Deal 2019; a.o.). Third, possible triggers of LV morphology are unitarily locative phrases, including locative adjuncts (1c) and the goal phrases in prepositional datives (14). Fourth, the trigger of CV morphology ranges from non-locative adjuncts to DPs that are not the highest below the matrix Voice.

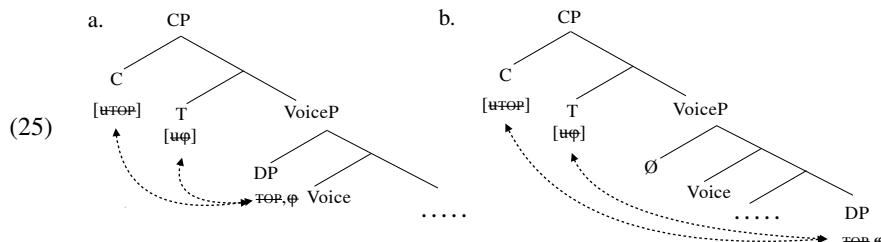
Building on these facts, I argue that Tagalog's four-way voice morphology is best analyzed as the spell-out of *four different bundles of abstract Agree relations* that probe the topic/pivot of a clause. This analysis is outlined previously in (2) and illustrated below.

	PIVOT	CONDITION
AV AFFIX	highest DP	$[uTOP]$ and $[u\phi]$ on T targeting the same goal
PV AFFIX	2nd high DP	$[uTOP]$ and $[u\phi]$ on matrix Voice targeting the same goal
LV AFFIX	locative phrase	$[uTOP]$ and $[u\phi]$ on P_{LOC} targeting the same goal
CV AFFIX	anything else	the goal of TOP-agreement not under any other Agree relation

Under (23), Tagalog constitutes a topic-prominent accusative language with a TOPIC-probe hosted in the C domain and a ϕ -probe on both T and matrix Voice, schematized in (24).

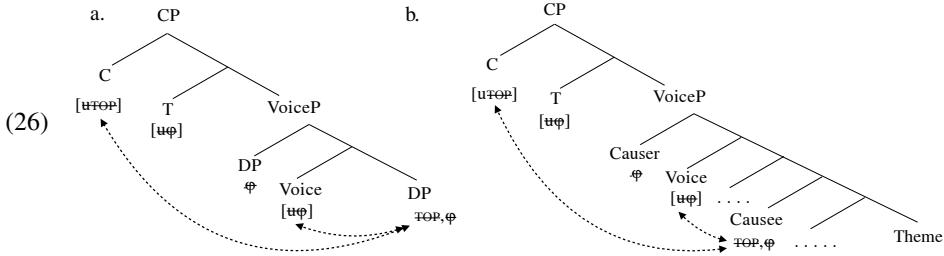


Under (24), AV morphology (i.e. spell-out of the bundle of abstract topic agreement and abstract subject agreement) indicates that the highest DP (i.e. *subject*) of a clause is simultaneously the *topic* (see (22a)). This correctly predicts that possible pivots in AV clauses are restricted to the *highest* external argument (25a) and unaccusative themes (25b), and not agentive causee in causatives (22e).

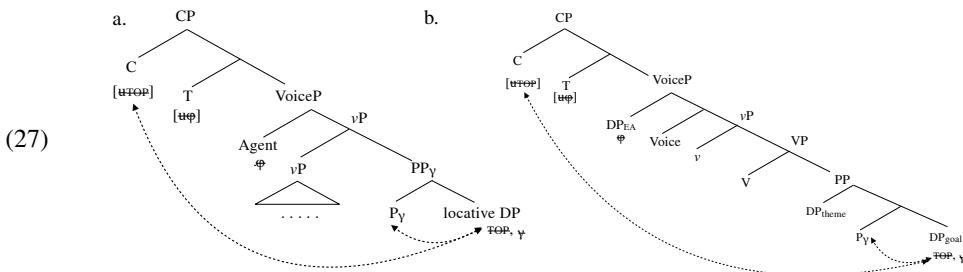


PV morphology (i.e. spell-out of the bundle of abstract topic agreement and abstract object agreement), on the other hand, indicates that the highest DP *below* the matrix Voice (i.e. goal of object agreement) is simultaneously the topic (e.g. (22a)). This analysis correctly captures two perplexing facts of Tagalog voice. First, in productive causatives, PV morphology patterns only with a pivot *causee* and not a pivot *theme* (which pairs only with CV morphology, see (22d)). Second, PV morphology is not applicable in ditransitives (see (14)).

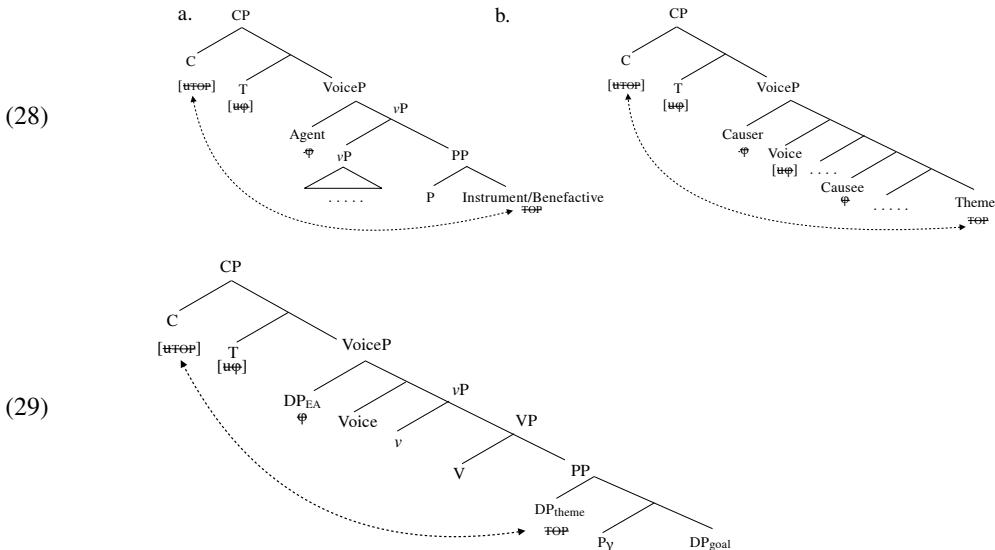
Under the current analysis, the fact that the theme in productive causatives cannot trigger PV morphology follows from the fact that it is not *the highest DP below matrix Voice*, which constitutes the only eligible trigger of object agreement across languages (Baker 2012; Deal 2019). That PV morphology is incompatible with ditransitives, on the other hand, follows from the conclusion in §3.3 that Tagalog ditransitives are prepositional datives. As both the theme and the goal in a prepositional dative are embedded inside a PP (17), they are predicted to be unable to trigger object agreement—given that object agreement cannot probe into PPs (Baker 2012).



Under the current analysis, LV morphology (i.e. spell-out of the bundle of abstract topic agreement and abstract locative agreement) indicates that the goal of [uTOP] is simultaneously the goal of a locative-selecting preposition, P_{LOC} —which agrees with its complement DP. This offers a simple account for the presence of LV morphology as consistently correlating which a pivot-marked locative phrase (see (22c)), including locative adjuncts (27a) and the goal phrase in prepositional dative (27b).



Finally, I argue that CV morphology is the spell-out of abstract topic agreement, which appears when the goal of [uTOP] is *not* under Agree relation with any other probe. This includes non-locative adjuncts (benefactor, instrument, reason, purpose) (28a), theme in productive causatives (28b) and theme in prepositional datives (29). This analysis correctly predicts that a possible trigger in CV can be any phrase that is neither the highest or second highest DP of the clause nor a locative phrase, ranging from (i) DPs that are structurally low, (ii) DPs embedded inside a PP, to (iii) non-locative adjuncts.



The present analysis successfully captures the absence of the voice-conditioned argument structure alternation in Tagalog (§3). Moreover, it reveals an under-explored syntactic variation between Western Austronesian and Western Nilotc. Both groups of languages have been reported to display topic-indicating verbal morphology and an associated Ā extraction constraint (van Urk 2015; Chen 2017; Chen & McDonnell 2019). However, while topics/pivots in Tagalog are distinct from subjects (§4), in

the Western Nilotc language Dinka, topics/pivots (i.e. triggers of verbal agreement) have been shown to functions simultaneously as the *subject* of a clause (claimed to be the outcome of [uTOP] and [uΦ] clustering on the same head), resulting in a binding parameter distinct from that in Tagalog.

6. Conclusion

In this paper, I have presented novel binding evidence showing that the crosslinguistically unusual four-way voice morphology found in Tagalog (Austronesian) is best analyzed as the spell-out of four different bundles of abstract Agree relations that target the topic of a clause, rather than valency-indicating morphology (Mithun 1994; Aldridge 2004, 2017) or case agreement morphology (Rackowski & Richards 2005). Under the current view, Tagalog constitutes a topic-prominent accusative language that shows prototypical traits of a discourse configurational language (Li & Thompson 1985; Kiss 1995; Miyagawa 2010, 2017), similar to Dinka (van Urk 2015), Kilega (Miyagawa 2010), Ripano (D’Alessandro 2020), and San Martín Peras Mixtec (Ostrove 2018).

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