The syntax of Philippine-type alignment: A bottom-up look at case-marking

Abstract

Although Philippine-type Austronesian languages display apparent hallmarks of syntactic ergativity, a closer look at the distribution of three basic case markers reveals that their ergative characteristics are only illusory. Presence of the alleged oblique case on ECM subjects and derived objects, along with its obligatory absence in restructuring infinitives, suggests that the construction traditionally analyzed as an antipassive in fact constitutes a true transitive with an accusative-licensed object. Presence of the putative inherent ergative case on unaccusative themes, along with its uniqueness per clause and sensitivity to locality, points to an alternative nominative analysis, suggesting that the extraction asymmetry found in these languages does not arise from the ban on ergative extraction. Finally, the non-local distribution of the so-called absolutive case reveals that it is a marker independent of case, in line with existing topic analyses of this marker. Accordingly, 'Philippine-type alignment' is essentially a run-of-the-mill accusative case system obscured by prominent topic-marking that overrides morphological case. This conclusion lends new support to previous accusative approaches to Tagalog (Richards 2000; Chen 2021) and Malagasy (Pearson 2001) and yields two important implications: (i) highly constrained $\bar{A}$-extraction asymmetry may be independent of syntactic ergativity, and (ii) discourse configurational languages may superficially exhibit traits of ergativity if their topic-marking is imprecisely treated as part of their case system.

Keywords: ◦ Austronesian-type alignment ◦ Philippine-type voice ◦ ergativity ◦ antipassive

Contents

1 Introduction

Despite investigations over the past five decades, the question of whether Philippine-type Austronesian languages are ergative, accusative, or typologically unique in their case alignment remains a point of contention in the literature (Blake 1925; Schachter 1976; Ramos 1974; Ramos and Bautista 1986; Gerdts 1988; Shibatani 1988; Guilfoyle, Hung and Travis 1992; Aldridge 2004; Pearson 2005; Rackowski and Richards 2005; a.o.). At the center of debate is the nature of a crosslinguistically unusual four-way argument-marking alternation attested across these languages, known in the literature as *Philippine-type alignment*.

In languages of this type, a change in verbal morphology correlates with a change in the distribution of a special marker labeled as PIVOT throughout this paper to remain analysis-neutral. As seen with the Tagalog examples in (1), with verbal morphology alternating between *Actor Voice* (AV), *Patient Voice* (PV), *Locative Voice* (LV), and *Circumstantial Voice* (CV), this marker shifts among the external argument (1a), the internal argument (1b), and different types of adjunct-like phrases (1c-d), respectively.[1] The labels CM_1 and CM_2 stand for the case-marking found on non-pivot external arguments (e.g., *ni* in (1b-d)) and non-pivot internal arguments (e.g., *ng* in (1a-d)), respectively. P_1 and P_2 represent different types of prepositions that mark non-pivot adjuncts (e.g., *para* for locatives (1c) and *mula* for benefactives (1d)).[2]

(1) Tagalog

a. B⟨**um**⟩ili si AJ ng keyk mula kay Lia para kay Joy.
buy⟨**AV**⟩ [PN.PIVOT AJ] INDF.CM_2 cake P_1 PN.CM_2 Lia P_2 PN.CM_2 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.CM_1 AJ [CN.PIVOT cake] P_1 PN.CM_2 Lia P_2 PN.CM_2 Joy
'AJ will buy the *cake* from Lia for Joy.' (PATIENT VOICE)

c. Bi-bilih-**an** ni AJ ng keyk si Lia para kay Joy.
CONT-buy-**LV** PN.CM_1 AJ INDF.CM_2 cake [PN.PIVOT Lia] P_2 PN.CM_2 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.CM_1 AJ INDF.CM_2 cake P_1 PN.CM_2 Lia [PN.PIVOT Joy]
'AJ will buy cake from Lia for *Joy*.' (CIRCUMSTANTIAL VOICE)

The pivot-marked phrase is syntactically privileged, as evidenced by a special Ā-extraction constraint: for a phrase to be relativized, it must be indicated as the pivot through the use of appropriate voice morphology. This is seen in (2), where relativization of the agent (2a), theme (2b), locative (2c), or benefactive (2d) is obligatorily accompanied by the use of AV, PV, LV, or CV, respectively – analogous to the mapping between voice and pivot selection observed in (1). Mismatch between voice type and the extracted phrase results in ungrammaticality.[3]

(2) Tagalog

a. Actor Voice

[1] List of abbreviations: AV: Actor Voice; CM: case marker; CN: common noun; CONJ: conjunction; CONT: contemplated aspect; CV: Circumstantial Voice; DEF: definite; DOM: differential object marking; INDF: indefinite; LV: Locative Voice; P: preposition; PV: Patient Voice; PN: personal name; PRF: perfective; RED: reduplication; REFL: reflexive.

[2] In Tagalog, pivot-marking further distinguishes between common nouns (*ang*) and personal names (*si*). See footnote 13 for the complete case paradigm of the language. In some Philippine-type languages such as Malagasy, pivot status is indicated by word order.

[3] This widely adopted generalization in the Austronesian literature sets aside several possible types of non-pivot extraction in Tagalog, which are beyond the scope of this paper. See Hsieh (2020) for details.

Sino ang [$_{RC}$ b**<um>**ili/{***-in/*-an/*i-**} ng keyk]?
who PIVOT [$_{RC}$ buy**<AV>/{*PV/*LV/*CV}** INDF.CM$_2$ cake]
'*Who* is the one that bought cake?' (relativization of agent)

b. Patient Voice

Ano ang [$_{RC}$ bi-bilih-**in/{*<um>/*-an/*i-}** ni Aya]?
what PIVOT [$_{RC}$ CONT-buy**-PV/{*AV/*LV/*CV}** PN.CM$_1$ Aya
'*What* is the thing that Aya will buy?' (relativization of theme)

c. Locative Voice

Nasaan ang [$_{RC}$ bi-bilih**-an/{*<um>/*-in/*i-}** ni Aya ng keyk]?
where PIVOT [$_{RC}$ CONT-buy**-LV/{*AV/*PV/*CV}** PN.CM$_1$ Aya INDF.CM$_2$ cake]
'*Where* will be the place where Aya will buy cake?' (relativization of locative)

d. Circumstantial Voice

Sino ang [$_{RC}$ **i-**bi-bili/{***<um>/*-in/*-an**} ni Aya ng keyk]?
who PIVOT [$_{RC}$ **CV-**buy/{***AV/*PV/*LV**} PN.CM$_1$ Aya INDF.CM$_2$ cake]
'*Who* is the one that Aya will buy cake *for*?' (relativization of benefactive)

To clarify the case alignment of these languages, the nature of the three basic markers – Pivot, CM$_1$, and CM$_2$ – must first be examined. Their distribution in prototypical Philippine-type languages is defined in (3) and illustrated in (4). All three markers are reconstructable to Proto-Austronesian or a stage immediately after its split (when the Philippine-type alignment inherited by later descendants first emerged). See Blust (2015) and works cited there for an overview.

(3) Three basic markers that form Philippine-type alignment
   a. Pivot: the morphological marking on the sole phrase in a clause eligible for Ā-extraction
   b. CM$_1$: the morphological marking on non-pivot external arguments (e.g., *ni* in (1))
   c. CM$_2$: the morphological marking on non-pivot internal arguments (e.g., *ng* in (2))[4]

(4) Philippine-type alignment: schematized case pattern[5]

	a. AV	b. PV	c. LV	d. CV
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/benefactor	P$_2$	P$_2$	P$_2$	**Pivot**

In the Austronesian literature, pivot-marking is commonly glossed as 'nominative' or 'absolutive,' CM$_1$ as 'ergative' or 'genitive,' and CM$_2$ as 'accusative' or 'oblique.' Due to a lack of in-depth investigations of basic constructions in these languages, however, the nature of these markers remains obscure. This has resulted in a common practice of adopting analysis-neutral labels for these markers, such as NOM for pivots, GEN for non-pivot agents, and OBL for non-pivot themes, whose

[4]In modern Tagalog, *ng* also marks non-pivot external arguments that are common nouns. This is the result of secondary case syncretism and a CM$_1$/CM$_2$ distinction remains intact in Tagalog's proper name and pronominal paradigm. The purpose of this table is to indicate the prototypical case distinctions attested in morphologically conservative Philippine-type languages (as well as Tagalog's proper name pronominal case distinctions). See also footnote 12 for Tagalog's complete case paradigm and specific notes on the distribution of *ng*.

[5]To the best of my knowledge, Philippine-type languages typically employ a dedicated preposition for locative adjuncts, hence the distinction between P$_1$ and P$_2$. In some languages, P$_2$ may have more than one form, which differentiates different types of non-locative adjuncts. For the purpose of the paper I schematize all these prepositions as P$_2$.

actual case value remains opaque. Although this approach effectively avoids theoretical controversies, it has also increased obstacles for crosslinguistic comparisons and misunderstandings among non-Austronesionists. Furthermore, although many have questioned the ergative view of Philippine-type alignment (see, e.g., Shibatani 1988; Richards 2000; Paul and Travis 2006; Foley 2008; Chen 2017; Erlewine et al. 2017), Philippine-type Austronesian languages continute to be commonly cited as examples of syntactic ergativity in recent typological studies. This highlights the need to better understand Philippine-type alignment through an in-depth investigation of the three basic markers introduced above.

In this paper, I show that a comparative look at new data from four Philippine-type languages offers a renewed perspective on this debate: Philippine-type alignment is neither ergative nor typologically unique, but a run-of-the-mill accusative case system obscured by prominent topic-marking that overrides morphological case. Its apparent traits of syntactic ergativity are only illusory. Using novel data from Tagalog, Puyuma, Amis, and Seediq as the empirical starting point, I demonstrate that CM_1 and CM_2 exhibit common hallmarks of nominative and accusative case, respectively, and that 'pivot' is a marker independent of case and associated with topichood. I also discuss how this conclusion is supported by secondary data from other Philippine-type languages. This conclusion thus not only indicates that Philippine-type alignment is not as typologically unique as previously thought, but also reinforces the importance of approaching conventional glosses and assumptions with caution.

Except where otherwise indicated, the data presented in this paper come from primary fieldwork on Manila Tagalog, Nanwang Puyuma, Central Amis, and Tgdaya Seediq, through elicitation and grammaticality judgement tests over the period of 2015 to 2022. Each of the four languages belongs to a different higher-order branch of Austronesian (Blust 1999; Ross 2009; Blust and Chen 2017). Their shared syntax is therefore informative for understanding the prototypical design of Austronesian-type alignment.[6] For the purpose of this paper, we set aside further formal distinctions within each marker, such as inflections for definiteness or nominal type (e.g., common noun vs. personal name) and focus on the three-way case distinction (Pivot/CM1/CM_2) observed in morphologically conservative Philippine-type languages. As will be shown in this paper, comparative data reveal surprising uniformity in the distribution of these three markers across Philippine-type languages, allowing for a unitary analysis of the nature of Philippine-type alignment.

The remainder of this paper is structured as follows. Section 2 reviews key assumptions of the three competing analyses. Sections 3 and 4 present new evidence for the nature of CM_1 and CM_2, drawing on data on previously understudied syntactic environments. Section 5 discusses the non-local distribution of pivot-marking and presents new evidence that this marker is best analyzed as a topic marker. Section 6 summarizes and concludes.

2 Austronesian-type alignment: Three competing approaches

Philippine-type alignment, also known as 'Austronesian-type alignment' in earlier works, is found across morphosyntactically conservative Austronesian languages distributed in Taiwan, the Philippines, northern Borneo, northern Sulawesi, and Madagascar. Key traits associated with this alignment are summarized in (5).[7]

(5) Key traits of Austronesian-type alignment

[6] Under the most widely-adopted subgrouping (Blust 1999), each of these languages belongs to a distinct primary branch. Under Ross's (2009) subgrouping, these languages still represent two of the four Austronesian primary branches. The shared case pattern of the languages may therefore be considered prototypical and reconstructable to their shared common ancestor.

[7] This definition expands on Erlewine et al.'s (2017) and Chen and McDonnell's (2019) definitions of Philippine-type voice.

a. A syntactically pivotal phrase: In each finite clause, one phrase is designated the syntactic pivot and realized in a particular morphological form and/or structural position, regardless of its original grammatical function, case, or thematic role.

b. Articulated verbal morphology: The four-way affixal morphology on the verb changes based on the choice of the pivot, with the option of taking certain non-core phrases as pivots.

c. One-to-many mapping between voice and pivot selection: The voice-marking of a clause is not conditioned simply by the case or thematic role of the pivot but is subject to a complex mechanism reflecting both the grammatical relation and the relative structural height of the pivot (see (9)).

d. Marking of non-pivot phrases: Non-pivot phrases carry a fixed case-marking depending on their grammatical relation.

e. Fluid extraction restriction: Ā-extraction (relativization, including pseudo-clefting) is limited to the pivot phrase of a given clause (see (2)).

The four voice types function generally like paraphrases. Common triggers of split alignment, such as TAM or DP type distinctions, do not exist among the four voice types.

Although the exact mechanism that drives Philippine-type alignment remains a point of contention, all agree that the mapping between voice choice and pivot selection is not conditioned by any single factor, but, instead, reflects a complex hierarchy sensitive both to the structural height of the pivot (as relative to the other arguments in the clause) and to the thematic role of the pivot (when the pivot is not a core argument selected by the verb). This is illustrated in (6): AV morphology can pick up either an agent (in unergatives/two-place constructions) or an unaccusative theme as the pivot (6a). At the same time, unaccusative themes, unlike transitive themes, cannot be picked up as the pivot in PV (6b). This reflects the lack of one-to-one correlation between voice type and the thematic role of the pivot. See Rackowski (2002) and Chen (2017) for a detailed discussion. The table in (7) summarizes the argument-marking pattern in five basic constructions and its correlation with voice alternations.

(6) Tagalog

a. { K⟨**um**⟩anta / d⟨**um**⟩ating } **si** **Aya**.
{ sing⟨AV⟩ / arrive⟨AV⟩ } **PN.PIVOT** **Aya**
'Aya {sang / arrived}.' (Actor Voice)

b. *D⟨**in**⟩ating **si** **Aya**.
arrive⟨**PV**⟩ **PN.PIVOT** **Aya**
(intended: 'Aya arrived.') (Patient Voice)

(7) Mapping between voice and case in basic constructions

	a. AV					b. PV				
	unergative	unaccusative	transitive	causative	ditransitive	unergative	unaccusative	transitive	causative	ditransitive
initiator/causer	Pivot	–	Pivot	Pivot	Pivot	*	*	CM1	CM1	CM1
locative	P1	P1	P1	–	–	*	*	P1	–	–
benefactor/instrument	P2 / CM2	P2 / CM2	P2 / CM2	P2 / CM2	P2 / CM2	*	*	P2 / CM2	–	–
causee	–	–	–	CM2	–	*	*	–	–	Pivot
recipient	–	–	–	–	CM2	*	*	–	–	Pivot
theme	–	Pivot	CM2	CM2	CM2	*	*	Pivot	CM2	CM2

	c. LV					d. CV				
	unergative	unaccusative	transitive	causative	ditransitive	unergative	unaccusative	transitive	causative	ditransitive
initiator/causer	CM1	CM1	CM1	*	CM1	CM1	CM1	CM1	CM1	CM1
locative	Pivot	Pivot	Pivot	*	–	–	–	–	–	–
benefactor/instrument	–	–	–	*	–	Pivot	Pivot	Pivot	–	–
causee	–	–	–	*	–	–	–	–	CM2	–
recipient	–	–	–	*	Pivot	–	–	–	–	CM2
theme	–	–	CM2	*	CM2	–	–	CM2	Pivot	Pivot

As is well-known, this four-way alignment has received three competing analyses, the basic assumptions of which are summarized in (8).

(8)

	Pivot-marking	**CM_1**	**CM_2**
a. Ergative view	absolutive case	ergative case	oblique case
b. Accusative view	topic-marking	nominative case	accusative case
c. Symmetrical voice view	subject-marking	(not specified)	(no speficied)

Under the ergative view (8a), voice alternation indexes *argument structure alternation*, promoting phrases of different types to the absolutive. In this view, 'pivot' marks the absolutive, and the 'pivot-only' constraint in Ā-extraction (2) is essentially an 'absolutive-only' restriction, according to which Philippine-type Austronesian languages manifest syntactic ergativity. CM_1, which commonly appears on non-pivot agents, marks ergative case, and the case-marking on AV objects (CM_2) marks oblique case (Payne 1982; De Guzman 1988; Gerdts 1988; Mithun 1994; Aldridge 2004 et seq.; a.o.). A key assumption of this approach is therefore that Philippine-type voice alternation indexes *transitivity alternation*, in a way similar to Indo-European-type active-passive alternation. Details of this analysis are introduced in section 2.1.

(9) The ergative approach to Austronesian-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	**ABS**	ERG	ERG	ERG
internal argument	OBL	**ABS**	OBL	OBL
locative	P_1	P_1	**ABS**	P_1
instrument/benefactor	P_2	P_2	P_2	**ABS**

Under the accusative view (8b), voice alternation indexes *a change in topic selection*, whereby 'pivot' is a topic marker obligatory for finite clauses and one that overrides morphological case and prepositions. In this view, Philippine-type languages possess an ordinary accusative case system: the case-marking on non-pivot agents is the nominative (CM_1), and that on non-pivot themes is the accusative (CM_2). Accordingly, Philippine-type Austronesian languages are discourse configurational languages in the sense of Li and Thompson (1976): their verbal morphology known as a 'voice' system is essentially topic-indicating Ā-agreement morphology hosted in the left periphery (see Richards 2000, Pearson 2001, 2005, and Chen 2017, 2021 for this line of analysis). This approach is summarized in (10).

(10) The accusative approach to Austronesian-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	~~NOM~~ **Topic**	NOM	NOM	NOM
internal argument	ACC	~~ACC~~ **Topic**	ACC	ACC
locative	P_1	P_1	~~P_1~~ **Topic**	P_1
instrument/benefactor	P_2	P_2	P_2	~~P_2~~ **Topic**

Under the symmetrical voice view (8c), the Philippine-type argument-marking alternation constitutes *a typologically unique type of case alignment* characterized by four traits (11) (Foley 2008; Himmelmann 2005a; Reisberg 2014).

(11) a. Voice alternation: presence of at least two voice alternations marked on the verb.
b. Lack of an unmarked verbal form: none of the alternating constructions identifiably the 'basic' or 'underlying' construction.

c. Fluid subjecthood: the ability of non-subcategorized participants like locatives or instrumentals to freely assume pivot or subject status via their unique voice marking affixes.

d. Pre-categorical roots: dependent relationship between symmetrical voice and pre-categorical roots.

With this background in mind, below I outline key assumptions of these three competing approaches.

2.1 The ergative and the split ergative approaches to Philippine-type alignment

2.1.1 The ergative approach

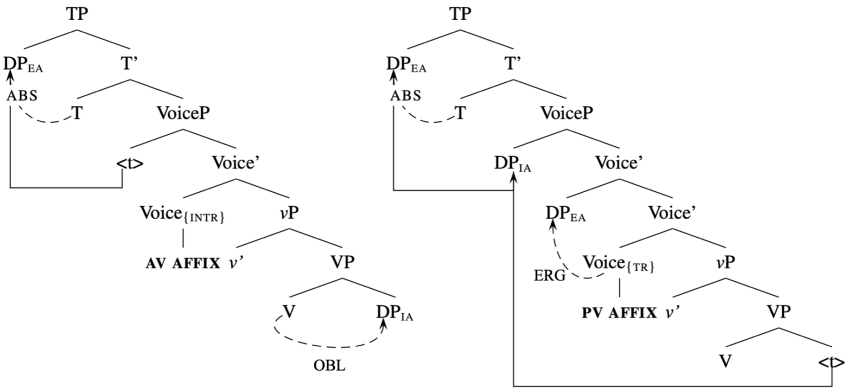
The ergative approach to Philippine-type alignment relies on one central assumption: 'pivot' marks absolutive case available to four types of argument: (a) intransitive subjects, (b) transitive objects, and (c) two types of applied objects.[8] Under this approach, the AV construction is an antipassive; the PV construction is the basic transitive; the LV and CV constructions are two types of applicative of transitives where an applied object functions as the primary object (Payne 1982; Mithun 1994; Aldridge 2011, 2012, 2016 et seq.; a.o.). This proposed case system is outlined in (12).

(12) The ergative approach to Austronesian-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	**Pivot: ABS**	ERG	ERG	ERG
internal argument	OBL	**Pivot: ABS**	CM_2: OBL	OBL
locative	P_1	P_1	**ABS**	P_1
instrument/benefactor	P_2	P_2	P_2	**ABS**
	intransitive / antipassive	basic transitive	transitive applicative	transitive applicative

The alleged transitivity split between AV and non-AV clauses is attributed to the flavor of Voice employed in each construction: an AV affix realizes an intransitive Voice head, which contrasts with a transitive Voice head (assumed to be realized as a PV affix) in two regards: (i) presence or absence of an EPP feature, and (ii) the ability to inherently case-license the external argument.[9] The proposed case-licensing pattern in these two constructions is schematized in (13).

(13) a. Actor Voice b. Patient Voice



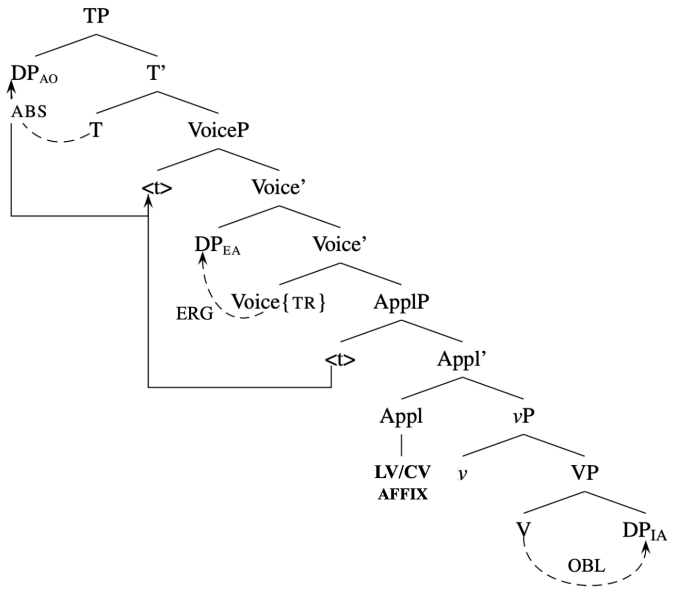
[8] Aldridge (2004) proposes two subtypes of ergativity within Philippine-type languages: T-type / high absolutive, where the source of pivot-marking (absolutive case) is unitarily T, and *v*-type / low absolutive, where the source of absolutive case splits between T and transitive Voice depending on the transitivity of the clause. This distinction was eliminated in her later works (2016, 2017) and will not be discussed in this paper.

[9] Aldridge does not distinguish between Voice and *v* in her series of work. I do implement this distinction (Pylkkänen 2002; Alexiadou et al. 2006; Harley 2013) throughout this paper and adjust the terminology used by Aldridge to reflect the Voice/*v* distinction.

Without an EPP feature on Voice, the internal argument in AV remains within VP and receives oblique case from V along with θ-assignment. The external argument checks absolutive case with T, as in (13a). In PV, the internal argument undergoes object shift to the outer specifier of VoiceP, where it further moves to Spec, TP and checks absolutive case. The external argument is inherently case-licensed by transitive Voice, as in (13b).

LV/CV constructions are claimed to be two types of high applicative constructions.[10] The pivot phrase is an applied object base-generated in the highest internal argument position, where it is eligible for object shift and accessible to absolutive case (14), similar to PV objects.

(14) Case-licensing in LV/CV constructions



Key assumptions of this analysis are summarized in (15). An implicit assumption of this analysis is that transitive Voice head is overtly spelled out only in PV clauses and is phonologically null in LV/CV.

(15) The ergative approach to Austronesian-type alignment

Argument-marking		Voice morphology	
Pivot	ABS from T	AV affix	reflex of intransitive Voice (with no EPP)
CM1	ERG from transitive Voice	PV affix	reflex of transitive Voice (with EPP)
CM2	OBL from V	LV affix	reflex of High Appl head (with EPP on a null transitive Voice head)
		CV affix	reflex of High Appl head (with EPP on a null transitive Voice head)

2.1.2 The split ergative approach

In recent years, several researchers have argued that a subset of Philippine-type languages possess a split ergative system. This alleged split lies between AV and the three non-AV (PV/LV/CV) clauses – AV as accusative-aligned, and the non-AV constructions as ergative-aligned. Aldridge (2008), for example, argues that some Formosan languages have shifted from a purely ergative system to a split ergative system, which is why their AV construction allows definite objects. See also Chang (1997) and Teng (2016) for a similar proposal for specific Formosan languages.

[10] It is unclear in the ergative literature how these two constructions differ in nature. Both are claimed to possess a high ApplP that introduces the pivot phrase.

Under this approach, CM_2 and 'pivot' realize two distinct cases in AV and non-AV environments. Pivot-marking marks nominative case in AV and absolutive case in non-AV constructions. CM_2, which consistently appears on non-pivot internal arguments, is claimed to mark accusative case in AV and oblique case in non-AV clauses. This analysis is illustrated in (16). The ban on internal argument extraction in AV clauses (2a) is assumed to be an independent constraint.

(16) The split ergative approach to Austronesian-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	**Pivot: NOM**	CM_1: ERG	CM_1: ERG	CM_1: ERG
internal argument	CM_2: ACC	**Pivot: ABS**	CM_2: OBL	CM_2: OBL
locative	P_1	P_1	**Pivot: ABS**	P_1
instrument/benefactive	P_2	P_2	P_2	**Pivot: ABS**

2.2 The accusative approach to Austronesian-type alignment

The accusative approach to Austronesian-type alignment holds a distinct view – 'pivot' is a marker of information structure status (topic), and the fluid extraction asymmetry does not manifest an extraction constraint, but an agreement-like mechanism that indexes the grammatical role of the Ā-extracted phrase (Chung 1994, 1998; Pearson 2005; Chen 2017; Erlewine et al. 2017). Despite differences in details among authors, the consensus has been that CM_1 and CM_2 realize nominative and accusative case, respectively; both cases are overridden by pivot/topic-marking, resulting in the apparently fluid case pattern observed in (3). This analysis is illustrated in (17)–(18).

(17) The accusative approach to Austronesian-type alignment[11]

	a. AV	b. PV	c. LV	d. CV
external argument	~~NOM~~ **Topic**	NOM	NOM	NOM
internal argument	ACC	~~ACC~~ **Topic**	ACC	ACC
locative	P_1	P_1	~~P_1~~ **Topic**	P_1
instrument/benefactor	P_2	P_2	P_2	~~P_2~~ **Topic**

(18) The accusative approach to Austronesian-type alignment

Argument-marking		Voice morphology	
Pivot	topic-marking	AV affix	topic agreement / extraction morphology with subject
CM1	NOM from T	PV affix	topic agreement / extraction morphology with DO
CM2	ACC from Voice	LV affix	topic agreement / extraction morphology with locative phrase
		CV affix	topic agreement / extraction morphology with none of the above

2.3 The symmetrical voice approach to Austronesian-type alignment

Yet a third line of analyses maintains that Austronesian-type alignment constitutes a unique type of alignment (Foley 2008:42), allowing four different mappings between semantic roles and syntactic positions. A key assumption of this approach is that none of the four voices is the default structure. Each is a non-derived construction featuring a subject with a different thematic role. In this view, Philippine-type Austronesian languages are non-configurational languages by default, whose configurationality is determined by voice type – each of which allows a specific subject-predicate relation,

[11] Despite slight differences among authors, a shared view among the accusative approaches is that the so-called 'voice' morphology found in Philippine-type languages is essentially not valency-indicating morphology encoded within VoiceP, but Ā-agreement or extraction morphology hosted high in the left periphery. See Pearson (2001, 2005) and Chen (2017, 2021) for details. See also Erlewine et al. (2017) for a similar approach, and Chen and Fukuda (2021) for a specific claim for Puyuma.

in which adjunct-like phrases such as instrument and benefactor are allowed to be introduced as the subject. This analysis is summarized in (19).

(19) The symmetrical voice approach to Philippine-type alignment

Argument-marking		Voice morphology	
Pivot	subject-marking	AV affix	agent subject construction
CM1	(unaddressed)	PV affix	theme subject construction
CM2	(unaddressed)	LV affix	locative subject construction
		CV affix	instrumental/benefactive subject construction

Although built in a non-generative framework, this approach can be evaluated with two central predictions: if this approach is on the right track, the pivot-marked phrase should behave like a subject in various regards, and the binding relation between the pivot phrase (the alleged subject) and other phrases in the clause should differ among the four voices.

Below I evaluate the key assumptions of the three competing approaches (20), drawing on new data from Tagalog, Puyuma, Amis, and Seediq and existing descriptions from other Philippine-type languages.

(20)

	Pivot-marking	CM_1	CM_2
a. Ergative approach	absolutive case	ergative case	oblique case
b. Accusative approach	topic marker	nominative case	accusative case
c. Symmetrical voice approach	subject marker	(unspecified)	(unspecified)

3 Is Philippine-type Actor Voice an antipassive?

Clarifying the status of CM_2 (i.e., the case-marking on AV objects) is crucial for a better understanding of Philippine-type alignment. If the AV-PV case alternation ((21), exemplified in (22)) indeed shows ergative patterning, the alleged absolutive case ('pivot') must be shared between intransitive subjects (S) and transitive objects (O). This analysis thus relies crucially on the premise that AV clauses are syntactically intransitive. Accordingly, AV clauses are claimed to be antipassives that contain non-structurally case-licensed oblique objects (Payne 1982; Mithun 1994; Liao 2004; Aldridge 2004 et seq.).

(21)

	a. Actor Voice	b. Patient Voice
external argument	*Pivot*	CM_1
internal argument	**CM_2**	*Pivot*

(22) Tagalog

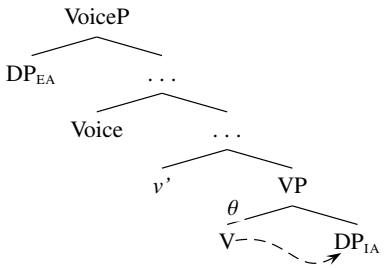
a. K**<um>**urot si kyla **kay** **juan**.
<AV>pinch PN.PIVOT Kyla **PN.CM2** **Juan**
'Kyla pinched Juan.' (Actor Voice)

b. K**<in>**urot ni kyla **si** **juan**.
<PV.PRF>pinch PN.CM_1 Kyla **PN.PIVOT** **Juan**
'Kyla pinched Juan.' (Patient Voice)

If, however, CM_2 marks accusative case, the intransitive view of AV constructions would not hold. The claimed ergative patterning between S and O will therefore fail to be maintained.

Oblique case and accusative case can be distinguished in specific environments. Although both commonly mark internal arguments, only the former is licensed in Head-Complement relation along with θ-assignment (Aldridge 2004 et seq.; Woolford 2006; Bobalijk 2008) (23). This predicts that oblique case can only appear on internal arguments that are θ-licensed locally.

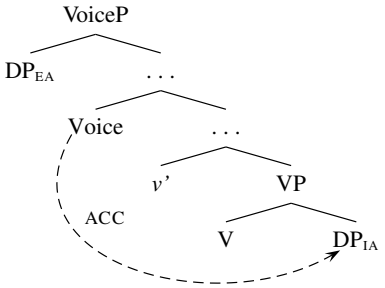
(23) Oblique case assignment



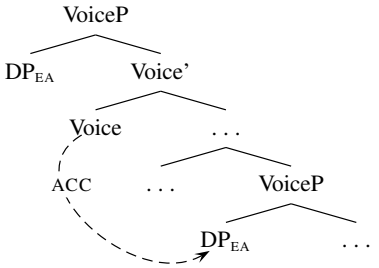
Accusative case, on the other hand, is assigned by the semi-functional head, Voice, and can be licensed either through the Head-Complement relation (24a) or via the Head-Specifier relation across the VoiceP boundary (24b) to a nonfinite embedded external argument – a configuration known as *Exceptional Case Marking* (ECM; Chomsky 1981, 1986). Accusative case can therefore appear on non-internal arguments. Furthermore, since accusative-licensing is not associated with θ-assignment, an accusative argument need not be θ-licensed by the local verb.

(24) Two patterns of accusative case assignment

a. Head-Comp licensing



b. Head-Spec licensing (ECM)



In this section, I show that a closer look at CM_2's distribution in productive causatives (ECM environments) (3.1), raising-to-object constructions (non-thematic argument positions) (3.2), and restructuring infinitives (3.3) reveals common hallmarks of accusative case. The data from these constructions therefore provide novel evidence against the ergative view of Philippine-type alignment.

3.1 CM_2 on causees (ECM subjects)

The oblique case view of CM_2 predicts that CM_2 can never appear on ECM subjects. A closer look at productive causatives show that this prediction is false.

Across Philippine-type Austronesian languages, CM_2 consistently appears on the causee in AV-marked productive causatives, alongside AV objects in simple clauses. Such CM_2-marked causees, as will be shown in this subsection, are located precisely in an ECM position where only structural accusative case and not lexical oblique case is available (24b). The availability of CM_2 in this position therefore indicates that CM_2 marks accusative and not oblique case.

Let us begin with Tagalog. As already reported in previous work (Schachter and Otanes 1972; Latrouite 2011), CM_2 is the shared case-marking for AV objects (the alleged antipassive objects)

and causees in AV-marked causatives. This is seen in (25), where the personal-name CM_2-marking *kay* appears on both the AV object and the causee. Although this causee shows agentive behaviors, it cannot carry CM_1-marking (*ni* for personal names) commonly found on non-pivot agents. Before proceeding, notice also that the theme of the caused event, 'cat', also carries obligatory CM_2-marking (25b), as do AV objects in simple clauses. See footnote 12 for Tagalog's full case paradigm.

(25) Tagalog[12]

a. H<um>abol si Aya { **kay** **Maria** / ng pusa }.
AV-chase PN.PIVOT Aya { **PN.CM_2** **Maria** / INDF.CM_2 cat }
'Aya chased {*Maria*/a cat}.'

b. Nag-pa-habol si Aya **kay** **Maria** ng pusa.
AV.PRF-CAU-chase PN.PIVOT Aya **PN.CM_2** **Maria** INDF.CM_2 cat

[12]Tagalog's full case paradigm is presented below:

(i)

	Common noun	Personal name	1SG	1PL (EXCL./INCL.)	2SG	2PL	3SG	3PL
Pivot	*ang*	*si*	*=ako*	*=kami/=tayo*	*=ikaw*	*=kayo*	*=siya*	*=sila*
CM_1	*ng*	*ni*	*=ko*	*=namin/natim*	*=mo*	*=ninyo*	*=niya*	*=nila*
CM_2	*ng* (indf.), *sa* (def.)	*kay*	*sa akin*	*sa amin/sa atin*	*sa iyo*	*sa inyo*	*sa kanya*	*sa kanila*

In the common noun series, the morphological distinction between CM_1 and CM_2 is partially lost (i.e., when the internal argument is marked with the indefinite marker *ng* – as this marker is synchronically homophonous with CM_1-marking for common nouns). Nevertheless, the CM_1/CM_2 distinction remains intact in the personal name series (*ni* vs. *kay*).

Some researchers have glossed *sa* and *kay* as 'dative,' for the reason that they also mark locative/recipient phrases. This treatment is, however, misleading as these markers also appear on the patient of high-transitive verbs (typical accusative positions). See Schachter and Otanes (1972) and Himmelmann (2005b) for relevant discussions. In such cases, *ng*, *sa*, *kay* function as parallel case-marking, differentiating between definiteness/specificity and nominal type (i.e., common noun (*ng/sa*) vs. personal name *kay*). This is illustrated with the examples in (iia-b). See Himmelmann (2005b) for a relevant discussion on SA as the marker for patient arguments.

(ii) Possible object-marking for Tagalog AV clauses

a. B<um>isita si Juan { ng hari / sa hari / kay Maria / sa kaniya }.
<AV>visit PN.PIVOT Juan { INDF.CM_2 king / DEF.CM_2 king / PN.CM_2 Maria / DEF.CM_2 3PL.CM_2 }
'Juan visited { the king / a king / Maria / them }.'

b. K<um>ilatis si Maria { ng pusa / sa pusa / kay Juan / sa akin }.
<AV>examine PN.PIVOT Maria { INDF.CM_2 cat / DEF.CM_2 cat / PN.CM_2 Juan / DEF.CM_2 1SG.CM_2 }
'Maria examined { a cat / the cat / Juan / me }.

That such *sa/kay*-marked phrases are a core object of the bivalent verb is evidenced by the fact that they can be picked up as the pivot in PV. Consider (iiia-b) and (iva-b).

(iii) AV/PV alternation with a *sa/kay*-marked object shifting to pivot status (cf. (ii))

a. B<in>isita ni Juan { ang hari / si Maria / =siya }.
<PV.PRF>VISIT PN.CM_1 Juan { PIVOT king / PN.PIVOT Maria / =3PL.PIVOT }
'Juan visited { the king / Maria / them }'.

b. K<in>ilatis ni Maria { ang pusa / si Juan / =ako }.
PV.PRFexamine PN.CM_1 Maria { PIVOT cat / PN.PIVOT Juan / =1SG.PIVOT }
'Maria examined { the cat / Juan / me }.'

(iv) AV/PV alternation in causatives with a *sa/kay*-marked causee shifting to pivot status

a. Nag-pa-habol si Aya { **sa** aso / **kay** **Maria** } ng pusa.
AV.PRF-CAU-chase PN.PIVOT Aya { **DEF.CM_2** **dog** / **PN.CM_2** **Maria** } INDF.CM_2 cat
'Aya made { the dog / *Maria* } chase a cat.'

b. P<in>a-habol ni Aya { **ang** **aso** / **si** **Maria** } ng pusa.
<PV.PRF> PN.CM_1 Aya { **PIVOT** **dog** / **PN.PIVOT** **Maria** INDF.CM_2 cat
'Aya made { the dog / Maria } chase a cat.'

See Latrouite (2011, 2018) for a discussion of how *sa* and *kay* function as differential object marking in three-place constructions. All three works cited above as well as the data collected from primary fieldwork suggest that *sa* and *kay* can mark core arguments/objects. I therefore label *sa* and *kay* as 'CM_2' where they mark the object of a bivalent verb.

'Aya made *Maria* chase a cat.'

The same case pattern is observed in Puyuma (26), Amis (27), and Seediq (28), where CM_2 is also found on causees and the themes in AV-marked causatives, alongside its mandatory presence on the internal argument of AV-marked simple clauses.[13]

(26) Puyuma[14]

a. Saletra'=ku { **kan Senten / kanku=walak** }.
<AV>slap=1SG.PIVOT { **SG.CM_2 Senten / 1SG.POSS.CM_2=child** }
'I slapped {*Senten*/my child}.'

b. ∅-pa-dirus=ku **kan Senten** kanku=walak.
AV-CAU-bath=1SG.PIVOT **SG.CM_2 Senten** 1SG.POSS.CM_2child
'I made *Senten* wash my child.'

(27) Amis[15]

a. Mi-lawup kaku **ci-Sawmah-an** inacila.
AV-chase 1SG.PIVOT **PN-Sawmah-CM_2** yesterday
'I chased *Sawmah* yesterday.'

b. ∅-pa-pi-lawup kaku **ci-Sawmah-an** ci-Panay-an inacila.
AV-CAU-PI-chase 1SG.PIVOT **PN-Sawmah-CM_2** PN-Panay-CM_2 yesterday
'I made *Sawmah* chase Panay yesterday.'

(28) Seediq[16]

a. Q<m><n>ita { ∅ **Iwan** / ∅ **roduc nii** } ka Pawan.
<AV><PRF>see { **CM_2 Iwan** / **CM_2 chicken this** } PIVOT Pawan
'Pawan saw {*Iwan*/this chicken}.'

b. ∅-p-hanguc=ku ∅ **Iwan** ∅ roduc nii.
AV-CAU-cook=1SG.PIVOT **CM_2 Iwan** CM_2 chicken this
'I made *Iwan* cook this chicken.'

[13]Puyuma, Amis, and Seediq all impose a specific phonotactic constraint that bans bilabial sequences. This triggers null AV morphology in causatives: *pa-* (causative prefix *pa-* + AV infix **) (Robert Blust pers. commun.). That the zero-marked causatives in (26)-(28) are AV-causatives is evidenced by their shared argument-marking pattern with the Tagalog example (25b), which bears an overt AV affix *nag-* with a non-bilabial onset.

[14]See below Puyuma's full case paradigm. All three markers (pivot, CM_1, CM_2) are further distinguished for definiteness. In both common noun and personal name series, the CM_1/CM_2 distinction is manifested by the presence or absence of the proclitic *tu=*. See Teng (2008) for details.

(i)

	Common noun	Personal name	1SG	1PL (EXCL./INCL.)	2SG	2PL	3SG	3PL
Pivot	*a* (indf.), *na* (def.)	*i*	*=ku*	*=mi/ta*	*=yu*	*=mu*	–	–
CM_1	*tu=... dra* (indf.), *tu=... kana* (def.)	*tu=... kan*	*ku=*	*niam=/ta=*	*nu=*	*mu=*	*tu=*	*tu=*
CM_2	*dra* (indf.), *kana* (def.)	*kan*	*kanku*	*kaniam*	*kanu*	*kanemu*	*kantu*	*kantu*

[15]See below Amis's full case paradigm. For further description of its case system, see Wu (2006).

(i)

	Common noun	Personal name	1SG	1PL (EXCL./INCL.)	2SG	2PL	3SG	3PL
Pivot	*ku*	*ci*	*kaku*	*kami/kita*	*kisu*	*kamo*	*cingra*	*caira, cangra*
CM_1	*nu*	*ni*	*aku*	*niyam/mita*	*isu*	*namo*	*nira*	*mira*
CM_2	*tu*	*ci-...-an,*	*takuwanan*	*kaminan/kitanan*	*tisuwanan*	*tamoanan*	*cingranan*	*cairaan, cangraan*

[16]See below Seediq's case paradigm. For further description of its case system, see Sung (2018).

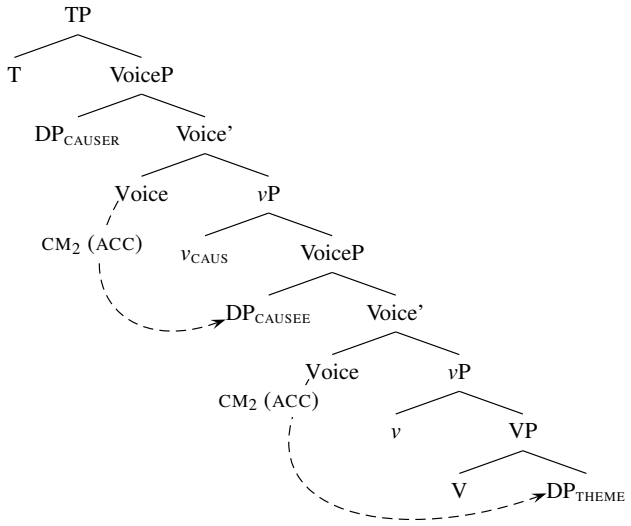
(i)

	Common noun	Personal name	1SG	1PL (EXCL./INCL.)	2SG	2PL	3SG	3PL
Pivot	*ka*	*ka*	*=ku*	*=nami/=ta*	*=su*	*=namu*	–	–
CM_1	*na*	*na*	*=mu*	*nami/ta*	*=su*	*=namu*	*=na*	*=daha*
CM_2	∅	∅	*yaku*	*yami/ita*	*isu*	*yamu*	*heya*	*dheya*

Presence of CM_2 on causees casts strong doubt on the oblique case view of this marker. Lexical oblique case is predicted to be available only to internal arguments that are θ-licensed locally. A causee (in any type of causative construction) is neither an internal argument nor θ-licensed by the matrix verb. The data above thus suggest that CM_2 has a wider distribution than that expected for oblique case, and is likely to realize structural accusative Case.

Results of three standard diagnostics confirm that the CM_2-marked causee is indeed in a structural position where only accusative case and not lexical oblique case is available – the specifier of an active embedded VoiceP – a position eligible for matrix accusative case via ECM-licensing. This attested bi-eventive causative structure is schematized in (29) (Folli and Harley 2007; Escamilla 2012; Legate 2014).

(29) Bi-eventive causatives



The structure of (29) provides a straightforward account for CM_2-marking on both the causee and the theme in causatives – with both the matrix and the embedded Voice head capable of accusative-licensing, the causee is predicted to be eligible for matrix accusative case (via ECM-licensing), whereas the theme is free to receive accusative case from the embedded Voice (via Head-Complement licensing). Several researchers have independently made the same observation for Tagalog causatives (Maclachlan 1996; Travis 2000; Rackowski 2002), but did not use it as an argument against the oblique case analysis of CM_2.

Consider, firstly, data on quantifier-variable binding test. Across the four languages, the causee in an AV-causativee is free to bind a pronoun embedded inside the theme (30). This suggests that the causee is indeed located in a structural position that c-commands the theme, as expected for the structure in (29).

(30) Quantifier-variable binding between causee and causand in AV-causatives

a. Nag-pa-basa ako **sa bawat estudyante** ng kanyang=libro.
AV.PRF-CAU-read 1SG.PIVOT **DEF.CM_2 every student** INDF.CM_2 3PL.POSS=book
'I asked every student$_{<i>}$ to read his/her$_{<i/j>}$ book.' (Tagalog)

b. ∅-pa-deru=ku **kana taynaynayan driya** kantu=kuraw.
AV-CAU-cook=1SG.PIVOT **SG.CM_2 mother.PL every** 3.POSS.CM_2=fish
'I asked every mother$_{<i>}$ to cook her$_{<i/j>}$ fish.' (Puyuma)

c. ∅-pa-pi-tangtang kaku **tu cimacima a ina** tu titi nangra.
AV-CAU-PI-cook 1SG.PIVOT **CM_2 every LK mother** CM_2 pork 3PL.POSS
'I will ask every mother$_{<i>}$ to cook her$_{<i/j>}$ pork.' (Amis)

d. ∅-p-hanguct=ku ∅ **knkingal bubu** ∅ sari=daha.
AV-CAU-cook=1SG.PIVOT **CM_2 every mother** CM_2 taro=3PL.POSS
'I asked every mother$_{<i>}$ to cook her$_{<i/j>}$ taro.' (Seediq)

Such causees' compatibility with agent-oriented adverbs (e.g., 'secretly,' 'severely,' and 'independently') confirms that they indeed behaves like an agentive external argument. Consider (31a–d).[17]

(31) Compatibility of agent-oriented adverbs with the causee in AV-marked causatives

a. Nag-pa-nakaw=ako kay ivan nang **palihim** ng keyk.
AV.PRF-CAU-steal=1SG.PIVOT PN.CM_2 Ivan CONJ **secretly** INDF.CM_2 cake
'I asked Ivan to steal the cake secretly.' (Ivan did so secretly) (Tagalog)

b. ∅-pa-pukpuk=ku kan siber **pakireb** kana suwan.
AV-CAU-hit=1SG.PIVOT SG.CM_2 Siber **severely** DEF.CM_2 dog
'I asked Siber to hit the dog severely.' (Siber did so severely) (Puyuma)

c. ∅-pa-pi-tangtang kaku ci-panay-an t-una futing **pina'un**.
AV-CAU-PI-cook 1SG.PIVOT PN.CM_2-Panay CM_2-that fish **carefully**
'I will ask Panay to cook the fish carefully.' (Panay did so carefully) (Amis)

d. ∅-p-sais=ku ∅ akin **murux** ∅ lukus.
AV-CAU-sew-1SG.PIVOT CM_2 Akin **independently** CM_2 clothes
'I asked Akin to sew the clothes independently.' (Akin did so independently) (Seediq)

Together, these two diagnostics rule out a passive (32a) and a monoclausal analysis (32b) for AV-causatives. The former contains a causee *by*-phrase unable to bind the theme (contra (30)) and the

[17]The agent-oriented adverbs in (31a-d) behave like genuine adverbs. They cannot stand alone as a predicate and require a co-occurring lexical verb. Furthermore, such causee-modifying adverbs cannot license voice alternation, unlike some sentence-initial adverbs that modify the matrix agent. Finally, in constructions that lack an agent, their presence yields ungrammaticality (consider, for example, the grammaticality contrast between an active sentence (ia) and the Puyuma antiagentive construction (ib), where an agent-oriented adverb cannot be present). We can therefore assume that these adverbs are a valid diagnostic for clarifying the agentivity of the causee in causatives.

(i) a. (✓**Tremakatrakaw**) **m**-ekan na ngiyaw kana kuraw.
(**secretly.AV**) **AV-**eat DEF.PIVOT cat DEF.ACC fish
'The cat ate the fish (secretly).' (two-place active clause)

b. (***Trakatrakaw**) **m-u**-ekan na kuraw.
(**secretly.AV**) **AV-DETR**-eat DEF.PIVOT fish
'The fish was eaten (*secretly).' (anti-agentive construction)

A causee-modifying adverb is typically right-adjacent to the causee. In Amis and Tagalog, however, they can also appear in the sentence-final position (see also Kroeger 1991:147 for a discussion of Tagalog adverbs' flexibility in linear order). In Puyuma and Seediq, the preferred order is causee – cause-modifying adverb – theme. In Amis, the most natural position is sentence-final, as allowed also in Tagalog. Importantly, all four languages draw a distinction in linear order to distinguish between causer- and causee-modifying adverbs. For considerations of space, this is illustrated with the Tagalog examples in (iia-b). As seen below, nonambiguous causer-modifying reading is available when the adverb immediately follows the causer. Where the adverb appears after the causee, the default interpretation is the causee-modifying reading, as seen in (31a).

(ii) a. Nag-pa-kaen=ako [nang palihim] kay Aya ng babuy.
AV.PRF-CAU-eat=1SG.CM_1 [CONJ secretly] PN.CM_2 Aya INDF.CM_2 pig
'I secretly made Aya eat the pork.' (The request was made secretly)

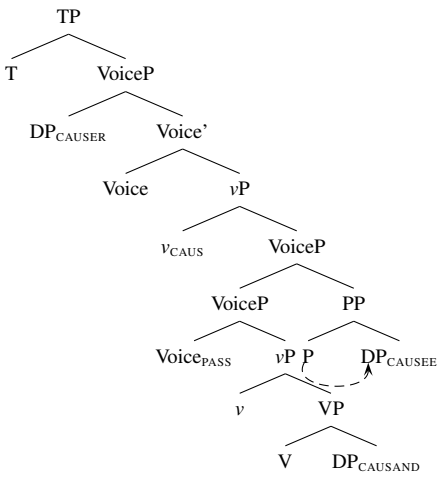
b. Nag-pa-tayo=ako [nang mag-isa] kay AJ ng bahay.
AV.PRF-CAU-build=1SG.CM_1 [CONJ independently] PN.CM_2 AJ INDF.CM_2 house
'I independently asked AJ to build the house.' (The request was made alone/independently)

An anonymous reviewer asked about the status of the *nang*-marked adverbs in Tagalog (e.g., *nang palihim* 'secretly'). To the best of my knowledge, the assumption in previous works is that such adverbs are structurally licensed. Kroeger (1991: 140) and Latrouite (Latrouite 2011:21) both note that *nang* is the obligatory linker for introducing verb-modifying adverbs. See also Rackowski (2002) for relevant examples. That *nang* does not introduce an embedded clause is evidenced by such adverbs' flexibility in linear order.

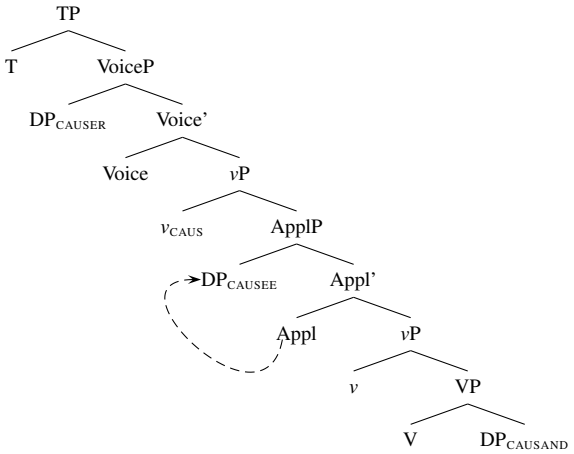
latter a non-agentive causee predicted to be incompatible with agent-oriented adverbs (contra (31)) (see Folli and Harley 2007 and Legate 2014 for a discussion of monoclausal causatives).

(32) Two types of causatives with a non-agentive causee

a. Causee licensed as a *by*-phrase



b. Causee licensed as an ApplP



The current analysis is reinforced by a third observation – in all four languages, the caused event of AV-causatives can be independently modified by the adverb of frequency 'again' and yields the reading of the causee was requested by the causer to conduct a certain action again, as seen in (33a–d).[18] This eliminates the monoclausal structure (32b), reinforcing the conclusion above that the causative construction under consideration is bi-eventive with the caused event encoded in an independent VoiceP.

(33) Compatibility of the adverb of frequency 'again' with the caused event in AV-marked causatives

[18] Across the four languages, 'again' appears in a different linear position when modifying the causing event. For consideration of space, this is exemplified with the Puyuma and Tagalog examples (i)-(ii).

(i) Tagalog

a. Nag-(pa)-pa-kanta **ulit** ako kay Aya ng kanta.
AV-(RED)-CAU-sing **again** 1SG.PIVOT PN.CM_2 Aya INDF.CM_2 song
'I (once again) asked Aya to sing a song.' (The requested was made again)

b. Nag-pa-kanta=ako **(ulit)** kay Aya **(ulit)** ng kanta **(ulit)**.
AV-CAU-sing=1SG.PIVOT **(again)** PN.CM_2 Aya **(again)** INDF.CM_2 song **(again)**
'I asked Aya to sing a song again.' (Aya was requested to sing the song one more time)

(ii) Puyuma

a. **Masal**=ku pa-uka kan Senten i Kalingku.
again=1SG.PIVOT AV-CAU-go PN.CM_2 Senten LOC Kalingku
'I asked Senten to go to Kalingku again.' (The request was made again)

b. Ku=pa-uka-aw i Senten **masal** m-uka i Kalingku.
1SG.CM_1=CAU-go-PV PN.PIVOT Senten **again** AV-go LOC Kalingku.
'I made Senten go to Kalingku again.' (Senten was asked to make a second visit)

Pronominal clitics in Puyuma obligatorily climb to negators and adverbs. It is therefore unsurprising that the adverb of frequency 'again' can host the first-person clitic. Similar to Puyuma and Tagalog, the scope of 'again' in Amis and Seediq can be differentiated by linear order.

The reading of the sentences above was elicited using the contact language (Mandarin for Puyuma/Amis/Seediq and English for Tagalog). Consultants were asked to translate the Mandarin causative sentences that contain the modifier 'again,' with a clarification note that 'again' is meant to describe the causing event (e.g., 'Senten was asked to pay her second visit to Kalingku'). The example provided was then replicated with 5 to 10 parallel sentences in the target language, when the exact reading of 'again' was double-checked with the consultants.

a. Nag-pa-kanta=ako kay Aya **ulit** ng kanta.
AV-CAU=1SG.CM_1 PN.CM_2 Aya **again** INDF.CM_2 song
'I asked Aya to sing a/the song again.' (Aya did so again)

b. ∅-pa-base=ku kan Senten **masal** kana kiping.
AV-CAU-wash=1SG.PIVOT SG.CM_2 Senten **again** DEF.CM_2 clothes
'I asked Senten to wash the clothes again.' (Senten did so again) (Puyuma)

c. ∅-pa-pi-tangtang kaku ci-Afan-an **heca** t-una tali.
AV-CAU-PI-cook 1SG.PIVOT PN-Afan-CM_2 **again** CM_2-that taro
'I will ask Afan to cook the taro again' (Afan will do so again) (Amis)

d. ∅-p-hanguc=ku ∅ Temi **dungan** ∅ rodux.
AV-CAU-cook=1SG.PIVOT CM_2 Temi **again** CM_2 chicken
'I asked Temi to cook the chicken again.' (Temi did so again) (Seediq)

To conclude, all three diagnostics indicate that the CM_2-marked causee is an external argument introduced in the specifier of the embedded VoiceP – a position where only accusative case and not oblique case is available. See Maclachlan (1996), Travis (2000), and Rackowski (2002) for the same bi-eventive analysis for Tagalog causatives. CM_2's distribution in productive causatives thus lends novel support to the accusative analysis of this marker and against the oblique case analysis.

Note, importantly, that shared CM_2-marking between causees and AV objects is found across at least 16 other Philippine-type languages, with no exception attested: Atayal, Bikol, Botolan Sambal, Bunun, Cebuano, Ida'an Begak, Ilocano, Kavalan, Muna, Paiwan, Saisiyat, Thao, Tsou, Yami, and Itbayaten. These languages belong to various higher-order branches of Austronesian, suggesting that a unitary accusative analysis for CM_2 is possible.[19]

3.2 CM_2 on derived objects

A second environment ideal for evaluating the oblique case view of CM_2 is the raising-to-object construction. In many Austronesian languages, complex sentences introduced by a knowledge/perception verb allow an embedded phrase to optionally surface in the matrix object position, as in (34). I refer to this construction as 'raising-to-object' (RTO) and the apparent raised phrase as the 'derived object' (in the sense that the object is not thematically linked to the matrix verb) without committing to a raising analysis.

(34) Madurese

a. Siti ngera [ja' dokter juwa mareksa **Hasan**].
Siti AV.think [C doctor DEM AV.examine **Hasan**]
'Siti thinks that the doctor examined *Hasan*.'

b. Siti ngera **Hasan** [ja' dokter juwa mareksa *aba'eng*].
Siti AV.think **Hasan** [C doctor DEM AV.examine *he*]
'Siti thinks about $Hasan_i$ that the doctor examined him_i.' (Davies 2005:653)

Across Philippine-type Austronesian languages, the case-marking of the derived object (e.g., 'Hasan' in (34b)) is dependent on the matrix voice. Matrix AV correlates with a CM_2-marked derived object; where the matrix voice shifts to PV, the object must be pivot-marked – as must the object

[19] Sources of data: Amis (see also T Chen 2019), Atayal (Huang 2005), Bikol (Mintz 1971), Botolan Sambal (Antworth 1979), Bunun (Zeitoun 2000), Cebuano (Tanankingsing 2009). Ida'an Begak (Goudswaard 2005), Ilocano (Silva-Corvalán 1978), Muna (van den Berg 1989), Thao (Jian 2018), Yami (Rau and Dong 2006), Itbayaten (Yamada 2014), Botolan Sambal (Antworth 1979), Puyuma (see also Kuo 2015), Kavalan (Don-yi Lin pers.c.), Seediq (see also Holmer 1999), Paiwan (Chang 2006), Saisiyat (Yeh 2000), Tagalog (see also Travis 2000 and Rackowski 2002), Tsou (Lin 2010).

in ordinary bivalent clauses, as in (35). This analogous case pattern is observed across Tagalog (36), Puyuma (37), Amis (38), and Seediq (39).[20]

(35)

	internal argument in simple clause	derived object in RTO
Matrix AV	CM_2	CM_2
Matrix PV	Pivot	Pivot

(36) Tagalog

a. **Um**-aasa ako [na mai-pasa **ni** **juan** ang exam].
AV-hope 1SG.PIVOT [C PV.SUBJ-pass **PN.CM_1** **Juan** CN.PIVOT exam].
'I hope that *Juan* will pass the exam.'

b. **Um**-aasa ako **kay** **juan**$_i$ [na ma-i-pasa niya$_i$ ang exam].
AV-hope 1SG.PIVOT **PN.CM_2** **Juan$_i$** [C PV.SUBJ-pass 3SG.CM_{1i} CN.PIVOT exam].
'I hope that *Juan* will pass the exam.' (CM_2 on derived objects)

c. **Um**-apak si Maria **kay** **juan**.
AV-step.on PN.PIVOT Maria **PN.CM_2** **Juan**
'Maria stepped on *Juan*.' (CM_2 on AV objects in simple clauses)

(37) Puyuma

a. **Ma**-lradram=ku [dra m-uka **i** **Isaw** i Balangaw adaman].
AV-know=1SG.PIVOT [C AV-go **SG.PIVOT** **Isaw**$_i$ LOC Balangaw yesterday]
'I know that Isaw went to Balangaw yesterday.'

b. **Ma**-lradram=ku **kan** **Isaw**$_i$ [dra m-uka ***(e.c.)***$_i$ i Balangaw adaman].
AV-know=1SG.PIVOT **SG.CM_2** **Isaw**$_i$ [C AV-go ***(e.c.)***$_i$ LOC Balangaw yesterday]
'I know that *Isaw* went to Balangaw yesterday.' (CM_2 on derived objects)

c. **Ma**-ladram=ku **kan** **Isaw**.
AV-know=1SG.PIVOT **SG.CM_2** **Isaw**
'I know Isaw.' (CM_2 on AV objects in simple clauses)

(38) Amis

a. **Ma**-fana' kaku [∅ mi-sakilif **ci-Sawmah** ci-Kulas-an].
AV-know 1SG.PIVOT [C AV-lie **SG.PIVOT-Sawmah** PN-Kulas-CM_2]
'I know that Sawmah lied to Kulas.'

b. **Ma**-fana' kaku **ci-Sawmah-an**$_i$ [∅ mi-sakilif ***(e.c.)***$_i$ ci-Kulas-an].
AV-know 1SG.PIVOT **PN-Sawmah-CM_2** [C AV-lie ***(e.c.)***$_i$ PN-Kulas-CM_2]
'I know that *Sawmah* lied to Kulas.' (CM_2 on derived objects)

c. **Ma**-fana' kaku **ci-Sawmah-an**.
AV-know 1SG.PIVOT **PN-Sawmah-CM_2**
'I know Sawmah.' (CM_2 on AV objects in simple clauses)

(39) Seediq (Truku)

a. **Me**-'isug=ku [∅ s<m>ipaq ∅ huling=mu **ka** **Imi**].
AV-fear=1SG.PIVOT [C <AV>hit CM_2 dog=1SG.POSS **PIVOT** **Imi**]
'I fear that Imi will hit my dog.'

b. **Me**-'isug=ku ∅ **Imi**$_i$ [∅ s<m>ipaq ∅ huling=mu ***(e.c.)***$_i$].
AV-fear=1SG.PIVOT **CM_2** **Imi**$_i$ [C <AV>hit CM_2 dog=1SG.POSS ***(e.c.)***$_i$]
'I fear that *Imi* will hit my dog.' (CM_2 on derived objects)

[20]The embedded clauses in all these examples are finite CPs, evidenced by non-restricted voice-marking and aspect-marking unavailable in infinitives, as well as by an obligatory complementizer in languages like Puyuma.

c. **Me**-'isug=ku ∅ **Imi**.
AV-fear=1SG.PIVOT **CM_2** **Imi**
'I am afraid of Imi.' (CM_2 on AV objects in simple clauses)

CM_2's obligatory presence on derived objects provides strong evidence against the lexical oblique case view of this marker. Since lexical case is licensed along with θ-assignment, this entails that the CM_2-marked derived object is θ-licensed by the matrix verb. This implication contradicts the basic assumption of all existing analyses of RTO, that the derived object bears no thematic relation with the matrix verb. In a raising analysis (40a), the derived object is base-generated in the embedded clause and θ-licensed by the embedded verb. It is therefore infelicitous to assume the object to be θ-licensed again by the matrix verb. In a base-generated analysis (40b), the in-situ derived object is standardly analyzed as lacking thematic identity with the matrix verb (see, e.g., Higgins 1981; Potsdam and Runner 2001; Davies 2005) and is typically licensed by structural (accusative) case (e.g, Middle Dutch: van Koppen and de Vries 2016) or introduced by a preposition (e.g., Madurese: Davies 2005; Sundanese: Kurniawan 2012).

(40) a. Type I RTO: the derived object undergoes ($\bar{A}$) movement from the embedded clause
$C \ldots V_{\text{knowledge/perception}} \ldots \underline{\text{derived object}_i}$ $[_{CP}\ C \ldots V \ldots <t_i>\ ]$

b. Type II RTO: the derived object is base-generated in its spell-out position
$C \ldots V_{\text{knowledge/perception}} \ldots \underline{\text{derived object}_i}\ [_{CP}\ C \ldots V \ldots \text{pronoun}_i\ ]$

Crucially, as standardly assumed, such objects are not θ-licensed by the matrix verb, as knowledge/perception verbs are assumed to not allow a three-place θ-grid as in (41).

(41) $V_{\text{knowledge/perception}} <x_{\text{agent}}, y_{\text{theme}}, z_{\text{derived object}}>$

Theoretical issues surrounding the analysis in (41) are as follows. First, it requires an independently motivated lexical entry that licenses three θ-roles. Second, the alleged thematic role on the XP is difficult to classify. To avoid this undesirable θ-grid, it is standardly assumed in the literature that the derived object in RTO constructions of this type is a non-thematic argument (e.g., Higgins 1981; Potsdam and Runner 2001; Davies 2005; Salzmann 2017; Wurmbrand et al. 2021, a.o.).

The accusative case analysis of CM_2, on the other hand, offers a straightforward account for the shared CM_2-marking between AV objects and the derived object in RTO. Since accusative case assignment is independent of θ-licensing, an accusative analysis for CM_2 is compatible with either a base-generation or movement analysis of RTO. Presence of CM_2 in this position therefore reinforces the conclusion from 3.1 and 3.2 that it realizes structural accusative case.[21]

According to existing descriptions, all 13 Philippine-type languages reported to have an RTO construction display obligatory CM_2-marking for the derived object whenever the matrix verb is in

[21] An anonymous reviewer noted that the apparent CM_2-marking on the derived objects could be a case assigned by a silent preposition, which is by accident homophonous with accusative case (and therefore has no value for clarifying the nature of CM_2 in simple AV clauses). There are two reasons to think that this possibility is not very high. First, since the actual morphological form of CM_2 varies across Philippine-type languages, the chance that all these languages adopt a prepositional case homophonous with the accusative is low. Furthermore, if such objects are licensed by a prepositional case, we would expect an overt preposition to be possible for a language like Tagalog, which is rich in prepositions. Second, in Philippine-type languages, prepositional phrases usually cannot be selected as the pivot in PV, whereas the derived objects are free to bear pivot-marking when the matrix voice is in PV (see (35) and Law (2011) and Chen and Fukuda (2016) for specific examples). This suggests that the CM_2 shown on the derived objects is more likely to be an ordinary case-marking, as in simple AV clauses.

AV.[22] Given the incompatibility of oblique case with derived objects, the accusative analysis for CM_2 may extend beyond Puyuma, Amis, Seediq, and Tagalog. See also the table in (60) for a summary of the current finding.

3.3 Absence of CM_2 in restructuring infinitives

A third environment informative for distinguishing the accusative case from oblique case is in restructuring infinitives. As is well-known, accusative case is unavailable in infinitival complements where a Voice layer is absent or defective (Aissen and Perlmutter 1976, 1983; Rizzi 1978, 1982; Wurmbrand 2001 et seq.; Cinque 2004). Absence of the local accusative case licensor drives long-distance case licensing, resulting in matrix voice-dependent case-marking on the embedded object. This is exemplified with the examples below from Kannada. As (42a–b) show, changing the matrix voice from active to passive correlates with obligatory nominative-marking on the object. This indicates that the source of accusative case in (42a) is matrix Voice.

(42) Kannada (Dravidian)

a. Jaananu-∅ [**hosa mane-(y)annu** kaTT-al(u)] shurumaaDid-anu.
John-NOM [**new house-ACC** build-INF] started-3SG.M
'John started to build the house.'

b. **Hosa mane(y)u-∅** (jaanan-inda) [__ kaTT-al(u)] shurumaaD-alpaTT-itu.
new house-NOM (John-by) [__ build-INF] started-PASS-3SG.N
'A house was started to be built (by John).' (Agbayani and Shekar 2007:10)

Unlike accusative case, oblique case should be consistently available in restructuring infinitives, as it is assigned by the lexical verb. Long-distance case-licensing for the embedded object should therefore not occur.

Contra this prediction, CM_2 is unavailable in restructuring infinitives, reinforcing the conclusion from 3.1 that CM_2 shows typical traits of structural accusative case. Restructuring infinitives in Philippine-type languages are characterized by clitic climbing, absence of an embedded complementizer, and TAM-deficiency (T. Chen 2010; C. Wu 2012; I. Wu 2011; Kroeger 2014; Wurmbrand 2014; Chang 2017; V. Chen 2017). These characteristics are exemplified with data from Puyuma. As (43a) shows, the pronominal clitic *yu* obligatorily surfaces in the matrix clause even though it is the object of the embedded verb. The embedded verb cannot take aspect or mood inflections, and the infinitive is incompatible with the complementizer *dra* obligatorily present in finite CP complements (see 3.2 for relevant examples).

(43) Puyuma[23]

a. Tu_i=talam-ay=*(yu) kan Isaw [(*dra) sabana(*=yu)].
3.CM_1=try-LV[PV]=*(2SG.PIVOT) SG.CM_1 $Isaw_i$ [(*C) <AV>cheat/(*=2SG.PIVOT)]
'Isaw tried to cheat you.' (obligatory clitic climbing)

b. Talam i Isaw [(*dra) deru/*da-deru dra patraka].
try<AV> SG.PIVOT Isaw [(*C) <AV>cook/*<AV>RED-cook INDF.CM_2 meat]
'Isaw tried to cook/*was cooking the meat.' (TAM deficiency)

[22] Sources of data: Amis (Liu 2011; Chen and Fukuda 2016), Atayal (Liu 2011), Bunun (Zeitoun 2000a), Cebuano (Davies 2005), Kavalan (Chang 2000), Malagasy (Paul and Rabaovololona 1998; Pearson 2001), Paiwan (Chang 2006; Wu 2012), Pazeh (primary data), Puyuma/Seediq (Chen and Fukuda 2016), Saisiyat (Yeh 2000), Tagalog (Law 2011), Tsou (Liu 2011).

[23] In Puyuma, a number of verbs that take a PV case frame carry LV morphology. This is known as PV-LV syncretism (Blust and Chen 2017). To avoid unnecessary confusion, such verbs are glossed as LV[PV].

Infinitives of this type feature a special voice-marking constraint known as 'AV-only,' in which Actor Voice is the only possible voice-marking on the verb, as in (44) (T. Chen 2010; I. Wu 2011; Kroeger 2014; Wurmbrand 2014; Chang 2017).

(44) Puyuma: the 'AV-only' constraint on restructuring infinitives

a. Tu$_i$=talam-ay kan senten$_i$ [$_{INF}$ sabana/*tu=sabana-aw i
3.CM$_{1i}$=try-LV[PV] SG.CM$_1$ Senten$_i$ [$_{INF}$ <AV>cheat/*3.CM$_1$=cheat-PV SG.PIVOT
sawagu].
Sawagu]
'Senten tried to cheat Sawagu.'

b. Talam i senten [$_{INF}$ sabana/*tu=sabana-aw kan sawagu].
try<AV> SG.PIVOT Senten [$_{INF}$ <AV>cheat/*3.CM$_1$=cheat-PV SG.CM$_2$ Sawagu]
'Senten tried to cheat Sawagu.'

Like the Kannada examples in (42), the case-marking of the embedded object is dependent on the matrix voice type. When the matrix verb is in AV, the embedded internal argument carries CM_2; when the matrix verb is in PV, the internal argument must be pivot-marked. This is schematized in (45) and illustrated in (46).

(45)

	internal argument in simple clause	object inside a restructuring infinitive
matrix AV	CM_2	CM_2
matrix PV	Pivot	Pivot

(46) Absence of CM_2 in restructuring infinitives

a. Puyuma

Ku=talam-ay [$_{INF}$ (*dra) sabana' { **i/*kan** } **Apeng**].
1SG.CM$_1$=try-LV[PV] [$_{INF}$ (*C) <AV>cheat { **SG.PIVOT/*SG.CM$_2$** } **Apeng**].
'I tried to cheat Apeng.'

b. Amis

Tanam-en aku [$_{INF}$ mi-tangtang { **k-una/*t-una** } **titi**].
try-PV 1SG.CM$_1$ [$_{INF}$ AV-cook { **PIVOT-that/*CM$_2$-that** } **pork**]
'I will try to cook that pork.'

c. Seediq

Ququ-un=mu [$_{INF}$ m-imah { **ka/*∅** } **sino nii**].
try-PV=1SG.CM$_1$ [$_{INF}$ AV-drink { **PIVOT/*CM$_2$** } **alcohol this**]
'I will try to drink this alcohol.'

As a lexical case licensor is available inside the embedded infinitives, the fact that CM_2 is unavailable inside the AV-marked restructuring infinitive undermines the lexical oblique case view of this case marker. This suggests that the presence or absence of this case is dependent on that of Voice, and not V, offering direct evidence that CM_2 realizes accusative case.

The matrix-dependent case-marking on the object in AV-marked infinitives is attested across 15 Philippine-type Austronesian languages reported to have a restructuring construction (Wurmbrand 2014).[24] The accusative case analysis for CM_2 can therefore extend beyond the current target languages.

[24]Tagalog does not exhibit infinitives of this type. Nevertheless, its CM_2-marking shows accusative behaviors in other environments, as reported above in sections 3.1 and 3.2.

3.4 Further evidence against the antipassive approach to Philippine-type Actor Voice

Other than CM_2's accusative behaviors, AV constructions' non-trivial differences from antipassives also argue against the intransitive approach to Actor Voice. In what follows, I revisit key traits of antipassives and their absence in Philippine-type Actor Voice. An antipassive is defined by four traits (47a–d) (Dixon 1979, 1994; England 1988; Cooreman 1994; Heaton 2017; Polinsky 2017).

(47) a. The underlying transitive object is marked by a non-core case or an adposition.
b. Explicit morphology on the semantically transitive verb indicates antipassivization.
c. The object can be optionally omitted.
d. The object is often indefinite/non-specific.

We have seen in 3.1–3.3 that AV objects are accusative-marked and not licensed with a non-core case or an adposition. Below I discuss how the traits listed in (47b–d) are also absent in these languages.

3.4.1 Absence of antipassive morphology

Antipassives across languages are characterized by an overt valency-decreasing morphology (47b), as shown by the examples below from Dyirbal (Pama-Nyungan) and Chukchi (Chukotko-Kamchatkan). In both languages, antipassivization is indexed by a verbal affix that is absent in monovalent intransitives.

(48) Dyirbal
a. Ngma banaga-nyu.
father.ABS return-NONFUT
'Father returned.' (monovalent intransitive)
b. Nguma bural-**nga**-nyu (yabu-gu).
father.ABS see-**ANTIP**-NONFUT (mother-DAT)
'Father saw mother.' (Dixon 1994:10, 13) (antipassive)

(49) Chukchi
a. Nginqey pəkir-g'i.
boy.ABS arrive-AOR.3SG
'The boy arrived.' (monovalent intransitive)
b. Tumgətum (nginqey-ək) **ine**-nyegtele-g'i.
friend.ABS (boy-LOC) **ANTIP**-save-AOR.3SG
'The friend saved the boy.' (Polinsky 2017:14) (antipassive)

However, antipassive marking is not attested in Philippine-type Actor Voice, where monovalent intransitives and the putative antipassive share the same verbal morphology (i.e., Actor Voice affix), as seen below in (50)–(51). This places the Philippine-type AV construction in a typologically unique position where antipassivization is morphologically unmarked.

(50) Tagalog
a. S**<um>**ayaw ang babae.
<AV>dance CN.PIVOT woman
'The woman danced.' (monovalent intransitive)
b. S**<um>**ulat ang babae ng liham.
<AV>write CN.PIVOT woman INDF.CM_2 letter
'The woman wrote a/the letter.' (putative antipassive)

(51) Puyuma

a. S****enay na bangsaran.
<AV>sing DEF.PIVOT young.man
'The young man sang.' (monovalent intransitive)

b. S****aletap=ku kana walak na matrulre'.
<AV>slap=1SG.PIVOT DEF.CM$_2$ child REL misbehave
'I slapped the disobedient child.' (Cauquelin 2015:399) (putative antipassive)

3.4.2 Non-omittable objects

Unlike antipassive objects (47c), the object in a Philippine-type AV construction cannot be left unexpressed, unless the object is a third person pronoun already indexed in the context. Without a given context, semantically two-place and three-place verbs do not allow their objects to be omitted. This is exemplified in (52). See Foley (2008), Paul and Travis (2006), Rackowski (2002), and O'Brien (2016) for the same observation.

(52) a. B<um>ili ang babae *(ng kendi).
<AV>buy PIVOT woman *(INDF.CM$_2$ candy)
'The woman bought *(candy) / #The woman bought something.' (Tagalog)

b. Trima na babayan *(dra patraka).
<AV>buy CN.PIVOT woman *(INDF.CM$_2$ meat)
'The woman bought *(meat). / #'The woman bought something.' (Puyuma)

c. Mi-qaca k-una fafahi *(tu talacay).
AV-buy PIVOT-that woman *(CM$_2$ pineapple)
'That woman is buying *(pineapple). / #The woman bought something.' (Amis)

Aldridge (2012) argues that AV objects in Tagalog can be freely omitted, using the example in (53).

(53) Object omission in Tagalog AV clause with the verb *k<um>aen* 'eat'

K<um>ain=ako (ng isda).
<AV>eat=1SG.PIVOT (INDF.CM$_2$ fish)
'I ate (a fish).' (Aldridge 2012:196)

According to my fieldwork with three Tagalog speakers, this flexibility applies only to the specific verb *kaen* 'eat' due to its valency ambiguity, and is not observed in AV clauses with non-ambiguous two-place verbs, such as that in (52). See previous descriptions of Tagalog for a similar observation (Schachter and Otanes 1972; Kroeger 1991; Maclachlan 1996; Rackowski 2002).

3.4.3 Absence of a strict anti-definiteness constraint on AV objects

Finally, AV objects in various Philippine-type languages can be definite/specific, contra (49d) (see previous descriptions in Pearson 2001, Rackowski 2002, Paul and Travis 2006, Foley 2008, O'Brien 2016, Sabbagh 2016, and Chen 2017, a.o.). Although some Philippine-type languages show a tendency of favoring indefinite/non-specific AV objects, definite/specific objects are still allowed (see Sabbagh 2016 and Collins 2018 for a detailed discussion of definiteness and specificity in Tagalog). Tagalog, for example, is commonly cited as one such language (Cooreman et al. 1984; Aldridge 2011). Consider, however, the examples below quoted from previous descriptions (Schachter and Otanes 1972; Kroeger 1991) and natural texts.

(54) Tagalog[25]

[25] See footnote 12 for Tagalog's case paradigm and a specific discussion of Tagalog's object-marking.

a. **Nag**-mamahal ang nanay ni juan **sa** **kaniya**.
AV.IMPREF-love CN.PIVOT mother PN.POSS Juan **DEF.CM$_2$** **3SG.CM$_2$**
'Juan's$_i$ mother loves *him$_i$*.' (Kroeger 1991:115)

b. B**<um>**isita si juan **sa** **hari** nang nagiisa.
<AV.PRF>visit PN.PIVOT Juan **DEF.CM$_2$** **king** ADV AV.IMPERF-one
'Juan visited *the king* alone.' (Kroeger 1991:41)

c. Kami nina charo santos and freddie garcia ang k**<um>**ilatis **kay** **lloydy**.
1PL.EXCL PN Charo Santos CONJ Freddie Garcia CN.PIVOT examine**<AV>** **PN.CM$_2$**
Lloydy
'It was us, Charo Santos and Freddie Garcia, who scrutinized *Lloydy*.'
(retrieved from https://www.pinoyexchange.com/discussion/406975/abs-cbn-kapamilya-pextalk124-higher-higher-bringing-supreme-quality-shows-to-d-philtv/p232)

d. Si cruz ang h**<um>**alili **kay** **dating Agrarian Reform Secretary John Castriciones**.
PN Cruz PIVOT replace**<AV>** **PN.CM$_2$** **former agrarian reform secretary John**
Castriciones
'Cruz (was the one) who replaced *the former Agrarian Reform Secretary John Castriciones*.'
(retrieved from https://www.dar.gov.ph/about-us/secretary)

Definite/specific objects are also allowed in other Philippine-type Austronesian languages. Consider (55a–f).

(55) a. **Nanapaka ity** **hazo** ity tamin'ny **antsy** i Sahondra.
PST.AV.cut **this tree** this PST.P.DET.GEN.DET knife PN Sahondra
'Sahondra cut this tree with *the knife*.' (Paul and Travis 2006:316) (Malagasy)

b. K**<um>**an si juan nog saging koyon.
<AV.IRR>eat PN.PIVOT Juan **CM$_2$** **banana** **DET**
'Juan will eat *that banana*.' (O'Brien 2016:11) (Subanon)

c. K****eLem ti palang **tjay** **kalalu**.
<AV>hit SG.PIVOT Palang **SG.CM$_2$** **Kalalu**
'Palang hit *Kalalu*.' (Chang 2006:71) (Paiwan)

d. Karuwa b<en>aaw **kanta=drekal**.
can **<AV>**save **1PL.POSS.CM$_2$=village**
'(She) was able to save *our village*.' (Teng 2008:294) (Puyuma)

e. **Mi**-takaw cira **tu** **payso** **nu** **ina** **nira**.
AV-steal 3SG.PIVOT **CM$_2$** **money** **POSS** **mother** **3SG.POSS**
'He stole *his mother's money*.' (ODFL, n.d.) (Amis)

f. Huwa kesun t**<m>**inun **tokan** **bale** **nii**, tama?
how so.called weave**<AV>** **knit.bag** **authentic** **this** father
'How do you weave *this traditional knit bag*, father?' (ODFL, n.d.) (Seediq)

As shown above, Philippine-type Actor Voice manifests none of the four crosslinguistically attested traits of antipassives (47a–d). The current observation that the AV construction in fact possesses a structurally case-licensed internal argument (3.1–3.3) follows from this fact.

3.5 Interim conclusion

Previously overlooked accusative behaviors of CM_2 show that AV constructions are true transitives, and not antipassives. This indicates that the alleged ergative patterning between antipassive subjects and transitive objects cannot be maintained.

(56) Case alternation between AV and PV

	a. Actor Voice	b. Patient Voice
external argument	Pivot	CM_1
internal argument	**CM_2: ACC**	Pivot
transitivity	transitive	transitive

The table below presents a sample list of Philippine-type languages attested with accusative behaviors of CM_2. Each of the three environments (57a–c) provides independent evidence against the lexical oblique case view of CM_2. It is therefore unnecessary for a language to exhibit all three constructions to support this conclusion.

(57) Summary: Evidence against the antipassive view of Actor Voice[26]

	Subgrouping affiliation	Causatives	RTO	Restructuring	Overt antipassive marking	AV objects freely omittable without a given context
		a. CM_2 on ECM subjects	b. CM_2 on derived objects	c. CM_2 absent in restructuring infinitives		
Atayal	Atayalic	✓	✓	✓	NO	NO
Seediq	Atayalic	✓	✓	✓	NO	NO
Puyuma	Puyuma	✓	✓	✓	NO	NO
Amis	East Formosan	✓	✓	✓	NO	NO
Kavalan	East Formosan	✓	✓	✓	NO	NO
Tsou	Tsouic	✓	✓	n/a	NO	NO
Thao	Western Plains	✓	✓	?	NO	NO
Bunun	Bunun	✓	✓	✓	NO	NO
Saisiyat	NW Formosan	✓	✓	✓	NO	NO
Paiwan	Paiwan	✓	✓	✓	NO	NO
Tagalog	Malayo-Polynesian	✓	✓	n/a	NO	NO
Ilocano	Malayo-Polyneisan	✓	?	n/a	NO	NO
Cebuano	Malayo-Polynesian	✓	✓	n/a	NO	NO
Botolan Sambal	Malayo-Polynesian	✓	✓	n/a	NO	NO
Subanon	Malayo-Polynesian	✓	✓	n/a	NO	NO

4 Relabeling 'ergative': Insights from causatives and unaccusatives

I turn now to CM_1, the case marker commonly glossed as ergative case. Recall that this marker is absent in AV (58a) and consistently appears on the external argument in non-AV clauses (58b–c).

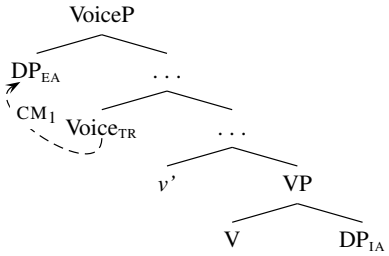
(58) Philippine-type alignment: schematized case pattern

	a. AV	b. PV	c. LV	d. CV
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/benefactor	P_2	P_2	P_2	Pivot

If CM_1 indeed realizes inherent ergative case assigned by transitive Voice (59), as argued by the ergative analysis (Aldridge 2004 et seq.), CM_1 should appear only on the external arguments and in transitive clauses. Furthermore, since the licensor of this case is Voice, multiple CM_1-marking should be possible within a single CP where the CP contains multiple Voice heads.

[26] Sources of data: Atayal (Huang 2005), Seediq (Holmer 1999), Puyuma (Kuo 2015), Amis (Chen 2017), Kavalan (Don-yi Lin p.c.), Tsou (Lin 2010), Thao (Jian 2018), Bunun (Zeitoun 2000), Saisiyat (Yeh 2000), Paiwan (Chang 2006), Tagalog (Travis 2000; Rackowski 2002), Ilocano (Silva-Corvalán 1978), Cebuano (Tanankingsing 2009), Botolan Sambal (Antworth 1979), Subanon (Estioca 2020).

(59) CM_1-assignment under the ergative case analysis



Nominative case contrasts with inherent ergative case in all three regards. As a structural case assigned by C/T, nominative case is unique per CP, and its distribution is not restricted to the external argument position or transitive clauses. The expected distribution of these two cases is outlined in (60).

(60) Distribution of CM_1 under two competing hypotheses

	CM_1 as ergative	CM_1 as nominative
a. CM_1 restricted to external arguments	Yes	No
b. CM_1 restricted to transitive clauses	Yes	No
c. CM_1 unique per clause	No	Yes
d. CM_1 present only on the highest caseless DP	No	Yes

In this section, I demonstrate that a closer look at the distribution of CM_1 in these specific environments reveals that CM_1 shows the hallmarks of nominative case.

4.1 CM_1: Locality constraints and uniqueness per CP

Ergative case across languages has been shown to be available in nonfinite embedded complements and able to appear multiple times within a single finite clause. Both traits follow from the fact that the source of this case (i.e., Voice) is not unique per CP.

Consider the examples below from three morphologically ergative languages, Trumai (isolate), Kabardian (Caucasian), and Macushi (Carib). All these languages demonstrate double ergative marking in productive causatives. This phenomenon follows from the prediction in (61c) that multiple ergative cases can co-occur within the same CP where the clause contains more than one Voice head.

(61) Ergative causee in morphologically ergative languages

a. **Alaweru-k** **hai-ts** axos disi-ka.
Alaweru-ERG **1SG-ERG** child.ABS hit-CAU
'Alaweru made me hit the child.' (Guirardello 1999:353) (Trumai)

b. **L'eze-m** **s'ala-m** d'abz-r y-r-y-ga-h-a-s.
old.man-ERG **boy-ERG** girl-ABS 3SG-3SG-3SG-CAU-carry-PRET-AFF
'The old man made the boy carry the girl.' (Matasovic 2010:50) (Kabardian)

c. Imakiupi kupi **jesus-ya** emaputi yonpa-pi **makiu-ya** teuren.
bad do **Jesus-ERG** CAU try-PST **Satan-ERG** FRUST
'Satan unsuccessfully tried to make Jesus do bad.' (Abbott 1991:40) (Macushi)

The alleged ergative case in Philippine-type Austronesian languages, however, shows two unexpected restrictions in its distribution – it is unique per CP, and it is available only to the highest argument per clause. In productive causative constructions with an agentive causee, this case is available only to the causer, and can never appear on the agentive causee, as in (62)–(63).[27] The table below illustrates the case pattern attested in these languages.

[27] I do not provide examples of PV-causatives, as the unavailability of CM_1 in PV-causatives is due to the causee's pivot status.

(62) Case pattern in productive causatives

	a. AV	b. PV	c. CV
Causer	Pivot	**CM_1**	**CM_1**
Causee	CM_2/***CM_1**	Pivot/***CM_1**	CM_2/***CM_1**
Theme	CM_2	CM_2	Pivot

(63) AV-causatives: Unavailability of CM_1 to the causee

a. Nag-pa-nakaw=ako **{kay/*ni}** Juan ng kotse.
AV.PRF-CAU-steal=1SG.PIVOT **CM_2/*CM_1** Juan INDF.CM_1 car
'I asked Juan to steal the car.' (Tagalog)

b. **(*Tu=)**∅-pa-karatr=ku **kana** **suwan** kan Senten.
(***3.CM_1**)=AV-CAU-bite=1SG.PIVOT **DEF.CM_2** **dog_i** PN.CM_2 Senten
'I made the dog bite Senten.' (Puyuma)

c. ∅-pa-pi-kalat kaku **{tu/*nu}** wacu ci-Afan-an.
AV-CAU-TR-bite 1SG.PIVOT **CM_2/*CM_1** dog PN-Afan-CM_2
'I will make the dog bite Afan.' (Amis)

d. ∅-p-tinun=ku **{∅/*na}** Robo ∅ lukus.
AV-CAU-weave=1SG.PIVOT **CM_2/*CM_1** Robo CM_2 clothes
'I asked Robo to sew the clothes.' (Seediq)

(64) CV-causatives: Unavailability of CM_1 to the causee

a. I-p<in>a-nakaw=ko **{kay/*ni}** Juan ang kotse.
CV-CAU<PRF>-steal=1SG.CM_1 **{PN.CM_2/*PN.CM_1}** Juan CN.PIVOT car
'I asked Juan to steal the car.' (Tagalog)

b. **(*Tu=)**ku=pa-saletra'-anay **kan** **Sawagu** i Senten.
(***3.CM_1=**)1SG_1=CAU-slap-CV **SG.CM_2** **Sawagu** PN.PIVOT Senten
'I asked Sawagu to slap Senten.' (Puyuma)

c. Sa-pa-pi-nengneng aku **{tu/*nu}** ising k-una pusi.
CV-CAU-TR-see 1SG.CM_1 **CM_2/*CM_1** doctor PIVOT-that cat
'I will ask the doctor to look at the cat.' (Amis)

d. S-p-tinun=mu **{∅/*na}** robo ka lukus.
CV-CAU-weave=1SG.CM_1 **CM_2/*CM_1** Robo PIVOT clothes
'I asked Robo to sew the clothes.' (Seediq)

The unavailability of CM_1 to the causee is unexpected, as the causative constructions above pass all three tests for a bi-eventive structure. This suggests that inherent ergative case should be available to the causee.[28] The uniqueness of this case per CP, along with its availability only to the highest DP, thus argues for a nominative case analysis for CM_1.

4.2 CM_1 on unaccusative themes

Consistent with the behavior described above, CM_1 shows one other hallmark of nominative case: it is available to internal arguments where an external argument is absent. Across Philippine-type languages, in LV/CV-clauses formed with a semantically intransitive verb, the sole argument of the

[28]There is clear evidence that the causee in CV-causatives is also an external argument (which is in principle eligible for ergative case). Like AV-marked causatives (31)–(33), CV-causatives possess a bi-eventive structure (29). This is evidenced by the causee's ability to bind the theme, as well as its compatibility with agent-oriented adverbs and the adverb of frequency 'again.' This suggests that CV-causatives and AV-causatives possess the same structure. See section 5 for a further discussion of this claim with actual data.

verb is obligatorily CM_1-marked, regardless of the verb being unergative or unaccusative. Consider the examples below from Tagalog, Puyuma, Amis, and Seediq (65)–(68).

(65) Tagalog

a. K<in>urot **ni** **AJ** si Lily.
pinch<PV.PRF> **PN.CM_1** **AJ** PN.PIVOT Lily
'AJ pinched Lily'. (CM_1 on initiator)

b. I-k<in>amatay **ni** **AJ** ang sakit.
CV-die-<PFV> **PN.CM_1** **AJ** CN.PIVOT sickness
'AJ died of illness.' (CM_1 on unaccusative theme)

(66) Puyuma[29]

a. **Tu_i**=trakaw-aw na paysu kan $Senten_i$.
3.CM_{1i}-steal-PV DEF.PIVOT money PN.CM_1 $Senten_i$
'Senten stole the money.' (CM_1 on initiator)

b. **Tu_i**=utrerag-ay kana $ladru_i$ ku-tranguru.
3.CM_{1i}-fall.down-LV DEF.CM_2 $mango_i$ 1SG.POSS-head
'The mango fell on my head.' (CM_1 on unaccusative theme)

(67) Amis[30]

a. Pi-qaca'-an **aku** tu pawli ku lumaq ni sawmah.
buy-LV **1SG.CM_1** CM_2 banana PIVOT house POSS Sawmah
'I bought bananas at Sawmah's house.' (CM_1 on initiator)

b. Ka-tulu'-an **aku** kuna lalan.
slip-LV **1SG.CM_1** PIVOT.that road
'I slipped on that road.' (CM_1 on unaccusative theme)

(68) Seediq

a. S-seeliq-un **na** **walis** ka babuy.
RED-butcher-PV **CM_1** **Walis** PIVOT boar
'Walis will butcher the boar.' (CM_1 on initiator)

b. S-k<n>arux **na** **Temi** ka knrudan-na.
CV-PRV-be.sick **CM_1** **Temi** PIVOT age-3SG.POSS
'Temi got sick because of her age.' (CM_1 on unaccusative theme)

The fact that CM_1 is available to unaccusative themes undermines the ergative case view of CM_1, which wrongly predicts that this case will be available only to external arguments and in transitive clauses. For that analysis to go through, one has to argue that (i) the unaccusative verbs 'fall,' 'slip,' 'be tired,' and 'die' in the examples above possess a transitive Voice head capable of ergative case assignment, and (ii) the undergoer arguments in these examples are introduced as external arguments in Spec, VoiceP. Neither assumption is compatible with the standard assumptions of unaccusativity

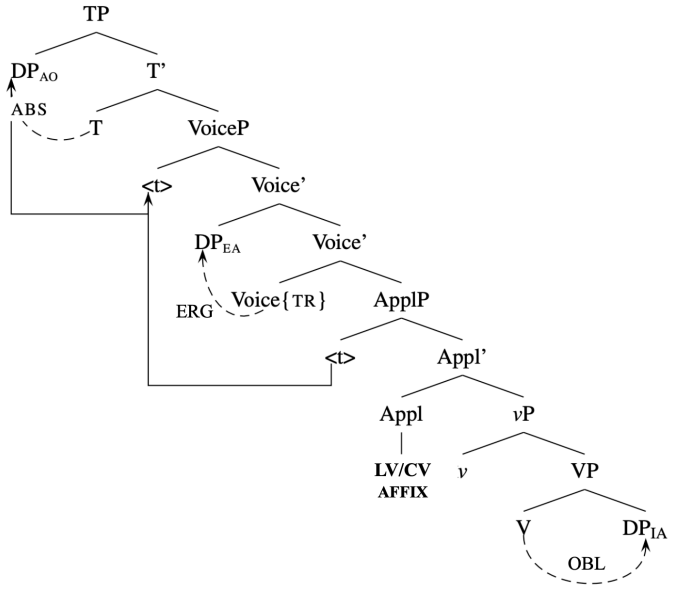
[29] As introduced in footnote 13, non-pivot agents (and non-pivot themes in unaccusatives) in Puyuma are obligatorily realized as a proclitic. The proclitic can be optionally cross-referenced by a full DP, which appears as an adjunct-like phrase. In (66a), the third-person proclitic *tu* is cross-referenced by the non-pivot agent 'Senten'; in (66b), it is crossreferenced by the unaccusative theme 'mango.' See footnote 13 for the complete case paradigm of Puyuma.

[30] In Amis, LV morphology appears as a circumfix with two possible forms conditioned by the inner valency of the stem: *pi-...-an* and *ka-...-an*. See Wu (2006) for details.

(Perlmutter 1978; Burzio 1986), and all four languages do show independent evidence for an unergative/unaccusative distinction.[31] Accordingly, the CM_1-marked themes in (65)–(68) are licensed in the internal argument position. The fact that CM_1 can appear in this position therefore suggests that the inherent ergative case view does not hold.

Notice, additionally, that the unaccusative construction under discussion displays a case pattern difficult to explain under the ergative analysis of Philippine-type alignment. According to that analysis, the internal argument in LV clauses should receive oblique case from the lexical verb with the pivot-marked locative introduced as an applied object above the theme, as in (69).

(69) The applicative approach to LV/CV constructions



However, the theme in this construction cannot be CM_2-marked, and must bear CM_1-marking, (65)–(68). This reinforces the conclusion from 4.1 that the case-licensing system assumed under the ergative approach is incorrect.

4.3 Interim conclusion

Evidence from causatives and unaccusatives shows that the distribution of CM_1 not only contradicts the inherent ergative case analysis, but also points straightforwardly to a nominative case analysis. Key observations from this section are summarized in (70).

(70)

	ergative case	nominative case
a. CM_1 available to internal arguments	No	Yes
b. CM_1 available in unaccusatives	No	Yes
c. CM_1 unique per clause	No	Yes
d. CM_1 restricted to the highest DP	No	Yes

[31] The evidence for an unergative/unaccusative distinction in these languages is as follows. First, in all four languages, typical unaccusative verbs take an AV affix distinct from that of unergative/transitive verbs. Second, in all four languages, typical unaccusative verbs contrast with unergative verbs in their compatibility with cause-denoting adjuncts, as observed also in typologically distinct languages (DeLancey 1984; Kallulli 2005; Levin and Rappaport Hovav 2005; Alexiadou et al. 2006). Third, in all four languages, canonical unergative verbs contrast with unaccusative verbs in their compatibility with cognate objects. See also Foley (2005:425) and Kaufman (2009:32) for the same assumption of an unergative/unaccusative distinction in Tagalog, and Chen and Fukuda (2017) for specific data supporting the generalizations above.

These observations yield two important implications. First, Philippine-type alignment is neither ergative-aligned nor constitutes a split ergative system with ergative-aligned non-AV constructions. Second, the 'pivot-only' extraction constraint on Ā-extraction does not arise from the ban on ergative extraction, as the alleged ergative agents are in fact structurally case-licensed nominative arguments. This highlights the fact that the Philippine-type extraction asymmetry is independent of syntactic ergativity, and is likely a property associated with pivothood – a question to be investigated in the following section. See footnote 34 for a further discussion of a similar type of extraction constraint observed in western Nilotic languages.

5 'Pivot' ≠ absolutive: Insights from binding

We have seen that CM_1 and CM_2 display common hallmarks of nominative and accusative case, respectively. This observation leads to an important subsequent question – what is the nature of pivot-marking, a marker that shifts freely among core arguments and adjunct-like phrases depending on voice type (71)?

(71) Philippine-type alignment: schematized case pattern

	a. AV	b. PV	c. LV	d. CV
external argument	**Pivot**	CM_1: NOM	CM_1: NOM	CM_1: NOM
internal argument	CM_2: ACC	**Pivot**	CM_2: ACC	CM_2: ACC
locative	P_1	P_1	**Pivot**	P_1
instrument/benefactor	P_2	P_2	P_2	**Pivot**

Since CM_1 marks nominative case (section 4), 'pivot' should not realize the same case (i.e., structural case from T). Its availability to adjunct-like phrases further suggests that it may be a marker independent of case. In this section, I present new evidence that 'pivot' is indeed a marker independent of case and one associated with a specific information structure status (topic). This observation reinforces the conclusion from sections 3 and 4 that Philippine-type alignment does not manifest ergativity at either the morphological or syntactic level.

5.1 The competing analyses: Subject, topic, or both?

The claim that pivot status is associated with topichood is not new. Much previous work on Malagasy has pointed out that pivot phrases in Malagasy are consistently associated with more 'referential prominence' than subjects in other languages (Keenan 1976 et seq.). Pearson (2001, 2005) made a similar observation, reporting that pivot phrases in Malagasy function as topics. Similar proposals have also been made for Tagalog. Richards (2000) and Rackowski (2002), in line with Schachter and Otanes's (1972) account of Tagalog pivots, argued explicitly that pivots in Tagalog occupy an Ā-position, parallel to topics in Icelandic and German. See also similar treatments for Atayal (Erlewine to appear), Tagalog (Schachter 1976, 1977; Foley and Van Valin 1984; Carrier-Duncan 1985; Shibatani 1988; Naylor 1995; Katagiri 2006), Cebuano (Shibatani 1988), and Malagasy (Pearson 2005; Paul and Massam 2021).

This analysis contrasts with the absolutive case analyses of pivot-marking (Payne 1982; De Guzman 1988; Maclachlan and Nakamura 1993, 1997; Mithun 1994; Gerdts 1998; Aldridge 2004, 2008, 2011, 2017; Liao 2004). Among these works, Guilfoyle, Hung, and Travis (1992) put forward the influential proposal that the pivot in Malagasy occupies the subject position and checks nominative case with T. This proposal was further developed by Aldridge (2004) as a core assumption of the

ergative approach to Philippine-type languages, and is commonly adopted in reference grammars and descriptive works on Formosan and Philippine languages, where pivot-marked phrases are commonly glossed as 'nominative' or 'absolutive' and treated as the subject of the clause.[32]

Yet a third proposal maintains that pivots bear the status of both subject and topic (Erlewine, Levin, and van Urk 2017). This view builds on the proposal that Philippine-type languages lack Feature Inheritance (Richards 2007; Chomsky 2008), hosting both the φ-feature and the $\bar{A}$-feature on C. On this analysis, Spec, CP in these languages is simultaneously an $\bar{A}$- and an A-position, with the prediction that pivots bear both A- and $\bar{A}$-properties.

Below I demonstrate how binding diagnostics provide strong evidence for the first view, that pivot status is independent of case and an $\bar{A}$ phenomenon, as argued previously by Pearson (2001, 2005) for Malagasy and Richards (2000) for Tagalog.

The subject/absolutive analysis for pivot-marking relies crucially on two assumptions (72a–b).

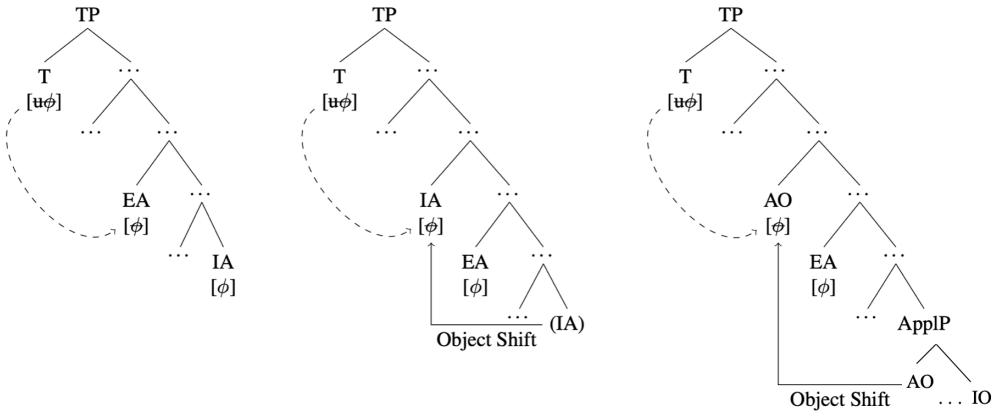
(72) a. A pivot is the highest DP within a TP.

b. In LV and CV clauses, it is an applied object introduced by a High Appl head in the highest internal argument position, where it is eligible for object shift.

This analysis predicts that voice alternation is accompanied by a change in argument structure, according to which we should observe evidence of argument structure alternation among PV, LV, and CV. Specifically, the highest internal argument of the clause should change from the theme to whatever phrase obtains pivot-marking in an LV/CV clause. This makes an easily testable assumption: in LV/CV, the applied object pivot should c-command the theme and not vice versa, as seen in (76c). Note, also, that an alternative Low Applicative analysis for LV (as proposed by Rackowski 2002) would make the same prediction: the pivot should asymmetrically bind the theme, since the applied object introduced by a Low Appl head is also base-generated in a position that c-commands the theme. See Rackowski (2002:122) for details.

(73) Alleged argument structure alternations among non-AV clauses

a. Actor Voice b. Patient Voice c. Locative/Circumstantial Voice



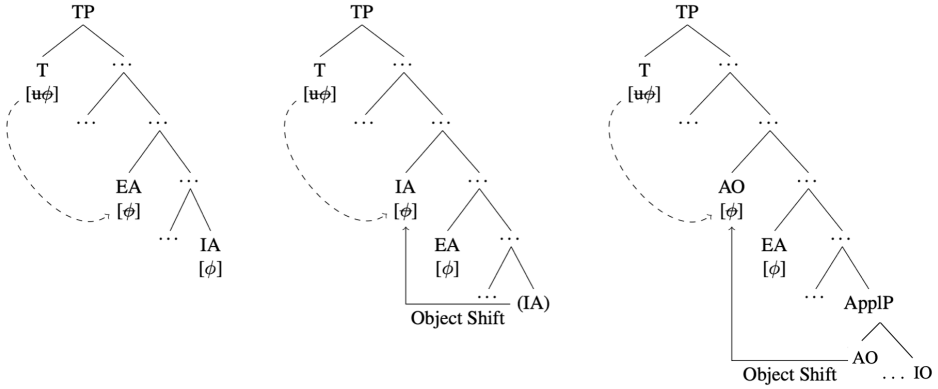
The topic analysis of pivot yields a distinct prediction: Philippine-type voice alternation should yield no argument structure alternation as it simply signals a change in topic selection. The pivot should behave like an $\bar{A}$-element (topic), displaying reconstruction effects and being interpreted in its

[32] See, for example, McKaughan 1973, Payne 1982, Starosta, Pawley, and Reid 1982, De Wolf 1988 and Gerdts 1988 for Tagalog; Keenan 1976 for Malagasy; : Chang 1997 for Seediq; J. Wu 2006 for Amis; Teng 2008 for Puyuma; Chang 2006 and C. Wu 2012 for for Paiwan; Zeitoun 2007 for Rukai; Ross 2002, Liao 2004, and Aldridge 2004, 2008, 2016, 2017 for Philippine-type languages in general.

θ-position. It may also show typical Ā-properties such as weak crossover (Postal 1993) and/or weakest crossover effects (Lasnik and Stowell 1991). Finally, as a topic need not be a DP, a pivot in a LV or CV clause may remain as an locative or instrumental/benefactive adjunct PP. Accordingly, the binding relations of a PV clause and its LV/CV counterpart may remain identical (unless affected by weakest crossover). This analysis is schematized in (74).

(74) Argument structure alternation among non-AV clauses

a. Actor Voice b. Patient Voice c. Locative/Circumstantial Voice



In what follows, I present new binding evidence from Tagalog, Puyuma, Amis, and Seediq in support of the topic approach and against the absolutive case analysis. Key predictions of these three competing analyses are summarized in (75).

(75) Expected behaviors of the pivot phrase under the competing hypotheses

	'pivot' as the ABS	'pivot' as a TOP marker	'pivot' with the status of both
a. A pivot phrase must be the highest DP	Yes	No	Yes
b. A pivot in LV/CV must be an applied object	Yes	No	Yes
c. Argument structure alternation among PV/LV/CV	Yes	No	Yes
d. A separate NOM position in the system	No	Yes	No

5.2 Pivot ≠ absolutive: Insights from binding

In this section, I show that voice alternations across Tagalog, Puyuma, Amis, and Seediq yield no change in the binding relations among the internal arguments in three-place constructions, suggesting that these languages have neither the proposed argument structure alternation nor applicativization in LV/CV.

5.2.1 Productive causatives

Productive causatives provide an ideal testing ground for examining the predictions in (75). With appropriate voice morphology, any of the three arguments (causer, causee, theme) in a causative of transitive can obtain pivot status. The argument-marking pattern is schematized in (76) and illustrated with the Seediq examples in (77).

(76) Productive causatives: mapping between voice and case

	a. AV	b. PV	c. CV
Causer	**Pivot**	CM_1	CM_1
Causee	CM_2	**Pivot**	CM_2
Theme	CM_2	CM_2	**Pivot**

(77) Seediq

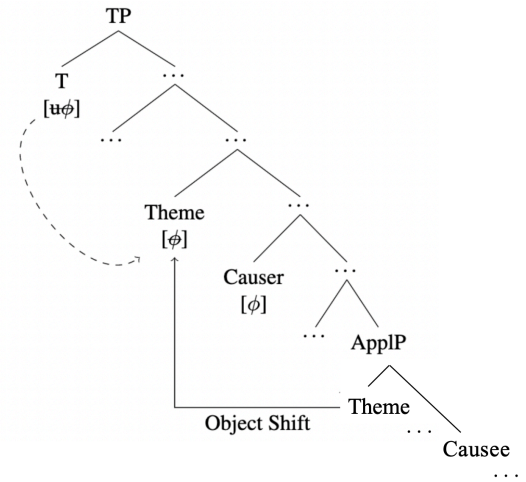
a. Wada=**ku** ∅-paadis ∅ dakis ∅ tigami.
PRF=**1SG.PIVOT** AV-send CM_2 Dakis CM_2 letter
'*I* sent Dakis a/the letter.' (Actor Voice)

b. Wada=mu pdes-un ∅ tigami **ka** **dakis**.
PRF=1SG.CM_1 send-PV CM_2 letter **PIVOT** **Dakis**
'I sent *Dakis* a/the letter.' (Patient Voice)

c. Wada=mu s-paadis ∅ dakis **ka** **tigami**.
PRF=1SG.CM_1 CV-send CM_2 Dakis **PIVOT** **letter**
'I sent Dakis *a/the letter*.' (Circumstantial Voice)

For our purpose, CV-marked causatives (77c) are of particular theoretical interest, where pivot-marking falls on the theme, skipping the CM_1-marked causer and the CM_2-marked causee. If pivot-marking indeed realizes absolutive case, this theme is necessarily analyzed as an applied object base-generated higher than the causee. This follows from the key assumption of the ergative approach to Philippine-type alignment, that the CV affix realizes a high applicative head, introducing the pivot as an applied object in the highest internal argument position. This applied object then undergoes object shift and raises across the causer to Spec TP through the phase edge of VoiceP for absolutive case, as in (78).

(78) Purported causative structure with an applicativized theme



Binding diagnostics show that this prediction is false. Across Tagalog, Puyuma, Amis, and Seediq, the non-pivot causee in a CV-causative can freely bind the theme pivot, as in AV-causatives (section 3.1). For readability, the pivot theme is boldfaced in the original and the gloss, and italicized in the translation (79a–d). Due to space limitations, I do not present the data on quantifier-variable binding, which show the same result.

(79) CV causatives: Causee binds theme pivot

a. Tagalog
I-p<in>a-li-linis=ko kay juan **ang** **kanya-ng** **sarili**.
CV-CAU<PRF>RED-clean=1SG.CM_1 PN.CM_2 Juan **CN.PIVOT** **3SG-POSS** **REFL**
'I asked Juan$_i$ to clean *himself*$_i$.'

b. Puyuma
Ku=pa-saletra'-anay kan sawagu **tayta'aw**.
1SG.CM_1=CAU-slap-CV SG.CM_2 Sawagu **3SG.REFL.PIVOT**

'I asked Sawagu$_i$ to slap *himself$_i$*.'

c. Amis

Sa-pa-pi-nengneng aku ci-afan-an **cingra** **tu** i dadingu.
CV-CAU-TR-see 1SG.CM$_1$ PN-Afan-CM$_2$ **3SG.PIVOT REFL** LOC mirror
'I asked Afan$_i$ to look at *herself$_i$* in the mirror.'

d. Seediq

S-p-tabak=mu ∅ heya **ka** **heya nanaq**.
CV-CAU-slap=1SG.CM$_1$ CM$_2$ 3SG **PIVOT** **3SG** **REFL**
'I asked him/her$_i$ to slap *himself/herself$_i$*.'

Note, importantly, that the same observation has been made in previous work. Rackowski (2002) reported that a theme pivot in Tagalog CV-causatives can be bound by a non-pivot causee. Consider (80), where the reflexive *kanyang sarili* is bound by the non-pivot causee 'Carlos'.[33]

(80) Tagalog: causee binds theme pivot in CV-causatives

I-p<in>a-ayos=ko kay carlos **ang** **kanyang** **sarili-ng** **kotse**.
CV-CAU<PRF>-repair=1SG.CM$_1$ PN.CM$_2$ Carlos **CN.PIVOT** **3SG.POSS** **self-LK** **car**
'I asked Carlos to repair *his own car (lit. the car of himself)*.' (Rackowski 2002:67–68)

This binding relation suggests that CV-causatives have a run-of-the-mill bi-eventive structure (29) and not the unusual hypothetical causative structure (78), which, to my knowledge, has not been reported in the literature.

One possible way to accommodate the absolutive case analysis with the current binding fact is to assume that the CM$_2$-marked causee above the theme is inherently case-licensed, allowing for absolutive case ('pivot') to be assigned to the theme. This explanation, however, is undermined by two facts. First, it relies on an independent assumption that the CM$_1$-marked causer is also inherently case-licensed (so that absolutive case is available to the lowest argument among the three). However, as shown in section 4, CM$_1$ does not behave like an inherent case. This suggests that the causer should in fact have priority to access absolutive case over the causee and the theme. Second, there is clear evidence that the CM$_2$-marked causee is an agentive argument licensed in the embedded Spec, VoiceP, where only accusative case and no nonstructural case is available. Consider (81)–(82), which show that causees in CV-causatives behave like a typical agentive external argument, similar to those in AV-causatives (section 3.1). This rules out the possibility of these arguments being inherently case-licensed.

(81) Compatibility of the causee with agent-oriented adverbs

a. Tagalog

I-p<in>a-ayos=ko nang **palihim** kay ivan ang kotse.
CV-CAU<PRF>-repair=1SG.CM$_1$ CONJ **secretly** PN.CM$_2$ Ivan PN.PIVOT car
'I asked Ivan to repair the car secretly.' (Ivan did so secretly)

[33] The phrase *kanyang sarili-ng kotse* in (80) behaves like a picture NP, in which the embedded reflexive must be bound by an antecedent in the same clause. Lack of an antecedent results in ungrammaticality, as seen below in (i).

(i) Picture NP reflexive embedded inside an AV subject

*P<um>atay kay Juan **ang** **sarili niya-ng** **anak**.
<AV>kill PN.ACC Juan **CN.PIVOT** **self** **3S.POSS-POSS** **child**
(intended: 'The child of himself killed Juan)

b. Puyuma

Ku=pa-pukpuk-anay kan sawagu **pakirep** na suwan.
1SG.CM$_1$=CAU-hit-CV SG.CM$_2$ Sawagu **severely** DEF.PIVOT dog
'I asked Sawagu to hit the dog severely.' (Sawagu did so severely)

c. Amis

Sa-pa-pi-tangtang aku cingranan k-una futing **pina'un**.
CV-CAU-PI-cook 1SG.CM$_1$ 3SG.CM$_2$ PIVOT-that fish **carefully**
'I asked her to cook the fish carefully.' (She did so carefully)

d. Seediq

S-p-sais=mu ∅ temi **murux** ka lukus.
CV-CAU-sew=1SG.CM$_1$ CM$_2$ Temi **alone** PIVOT clothes
'I asked Temi to sew the clothes independently.' (Temi did so without help)

(82) Compatibility of the causee with the adverb of frequency 'again'

a. Tagalog

I-p<in>a-sulat=ko **ulit** kay aya ang liham.
CV-CAU<PRF>-write=1SG.CM$_1$ **again** PN.CM$_2$ AyaCN.PIVOT letter
'I asked Aya to write the letter again.' (Aya did so again)

b. Puyuma

Ku=pa-pukpuk-anay kan senten **masal** na suwan.
1SG.CM$_1$=CAU-hit-CV SG.CM$_2$ Senten **again** DEF.PIVOT dog
'I asked Senten to hit the dog again.' (Senten did so again)

c. Amis

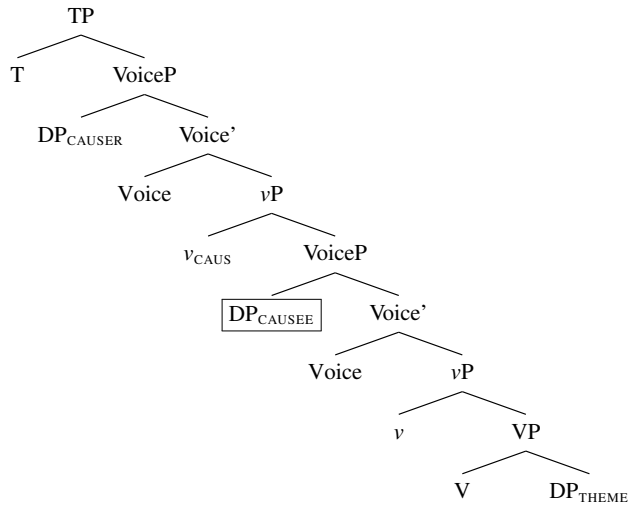
Una maeded-ay a wacu, sa-pa-pi-palu **heca** aku ci-kulas-an.
that bad-NMZ LK dog CV-CAU-PI-hit **again** 1SG.CM$_2$ PN-Kulas-CM$_2$
'That bad dog, I asked Kulas to hit (it) again.' (Kulas did so again)

d. Seediq

S-p-pahu=mu ∅ dakis **dungan** ka lukus nii.
CV-CAu-wash=1SG.CM$_1$ CM$_2$ Dakis **again** PIVOT clothes this
'I asked Dakis to wash the clothes again.' (Dakis did so again)

The three diagnostics above indicate that CV-causatives are bi-eventive causatives with an active, independent embedded VoiceP, with the causee c-commanding the theme (83).

(83) Bi-eventive structure of CV causatives



The fact that pivot-marking can skip this argument and appear on the theme therefore suggests that the licensing of this marker does not respect locality. This non-local distribution suggests that 'pivot' does not mark absolutive case.

The current conclusion is supported by data on PV-causatives, which display an argument- marking pattern distinct from both CV- and AV- causatives but a binding pattern that is identical to that of the other causatives – in which the causee asymmetrically binds the theme (84). Like in AV- and CV-marked causatives, the causing event in a PV-causative can be independently modified by agent-oriented adverbs and the adverb of frequency 'again,' revealing structural consistency across voice types. For considerations of space, I do not present the data on the two diagnostics.

(84) PV causatives: causee binds theme

a. Tagalog

P<in>a-pa-ligo=ko **si** **ivan** ng sarili niya.
CAU<PV.PRF>-RED-bathe=1SG.CM$_1$ **PN.PIVOT** **Ivan** CM$_2$ REFL 3SG
'I am making *Ivan* bathe himself.'

b. Puyuma

Ku=pa-saletra'-aw **i** **sawagu** kanta'aw.
1SG.CM$_1$=CAU-slap-PV **SG.PIVOT** **Sawagu** 3SG.REFL.CM$_2$
'I asked *Sawagu* to slap himself.'

c. Amis

Pa-pi-nengneng-en aku **ci-afan** cingran-an tu i dadingu.
CAU-TR-see-PV 1SG.CM$_1$ **PN.PIVOT-Afan** 3SG.CM$_2$ REFL LOC mirror
'I made *Afan* look at herself in the mirror.'

d. Seediq

Wada=mu p-tabak-un ∅ heya nanaq **ka** **heya**.
PRF=1SG.CM$_1$ CAU-slap-PV CM$_2$ 3SG REFL **PIVOT** **3SG**
'I made *him/her* slap himself/herself.'

The invariable causative structure observed here highlights the fact that pivot designation has no impact on the argument structure of a given clause. The non-local distribution of pivot-marking therefore indicates that 'pivot' does not realize absolutive case and should be a marker independent of case.

This conclusion follows from our prediction earlier that 'pivot' should not realize the same case (structural case from T) with CM$_1$. It also casts strong doubt on the applicative view of CV morphology, which will be reexamined in the following subsections.

5.2.2 Ditransitives

Ditransitive data provide further evidence against the absolutive case view of pivot-marking. As in causatives, all three arguments in a ditransitive can may all obtain pivot status via Philippine-type voice alternation. The observed case pattern across Philippine-type languages is schematized in (85) and exemplified in (86).[34]

(85) Ditransitives: mapping between voice and case

[34]Philippine-type languages vary in the corresponding voice-marking for ditransitives with a pivot-marked recipient. Some employ PV morphology and others adopt LV morphology. This variation does not affect the main argument here.

	a. AV	b. PV/LV	c. CV
Agent	**Pivot**	CM_1	CM_1
Recipient	CM_2	**Pivot**	CM_2
Theme	CM_2	CM_2	**Pivot**

(86) Amis

a. ∅-pafeli **kaku** t-una wawa t-una paysu.
AV-give **1SG.PIVOT** CM_2-that child CM_2-that money
'I gave the child that money.'

b. Pafeli-en aku **k-una** **wawa** t-una paysu.
give-PV 1SG.CM_1 **pivot-that child** CM_2 money
'I gave the child that money.'

c. Sa-pi-pafeli aku t-una wawa **k-una** **paysu**.
CV-PI-give 1SG.CM_1 CM_2-that child **PIVOT-that money**
'I gave the child that money.'

As observed with causatives, binding diagnostics show that voice alternation has no impact on binding relations in ditransitives. Across Puyuma, Amis, and Seediq, the recipient asymmetrically binds the theme regardless of voice type. Consider (87)–(93).

(87) Amis: R binds T regardless of voice type

a. **Actor Voice: *Recipient > Theme***

∅-paefer kaku [ci-ina-an nu cimacima a wawa] [tu wuhung
AV-send 1SG.PIVOT [PN-mother-CM_2 POSS every LK child] [CM_2 book
nira].
3PL.POSS]
'I sent every child's$_{<i>}$ mother his/her$_{<i/j>}$ book.'

b. **Patient Voice: *Recipient > Theme***

paefer-**en** aku [ci-ina nu cimacima a wawa] [tu wuhung
send-**PV** 1SG.CM_1 [PN.PIVOT-mother POSS every LK child] [CM_2 book
nira].
3SG.POSS]
'I will send every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

c. **Circumstantial Voice: *Recipient > Theme***

Sa-paefer aku [ci-ina-an nu cimacima a wawa] [ku wuhung
CV-send 1SG.CM_1 [PN-mother-CM_2 POSS every LK child] [PIVOT book
nira].
3SG.POSS]
'I sent every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

(88) Amis: T fails to bind R regardless of voice type

a. **Actor Voice: *Theme ⊁ Recipient***

∅-pafeli kaku [tu wawa nira] [tu paysu nu cimacima a
AV-give 1SG.PIVOT [CM_2 child 3SG.POSS] [CM_2 money POSS every LK
tamdaw].
person]
'I gave his$_{<i>}$ child every person's$_{<j/*i>}$ money.' (bound variable reading unavailable)

b. **Patient Voice: *Theme ⊁ Recipient***

Pafeli-**en** aku [ku wawa nira] [tu paysu nu cimacima a
give-**PV** 1SG.CM$_1$ [PIVOT child 3SG.POSS] [CM$_2$ money POSS every LK
tamdaw].
person]
'I will give his/her$_{<i>}$ child every person's$_{<j/*i>}$ money.' (bound variable reading unavailable)

c. **Circumstantial Voice: *Theme ≯ Recipient***

Sa-pafeli aku [tu wawa nira] [ku paysu nu cimacima a
CV-give 1SG.CM$_1$ [CM$_2$ child 3SG.POSS] [PIVOT money POSS every LK
tamdaw].
person]
'I gave his/her$_{<i>}$ child every person's$_{<j/*i>}$ money.' (bound variable reading unavailable)

(89) Seediq: R binds T regardless of voice type

a. **Actor Voice: *Recipient > Theme***

Wada=ku ∅-paadis [∅ bubu=na knkingal laqi] [∅
PRF=1SG.PIVOT **AV**-send [CM$_2$ mother=3SG.POSS every child] [CM$_2$
patis=daha].
book=3PL.POSS]
'I sent every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

b. **Patient Voice: *Recipient > Theme***

Wada=mu pdes-**un** [∅ patis=daha] [ka bubu=na knkingal
PRF=1SG.CM$_1$ send-**PV** [CM$_2$ book=3PL.POSS] [PIVOT mother=3SG.POSS every
laqi].
child]
'I sent every child's$_{<i>}$ mother his/her$_{<i/j>}$ book.'

c. **Circumstantial Voice: *Recipient > Theme***

Wada=mu **s**-paadis [∅ bubu=na knkingal laqi] [ka
PRF=1SG.CM$_1$ **CV**-send [CM$_2$ mother=3SG.POSS every child] [PIVOT
patis=daha].
book=3PL.POSS]
'I sent every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

(90) Seediq: T fails to bind R regardless of voice type

a. **Actor Voice: *Theme ≯ Recipient***

∅-pafeli kaku [tu wawa nira] [tu paysu nu cimacima a tamdaw].
AV-give 1SG.PIVOT [CM$_2$ child 3SG.POSS] [CM$_2$ money POSS every LK person]
'I gave his$_{<j>}$ child every person's$_{<k/*j>}$ money.'

b. **Patient Voice: *Theme ≯ Recipient***

Pafeli-**en** aku [ku wawa nira] [tu paysu nu cimacima a
give-**PV** 1SG.CM$_1$ [PIVOT child 3SG.POSS] [CM$_2$ money POSS every LK
tamdaw].
person]
'I will give his/her$_{<j>}$ child every person's$_{<k/*j>}$ money.'

c. **Circumstantial Voice: *Theme ≯ Recipient***

Sa-pafeli aku [tu wawa nira] [ku paysu nu cimacima a
CV-give 1SG.CM$_1$ [CM$_2$ child 3SG.POSS] [PIVOT money POSS every LK
tamdaw].
person]

'I gave his/her$_{<j>}$ child every person's$_{<k/*j>}$ money.'

(91) Seediq: T fails to bind R regardless of voice type[35]

a. **Actor Voice: *Theme ≯ Recipient***

Wada=ku ∅-paadis [∅ bubu=daha] [∅ patis knkingal laqi].
PRF=1SG.PIVOT **AV**-send [Y mother=3PL.POSS] [CM$_2$ book every child]
'I sent his/her$_{<j>}$ mother every child's$_{<k/*j>}$ book.'

b. **Patient Voice: *Theme ≯ Recipient***

Wada=mu pdes-**un** [∅ patis knkingal laqi] [ka bubu=daha].
PRF=1SG.CM$_1$ send-**PV** [CM$_2$ book every child] [PIVOT mother=3PL.POSS]
'I sent his/her$_{<j>}$ mother every child's$_{<k/*j>}$ book.'

c. **Circumstantial Voice: *Theme ≯ Recipient***

Wada=mu **s**-paadis [∅ bubu=daha] [ka patis knkingal laqi].
PRF=1SG.CM$_1$ **CV**-send [CM$_2$ mother=3PL.POSS] [PIVOT book every child]
'I sent his/her$_{<j>}$ mother every child's$_{<k/?j>}$ book.' (bound variable reading marginal)

Puyuma ditransitives deserve a special note. As the language allows flexible word order among nominals, it is possible to eliminate linear order as a potential factor for the binding interpretation. All ditransitive sentences in (95)-(96) allow the pronoun to precede its binder. Nevertheless, a bound variable reading invariably obtains when the pronoun is embedded in the theme (95). Where the pronoun is embedded in the recipient, the same reading is unavailable. This suggests that speakers' interpretation is not affected by the linear ordering between the quantifier and the pronoun, but by the underlying asymmetrical c-commanding relation between the recipient and the theme. The Puyuma data reported here thus present a particularly strong case against the alleged argument structure alternation between PV- and CV-marked clauses.

(92) Puyuma: R binds T regardless of voice type

a. **Actor Voice: *Recipient > Theme***

∅-beray=ku [kantu=lribun] [kan tinataw kana kiakarun
AV-give=1SG.PIVOT [3.POSS.CM$_2$=wages] [SG.CM$_2$ 3S.POSS.mother LK laborer
driya].
every]
'I gave every laborer's$_{<i>}$ mother his$_{<i/*j>}$ wages.'

b. **Patient Voice: *Recipient > Theme***

ku=beray-**ay** [kantu=lribun] [i tinataw kana kiakarun
1SG.CM$_1$=give-**LV** [3.POSS.CM$_2$=wages] [SG.PIVOT 3S.POSS.mother LK laborer
driya].
every]
'I gave every laborer's$_{<i>}$ mother his$_{<i/*j>}$ wages.'

c. **Circumstantial Voice: *Recipient > Theme***

Ku=beray-**anay** [tu=lribun] [kan tinataw kana kiakarun
1SG.CM$_1$=give-**CV** [3.POSS.PIVOT=wages] [SG.CM$_2$ 3S.POSS.mother LK laborer
driya].
every]

[35]The Seediq speakers I worked with reported that a bound variable reading between the quantificational theme 'every child's book' and the recipient 'his/her mother' is marginally available. This interpretation is not always available in CV ditransitives. Changing the verb or the event participants affects the availability of this reading. I assume that this potential reading manifests the weakest crossover effect (Lasnik and Stowell 1991).

'I gave every laborer's$_{<i>}$ mother his$_{<i/*j>}$ wages.'

(93) Puyuma: T fails to bind R regardless of voice type

a. **Actor Voice: *Theme ≯ Recipient***

∅-beray=ku [kantu=walak] [kantu=lribun kana kiakarun driya].
AV-give=1SG.PIVOT [3.POSS.CM$_2$=child] [3.POSS.CM$_2$=wages LK laborer every]
'I gave his$_{<i>}$ child every laborer's$_{<j/*i>}$ wages.'

b. **Patient Voice: *Theme ≯ Recipient***

Ku=beray-**ay** [tu=walak] [kantu=lribun kana kiakarun driya].
1SG.CM$_1$=give-**LV** [3.POSS.PIVOT=child] [3.POSS.CM$_2$=wages LK laborer every]
'I gave his$_{<i>}$ child every laborer's$_{<j/*i>}$ wages.'

c. **Circumstantial Voice: *Theme ≯ Recipient***

Ku=beray-anay [kantu=walak] [tu=lribun kana kiakarun driya].
1SG.CM$_1$=give-**CV** [3.POSS.CM$_2$=child] [3.POSS.PIVOT=wages LK laborer every]
'I gave his$_{<i>}$ child every laborer's$_{<j/*i>}$ wages.'

Tagalog ditransitives also display an invariable binding pattern immune to voice alternation, in which the recipient and the theme can mutually bind each other regardless of voice type (94)–(95).

(94) Tagalog: R binds T regardless of voice type

a. **Actor Voice (AV): *Recipient > Theme***

Nag-bigay si Joy kay Lia **ng** **sarili niyang** **larawan**.
AV.PRF-give PN.PIVOT Joy PN.CM$_2$ Lia **ID.CM$_2$** **self** **3S.POSS** **picture**
'*Joy*$_{<k>}$ gave *Lia*$_{<j>}$ a picture of *herself*$_{<k/j>}$.'

b. **Locative Voice (PV); *Recipient > Theme***

B<in>igy-**an** ni Joy si Lia **ng** **sarili niyang** **larawan**.
give-PRF-**LV** PN.CM$_1$ Joy PN.PIVOT Lia **ID.CM$_2$** **self** **3S.POSS** **picture**
'*Joy*$_{<k>}$ gave *Lia*$_{<j>}$ a picture of *herself*$_{<k/j>}$.'

c. **Circumstantial Voice (CV): *Recipient > Theme***

I-b-in-igay ni Joy kay Lia **ang** **sarili niyang** **larawan**.
CV-give-PRF PN.CM$_1$ Joy PN.CM$_2$ Lia **PIVOT** **self** **3S.POSS** **picture**
'*Joy*$_{<k>}$ gave *Lia*$_{<j>}$ a picture of *herself*$_{<k/j>}$.'

(95) Tagalog: T binds R regardless of voice type[36]

a. **Actor Voice (AV): *Theme > Recipient***

Nag-bigay=ako [sa kanilang nanay] [ng sweldo ng
AV.PRF-give=1SG.PIVOT [DEF.CM$_2$ 3PL.POSS mother] [INDF.CM$_2$ wages POSS
bawat manggagawa].
every laborer]
'I gave their$_{<j>}$ mother every laborer's$_{<j/k>}$ wages.' (bound variable reading available)

b. **Locative Voice (LV): *Theme > Recipient***

B<in>igy-**an**=ko [ang kanilang nanay] [ng sweldo ng bawat
give-PRF-**LV**=1SG.CM$_1$ [CN.PIVOT 3PL.POSS mother] [INDF.CM$_2$ wages POSS every
manggagawa].
laborer]

[36]In Tagalog, a non-pivot recipient/causee is obligatorily marked by *sa* (*ng* is not a possible option). This is an instance of differential object marking, and has no direct correlation with the argument here. See Latrouite (2018) for a dedicated discussion of differential object marking in Tagalog.

'I gave their$_{<j>}$ mother every laborer's$_{<j/k>}$ wages.' (bound variable reading available)

c. **Circumstantial Voice (CV): *Theme > Recipient***

I-b-in-igay=ko [sa kanilang nanay] [ang sweldo ng bawat
CV-give-PRF=1SG.CM$_1$ [DEF.CM$_2$ 3PL.POSS mother] [PIVOT wages POSS every
manggagawa].
laborer]
'I gave their$_{<j>}$ mother every laborer's$_{<j/k>}$ wages.' (bound variable reading available)

Note, importantly, that the same observation has been made in previous work. Andrews (1985) reported that a theme pivot can be bound by a non-pivot recipient in CV-ditransitives (96). This reinforces our current claim against the applicative approach to CV constructions.

(96) Example of picture NP reflexive reported in previous work

I-ni-abot niya sa bata ang kaniya-ng sarili-ng larawan.
CV-PFV-hand 3SG.CM$_1$ DEF.DOM.CM$_2$ child PIVOT 3SG-LK self-POSS picture
'He$_{<i>}$ handed the child$_{<j>}$ a picture of himself$_{<i/j>}$.'(Andrews 1985:143)

5.2.3 Three-place constructions with an adjunct-like pivot

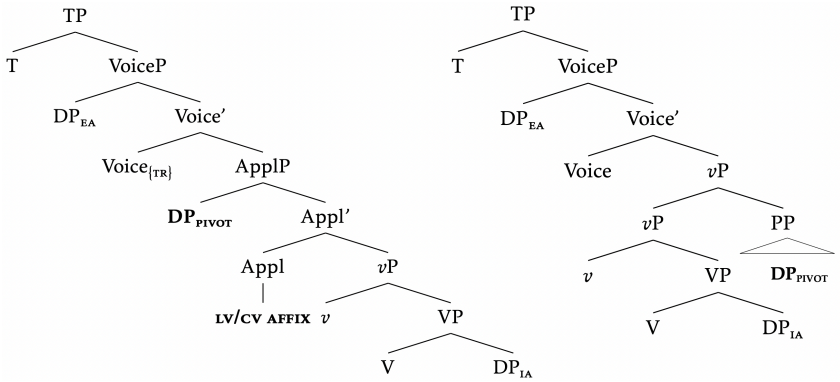
A final question concerns the status of adjunct-like pivots in LV/CV clauses formed with a bivalent verb (e.g., (97a–b)). Contra the conventional view, our current analysis predicts that such pivots may well not be an applied object (97a), but instead be an adjunct adjoined to the verb phrase. This proposal is schematized in (97b).

(97) Puyuma

a. Ku=retra-ay **na** **etu** dra paysu.
1SG.CM$_1$=put-LV **DEF.PIVOT** **desk** INDF.CM$_2$ money
'I put some money on the desk.'

b. Ku=deru-anay **na** **si'uy** dra patraka.
1SG.CM$_1$=cook-CV **DEF.PIVOT** **pot** INDF.CM$_2$ meat
'I cooked meat with the pot.'

(98) a. LV/CV pivot as an applied object b. LV/CV pivot as an adjunct



If the current non-applicative analysis is on the right track, the pivot-marked adjunct and the theme are in sisterhood within the same phase (VoiceP), and are expected to mutually bind each other under Bruening's (2014) theory of precede-and-command. If, however, the applicative analysis is correct, the theme should never be able to bind the pivot, as it is asymmetrically c-commanded by the (pivot-marked) applied object (98a).

Binding tests indicate that the applicative analysis is untenable. Across Puyuma, Amis, Seediq, and Tagalog, a quantificational theme can bind a pronominal pivot in LV/CV constructions, with the latter interpreted as a bound variable (99)–(100). This suggests that the pivot is not base-generated in the highest internal argument position (98a), and may instead remain as an adjunct adjoined to VoiceP (98b).

(99) LV: Locative pivot binds theme

a. Tagalog

Ni-lutu-**an**=ko [ng isda ng bawat babae] [ang kanyang kawali].
PRF-cook-**LV**=1SG.CM$_1$ [INDF.ACC fish POSS woman every] [PIVOT 3PL.POSS pot]
'I cook every woman's$_{<i>}$ fish in her$_{<i/j>}$ pot.' (bound variable reading available)

b. Puyuma

Ku=retra-**ay** [tu=etu] [kantu=paysu kana trawtrawtraw driya].
1SG.CM$_1$=put-**LV** [3.POSS.PIVOT=desk] [3.POSS=money POSS person every]
'I put every person's$_{<i>}$ money on their$_{<i/j>}$ desk.' (bound variable reading available)

c. Amis[37]

Pi-teli-**an** aku [tu syasing nu cimacima a wawa] [i cukuwi nangra].
put-**LV** 1SG.CM$_1$ [CM.$_2$ picture POSS every LK child] [PIVOT desk 3PL.POSS]
'I put every child's$_{<i>}$ picture on their$_{<i/j>}$ desk.' (bound variable reading available)

d. Seediq

Wada=mu phuma-**an** [∅ sari na knkingal rodan] [ka neepah=daha].
PRF=1SG.CM$_1$ grow-**LV** [ACC taro POSS every old.man] [PIVOT field=3PL.POSS]
'I grew every old man's$_{<i>}$ taro on his$_{<i/j>}$ field.' (bound variable reading available)

(100) CV: Instrumental pivot binds theme

a. Tagalog

I-p<in>ampalo=ko [ang kanyang pamalo] [ng bawat bata].
CV-hit=1SG.CM$_1$ [PIVOT 3SG.POSS stick] [INDF.CM$_2$ every child]
'I hit every child$_{<i>}$ with their$_{<i/j>}$ stick.' (bound variable reading available)

b. Puyuma

Ku=deru-**anay** [tu=si'uy] [kantu=buir kana taynaynayan driya].
1SG.CM$_1$=cook-**CV** [3.POSS.PIVOT=pot] [3.POSS=taro LK mother every]
'I cooked every mother's$_{<i>}$ taro with her$_{<i/j>}$ pot.' (bound variable reading available)

c. Amis

Sa-pi-tangtang aku [tu futing nu cimacima a tamdaw] [ku si'uy nangra].
CV-cook 1SG.CM$_1$ [CM$_2$ fish POSS every LK person] [PIVOT pot 3PL.POSS]
'I cooked every person's$_{<i>}$ fish with their$_{<i/j>}$ pot.' (bound variable reading available)

d. Seediq

[37] In Amis, CV morphology appears as a circumfix with two possible forms conditioned by the inner valency of the stem: *sa-pi-* and *sa-ka-*. See Wu (2006) for details.

S-beebu=mu [∅ knkingal laqi] [ka qreti=daha].
CV-hit=1SG.CM$_1$ [CM$_2$ every child] [PIVOT stick=3PL.POSS]
'I hit every child$_{<i>}$ with their$_{<i/j>}$ stick.' (bound variable reading available)

Not only do the binding facts discussed here undermine the alleged applicativization of LV/CV pivot, but they also reinforce the evidence against the absolutive case view of pivot-marking as well as the conclusion made earlier that the ergative approach to Philippine-type alignment is difficult to maintain. In addition, the same conclusion also argues against the case agreement approach to Tagalog voice (Rackowski and Richards 2002), which also replies crucially on the applicative analysis for LV and CV.[38]

5.3 'Pivot' as a topic marker independent of case: Further evidence

In the discussion so far, we have seen that pivot designation is not accompanied by argument structure alternation. This suggests that 'pivot' is a marker independent of case – given its non-local licensing in NAV clauses. This follows from Bowen's (1965) old insight that pivot phrases in Tagalog and many other Philippine-type languages show topic properties in being preferentially definite/specific and 'old information' (see also Schachter and Otanes 1972, Shibatani 1988, Richards 2000, Pearson 2001, 2005, Paul, Cortes, and Milambiling 2015, Collins 2018, and Paul and Massam 2021 for similar claims/assumptions).

Building on these works, I propose that pivot is a topic marker obligatorily present in all finite clauses. This marker overrides morphological cases and prepositions, giving rise to an ergative-like case pattern. This analysis is illustrated in (101).

(101) The accusative approach to Philippine-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	~~NOM~~ **Topic**	NOM	NOM	NOM
internal argument	ACC	~~ACC~~ **Topic**	ACC	ACC
locative	P_1	P_1	~~P_1~~ **Topic**	P_1
instrument/benefactor	P_2	P_2	P_2	~~P_2~~ **Topic**

Topicality has been shown to be difficult to define in a simple way, with observed variation in the syntactic, pragmatic, and semantic properties of topics across languages. It is therefore important to acknowledge that the topic analysis for 'pivot-marking' should only be viewed as an approximate analysis. Below I discuss three shared characteristics of Philippine-type syntax that lend potential further support to the topic analysis.

5.3.1 'Pivot' marks discourse topics

Elicited question-answer sequences with a clear discourse topic reveal a tight connection between pivot status and topichood: without further backgrounding context, the discourse topic must be indicated as the pivot in the answer sentence. Where the discourse topic is the theme in the answer (e.g., 'Kulas hit her'), the sentence must be marked in PV, with the topic having pivot status, as in (102b). A parallel sentence that does not place the topic as the pivot is considered infelicitous as a response (102c).

[38] As predicted under the current analysis, across the four languages, a quantificational theme may also bind an adjunct pivot in LV/CV constructions. Namely, the theme and the pivot can mutually bind each other. Due to space limitations, I do not present the data here. See Chen (2017:127–128) for the same observation and specific data presented there. This binding relation follows from Bruening's (2014) theory of precede-and-command, which predicts that two phrases under sisterhood within the same phase can mutually bind each other.

(102) Amis

a. Q: Na ma-maan **ci** **sawmah**?
PST PV-what **PN.PIVOT Sawmah**
'What happened to Sawmah?' (Context: seeing Sawmah crying)

b. A1: Ma-palu ni kulas **cingra**.
PV-hit PN.CM$_1$ Kulas **3SG.PIVOT**
'Kulas hit her.'

c. A2: *Mi-palu=tu ci-kulas **cangran-an.**
AV-hit=PRF PN-Kulas.PIVOT **3SG-CM$_2$**
(Intended: 'Kulas hit her.')

Further observations confirm that the unacceptability of A2 is due to the mismatch between the pivot designation and the discourse topic. Where the discourse topic is the agent in the answer (e.g. 'She is cooking pork' (103)), the response sentence must be framed in AV to sound natural, with the agent topic marked as the pivot (103b). Question-answer sequences from Seediq, Puyuma, and Tagalog demonstrate the same pattern. Due to space limitations, I do not include data here.

(103) Amis

a. Q: Mi-maan **ci** **sawmah**?
AV-what **PN.PIVOT Sawmah**
'What is Sawmah doing?' (Context: asking on the phone)

b. A1: Mi-tangtang **cingra** tu titi.
AV-cook **3SG.PIVOT** CM$_2$ pork
'She is cooking pork.'

c. A2: *Mi-tangtang-an **nira** ku titi.
PV.hit=PFV **3SG.CM$_1$** PIVOT pork
(Intended: 'She is cooking pork.')

Note, importantly, that the pattern observed above is not about repeating the same voice type from the question. Consider the Tagalog data in (104), created by a native speaker. In response to the question 'Where is Maria's spoon?', four possible answers were provided, (A1)–(A4).

(104) Tagalog

a. Q: Na saan **ang** **kutsara ni** **Maria**?
NA where **CN.PIVOT spoon** **PN.POSS Maria**
'Where is *Maria's spoon*?'

b. A1: Gamit ni Maria **(ang** **kutsara)**.
use.PV PN.CM$_1$ Maria (**CN.PIVOT spoon**)
'Maria is using *(it/the spoon)*.'

c. A2: I-p<in>ang-ka-kain ni AJ **(ang** **kutsara)**.
CV-PANG<PRF>-RED-eat PN.CM$_1$ AJ (**CN.PIVOT spoon**)
'AJ is eating with *(it/the spoon)*.'

d. A3: Na-kita=ko=[ng k<in>uha ni Lia **(ang** **kutsara)**].
PRF.PV-see=1SG.CM$_1$=[LK steal<PV.PRF> PN.CM$_1$ Lia (**CN.PIVOT spoon**)]
'I saw that Lia stole *(it/the spoon)*.'

e. A4: Na kay Peter **(ang** **kutsara)**.
NA with Peter **(CN.PIVOT spoon)**
'*The spoon* is with Peter.'

All four answers differ in voice choice and sentence structure, while all placing the discourse topic 'Maria's spoon' as the pivot. This reinforces the proposal above that pivothood is tightly associated with topichood in Philippine-type languages.

5.3.2 Pivot phrases share the same marker with hanging topics

The link between pivothood and topichood is seen also in hanging topic constructions. In the majority of Philippine-type languages, hanging topics consistently bear the same morphological marking as the pivot phrase. Consider the data below from three languages belonging to distinct Austronesian primary branches. Despite the form of pivot-marking differing across these languages, their hanging topics consistently share the same marking with the pivot phrase.

(105) Puyuma

a. Adri sagar i siber kan akang.
NEG like.AV SG.PIVOT Siber SG.CM$_2$ Akang
'Siber dislikes Akang.'

b. {**I**/*kan} **akang** i, adri sagar **i** **siber**.
{**SG.PIVOT**/*SG.CM$_2$} **Akang** PART NEG like.AV **SG.PIVOT** **Siber**
'Akang, Siber dislikes (her).'

(106) Paiwan

a. D<in>ukuL ti kui ni zepul.
hit<PV.PRF> SG.PIVOT Kui PN.CM$_1$ Zepul
'Zepul has hit Kui.'

b. {**Ti**/*ni} **zepul** d<in>ukuL **ti** **kui**.
{**SG.PIVOT**/*SG.CM$_1$} **Zepul** hit<PV.PRF> **SG.PIVOT** **Kui**
'Zepul, (she) has hit Kui.' (Chang 2006:417-18)

(107) Cebuano

a. Gi-higugma ni juan si maria.
PV-love PN.$_1$ Juan PN.PIVOT Maria
'Juan loves Maria.'

b. {**Si**/*ni} **juan** gi-higugma (niya) **si** **maria**.
{**PN.PIVOT**/*PN.CM$_1$} **Juan** PV-love (3SG.CM$_1$) **PN.PIVOT** **Maria**
'Juan, (he) loves Maria.' (Shibatani 1988:131)

5.3.3 'Pivot' marks presupposed information in pseudo-clefts

Pseudo-cleft constructions also lend independent support to the current analysis. In Philippine-type languages, pseudo-clefts are characterized by a sentence-initial predicate and a presupposed clause that follows it. New information (focus) is usually introduced as the predicate, with given information placed in the presupposed clause. The predicate and the presupposed clause are connected by a marker, which is consistently in pivot form across Philippine-type languages. Consider the examples below in (109).

(108) Focus **pivot-marking** { presupposed clause }
new information *old information*

(109) Pseudo clefts

a. Tagalog

Si ivan **ang** [b<um>ili ng kendi], hindi si aya.
pn ivan **PIVOT** [buy<AV> INDF.CM$_2$ candy] NEG PN.PIVOT Aya
'It is Ivan who bought candy, not Aya.'

b. Puyuma

I senten **na** [trima dra ruma] ameli i sayki.
PN.PIVOT Senten **PIVOT** [buy<AV> INDF.CM$_2$ house], NEG.COP PN.PIVOT Sayki
'It is Senten who bought a house, not Sayki.'

c. Amis

ci kulas **ku** [mi-palu-ay tisuwanan], anu ci panay?
pn.pivot Kulas **PIVOT** [AV-hit-NMZ 2SG.CM$_2$] or PN.PIVOT Panay
'Is it Kulas who hit you, or is it Panay?'

d. Seediq

ye walis **ka** [b<n>eebu ∅ isu], ye watan?
part Walis **PIVOT** [<PV.PRF>hit CM$_1$ 2SG] Q Watan?
'Is it Walis who hit you, or is it Watan?'

I propose that this construction can be viewed as a topic-comment structure, in which the presupposed clause is the topic, marked with pivot-marking, with the predicate denoting the focus of the construction, as in (110).

(110) Focus pivot-marking { presupposed clause }
Comment topic-marking *Topic*

Elicited question-answer sequences from Tagalog, Puyuma, Amis, and Seediq confirm that the focus (i.e., new information) is consistently placed in the predicate of the cleft, with the given information placed consistently in the presupposed clause and marked by pivot-marking, as in (111)–(114).

(111) Tagalog

a. Q: Sino **ang babae=[ng naglakad kasama ni ivan]**?
[who] **CN.PIVOT woman=[LK AV.PRF-walk with PN.CM$_2$ Ivan]**
'Who is the woman who walked with Ivan?' (Context: saw Ivan outside)

b. A: [Nanay niya] **ang babae=ng iyon**.
[mother 3SG.POSS] **PIVOT woman=LK that**
'That woman is his mother.'

(112) Puyuma

a. Q: [Isuwa] **na suwan**?
[where] **PIVOT dog**
'Where is the dog?' (Context: asking a family member about the family dog)

b. A: [Ulaya i sawka] **na suwan**.
[EXI LOC kitchen] **PIVOT dog**
'The dog is in the kitchen.'

(113) Amis

a. Q: [Cima] **ci Kulas**?
[who] **PN.PIVOT Kulas**
'Who is Kulas?' (Context: overheard people talking about a man named Kulas)

b. A: [U mitililday aku] **ci Kulas**.
[DET student 1SG.POSS] **PN.PIVOT Kulas**
'Kulas is my student.'

(114) Seediq

a. Q: [Ima] **ka heya**?
[who] **PIVOT 3SG**
'Who is he?' (Context: overheard people talking about a man named Kulas)

b. A: [Tangi=mu] **ka** **heya**.
[friend=1SG.POSS] **PIVOT** **3SG**
'He is my friend.'

That old information is consistently marked by pivot-marking across these languages suggests that this marker may constitute a general topic marker used for both hanging topics and internal topics, as well as in topic-comment constructions like the above. The non-local distribution of pivot-marking observed in 5.1–5.3 follows from this analysis.

Given the observations above, the topic approach may be an appropriate approximate analysis for pivot-marking. A better understanding of its nature awaits future investigation. It is, however, non-controversial to conclude that it is a marker of information structure status independent of the case system of Philippine-type languages.

A remaining question concerns the nature of the highly constrained Ā-extraction asymmetry found in these languages (see (2)). A recent analysis of a typologically similar language offers insights on the nature of this constraint. Dinka (Nilotic) possesses a Philippine-style voice system (van Urk 2015), where the grammatical role of the topic in a given (finite) clause is indexed by voice morphology on the verb. As seen below, in Dinka, the topic surfaces in the sentence-initial position, whose grammatical role is indexed by tonal morphology on the verb.

(115) Dinka

a. Àyén à-càm cuḭ̈in nḛ̈ păal.
Ayen 3s-eat.SV food P knife
'*Ayen* is eating food with a knife.' (Subject Voice)

b. Cuḭ̈in à-cɛ́ɛm Áyèn nḛ̈ păal.
food 3s.eat-OV Ayen.GEN P knife
'Ayen is eating *the food* with a knife.' (Object Voice)

c. Păal à-cɛ́ɛmḛ̈ Áyèn cuḭ̈in
knife 3s-eat.OBLV Ayen.GEN food
'Ayen is eating food with *a knife*.' (van Urk 2015:61) (Oblique Voice)

A 'pivot-only' extraction constraint is also observed in Dinka. In instances of relativization and *wh*-extraction, the tonal morphology on the verb must indicate the extracted phrase as the pivot/topic, as in (116).

(116) Dinka

a. Yè ngà cḛ́̈ cuḭ̈in câam?
be who PRF.SV food eat.NF
'*Who* has eaten the food?' (Subject *wh*-question)

b. tíng [CP cḛ́̈ Bòl tḭ̈ing]
woman.CS PERF.SV Bol see.NF
'*the woman* that has seen Bol' (Subject relativization)

c. Yè ngǫ̈́ cḭ́̈i Bôl câam?
be what PRF.OV Bol.GEN eat.GEN
'*What* has Bol eaten?' (Object *wh*-question)

d. tíng [CP cḭ̀̈i Bôl tḭ̈ing]
woman.CS PERF.OV Bol.GEN see.NF
'*the woman* that Bol has seen' (Object relativization)

Dinka has been analyzed as a topic-prominent accusative language with obligatory topic agreement on the verb (van Urk 2015). Along the lines of this analysis, its 'pivot-only' constraint is proposed to be driven by a flat Ā-probe, which can be satisfied through Agree with a phrase bearing either a [TOP] or [REL]-feature. Accordingly, 'pivot-only' is essentially not an extraction restriction, but extraction/agreement morphology. See similar proposals in Miyagawa (2010), Aravind (2018), and Baier (2018). I propose, building on this line of analyses, that topicalization and relativization in Philippine-type Austronesian languages are driven by the same Ā-probe, which is why both operations trigger the same set of verbal agreement morphology. See also Pearson (2001, 2005) and Erlewine et al. (2017) for two alternative accounts for the 'pivot-only' constraint under a non-ergative view of Philippine-type languages.

6 Conclusion

Although Philippine-type Austronesian languages exhibit apparent hallmarks of ergativity, a closer examination of the distribution of the alleged oblique, ergative, and absolutive cases has revealed that four languages of this type – Tagalog, Puyuma, Amis, and Seediq – all possess a run-of-the-mill accusative case system intertwined with prominent topic-marking overriding case. This suggests that (i) Philippine-type Austronesian languages are configurational languages that employ an ordinary case-licensing mechanism and (ii) the so-called 'Philippine-type alignment' neither manifests syntactic ergativity (Payne 1982; Mithun 1994; Aldridge 2004 et seq.; a.o.) nor constitutes a typologically unique type of case alignment (Himmelmann 2002, 2004; Foley 2008; Riesberg 2014, a.o.), but is an illusion created by prominent topic-marking overriding morphological case. Crucially, at least 10 other Philippine-type languages are reported to possess the case patterns that constitute key evidence for the accusative analysis (see sections 3 and 4). This suggests that the current claim may extend beyond the four target languages.

The conclusion reached here indicates that Philippine-type voice is fundamentally different from Indo-European voice – the latter constitutes valency-rearranging morphology hosted within VoiceP, whereas the former would be best viewed as topic-indicating morphology hosted beyond VoiceP. See Pearson (2005) and Chen (2022) for specific evidence for this implication. A notable prediction is therefore that 'Philippine-type voice' (i.e., topic-indicating verbal morphology) may appear in languages with either accusative or ergative case alignment – as it is not associated with valency-rearranging operations and should be compatible with any type of case alignment.

The current conclusion also indicates that syntactic ergativity is not the only possible trigger of a highly constrained Ā-extraction asymmetry. The important take-home message is therefore that discourse configurational languages may exhibit superficial traits of ergativity if their topic-marking is imprecisely treated as part of their case system. The illusory ergativity found in Austronesian thus reinforces the importance of approaching conventional glosses with caution and the need to reexamine existing analyses with new data.

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