# The syntax of Philippine-type alignment: Insights from case marking

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#### **Abstract**

Despite the apparent hallmarks of syntactic ergativity found in Philippine-type Austronesian languages, a closer look at the distribution of three basic case markers reveals that their ergative characteristics are only illusory. Support for an accusative view firstly comes from the presence of the putative oblique case on ECM subjects, derived objects, and objects inside restructuring infinitives—a distribution that undermines the antipassive view of Philippine-type Actor Voice, indicating instead that the alleged antipassive features accusative object and does not alternate transitivity based on voice. Further evidence comes from the locality-constrained distribution of the putative inherent ergative case, which shows hallmarks of structural nominative and suggests that the extraction restriction imposed on these languages is distinct 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 recent Ā-topic approaches to this marker. These observations motivate the view that 'Philippine-type alignment' reflects a nominative-accusative case system obscured by prominent topic-marking that overrides morphological case. This conclusion lends new support to the accusative view of Philippine-type languages and yields two implications: (i) highly constrained Ā-extraction asymmetry may be independent of syntactic ergativity, and (ii) discourse-configurational languages such as Philippine-type Austronesian languages may exhibit superficial traits of syntactic ergativity where topic-marking is imprecisely treated as part of their case system.

 $\textbf{Keywords:} \circ Austronesian-type \ voice \circ Philippine-type \ alignment \circ syntactic \ ergativity \circ antipassive \circ discourse-configurational \ language$ 

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# 1 Introduction

Despite investigations and debates since the 1970s, the question of whether Philippine-type Austrone-sian languages are ergative, accusative, or possess a typologically unique case alignment remains a point of contention in the literature. At the center of the debate is a typologically rare four-way argument-marking alternation found in these languages, known in the literature as 'Philippine-type alignment' (Blake 1925; Schachter 1976; Ramos 1974; Ramos & Bautista 1986; Gerdts 1988; Shibatani 1988; Guilfoyle, Hung & Travis 1992; Aldridge 2004; Pearson 2005; Rackowski & Richards 2005; a.o.).

In languages of this type, a change in verbal morphology (conventionally termed 'voice') correlates with a change in the distribution of a special marker commonly labeled as 'pivot' in the literature, which flags  $\bar{A}$ -extraction eligibility. As seen in the Tagalog examples (1a–d), with the verbal morphology alternating between Actor Voice (AV), Patient Voice (PV), Locative Voice (LV), and Circumstantial Voice (CV), this marker (*si* for personal names; *ang* for common nouns) shifts among the external argument (1a), the internal argument (1b), and various types of adjunct-like phrases (1c–d), respectively.

### (1) Tagalog

- a.  $B\langle \mathbf{um} \rangle$ ili si AJ ng keyk mula kay Lia para kay Joy. buy $\langle \mathbf{AV} \rangle$  PN.PIVOT AJ INDF.CM2 cake  $P_1$  PN.CM2 Lia  $P_2$  PN.CM2 Joy 'AJ bought cake from Lia for Joy.' (ACTOR VOICE)
- b. Bi-bilih-in ni AJ ang keyk mula kay Lia para kay Joy.

  CONT-buy-PV PN.CM<sub>1</sub> AJ CN.PIVOT cake P<sub>1</sub> PN.CM<sub>2</sub> Lia P<sub>2</sub> PN.CM<sub>2</sub> 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<sub>1</sub> AJ INDF.CM<sub>2</sub> cake PN.PIVOT Lia P<sub>2</sub> PN.CM<sub>2</sub> 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<sub>1</sub> AJ INDF.CM<sub>2</sub> cake P<sub>1</sub> PN.CM<sub>2</sub> Lia PN.PIVOT Joy

  'AJ will buy cake from Lia for *Joy*.' (CIRCUMSTANTIAL VOICE)

To remain analysis-neutral, the label  $CM_1$  stands for the case marking of non-pivot external arguments (e.g. ni in (1b-d));  $CM_2$  represents the case marking of non-pivot internal arguments (e.g. ng in (1a-d)).  $P_1$  and  $P_2$  denote two types of prepositions that mark non-pivot adjuncts: para for locatives (1c) and para for benefactives (1d).

As is well-known, this four-way system imposes a highly constrained  $\bar{A}$ -extraction restriction: for a phrase to undergo relativization, it must be indicated as the pivot via the use of appropriate voice morphology. This is seen in (2), where relativization of the agent, theme, locative, or benefactive is obligatorily accompanied by the use of AV (2a), PV (2b), LV (2c), or CV (2d), respectively—analogous to the mapping between voice and pivot selection observed in (1). Mismatch between voice type and the extracted phrase yields ungrammaticality. <sup>1</sup>

<sup>&</sup>lt;sup>1</sup>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 and commonly assumed to be secondary innovations. See Bondoc (2020) and Hsieh (2020) for details.

# (2) Tagalog

#### a. Actor Voice

```
Sino ang [_{RC} b<br/>
who PIVOT [_{RC} buy<av>/{*PV/*LV/*CV} INDF.CM2 cake]<br/>
'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<sub>1</sub> 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.CM1 Aya INDF.CM2 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<sub>1</sub> Aya INDF.CM<sub>2</sub> cake] 'Who is the one that Aya will buy cake for?' (relativization of benefactive)
```

What is the case alignment of these languages? The longstanding debate in the literature has revolved around the exact nature of  $CM_1$ ,  $CM_2$ , and the pivot marker—three basic markers attached to this voice system that are reconstructable to Proto-Austronesian or a stage immediately following its split.<sup>2</sup> The distribution of these markers is illustrated in (3) and defined in (4).

# (3) Philippine-type alignment: schematized case pattern<sup>3</sup>

	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

#### (4) Three basic markers that form Philippine-type alignment

- a. **Pivot**: the morphological marking on the sole phrase in a clause eligible for A-extraction
- b.  $CM_1$ : the morphological marking on non-pivot external arguments (e.g. ni in (1b–d))
- c. CM<sub>2</sub>: the morphological marking on non-pivot internal arguments (e.g. ng in (1a, c-d))

Depending on the framework adopted, the pivot marker is also commonly glossed as 'nominative' or 'absolutive' in the Austronesian literature, although a family of  $\bar{A}$ -approaches to these languages has analyzed it as a topic marker. The case marker  $CM_1$  is often glossed as 'ergative' or 'genitive,' although an alternative nominative analysis has also been advocated. The marker  $CM_2$  has also received two competing analyses. While the ergative approach to Philippine-type languages analyzes it

<sup>&</sup>lt;sup>2</sup>See Blust (2015), Chen (2017), and works cited there for an overview of the reconstructability of Philippine-type alignment to Proto-Austronesian. Note, however, that some of these markers are not present in morphosyntactically less conservative Philippine-type languages, such as Malagasy. See McDonnell and Chen (2022) for an overview of the loss of case-marking in these languages.

<sup>&</sup>lt;sup>3</sup>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 take more than one form, differentiating between different types of non-locative adjuncts. For the purpose of the paper, I schematize all these prepositions as  $P_2$ .

as lexical oblique case for antipassive objects, a number of researchers have put forward an accusative analysis of specific languages. A comprehensive overview is presented in section 2.

Despite over fifty years of scholarship, the exact nature of these three markers remains obscure, due to a lack of inter-language comparisons and insufficient investigation into the specific syntactic environments that reveal their case properties. As a result, recent works have commonly adopted analysis-neutral labels—NOM for pivot phrases, GEN for non-pivot agents, and ACC or OBL for non-pivot themes. Regrettably, such labels have increased obstacles for crosslinguistic comparisons and misunderstandings among non-Austronesianists. Consequently, although many have questioned the ergative view of Philippine-type alignment (Shibatani 1988; Richards 2000; Rackowski 2002; Rackowski and Richards 2005; Paul and Travis 2006; Foley 2008; Chen 2017; Erlewine et al. 2017; a.o.), Philippine-type Austronesian languages have continually been cited as examples of syntactic ergativity in recent typological literature.

The goal of the paper is to demonstrate that a closer examination of the distribution of CM<sub>1</sub>, CM<sub>2</sub>, and 'pivot' across these languages provides a new perspective on this debate. This new comparative evidence indicates that 'Philippine-type alignment' is neither ergative nor uniquely typological, but a run-of-the-mill accusative system obscured by prominent topic-marking (referred to as 'pivot') that overrides morphological case. Support for this claim comes from novel comparative data across four languages from different Austronesian primary branches: Puyuma (ISO 639-3 *pyu*), Amis (ISO 639-3 *ami*), Seediq (ISO 639-3 *trv*), and Tagalog (ISO 639-3 *tgl*). A systematic examination of previously overlooked syntactic environments across these languages reveals that CM<sub>1</sub> marks nominative, CM<sub>2</sub> marks accusative, and that pivot-marking is independent of case—a conclusion in line with existing accusative approaches to Philippine-type languages (Shibatani 1998; Richards 2000; Pearson 2005; Chen 2017).

The remainder of the paper is structured as follows. Section 2 reviews key assumptions of the competing analyses. Sections 3 and 4 present new evidence for the nature of CM<sub>1</sub> and CM<sub>2</sub>, drawing on data from previously understudied syntactic environments. Section 5 discusses the non-local distribution of pivot-marking and presents specific evidence that this marker is best analyzed as a topic marker. Section 6 summarizes and concludes.

For clarity and simplicity, I set aside further formal distinctions within each marker in individual languages, such as inflections for definiteness or nominal type (e.g. common noun vs. personal name) and focus on the three-way case distinction 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.

Except where otherwise indicated, the data presented in the 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 2023. Each of the four languages belongs to a different higher-order branch of Austronesian: Puyuma, Atayalic, East Formosan, and Malayo-Polynesian (Blust 1999; Ross 2009). Their shared syntax is therefore informative for understanding the prototypical design of Philippine-type alignment.

# 2 Philippine-type alignment: Four competing approaches

Philippine-type alignment, also known as 'Austronesian-type alignment' in earlier works, is found across morphosyntactically conservative Austronesian languages spoken in Taiwan, the Philippines,

northern Borneo, northern Sulawesi, and Madagascar. Key traits associated with this alignment are summarized in (5).<sup>4</sup>

# (5) Key traits of Philippine-type alignment

- 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 (known as 'voice') co-varies with the choice of the pivot, with the option of taking certain non-core phrases as pivots. 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.
- 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. <u>Fluid extraction restriction</u>: Ā-extraction (relativization, including pseudo-clefting) is limited to the pivot phrase of a given clause (see (2)).

Despite debates over the exact mechanism driving voice alternation, consensus holds that the mapping between voice choice and pivot selection is not conditioned by any single factor—such as the thematic role of the pivot. Instead, this mapping reflects a complex hierarchy sensitive to both the structural height of the pivot (relative to other arguments in the clause) and the thematic role of the pivot (when the pivot is not a core argument selected by the verb).

This non-thematic-based mapping is illustrated with the Tagalog examples below. As (6) shows, AV morphology can pick up either an agent in unergatives/two-place constructions (6a) or an unaccusative theme (6b) as the pivot.

#### (6) Tagalog

a. K(um)anta si Aya.sing(AV) PN.PIVOT Aya'Aya {sang / arrived}.'

(Actor Voice)

b. d(um)ating si Aya arrive(AV) PN.PIVOT Aya 'Aya arrived.'

(Actor Voice)

At the same time, unaccusative themes such as that in (6b) cannot constitute the pivot in PV morphology, as in (7). This differs from transitive themes (1b), further revealing the absence of a one-to-one correlation between voice type and the thematic role of the pivot. See Rackowski (2002) and Chen (2017) for a detailed discussion about the mismatch between voice choice and the thematic role of the pivot. See also the summary of the mapping between voice and argument-marking in Appendix I.

<sup>&</sup>lt;sup>4</sup>This definition expands on Erlewine et al.'s (2017) and Chen and McDonnell's (2019) definitions of Philippine-type alignment

### (7) Tagalog

\*D(in)ating si Aya arrive(PV) PN.PIVOT Aya (intended: 'Aya arrived.')

(Patient Voice)

I turn now to the case paradigms of the four target languages. Morphologically conservative Philippine-type languages typically possess a three-way case system, where CM<sub>1</sub>, CM<sub>2</sub>, and the pivot marker are all morphologically distinct. Amis features such a three-way distinction in both its case and pronominal paradigms, as in (8).

#### (8) Amis case and pronominal paradigm (Wu 2006)

	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	cian,	takuwanan	kaminan/kitanan	tisuwanan	tamoanan	cingranan	cairaan, cangraan

Seediq also exhibits a prototypical three-way distinction in its case and pronominal systems, where  $CM_1$ ,  $CM_2$ , and pivot-marking are formally distinct, as in (9).

# (9) Seediq case and pronominal paradigm (Holmer 1996)<sup>5</sup>

	Common noun	Personal name	1sg	1PL (EXCL./INCL.)	2sg	2PL	3sg	3PL
Pivot	ka	ka	=ku	=nami, miya/=ta	=su	=namu	-	_
$CM_1$	na	na	=mu	=nami, miyan/=ta	=su	=namu	=na	=daha
$CM_2$	Ø	Ø	kenan, munan	_	sunan	_	_	-

Puyuma (Nanwang) also displays a three-way case system, despite having undergone partial case syncretism in its common noun and personal name series (10).<sup>6</sup> Even though nonpivot agents may share the same case marking as nonpivot themes when they agree in definiteness, their case status ( $CM_1$  versus  $CM_2$ ) remains clear. This distinction is maintained by the presence of the proclitic tu= for  $CM_1$  phrases.

# (10) Puyuma case and pronominal paradigm (Teng 2008)

	Common noun	Personal name	1sg	1PL (EXCL./INCL.)	2sg	2 <sub>PL</sub>	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	

Tagalog exhibits a paradigm similar to that of Puyuma:  $CM_1$  and  $CM_2$  are further distinguished by definiteness, and the language shows partial case syncretism between  $CM_1$  and  $CM_2$ .

#### (11) Tagalog case and pronominal paradigm

	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 Tagalog's common noun series, the morphological distinction between  $CM_1$  and  $CM_2$  is partially lost where the internal argument is marked as indefinite. Such themes bear the marker ng, which is homophonous with  $CM_1$ -marking for common nouns.<sup>7</sup> Nevertheless, the  $CM_1/CM_2$  distinction

<sup>&</sup>lt;sup>5</sup>In Seediq, the homophony between the first-person plural pivot/CM<sub>1</sub> and the singular and plural second-person pronouns is resolved by the case marking on the other argument within the clause.

<sup>&</sup>lt;sup>6</sup>There is clear evidence that this syncretic pattern is innovative, as some Puyuma dialects fully preserve a three-way case distinction (Teng 2009).

<sup>&</sup>lt;sup>7</sup>Where ambiguity arises, speakers tend to use a different voice for clarity.

remains intact in Tagalog's personal name series (*ni* vs. *kay*) and pronouns. Further notes on Tagalog's case markers are presented in Appendix II.

This three-way argument-marking pattern has received four competing analyses, the basic assumptions of which are summarized in example (12).

		$CM_1$	$CM_2$	Pivot-marking
	a. Ergative view	ergative case	oblique case	absolutive case
(12)	b. Accusative view	nominative case	accusative case	topic-marking
	c. Theory-neutral view	"genitive"	"accusative"	"nominative"
	d. Symmetrical voice view	(not specified)	(not specified)	subject-marking

In sections 3–5, I present new empirical evidence for the accusative view (12b). The remainder of this section outlines the core assumptions of the four competing approaches.

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

## 2.1.1 The ergative view of Philippine-type alignment

The ergative approach to Philippine-type alignment draws on a key assumption—pivot-marking realizes absolutive case available to four types of argument: (a) intransitive subjects, (b) transitive objects, and (c) two types of applied objects.<sup>8</sup> This proposed case system is outlined in (13).

## (13) The ergative approach to Philippine-type alignment

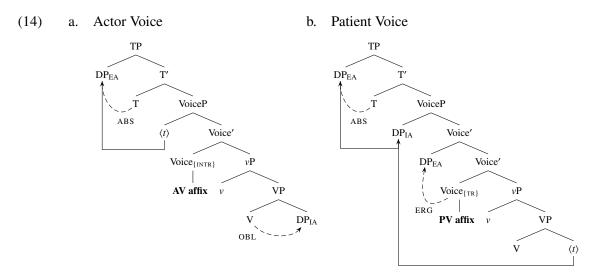
	a. AV	b. PV	c. LV	d. CV
external argument	Pivot: ABS	ERG	ERG	ERG
internal argument	OBL	Pivot: ABS	CM <sub>2</sub> : OBL	OBL
locative	$P_1$	$P_1$	Pivot: ABS	$P_1$
instrument/benefactor	$P_2$	$P_2$	$P_2$	Pivot: ABS
	intransitive / antipassive	basic transitive	transitive applicative	transitive applicative

Under this approach, the AV (13a) is an antipassive construction with an oblique object; the PV (13b) is the basic transitive; the LV and the CV (13c–d) are two types of transitive applicatives where an applied object functions as the primary object. In this view, Philippine-type voice constitutes a type of valency-rearranging morphology, promoting different types of arguments to subject status, akin to Indo-European-type voice (Payne 1982; Mithun 1994; Aldridge 2011, 2012, 2016 et seq.; inter alia.).

Treating voice shift as argument structure alternation, this approach positions voice alternation within the core verbal domain (VoiceP), attributing it to a change in the flavor of the Voice head: AV morphology realizes an intransitive Voice head, which contrasts with a transitive Voice head (realized as PV morphology) in two regards: (i) presence or absence of an EPP feature, and (ii) the ability to inherently case-license the external argument.<sup>9</sup> The proposed case-licensing pattern in these two constructions is schematized in (14).

<sup>&</sup>lt;sup>8</sup>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.

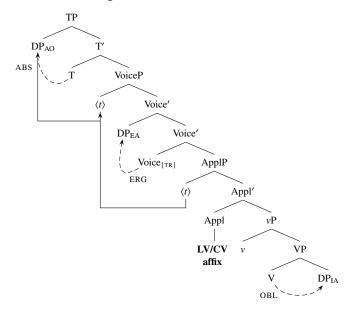
<sup>&</sup>lt;sup>9</sup>Aldridge does not distinguish between Voice and v in her series of work. For consistency, I implement this distinction (Pylkkänen 2002; Alexiadou et al. 2006; Harley 2013) throughout the paper and adjust the terminology used by Aldridge to reflect the Voice/v distinction, as this distinction enables a clearer discussion of the analysis of causatives (section 3).



With the absence of an EPP feature on Voice, the internal argument in AV constructions remains within VP and receives oblique case from V along with  $\theta$ -assignment. The external argument checks absolutive case with T, as in (14a). 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 (14b).

The LV and CV constructions are assumed to be two types of high applicative constructions.<sup>10</sup> Accordingly, the adjunct-like pivot phrase (e.g. instrument, location, or benefactor) is an applied object introduced by an applicative phrase, base-generated in the highest internal argument position, eligible for object shift, and accessible to absolutive case (15)—similar to PV objects.

## (15) Case-licensing in LV/CV constructions



An implicit assumption behind this approach is therefore that the transitive Voice head is overtly spelled out only in PV clauses and is phonologically null in LV/CV. Key assumptions of this analysis are summarized in (16).

<sup>&</sup>lt;sup>10</sup>It is unclear in the ergative literature how these two constructions differ in nature. Both are claimed to possess a high applicative phrase that introduces the pivot phrase (see, e.g. Aldridge 2004, 2008, 2011, and 2016 for this analysis.

### (16) The ergative approach to Philippine-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

A subset of Philippine-type languages has been further argued to exhibit a voice-based split ergative system, with the AV showing nominative-accusative alignment and the non-AV constructions exhibiting syntactic ergativity. Aldridge (2008), for example, contends that some Formosan languages have transitioned from a purely ergative system to a split ergative system, explaining why their AV constructions permit definite objects. See also Chang (1997) and Teng (2016) for a similar proposal for specific Formosan languages.

A necessary (yet potentially undesirable) assumption of this approach is that 'pivot' and  $CM_2$  each realize two distinct cases in AV and non-AV environments. The former marks nominative case in AV and absolutive case in non-AV constructions; the latter, which consistently appears on non-pivot internal arguments, realizes accusative case in AV and oblique case in non-AV clauses, as in (17). An immediate implication under this approach is therefore that the ban on internal argument extraction in the accusative-aligned AV constructions (shown earlier in (2a)) is an additional extraction constraint independent of syntactic ergativity.

#### (17) The split ergative view of Philippine-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	<b>Pivot: NOM</b>	CM <sub>1</sub> : ERG	CM <sub>1</sub> : ERG	CM <sub>1</sub> : ERG
internal argument	CM <sub>2:</sub> ACC	Pivot: ABS	CM <sub>2:</sub> OBL	CM <sub>2:</sub> OBL
locative	P <sub>1</sub>	$P_1$	<b>Pivot: ABS</b>	P <sub>1</sub>
instrument/benefactive	$P_2$	$P_2$	$P_2$	Pivot: ABS

#### 2.2 The accusative approach to Philippine-type alignment

The accusative approach to Philippine-type alignment holds a distinct view—'pivot' is a marker of information structure status (topic). In this view, the extraction asymmetry found in these languages does not manifest an 'absolutive-only' constraint, but an agreement-like mechanism that indexes the grammatical role of the Ā-extracted phrase that has either undergone topicalization or relativization (Chung 1994, 1998; Pearson 2005; Chen 2017; Erlewine et al. 2017). Despite minor differences among authors, the consensus is that CM<sub>1</sub> marks nominative case, and and CM<sub>2</sub> marks accusative case. An immediate assumption is therefore that both are overridden by pivot/topic-marking, resulting in the apparently fluid case pattern observed in (3). In this view, Philippine-type voice is not valency-indicating morphology hosted within VoiceP, but Ā-agreement or extraction morphology encoded in the left periphery. This analysis is illustrated in (18)–(19).

### (18) 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 <sub>T</sub> Topic	$P_1$
instrument/benefactor	$P_2$	$P_2$	$P_2$	P <sub>2</sub> Topic

## (19) The core assumptions of the accusative approach to Philippine-type alignment

Arg	ument-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 Philippine-type alignment

Yet a third family of analyses maintains that Philippine-type alignment is typologically unique, allowing four distinct mappings between semantic roles and syntactic positions (Foley 2008:42). 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 languages are non-configurational languages by default, the configurationality of which is determined by voice type—each of which allows a specific subject-predicate relation, in which adjunct-like phrases such as instrument and benefactor are allowed to be introduced as the subject. This analysis is summarized in (20).

#### (20) 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 developed within a non-generative framework, this approach can be evaluated based on two central predictions: if this approach is correct, the pivot phrases should exhibit subject-like behavior in various respects, and the binding relationship between the pivot phrase (the alleged subject) and other phrases in the clause should vary across the four voices.

#### 2.4 The theory-neutral view adopted in the recent literature

The aforementioned controversies have motivated a fourth approach, which employs purportedly analysis-neutral labels for the three markers: 'nominative' for pivot-marking, 'genitive' for  $CM_1$ , and 'accusative' for  $CM_2$  (e.g. Pizarro-Guevara 2020; Erlewine & Lim 2023; Hsieh 2023; among others). Despite its original intention to sidestep existing controversies in marker analysis, this approach still fundamentally assumes that the pivot phrase in a given clause functions as the subject or nominative, drawn to [uD] and located in a derived A-position. This leads to the prevailing view in the literature that the 'pivot-only' extraction restriction is equivalent to a 'subject-only' constraint. Therefore, this approach is not entirely neutral and actually bears similarities to the ergative analysis. Given its clear assumptions about the pivot phrases, it can be evaluated alongside three other competing analyses.

# 3 CM<sub>2</sub> as accusative: Insights from causatives, RTO, and infinitives

In this section, I present novel empirical evidence that  $CM_2$ —the marker defined earlier in (3) and reiterated in (21)—realizes structural accusative case.

## (21) CM<sub>2</sub>: the morphological marking on non-pivot internal arguments

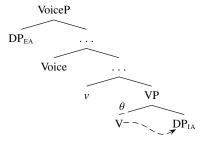
Not only does this analysis undermine the lexical oblique case view of CM<sub>2</sub>, but it also suggests that the AV constructions in these languages (which employ CM<sub>2</sub>-marked internal arguments) are syntactically transitive, rather than antipassive.

		a. Actor Voice	b. Patient Voice
(22)	external argument	Pivot	$CM_1$
	internal argument	$CM_2$	Pivot

This observation thus calls into question the ergative approach to Philippine-type alignment, which relies crucially on the assumption that the complementary distribution of  $CM_1$  and  $CM_2$  in (22) reflects a transitivity contrast between the AV and the PV. This conclusion thus also warrants a reexamination of  $CM_1$ , which will be discussed in Section 4.

Oblique and accusative cases are distinguishable in specific environments. Although both mark internal arguments, only the former is licensed in a Head-Complement relation along with  $\theta$ -assignment (23) (Aldridge 2004 et seq.; Woolford 2006; Bobaljik 2008). This suggests that the oblique case can appear only on internal arguments that are  $\theta$ -licensed locally.

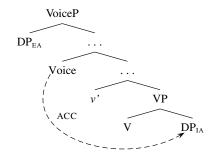
#### (23) Oblique case assignment



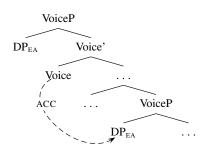
Accusative case, on the other hand, is assigned by Voice/ $\nu$ , and can be licensed either through the Head-Complement relation (24a) or via the Head-Specifier relation (24b) and appear on non-internal arguments. The latter is known as Exceptional Case Marking (ECM; Chomsky 1981, 1986), where accusative case is assigned across the VoiceP boundary to a nonfinite embedded external argument. Furthermore, since accusative licensing is not associated with  $\theta$ -assignment, an accusative-marked argument need not be  $\theta$ -licensed by the local verb.

#### (24) Two patterns of accusative case assignment

## a. Head-Comp licensing



## b. Head-Spec licensing (ECM)



In what follows, I demonstrate that CM<sub>2</sub> displays typical characteristics of accusative case across three understudied constructions: productive causatives (ECM environments) in section 3.1, raising-to-object constructions (non-thematic argument positions) in section 3.2, and restructuring infinitives in section 3.3.

## 3.1 CM<sub>2</sub> on ECM subjects

Productive causatives provide an ideal ECM environment for examining the nature of  $CM_2$ . Across the four target Philippine-type languages, AV-marked productive causatives obligatorily employ a  $CM_2$ -marked causee. Such causees therefore share the same case-marking with the internal argument in AV-marked simple clauses, as seen below in (25)–(28).

## (25) Tagalog

- a. Nag-pa-habol si Aya kay Maria ng pusa.
   AV.PFV-CAUS-chase PN.PIVOT Aya PN.CM<sub>2</sub> Maria INDF.CM<sub>2</sub> cat
   'Aya made Maria chase a cat.' (AV-marked causative)
- b. H<um>abol si Aya { kay Maria / ng pusa }.
   AV-chase PN.PIVOT Aya { PN.CM2 Maria / INDF.CM2 cat }
   'Aya chased { Maria / a cat }.'
   (Simple AV clause)

# (26) Puyuma

- a. Ø-pa-dirus=ku **kan Senten** kanku=walak.

  AV-CAUS-bath=1SG.PIVOT **SG.CM<sub>2</sub> Senten** 1SG.POSS.CM<sub>2</sub>=child

  'I made *Senten* wash my child.' (AV-marked causative)
- b. S<em>aletra'=ku { kan Senten / kanku=walak }.
   <AV>slap=1sg.PIVOT { sg.CM2 Senten / 1sg.Poss.CM2=child }
   'I slapped { Senten / my child }.' (Simple AV clause)

## (27) Amis

- a. Ø-pa-pi-lawup kaku **ci-Sawmah-an** ci-Panay-an inacila.

  AV-CAUS-PI-chase 1SG.PIVOT **PN-Sawmah-**CM<sub>2</sub> PN-Panay-CM<sub>2</sub> yesterday

  'I made *Sawmah* chase Panay yesterday.' (AV-marked causative)
- b. Mi-lawup kaku ci-Sawmah-an inacila.
   AV-chase 1SG.PIVOT PN-Sawmah-CM<sub>2</sub> yesterday
   'I chased Sawmah yesterday.' (Simple AV clause)

## (28) Seediq

a. Ø-p-hanguc=ku Ø **Iwan** Ø roduc nii.

AV-CAUS-cook=1SG.PIVOT CM<sub>2</sub> **Iwan** CM<sub>2</sub> chicken this

'I made *Iwan* cook this chicken.'

(AV-marked causative)

b. Q<m><n>ita { Ø Iwan / Ø roduc nii } ka Pawan. <AV><PFV>see { CM2 Iwan / CM2 chicken this } PIVOT Pawan 'Pawan saw {Iwan / this chicken}.' (Simple AV clause)

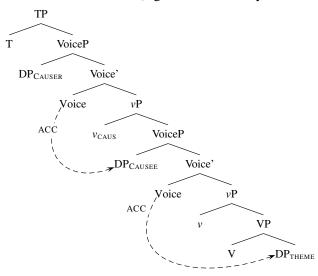
The presence of  $CM_2$  on causees challenges the oblique case view of this marker. Given that a causee in any causative construction is neither introduced as an internal argument nor  $\theta$ -licensed by the matrix verb, the presence of  $CM_2$  on such arguments suggests a wider distribution than expected for

<sup>&</sup>lt;sup>11</sup>See Schachter & Otanes (1972) and Latrouite (2011) for the same observation for Tagalog and descriptions of Puyuma, Amis, and Seediq in Teng (2008), Wu (2006), and Holmer (1999).

oblique case—which should be restricted to internal arguments that are  $\theta$ -licensed locally. Of course, such causees may also be inherently case-licensed by the dative or another type of inherent case (see Harley 2008 for an overview). I set aside this possibility for now and will return to this alternative with counterevidence.

Three diagnostics confirm that these causees are precisely located in an ECM environment—i.e. the specifier of an active embedded verb phrase (VoiceP). This is a position where accusative case from the matrix clause is available while lexical oblique case from V is not, as shown in (29). CM<sub>2</sub>'s availability in this environment thus lends novel support for the accusative case view of this marker.

### (29) Bi-eventive causatives (e.g. Folli and Harley 2007; Escamilla 2012; Legate 2014)

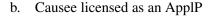


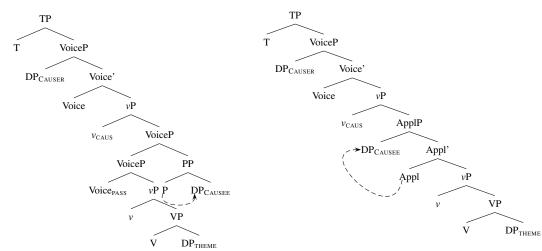
Below I present specific evidence that the causative construction under discussion indeed exhibits a bi-eventive structure like (29).

Causative constructions fall under three subtypes with regard to how the causee is licensed. The first type features a causee introduced as an ordinary external argument of an active embedded VoiceP, as shown above in (29). A second type features one that is licensed by a *by*-phrase attached to a passive embedded VoiceP (Kayne 1975; Legate 2014), as in (30a). A third type involves one that is licensed by an applicative phrase in a ditransitive-like monoclausal construction, as in (30b) (e.g. Folli and Harley 2007; Legate 2014).

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

a. Causee licensed as a by-phrase





A Type II analysis (30a) may first be ruled out by examining the binding relation between the causee and the theme. In all four target languages, anaphor binding and quantifier-variable binding adhere to the standard theory of c-command, as previously demonstrated for Tagalog and Malagasy (Pearson 2001; Rackowski 2002). Therefore, one would not expect the causee to be able to bind the theme in a structure like (30a), unless all four languages allow binding out of a *by*-phrase. Primary data show that the CM<sub>2</sub>-marked causee can freely bind a pronoun embedded within the theme across the four languages, as seen in (31a–b). This indicates that the causee occupies a structural position that c-commands the theme, consistent with either a Type I or Type III analysis.

- (31) Quantifier-variable binding between causee and theme in AV-causatives
  - a. Nag-pa-basa ako **sa bawat estudyante** ng

    AV.PFV-CAUS-read SG.PIVOT **DEF.CM**<sub>2</sub> **every student** INDF.CM<sub>2</sub> kanyang=libro.

3PL.POSS=book

'I asked every student<sub><i></sub> to read his/her<sub><i/i></sub> book.'

(Tagalog)

- b. Ø-pa-deru=ku kana taynaynayan driya kantu=kuraw.

  AV-CAUS-cook=1SG.PIVOT SG.CM<sub>2</sub> mother.PL every 3.POSS.CM<sub>2</sub>=fish
  'I asked every mother<sub><i>></sub> to cook her<sub><i/>|</sub> fish.' (Puyuma)
- c. Ø-pa-pi-tangtang kaku **tu cimacima a ina** tu titi nangra.

  AV-CAUS-PI-cook 1SG.PIVOT **CM<sub>2</sub> every LK mother** CM<sub>2</sub> pork 3PL.POSS 'I will ask every mother<sub><i>></sub> to cook her<sub><i/>|</sub> pork.' (Amis)
- d. Ø-p-hanguct=ku Ø **knkingal bubu** Ø sari=daha.

  AV-CAUS-cook=1SG.PIVOT CM<sub>2</sub> every mother CM<sub>2</sub> taro=3PL.POSS

  'T asked every mother<sub><i>></sub> to cook her<sub><i/i>></sub> taro.' (Seediq)

Reflexive binding diagnostics yield the same results, showing that a  $CM_2$ -marked causee can freely bind the theme with the latter interpreted as a variable, as in (32).

- (32) Reflexivization between causee and theme in AV-causatives
  - a. Nag-pa-pa-ligo ako kay Maria  $\mathbf{ng}$  sarili  $\mathbf{niya}$ . AV.PFV-CAUS-RED-bathe 1SG.PIVOT PN.CM2 Maria  $\mathbf{INDF.CM2}$  REFL 3SG 'I made Maria $_{<i>}$  bathe herself $_{<i>}$ '. 12
  - b. Ø-pa-salretra'=ku kan Sawagu **kanta'aw**.

    AV-CAUS-slap=1SG.PIVOT DF.CM<sub>2</sub> Sawagu **3SG.REFL.CM<sub>2</sub>**'I asked Sawagu<sub>≤|></sub> to slap himself<sub><|></sub>.' (Puyuma)
  - c. Ø-pa-pi-nengneng kaku ci-Sawmah-an **cingran-an tu** i dadingu.

    AV-CAUS-PI-see 1SG.PIVOT PN-Sawmah-CM<sub>2</sub> **3SG-CM<sub>2</sub> REFL** LOC mirror

    'I will ask Sawmah<sub><i>></sub> to look at herself<sub><i>></sub> in the mirror.' (Amis)
  - d. ?Ø-p-qiyuc=ku Ø huling=mu Ø **heya nanaq**.

    AV-CAUS-bite=1SG.PIVOT Y dog=1SG.POSS Y **3SG REFL**'I made my dog<sub><i>></sub> bite itself<sub><i></sub>.' (Seediq)

(i) Tagalog

Nag-pa-sunog ako kay Maria ng picture ng sarili niya.

AV-CAUS-burn 1SG.PIVOT PN.CM<sub>2</sub> Maria INDF.CM<sub>2</sub> picture INDF.CM<sub>2</sub> REFL 3SG

'I made Maria<sub><i>></sub> burn a picture of herself<sub><i>></sub>.' (Taga

Combining the observation from quantifier-variable binding (31d), I take this to mean that the causee and the theme are indeed in a c-commanding relation, although a reflexive theme in AV-marked causatives is dispreferred.

<sup>&</sup>lt;sup>12</sup>The three Tagalog speakers I consulted reported varying levels of unnaturalness for AV-marked causatives with a reflexive theme, as in (32a), while acknowledging that these structures are not ungrammatical. Additionally, all agreed that naturalness greatly improves when the reflexive is embedded within a DP, as in the picture NP example below:

Further evidence against analyzing the causee as a *by*-phrase (30a) lies in the combination of three facts. First, in all four languages, the causee occupies a position expected for a core argument and cannot be freely omitted—unexpected if it were a *by*-phrase. Second, changing the voice marking of the verbal complex from Actor Voice to Patient Voice allows the causee to carry pivot marking. This alternation, typically found with direct objects in Philippine-type languages, is impossible with PPs (such as *by*-phrases). Finally, the causatives under discussion bear no valency-decreasing morphology, nor any additional or distinct verbal morphology beyond voice marking. All evidence suggests there is little basis for analyzing CM<sub>2</sub>-marked causees as a *by*-phrase with a Type II analysis.

A Type III analysis (30b) can also be ruled out based on the causee's compatibility with agent-oriented adverbs. Type III causatives feature a monoclausal structure and possess a recipient-like, non-agentive causee that does not allow for agent-oriented adverbs (Folli & Harley 2007; Legate 2014). Conversely, the causative under discussion consistently allows the CM<sub>2</sub>-marked causee to be modified by agent-oriented adverbs such as 'secretly,' 'severely, and 'independently,' as seen in (33).<sup>13</sup> This reinforces the view that such causees are agentive external arguments, thereby supporting a Type I analysis.

- (33) Compatibility of agent-oriented adverbs with the causee in AV-marked causatives
  - a. Nag-pa-nakaw=ako kay ivan nang **palihim** ng keyk.

    AV.PFV-CAUS-steal=1SG.PIVOT PN.CM<sub>2</sub> Ivan CONJ **secretly** INDF.CM<sub>2</sub> cake

    'I asked [Ivan<sub>k</sub> to steal the cake secretly<sub>k</sub>].'

    (Tagalog)
  - b. Ø-pa-pukpuk=ku kan siber **pakireb** kana suwan.

    AV-CAUS-hit=1SG.PIVOT SG.CM<sub>2</sub> Siber **severely** DEF.CM<sub>2</sub> dog

    'I asked [Siber<sub>k</sub> to hit the dog severely<sub>k</sub>].'

    (Puyuma)
  - c. Ø-pa-pi-tangtang kaku ci-panay-an t-una futing **pina'un**.

    AV-CAUS-PI-cook 1SG.PIVOT PN.CM<sub>2</sub>-Panay CM<sub>2</sub>-that fish **carefully**'I will ask [Panay<sub>k</sub> to cook the fish carefully<sub>k</sub>].'

    (Amis)
  - d.  $\varnothing$ -p-sais=ku  $\varnothing$  akin **murux**  $\varnothing$  lukus. AV-CAUS-sew-1SG.PIVOT CM<sub>2</sub> Akin **independently** CM<sub>2</sub> clothes 'I asked [Akin<sub>k</sub> to sew the clothes independently<sub>k</sub>].' (Seediq)

Further evidence for the Type I analysis in (29) lies in the compatibility of the caused event with the frequency adverb 'again'. Differentiated by linear order (sentence-initial vs. post-causee), this adverb can unambiguously modify the causing event across all four languages, allowing for the interpretation that the CM<sub>2</sub>-marked causee is requested by the causer to repeat the action. This suggests that the caused event can be independently modified, arguing against a monoclausal (Type III) analysis of this construction. This lends further support to the Type I analysis, which posits an independent embedded VoiceP with an agentive causee as the external argument, thus allowing modification by a frequency adverb.

<sup>&</sup>lt;sup>13</sup>There are a few points to clarify concerning the syntactic status of adverbs discussed here and the evidence that they indeed modify the causee/causing event. First, the agent-oriented adverbs discussed here function as genuine adverbs. When not in sentence-initial position, these adverbs do not license voice alternation and must appear with a co-occurring lexical verb. Importantly, in constructions lacking an agent, the presence of such adverbs results in ungrammaticality. We may therefore assume that these adverbs are valid diagnostics for assessing the agentivity of the causee in causatives. Second, all four languages use distinctions in linear order to differentiate between adverbs modifying the causer and those modifying the causee. Typically, causee-modifying adverbs are positioned right-adjacent to the causee. In Amis and Tagalog, however, they may also appear in sentence-final position (see also Kroeger (1991:147) for a discussion on the flexibility of Tagalog adverbs). An anonymous reviewer inquired about the status of *nang*-marked adverbs in Tagalog (e.g. *nang palihim* 'secretly'), which are commonly assumed to be structurally licensed. Both Kroeger (1991:140) and Latrouite (2011:21) note that *nang* is the obligatory linker for introducing verb-modifying adverbs, and the flexibility in linear order further demonstrates that *nang* does not introduce an embedded clause.

- (34) Compatibility of the adverb of frequency 'again' with the caused event in AV-marked causatives
  - a. Nag-pa-kanta=ako kay Aya **ulit** ng kanta. AV-CAUS=1SG.CM<sub>1</sub> PN.CM<sub>2</sub> Aya **again** INDF.CM<sub>2</sub> song 'I asked [Aya<sub>k</sub> to sing a/the song again<sub>k</sub>].'
  - b. Ø-pa-base=ku kan Senten **masal** kana kiping.

    AV-CAUS-wash=1SG.PIVOT SG.CM<sub>2</sub> Senten **again** DEF.CM<sub>2</sub> clothes

    'I asked [Senten<sub>k</sub> to wash the clothes again<sub>k</sub>].'

    (Puyuma)
  - c. Ø-pa-pi-tangtang kaku ci-Afan-an **heca** t-una tali.

    AV-CAUS-PI-cook 1SG.PIVOT PN-Afan-CM<sub>2</sub> **again** CM<sub>2</sub>-that taro

    'I will ask [Afan<sub>k</sub> to cook the taro again<sub>k</sub>].'

    (Amis)
  - d. Ø-p-hanguc=ku Ø Temi **dungan** Ø rodux.

    AV-CAUS-cook=1SG.PIVOT CM<sub>2</sub> Temi **again** CM<sub>2</sub> chicken

    'I asked Temi<sub>k</sub> to cook the chicken again<sub>k</sub>.' (Seediq)

We can thus conclude that the CM<sub>2</sub>-marked causee is indeed associated with a Type I structure, introduced as an ordinary external argument in the embedded Spec, VoiceP, as shown earlier in (29).<sup>14</sup> As this position is one where only ECM licensing and not lexical oblique case is available, it provides strong empirical evidence that CM<sub>2</sub> realizes structural accusative case. See also Maclachlan (1996), Travis (2000), and Rackowski (2002) for a similar bi-eventive analysis of Tagalog causatives.

A systematic literature review reveals the same distribution of CM<sub>2</sub> across 16 other Philippinetype languages from various higher-order Austronesian branches, with no exceptions attested. This suggests that the accusative analysis of this marker may extend beyond the four target languages.<sup>15</sup>

## 3.2 CM<sub>2</sub> on derived objects

A second environment ideal for examining the nature of CM<sub>2</sub> lies in constructions with a derived object that bears no thematic identity with the local verb. Since lexical oblique case is assigned along with  $\theta$ -licensing, it should not be available for such objects.

Many western Austronesian languages exhibit a type of complex sentence that can be neutrally described as 'raising to object' (RTO). In this construction, a phrase that is thematically linked to the finite embedded clause can optionally surface in the matrix object position, following a matrix knowledge or preception verb (Davies 2005; Pearson 2001; Chen & Fukuda 2016; a.o.). Consider the example below from Madurese. In (35), the subject of the embedded clause 'Hasan' can optionally surface in the matrix object position without grammaticality consequences. I refer to such constructions as RTO, setting aside questions regarding how the apparent raised phrase is derived in individual languages. For simplicity, this phrase is referred to as the 'derived object' while remaining agnostic about its syntactic status (movement vs. base-generation).

<sup>&</sup>lt;sup>14</sup>This conclusion is supported by the results from one other diagnostic. In Puyuma, Amis, and Seediq, such causatives allow two distinct temporal adverbs that can independently modify the causing and caused events. However, Tagalog causatives generally disfavor two temporal adverbs, although all other common diagnostics discussed in Section 3.1 indicate that they share a similar bi-eventive structure with those in Puyuma, Amis, and Seediq. Considering the length and complexity of the paper, I do not introduce a fourth test here, provided that the three diagnostics discussed in the text suffice to reach the conclusion. See Chen (2017:49–50) for the relevant data.

<sup>&</sup>lt;sup>15</sup>Sources of data: Amis (Liu 2011; Chen & Fukuda 2016), 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).

#### (35) 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*; that the doctor examined him;.' (Davies 2005:653)

Such derived objects exhibit case-marking dependent on the matrix voice. Across all Philippine-type languages reported with an RTO construction, the derived object carries obligatory CM<sub>2</sub>-marking when the matrix verb is in AV; where the verb is in PV, the same object must carry pivot-marking. This correlation mirrors the case pattern observed on ordinary objects in simple clauses, as seen in (36).

		a. internal argument in simple clause	b. derived object in RTO
(36)	Matrix AV	$CM_2$	$CM_2$
	Matrix PV	Pivot	Pivot

The shared case pattern between these two types of object is found in all four target languages. Consider examples below from Tagalog (37), Puyuma (38), Amis (39), and Seediq (40).<sup>16</sup>

## (37) Tagalog

- a. **Um**-aasa ako [ na mai-pasa **ni juan** ang exam ]. **AV**-hope 1SG.PIVOT [ C PV.SUBJ-pass **PN.CM**<sub>1</sub> **Juan** CN.PIVOT exam ]. 'I hope that *Juan* will pass the exam.'
- b. **Um**-aasa ako **kay juan**<sub>i</sub> [ na ma-i-pasa niya<sub>i</sub> ang exam ]. **AV**-hope 1SG.PIVOT **PN.CM2 Juan**<sub>i</sub> [ C PV.SUBJ-pass 3SG.CM<sub>1i</sub> CN.PIVOT exam ].

  'I hope that *Juan* will pass the exam.'

  (CM<sub>2</sub> on derived objects)
- c. **Um**-apak si Maria **kay juan**. **AV**-step.on PN.PIVOT Maria **PN.CM<sub>2</sub> Juan**'Maria stepped on *Juan*.' (CM<sub>2</sub> on AV objects in simple clauses)

#### (38) Puyuma

- b. **Ma**-lradram=ku **kan Isaw**<sub>i</sub> [ dra m-uka (*e.c.*)<sub>i</sub> i Balangaw adaman ]. **AV**-know=1SG.PIVOT **SG.CM<sub>2</sub> Isaw** [ C AV-go (*e.c.*) LOC Balangaw yesterday ]

  'I know that *Isaw* went to Balangaw yesterday.' (CM<sub>2</sub> on derived objects)
- c. Ma-ladram=ku kan Isaw.

  AV-know=1SG.PIVOT SG.CM<sub>2</sub> Isaw
  'I know Isaw.' (CM<sub>2</sub> on AV objects in simple clauses)

#### (39) Amis

a. **Ma**-fana' kaku [ Ø mi-sakilif **ci-Sawmah** ci-Kulas-an ]. **AV**-know 1SG.PIVOT [ C AV-lie **SG.PIVOT-Sawmah** PN-Kulas-CM<sub>2</sub> ] 'I know that Sawmah lied to Kulas.'

<sup>&</sup>lt;sup>16</sup>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.

- b. **Ma**-fana' kaku **ci-Sawmah-an**<sub>i</sub> [ Ø mi-sakilif (*e.c.*)<sub>i</sub> ci-Kulas-an ]. **AV**-know 1SG.PIVOT **PN-Sawmah-CM2** [ C AV-lie (*e.c.*) PN-Kulas-CM2 ]

  'I know that *Sawmah* lied to Kulas.' (CM2 on derived objects)
- c. **Ma**-fana' kaku **ci-Sawmah-an**. **AV**-know 1sG.PIVOT **PN-Sawmah-**CM<sub>2</sub>

  'I know Sawmah.' (CM<sub>2</sub> on AV objects in simple clauses)
- (40) Seediq (Truku)
  - a. **Me**-'isug=ku [ Ø s<m>ipaq Ø huling=mu **ka Imi**]. **AV**-fear=1SG.PIVOT [ C <AV>hit CM<sub>2</sub> dog=1SG.POSS **PIVOT Imi** ]
    'I fear that Imi will hit my dog.'
  - b. **Me**-'isug=ku Ø **Imi**<sub>i</sub> [Øs<m>ipaq Ø huling=mu (e.c.)<sub>i</sub>]. **AV**-fear=1SG.PIVOT CM<sub>2</sub> **Imi** [C <AV>hit CM<sub>2</sub> dog=1SG.POSS (e.c.)]

    'I fear that *Imi* will hit my dog.' (CM<sub>2</sub> on derived objects)
  - c. **Me**-'isug=ku Ø **Imi**. **AV**-fear=1SG.PIVOT **CM<sub>2</sub> Imi**'I am afraid of Imi.'

(CM<sub>2</sub> on AV objects in simple clauses)

The obligatory presence of  $CM_2$  on derived objects poses theoretical challenges to the lexical oblique case view of this marker. By definition, lexical case is licensed alongside  $\theta$ -assignment. Its presence thus entails that the derived object is  $\theta$ -licensed by the matrix verb. This contradicts the fundamental assumption in the RTO literature that the derived object bears no thematic relation to the matrix verb—regardless of its syntactic status. In genuine cases of RTOs where the derived object undergoes movement to either the edge of the embedded clause or into the matrix clause (41), the derived object is already  $\theta$ -licensed by the embedded verb prior to raising. It is therefore infelicitous to assume this object bears  $\theta$ -identity with the matrix V.

(41) Type I RTO: the derived object undergoes  $(\bar{A})$  movement from the embedded clause

$$C \dots V_{knowledge/perception} \dots \underbrace{\frac{derived\ object_i}{}}_{} \quad [_{CP}\ C \dots V \dots < t_i > ]$$

In an alternative proleptic scenario (42), where the derived object is base-generated in its spell-out position, this object is typically analyzed as a non-thematic argument with no thematic relationship to the matrix verb (Higgins 1981; Potsdam and Runner 2001; Davies 2005; Salzmann 2017; Lohninger et al. 2022, among others)unless one posits a three-place  $\theta$ -grid:  $\langle x_{agent}, y_{theme}, z_{derived\ object} \rangle$  for knowledge/perception verbs that allow for RTO.

(42) Type II RTO: the derived object is base-generated in its spell-out position

$$C \dots V_{knowledge/perception} \dots derived object_i [CP C \dots V \dots pronoun_i]$$

Theoretical issues surrounding such a  $\theta$ -grid are as follows. First, it necessitates an independently motivated lexical entry that licenses three  $\theta$ -roles tied to prototypical two-place verbs, alongside the issue that the thematic role of the derived object is difficult to classify. Derived objects in RTO constructions are thus problematic for the assumption that they receive matrix lexical oblique case—irregardless of whether the construction involves a genuine instance of raising. Their compatibility with CM<sub>2</sub> thus casts further doubts on the oblique case view of this marker.

I now present arguments against an alternative account in which such objects are inherently caselicensed by a null preposition or applicative head, which assigns a case that is homophonous with CM<sub>2</sub>. The mapping between voice and case pattern in this construction argues against this analysis. PPs across Philippine-type languages cannot be selected as the pivot in Patient Voice, and instead, requires the use of Locative Voice or Circumstantial Voice to be promoted to pivot (Chung 1994; Pearson 2001; Rackowski 2002; Chen 2017). This contrasts with fact that the derived object in RTO can be promoted to pivot with the use of matrix PV morphology, as shown below in (43).

### (43) Seediq

- a. **Me**-'isug=ku **Ikung-**0 [ 0 s<m>ipaq huling=mu ]. **AV**-fear=1SG.PIVOT **Ikung-**CM<sub>2</sub> [ C <AV>beat dog=1SG.POSS.OBL ] 'I fear that Ikung will hit my dog.'
- b. Kela-**un**=mu **ka Ikung** [ Ø m-usa Ø Skangki ]. know-**PV**=1SG.CM<sub>1</sub> **PIVOT Ikung** [ C AV-go LOC Skangki ] 'I know that Ikung went to Skangki.'

The case pattern above thus suggests that such objects behave like a structurally case-licensed primary object—similar to ordinary DP objects in simple AV clauses, as shown earlier in (36).<sup>17</sup>

In contrast to the approaches above, the accusative analysis of  $CM_2$  offers a straightforward account for its consistent presence on AV objects, agentive causees, and derived objects in RTO. Since accusative case assignment is independent of  $\theta$ -licensing, an accusative case analysis for  $CM_2$  is compatible with either a base-generation or movement analysis in RTO, as demonstrated across various languages (see Salzmann 2017 for an overview). The obligatory presence of  $CM_2$  on derived objects thus reinforces the accusative case view of  $CM_2$ .

All 13 Philippine-type languages reported to possess an RTO construction in the literature exhibit obligatory  $CM_2$ -marking on derived objects whenever the matrix verb is in AV.<sup>18</sup> This suggests that the accusative analysis for  $CM_2$  can extend beyond the four target languages.

# 3.3 Absence of CM<sub>2</sub> in restructuring infinitives

A third environment ideal for differentiating accusative from oblique case is restructuring infinitives. As is well-known, accusative case is unavailable in infinitival complements that lack a fully functional Voice layer. This absence necessitates long-distance case licensing, leading to a special phenomenon where the embedded object's case marking depends on the matrix voice type (e.g. Aissen and Perlmutter 1976, 1983; Rizzi 1978, 1982; Wurmbrand 2001 et seq.; Cinque 2004).

This phenomenon is demonstrated in the following examples from Kannada, a language with overt case distinctions between nominative and accusative. As seen in (44), changing the matrix voice from active to passive results in obligatory nominative marking on the object within the restructuring infinitive. This indicates that the source of accusative case in the active example (44a) is the matrix Voice, and its absence when the matrix Voice is defective (44b).

#### (44) Kannada (Dravidian)

a. Jaananu-Ø [ 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.'

<sup>&</sup>lt;sup>17</sup>In addition, if such objects were licensed by a P head or an applicative head, a necessary assumption would be that the head is unitarily null across all these languages, including those that exhibit a rich prepositional inventory such as Tagalog and many other Central Philippine languages.

<sup>&</sup>lt;sup>18</sup>Sources of data: Amis (Liu 2011; Chen and Fukuda 2016), Atayal (Liu 2011), Bunun (Zeitoun 2000), 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).

```
b. Hosa mane(y)u-Ø (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 & Shekar 2007:10)
```

Restructuring infinitives (RIs) are particularly informative for our current investigation of  $CM_2$  because lexical oblique case should be consistently available within RIs, given that it is directly licensed by the lexical verb—which is always present within these infinitives. Consequently, long-distance case-licensing and matrix-dependent case marking of the object should not occur if the object is licensed with oblique case.

In all four target languages, the object within RIs exhibits matrix-dependent case marking—similar to the derived objects in RTO. This supports the conclusion that such objects are accusative-licensed.<sup>19</sup> Before discussing the core data, a brief overview of restructuring infinitives is necessary. In Philippine-type languages, RIs are characterized by clitic climbing, the 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 for details). These features are illustrated with the Puyuma examples in (45). As shown in (45a), the embedded object *yu* is obligatorily attached to the matrix verb as a pronominal clitic, indicating the absence of clause-boundedness effects. The embedded verb cannot take aspect or mood inflections, and the infinitive is incompatible with the complementizer *dra*, which is mandatory in finite CP complements (see section 3.2 for relevant examples).

## (45) Puvuma<sup>20</sup>

- a.  $Tu_i$ =talam-ay=\*(yu) kan Isaw [ (\*dra) s<em>abana(\*=yu)]. 3.CM1=try-LV[PV]=\*(2SG.PIVOT) SG.CM1 Isawi [ (\*C) <AV>cheat/(\*=2SG.PIVOT)] 'Isaw tried to cheat you.' (obligatory clitic climbing)
- b. T<em>alam i Isaw [ (\*dra) d<em>eru/\*d<em>a-deru dra patraka ]. try<AV> SG.PIVOT Isaw [ (\*C) <AV>cook/\*<AV>RED-cook INDF.CM2 meat ] 'Isaw tried to cook/\*was cooking the meat.' (TAM deficiency)

Infinitives of this type feature a special voice-marking constraint known as 'AV-only,' where Actor Voice is the only permissible voice-marking on the embedded verb. This constraint has been shown to be associated with a VoiceP complement containing a defective Voice head, which is incapable of accusative licensing.<sup>21</sup> Consider the examples in (46), which demonstrate that this constraint operates independently of the matrix voice-marking (PV vs. AV).

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

a.  $Tu_i$ =talam-ay kan senten $_i$  [ $_{INF}$  s<em>abana/\*tu=sabana-aw i 3.CM $_1$ i=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.'

<sup>&</sup>lt;sup>19</sup>Tagalog exhibits no infinitive of this type. Nevertheless, its CM<sub>2</sub>-marking shows the hallmarks of structural accusative case in the two environments discussed in sections 3.1 and 3.2.

<sup>&</sup>lt;sup>20</sup>In Puyuma, a number of verbs that use a PV case frame also exhibit LV morphology, a phenomenon known as PV-LV syncretism (Blust and Chen 2017). To avoid unnecessary confusion, these verbs are glossed as LV[PV].

<sup>&</sup>lt;sup>21</sup>See T. Chen 2010, H. Wu 2011, Kroeger 2014, Wurmbrand 2014, Chang 2017, and V. Chen 2017 for a detailed discussion. An anonymous reviewer asked if there is a way to determine whether the Voice layer in these languages is simply absent. Given that these RIs can be independently negated (as in examples like 'I tried not to smoke a cigarette,' which is structurally distinct from the sentential negation 'I did not try to smoke a cigarette' based on the negator's linear order), it is evident that they do possess a defective Voice head. See Wurmbrand (2014 et seq.) for details on this diagnostic.

```
b. T<em>alam i senten [_{INF} s<em>abana/*tu=sabana-aw kan sawagu ]. try<AV> SG.PIVOT Senten [_{INF} \boxed{<AV>cheat/*3.CM_1=cheat-PV} SG.CM<sub>2</sub> Sawagu ] 'Senten tried to cheat Sawagu.'
```

Like the Kannada examples (44), the case marking of the embedded object is determined by the matrix voice type. Where the matrix verb is in AV, the embedded object must carry  $CM_2$ -marking; where the matrix verb is in PV, the object must bear pivot-marking. This alternation is schematized in (47) and illustrated in (48).

		internal argument in simple clause	object inside a restructuring infinitive
(47)	matrix AV	$CM_2$	$CM_2$
	matrix PV	Pivot	Pivot

- (48) Absence of CM<sub>2</sub> in restructuring infinitives
  - a. Puyuma

```
Ku=talam-ay [_{INF} (*dra) s<em>abana' { i/*kan } Apeng ]. 1SG.CM<sub>1</sub>=try-LV[PV] [_{INF} (*C) \boxed{<AV>cheat } { SG.PIVOT/*SG.CM<sub>2</sub> } Apeng ]. 'I tried to cheat Apeng.'
```

b. Amis

```
Tanam-en aku \begin{bmatrix} I_{INF} \text{ mi-tangtang } \{ \text{ k-una/*t-una} \} \text{ titi } \end{bmatrix}. try-PV 1SG.CM<sub>1</sub> \begin{bmatrix} I_{INF} \text{ AV-cook} \end{bmatrix} { PIVOT-that/*CM<sub>2</sub>-that } pork ] 'I will try to cook that pork.'
```

c. Seediq

```
Ququ-un=mu [_{INF} m-imah { ka/*\emptyset } sino nii ]. try-PV=1SG.CM1 [_{INF} AV-drink] { PIVOT/*CM2 } alcohol this ] 'I will try to drink this alcohol.'
```

Since V—the licensor of lexical case—is present within RIs, the fact that CM<sub>2</sub> is absent in this environment further undermines the lexical oblique case view of CM<sub>2</sub>. Under that approach, the internal argument would have been locally case-licensed and remained in the embedded clause. Consider below examples from Turinese (49a) and Italian (49b), which show that lexically case-licensed objects (e.g. the dative recipient 'Mario') cannot participate in long passive (Ledgeway 2021). This contrasts with accusative-licensed objects in the same languages, which can freely participate in passivization. This is seen in (50), where the accusative theme of the ditransitive verb 'send' (50a) and that of transitive verbs 'pinch' (50b) can freely undergo passivization.

(49) a. Turinese (dative receipt banned from long passive)

```
*Marjo a vøl ese mand la.

Mario SCL want.PRS.3SG be.INF send.PTCP.FSG/MSG the.FSG letter.F (intended: 'Mario wants to be sent the letter.')'
```

b. Italian (dative receipt banned from long passive)

```
*Mario vuole essere mandata/-o la lettera.

Mario SCL want.PRS.3SG be.INF send.PTCP.FSG/MSG the.FSG letter.F

(intended: 'Mario wants to be sent the letter.') (Ledgeway 2021:142)
```

(50) Italian (accusative object becoming matrix subject following passivization)

```
    a. { Mario / liu } vuole essere mandato a Lipsia (da te).
    { Mario / he } want.3sg be.Inf send.ptcp.m.sg to Leipzig (by you)
    'Mario/he wants to be sent to Leipzig (by you).'
```

```
    b. { Mario / liu } vuole essere pizzicato (da te).
    { Mario / he } want.3sg be.INF pinch.PTCP.M.sg (by you)
    'Mario/he wants to be pinched (by you).'
```

Given (49)–(50), the unavailability of  $CM_2$  within the RIs under discussion (48) not only challenges its claimed status as lexical oblique case but also suggests that its licensing is dependent on Voice—under the standard assumption that such RIs contain a deficient Voice head that is incapable of case-licensing (see Wurmbrand et al.'s 2014 analysis of RIs in Formosan languages). This directly supports the view that  $CM_2$  realizes accusative case.<sup>22</sup>

Importantly, the matrix-dependent case marking is discussed here found across in RIs in at least 15 Philippine-type Austronesian languages (Wurmbrand 2014). This suggests that the accusative case analysis for CM<sub>2</sub> may thus extend beyond the target languages.

#### 3.4 Interim conclusion

CM<sub>2</sub>'s consistent presence on ECM subjects and non-thematic objects across four Philippine-type languages, alongside its absence in restructuring infinitives, suggests that this case is not limited to internal argument positions (as would be expected for lexical oblique case) but rather appears in various environments where structural accusative case is typically expected.

This conclusion reveals that two-place AV constructions in these languages—which feature a CM<sub>2</sub>-marked object—are genuine transitives with accusative objects. Consequently, the proposed ergative alignment of antipassive subjects (S) and transitive objects (O) cannot be maintained, as antipassive subjects are fundamentally distinct from transitive subjects (A).

#### (51) Case alternation between AV and PV

	a. Actor Voice	b. Patient Voice
external argument internal argument		CM <sub>1</sub> Pivot
transitivity	transitive	transitive

The current conclusion follows consistently from recent critiques of the antipassive approach to Philippine-type Actor Voice, where several empirical differences between Philippine-type Actor Voice and prototypical antipassives have been identified—including the former's lack of valency-decreasing morphology, compatibility with definite/specific objects, and the non-omissibility of such objects. See Foley (1998), Rackowski (2002), Paul and Travis (2006), O'Brien (2016), Chen (2017), and works cited there for a detailed overview of empirical issues for that analysis.

<sup>&</sup>lt;sup>22</sup>An anonymous reviewer posited that the ungrammaticality of the CM<sub>2</sub>-marked object in (46) might be due to the requirement of a pivot in the language; since pivot marking can override case marking, it is unclear whether CM<sub>2</sub> is structural or lexical. There are two reasons against this analysis: First, complement clauses in Philippine-type languages may covertly bear pivot status without overt pivot-marking, in which case the pivot status of the clause is inferred by Ā-extraction eligibility of clause-internal phrases (see Rackowski and Richards 2005; Chen and Fukuda 2016 for details). Thus, complex sentences like (46a–c) can be grammatical without overt pivot-marking: the infinitive itself may be the pivot if the embedded object does not lack a local case-licensor. Second, even if pivot-marking overrides case marking, the matrix voice-marking would still indicate the grammatical role of the pivot phrase. As is widely agreed, only structurally case-licensed direct objects in these languages trigger PV morphology; other types of internal arguments and adjuncts usually require CV morphology (see Rackowski, 2002; Chen, 2017). Therefore, the matrix voice would not be in PV if these examples indeed contained oblique case-licensed objects.

Crucially, the accusative behavior of CM<sub>2</sub> discussed here is not specific to the four target languages. The table below presents a sample list of Philippine-type languages attested with the aforementioned accusative behavior of CM<sub>2</sub>. Since each of the three environments (52a–c) provides independent evidence for the accusative case view of CM<sub>2</sub>, it is unnecessary for a language to exhibit all three to support this conclusion.

(52) Summary: Evidence for the  $CM_2$  as structural accusative case<sup>23</sup>

	Subgrouping	Causatives	RTO	Restructuring infinitives
	affiliation	a. CM <sub>2</sub> on ECM subjects b. CM <sub>2</sub> on derived objects	b. CM <sub>2</sub> on derived objects	c. CM <sub>2</sub> absent in
		a. Civi2 on Ecivi subjects	b. Civi2 on derived objects	RIs where the matrix voice is in NAV
Atayal	Atayalic	<b>✓</b>	<b>✓</b>	<b>✓</b>
Seediq	Atayalic	<b>✓</b>	<b>✓</b>	<b>✓</b>
Puyuma	Puyuma	<b>✓</b>	<b>✓</b>	<b>✓</b>
Amis	East Formosan	<b>✓</b>	<b>✓</b>	<b>✓</b>
Kavalan	East Formosan	<b>✓</b>	<b>✓</b>	<b>✓</b>
Tsou	Tsouic	<b>✓</b>	<b>✓</b>	<b>✓</b>
Thao	Western Plains	<b>✓</b>	<b>✓</b>	?
Bunun	Bunun	<b>✓</b>	<b>✓</b>	<b>✓</b>
Saisiyat	NW Formosan	<b>✓</b>	<b>✓</b>	<b>✓</b>
Paiwan	Paiwan	<b>✓</b>	<b>✓</b>	<b>✓</b>
Tagalog	Malayo-Polynesian	<b>✓</b>	<b>✓</b>	N/A
Ilocano	Malayo-Polynesian	<b>✓</b>	<b>✓</b>	N/A
Cebuano	Malayo-Polynesian	<b>✓</b>	<b>✓</b>	N/A
Botolan Sambal	Malayo-Polynesian	✓	<b>✓</b>	N/A
Subanon	Malayo-Polynesian	✓	✓	N/A

# 4 $CM_1$ as nominative: Insights from causatives and unaccusatives

I turn now to the distribution of CM<sub>1</sub>, the marker defined earlier in (3) and repeated in (53).

(53) CM<sub>1</sub>: the morphological marking on non-pivot external arguments.

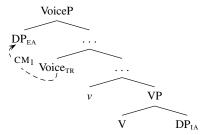
Recall that this marker is consistently present on the external argument in non-AV clauses but absent in Actor Voice (54). According to the long-standing assumption that AV clauses are syntactically intransitive, this marker has traditionally been analyzed as inherent ergative case assigned by transitive Voice/v (Aldridge 2004 et seq.), illustrated below in (54).

(54) Philippine-type alignment: schematized case pattern

	a. AV	b. PV	c. LV	d. CV
external argument	Pivot	$CM_1$	CM <sub>1</sub>	$CM_1$
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

<sup>&</sup>lt;sup>23</sup>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).

### (55) CM<sub>1</sub>-assignment under the ergative case view



If  $CM_1$  indeed marks inherent ergative case assigned by transitive Voice, it should exclusively mark external arguments within transitive clauses. Moreover, given that Voice/ $\nu$  is the licensor of this case, multiple instances of  $CM_1$  marking could occur within a single transitive clause if it contains multiple Voice/ $\nu$  heads.

If, however,  $CM_1$  exhibits a broader distribution beyond external argument positions, yet remains unique per clause and is confined to the highest argument within a CP, this suggests that  $CM_1$  might be better understood as a type of structural case assigned to the highest caseless DP per clause—namely, the nominative. The anticipated distributional disparities between inherent ergative and nominative cases are delineated in (56).

# (56) Distribution of CM<sub>1</sub> under two competing hypotheses<sup>24</sup>

	CM <sub>1</sub> as inherent ergative case	CM <sub>1</sub> as structural nominative case
a. CM <sub>1</sub> restricted to external arguments	Yes	No
b. CM <sub>1</sub> restricted to transitive clauses	Yes	No
c. CM <sub>1</sub> unique per clause	No	Yes
d. CM <sub>1</sub> present only on the highest caseless DP	No	Yes

In this section, I demonstrate that  $CM_1$  shows common hallmarks of the nominative in two specific environments—causative of transitives (4.1) and unaccusatives with an adjunct phrase (4.2).

## 4.1 CM<sub>1</sub> as locality-constrained and unique per CP

Ergative case is well-documented to appear in infinitives or recur within a single finite clause. Such a distribution is expected given that Voice—the licensor of this case—is neither unique to each CP nor restricted to finite environments. Consider the examples below from Trumai (an isolate), Kabardian (Caucasian), and Macushi (Carib), where ergative marking is found on both the causer and the causee in a causative construction.

(57) Ergative causee in morphologically ergative languages

a. Alaweru-k hai-ts axos disi-ka.

Alaweru-ERG 1SG-ERG child.ABS hit-CAUS

'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-CAUS-carry-PRET-AFF

'The old man made the boy carry the girl.' (Matasovic 2010:50) (Kabardian)

 $<sup>^{24}</sup>$ This table excludes potential scenarios where  $\overline{\text{CM}}_1$  is syncretic with the ergative and another nonstructural case. This is not really a concern for the current investigation of  $\overline{\text{CM}}_1$ , as there is clear evidence (to be presented later in this section) that  $\overline{\text{CM}}_1$ 's distribution is incompatible with any nonstructural case.

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

Conversely, the alleged ergative case in Philippine-type languages— $CM_1$ —shows a distinct distribution. It is unique per CP and available only to the highest argument per clause. This distribution is transparent in bi-eventive productive causatives, where  $CM_1$  is available only to the causer, and can never appear on the agentive causee. Consider (58).

### (58) Case pattern in productive causatives

	a. AV	b. PV	c. CV
Causer	Pivot	CM <sub>1</sub>	CM <sub>1</sub>
Causee	$CM_2/*CM_1$	Pivot/*CM <sub>1</sub>	$CM_2/*CM_1$
Theme	$CM_2$	$CM_2$	Pivot

This locality-based distribution is exemplified in the data below from the four target languages. Consider below the examples of AV-marked and CV-marked causatives. Examples of PV-marked causatives are omitted, as the absence of  $CM_1$  in that construction is due to the causee bearing pivot marking, as illustrated above in (58b). Recall that in AV-marked causatives, the causee behaves like a typical external argument introduced by an active VoiceP (section 3.1). The same observations hold for that in CV-marked causatives, the diagnostics for which are not repeated here for simplicity.<sup>25</sup>

## (59) AV-causatives: Unavailability of CM<sub>1</sub> to the causee

a. Nag-pa-nakaw=ako {kay/\*ni} Juan ng kotse.

AV.PFV-CAUS-steal=1SG.PIVOT CM2/\*CM1 Juan INDF.CM1 car

'I asked Juan to steal the car.' (Tagalog)

b.  $(*Tu=)\emptyset$ -pa-karatr=ku kana suwan kan Senten.  $(*3.CM_1)$ =AV-CAUS-bite=1SG.PIVOT **DEF.CM<sub>2</sub> dog**<sub>i</sub> PN.CM<sub>2</sub> Senten 'I made the dog bite Senten.' (Puyuma)

c. Ø-pa-pi-kalat kaku **{tu/\*nu}** wacu ci-Afan-an.

AV-CAUS-TR-bite 1SG.PIVOT **CM<sub>2</sub>/\*CM<sub>1</sub>** dog PN-Afan-CM<sub>2</sub>

'I will make the dog bite Afan.' (Amis)

d. Ø-p-tinun=ku {Ø/\*na} Robo Ø lukus.

AV-CAUS-weave=1SG.PIVOT CM<sub>2</sub>/\*CM<sub>1</sub> Robo CM<sub>2</sub> clothes

'I asked Robo to sew the clothes.' (Seediq)

## (60) CV-causatives: Unavailability of CM<sub>1</sub> to the causee

a. I-p<in>a-nakaw=ko {kay/\*ni} Juan ang kotse.

CV-CAU<PFV>-steal=1SG.CM<sub>1</sub> {PN.CM<sub>2</sub>/\*PN.CM<sub>1</sub>} Juan CN.PIVOT car

'I asked Juan to steal the car.' (Tagalog)

b. (\*Tu=)ku=pa-saletra'-anay kan Sawagu i Senten.

(\*3.CM<sub>1</sub>=)1SG<sub>1</sub>=CAUS-slap-CV SG.CM<sub>2</sub> Sawagu PN.PIVOT Senten
'I asked Sawagu to slap Senten.' (Puyuma)

c. Sa-pa-pi-nengneng aku {tu/\*nu} ising k-una pusi.

CV-CAUS-TR-see 1SG.CM<sub>1</sub> CM<sub>2</sub>/\*CM<sub>1</sub> doctor PIVOT-that cat

'I will ask the doctor to look at the cat.' (Amis)

<sup>25</sup>There is clear evidence that the CV-marked causatives in these languages share the same structure as AV-causatives (see section 3.1), featuring an agentive causee introduced as an external argument of the embedded VoiceP. Support for this comes from the causee's ability to bind the theme, as well as its compatibility with agent-oriented adverbs and the frequency adverb 'again.' See section 5 for further discussion of this claim with supporting data.

d. S-p-tinun=mu {Ø/\*na} robo ka lukus.

CV-CAUS-weave=1SG.CM<sub>1</sub> CM<sub>2</sub>/\*CM<sub>1</sub> Robo PIVOT clothes

'I asked Robo to sew the clothes.' (Seediq)

The fact that the agentive causees in both constructions (59)–(60) are inaccessible to  $CM_1$  thus indicates that  $CM_1$  is restricted to the highest DP per finite clause and not to any external argument positions, thereby lending strong support to the nominative case view of  $CM_1$  and challenging the traditional ergative analysis.<sup>26</sup>

# 4.2 $CM_1$ on unaccusative themes

Alongside its structural-case behavior noted above,  $CM_1$  exhibits one other hallmark of the nominative case: it is available to internal arguments when no external argument is present in the same clause.

Across the four target languages, in LV/CV-marked constructions formed with a semantically intransitive verb, the sole argument of the verb is obligatorily marked with  $CM_1$ , whether the verb is unergative or unaccusative. Consider the examples below from Tagalog (61), Puyuma (62), Amis (63), and Seediq (64).

### (61) Tagalog

- a. K<in>urot { ni/\*kay } AJ si Lily.
  pinch<PV.PFV> { PN.CM<sub>1</sub>/\*PN.CM<sub>2</sub> } AJ PN.PIVOT Lily
  'AJ pinched Lily'. (CM<sub>1</sub> on initiator)
- b. I-k<in>amatay { ni/\*kay } AJ ang sakit.

  CV-die-<PFV> { PN.CM<sub>1</sub>/\*PN.CM<sub>2</sub> } AJ CN.PIVOT sickness

  'AJ died of illness.' (CM<sub>1</sub> on unaccusative theme)

## (62) Puyuma<sup>27</sup>

- a. {  $Tu_i/^*\varnothing$  }=trakaw-aw na paysu kan Senten<sub>i</sub>. {  $3.CM_1/^*CM_2$ } =steal-PV DEF.PIVOT money PN.CM<sub>1</sub> Senten 'Senten stole the money.' (CM<sub>1</sub> on initiator)
- b. {  $Tu_i*\emptyset$ } =utrerag-ay kana ladru<sub>i</sub> ku-tranguru. {  $3.CM_1/*CM_2$ } =fall.down-LV DEF.CM<sub>2</sub> mango<sub>i</sub> 1SG.POSS-head 'The mango fell on my head.' (CM<sub>1</sub> on unaccusative theme)

## (63) $Amis^{28}$

a. Pi-qaca'-an { aku/\*takuwanan } tu pawli ku lumaq ni sawmah.
 buy-LV { 1SG.CM<sub>1</sub>/\*CM<sub>2</sub> } CM<sub>2</sub> banana PIVOT house POSS Sawmah
 'I bought bananas at Sawmah's house.'

(CM<sub>1</sub> on initiator)

<sup>&</sup>lt;sup>26</sup>It is noteworthy that this conclusion is potentially incompatible with a default case analysis of nominative case (e.g. Pesetsky and Torrego 2001; Schütze 2001; Legate 2008; Levin 2015). Under that approach, the highly restricted distribution of CM<sub>1</sub> is unexpected because nominative case is not anticipated to be unique per clause but rather to appear as a morphological default (which may surface multiple times within a clause). The key point here, therefore, is that the distributional constraints observed with CM<sub>1</sub> suggest that it is perhaps neither a type of default case nor any type of inherent case such as the ergative.

<sup>&</sup>lt;sup>27</sup>As introduced in (10), non-pivot agents (and non-pivot themes in unaccusatives) in Puyuma are obligatorily realized as proclitics. The proclitic can be optionally cross-referenced by a full DP, which appears as an adjunct-like phrase. In (59a), the third-person proclitic *tu* is cross-referenced by the non-pivot agent 'Senten'; in (66b), it is cross-referenced by the unaccusative theme 'mango.'

 $<sup>^{28}</sup>$ LV morphology in Amis appears as a circumfix with two possible forms conditioned by the inner valency of the stem: pi-...-an and ka-...-an.

b. Ka-tulu'-an { aku/\*takuwanan } kuna lalan. slip-LV { 1SG.CM<sub>1</sub>/\*CM<sub>2</sub> } PIVOT.that road 'I slipped on that road.'

(CM<sub>1</sub> on unaccusative theme)

### (64) Seediq

a. S-seeliq-un {  $na/*\emptyset$  } walis ka babuy. RED-butcher-PV {  $CM_1/*CM_2$  } Walis PIVOT boar 'Walis will butcher the boar.'

(CM<sub>1</sub> on initiator)

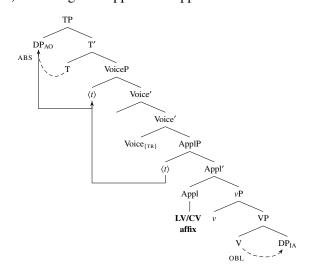
b. S-k<n>arux {  $na/*\emptyset$  } Temi ka knrudan-na. CV-PRV-be.sick {  $CM_1/*CM_2$  } Temi PIVOT age-3SG.POSS 'Temi got sick because of her age.' (CM<sub>1</sub> on unaccusative theme)

The obligatory presence of  $CM_1$  on unaccusative themes further undermines the inherent ergative case view of this marker. Supporting such an analysis would require contending that (i) the  $CM_1$ -marked themes are introduced as external arguments in [Spec, VoiceP] and (ii) that unaccusative verbs such as 'fall,' 'slip,' 'be tired,' and 'die' possess a transitive Voice head capable of assigning ergative case. Neither assumption aligns with the standard understanding of unaccusativity (Perlmutter 1978; Burzio 1986), as all four languages present clear independent evidence for an unergative/unaccusative distinction.

Evidence supporting an unergative/unaccusative distinction in these languages is multifaceted. Firstly, typical unaccusative verbs in all four languages exhibit an AV morpheme distinct from that of unergative/transitive verbs. Secondly, they differ from unergative verbs in their compatibility with cause-denoting adjuncts, a pattern observed in typologically distinct languages (Kallulli 2005; Levin & Rappaport Hovav 2005; Alexiadou et al. 2006). Finally, canonical unergative verbs contrast with unaccusative verbs in their compatibility with cognate objects across all four languages. Foley (2005:425) and Kaufman (2009:32) similarly assume an unergative/unaccusative distinction in Tagalog. See Chen and Fukuda (2016) for specific data supporting these generalizations.

We may then conclude that the  $CM_1$ -marked themes in (61)–(64) are genuine internal arguments. The occurrence of  $CM_1$  on these themes thus lends further support to the nominative case view of this marker. Before finalizing this analysis, it is crucial to note that this construction displays a case pattern that further contradicts the expected ergative alignment in Philippine-type languages. According to the ergative view, the internal argument in the LV examples above should receive oblique case from the lexical verb, while the pivot-marked locative phrase is introduced by a high applicative phrase above the theme. This hypothesized case-licensing pattern is shown in (65).

## (65) The ergative/applicative approach to LV/CV constructions



However, marking the theme with  $CM_2$  in (61)–(64) results in ungrammaticality, highlighting  $CM_1$  as the only possible case marking. This further strengthens the conclusion drawn from the various constructions discussed earlier, suggesting that the case-licensing mechanism proposed under the ergative approach is incorrect. Additionally, the consistent unavailability of  $CM_2$  marking aligns with the accusative analysis of this marker, which predicts its absence in unaccusative contexts.

#### 4.3 Interim conclusion

CM<sub>1</sub>'s locality-based distribution in productive causatives and unaccusatives undermines the inherent ergative case view of this marker, suggesting instead an alternative nominative case analysis.<sup>29</sup>

This conclusion yields two implications. First, it suggests that Philippine-type alignment cannot be analyzed as either ergative-aligned or a split ergative system—as both analyses hinge on treating CM<sub>1</sub> as an ergative case. Second, it indicates that the 'pivot-only' extraction constraint found in these languages does not manifest the ban on ergative extraction, since the supposed ergative agents are actually structurally case-licensed nominative arguments. Both implications support the view that Philippine-type extraction asymmetry is distinct from syntactic ergativity and likely relates more to pivothood—a hypothesis to be explored further in the next section.

# 5 'Pivot' ≠ absolutive: Insights from binding and beyond

As shown in Sections 3 and 4, CM<sub>1</sub> and CM<sub>2</sub> exhibit the hallmarks of nominative and accusative case, respectively. This raises an important question about the true case value of pivot-marking. Recall that this marker varies fluidly with voice alternation and applies to both core arguments and adjunct-like phrases, as illustrated in (66).

(66) Philippine-type alignment: schematized case pattern

	a. AV	b. PV	c. LV	d. CV
external argument	Pivot	CM <sub>1</sub> : NOM	CM <sub>1</sub> : NOM	CM <sub>1</sub> : NOM
internal argument	CM <sub>2</sub> : ACC	Pivot	CM <sub>2</sub> : ACC	CM <sub>2</sub> : ACC
locative	$P_1$	$P_1$	Pivot	$P_1$
instrument/benefactor	$P_2$	$P_2$	$P_2$	Pivot

Given that  $CM_1$  marks nominative case, it follows that the 'pivot' should not realize the same case. This challenges the traditional view in the Austronesian literature that pivot-marking is a subject marker realizing absolutive/nominative case assigned to a derived A-position.

In this section, I present new evidence that the 'pivot' does not, in fact, realize any type of structural case. Instead, it is a marker associated with a specific information structure status (topic) and independent of case. This observation reinforces the conclusions above that Philippine-type alignment does not manifest ergativity at either the morphological or syntactic level. Furthermore, it suggests that Philippine-type voice is a topic-indexing mechanism akin to the voice system of Dinka (van Urk 2015) and distinct from Indo-European-type voice.

<sup>&</sup>lt;sup>29</sup>An anonymous reviewer asked whether CM<sub>1</sub>-marked phrases are freely omissible in the target languages and whether the answer would have an impact on the nominative case analysis. According to primary fieldwork, such phrases may indeed be omitted in Tagalog and Amis given sufficient context. However, I believe that their omissibility has no direct impact on this analysis, as there are no established theoretical restrictions against the omission of nominative arguments.

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

The link between pivothood and topichood is not a novel claim for Philippine-type languages. Much previous work has shown that pivot phrases in Malagasy consistently exhibit greater 'referential prominence' compared with subjects in other languages (Keenan 1976 et seq.). Pearson (2001, 2005) extensively investigated the Ā-syntax of Malagasy, concluding that pivot phrases function as topics. Similar proposals have been made for Tagalog, where Richards (2000) and Rackowski (2002), building on Schachter & Otanes's (1972) framework, explicitly argued that pivots occupy an Ā-position, akin to topics in Icelandic and German. Comparable treatments exist for Atayal (Erlewine 2014), 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 & Massam 2021).

This approach contrasts with the absolutive case view of pivot-marking—which has become prevalent over the past few decades following the development of formal and functional approaches to ergativity (Payne 1982; De Guzman 1988; Gerdts 1988; Maclachlan and Nakamura 1993, 1997; Mithun 1994; Aldridge 2004, 2008, 2011, 2017; Liao 2004). Among these works, Guilfoyle, Hung, and Travis (1992) proposed that the pivot in Malagasy occupies the subject position and checks nominative case with T. This proposal was further developed in Aldridge (2004, 2008, 2011) as a fundamental assumption of the ergative approach to Philippine-type languages. This assumption is commonly adopted in reference grammars and descriptive works on Formosan and Philippine languages, where pivot-marked phrases are frequently glossed as 'nominative' or 'absolutive' and treated as the subject of the clause.<sup>30</sup>

A third view in the literature holds that pivots bear the status of both subject and topic (Erlewine, Levin, and van Urk 2017). This view is built upon the proposal that Philippine-type languages lack Feature Inheritance (Richards 2007; Chomsky 2008), hosting both the  $\varphi$ -feature and the  $\bar{A}$ -feature on C. According to this analysis, [Spec, CP] in these languages is both an  $\bar{A}$ - and an A-position, leading to the prediction that pivots exhibit properties of both A- and  $\bar{A}$ -elements.

Below, I present novel evidence that the status of the pivot across Tagalog, Puyuma, Amis, and Seediq is independent of case and linked to topichood, in line with the existing view for Malagasy and Tagalog.

#### 5.2 Testable predictions

The subject/absolutive analysis for the pivot marker rests on two fundamental assumptions (67a-b).

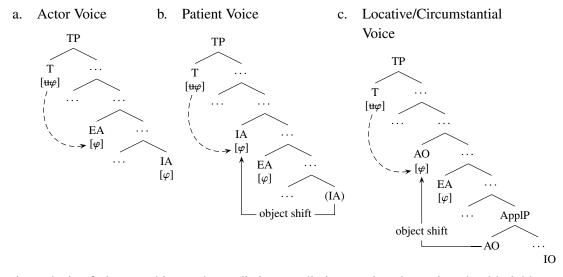
- (67) a. A pivot is the highest DP within a TP.
  - b. In LV and CV clauses, it is an applied object introduced by a High Applicative head in the highest internal argument position, where it is eligible for object shift.

This analysis predicts that voice alternation yields changes in argument structure. Specifically, among PV, LV, and CV constructions, the highest internal argument of the clause should shift from the theme to whatever phrase receives pivot-marking. This prediction is easily testable: in LV/CV, the applied object pivot should c-command the theme, as demonstrated in (68c). An alternative Low Applicative analysis for LV (as proposed by Rackowski 2002) would yield the same prediction: the pivot should

<sup>&</sup>lt;sup>30</sup>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.

asymmetrically bind the theme, given that the applied object introduced by a Low Applicative head is also base-generated in a position that c-commands the theme. See Rackowski (2002:122) for details.

### (68) Alleged argument structure alternations among non-AV clauses



The topic analysis of pivot-marking makes a distinct prediction—voice alternation should yield no argument structure alternation, as it simply flags a change in topic selection. This allows for two testable predictions. First, the pivot should behave like an  $\bar{A}$ -element (topic), displaying reconstruction effects and being interpreted in its  $\theta$ -position. It may also exhibit typical  $\bar{A}$ -properties such as weak crossover (Postal 1993) and/or weakest crossover effects (Lasnik & Stowell 1991). Second, as a topic need not be a DP, a pivot in an LV or CV clause may remain as a 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).

The key predictions of these competing analyses are summarized in (69). In section 5.3, I present new evidence from the four languages for the topic approach to pivothood.

(69) 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

# **5.3** Pivot ≠ absolutive: Insights from binding

#### **5.3.1** Productive causatives

Productive causatives provide an ideal testing ground for examining the essence of pivothood. Philippine-type voice alternation allows each of the three arguments in a causative of transitive (causer, causee, theme) to be promoted to pivot: AV for the causer, PV for the causee, and CV for the theme (70). This pattern is exemplified with Seediq examples in (71).

(70) 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

#### (71) Seedig

- a. <u>Ø</u>-p-trima=**ku** Ø laqi gaga Ø papak=na.

  <u>AV</u>-CAUS-wash=**1SG.PIVOT** CM<sub>2</sub> child that CM<sub>2</sub> leg=3SG.POSS

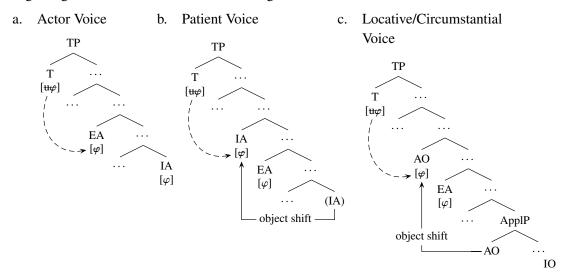
  'I made that child wash his legs.' (Actor Voice)
- b. P-trima-<u>un</u>=mu Ø papak=na **ka laqi gaga**.

  CAUS-wash-<u>PV</u>=1SG.CM<sub>1</sub> CM<sub>2</sub> leg=3SG.POSS **PIVOT child that**'I made *the child* wash his legs.' (Patient Voice)
- c. <u>S</u>-p-trima=mu Ø laqi gaga **ka papak=na**.

  <u>CV</u>-CAUS-wash=1SG.CM<sub>1</sub> CM<sub>2</sub> child that **PIVOT leg=3SG.POSS**'I made that child wash *his legs*.' (Circumstantial Voice)

Let us begin by examining the case pattern of CV-marked causatives (71c). In this construction, the pivot marker falls on the theme, bypassing the  $CM_1$ -marked causer and the  $CM_2$ -marked causee. If 'pivot' indeed marks absolutive case, then the pivot-marked theme must be an applied object basegenerated above the causee. This aligns precisely with the ergative view of Philippine-type alignment, which posits that CV morphology realizes a high applicative head. Subsequently, this applied object is presumed to undergo object shift, rising across the causer to Spec, TP, and acquiring absolutive case, as schematized below in (72).

## (72) Alleged argument structure alternations among non-AV clauses



Binding diagnostics indicate that this potential analysis is incorrect. Multiple Philippine-type languages, including Tagalog, have been shown to adhere to standard binding principles (Chomsky 1981, 1986), in which the agent can bind the theme in a simple AV construction but not vice versa (Malagasy: Pearson 2001; Tagalog: Rackowski 2002). This pattern also holds true for Puyuma, Amis, and Seediq (Chen 2017). Across the four target languages, a CM<sub>2</sub>-marked causee can freely bind the pivot-marked theme, as illustrated in (73). For clarity, the pivot-marked theme is boldfaced in the original text and gloss, and italicized in the translation. Due to space constraints, I omit parallel results from quantifier-variable binding, which similarly align with c-command (Pearson 2001; Rackowski 2002; Chen 2017).

#### (73) CV-marked causatives: causee binds theme pivot

a. Tagalog

<u>I</u>-p<in>a-li-linis=ko kay juan **ang kanya-ng sarili**. <u>CV</u>-CAU<PFV>RED-clean=1SG.CM<sub>1</sub> PN.CM<sub>2</sub> Juan **CN.PIVOT 3SG-POSS REFL**  'I asked Juan; to clean himself;.'

b. Puyuma

Ku=pa-saletra'-anay kan sawagu **tayta'aw**. 1SG.CM<sub>1</sub>=CAUS-slap-<u>CV</u> SG.CM<sub>2</sub> Sawagu **3SG.REFL.PIVOT** 'I asked Sawagu<sub>i</sub> to slap *himself*<sub>i</sub>.'

c. Amis

 $\underline{\underline{Sa}}$ -pa-pi-nengneng aku ci-afan-an **cingra tu** i dadingu.  $\underline{\underline{CV}}$ -CAUS-TR-see 1SG.CM<sub>1</sub> PN-Afan-CM<sub>2</sub> **3SG.PIVOT REFL** LOC mirror 'I asked Afan<sub>i</sub> to look at *herself*<sub>i</sub> in the mirror.'

d. Seediq

<u>S</u>-p-tabak=mu Ø heya **ka** heya nanaq. <u>CV</u>-CAUS-slap=1SG.CM<sub>1</sub> CM<sub>2</sub> 3SG **PIVOT** 3SG **REFL** 'I asked him/her<sub>i</sub> to slap *himself/herself*<sub>i</sub>.'

The same binding pattern has been reported in previous work on Tagalog. Consider example (71) from Rackowski (2002:67–68), where the theme pivot (*kanyang sarili*) is bound by the non-pivot causee ('Carlos') in CV-causatives.<sup>31</sup>

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

<u>I-p</u><in>a-ayos=ko kay carlos **ang kanyang sarili-ng kotse**. <u>CV</u>-CAU<PFV>-repair=1SG.CM<sub>1</sub> PN.CM<sub>2</sub> 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)

The binding pattern observed here provides no evidence for the alleged argument structure alternation assumed by the ergative analysis, wherein the pivot-marked theme would be base-generated above the causee (69). Instead, it suggests that the causee c-commands the theme, akin to AV-causatives (as discussed in section 3.1). This contradicts the key assumption of the ergative analysis and indicates that voice alternation has no impact on argument structure.

One might argue that the current binding patterns result from the CM<sub>2</sub>-marked causee being inherently case-licensed by an applicative head, thus allowing for absolutive case (pivot-marking) to be assigned to a lower argument (i.e. the theme). This account faces two challenges. First, it relies critically on one other assumption that the CM<sub>1</sub>-marked causer is also inherently case-licensed, granting the theme access to absolutive case. However, as shown earlier in section 4, CM<sub>1</sub> does not behave like an inherent case. This suggests that the causer should have priority in accessing absolutive (structural) case over both the causee and the theme. Second, there is clear evidence that the CM<sub>2</sub>-marked causee is an agentive argument licensed in the embedded Spec, VoiceP. This is a position where only structural case, not inherent case, is available. This refutes the possibility of the causee being inherently case-licensed. The examples below illustrate how the causee behaves like a typical agentive external argument in CV-marked causatives, as in the AV-marked causatives discussed in section 3.1. In both

(i) Picture NP reflexive embedded inside an AV subject

\*P<um>atay kay Juan ang sarili niya-ng anak <AV>kill PN.CM 2 Juan CN.PIVOT self 3s.POSS-LK child (intended: 'The child of himself killed Juan.')

<sup>&</sup>lt;sup>31</sup>The phrase *kanyang sarili-ng kotse* (74) behaves like a picture NP. 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).

constructions, the causee can be freely modified by agent-oriented adverbs or the frequency adverb 'again.' These adverbs vary in linear order when modifying the causing event in all four target languages. It is therefore unambiguous that they modify the causee/caused event in (75) and (76), and thus constitute valid diagnostics of the agentivity of the causee.

- (75) Compatibility of the causee with agent-oriented adverbs in CV-marked causatives
  - a. Tagalog

<u>I</u>-p<in>a-ayos=ko nang **palihim** kay ivan ang kotse. <u>CV</u>-CAU<PFV>-repair=1SG.CM<sub>1</sub> CONJ **secretly** PN.CM<sub>2</sub> Ivan PN.PIVOT car 'I asked [Ivan<sub>k</sub> to repair the car secretly<sub>k</sub>].'

b. Puyuma

Ku=pa-pukpuk-anay kan sawagu **pakirep** na suwan. 1SG.CM<sub>1</sub>=CAUS-hit- $\underline{CV}$  SG.CM<sub>2</sub> Sawagu **severely** DEF.PIVOT dog 'I asked [Sawagu<sub>k</sub> to hit the dog severely<sub>k</sub>].'

c. Amis

<u>Sa</u>-pa-pi-tangtang aku cingranan k-una futing **pina'un**. <u>CV</u>-CAUS-PI-cook 1SG.CM<sub>1</sub> 3SG.CM<sub>2</sub> PIVOT-that fish **carefully** 'I asked [her<sub>k</sub> to cook the fish carefully<sub>k</sub>].'

d. Seediq

<u>S</u>-p-sais=mu  $\varnothing$  temi **murux** ka lukus. <u>CV</u>-CAUS-sew=1SG.CM<sub>1</sub> CM<sub>2</sub> Temi **alone** PIVOT clothes 'I asked [Temi<sub>k</sub> to sew the clothes independently<sub>k</sub>].'

- (76) Compatibility of the causee with the adverb of frequency 'again' in CV-marked causatives
  - a. Tagalog

<u>I</u>-p<in>a-sulat=ko **ulit** kay aya ang liham. <u>CV</u>-CAU<PFV>-write=1SG.CM<sub>1</sub> **again** PN.CM<sub>2</sub> AyaCN.PIVOT letter 'I asked [Aya<sub>k</sub> to write the letter again<sub>k</sub>].'

b. Puyuma

Ku=pa-pukpuk-anay kan senten **masal** na suwan.  $1 \text{SG.CM}_1 = \text{CAUS-hit-CV} \text{SG.CM}_2$  Senten **again** DEF.PIVOT dog 'I asked [Senten $_k$  to hit the dog  $again_k$ ].'

c. Amis

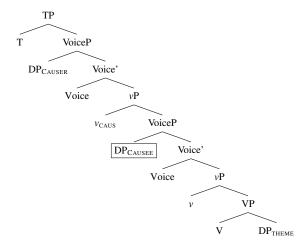
Una maeded-ay a wacu, <u>sa</u>-pa-pi-palu **heca** aku ci-kulas-an. that bad-NMZ LK dog <u>CV</u>-CAUS-PI-hit **again** 1SG.CM $_2$  PN-Kulas-CM $_2$  'That bad dog, I asked [Kulas $_k$  to hit (it) again $_k$ ].'

d. Seediq

S-p-pahu=mu  $\varnothing$  dakis **dungan** ka lukus nii. CV-CAu-wash=1SG.CM<sub>1</sub> CM<sub>2</sub> Dakis **again** PIVOT clothes this 'I asked [Dakis<sub>k</sub> to wash the clothes again<sub>k</sub>].'

As these diagnostics indicate, CV-marked causatives exhibit a bi-eventive structure containing an active, independent embedded VoiceP, with the causee c-commanding the theme, as schematized below in (77). This suggests that these causatives share the same structure as their AV-marked counterparts, despite differences in voice marking. See Section 3.1 for a detailed discussion of these diagnostics and how they rule out alternative causative structures.

#### (77) Bi-eventive structure of CV causatives



The fact that pivot-marking may bypass the causee and mark the theme thus reveals that the licensing of this marker is insensitive to locality (of [uD]). This suggests that 'pivot' does not realize any type of structural case. An examination of PV-marked causatives reinforces this conclusion with the same binding pattern (78).

#### (78) PV causatives: causee binds theme

a. Tagalog

P<in>a-pa-ligo=ko si ivan ng sarili niya. CAU<PV.PFV>-RED-bathe=1SG.CM<sub>1</sub> PN.PIVOT Ivan INDF.CM<sub>2</sub> REFL 3SG 'I am making *Ivan* bathe himself.'

b. Puyuma

Ku=pa-saletra'-<u>aw</u> **i sawagu** kanta'aw. 1SG.CM<sub>1</sub>=CAUS-slap-<u>PV</u> **SG.PIVOT Sawagu** 3SG.REFL.CM<sub>2</sub> 'I asked *Sawagu* to slap himself.'

c. Amis

Pa-pi-nengneng-en aku **ci-afan** cingran-an tu i dadingu. CAUS-TR-see-PV 1SG.CM<sub>1</sub> **PN.PIVOT-Afan** 3SG.CM<sub>2</sub> REFL LOC mirror 'I made *Afan* look at herself in the mirror.'

d. Seediq

Wada=mu p-tabak-<u>un</u>  $\varnothing$  heya nanaq **ka** heya. PFV=1SG.CM<sub>1</sub> CAUS-slap-<u>PV</u> CM<sub>2</sub> 3SG REFL **PIVOT 3SG** 'I made *him/her* slap himself/herself.'

As this invariable binding pattern indicates, Philippine-type voice alternation is not a valency-rearranging operation, contrary to traditional views (e.g. Payne 1982; Mithun 1994; Aldridge 2004 et seq.). It also highlights the non-local distribution of the pivot marker, suggesting that it is a marker independent of case. This conclusion follows from the implication from section 4 that 'pivot' should not realize the same case as  $CM_1$  (nominative).

### 5.3.2 Ditransitives

Ditransitive constructions provide further evidence against the absolutive case view of the pivot marker. As in causatives, voice alternation enables each of its three arguments to be promoted to pivot, as ex-

emplified in (79) and (80). 32

(79) Ditransitives: mapping between voice and case

	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

#### (80) Amis

- a.  $\varnothing$ -pafeli **kaku** t-una wawa t-una paysu. AV-give **1SG.PIVOT** CM<sub>2</sub>-that child CM<sub>2</sub>-that money 'I gave the child that money.'
- b. Pafeli-en aku **k-una wawa** t-una paysu. give-PV 1SG.CM<sub>1</sub> **PIVOT-that child** CM<sub>2</sub>-that money 'I gave *the child* that money.'
- c. Sa-pi-pafeli aku t-una wawa **k-una paysu**. CV-PI-give 1SG.CM<sub>1</sub> CM<sub>2</sub>-that child **PIVOT-that money** 'I gave the child *that money*.'

Like the causatives, ditransitives also exhibit consistent binding relations regardless of voice across the four languages. In Puyuma, Amis, and Seediq, ditransitives uniformly feature a recipient phrase that asymmetrically c-commands the theme, regardless of the voice-marking of the clause. Consider firstly examples below from Amis (81)–(82) and Seediq (83)–(84). Here, I adopt quantificational binding to prime the binding relation between the recipient and the theme. Similar to English (Higginbothem 1980; Reinhart 1983; Barker 2012), all four target languages allow a quantificational possessor (e.g. 'every girl's mother') to bind a pronoun outside its possessive hosts—provided the pronoun is c-commanded by the host, as in 'Every girl's mother braided her hair'. I assume, following Reinhart (1983), that this is the outcome of the pronoun being c-commended by the quantified DP. As the ditransitive examples below show, the universal quantifier 'every' embedded inside a recipient phrase (e.g. (81), (83), and (85)) can bind into a pronoun embedded inside the theme argument, resulting in its interpretation as a variable. Conversely, when the same quantifier is embedded inside the theme, the pronoun embedded inside the recipient fails to be interpreted as a bound variable ((82), (84), and (86)). This structural relation suggests that the recipient consistently occupies a c-commanding position above the theme, regardless of the voice.

- (81) Amis: R(ecipient) binds T(heme) regardless of voice type
  - a. Actor Voice: Recipient > Theme

Ø-paefer kaku [ci-ina-an nu cimacima a wawa] [tu wuhung **AV**-send 1SG.PIVOT [PN-mother-CM<sub>2</sub> POSS every LK child] [CM<sub>2</sub> book nira].

3PL.POSS]

'I sent every child's is mother his/her is/her book.'

b. Patient Voice: Recipient > Theme

<sup>&</sup>lt;sup>32</sup>Philippine-type languages vary in the corresponding voice-marking for ditransitives with a pivot-marked recipient. Some employ PV morphology, while others adopt LV morphology. However, this variation does not impact the main argument here.

paefer-en aku [ci-ina nu cimacima a wawa] [tu wuhung send-PV 1SG.CM<sub>1</sub> [PN.PIVOT-mother POSS every LK child] [CM<sub>2</sub> book nira].

3sg.poss1

'I will send every child's mother<sub><i>his/her<sub><i/i></sub> book.'</sub>

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

**Sa**-paefer aku [ci-ina-an nu cimacima a wawa] [ku wuhung CV-send 1SG.CM<sub>1</sub> [PN-mother-CM<sub>2</sub> POSS every LK child] [PIVOT book nira].

3SG.POSS]

'I sent every child's mother<sub><i></sub> his/her<sub><i/i></sub> book.'

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

# a. Actor Voice: Theme ≯ Recipient

 $\varnothing$ -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<sub><i></sub> child every person's<sub><i</sub>\*<sub>i></sub> 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<sub>1</sub> [PIVOT child 3SG.POSS] [CM<sub>2</sub> money POSS every LK tamdaw].

person

'I will give his/her<sub><i></sub> child every person's<sub><j/\*i></sub> money.' (bound variable reading unavailable)

### c. Circumstantial Voice: Theme ≯ Recipient

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

person]

'I gave his/her<sub><i></sub> child every person's<sub><i/\*i></sub> money.' (bound variable reading unavailable)

### (83) Seediq: R binds T regardless of voice type

# a. Actor Voice: Recipient > Theme

Wada=ku  $\varnothing$ -paadis [ $\varnothing$  bubu=na knkingal laqi] [ $\varnothing$  PFV=1SG.PIVOT **AV**-send [CM<sub>2</sub> mother=3SG.POSS every child] [CM<sub>2</sub> patis=daha].

book=3PL.POSS]

'I sent every child's mother ib his/her book.'

# b. Patient Voice: Recipient > Theme

Wada=mu pdes-**un** [ $\varnothing$  patis=daha] [ka bubu=na knkingal PFV=1SG.CM<sub>1</sub> send-**PV** [CM<sub>2</sub> book=3PL.POSS] [PIVOT mother=3SG.POSS every laqi].

child]

'I sent every child's<sub><i></sub> mother his/her<sub><i/j></sub> book.'

## c. Circumstantial Voice: Recipient > Theme

Wada=mu s-paadis [Ø bubu=na knkingal laqi] [ka PFV=1SG.CM<sub>1</sub> CV-send [CM<sub>2</sub> mother=3SG.POSS every child] [PIVOT patis=daha]. book=3PL.POSS]
'I sent every child's mother<sub>⟨i⟩</sub> his/her<sub>⟨i/i⟩</sub> book.'

(84) Seediq: T fails to bind R regardless of voice type<sup>33</sup>

# a. Actor Voice: Theme ≯ Recipient

Wada=ku Ø-paadis [Ø bubu=daha] [Ø patis knkingal laqi]. PFV=1SG.PIVOT AV-send [Y mother=3PL.POSS] [CM<sub>2</sub> book every child] 'I sent his/her $_{<i>>}$  mother every child's $_{<k'*>>}$  book.'

## b. Patient Voice: Theme ≯ Recipient

Wada=mu pdes-**un** [Ø patis knkingal laqi] [ka bubu=daha]. PFV=1SG.CM<sub>1</sub> send-**PV** [CM<sub>2</sub> book every child] [PIVOT mother=3PL.POSS] 'I sent his/her<sub></</sub>>/>/p mother every child's<sub><k</sub>/\*/<sub>j></sub> book.'

# c. Circumstantial Voice: Theme ≯ Recipient

Wada=mu **s**-paadis [Ø bubu=daha] [ka patis knkingal laqi].

PFV=1SG.CM<sub>1</sub> CV-send [CM<sub>2</sub> mother=3PL.POSS] [PIVOT book every child]

'I sent his/her<sub><j></sub> mother every child's<sub><M?j></sub> book.' (bound variable reading marginal)

Puyuma ditransitives warrant special attention. As the language allows flexible word order among nominal phrases, it is possible to eliminate the potential confounding factor of linear order in interpreting binding relations. Primary data show that a quantificational recipient can consistently bind the theme regardless of voice—even when the pronoun precedes its quantificational binder in linear order, as shown in (85a–c). Thus, a bound variable reading of the theme remains consistently available, even when the theme is pivot-marked (85c). This indicates that Puyuma speakers' interpretations are unaffected by linear order but determined by the underlying asymmetrical c-commanding relation between the recipient and the theme.

# (85) Puyuma: R binds T regardless of voice type

### a. Actor Voice: Recipient > Theme

Ø-beray=ku [kantu=lribun] [kan tinataw kana kiakarun AV-give=1SG.PIVOT [3.POSS.CM<sub>2</sub>=wages] [SG.CM<sub>2</sub> 3S.POSS.mother LK laborer driya]. every]

'I gave every laborer's<i> mother his<i/>i/\*j> wages.'

### b. Patient Voice: Recipient > Theme

ku=beray-**ay** [kantu=lribun] [i tinataw kana kiakarun 1sG.CM<sub>1</sub>=give-**LV** [3.POSS.CM<sub>2</sub>=wages] [sG.PIVOT 3s.POSS.mother LK laborer driya]. every]

'I gave every laborer's $_{\langle i \rangle}$  mother his $_{\langle i/*_{i} \rangle}$  wages.'

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

<sup>&</sup>lt;sup>33</sup>My Seediq consultants 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).

Ku=beray-**anay** [tu=lribun] [kan tinataw kana kiakarun  $1 \text{SG.CM}_1 = \text{give-CV}$  [3.POSS.PIVOT=wages] [SG.CM2 3S.POSS.mother LK laborer driya]. every]

'I gave every laborer's $_{\langle i \rangle}$  mother his $_{\langle i/*i \rangle}$  wages.'

When the pronoun is embedded in the recipient, the availability of a quantifier-variable reading becomes restricted (86). The observed Puyuma facts therefore provide compelling evidence against the proposed argument structure alternation approach to Philippine-type voice alternation.

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

## a. Actor Voice: Theme ≯ Recipient

 $\varnothing$ -beray=ku [kantu=walak] [kantu=lribun kana kiakarun driya]. **AV**-give=1SG.PIVOT [3.POSS.CM<sub>2</sub>=child] [3.POSS.CM<sub>2</sub>=wages LK laborer every] 'I gave his $_{<i>}$  child every laborer's $_{<i/*i>}$  wages.'

### b. Patient Voice: Theme ≯ Recipient

Ku=beray-**ay** [tu=walak] [kantu=lribun kana kiakarun driya]. 1SG.CM<sub>1</sub>=give-LV [3.POSS.PIVOT=child] [3.POSS.CM<sub>2</sub>=wages LK laborer every] 'I gave his<sub><i></sub> child every laborer's<sub><i/\*</sub> wages.'

### c. Circumstantial Voice: Theme ≯ Recipient

Ku=beray-anay [kantu=walak] [tu=lribun kana kiakarun driya]. 1SG.CM<sub>1</sub>=give-CV [3.POSS.CM<sub>2</sub>=child] [3.POSS.PIVOT=wages LK laborer every] 'I gave his $_{<i>}$  child every laborer's $_{<j/*i>}$  wages.'

Tagalog ditransitives also exhibit an invariable binding pattern across voices, although this pattern differs from that observed in Puyuma, Amis, and Seediq. As seen below, the recipient and the theme in Tagalog ditransitives can reciprocally bind each other irrespective of voice. Here, I choose to present data on reflexive binding to illustrate the relationship in example (87) (R > T), as such examples are more pragmatically natural and appropriate than those in the quantifier-variable binding example. The same result is attested with quantifier-variable binding diagnostics. See Chen (2017:124) for the relevant data.

### (87) 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.PFV-give PN.PIVOT Joy PN.CM<sub>2</sub> Lia ID.CM<sub>2</sub> 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-PFV-LV PN.CM<sub>1</sub> Joy PN.PIVOT Lia ID.CM<sub>2</sub> 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-PFV PN.CM $_1$  Joy PN.CM $_2$  Lia PIVOT self 3s.POSS picture 'Joy $_{< k>}$  gave  $Lia_{< |>}$  a picture of  $herself_{< k/|>}$ .'

# (88) Tagalog: T binds R regardless of voice type<sup>34</sup>

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

**Nag**-bigay=ako [sa kanilang nanay] [ng sweldo ng **AV.PFV**-give=1SG.PIVOT [DEF.CM<sub>2</sub> 3PL.POSS mother] [INDF.CM<sub>2</sub> wages POSS bawat manggagawa].

every laborer]

'I gave their in mother every laborer's wages.' (bound variable reading available)

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

B<in>igy-an=ko [ang kanilang nanay] [ng sweldo ng bawat give-PFV-LV=1SG.CM<sub>1</sub> [CN.PIVOT 3PL.POSS mother] [INDF.CM<sub>2</sub> wages POSS every manggagawa].

laborer]

'I gave their<sub><j></sub> mother every laborer's<sub><j/k></sub> 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-PFV=1SG.CM<sub>1</sub> [DEF.CM<sub>2</sub> 3PL.POSS mother] [PIVOT wages POSS every manggagawa].

laborer]

'I gave their<sub><i></sub> mother every laborer's<sub><i/k></sub> wages.' (bound variable reading available)

It is worth noting that a similar pattern has been documented before. Andrews (1985) noted that a non-pivot recipient can bind a theme pivot in CV-marked ditransitives (89). This supports the current observation that CV-ditransitives display binding patterns consistent with those in other voices, suggesting that there is no indication of the pivot being introduced in an applicative position.

# (89) 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<sub>1</sub> DEF.DOM.CM<sub>2</sub> child PIVOT 3SG-LK self-POSS picture 'He $_{<i>}$  handed the child $_{<i>}$  a picture of himself $_{<i/}$  (Andrews 1985:143)

For this paper, I set aside the structural differences between ditransitives in the first three languages and Tagalog. Tagalog displays a binding pattern consistent with a prepositional dative analysis (see Hoekstra and Mulder 1990; Den Dikken 1995; Harley 1997). However, this distinction is not central to the main objective, which focuses on the lack of argument structure alternation in relation to voice alternation.

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

I have shown that pivot-marking in causatives and ditransitives does not affect argument structure, indicating its role as a case-independent marker. This aligns with Bowen's (1965) insight that pivot phrases in Tagalog and other Philippine-type languages function as topics, featuring definiteness/specificity and conveying old information (see also Schachter and Otanes 1972; Shibatani 1988; Richards 2000; Pearson 2001; Paul, Cortes, and Milambiling 2015; Collins 2018; Paul and Massam 2021; and recent claims in Chen 2017, 2021).

<sup>&</sup>lt;sup>34</sup>In Tagalog, a non-pivot recipient/causee is obligatorily marked by *sa* (glossed as definite CM<sub>2</sub> in this paper); *ng* (glossed as indfinite CM<sub>2</sub>) is not a possible option. This is an instance of differential object marking applied to Tagalog causatives and ditransitives, and has no direct correlation with the argument here. See Latrouite (2018) for a dedicated discussion of differential object marking in Tagalog.

I argue that pivot-marking functions as a topic marker, which is obligatory in all finite clauses with a CP layer that licenses topics; this marker overrides morphological case, similar to the topic markers *wa* and *nun* in Japanese and Korean (Kuno 1973; Chung 1994). The intertwining of this marker with morphological case yields an apparently ergative-aligned argument-marking pattern, allowing subjects, objects, and certain adjunct-like phrases to share the same case, as shown in (90).

## (90) 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 <sub>T</sub> Topic	$P_1$
instrument/benefactor	$P_2$	$P_2$	$P_2$	P <sub>2</sub> Topic

Support for this analysis comes from the possible co-occurrence of pivot-marking and prepositional marking on the same phrase. Consider two examples from Paiwan below, which contrast PV and LV (91a-b). Whether the locative phrase post office serves as the pivot or not, it consistently includes the locative preposition i and additionally bears the pivot-marking a when the sentence is in Locative Voice (91a). This compatibility strengthens the view that the pivot functions as a marker independent of case, denoting information structure status (topic).

### (91) Paiwan

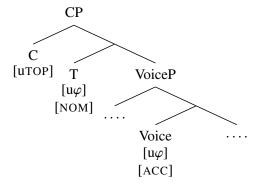
- a. 'u=<in>alap-an tatiav ta paysu a i yubinkiuku.
   1SG.CM<sub>1</sub>=<PFV>take-LV yesterday CM<sub>2</sub> money PIVOT LOC post.office
   'I withdrew cash at the post office yesterday.' (Locative Voice)
- b. 'u=<in>alap tatiav a paysu **i yubinkiuku**.

  1SG.CM<sub>1</sub>=take-PV yesterday PIVOT money **LOC post.office**'I withdrew cash at the post office yesterday.' (Chang 2018:63) (Patient Voice)

The topic approach presented here should be viewed as a preliminary proposal, given that topicality has proven challenging to define uniformly across languages, with variation observed in syntactic, pragmatic, and semantic regards (Rizzi 1997; Frascarelli & Hinterhölzl 2007; Sigurdsson 2011; a.o.). Under the current view, the so-called 'Philippine-type alignment' essentially reflects an ordinary nominative-accusative system obscured by obligatory topic-marking. The proposed design of this system is illustrated in (92). The obligatory topicalization is driven by a head in the C-domain that contains a [uTOP] feature, driving  $\bar{A}$ -movement of the pivot to the left periphery. These languages thus possess a clear A/ $\bar{A}$  distinction, with an obligatory  $\bar{A}$ -position filled by the pivot and an obligatory derived A-position filled by CM<sub>1</sub> phrases.

<sup>&</sup>lt;sup>35</sup>Pivots in these languages can thus be viewed as internal topics in the sense of Aissen (1992), which contrasts with base-generated external/hanging topics (section 5.4.2), which involve no Ā-movement. See Chen 2018 and Erlewine & Lim 2023 for specific evidence for hanging topics in Puyuma and Tagalog as base-generated.

# (92) Proposal: the make-up of 'Philippine-type alignment'



Below I outline three common characteristics of Philippine-type languages that support the topic analysis.

## 5.4.1 'Pivot' marks discourse topics

Question-answer sequences elicited with a set discourse topic show a strong link between pivot status and topichood: in the absence of additional context, the discourse topic 'Kulas' must align with the pivot in the answer. When the topic corresponds to the theme, the sentence must employ PV, making the topic the pivot, as shown in (93b). Conversely, responses where the topic is not the pivot, as in (93c), are considered unnatural as an answer.

## (93) Amis

a. Q: Na ma-maan **ci kulas**?

PST PV-what **PN.PIVOT Kulas**'What happened to Kulas?'

(Context: seeing Kulas crying)

- b. A1: Ma-palu ni panay **cingra**.

  PV-hit PN.CM<sub>1</sub> Panay **3sg.PIVOT**'Panay hit him.'
- c. A2: \*Mi-palu=tu ci panay **cangran-an.**AV-hit=PFV PN.PIVOT Panay **3SG-CM<sub>2</sub>**(Intended: 'Panay hit him.')

According to primary fieldwork, the unacceptability of A2 stems from the discrepancy between the pivot designation and the discourse topic. When the discourse topic corresponds to the agent in the response (e.g. 'She is cooking pork' (94)), the natural-sounding sentence must be structured in AV, with the agent topic designated as the pivot (94b). Question-answer sequences from Seediq, Puyuma, and Tagalog exhibit identical patterns. Due to space constraints, I omit the data here.

## (94) 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<sub>2</sub> pork 'She is cooking pork.'
- c. A2: \*Mi-tangtang-an **nira** ku titi.

  PV.hit=PFV **3SG.CM**<sub>1</sub> PIVOT pork (Intended: 'She is cooking pork.')

It is crucial to recognize that the pattern observed above doesn't entail merely echoing the same voice type as the question. Take, for instance, the Tagalog dialogue below crafted by a native speaker. When presented with the question 'Where is Maria's spoon?', four potential responses were offered, (A1)–(A4).

## (95) 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 Lia (ang kutsara). use.PV PN.CM<sub>1</sub> Lia (CN.PIVOT spoon) 'Lia is using (it/the spoon).'
- c. A2: I-p<in>ang-ka-kain ni Lia (ang kutsara). CV-PANG<PFV>-RED-eat PN.CM<sub>1</sub> Lia (CN.PIVOT spoon) 'Lia is eating with (it/the spoon).'
- d. A3: Na-kita=ko=[ng k<in>uha ni Lia (ang kutsara)].

  PFV.PV-see=1SG.CM<sub>1</sub>=[LK steal<PV.PFV> PN.CM<sub>1</sub> Lia (CN.PIVOT spoon)]

  'I saw that Lia stole (*it/the spoon*).'
- e. A4: Na kay Lia (ang kutsara).

  NA with Lia (CN.PIVOT spoon)

  'The spoon is with Lia.'

All four responses diverge in voice selection and sentence structure, yet each maintains 'Maria's spoon' as the pivot, the discourse topic. This robust consistency lends additional credence to the assertion that pivothood intricately intertwines with topichood in Philippine-type languages.

### 5.4.2 Pivot phrases share the same marker with hanging topics

The aforementioned connection between pivothood and topichood is further evident in hanging topic constructions. Across most Philippine-type languages, hanging topics consistently exhibit the same morphological marking as the pivot phrase. This correlation is illustrated with data from two languages belonging to different primary branches of the Austronesian family: Paiwan and Cebuano. Despite variations in the form of pivot-marking across these languages, their hanging topics consistently bear the same marking as the pivot phrase.

# (96) Paiwan

- a. D<in>ukuL ti kui ni zepul.
   hit<PV.PFV> SG.PIVOT Kui PN.CM<sub>1</sub> Zepul 'Zepul has hit Kui.'
- b. {Ti/\*ni} zepul d<in>ukuL ti kui. {SG.PIVOT/\*SG.CM<sub>1</sub>} Zepul hit<PV.PFV> SG.PIVOT Kui 'Zepul, (she) has hit Kui.' (Chang 2006:417-18)

# (97) Cebuano

- a. Gi-higugma ni juan si maria.
   PV-love PN.<sub>1</sub> Juan PN.PIVOT Maria
   'Juan loves Maria.'
- b. {Si/\*ni} juan gi-higugma (niya) si maria. {PN.PIVOT/\*PN.CM<sub>1</sub>} Juan PV-love (3SG.CM<sub>1</sub>) PN.PIVOT Maria 'Juan, (he) loves Maria.' (Shibatani 1988:131)

## 5.4.3 'Pivot' marks presupposed information in pseudo-clefts

Pseudo-cleft constructions offer additional evidence for the current analysis. Pseudo-clefts in Philippine-type languages typically comprise a sentence-initial predicate, followed by a marker preceding a presupposed clause resembling a headless relative, as exemplified in (98) (Paul 2001; Aldridge 2004; Potsdam 2006 et seq.).

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

In all four target languages, new information (focus) is typically introduced as the predicate, while given information is placed within the presupposed clause. Importantly, the marker linking the predicate and the presupposed clause consistently takes the form of pivot marking across Philippine-type languages, as depicted in (99).

- (99) Pseudo clefts
  - a. Tagalog

Si ivan **ang** [b<um>ili ng kendi], hindi si aya. PN ivan **PIVOT** [buy<AV> INDF.CM<sub>2</sub> candy] NEG PN.PIVOT Aya 'It is Ivan who bought candy, not Aya.'

b. Puyuma

I senten **na** [tr<em>ima dra ruma] ameli i sayki. PN.PIVOT Senten **PIVOT** [buy<AV> INDF.CM<sub>2</sub> 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<sub>2</sub>] or PN.PIVOT Panay 'Is it Kulas who hit you, or is it Panay?'

d. Seedig

Ye walis **ka** [b<n>eebu Ø isu], ye watan? PART Walis **PIVOT** [<PV.PFV>hit CM<sub>1</sub> 2SG] Q Watan? 'Is it Walis who hit you, or is it Watan?'

This construction can be viewed as a topic-comment structure, where the presupposed clause serves as the topic, marked by pivot-marking, while the predicate denotes the focus of the construction, as in (100).

(100) <u>Focus</u> <u>pivot-marking</u> { presupposed clause } <u>Comment</u> topic-marking <u>Topic</u>

Elicited question-answer sequences from the four target languages affirm that the focus (i.e. new information) consistently occupies the predicate of the cleft construction, while the given information is consistently situated in the presupposed clause, marked by pivot-marking. This pattern is demonstrated in examples (101) through (104).

- (101) Tagalog
  - a. Q: Sino ang babae=[ng naglakad kasama ni ivan]?

    [who] CN.PIVOT woman=[LK AV.PFV-walk with PN.CM2 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.'
```

## (102) Puyuma

- (103) 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 mitiliday aku] ci Kulas.

    [DET student 1SG.POSS] PN.PIVOT Kulas

    'Kulas is my student.'

# (104) 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.'

The consistent use of pivot-marking to indicate old information suggests that this marker may function as a general topic marker, applicable to hanging topics, internal topics, and topic-comment constructions, such as the example discussed above. The non-local distribution of pivot-marking, as observed earlier in this section, supports this interpretation.

We may conclude that the topic approach offers a better approximate for pivot-marking, the distribution of which is independent of case and indicates a particular information structure status. A closer understanding of its nature awaits further investigation.

### 6 Conclusion

I have argued in this paper that the apparent ergative alignment found in four Austronesian languages is an illusion caused by prominent topic-marking that obscures an accusative case system. This suggests that Philippine-type alignment neither exhibits syntactic ergativity (cf. Payne 1982; Mithun 1994; Aldridge 2004 et seq.) nor represents a typologically unique case alignment (cf. Himmelmann 2002; Foley 2008; Riesberg 2014). Given that these four languages (Tagalog, Puyuma, Amis, Seediq) belong to distinct Austronesian primary branches and share similar case patterns with other Philippine-type languages, the current conclusion may extend beyond these languages.

The current conclusion reveals that Philippine-type voice morphology—despite its terminological tradition—is fundamentally different from Indo-European-type voice: the latter constitutes valency-rearranging morphology hosted within VoiceP, whereas the former is best understood as topic-indicating

morphology hosted in the left periphery, as has been argued previously for Malagasy (Pearson 2005). A notable prediction is therefore that Philippine-type voice could coexist with either accusative or ergative alignment—as it does not involve valency-rearranging operations. See Chen (2022) for a case study on Puyuma that supports this prediction.

Two important implications of this paper are that (i) syntactic ergativity is not the sole source of Ā-extraction asymmetries and (ii) languages with discourse configurationality (Miyagawa 2010), such as Philippine-type Austronesian languages, may exhibit superficial traits of ergativity if their topic-marking is mistakenly treated as part of their case system. The illusory ergativity observed in Austronesian thus underscores the importance of approaching conventional analyses with caution and the need for systematic diagnostics to investigate case alignment.

A remaining question from this conclusion concerns the nature of the highly restricted topic-only constraint imposed on relativization. Recent work on a typologically similar language, Dinka (Nilotic), offers insights into this constraint. Dinka has been shown to exhibit a similar voice system (Andersson 2015; van Urk 2015), where the grammatical role of the topic in a given clause is indexed by verbal morphology. Importantly, a comparable 'pivot-only' constraint in Ā-extraction is also attested in Dinka: during relativization and wh-extraction, the language's verbal morphology must indicate the extracted phrase as the topic. Notably, Dinka has also been analyzed as a topic-prominent accusative language with obligatory topic agreement on the verb (van Urk 2015). In line with this analysis, its 'pivot-only' constraint has been proposed to arise from a flat Ā-probe, which can be satisfied through Agree with a phrase bearing either a [TOP] or [REL] feature. Thus, 'pivot-only' in Dinka is not an extraction restriction but rather the outcome of relativization and topicalization triggering the same set of verbal morphology (see also similar proposals in Miyagawa 2010 and Baier 2018). Given this approach, a plausible account for the 'pivot-only' constraint in Austronesian languages is that topicalization and relativization are also driven by the same Ā-probe in Philippine-type languages. See Pearson (2001, 2005) for a similar account of the 'pivot-only' constraint under an accusative analysis of Malagasy.

#### Appendix I

	1 .				
Monning	hatruaan	MOLOG ONG	0000 11	1 h0010	constructions
viammy	Derween	voice and	Case II	I Dasic	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

## Appendix II

Tagalog kay and sa have been glossed as dative in some literature, given that they mark locative and recipient phrases. This label could be potentially misleading to a general reader as it also appears in prototypical accusative positions, such as the theme of prototypical transitive verbs such as 'pinch,' 'kill,' 'stab,' and 'injure'. See Schachter and Otanes (1972) and Himmelmann (2005b) for relevant discussions. In such cases, ng, sa, and kay share the same case value, differentiating between definiteness/specificity and nominal type (i.e. common noun (ng/sa) vs. personal name kay). This is illustrated with the examples below in (105). See Himmelmann (2005b) for a relevant discussion on sa as the marker for patient arguments.

(105) Possible object-marking for Tagalog AV clauses

```
a. B<um>isita si
                            Juan { ng
                                               hari / sa
                                                                 hari / kay
                                                                                 Maria /
   <AV>visit PN.PIVOT Juan { INDF.CM2 king / DEF.CM2 king / PN.CM2 Maria /
              kaniya
   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 /
   <a>V>examine PN.PIVOT Maria { INDF.CM<sub>2</sub> cat / DEF.CM<sub>2</sub> cat / PN.CM<sub>2</sub> Juan /
              akin
   DEF.CM<sub>2</sub> 1SG.CM<sub>2</sub> }
   'Maria examined { a cat / the cat / Juan / me }.
```

That such *sa/kay*-marked phrases are typical direct objects (rather than PPs) is further evidenced by the fact that they can serve as the pivot in PV. Consider (106) and (107).

```
(106) AV-PV alternation with a sa/kay-marked object shifting to pivot status (cf. (107))
```

- a. B<in>isita ni Juan { ang hari / si Maria / =siya }. <PV.PFV>VISIT PN.CM1 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.PFVexamine PN.CM<sub>1</sub> Maria { PIVOT cat / PN.PIVOT Juan / =1SG.PIVOT }
  'Maria examined { the cat / Juan / me }.'

- (107) 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
     AV.PFV-CAUS-chase PN.PIVOT Aya { DEF.CM<sub>2</sub> dog / PN.CM<sub>2</sub> Maria } INDF.CM<sub>2</sub>
     pusa.

cat

- 'Aya made { the dog / Maria } chase a cat.'
- b. P<in>a-habol ni Aya { ang aso / si Maria } ng pusa. <PV.PFV> PN.CM<sub>1</sub> Aya { PIVOT dog / PN.PIVOT Maria } INDF.CM<sub>2</sub> 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<sub>2</sub>' where they mark the object of a bivalent verb.

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