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

Abstract

Although Philippine-type Austronesian languages display apparent hallmarks of syntactic ergativity, a closer examination of the distribution of three basic case markers reveals that the ergative characteristics are only illusory. Support for an accusative analysis comes firstly from the presence of the putative oblique case on ECM subjects, derived objects, and objects inside restructuring infinitives – a distribution that undermines the traditional antipassive view of Philippine-type Actor Voice. Further evidence comes from the locality-constrained distribution of the alleged inherent ergative case, which shows the hallmarks of structural nominative, suggesting that the extraction restriction attested across 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 previous topic analyses of this marker. Accordingly, 'Philippine-type alignment' essentially reflects an ordinary accusative case system obscured by prominent topic-marking that overrides morphological case. This conclusion lends novel support to the accusative view of Tagalog (Richards 2000; Chen 2021) and Malagasy (Pearson 2001) and yields two implications: (i) highly constrained Ā-extraction asymmetry may be independent of syntactic ergativity, and (ii) discourse configurational languages may superficially exhibit traits of ergativity if their topic-marking is imprecisely treated as part of their case system.

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

Contents

1 Introduction

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

In languages of this type, a change in verbal morphology (conventionally termed 'voice') correlates with a change in the distribution of a special marker labeled as PIVOT throughout this paper, which indicates Ā-extraction eligibility. As seen in the Tagalog examples in (1), 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 different types of adjunct-like phrases (1c–d), respectively.[1]

(1) Tagalog

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

b. Bi-bilih-**in** ni AJ ang keyk mula kay Lia para kay Joy.
CONT-buy-**PV** PN.CM_1 AJ [CN.PIVOT cake] P_1 PN.CM_2 Lia P_2 PN.CM_2 Joy
'AJ will buy the *cake* from Lia for Joy.' (PATIENT VOICE)

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

d. **I**-bi-bili ni AJ ng keyk mula kay Lia si Joy.
CV-CONT-buy PN.CM_1 AJ INDF.CM_2 cake P_1 PN.CM_2 Lia [PN.PIVOT Joy]
'AJ will buy cake from Lia for *Joy*.' (CIRCUMSTANTIAL VOICE)

To remain analysis-neutral, the abstract label CM_1 in (1) stands for the case-marking of non-pivot external arguments (e.g. *ni* in (1b–d)) and CM_2 stands for that of non-pivot internal arguments (e.g. *ng* in (1a–d)). P_1 and P_2 represent different types of prepositions that mark non-pivot adjuncts (e.g. *para* for locatives (1c) and *mula* for benefactives (1d)).

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

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

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

b. Patient Voice

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

c. Locative Voice

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

d. Circumstantial Voice

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

Controversies in the case alignment of these languages have centered around the exact case value of CM$_1$, CM$_2$, and the pivot marker – three basic markers reconstructable to Proto-Austronesian or a stage immediately after its split, when the Philippine-type alignment first emerged.[3] The distribution of the three markers is defined in (3) and illustrated in (4).

(3) Three basic markers that form Philippine-type alignment

a. Pivot: the morphological marking on the sole phrase in a clause eligible for Ā-extraction

b. CM$_1$: the morphological marking on non-pivot external arguments (e.g. *ni* in (1))

c. CM$_2$: the morphological marking on non-pivot internal arguments (e.g. *ng* in (2))

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

	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**

The pivot marker is commonly glossed as 'nominative' or 'absolutive' in the Austronesian literature, although a family of Ā-approaches to these languages has analyzed it as a topic marker. The case marker labeled as CM$_1$ is commonly glossed as 'ergative' or 'genitive,' although an alternative nominative analysis has also been advocated. The marker labeled as CM$_2$ has also received two competing analyses. While the ergative approach to these languages treats it as lexical oblique case for antipassive objects, a number of researchers have put forward an accusative analysis for specific languages. A comprehensive overview is presented in section 2.

[3] See Blust (2015), Chen (2017), and works cited there for an overview.

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

Due to a lack of in-depth investigations of these markers' distributions in non-basic constructions, their case value has remained obscure. This has led to the use of analysis-neutral labels in recent works – NOM for pivots, GEN for non-pivot agents, and ACC for non-pivot themes – which have increased obstacles for crosslinguistic comparisons and misunderstandings among non-Austronesionists. Consequently, although many researchers have questioned the ergative view of Philippine-type alignment (see, e.g. Shibatani 1988; Richards 2000; Rackowski 2002; Rackowski and Richards 2005; Paul and Travis 2006; Foley 2008; O'Brien 2016; Chen 2017; Erlewine et al. 2017), Philippine-type languages have continually been cited as examples of syntactic ergativity in the recent typological literature.

The aim of the paper is to demonstrate that a systematic examination of the distribution of CM_1, CM_2, and pivot-marking in specific syntactic environments across languages under different Austronesian higher-order branches offers a renewed answer on this debate. This new comparative evidence indicates that 'Philippine-type alignment' is neither ergative nor typologically unique, but a run-of-the-mill accusative system obscured by prominent topic-marking ('pivot') that overrides morphological case. Support for this claim comes from novel 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*). Through a comparative look at previously overlooked syntactic environments across these languages, it becomes transparent that CM_1 marks nominative, CM_2 marks accusative, and that pivot-marking is independent of case – a conclusion in line with the existing accusative approaches to Philippine-type languages (Shibatani 1998; Richards 2002; Pearson 2005; Chen 2023).

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

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 Austronesian-type alignment.

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

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).[5]

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

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

Despite controversies surrounding the exact mechanism that drives voice alternation, all agree 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, the mapping reflects a complex hierarchy sensitive both to the structural height of the pivot (as relative to the other arguments in the clause) and to the thematic role of the pivot (where the pivot is not a core argument selected by the verb).

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

(6) Tagalog

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

At the same time, unaccusative themes, unlike transitive themes, cannot render the pivot under PV morphology (7). This further reveals the absence of one-to-one correlation between voice type and the thematic role of the pivot. See Rackowski (2002) and Chen (2017) for a detailed discussion. See also a summary of the mapping between voice and argument-marking in the Appendix I.

(7) Tagalog

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

Let us now turn to the case paradigm of the four target languages. As noted in section 1, morphologically conservative Philippine-type languages display a three-way case system illustrated in (3)–(4), where CM_1, CM_2, and the pivot marker are morphologically distinct.

Amis possesses such a three-way distinction in case-marking and pronominal paradigm (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*	*ci-...-an,*	*takuwanan*	*kaminan/kitanan*	*tisuwanan*	*tamoanan*	*cingranan*	*cairaan, cangraan*

Seediq also possesses a prototypical three-way distinction among CM_1, CM_2, and pivot-marking (9).

(9) Seediq case paradigm (Holmer 1996)[6]

	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	∅	∅	*kenan, munan*	–	*sunan*	–	–	–

Puyuma (Nanwang) also exhibits a three-way system (10), despite showing partial case syncretism in its common noun and personal name series. Even though nonpivot agents may thus share the same case-marking with nonpivot themes when they agree in definiteness, their case status (CM_1 vs. CM_2) remains transparent, as the clarity 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	2PL	3SG	3PL
Pivot	*a* (indf.), *na* (def.)	*i*	*=ku*	*=mi/ta*	*=yu*	*=mu*	–	–
CM_1	*tu=... dra* (indf.), *tu=... kana* (def.)	*tu=... kan*	*ku=*	*niam=/ta=*	*nu=*	*mu=*	*tu=*	*tu=*
CM_2	*dra* (indf.), *kana* (def.)	*kan*	*kanku*	*kaniam*	*kanu*	*kanemu*	*kantu*	*kantu*

Tagalog displays a paradigm similar to Puyuma's. CM_1 and CM_2 are further distinguished for definiteness and the language displays partial case syncretism of 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 the common noun series, the morphological distinction between CM_1 and CM_2 is partially lost where the internal argument is m indefinite. Such themes bear the marker *ng*, which is homophonous with CM_1-marking for common nouns.[7] Nevertheless, the CM_1/CM_2 distinction remains intact in Tagalog's personal name series (*ni* vs. *kay*) and pronouns, as seen in (11). Further notes on Tagalog's case markers are presented in Appendix II.

The three-way argument-marking system shown above has received four competing analyses, the basic assumptions of which are summarized in (12).

(12)

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

The purpose of the paper is to present novel empirical evidence for the accusative view (12b). In the rest of the section, I provide a brief overview of each approach.

[6]The pivot/CM_1 homophony in Seediq's first plural and second singular pronouns is disambiguated by the case-marking of the second argument in the same clause.

[7]Where ambiguity arises, speakers tned to use a different voice for clarity.

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

2.1.1 The ergative approach to Philippine-type alignment

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

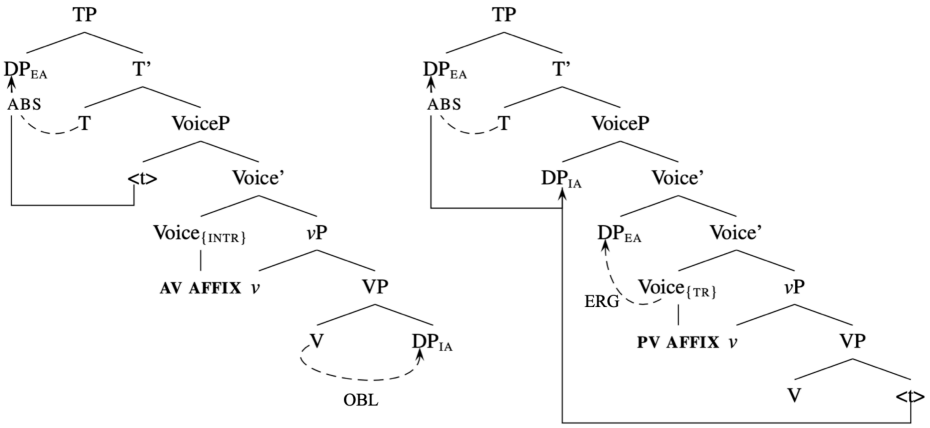
(13) The ergative approach to Austronesian-type alignment

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

Under this approach, the AV construction is an antipassive with an oblique object; the PV construction is the basic transitive; the LV and CV constructions are two types of applicative of transitives where an applied object functions as the primary object (Payne 1982; Mithun 1994; Aldridge 2011, 2012, 2016 et seq.; a.o.). In this view, Philippine-type voice alternation indicates argument structure alternation that enables phrases of different types to render the subject, akin to Indo-European-type voice.

The claimed voice-based split in transitivity outlined above is attributed to the flavor of Voice employed in each construction: an AV morpheme realizes an intransitive Voice head, which contrasts with a transitive Voice head (assumed to be realized as a PV affix) in two regards: (i) presence or absence of an EPP feature, and (ii) the ability to inherently case-license the external argument.[9] The proposed case-licensing pattern in these two constructions is schematized in (14).

(14) a. Actor Voice b. Patient Voice



Without an EPP feature on Voice, the internal argument in AV remains within VP and receives oblique case from V along with θ-assignment. The external argument checks absolutive case with T, as in

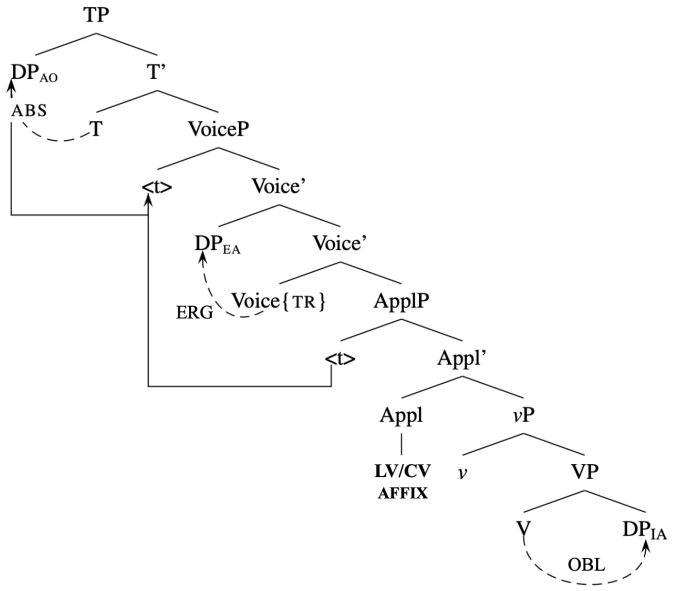
[8] Aldridge (2004) proposes two subtypes of ergativity within Philippine-type languages: T-type / high absolutive, where the source of pivot-marking (absolutive case) is unitarily T, and *v*-type / low absolutive, where the source of absolutive case splits between T and transitive Voice depending on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

[9] Aldridge does not distinguish between Voice and *v* in her series of work. 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).

(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).

Under this analysis, the LV/CV constructions are claimed to be two types of high applicative constructions.[10] Accordingly, the pivot phrase (e.g. instrument, location, or benefactor) is an applied object base-generated in the highest internal argument position, where it is eligible for object shift and accessible to absolutive case (15), similar to PV objects.

(15) Case-licensing in LV/CV constructions



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

(16) The ergative approach to Austronesian-type alignment

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

2.1.2 The split ergative approach

In recent years, several researchers have further argued that a subset of Philippine-type languages possess a voice-based split ergative system. Accordingly, AV as accusative-aligned, and the non-AV constructions as ergative-aligned. Aldridge (2008), for example, argues that some Formosan languages have shifted from a purely ergative system to a split ergative system, which is why their AV construction allows definite objects. See also Chang (1997) and Teng (2016) for a similar proposal for specific Formosan languages.

Under this approach, CM_2 and pivot-marking realize two distinct cases in AV and non-AV environments. Pivot-marking marks nominative case in AV and absolutive case in non-AV constructions.

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

CM_2, which consistently appears on non-pivot internal arguments, is claimed to mark accusative case in AV and oblique case in non-AV clauses. This analysis is illustrated in (16). The ban on internal argument extraction in AV clauses (2a) is assumed to be an independent constraint.

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

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

2.2 The accusative approach to Philippine-type alignment

The accusative approach to Austronesian-type alignment holds a distinct view – 'pivot' is a marker of information structure status (topic), and the fluid extraction asymmetry does not manifest an extraction constraint, but an agreement-like mechanism that indexes the grammatical role of the Ā-extracted phrase (Chung 1994, 1998; Pearson 2005; Chen 2017; Erlewine et al. 2017). Despite differences in details among authors, the consensus has been that CM_1 and CM_2 realize nominative and accusative case, respectively; both cases are overridden by pivot/topic-marking, resulting in the apparently fluid case pattern observed in (3). In this view, Philippine-type voice is not valency-indicating morphology encoded within VoiceP, but Ā-agreement or extraction morphology hosted in the left periphery. This analysis is illustrated in (18)–(19).

(18) The accusative approach to Austronesian-type alignment

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

(19) The accusative approach to Austronesian-type alignment

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

2.3 The symmetrical voice approach to Philippine-type alignment

Yet a third line of analyses argues that Austronesian-type alignment constitutes a unique type of alignment (Foley 2008:42), allowing four different mappings between semantic roles and syntactic positions. A key assumption of this approach is that none of the four voices is the default structure. Each is a non-derived construction featuring a subject with a different thematic role. In this view, Philippine-type Austronesian languages are non-configurational languages by default, 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 built in a non-generative framework, this approach can be evaluated with two central predictions: if this approach is on the right track, the pivot-marked phrase should behave like a subject in various regards, and the binding relation between the pivot phrase (the alleged subject) and other phrases in the clause should differ among the four voices.

2.4 The theory-neutral view adopted in the recent literature

Existing controversies on this theme has motivated a fourth approach commonly adopted in the recent literature, which adopts what are claimed to be theory-neutral labels for the three markers under discussion: "nominative" for pivot-marking, "genitive" for CM_1, and "accusative" for CM_2 (e.g. Pizarro-Guevara 2020; Alonso-Ovalle & Hsieh 2021; Erlewine & Lim 2023; Hsieh 2023; a.o.).

Although this approach intends to set aside controversies in the analysis of each marker, it still fundamentally assumes that the pivot phrase in a clause acts as the subject or nominative, drawn to [uD] and located in a derived A-position. This approach therefore leads to the common 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 in fact shares similarities to the ergative analysis. Since the method makes clear assumptions about the pivot phrases, it can be examined with three other competing analyses.

3 CM_2 as accusative: Insights from causatives, RTO, and infinitives

I begin in this section by providing novel empirical evidence that CM_2 – the marker defined earlier in (3) and repeated in (21) – realizes structural accusative case.

(21) CM_2: the morphological marking on non-pivot internal arguments

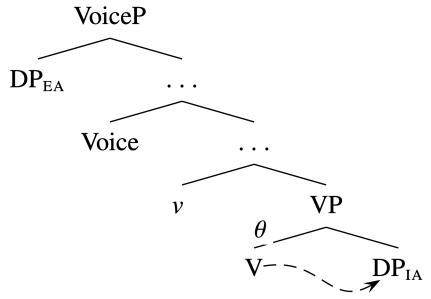
This analysis has important consequences for the understanding of Philippine-type alignment. Not only does it argue against the lexical oblique case view of the same marker, but it also suggests that Philippine-type Actor Voice is syntactically transitive with accusative-marked objects, and not an antipassive. This observation thus undermines the conventional view in the Austronesian literature that the complementary distribution of CM_1 and CM_2 (22) is due to a voice-based contrast in transitivity between the AV and the PV. This observation thus warrants a reexamination of CM_1 in section 4.

(22)

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

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

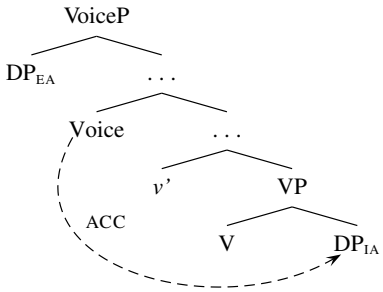
(23) Oblique case assignment



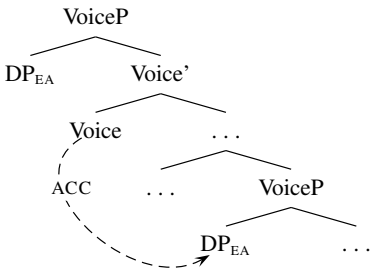
Accusative case, on the other hand, is assigned by the semi-functional head, Voice/*v*, and can be licensed either through the Head-Complement relation (24a) or via the Head-Specifier relation across the VoiceP boundary to a nonfinite embedded external argument – a configuration known as *Exceptional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

(24) Two patterns of accusative case assignment

a. Head-Comp licensing



b. Head-Spec licensing (ECM)



In the following subsections, I show that CM_2's distribution in productive causatives (ECM environments) (3.1), raising-to-object constructions (non-thematic argument positions) (3.2), and restructuring infinitives (3.3) shows common hallmarks of accusative case.

3.1 CM_2 on ECM subjects

Bi-clausal causatives provide an ideal testing ground for examining the competing analyses of CM_2 (oblique vs. accusative). In AV-marked productive causatives across Tagalog, Puyuma, Amis, and Seediq, the causee bears obligatory CM_2-marking. Such causees therefore share the same case-marking with AV objects in simple clauses, as seen in (25)–(28). See Schachter and Otanes (1972) and Latrouite (2011) for the same observation for Tagalog.

(25) Tagalog

a. Nag-pa-habol si Aya **kay** **Maria** ng pusa.
AV.PRF-CAU-chase PN.PIVOT Aya **PN.CM_2** **Maria** INDF.CM_2 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.CM_2** **Maria** / INDF.CM_2 cat }
'Aya chased {*Maria* / a cat}.' (Simple AV clause)

(26) Puyuma

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

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

(27) Amis

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

b. Mi-lawup kaku **ci-Sawmah-an** inacila.
AV-chase 1SG.PIVOT **PN-Sawmah-CM_2** yesterday
'I chased *Sawmah* yesterday.' (Simple AV clause)

(28) Seediq

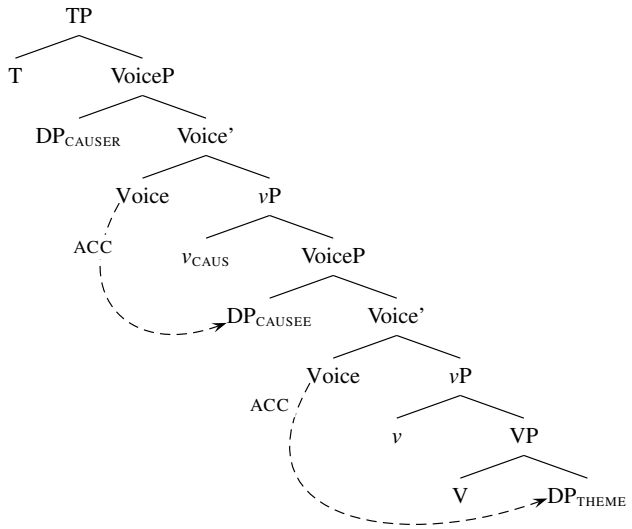
a. ∅-p-hanguc=ku ∅ **Iwan** ∅ roduc nii.
AV-CAU-cook=1SG.PIVOT **CM_2** **Iwan** CM_2 chicken this
'I made *Iwan* cook this chicken.' (AV-marked causative)

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

Presence of obligatory CM_2-marking on causees posits direct challenges to the oblique analysis of this marker. Since a causee in any type of causative construction is neither an internal argument nor θ-licensed by the matrix verb, its compatibility with CM_2 reveals a wider distribution than that expected for oblique case, which should be available only to internal arguments that are θ-licensed locally.

Three diagnostics further indicate that the CM_2-marked causee in the causative construction under discussion is located exactly in an ECM environment – the specifier of an active embedded verb phrase (VoiceP). This is a position where accusative case from the matrix clause is available, whereas lexical oblique case from V is not, thus lending novel support for the accusative analysis of CM_2, as in (29).

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

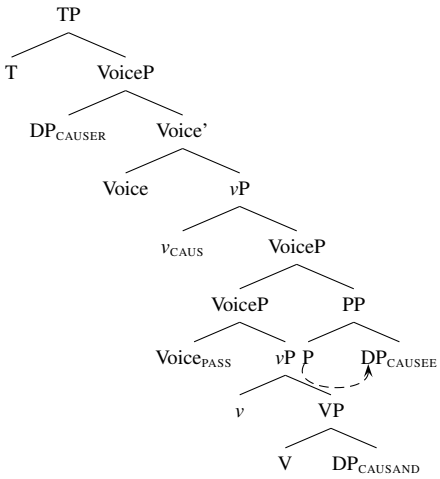


In what follows, I present specific evidence that the causative construction under discussion indeed exhibits a bi-clausal structure like (29).

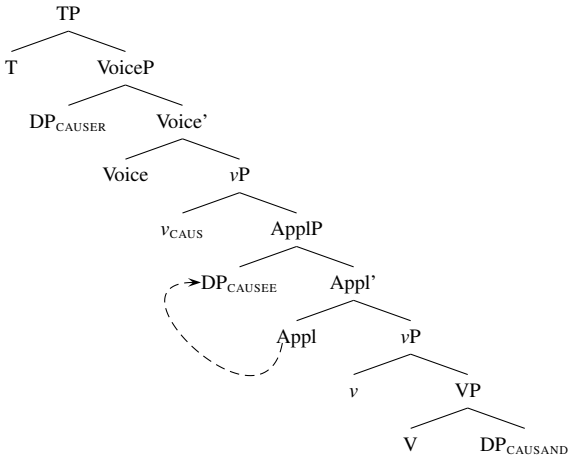
Recent work has shown that causatives across languages can be divided into three types with regard to how the causee is licensed. The first type (Type I) involves a causee introduced as an ordinary external argument of an active embedded VoiceP, as shown above in (29). The second type (Type II) features the causee being licensed by a *by*-phrase attached to a passive embedded VoiceP, as illustrated below in (30a). The third type contains a causee that is licensed by an applicative phrase in a ditransitive-like mono-clausal construction, as seen 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



b. Causee licensed as an ApplP



A Type II analysis can first be ruled out by binding diagnostics. Across the four languages, anaphor binding and quantifier-variable binding both operate in line with the standard theory of c-command, as has been previously demonstrated for Tagalog and Malagasy (Pearson 2001; Rackowski 2002). Across these languages, the CM_2-marked causee is free to bind a pronoun embedded inside the theme (31a–b). This suggests that the causee is located in a structural position that c-commands the theme, consistent with either a Type I or Type III analysis. Reflexive binding diagnostics yield similar results, showing that the pivot-marked theme can surface as a reflexive bound by the CM_2-marked causee, but not vice versa. For brevity, this data is not presented here. See Chen (2017) for the same observation.

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

a. Nag-pa-basa ako **sa bawat estudyante** ng kanyang=libro.
AV.PRF-CAU-read 1SG.PIVOT **DEF.CM$_2$ every student** INDF.CM$_2$ 3PL.POSS=book
'I asked every student$_{<i>}$ to read his/her$_{<i/j>}$ book.' (Tagalog)

b. ∅-pa-deru=ku **kana taynaynayan driya** kantu=kuraw.
AV-CAU-cook=1SG.PIVOT **SG.CM$_2$ mother.PL every** 3.POSS.CM$_2$=fish
'I asked every mother$_{<i>}$ to cook her$_{<i/j>}$ fish.' (Puyuma)

c. ∅-pa-pi-tangtang kaku **tu cimacima a ina** tu titi nangra.
AV-CAU-PI-cook 1SG.PIVOT **CM$_2$ every LK mother** CM$_2$ pork 3PL.POSS
'I will ask every mother$_{<i>}$ to cook her$_{<i/j>}$ pork.' (Amis)

d. ∅-p-hanguct=ku ∅ **knkingal bubu** ∅ sari=daha.
AV-CAU-cook=1SG.PIVOT **CM$_2$ every mother** CM$_2$ taro=3PL.POSS
'I asked every mother$_{<i>}$ to cook her$_{<i/j>}$ taro.' (Seediq)

Type I and Type II causatives can be distinguished by their compatibility with agent-oriented adverbs. Type III causatives, which possess a monoclausal structure, have been reported to possess a recipient-like nonagentive causee imcompatible with agent-oriented adverbs. See Folli and Harley (2007), Ko (2008), and Legate (2014) for a detailed discussion. The AV-marked causatives under discussion, however, consistently allows the CM_2-marked causee to be modified by agent-oriented adverbs such as 'secretly,' 'severely,' and 'independently,' as seen below in (32a–d). This observation, alongside the binding fact discussed above, suggest that the CM_2-marked causees are indeed agentive and behave like typical external arguments, hence supporting a Type I analysis.[11]

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

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

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

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

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

The bi-clausal Type I analysis is further supported by the causative construction's compatibility with the adverb of frequency 'again', which can modify either the causing event or the caused event, with the reading distinguished by the linear order of the adverb (sentence-initial vs. post-causee position). Example (33a–d) demonstrate the compatibility of the CM_2-marked causee with such adverbs, which yields the reading that the causee is requested by the causer to conduct the action again. This compatibility reinforces the view that the AV-marked construction under discussion exhibits a bi-clausal structure with an active embedded VoiceP and an agentive causee as its external argument, as suggested exactly by a Type I analysis (29).

(33) 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-CAU=1SG.CM_1 PN.CM_2 Aya **again** INDF.CM_2 song
'I asked Aya to sing a/the song again.' (Aya did so again)

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

[11] The agent-oriented adverbs discussed here behave like genuine adverbs. When not present in the sentence-initial position, adverbs in these languages do not license voice alternation require a co-occurring lexical verb. Importantly, in constructions that lack an agent, presence of such adverbs yields ungrammaticality. We can therefore assume that these adverbs constitute valid diagnostics for clarifying the agentivity of the causee in causatives. All four languages draw a distinction in linear order to distinguish between causer- and causee-modifying adverbs. Causee-modifying adverbs are typically right-adjacent to the causee. In Amis and Tagalog, however, they can also appear in the sentence-final position (see also Kroeger 1991:147 for a discussion of Tagalog adverbs' flexibility in linear order). An anonymous reviewer also asked about the status of the *nang*-marked adverbs in Tagalog (e.g. *nang palihim* 'secretly'). Such adverbs are commonly assumed to be structurally licensed. Kroeger (1991:140) and Latrouite (Latrouite 2011:21) both note that *nang* is the obligatory linker for introducing verb-modifying adverbs. That *nang* does not introduce an embedded clause is also evidenced by the adverbs' flexibility in linear order.

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

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

We can thus conclude that the CM_2-marked causee is indeed associated with a Type I structure (29) and is introduced as an ordinary external argument in the embedded Spec, VoiceP. This position is one where only ECM-licensing is available, and not lexical oblique case. Accordingly, CM_2 is best analyzed as structural accusative case. See also Maclachlan (1996), Travis (2000), and Rackowski (2002) for a similar bi-clausal analysis for Tagalog causatives.

Notably, presence of CM_2 on causees is not specific to the four target languages. A systematic literature review reveals the same distribution across 16 other Philippine-type languages under various higher-order Austronesian branches, with no exception attested. This indicates that the accusative analysis for CM_2 may extend beyond the four target languages.[12]

3.2 CM_2 on derived objects

A second environment ideal for examining the nature of CM_2 is the raising-to-object construction. In western Austronesian languages, it is common for complex sentences selected by a knowledge or perception verb to possess an optional object that is thematically linked to the embedded clause. This is illustrated with the Madurese example (34) (see, e.g. Davis 2005; Kurniawan 2014; Pearson 2001; Chen 2018). For simplicity, I refer to this construction as 'raising-to-object' (RTO) and the apparent raised phrase as the 'derived object' without committing to a raising analysis.

(34) Madurese

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

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

Across RTO constructions found in Philippine-type languages, the case-marking of the derived object (e.g. 'Hasan' in (34b)) is dependent on the matrix voice. Matrix AV correlates with a CM_2-marked derived object; matrix PV correlates with a pivot-marked derived object, , as outlined in (35), analogous to the case-marking on ordinary objects in simple clauses.

(35)

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

This case pattern is consistently observed across the four target languages. Consider examples below from Tagalog (36), Puyuma (37), Amis (38), and Seediq (39).[13]

[12] Sources of data: Amis (Chen & Fukuda 2016; T Chen 2019), Atayal (Huang 2005), Bikol (Mintz 1971), Botolan Sambal (Antworth 1979), Bunun (Zeitoun 2000), Cebuano (Tanankingsing 2009). Ida'an Begak (Goudswaard 2005), Ilocano (Silva-Corvalán 1978), Muna (van den Berg 1989), Thao (Jian 2018), Yami (Rau and Dong 2006), Itbayaten (Yamada 2014), Botolan Sambal (Antworth 1979), Puyuma (see also Kuo 2015), Kavalan (Don-yi Lin pers.c.), Seediq (see also Holmer 1999), Paiwan (Chang 2006), Saisiyat (Yeh 2000), Tagalog (see also Travis 2000 and Rackowski 2002), Tsou (Lin 2010).

[13] 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.

(36) Tagalog

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

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

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

(37) Puyuma

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

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

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

(38) Amis

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

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

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

(39) Seediq (Truku)

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

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

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

The obligatory presence of CM_2 on derived objects posits further challenges for the lexical oblique case view of this marker. Since lexical case is licensed along with θ-assignment, its presence entails that the derived object is θ-licensed by the matrix verb. This contradicts the basic assumption of all existing analyses of RTO in the literature, that the derived object bears no thematic relation with the matrix verb. In RTO constructions that contain a genuine instance of raising (either to the embedded phase edge or the matrix clause) (40), the derived object is already θ-licensed by the embedded verb prior to raising. It is therefore infelicitous to be θ-licensed again by the matrix verb.

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

$C \ldots V_{knowledge/perception} \ldots \underline{\text{derived object}_i} \quad [_{CP}\ C \ldots V \ldots <t_i>]$

In an alternative analysis where the derived object is base-generated in-situ (41), that object is standardly analyzed as a nonthematic argument that lacks thematic identity with the matrix verb (see e.g. Higgins 1981; Potsdam and Runner 2001; Davies 2005; Salzmann 2017; Wurmbrand et al. 2021; a.o.), as knowledge/perception verbs are assumed to not allow a three-place θ-grid as in (42).

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

$C \ldots V_{knowledge/perception} \ldots \underline{\text{derived object}_i}\ [_{CP}\ C \ldots V \ldots \text{pronoun}_i\ ]$

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

Theoretical issues surrounding the analysis in (42) are as follows. First, it requires an independently motivated lexical entry that licenses three θ-roles. Second, the alleged thematic role of the derived object is difficult to classify. To avoid this undesirable θ-grid, it is standardly assumed in the literature that the derived object in RTO constructions of this type is a non-thematic argument (e.g. Higgins 1981; Potsdam and Runner 2001; Davies 2005; Salzmann 2017; Wurmbrand et al. 2021, a.o.).

Therefore, derived objects in RTOs are in principle incompatible with lexical oblique case, regardless of whether an RTO construction involves a genuine instance of raising. Such objects' compatibility with CM_2 thus argues against the oblique case view of this marker. The accusative case analysis of CM_2, on the other hand, provides a straightforward account for the shared CM_2-marking across AV objects, agentive causees, and the derived objects in RTO. Since accusative case assignment is independent of θ-licensing, an accusative analysis for CM_2 is compatible with either a base-generation or movement analysis of RTO, as attested across various languages (see Salzmann 2017 for an overview). The obligatory presence of CM_2 ob derived objects thus reinforces the accusative case view of CM_2.

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

Notaboy, all 13 Philippine-type languages that have been reported to possess an RTO construction display obligatory CM_2-marking on derived objects whenever the matrix verb is in AV.[14] This suggests that the accusative analysis for CM_2 may extend beyond Puyuma, Amis, Seediq, and Tagalog.

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

3.3 Absence of CM_2 in restructuring infinitives

A third environment ideal for distinguishing between accusative and oblique case is restructuring infinitives. As is well-known, accusative case is unavailable in infinitival complements where a Voice layer is absent or defective. Absence of this case drives long-distance case licensing, resulting in the special phenomenon in which the embedded object carries case-marking that is dependent of the matrix voice type (e.g. Aissen and Perlmutter 1976, 1983; Rizzi 1978, 1982; Wurmbrand 2001 et seq.; Cinque 2004).

This phenomenon is exemplified with the examples below from Kannada. As (43a–b) show, shifting the matrix voice from active to passive correlates with obligatory nominative-marking on the object inside the restructuring infinitive. This indicates that the source of accusative case in the active example (43a) is the matrix Voice, hence its absence where the matrix Voice is defective (43b).

(43) Kannada (Dravidian)

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

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

Lexical oblique case, on the other hand, should be consistently available in restructuring infinitives (RIs), since it is licensed directly by the lexical verb, which is consistently present within infinitives. Long-distance case-licensing and matrix-dependent case-marking of the object should therefore not occur if the object inside the infinitive is licensed with oblique case.

Across the four target languages, the object within RIs displays matrix-dependent case-marking – analogous to the derived objects in RTO. This lends further support to the conclusion that such objects are accusative-licensed. Before discussing the core data, a note on restructuring infinitive is in order. In Philippine-type languages, RIs are characterized by clitic climbing, absence of an embedded complementizer, and TAM-deficiency (see, e.g. T. Chen 2010; C. Wu 2012; I. Wu 2011; Kroeger 2014; Wurmbrand 2014; Chang 2017; V. Chen 2017 for details). These characteristics are exemplified with the Puyuma examples in (44). As (44a) shows, the embedded object *yu* is obligatorily attached to the matrix verb as a pronominal clitic, showing the absence of clauseboundedness effects. The embedded verb cannot take aspect or mood inflections, and the infinitive is incompatible with the complementizer *dra* obligatorily present in finite CP complements (see 3.2 for relevant examples).

(44) Puyuma[15]

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

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

Infinitives of this type feature a special voice-marking constraint known as 'AV-only,' in which Actor Voice is the only possible voice-marking on the embedded verb. This constraint has been argued to

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

be associated with a VoiceP complement that contains a defective Voice head incapable of accusative licensing (see, e.g. T. Chen 2010; I. Wu 2011; Kroeger 2014; Wurmbrand 2014; Chang 2017; Chen 2017). Consider the examples in (45a–b), which demonstrate that this constraint is independent of matrix voice-marking (PV vs. AV).

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

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

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

Like the Kannada examples (42), the case-marking of the embedded object is subject to 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 (46) and illustrated in (47).

(46)

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

(47) Absence of CM_2 in restructuring infinitives

a. Puyuma

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

b. Amis

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

c. Seediq

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

Since the licensor of lexical case – V – is available within the infinitives under discussion, the fact that CM_2 is not available inside the AV-marked RIs (47a–c) thus provides further evidence against the lexical oblique case view of CM_2. At the same time, it indicates that the presence or absence of this marker is dependent on that of Voice, and not V, offering direct support that CM_2 realizes accusative case.

A preliminary survey shows that the same type of matrix-dependent case-marking in RIs is attested across 15 Philippine-type Austronesian languages (Wurmbrand 2014).[16] The accusative case analysis for CM_2 can therefore extend beyond the target languages.

[16]Tagalog exhibits no infinitive of this type. Nevertheless, its CM_2-marking shows the hallmarks of structural accusative case in the two environments discussed in sections 3.1 and 3.2.

3.4 Interim conclusion

I have demonstrated that presence of CM_2 on ECM subjects, derived objects, and within restructuring infinitives suggests that CM_2 is essentially not restricted to the internal argument positions, but available in several environments where structural accusative case is predicted to be available.

This conclusion yields an important consequence: two-place AV constructions – which possess a CM_2-marked object – are true transitives with accusative licensed objects, and not antipassives. This suggests that the alleged ergative patterning between antipassive subjects (alleged S) and transitive objects (O) cannot be maintained, as the former are essentially not transitive subjects (A).

(48) Case alternation between AV and PV

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

This conclusion follows consistently from various recent critiques of the antipassive approach to Philippine-type Actor Voice. See Rackowski (2002), Paul and Travis (2006), O'Brien (2015), Chen (2017) and works cited there for a detailed overview of empirical issues for the antipassive analysis.

Importantly, the accusative behaviors of CM_2 is not specific to the four target languages. The table below presents a sample list of Philippine-type languages attested with the aforementioned accusative behaviors of CM_2. Since each of the three environments (57a–c) provides independent evidence for the accusative case view of CM_2, it is unnecessary for a language to exhibit all three to support this conclusion.

(49) Summary: Evidence for the CM_2 as structural accusative case[17]

	Subgrouping affiliation	Causatives	RTO	Restructuring infinitives
		a. CM_2 on ECM subjects	b. CM_2 on derived objects	c. CM_2 absent in RIs where the matrix voice is in NAV
Atayal	Atayalic	✓	✓	✓
Seediq	Atayalic	✓	✓	✓
Puyuma	Puyuma	✓	✓	✓
Amis	East Formosan	✓	✓	✓
Kavalan	East Formosan	✓	✓	✓
Tsou	Tsouic	✓	✓	✓
Thao	Western Plains	✓	✓	?
Bunun	Bunun	✓	✓	✓
Saisiyat	NW Formosan	✓	✓	✓
Paiwan	Paiwan	✓	✓	✓
Tagalog	Malayo-Polynesian	✓	✓	N/A
Ilocano	Malayo-Polynesian	✓	✓	N/A
Cebuano	Malayo-Polynesian	✓	✓	N/A
Botolan Sambal	Malayo-Polynesian	✓	✓	N/A
Subanon	Malayo-Polynesian	✓	✓	N/A

4 CM_1 as nominative: Insights from causatives and unaccusatives

Let's now consider the distribution of CM_1, the marker defined earlier in (3) and repeated in (50).

[17] 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).

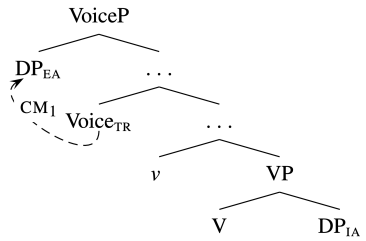
(50) CM_1: the morphological marking on non-pivot external arguments.

Recall that this marker is absent in Actor Voice and consistently appears on the external argument in non-AV clauses (51), and is traditionally analyzed as inherent ergative case assigned by transitive Voice/*v* (52) (Aldridge 2004 et seq.).

(51) Philippine-type alignment: schematized case pattern

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

(52) CM_1-assignment under the ergative case analysis



If CM_1 indeed realizes an inherent case assigned by transitive Voice (52), the marker should appear only on the external arguments and in transitive clauses. Additionally, since the licensor of inherent ergative case is Voice/*v*, multiple CM_1-marking should be possible within a single CP where the CP contains multiple Voice/*v* heads.

If, however, CM_1 shows a distribution wider than external argument positions, yet is unique per clause and restricted to the highest argument per clause, it would suggest that CM_1 is better analyzed as a type of structural case that is available to the highest caseless DP – namely, the nominative. The predicted distributional differences between ergative and nominative case is outlined in (53).

(53) Distribution of CM_1 under two competing hypotheses

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

In this section, I demonstrate that CM_1 shows the hallmarks of nominative case in two specific environments where the two cases can be distinguishable: three-place productive causatives and unaccusatives with an adjunct phrase.

4.1 CM_1: Locality constraints and uniqueness per CP

Ergative case across languages has been shown available in nonfinite embedded complements. It may also appear more than once within a single finite clause. Both traits follow from the fact that the source of this case (i.e., Voice) is not unique per CP. Consider below examples from three morphologically ergative languages, Trumai (isolate), Kabardian (Caucasian), and Macushi (Carib). All three demonstrate double ergative marking in productive causatives. This phenomenon follows from the prediction above in (54c) that multiple ergative cases may co-occur within the same CP where the clause contains more than one Voice head.

(54) Ergative causee in morphologically ergative languages

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

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

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

CM_1, the alleged ergative case in Philippine-type Austronesian languages, shows two distributional restrictions unexpected for the ergative case view. It is unique per CP and available only to the highest argument per clause. This distribution is transparent in bi-clausal productive causatives, where CM_1 is available only to the causer, and can never appear on the agentive causee, as in (55).

(55) Case pattern in productive causatives

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

This locality-sensitive distribution is shown with the examples below from Tagalog, Puyuma, Amis, and Seediq, (56)–(57). Examples of PV-causatives are not presented, as the unavailability of CM_1 in PV-causatives is due to the causee's pivot status.

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

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

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

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

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

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

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

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

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

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

There is clear evidence that the causee in CV-marked causatives (57) is also an external argument, evidenced by such causee's ability to bind the theme and its compatibility with agent-oriented adverbs and the adverb of frequency 'again.' This suggests that CV-causatives exhibit the same structure with AV-causatives discussed in section 3.1 and possess an agentive causee introduced as an external argument of the embedded VoiceP. See section 5 for a further discussion of this claim with actual data.

The fact that CM_1 is consistently restricted to the highest DP in productive causatives and not available to agentive causees lends strong support to the nominative case view of CM_1.

4.2 CM_1 on unaccusative themes

Alongside its uniqueness per clause and sensitivity to locality, CM_1 shows one other hallmark of nominative case: where an external argument is absent, it is available to internal arguments.

Across Philippine-type Austronesian languages, in LV/CV-marked constructions formed with a semantically intransitive verb, the sole argument of the verb is obligatorily CM_1-marked, regardless of the verb being unergative or unaccusative. This is exemplified with examples below from Tagalog (58), Puyuma (59), Amis (60), and Seediq (61).

(58) Tagalog

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

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

(59) Puyuma[18]

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

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

(60) Amis[19]

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

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

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

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

(61) Seediq

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

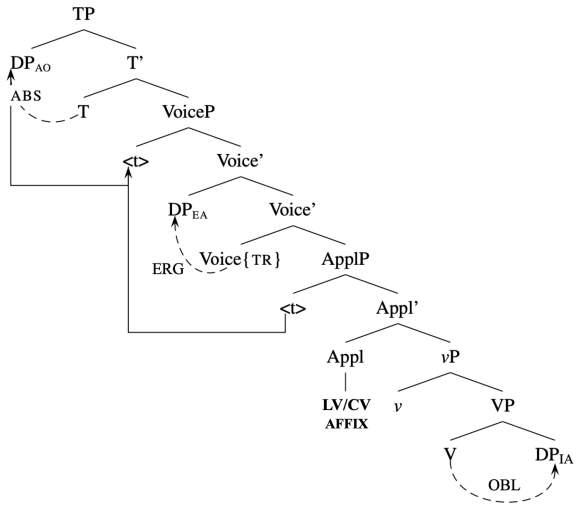
b. S-k<n>arux **na** **Temi** ka knrudan-na.
CV-PRV-be.sick **CM_1** **Temi** PIVOT age-3SG.POSS
'Temi got sick because of her age.' (CM_1 on unaccusative theme)

Presence of CM_1 on unaccusative themes directly undermines the ergative case view of CM_1. For that analysis to go through, one has to argue that the CM_1-marked undergoer arguments are introduced as external arguments in [Spec, VoiceP] and that the unaccusative verbs 'fall,' 'slip,' 'be tired,' and 'die' in possess a transitive Voice head capable of ergative case assignment. Neither assumption is compatible with the standard assumptions of unaccusativity (Perlmutter 1978; Burzio 1986), as all four languages display clear independent evidence for an unergative/unaccusative distinction.

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

We may then conclude that the CM_1-marked themes in (58)–(61) are genuine internal arguments. The fact that CM_1 may appear on these arguments where an external argument is absent thus lends further support to the structural nominative case view of this marker. Before concluding, it is noteworthy that the construction under discussion possesses a case pattern unexpected for the ergative view of Philippine-type alignment. According to that analysis, the internal argument in LV clauses should receive oblique case from the lexical verb, with the pivot-marked locative phrase licensed by a high applicative phrase above the theme. The case-licensing mechanism under that approach is illustrated in (62).

(62) The ergative/applicative approach to LV/CV constructions



However, CM_2-marking on the theme in (58)–(61) yields ungrammaticality, with CM_1 being the only possible case-marking. This reinforces the current conclusion from the various constructions discussed above that the case-licensing mechanism assumed under the ergative approach is incorrect. The unavailability of CM_2-marking also follows consistently from the accusative analysis of this marker, which predicts it to be unavailable in unaccusatives.

4.3 Interim conclusion

To conclude: CM_1's distribution in bi-clausal causatives and unaccusatives not only argues against the inherent ergative case view of this marker but also points directly to an alternative nominative case analysis.

This conclusion has two important implications. First, it suggests that 'Philippine-type alignment' is neither ergative-aligned nor a voice-based split ergative system, as both analyses rely crucially on the ergative case analysis of CM_1. Furthermore, it indicates that the 'pivot-only' extraction constraint observed in these languages does not arise from a ban on ergative extraction – as the alleged ergative agents are in fact structurally case-licensed nominative arguments. These implications highlight the view that the Philippine-type extraction asymmetry is independent of syntactic ergativity, and is likely a property associated with pivothood – a question to be further investigated in the following section.

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

We have seen that CM_1 and CM_2 display common hallmarks of nominative and accusative case, respectively. This conclusion yields an important subsequent question concerning the actual case value of the pivot-marking, which shows a fluid distribution sensitive to voice alternation and is compatible with either core arguments or adjunct-like phrases, as in (63).

(63) Philippine-type alignment: schematized case pattern

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

Given that CM_1 marks nominative case (section 4), 'pivot' should not realize the same case (i.e. structural case from T). This calls into question the traditional view in the 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 'pivot' indeed not realizes any type of structural case, but a marker independent of case and one associated with a specific information structure status (topic), as argued by a number of researchers for various Philippine-type languages. This observation reinforces the conclusion from sections 3 and 4 that Philippine-type alignment does not manifest ergativity at either the morphological or syntactic level.

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

The claim that pivothood in Philippine-type languages is associated with topichood is not new. Much previous work on Malagasy has pointed out that pivot phrases are consistently associated with more 'referential prominence' than subjects in other languages (Keenan 1976 et seq.). Pearson (2001, 2005)

provide an in-depth investigation of Malagasy, concluding that pivot phrases in Malagasy function as topics. Similar proposals have also been made for Tagalog. Richards (2000) and Rackowski (2002), in line with Schachter and Otanes's (1972), argued explicitly that pivots in Tagalog occupy an Ā-position, parallel to topics in Icelandic and German. See also similar treatments 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 and Massam 2021).

This analysis contrasts with the absolutive case analyses of pivot-marking (Payne 1982; De Guzman 1988; Maclachlan and Nakamura 1993, 1997; Mithun 1994; Gerdts 1998; Aldridge 2004, 2008, 2011, 2017; Liao 2004). Among these works, Guilfoyle, Hung, and Travis (1992) put forward the influential proposal that the pivot in Malagasy occupies the subject position and checks nominative case with T. This proposal was further developed in Aldridge (2004, 2008, 2011) as a core assumption of the ergative approach to Philippine-type languages, and is commonly adopted in reference grammars and descriptive works on Formosan and Philippine languages, where pivot-marked phrases are commonly glossed as 'nominative' or 'absolutive' and treated as the subject of the clause.[20]

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

Below I present novel empirical evidence that pivot status 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 pivot-marking relies on two fundamental assumptions (64a–b).

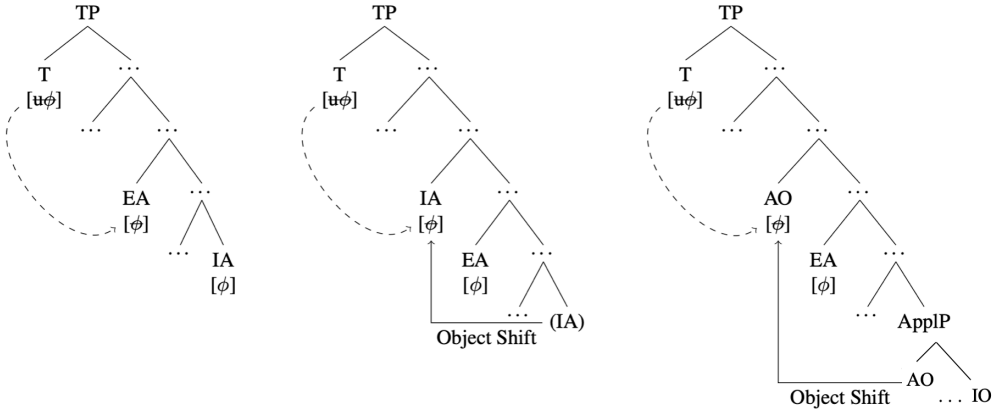
(64) a. A pivot is the highest DP within a TP.
b. In LV and CV clauses, it is an applied object introduced by a High Appl head in the highest internal argument position, where it is eligible for object shift.

This analysis predicts that voice alternation is accompanied by a change in argument structure, according to which we should observe evidence of argument structure alternation among PV, LV, and CV. Specifically, the highest internal argument of the clause should change from the theme to whatever phrase obtains pivot-marking in an LV/CV clause. This makes an easily testable assumption: in LV/CV, the applied object pivot should c-command the theme and not vice versa, as seen in (65c). Note, also, that an alternative Low Applicative analysis for LV (as proposed by Rackowski 2002) would make the same prediction: the pivot should asymmetrically bind the theme, since the applied object introduced by a Low Appl head is also base-generated in a position that c-commands the theme. See Rackowski (2002:122) for details.

[20] 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.

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

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



The topic analysis of pivot makes a distinct prediction: Philippine-type voice voice alternation should yield no argument structure alternation – as it simply signals a change in topic selection. Accordingly, the pivot should behave like an Ā-element (topic), displaying reconstruction effects and being interpreted in its θ-position. It may also show typical Ā-properties such as weak crossover (Postal 1993) and/or weakest crossover effects (Lasnik and Stowell 1991). Finally, as a topic need not be a DP, a pivot in a LV or CV clause may remain as an locative or instrumental/benefactive adjunct PP. Accordingly, the binding relations of a PV clause and its LV/CV counterpart may remain identical (unless affected by weakest crossover).

In what follows, I present new evidence from the four target languages for the topic approach to pivothood. Key predictions of these competing analyses are summarized in (66).

(66) 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

In this subsection, I present novel evidence that voice alternations across the four target languages yields no argument structure alternation, contra the absolutive case view of pivot-marking.

5.3.1 Productive causatives

Productive causatives provide an ideal testing ground for the nature of pivothood. Across Philippine-type languages, each of the three arguments in a causative of transitive (causer, causee, theme) can render the pivot through appropriate voice-marking: AV for causer; PV for causee; CV for theme. This pattern is schematized in (67) and exemplified with the Seediq examples in (68).

(67) 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**

(68) Seediq

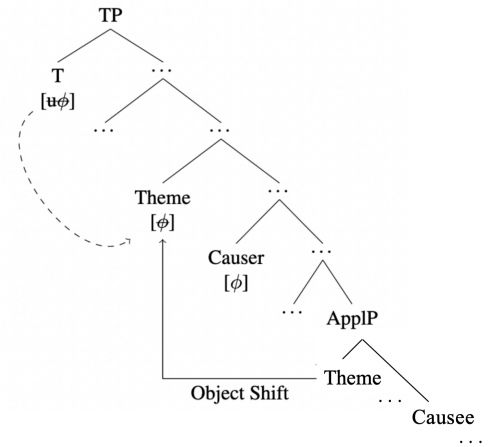
a. ∅-p-trima=**ku** ∅ laqi gaga ∅ papak=na.
AV-CAU-wash=**1SG.PIVOT** CM_2 child that CM_2 leg=3SG.POSS
'*I* made that child wash his legs.' (Actor Voice)

b. P-trima-un=mu ∅ papak=na **ka laqi gaga**.
CAU-wash-PV=1SG.CM_1 CM_2 leg=3SG.POSS **PIVOT child that**
'I made *the child* wash his legs.' (Patient Voice)

c. S-p-trima=mu ∅ laqi gaga **ka papak=na**.
CV-CAU-wash=1SG.CM_1 CM_2 child that **PIVOT leg=3SG.POSS**
'I made that child wash *his legs*.' (Circumstantial Voice)

Let us first consider the case pattern observed with CV-marked causatives. In this construction (68c), pivot-marking falls on the theme, skipping the CM_1-marked causer and the CM_2-marked causee. If pivot-marking indeed realizes absolutive case, the pivot-marked theme is therefore necessarily analyzed as an applied object base-generated above the causee. This is assumed exactly by the ergative view of Philippine-type alignment, which maintains that CV morphology realizes a high applicative head. This applied object is then assumed to undergo object shift, raising across the causer to Spec, TP and obtaining absolutive case, as schematized below in (69).

(69) Purported causative structure with an applicativized theme



Binding diagnostics show that this potential analysis is false. Several Philippine-type languages have previously been shown to conform to the standard binding principles (Malagasy: Pearson 2001; Tagalog: Rackowski 2002). The same observation applies to Puyuma, Amis, and Seediq. Across the four target languages, a CM_2-marked causee can freely bind the pivot-marked theme, as in (70). For readability, the pivot-marked theme is boldfaced in the original text and the gloss, and italicized in the translation. Due to space limitations, I do not present parallel results from quantifier-variable binding, which also conforms to c-command (Pearson 2001; Rackowski 2002; Chen 2017),.

(70) CV causatives: Causee binds theme pivot

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

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

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

c. Amis

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

d. Seediq

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

It is noteworthy that the same binding pattern has been reported in previous work on Tagalog. Consider example (71), which shows that a theme pivot (*kanyang sarili*) in CV-causatives can be bound by a non-pivot causee 'Carlos' (Rackowski 2002:67–68).[21]

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

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

As this binding pattern suggests, CV-causatives show no evidence of the hypothetical argument structure alternation, via which the pivot-marked theme is base-generated above the causee (69). Instead, it suggests that the causee c-commands the theme, as do AV-causatives (section 3.1). This contradicts the key assumption of the ergative analysis and suggests instead that voice alternation has no impact on the structural relation among arguments.

One might argue that the current binding fact is the outcome of the CM$_2$-marked causee being inherently case-licensed, thus allowing for absolutive case (pivot-marking) to be assigned to a lower argument (i.e. theme). This account is undermined by two facts. First, it relies on an independent assumption that the CM$_1$-marked causer is also inherently case-licensed – so that absolutive case is available to the lowest argument among the three. However, as shown in section 4, CM$_1$ does not behave like an inherent case. This suggests that the causer should in fact have priority to access absolutive case over both the causee and the theme. Second, there is clear evidence that the CM$_2$-marked causee is an agentive argument licensed in the embedded Spec, VoiceP – a position where only structural case is available. This rules out the possibility of these arguments being inherently case-licensed. Consider (72)–(73), which show that the cause in CV-causatives does behave like a typical agentive external argument, similar to that in AV-causatives (section 3.1).

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

a. Tagalog

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

[21] The phrase *kanyang sarili-ng kotse* in (72) 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).

(i) Picture NP reflexive embedded inside an AV subject

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

'I asked Ivan to repair the car secretly.' (Ivan did so secretly)

b. Puyuma

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

c. Amis

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

d. Seediq

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

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

a. Tagalog

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

b. Puyuma

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

c. Amis

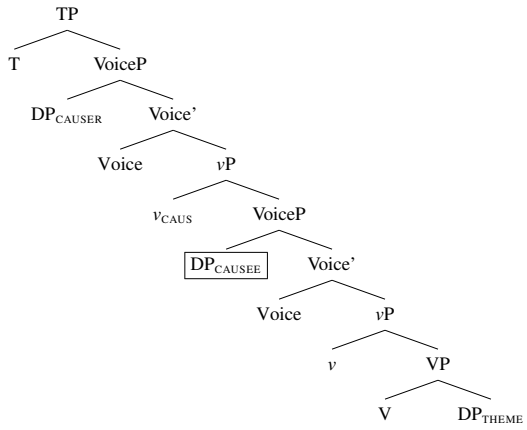
Una maeded-ay a wacu, sa-pa-pi-palu **heca** aku ci-kulas-an.
that bad-NMZ LK dog CV-CAU-PI-hit **again** 1SG.CM$_2$ PN-Kulas-CM$_2$
'That bad dog, I asked Kulas to hit (it) again.' (Kulas did so again)

d. Seediq

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

The observations above thus reveal that CV-marked causatives, like their AV-marked counterpart, exhibit a bi-clausal structure, containing an active, independent embedded VoiceP, with the causee c-commanding the theme, as illustrated in (74) (section 3.1).

(74) Bi-eventive structure of CV causatives



The fact that pivot-marking may skip the causee and appear on the theme in CV-marked causatives thus reveals that the licensing of this marker is immune to locality. This suggests that pivot-marking does not realize structural case of any type. An examination of PV-marked causative reinforces this conclusion, which reveals the same binding pattern (75).

(75) PV causatives: causee binds theme

a. Tagalog

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

b. Puyuma

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

c. Amis

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

d. Seediq

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

The invariable binding pattern observed here highlights the fact that Philippine-type voice alternation is not a valency-rearranging operation, contra the traditional views (e.g. Payne 1982; Mithun 1994; Aldridge 2004 et seq.; see Chen & McDonnell 2019 for a comprehensive overview). The non-local distribution of pivot-marking thus indicates 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 with CM$_1$ (nominative).

5.3.2 Ditransitives

Ditransitives provide further evidence against the absolutive case view of pivot-marking. As in causatives, each of the three arguments in this construction may render the pivot through voice alternation. The shared case pattern across these languages is schematized in (76) and exemplified in (77).[22]

(76) 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**

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

(77) Amis

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

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

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

As observed with causatives, ditransitives in the four languages display invariable binding relations regardless of voice. In Amis (78)–(79), Seediq (80)–(81), and Puyuma (82)–(83), the recipient asymmetrically binds the theme regardless of voice type, suggesting that these ditransitives are unitarily double object constructions, in which the recipient asymmetrically c-commands the theme (Barss and Lasnik 1986; Haspelmath 2014). Like in English (Higginbothem 1980; Reinhart 1983; Barker 2012), quantificational posessors in the four languages can freely bind a pronoun outside their possessive hosts, as long as the pronoun is c-commanded by the host. As seen below, where the universal quantifier 'every' is embedded inside the recipient ((78), (80), and (82)), it may freely bind a pronoun embedded inside the theme, with that pronoun interpreted as a variable. Conversely, where the same quantifier is embedded inside the theme, the pronoun embedded inside the recipient fails to obtain variable reading ((79), (81), and (83)). This indicates a structural relation in which the recipient asymmetrically c-commands the theme, suggesting that the recipient is consistently located in a c-commanding position above the theme regardless of voice.

(78) Amis: R(ecipient) binds T(heme) regardless of voice type

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

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

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

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

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

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

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

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

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

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

Pafeli-**en** aku [ku wawa nira] [tu paysu nu cimacima a
give-**PV** 1SG.CM_1 [PIVOT child 3SG.POSS] [CM_2 money POSS every LK tamdaw].
person]
'I will give his/her$_{<i>}$ child every person's$_{<j/*i>}$ money.' (bound variable reading unavailable)

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

Sa-pafeli aku [tu wawa nira] [ku paysu nu cimacima a
CV-give 1SG.CM_1 [CM_2 child 3SG.POSS] [PIVOT money POSS every LK tamdaw].
person]
'I gave his/her$_{<i>}$ child every person's$_{<j/*i>}$ money.' (bound variable reading unavailable)

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

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

Wada=ku ∅-paadis [∅ bubu=na knkingal laqi] [∅
PRF=1SG.PIVOT **AV**-send [CM_2 mother=3SG.POSS every child] [CM_2 patis=daha].
book=3PL.POSS]
'I sent every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

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

Wada=mu pdes-**un** [∅ patis=daha] [ka bubu=na knkingal
PRF=1SG.CM_1 send-**PV** [CM_2 book=3PL.POSS] [PIVOT mother=3SG.POSS every laqi].
child]
'I sent every child's$_{<i>}$ mother his/her$_{<i/j>}$ book.'

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

Wada=mu **s**-paadis [∅ bubu=na knkingal laqi] [ka
PRF=1SG.CM_1 **CV**-send [CM_2 mother=3SG.POSS every child] [PIVOT patis=daha].
book=3PL.POSS]
'I sent every child's mother$_{<i>}$ his/her$_{<i/j>}$ book.'

(81) Seediq: T fails to bind R regardless of voice type[23]

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

Wada=ku ∅-paadis [∅ bubu=daha] [∅ patis knkingal laqi].
PRF=1SG.PIVOT **AV**-send [Y mother=3PL.POSS] [CM_2 book every child]

[23] 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).

'I sent his/her$_{<j>}$ mother every child's$_{<k/*j>}$ book.'

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

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

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

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

Puyuma ditransitives deserve a special note. As the language allows fully flexible word order among nominals, it is possible to eliminate linear order as a potential intervening factor for binding interpretation. Novel data from the language shows that a quantificational recipient can consistently bind the theme regardless of voice, even if the pronoun precedes its quantificational binder in linear order, as in (82a–c). Therefore, a bound variable reading of the theme is consistently available, even when the theme is pivot-marked (82c). This suggests that speakers' interpretation is unaffected by linear order, but determined by the underlying asymmetrical c-commanding relation between the recipient and the theme.

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

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

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

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

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

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

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

Where the pronoun is embedded in the recipient, quantifier-variable reading becomes unavailable (84). The Puyuma fact observed here thus presents a strong case against the claimed argument structure alternation approach to Philippine-type voice alternation.

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

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

∅-beray=ku [kantu=walak] [kantu=lribun kana kiakarun driya].
AV-give=1SG.PIVOT [3.POSS.CM$_2$=child] [3.POSS.CM$_2$=wages LK laborer every]

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

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

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

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

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

Tagalog ditransitives also display an invariable binding pattern immune to voice alternation. Consider (84)–(85), which show the recipient and the theme can mutually bind each other regardless of voice.

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

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

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

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

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

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

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

(85) Tagalog: T binds R regardless of voice type[24]

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

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

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

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

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

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

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

It is noteworthy that the same pattern has been previously reported. Andrews (1985), for example, reported that a theme pivot may be bound by a non-pivot recipient in CV-marked ditransitives (86). This reinforces the current finding that CV-ditransitives exhibit consistent binding facts with those marked in other voices, with no indication of the pivot being introduced in an applicative position.

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

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

In this discussion, I set aside the structural differences between the ditransitives found in the first three languages and Tagalog, which shows a binding pattern compatible with a prepositional dative analysis (for details, see Hoekstra and Mulder 1990; Den Dikken 1995; Harley 1997). This distinction is not central to the main purpose here, which focuses on the lack of argument structure alternation corresponding to voice alternation.

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

I have shown that pivot designation in causatives and ditransitives has no impact on argument structure. The non-local distribution of the pivot-marking thus indicates that it is a marker independent of case. This follows from Bowen's (1965) early insight that pivot phrases in Tagalog and many other Philippine-type languages show topic properties in being preferentially definite/specific and 'old information' (see also Schachter and Otanes 1972, Shibatani 1988, Richards 2000; Pearson 2001, Paul, Cortes, and Milambiling 2015, Collins 2018, and Paul and Massam 2021 for similar claims/assumptions). See also the same observation from LV/CV constructions that possess an adjunct-like pivot in recent works (Chen 2017, 2021).

I propose accordingly that pivot is a topic marker obligatorily present in all finite clauses that contain a CP layer, which licenses topics. This marker overrides morphological cases, similar to the topic markers *wa* and *nun* in Japanese and Korean (Kuno 1973; Chung 1994). This gives rise to an ergative-like argument-marking pattern in which subjects, objects, and types of adjunct-like phrases are accessible to the same case. This analysis is illustrated in (87).

(87) The accusative approach to Philippine-type alignment

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

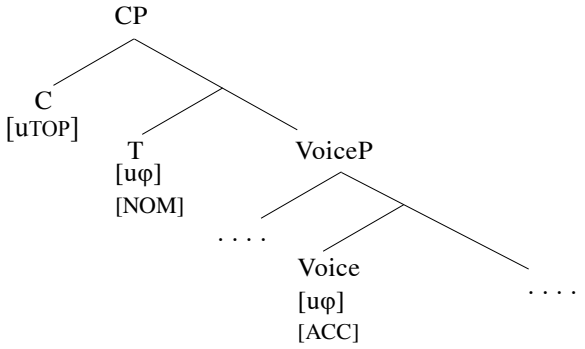
Notably, in some Philippine-type languages, pivot-making may optionally co-occur with a preposition original to the pivot phrase. Consider, for example, the LV sentence below from Paiwan (88), where the locative phrase *i maza* 'LOC here' is in pivot status and is marked by the pivot marker *a* without losing the locative preposition *i*. The determiner *icu* commonly co-occur with definite pivot phrases, including the locative phrases.

(88) Paiwan

Ku=p<in>uri-kasiw-an **a** icu **i** maza.
1SG.CM$_1$=PFVseek-wood-LV **CN.PIVOT** this **LOC** here
'I looked for wood here.' (Chang 2006: 141)

It is also important to note that topicality has been shown challenging to be defined in an unified way across languages, with variation attested in various syntactic, pragmatic, and semantic regards (Rizzi 1997; Frascarelli and Hinterhölzl 2007; Sigurdsson 2011; a.o.). The topic approach to pivot-marking proposed here should therefore only be viewed as an approximate analysis. 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 (89). The obligatory topicalization is proposed to be driven by a head in the C-domain that contains a [uTOP] feature, driving Ā-movement of the pivot to the left periphery.[25] These languages thus possess a clear A/Ā distinction, with an obligatory Ā-position filled by the pivot and an obligatory derived A-position filled by CM$_1$ phrases.

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



Below I discuss three shared characteristics of Philippine-type syntax that lend potential further support to the topic analysis.

5.4.1 'Pivot' marks discourse topics

Elicited question-answer sequences with a set discourse topic reveal a close connection between pivot status and topichood: without further context, the discourse topic must be indicated as the pivot in the answer sentence. Where the discourse topic is the theme in the answer (e.g. 'Kulas hit her'), the sentence must be marked in PV, with the topic having pivot status, as in (90b). A parallel sentence that does not place the topic as the pivot is considered infelicitous as a response (90c).

(90) Amis

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

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

[25] 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.

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

Consultation with speakers confirms that A's unacceptability is due to the mismatch between the pivot designation and the discourse topic. Where the discourse topic is the agent in the answer (e.g. 'She is cooking pork' (91)), the response sentence must be framed in AV to sound natural, with the agent topic marked as the pivot (91b). Question-answer sequences from Seediq, Puyuma, and Tagalog demonstrate the same pattern. Due to space limitations, I do not include data here.

(91) Amis

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

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

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

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

(92) Tagalog

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

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

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

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

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

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

5.4.2 Pivot phrases share the same marker with hanging topics

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

(93) Paiwan

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

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

(94) Cebuano

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

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

5.4.3 'Pivot' marks presupposed information in pseudo-clefts

Pseudo-clefts lend further support to the current analysis. In Philippine-type languages, this construction features a sentence-initial predicate, followed by a marker preceding a presupposed clause that has the form of a headless relative (Aldridge 2004; Potsdam 2006 et seq.), as in (95). Across the four target languages, new information (focus) is usually introduced as the predicate, with given information placed in the presupposed clause. Crucially, the marker connecting the predicate and the presupposed clause is consistently in pivot form across Philippine-type languages, as in (96).

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

(96) Pseudo clefts

a. Tagalog

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

b. Puyuma

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

c. Amis

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

d. Seediq

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

This construction can thus be viewed as a topic-comment structure, in which the presupposed clause is the topic, marked by pivot-marking, with the predicate denoting the focus of the construction, as in (97).

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

Elicited question-answer sequences from Tagalog, Puyuma, Amis, and Seediq confirm that the focus (i.e., new information) is consistently placed in the predicate of the cleft, with the given information placed consistently in the presupposed clause and marked by pivot-marking, as in (98)–(101).

(98) Tagalog

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

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

(99) Puyuma

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

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

(100) Amis

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

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

(101) Seediq

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

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

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

We may thus conclude that the topic approach is an appropriate approximate analysis for pivot-marking, which is independent of the case and indicates a certain information structure status. A better understanding of its nature awaits future investigation.

6 Conclusion and implications

In this paper, I have shown that the apparent ergative characteristics found in four languages with Philippine-type alignment (Tagalog, Puyuma, Amis, Seediq) are best viewed as an illusion created by prominent topic-marking obscuring an accusative case system. As this conclusion suggests, 'Philippine-type alignment' neither manifests syntactic ergativity (Payne 1982; Mithun 1994; Aldridge 2004 et seq.; a.o.) nor instantiates a typologically unique type of case alignment (Himmelmann 2002, 2004; Foley 2008; Riesberg 2014, a.o.). The fact that the four target languages belong to distinct higher-order branches of Austronesian and exhibit highly similar case patterns with other Philippine-type languages suggests that the current claim may extend beyond the four languages.

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

This conclusion also indicates that syntactic ergativity is not the only possible trigger of a highly constrained Ā-extraction asymmetry. A key implication here is therefore that discourse configurational languages may exhibit superficial traits of ergativity if their topic-marking is imprecisely treated as part of their case system. The illusory ergativity found in Austronesian thus reinforces the importance of approaching conventional glosses with caution.

A remaining question from this conclusion is the nature of the highly restricted 'topic-only' constraint imposed on relativization. Recent work on a typologically similar language offers insights on that constraint. Dinka (Nilotic) has been shown to possess a highly similar voice system (van Urk 2015), where the grammatical role of the topic in a given clause is also indexed by verbal morphology. A similar 'pivot-only' constraint in Ā-extraction is also attested in Dinka. In instances of 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). Along the lines of this analysis, its 'pivot-only' constraint is proposed to be driven by a flat Ā-probe, which can be satisfied through Agree with a phrase bearing either a [TOP] or [REL]-feature. Accordingly, 'pivot-only' is essentially not an extraction restriction in Dinka, but the outcome of relativization and topicalization triggering the same set of verbal morphology. See also similar proposals in Miyagawa (2010) and Baier (2018). In light of this line of analyses, a plausible account for 'pivot-only' in Philippine-type languages is therefore that topicalization and relativization are also driven by the same Ā-probe. See also Pearson (2001, 2005) for a similar account for the 'pivot-only' constraint under a non-ergative view of Philippine-type languages.

Appendix I

Mapping between voice and case in basic constructions

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

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

Appendix II

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

(102) 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.CM_2 king / DEF.CM_2 king / PN.CM_2 Maria /
sa 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 /
<AV>examine PN.PIVOT Maria { INDF.CM_2 cat / DEF.CM_2 cat / PN.CM_2 Juan /
sa akin }.
DEF.CM_2 1SG.CM_2 }
'Maria examined { a cat / the cat / Juan / me }.

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

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

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

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

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

a. Nag-pa-habol si Aya { **sa** aso **/ kay** **Maria** } ng pusa.
AV.PRF-CAU-chase PN.PIVOT Aya { **DEF.CM$_2$ dog / PN.CM$_2$ Maria** } INDF.CM$_2$ cat
'Aya made { the dog / *Maria* } chase a cat.'

b. P<in>a-habol ni Aya { **ang aso / si Maria** } ng pusa.
<PV.PRF> PN.CM$_1$ Aya { **PIVOT dog / PN.PIVOT Maria** INDF.CM$_2$ cat
'Aya made { the dog / Maria } chase a cat.'

See Latrouite (2011, 2018) for a discussion of how *sa* and *kay* function as differential object marking in three-place constructions. All three works cited above as well as the data collected from primary fieldwork suggest that *sa* and *kay* can mark core arguments/objects. I therefore label *sa* and *kay* as 'CM$_2$' where they mark the object of a bivalent verb.

References

Abbott, Miriam. 1991. Macushi. In D. Derbyshire and G. Pullum (eds.), *Handbook of Amazonian Languages Vol. 2*, 23–160. Berlin/New York: Mouton de Gruyter.

Agbayani, Brian and Chandra Shekar. 2007. Restructuring and clausal architecture. In S. Karimi et al. (eds.), *Phrasal and Clausal Architecture: Syntactic Derivation and Interpretation: in Honor of Joseph E. Emonds*, 8–24.

Aissen, Judith and David Perlmutter. 1976. Clause reduction in Spanish. In H. Thompson et al (eds.), *Proceedings of the Second Annual Meeting of the Berkeley Linguistics* (BLS2), 1–30.

Aissen, Judith and David Perlmutter. 1983. Clause reduction in Spanish. In D. Perlmutter (eds.), *Studies in Relational Grammar*, 360–403. University of Chicago Press.

Aldridge, Edith. 2004. Ergativity and Word Order in Austronesian Languages. Ph.D. dissertation, Cornell University.

Aldridge, Edith. 2008. Generative approaches to ergativity. *Language and Linguistics Compass: Syntax and Morphology* 2(5):966–995.

Aldridge, Edith. 2011. Antipassive in Austronesian alignment change. In Dianne Jonas, John Whitman, and Andrew Garrett (eds.), *Grammatical Change: Origins, Nature, Outcomes*, 332–346. Oxford University Press.

Aldridge, Edith. 2012. Antipassive and ergativity in Tagalog. *Lingua* 122(3): 192–203.

Aldridge, Edith. 2016. Ergativity from subjunctive in Austronesian languages. *Language and Linguistics* 17(1):27–62.

Aldridge, Edith. 2017. Phi-Feature Competition: A unified approach to the Austronesian extraction restriction. In J. Kantarovich, T. Truong and O. Xherija (eds.), *Proceedings of the 52nd Meeting of the Chicago Linguistic Society (CLS 52)*.

Aldridge, Edith. 2021. Syntactic conditions on accusative to ergative alignment change in Austronesian languages. *Journal of Historical Linguistics* 11(2): 214–247.

Alexiadou, Artemis, Elena Anagnostopoulou, and Florian Schafer. 2006. The properties of anticausatives crosslinguistically. In Mara Frascarelli (ed.), *Phases of Interpretation*, 175–199. Berlin: Mouton.

Andrews, Avery. 1985. The major functions of the noun phrase. In T. Shopen (ed.), *Language typology and syntactic description*, vol I: *Clause structure*, 62–154. Cambridge University Press.

Antworth, Evan. 1979. *Grammatical sketch of Botolan Sambal*. Manila: Linguistic Society of the Philippines. ă

Aravind, Athulya. 2018. Licensing long-distance wh-in-situ in Malayalam some padding here. *Natural Language and Linguistic Theory* 36:1–43.ă

Baier, Nicholas. 2018. Anti-Agreement. Ph.D. dissertation: UC Berkeley.

Blake, Frank. 1925. *A grammar of the Tagalog language: The chief native idiom of the Philippine Islands* Vol 1. New Haven: The American Oriental Society.

Blust, Robert. 1999. Subgrouping, circularity and extinction: some issues in Austronesian comparative linguistics. In E. Zeitoun and P. Li (eds.), *Selected Papers from the Eighth International Conference on Austronesian Linguistics*, 31–94. Taipei: Institute of Linguistics, Academia Sinica.

Blust, Robert. 2015. The case markers of Proto-Austronesian. *Oceanic Linguistics* 54(2):436–91.

Blust, Robert and Victoria Chen. 2017. The pitfalls of negative evidence: 'Ergative Austronesian', 'Nuclear Austronesian' and their progeny. *Language and Linguistics* 18(4):577–621.

Bobaljik, Jonathan. 2008. Where's phi? Agreement as a post-syntactic operation. In D. Harbour et al. (eds.), *Phi Theory: phi-features across interfaces and modules*, 295–328. Oxford: Oxford University Press.

Bondoc, Ivan. 2020. Revisiting relativization asymmetries in Philippine-type voice languages: A preliminary study. *The Archive: A Journal Dedicated to the Study of Philippine Languages and Dialects* 1(1-2): 1–34.

Bowen, Donald. 1965. *Beginning Tagalog: A course for speakers of English*. University of California Press.

Bruening, Benjamin. 2014. Precede-and-command revisited. *Language* 90:342–388.

Burzio, Luigi. 1986. *Italian syntax: A Government-Binding approach*. Dordrecht: Reidel.

Carrier-Duncan, Jill. 1985. Linking of Thematic Roles in Derivational Word Formation. *Linguistic Inquiry* 16(1):1–34.

Cauquelin, Josianne. 2015. *Nanwang Puyuma-English dictionary*. Language and Linguistics Monograph Series 56. Taipei: Institute of Linguistics, Academia Sinica.

Chang, Anna Hsiou-chuan. 2006. A reference grammar of Paiwan. PhD dissertation, Australian National University.

Chang, Henry Yung-Li. 1997. Voice, case, and agreement in Seediq and Kavalan. Ph.D. dissertation: National Tsing Hua University.

Chang, Henry Yung-li. 2000. *A reference grammar of Kavalan* [in Chinese]. Taipei: Yuanliu.

Chang, Henry Yung-li. 2011. Triadic Encoding in Tsou. *Language and Linguistics* 12.4:799–843.

Chang, Henry Yung-li. 2017. The AV-only restriction and locality in Formosan languages. *Tsing Hua Journal of Chinese Studies* 47(2):231–254.

Chen, Ting-chun. 2010. Restructuring in Mayrinax Atayal. BA Honors thesis: McGill University.

Chen, Ting-chun. 2020. Raising-to-Object in Amis. In I. Paul (ed.), *Proceedings of the 26th Meeting of the Austronesian Formal Linguistic Association*, 36–53.

Chen, Victoria. 2017. A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping. Ph.D. dissertation, University of Hawai'i at Mānoa.

Chen, Victoria. 2021. Tagalog voice as four bundles of Agree relations: Insights from binding. In *Proceedings of the 38th West Coast Conference on Formal Linguistics* (WCCFL 38), 94–104. Somerville, MA: Cascadilla Proceedings Project.

Chen, Victoria. 2022. When Philippine-type voice meets Indo-European-type voice: insights from Puyuma. *Journal of East Asian Linguistics* 31: 517–550.

Chen, Victoria and Shin Fukuda. 2016b. Raising to object out of CP as embedded left dislocations: Evidence from three Formosan languages. *Proceedings of the 33rd West Coast Conference on Formal Linguistics*, 88–98. Somerville, MA: Cascadilla Proceedings Project.

Chen, Victoria and Bradley McDonnell. 2019. Western Austronesian voice. *Annual Review of Linguistics* (5), 173–195.

Chen, Victoria and Shin Fukuda. 2021. One language, two voice systems: Insights from Puyuma. In *Proceedings of the 38th West Coast Conference on Formal Linguistics* (WCCFL 38), 105–115. Somerville, MA: Cascadilla Proceedings Project.

Chen, Victoria and Shin Fukuda. 2017. Re-labeling 'Ergative': Evidence from Formosan. *Proceedings of the 23rd Austronesian Formal Linguistic Association* (AFLA 23), 50–65. Canberra: Asia-Pacific Linguistics.

Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris Publications.

Chomsky, Noam. 1986. *Barriers*. Cambridge, MA: MIT Press.

Chomsky, Noam. 2008. On phases. In R. Freidin et al. (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133–66. Cambridge, MA: MIT Press.

Chung, Sandra. 1994. Wh-agreement and"referentiality" in Chamorro. *Linguistic Inquiry* 25(1):1–44.

Chung, Sandra. 1998. *The design of agreement: Evidence from Chamorro.* Chicago: University of Chicago Press.

Chung, Gyeonghee No. 1994. Case and its acquisition in Korean. Ph.D. dissertation, University of Texas at Austin.

Cinque, Guglielmo. 2004. *Restructuring and functional structure.* Structures and beyond: The cartography of syntactic structures 3: 132–191.

Cole, Peter. 1976, A Causative Construction in Modern Hebrew: Theoretical Implications. In P. Cole (ed.), *Studies in Modern Hebrew Syntax and Semantics*, 99–126, North Holland Publishing Co., Amsterdam.

Collins, James. 2018. Definiteness determined by syntax. A case study in Tagalog. *Natural Language and Linguistic Theory* 37, 1367–1420.

Cooreman, Ann. 1994. A functional typology of antipassives. In B. Fox and P. Hopperoice (eds.), *Form and Function*, 49–88. Amsterdam: John Benjamins.

Cooreman, Ann, Barbara Fox and Talmy Givon. 1984. The discourse definition of ergativity. *Studies in Language* 8:1–34.

Davies, William. 2005. Madurese prolepsis and its implications for a typology of raising. *Language* 81:645–65.

De Guzman, Videa. 1988. Ergative analysis for Philippine languages: an analysis. In R. McGinn (ed.), *Studies in Austronesian linguistics*, 323–345. Athens: Ohio University Press.

DeLancey, Scott. 1984. Notes on agentivity and causation. *Studies in Language* 8: 181–213.

De Wolf, Charles. 1988. Voice in Austronesian languages of Philippine type: passive, ergative, or neither? In M. Shibatani (ed.), *Passive and Voice*, 143–193. Amsterdam and Philadelphia: John Benjamins.

Dixon, Robert. 1979. Ergativity. *Language* 55:59–138.

Dixon, Robert. 1994. *Ergativity*. Cambridge: Cambridge University Press.

England, Nora. 1988. Mam Voice. In M. Shibatani (ed.), *Passive and Voice*, 525–545. Amsterdam: John Benjamins.

Erlewine, Michael. To appear. Subject marking on non-subjects in Squliq Atayal. *Proceedings of the 20th Austronesian Formal Linguistics Association* (AFLA 20).

Erlewine, Michael, Theodore Levin, and Coppe van Urk. 2017. Ergativity and Austronesian-type voice systems. In J. Coon et al. (eds.), *Oxford Handbook of Ergativity*. Oxford University Press.

Erlewine, Michael, and Cheryl Lim. Bikol clefts and topics and the Austronesian extraction restriction. *Natural Language and Linguistic Theory* 41: 911–960.

Escamilla, Ramón. 2012. The Syntactic Causative Construction in Hupa (California Athabaskan). *Rice Working Papers in Linguistics 3*.

Estioca, Sharon. 2020. A Grammar of Western Subanon. PhD dissertation, University of Hawai'i.

Foley, William. 2005. Semantic parameters and the unaccusative split in the Austronesian language family. *Studies in Language* 29(2):385–430.

Foley, William. 2008. The place of Philippine languages in a typology of voice systems. In P. Austin and S. Musgrave (eds.), *Voice and grammatical relations in Austronesian languages*, 22–44. Stanford: CSLI Publications.

Foley, William and Robert Van Valin. 1984. *Functional syntax and universal grammar*. Cambridge: Cambridge University Press.

Folli, Raffaella and Heidi Harley. 2007. Causation, obligation, and argument structure: on the nature of little v. *Linguistic Inquiry* 38(2):197–238.

Frascarelli, Mara and Roland Hinterhölzl. 2007. Types of topics in German and Italian. In W. Susanne and K. Schwabe (eds.), *On Information Structure, Meaning and Form*. Amsterdam & Philadelphia, John Benjamins.

Gerdts, Donna. 1988. Antipassives and causatives in Ilokano: evidence for an ergative analysis. In R. McGinn (ed.), *Studies in Austronesian Linguistics*, 295–321. Athens: Ohio University Center for International Studies.

Goudswaard, Nelleke. 2005. *The Begak (Ida'an) language of Sabah*. Utrecht: LOT.

Guilfoyle, Eithne, Henrietta Hung, and Lisa Travis. 1992. Spec of IP and Spec of VP: Two subjects in Austronesian languages. *Natural Language and Linguistic Theory* 10:375–414.

Guirardello, Raquel. 1999. Trumai. In R. Dixon and A. Aikhenvold (eds), *The Amazonian languages*, 351–353. Cambridge: Cambridge University Press.

Harley, Heidi. 2008. On the causative construction. In S. Miyagawa and M. Saito (eds.), *Handbook of Japanese Linguistics*, 20–53, Oxford: OUP.

Harley, Heidi. 2013. External arguments and the mirror principle: on the distinctness of Voice and v. *Lingua* 125:34–57.

Heaton, Raina. 2017. A typology of antipassives, with special reference to Mayan. Ph.D. dissertation, University of Hawai'i at Mānoa.

Higgins, Roger. 1981. Proleptic objects and verbs of perception in Zacapoaxtla Nahuat. *Texas Linguistic Forum* 18, 69–88.

Himmelmann, Nikolaus. 2005a. The Austronesian languages of Asia and Madagascar: Typological characteristics. In A. Adelaar and N. Himmelmann (eds.), *The Austronesian languages of Asia and Madagascar*, 110–81. Routledge: Language Family Series, vol. 7. New York: Routledge.

Himmelmann, Nikolaus. 2005b. Tagalog. In K. Adelaar and N. Himmelmann (eds.), *The Austronesian Languages of Asia and Madagascar*, 350–376. London: Routledge..

Holmer, Arthur. 1999. Structural implications of the function of Instrument Focus in Seediq. In P. Li and E. Zeitoun (eds.), *Selected papers from ICAL-8*, 423–454. Taipei: Institute of Linguistics, Academia Sinica.

Hsieh, Henrison. 2020. Beyond Nominative: a broader view of Ā-dependencies in Tagalog. PhD dissertation: McGill University.

Hsieh, Henrison. 2023. Locality in Exceptional Tagalog A-extraction. *Linguistic Inquiry*.

Huang, Shuan-fan. 2005. Split O in Formosan languages – a localist interpretation. *Language and Linguistics* 6:783–806.

Jian, Shi-lang. 2018. *A grammar of Thao*. New Taipei: Council of Indigenous Peoples.

Katagiri, Masumi. 2006. Topichood of the Philippine topic: Revisited from a cross-linguistic perspective. Paper presented at the 10th ICAL. January 1720.

Kaufman, Daniel. 2009. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35(1):149.

Kallulli, Dalina. 2005. Unaccusatives with overt Causers and Experiencers: A Unified Account. In D. Hole, and A. Meinunger (eds.), *Datives and Similar Cases*. Amsterdam: John Benjamins.

Keenan, Edward. 1976. Remarkable subjects in Malagasy. In C. Li (ed.), *Subject and topic*, 247–301. New York: Academic Press.

Kroeger, Paul. 1991. Phrase structure and grammatical relations in Tagalog. PhD dissertation: Standford University.

Kroeger, Paul. 2014. An affectedness constraint in Kimaragang restructuring. In M. Butt and T. Holloway King (eds.), *Proceedings of the LFG14 Conference*, 283–303. Stanford, CA: CSLI Publications.

Kuno, Susumu. 1973. The structure of the Japanese language. The MIT Press.

Kuo, Cheng-chuen. 2015. Argument alternation and argument structure in symmetrical voice languages: a case study of transfer verbs in Amis, Puyuma, and Seediq. PhD dissertation, University of Hāwai'i at Manoa.

Kurniawan, Eri. 2012. Does Sundanese have prolepsis and/or raising-to-object construc- tions? In L. E. Clemens et al. (eds.),*Proceedings of the 18th Annual Meeting of the Austronesian Formal Linguistics Society*, 16–30. Online publication hosted by the University of Western Ontario.

Kuroda, Yuki. 1965. Generative Grammatical Studies in the Japanese Language. PhD Dissertation: MIT.

Lasnik, Howard and Tim Stowell. 1991 Weakest crossover. *Linguistic Inquiry* 22(4):687–720.

Latrouite, Anja. 2011. Voice and Case in Tagalog: The coding of prominence and orientation. PhD dissertation: Heinrich-Heine-Universität Düsseldorf.

Latrouite, Anja. 2018. Differential object marking in Tagalog. In L. Clemens et al. (eds.), *Proceedings of the Eighteenth Meeting of the Austronesian Formal Linguistics Association* (AFLA 18), 94–109.

Law, Paul. 2011. Raising in Tagalog. In M. Washburn et al. (eds.), *Proceedings of the 28th West Coast Conference on Formal Linguistics*, 142–151. Somerville, MA: Cascadilla Proceedings Project.

Lee, J.-H. 1992. *Hyentaykwuke mwunpeplon* [Modern Korean grammar]. Seoul: Korean Textbooks Company.

Legate, Julie. 2014. *Voice and little v: lessons from Acehnese*. Cambridge: MIT Press.

Levin, Beth and Malka Rappaport Hovav. 2005. *Argument realization*. New York: Cambridge University Press.

Li, Charles and Sandra Thompson. 1976. Subject and topic: a new typology of language. In C. Li (ed.), *Subject and Topic*, 457–461. Austin: University of Texas Press.

Liao, Hsiu-chuan. 2004. Transitivity and Ergativity in Formosan and Philippine Languages. PhD dissertation, University of Hawai'i at Mānoa.

Lin, Gu-jing. 2010. Argument Structure of Tsou: Simplex and Complex Predicates. PhD dissertation, Rice University.

Liu, Dorinda Tsai-hsiu. 2011. Complementation in Three Formosan Languages – Amis, Mayrinax Atayal and Tsou. PhD dissertation: University of Hawai'i at Mānoa.

Maclachlan, Anna. 1996. Aspects of Ergativity in Tagalog. PhD dissertation, McGill University.

Maclachlan, Anna and Masanori Nakamura. 1993. An economy account of wh-extraction in Tagalog. In *Proceedings of the 12th Meeting of the West Coast Conference of Linguistics* (WCCFL 12). Stanford: CSLI.

Maclachlan, Anna and Masanori Nakamura. 1997. Case-checking and Specificity in Tagalog. *The Linguistic Review* 14: 307–33.

Matasovic, Ranko. 2010. *A short grammar of East Circassian (Kabardian)*. Zagrebd.

McKaughan, Howard. 1973. Subject versus topic. In A. Gonzalez (ed.), *Parangal kay Cecilio Lopez: Essays in honor of Cecilio Lopez on his seventy-fifth birthday. Philippine Journal of Linguistics Special Issue*. Linguistic Society of the Philippines.

Megerdoomian, Karine. 2005. Transitivity alternation verbs and causative constructions in Eastern Armenian. *Proceedings of Annual Meeting of Armenian Linguistics* 24, 13–33.

Mintz, Malcolm. 1971. *Bikol grammar notes.* Honolulu: University of Hawaii Press.

Mithun, Marianne. 1994. The implications of ergativity for a Philippine voice system. In B. Fox and P. Hopper (eds.), *Voice: Form and Function*, 247–277. Amsterdam: John Benjamins.

Miyagawa, Shigeru. 2010. *Why Agree? Why Move?* Cambridge, MA: MIT Press.

Naylor, Paz. 1995. Subject, topic and Tagalog syntax. In D. Bennett et al. (eds.), *Subject, voice and ergativity: Selected essays*, 161–201. London: School of Oriental and African Studies, University of London.

O'Brien, Colleen. 2016. Are Philippine Languages Ergative? Evidence from Western Subanon. *Working Papers in Linguistics* 47(2), University of Hawai'i at Mānoa.

Online Dictionary of Formosan languages (ODFL, n.d.). http://e-dictionary.apc.gov.tw

Owens, Jonathan. 1985. *A Grammar of Harar Oromo (Northeastern Ethiopia)*. Hamburg: Buske.

Paul, Ileana and Lucie Rabaovololona 1998. Raising to object in Malagasy. *UCLA Occasional Papers in Linguistics* 20, 50–64.

Paul, Ileana and Lisa Travis. 2006. Ergativity in Austronesian languages: What it can do, what it cant do, but not why. In A. Johns, D. Massam, and J. Ndayiragije (eds.), *Ergativity: emerging issues*, 315–336. Springer.

Paul, Ileana, Key Cortes, and Lareina Milambiling. 2015. Definiteness without D: The case of *ang* and *ng* in Tagalog. *Canadian Journal of Linguistics* 60(3): 361–390.

Paul, Ileana and Diane Massam. 2021. Licensing null arguments in recipes across languages. *Journal of Linguistics* 57(4): 815–839.

Payne, Thomas. 1982. Role and reference related subject properties and ergativity in Yup'ik Eskimo and Tagalog. *Studies in Language* 6:75–106.

Pearson, Matthew. 2001. The clause structure of Malagasy: A minimalist approach. PhD dissertation, UCLA.

Pearson, Matthew. 2005. The Malagasy subject/topic as an Ā-element. *Natural Language and Linguistic Theory 23*:381–457.

Perlmutter, David. 1978. Impersonal Passives and the Unaccusative Hypothesis. In Farrell, A. and J. Jaeger (eds.), *Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society* (BLS 4), 157–189.

Pizarro-guevara, Jed. 2020. When human universal meets language specific. PhD dissertation, UCSC.

Polinsky, Maria. 2017. Antipassive. In J. Coon, D. Massam, and L. Travis (eds.), *The Oxford Handbook of Ergativity*. Oxford: Oxford University Press.

Potsdam, Eric and Jeffrey Runner. 2001. Richard returns: Copy Raising and its implications. In M. Andronis, C. Ball, H. Elston, and S. Neuvel (eds.), *CLS 37: The Main Session* vol. 1:453–68. Chicago, IL: Chicago Linguistic Society.

Postal, Paul. 1993. Remarks on weak crossover effects. *Linguistic Inquiry* 24(3), 539–556.

Pylkkänen, Liina. 2002. Introducing arguments. PhD dissertation, MIT.

Rackowski, Andrea. 2002. The Structure of Tagalog: Specificity, Voice, and the Distribution of Arguments. PhD dissertation, MIT.

Rackowski, Andrea and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36(4):565–599.

Ramos, Teresita. 1974. *The case system of Tagalog verbs*. Pacific Linguistics B27. Canberra: The Australian National University.

Ramos, Teresita and Maria Bautista. 1986. *Handbook of Tagalog Verbs: Inflections, Modes, and Aspects*. Honolulu: University of Hāwai‘i Press.

Riesberg, Sonja. 2014. *Symmetrical voice and linking in western Austronesian languages*. Berlin: De Gruyter Mouton.

Richards, Norvin. 2000. Another look at Tagalog subjects. In I. Paul, V. Phillips, and L. Travis (eds.), *Formal issues in Austronesian linguistics*, 105–116. Dordrecht: Kluwer Academic Publishers.

Richards, Marc. 2007. On feature inheritance: An argument from the Phase Impenetrability Condition. *Linguistic inquiry*38(3):563–572.

Rizzi, Luigi. 1978. A Restructuring Rule in Italian Syntax. In S. Keyser (ed.), *Recent Transformational Studies in European Languages*, 113–158. Cambridge: MIT Press.

Rizzi, Luigi. 1982. A restructuring rule. In Rizzi, L. (eds.), *Issues in Italian syntax*, 1–76. Dordrecht: Foris.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In L. Haegeman (ed.), *Elements of grammar. Handbook in Generative Syntax*, 281–337. Dordrecht: Kluwer.

Ross, Malcolm. 2002. The history and transitivity of Western Austronesian voice and voice-marking. In F. Wouk and M. Ross (eds.), *The history and typology of Western Austronesian voice systems*, 17–62. Canberra: Pacific Linguistics.

Ross, Malcolm. 2009. Proto Austronesian verbal morphology: a reappraisal. In A. Adelaar and A. Pawley (eds.), *Austronesian historical linguistics and culture history: A Festschrift for Robert Blust*, 295–326. Canberra: Pacific Linguistics.

Rau, Victoria and Maa-neu Dong. 2006. *Yami Texts with reference grammar and dictionary.* Institute of Linguistics, Academia Sinica.

Sabbagh, Joey. 2016. Specificity and objecthood in Tagalog. *Journal of Linguistics* 52(3), 639–688.

Salzmann, Martin. 2017. Prolepsis. *The Wiley Blackwell Companion to Syntax*, 1–42.

Schachter, Paul. 1976. The subject in Philippine languages: Topic, actor, actor-topic, or none of the above? In C. Li (eds.), *Subject and topic*, 491–518.

Schachter, Paul. 1977. Reference-related and role-related properties of subjects. In P. Cole and J Saddock (eds.), *Grammatical Relations*, 279–306. New York: Academic Press.

Schachter, Paul and Fe Otanes. 1972. *Tagalog reference grammar*. Berkeley: University of California Press.

Shibatani, Masayoshi. 1976. On Japanese Causative: Review of Shibatani's Notion of Causative. *Syntax and semantics* 6, 1–42. New York: Academic Press.

Shibatani, Masayoshi. 1988. Voice in Philippine languages. In M. Shibatani (ed.), *Passive and Voice*, 85–142. Amsterdam: John Benjamins.

Sigurdsson, Halldor. 2011. Conditions on Argument drop. *Linguistic Inquiry* 42:267–304.

Silva-Corvalán, Carmen. 1978. The Ilokano Causative in Universal Grammar. In J. Jaeger et al. (eds.), *Proceedings of the 4th Annual Meeting of the Berkeley Linguistics Society (BLS 4)*, 223–238.

Starosta, Stanley, Andrew Pawley, and Lawrence Reid. 1982. The evolution of focus in Austronesian. In A. Halim et al. (eds.), *Papers from the Third International Conference on Austronesian Linguistics*, Vol. 2, 145–70. Canberra: Pacific Linguistics. Reprinted in E. Zeitoun, (ed.) 2009, *Formosan Linguistics: Stanley Starosta's Contributions*, 297–328.

Sung, Li-May. 2018. *A grammar of Seediq*. New Taipei: Council of Indigenous Peoples.

Wurmbrand, Susi, Iva Kovac, and Magdalena Lohninger. 2021. From Prolepsis to Hyperraising. *Abralin talk*.

Tanankingsing, Michael. 2009. A Functional reference Grammar on Cebuano. PhD dissertation, National Taiwan University.

Teng, Stacy Fang-ching. 2008. *A grammar of Puyuma, an Austronesian language of Taiwan.* Canberra: Australian National University.

Teng, Stacy Fang-ching. 2016. Aspectual split ergative pattern in Puyuma: synchronic and diachronic. *Proceedings of the 11th International Symposium on Taiwanese languages and Teaching*, 353–375.

Travis, Lisa. 2000. The 1-syntax, s-syntax boundary: evidence from Austronesian. In I. Paul at al. (eds.), *Formal Issues in Austronesian Linguistics*, 167–194. Dordrecht: Kluwer Academic Publishers.

Van den Berg, René. *A grammar of the Muna language*. Vol. 139. Dordrecht: Foris Publications.

van Koppen, Marjo, Lucas Seuren, and Mark de Vries. 2016. The proleptic accusative as an exceptional Exceptional Case Marking construction. ms.

van Urk, Coppe. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. PhD dissertation, MIT.

Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37:111–130.

Wu, Chun-ming. 2012. The Syntax of Linking Constructions in Mayrinax Atayal and Sinvaudjan Paiwan. PhD dissertation, National Tsing-hua University.

Wu, Hsiao-hung. 2011. Restructuring and Clause Structure in Isbukun Bunun. *Oceanic Linguistics* 52(1):69–85.

Wu, Jing-lan. 2006. Verb classification, case marking, and grammatical relations in Amis. PhD dissertation, State University of New York at Buffalo.

Wurmbrand, Susi. 2001. *Infinitives: Restructuring and Clause Structure*. New York: Mouton de Gruyter.

Wurmbrand, Susi. 2014. Restructuring across the world. In L. Veselovská and M. Janebová (eds.): Complex Visibles Out There. *Proceedings of the Olomouc Linguistics Colloquium 2014: Language Use and Linguistic Structure*, 275–94. Olomouc: Palacký University.

Yamada, Yukihiro. 2014. *A grammar of the Itbayat language of the Philippines.* Himeji, Japan.

Yeh, Mei-li. 2000. *A reference grammar of Saisiyat* [in Chinese]. Taipei: Yuanliu.

Zeitoun, Elizabeth. 2000. *A Reference Grammar of Bunun* [in Chinese]. Taipei: Yuanliu.

Zeitoun, Elizabeth. 2007. *A Grammar of Mantauran (Rukai)*. Taipei: Institute of Linguistics, Academia Sinica.