

# What agrees, why and how? Austronesian-type voice and its variation beyond Austronesian\*

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*This talk . . .*

- is about Austronesian-type voice (and the various debates associated with it)
- reconsiders the syntactic typology of  $\bar{A}$ -agreement, in particular:
  - an understudied type of verbal morphology known as ‘symmetrical voice’
- provides new evidence for the accusative view of Philippine-type languages
- reconsider the commonly assumed dichotomy of topic- vs. subject-prominence

## 1 A- vs. $\bar{A}$ -agreement: overview

### 1.1 Two types of $\phi$ -agreement

- As is well-known, the Agree relation between the  $\phi$ -probe and its goal is commonly indicated by  $\phi$ -feature agreement.
  - **Subject agreement.** Agree with the  $\phi$ -probe on T is commonly indicated by  $\phi$ -feature agreement with the goal. This morphology is known as *subject agreement* (Chomsky 2001; Miyagawa 2009):
    - (1) a. Arabic  
Al-ʔawlaadu qadim-**uu**/\*-**a**.  
the-boys-**3MP** came-**3MP**/\***3MS**  
‘The boys came.’ (Bahloul & Harbert 1993:15)
    - b. English  
John seem-**s**/\* $\emptyset$  to have drunk too much coffee.

- **Object agreement.** Agree with the  $\phi$ -probe on Voice/*v* may also trigger overt  $\phi$ -feature agreement. This is known as *object agreement* (Chomsky 2000, 2001, Baker 2008, 2012).

- Nahuatl (Uto-Aztecan), for example, employs  $\phi$ -feature agreement with both subject and direct object (2):

(2) Nahuatl

**Ni-k**-te:moa šo:čitl.

**1S.S-3S.O**-seek flower

‘I seek a flower.’ (Stiebels 1999:790)

- ⊗ But how are  $\bar{A}$ -agree relations (i.e. Agree with an  $\bar{A}$ -probe, such as [uTOP], [uREL], or [uFOC]) realized in narrow syntax?

- Recent work has revealed two distinct strategies:  $\phi$ -feature agreement (§1.1) and what is known as ‘symmetrical voice’ (§1.2).

### 1.2 Two types of $\bar{A}$ -agreement morphology

#### 1.2.1 Type I morphology: $\phi$ -feature agreement

- Much recent work has reported that  $\phi$ -feature agreement is not tied specifically to Agree with [u $\phi$ ]. Agree with an  $\bar{A}$ -probe may also trigger  $\phi$ -feature agreement (van Urk 2015; Ostrove 2018; D’Alessandro 2020; a.o. ). For example:

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(3) San Martin Peras Mixtec:  $\phi$ -feature agreement indexing topic

- a. **Rà**<sub>i</sub>-xá'antsya rà **Juan**<sub>i</sub> chikí.  
**he**-cut.PRES he **Juan** tuna  
 'Juan is cutting tunas.' (subject topic)
- b. **Ri**<sub>i</sub>-xá'antsya rà Juan **chikí**.  
**it**.AML-cut.PRES he Juan **tuna**  
 'Juan is cutting *tunas*.' (Ostrove 2018:vii, viii) (object topic)

(4) Gujarati:  $\phi$ -feature agreement indexing focus

- a. **Shahrukh** bakri nho-**to** laav-yo.  
**Shahrukh.M.SG-NOM** goat.F.SG NEG-**M.SG** bring-PFV.M.SG  
 'S. did not bring a goat, but someone else did.' (subject focus)
- b. Shahrukh **bakri**-ne nho-**ti** laav-yo.  
 Shahrukh.M.SG-NOM **goat.F.SG-ACC** NEG-**F.SG** bring-PFV.M.SG  
 'S. did not bring *the goat* but something else.' (object focus)  
 (Joshi 2022:1)

\*Cases of  $\phi$ -feature agreement triggered by *wh*- and REL-phrases also attested (e.g. Henderson 2006; van Urk 2015).

→ In both languages,  $\phi$ -feature agreement targets an  $\bar{A}$ -element, showing a key feature of *discourse configurationality* (É. Kiss 1995; see also Li & Thompspon 1976, Miyagawa 2010, 2017, and D'Alessandro 2020).

(5) *Discourse configurational languages*

In a topic-prominent language, the topic is, in a way, an alternative to the subject [in a subject-prominent language]. (É. Kiss. 1995:4)

This definition reflects a common assumption in the literature, that languages are either subject-prominent or topic-prominent in agreement morphology (6) (e.g. Li & Thompspon 1976; É. Kiss 1995; Miyagawa 2010, 2017; D'Alessandro 2020; a.o.):

## (6) Two-way typology assumed in previous work

	Subject-prominent	Topic-prominent
Agree with [u $\phi$ ] realized in narrow syntax	X	7
Agree with [uTOP] realized in narrow syntax	7	X

- Implicit assumption behind (7)  $\phi$ -feature agreement in a given language is either A-oriented or  $\bar{A}$ -oriented. This raises the underexplored question (7):

(7) Are there languages where the Agree relations with [u $\phi$ ] and [u $\bar{A}$ ] are both indexed in narrow syntax?

- ⊗ Such a design is not only logically possible but also attested in natural languages – although the type of agreement that manifests this design has received scant attention in the literature.

- The group of languages that I argue manifests this pattern is western Austronesian languages known as the Philippine-type:

- Consider the example below from Seediq (ISO 639-3 *trv*):

## (8) Seediq (Austronesian)

Maha-**ku<sub>k</sub>-na<sub>j</sub>** bbe-**un** [na pawan]<sub>j</sub> [ka yaku]<sub>k</sub>.  
 FUT-**I SG.TOP-3 SG.SUBJ** hit-**PV** [NOM Pawan] [PIVOT 1SG]

'Pawan will hit *me*.' (Chang 1997:99) (patient voice)

→ The affix (-*un*) on the verb – known in literature as the Patient Voice – indicates that the topic of the sentence is the direct object ('me').

→ Both the grammatical subject ('Pawan') and the object topic ('me') are cross-referenced by a person/number-indexing morpheme that matches the  $\phi$ -features of the full DP:

- *ku* for the first-person singular topic 'I'
- *na* for the third-person singular subject 'Pawan'

→ Such morphemes are traditionally labeled as pronominal clitics in the literature, although their precise syntactic status has remained underexplored.

- ⊗ I will argue that these morphemes are agreement affixes – namely,  $\phi$ -feature agreement with the topic and the subject.

→ Seediq demonstrates a typologically rare system where Agree with [u $\phi$ ] and [uTOP] are both spelled out as  $\phi$ -feature agreement.

## 1.2.2 Type II morphology: ‘symmetrical voice’ tracking $\bar{A}$ -elements

- There’s yet a second type of morphology that indexes  $\bar{A}$ -agree relations. Descriptively, it inflects for the grammatical relations of certain  $\bar{A}$ -elements (e.g. topic, focus, relativized phrase). In other words, it indexes the A-relation of  $\bar{A}$ -elements.

- ▷ It is known as ‘symmetrical voice’ in the literature (e.g. Himmelmann 2002).
- ▷ Kurmuk and Abaza, for example, both exhibit this type of morphology (Anderson 2015:510; Arkadiev & Caponigro 2020:6,7):

### (9) a. *Kurmuk (Nilotic)*

táarák <sup>4</sup>bóor-**ú** dɛɛl kà ɲìr.  
person skin-PST.**SUBJ.T** goat PREP knife

‘The man skinned a goat with a knife.’ (subject topic)

b. dɛɛl bóor-ú**ɪ** ɲà táarák kà ɲìr.  
goat skin-PST-**OBJ.T** NOM person PREP knife

‘The man skinned *the* goat with a knife.’ (object topic)

c. ɲìr bóor-ú**ɪ** dɛɛl ɲà táarák  
knife skin-PST-**OBL.T** goat NOM person

‘The man skinned a goat with *the* knife.’ (oblique topic)

### (10) *Abaza (Caucasian)*

a. [ awaʔa **j**-ʃa-ta-χa-k<sup>w</sup>a-z ] abaza-k<sup>w</sup>a  
[ there **REL.SUBJ**-CSL-LOC-remain-PL-PST.NFIN ] Abaza-PL  
r-aḵ<sup>w</sup>a-p̄  
3PL.IO-COP-NPST-DCL

‘Those who remain there are the Abaza’ (Subject RC (S))

b. [ a-ph<sup>w</sup>əspa ça lə-z-tə-z ] a-č<sup>w</sup>ḵ<sup>w</sup>ən  
[ DEF-girl apple 3SG.F.IO-**REL.NSUBJ**-give-PST.NFIN ] DEF-boy  
‘the boy who gave an apple to the girl’ (Non-subject RC (A))

c. [ a-karbəʒ<sup>ʔ</sup>-k<sup>w</sup>a **Pa**-də-r-baχ-wa-z ]  
[ DEF-brick-PL **REL.LOC**-3PL.ERG-CAUS-dry-IPF-PST.NFIN ]  
a-baḵ  
DEF-shed

‘the shed where bricks are made’

(Locative RC)

#### • Shared traits of symmetrical voice (Type II morphology)

- It’s formally distinct from  $\phi$ -feature agreement employed in the same language (if any) and may co-occur with it.
- The exact types of grammatical relations distinguished by this morphology vary across languages.
- In many languages, more than one type of  $\bar{A}$ -operations (e.g. topicalization, relativization, *wh*-extraction) trigger this morphology.

⊗ I will argue that what is known as ‘Philippine-type voice’ is also an instance of Type II morphology.

- For example, the Patient Voice affix (*-un*) in Seediq indicates that the grammatical relation of the topic is the direct object:

### (11) *Seediq (Austronesian)*

Maha-ku<sub>k</sub>-na<sub>j</sub> bbe-**un** [na pawan]<sub>j</sub> [ka yaku]<sub>k</sub>.  
FUT-1SG.TOP-3SG.SUBJ hit-**PV** [NOM Pawan] [PIVOT 1SG]

‘Pawan will hit *me*.’ (Chang 1997:99) (patient voice)

⊗ A closer look at Philippine-type voice and its variation would thus enrich our understanding of the syntactic typology of  $\bar{A}$ -agreement, in particular that of Type II morphology (symmetrical voice).

## 1.3 Goal of this talk

### *The key questions*

- 1 What’s the nature of symmetrical voice, which functions to index the A-relation of certain  $\bar{A}$ -elements?
- 2 Are topic-prominence and subject-prominence a dichotomy? If not, how does symmetrical voice vary and evolve?
- 3 What type of case alignment is associated with the presence of symmetrical voice?

### Main claims

- 1 Symmetrical voice is best viewed as the arbitrary spell-out of parallel chains (Chomsky 2005; Kandybowicz 2008, Kandybowicz & Torrence 2016; Aboh & Dyakonova 2009).
- 2 Topic- vs. subject-prominence is not a binary choice; however, the former tends to evolve into the latter over time.
- 3 Symmetrical voice is independent of case alignment. In the case of Philippine-type Austronesian languages, this morphology co-occurs with accusative case alignment (contra previous ergative views).

### Roadmap

- §2 Austronesian voice: facts and debates
- §3 Two probes, one goal: AN-type voice as the spell-out of parallel chain
- §4 Austronesian-type voice and its external variation
- §5 Austronesian-type voice and its demise
- §6 Conclusion and implication

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## 2 Austronesian-type voice: facts and debates

- Many western Austronesian languages display a typologically unusual voice system known as **Austronesian-type voice** or **Philippine-type voice**.
- In these languages, the  $\bar{A}$ -extraction constraint of a given clause is subject to the form of voice morphology:

### (12) Tagalog relativization<sup>1</sup>

- a. **Sino** ang [RC **b<um>ili**/\*-in/\*-an/\*i- ng keyk ]?  
**who** PIVOT [RC **buy<AV>**/\*PV/\*LV/\*CV ID.CM<sub>2</sub> cake ]  
 ‘Who is the one that bought cakes?’ (Actor Voice)
- b. **Ano** ang [RC **bi-bilih-in**/\*<um>/\*-an/\*i- ni AJ ]?  
**what** PIVOT [RC CONT-**buy-PV**/\*AV/\*LV/\*CV PN.CM<sub>1</sub> AJ ]  
 ‘What is the thing that AJ will buy?’ (Patient Voice)

- c. **Nasaan** ang [RC **bi-bilih-an**/\*<um>/\*-in/\*i- ni AJ ng  
**where** PIVOT [RC CONT-**buy-LV**/\*AV/\*PV/\*C PN.CM<sub>1</sub> AJ ID.CM<sub>2</sub>  
 keyk ]?  
 cake ]  
 ‘Where will be the place where AJ bought cakes?’ (Locative Voice)
- d. **Sino** ang [RC **i-bi-bili**/\*<um>/\*-in/\*-an ni AJ ng keyk ]?  
**who** PIV [RC **CV-buy**/\*AV/\*PV/\*LV PN.CM<sub>1</sub> AJ ID.CM<sub>2</sub> cake ]  
 ‘Who is the one that AJ will buy cakes for?’ (Circumstantial Voice)

- In simple transitives like (12):

- Actor Voice (AV) is obligatory for **EA** extraction (12a).
- Patient Voice (PV) is obligatory for **IA** extraction (12b).
- Locative Voice (LV) is obligatory for **locative** extraction (12c).
- Circumstantial Voice (CV) is obligatory for **benefactive** extraction.
- ▷ Extraction of other types of adjuncts (e.g. instrument, purpose) or DPs that are structurally low (e.g. theme in causatives, ditransitives, or controls) also take this affix (12d).

- ▷ The same set of verbal morphology is also obligatory in finite declaratives:

### (13) Tagalog

- a. **B<um>ili** **si** AJ ng keyk mula kay Lia para  
 buy<AV> PN.PIVOT AJ ID.CM<sub>2</sub> cake P<sub>1</sub> PN.CM<sub>2</sub> Lia P<sub>2</sub>  
 kay Joy.  
 PN.CM<sub>2</sub> Joy  
 ‘AJ bought cake from Lia for Joy.’ (AV)
- b. **Bi-bilih-in** ni AJ ang keyk mula kay Li para  
 CONT-buy-PV PN.CM<sub>1</sub> AJ PIVOT cake P<sub>1</sub> PN.CM<sub>2</sub> Li P<sub>2</sub>  
 kay Joy.  
 PN.CM<sub>2</sub> Joy  
 ‘AJ will buy cake from Li for Joy.’ (PV)

<sup>1</sup>CM: case marker; CONT: contemplated aspect; ID: indefinite; P: preposition; PN: personal name

- c. Bi-bilih-an ni AJ ng keyk si Li para  
 CONT-buy-LV PN.CM1 AJ ID.CM1 cake PN.PIVOT Li P2  
 kay Joy.  
 PN.CM2 Joy  
 ‘AJ will buy cake from Li for Joy.’ (LV)
- d. I-bi-bili ni AJ ng keyk mula kay Li  
 CV CONT-buy PN.CM1 AJ ID.CM2 cake P1 PN.CM2 Li  
 si Joy.  
 PN.PIVOT Joy  
 ‘AJ will buy cake from Li for Joy.’ (CV)

▷ Analogous to the mapping seen in relativization (13),

- ▷ In AV, the EA is marked in a special marker labeled as ‘pivot’ (13a).
- ▷ In PV: the IA bears the marker (13b).
- ▷ In LV: the locative bears the marker (13c).
- ▷ In CV: the benefactor bears the marker (13d).

(14) *Philippine-type alignment*

	a. AV	b. PV	c. LV	d. CV
external argument	<b>Pivot</b>	CM <sub>1</sub>	CM <sub>1</sub>	CM <sub>1</sub>
internal argument	CM <sub>2</sub>	<b>Pivot</b>	CM <sub>2</sub>	CM <sub>2</sub>
locative	P <sub>1</sub>	P <sub>1</sub>	<b>Pivot</b>	P <sub>1</sub>
benefactor	P <sub>2</sub>	P <sub>2</sub>	P <sub>2</sub>	<b>Pivot</b>

- (15) a. **Pivot**: the morphological marking on the sole phrase in a clause eligible for  $\bar{A}$ -extraction  
 b. **CM<sub>1</sub>**: the morphological marking on non-pivot external arguments  
 c. **CM<sub>2</sub>**: the morphological marking on non-pivot internal arguments  
 d. **P<sub>1</sub>/P<sub>2</sub>**: prepositions marking different types of adjuncts

(16) *Key traits of Philippine-type voice*

- a. **Articulated verbal morphology**: Four-way affixal morphology alternates based on the choice of the pivot, including options for taking non-core phrases as pivots.

- b. **A syntactically pivotal phrase**: In each finite CP, there must be one and only one phrase designated the pivot. Regardless of its grammatical relation or thematic role, the pivot bears a specific morphological marking and/or occupies a specific linear position.
- c. **Status of nonpivot phrases**: Nonpivot phrases are not syntactically demoted and carry a fixed case-marking.
- d. **Fluid extraction restriction**:  $\bar{A}$ -extraction (relativization, including pseudo-clefting) is limited to the pivot phrase of a given clause.
- e. **One-to-many mapping between voice and pivot selection**: the mapping between voice choice and pivot designation reflects a mechanism sensitive to both the relative structural height of the pivot compared to other DPs in the clause (see §3 for details).

- **The well-known debate**: How does voice alternation (14a–d) enable pivot-marking to fall on various types of core arguments and adjunct-like phrases?

⊗ The core questions

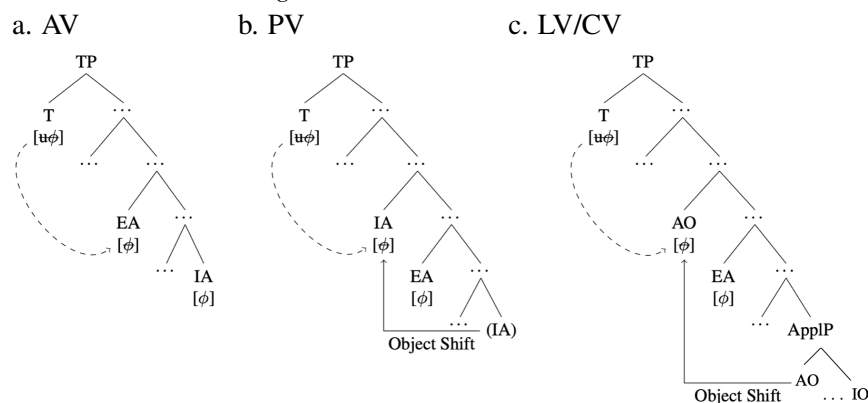
- ▷ What does pivot-marking realize?
- ▷ What’s the nature of the four-way morphology (AV/PV/LV/CV)?
- ▷ What gives rise to the fluid constraint in  $\bar{A}$ -extraction (12)?

(17) Geographical distribution of Philippine-type voice

## 2.1 The A-approach to Philippine-type voice (ergative view)

- ‘Pivot’ marks absolutive case from T, available to the highest DP (Payne 1982; Mithun 1994; Aldridge 2004, 2012, 2017 et seq.)
  - The ‘pivot-only’ constraint in  $\bar{A}$ -extraction is an absolutive-only restriction.
  - ‘Philippine-type alignment’ manifests syntactic ergativity.
  - Voice is valency-indicating morphology hosted within VoiceP.
    - AV affix: intransitive voice head (no EPP feature)
    - PV affix: transitive voice head with an EPP feature (driving object shift)
    - LV/CV affix: high applicative head (co-occurring with a null transitive voice head with an EPP feature)

(18) *Voice alternation as argument structure alternation*



- Voice indexes argument structure alternation, enabling different phrases to render the highest DP:
  - In AV (18a), the highest DP (often the EA) checks ABS case with T.
  - In PV (18b), the theme undergoes object shift and raises across the EA, rendering the highest DP.
  - In LV and CV (18c), an applied object (e.g. locative, locative, benefactive) undergoes object shift and renders the highest DP.
- **Claim:** All nonpivot phrases bear nonstructural case:
  - CM<sub>1</sub>:** inherent ergative case from transitive Voice/v;
  - CM<sub>2</sub>:** lexical oblique case from V (Aldridge 2004, 2012, 2017; Chang 2011, 2013)

(19) The ergative view of Philippine-type alignment

	a. AV	b. PV	c. LV	d. CV
external argument	<b>Pivot: ABS</b>	ERG	ERG	ERG
internal argument	OBL	<b>Pivot: ABS</b>	OBL	OBL
locative	P <sub>1</sub>	P <sub>1</sub>	<b>Pivot: ABS</b>	P <sub>1</sub>
instrument/benefactor	P <sub>2</sub>	P <sub>2</sub>	P <sub>2</sub>	<b>Pivot: ABS</b>
	intransitive / antipassive	basic transitive	tran. applicative	ditto

## 2.2 The $\bar{A}$ -approach to Philippine-type voice (accusative view)

- ‘Pivot’ is a topic marker that marks the internal topic (obligatory in finite clauses) in an ordinary accusative case system (Richards 2000; Pearson 2001, 2005; Rackowski 2002; Rackowski & Richards 2005; Chen 2017).
  - **Assumption:** This marker overrides case (20), similar to topic marking in Japanese and Korean.

(20) *The  $\bar{A}$ -approach to Philippine-type alignment*

	a. AV	b. PV	c. LV	d. CV
external argument	<del>NOM</del> <b>Topic</b>	NOM	NOM	NOM
internal argument	ACC	<del>ACC</del> <b>Topic</b>	ACC	ACC
locative	P <sub>1</sub>	P <sub>1</sub>	<del>P<sub>T</sub></del> <b>Topic</b>	P <sub>1</sub>
instrument/benefactor	P <sub>2</sub>	P <sub>2</sub>	P <sub>2</sub>	<del>P<sub>2</sub></del> <b>Topic</b>

- ⊗ Voice alternation indexes topicalization.
  - The licensing of pivot-marking is subject to *Relativized Minimality* (RM) (Rizzi 1990 et seq; Starke 2001; van Urk 2015):
    - (21) A probing feature F must Agree with the closest XP that bears F.
      - ▷ Namely, Agree ignores all XPs that do not carry an instance of the probing feature (Chomsky 2001).
  - Given RM, a topic need not render the highest DP to agree with [uTOP], and it can either be a DP or a PP.

- ▷ This is similar to *wh*-agreement: a *wh*-probe will target the closest XP with a *wh*-feature (which may be an adjunct), skipping all intervening DPs without a *wh*-feature.

(22) Wh-agreement need not targets the highest DP

- ▷ **Consensus among this family of analyses:** Philippine-type voice is hosted high in the C domain, indicating the Agree relation with [uTOP].
- ▷ **Does voice track the case of the pivot?:** Previous topic approaches to Philippine-type languages commonly assume that voice morphology inflects for the case status of the topic (Rackowski & Richards 2005; Pearson 2005).

(23) *Ā*-approach to Malagasy voice (Pearson 2005:401)

- AV affix: realization of nominative case feature of the Op
- PV affix: realization of accusative case feature of the Op
- CV affix: realization of applicative morpheme that introduces an applied object

- However, new comparative evidence indicates that Philippine-type voice does not track case.
- A revised analysis to be presented in §3.3.

⊗ **Outstanding questions:** what does the four-way morphology realize?; how does this approach account for the ‘pivot-only’ constraint in relativization?

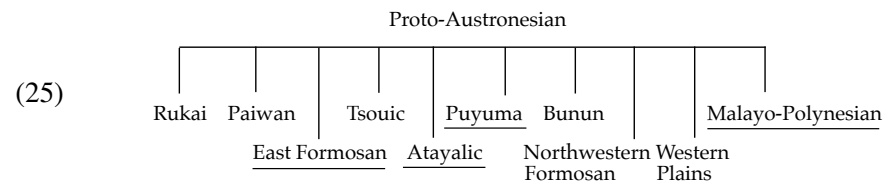
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### 3 Two probes, one goal: Austronesian-type voice as the spell-out of parallel chain in an accusative system

(24) *The competing analyses: the A- vs. Ā-view of Philippine-type voice*

	a. A-approach to PPT voice	b. Ā-approach to voice
Case alignment	ergative-absolutive	nominative-accusative
Locus of voice	within VoiceP	C domain
Nature of voice	Voice / applicative head	Agreement morphology
Pivot-marking	absolutive case from T	topic-marking
CM <sub>1</sub>	inherent ergative case from tran. Voice	nominative case from T
CM <sub>2</sub>	lexical oblique case from V	accusative case from Voice
‘Pivot-only’ restriction	absolutive-only	topic-only

- New data from four languages: Puyuma (*iso 639-3 pyu*), Amis (*iso 639-3 ami*), Seediq (*iso 639-3 trv*), Tagalog; each belongs to a distinct Austronesian higher-order branch.



- ▷ An examination of the distribution of CM<sub>1</sub>, CM<sub>2</sub>, and pivot-marking in understudied constructions lends novel support to the accusative view.

#### 3.1 New evidence for the Ā (accusative) approach to Philippine-type voice (and against the ergative view)

##### 3.1.1 Evidence for CM<sub>2</sub> as accusative (and against the oblique case view)

- Philippine-type Actor Voice clauses contains a CM<sub>2</sub>-marked theme.

(26) *Amis*

Mi-lawup kaku            **ci-Sawmah-an**    inacula.  
 AV-chase 1SG.PIVOT PN-Sawmah-CM<sub>2</sub> yesterday

‘I chased *Sawmah* yesterday.’ (Actor Voice)

- ▷ **Ergative approach:** this is an antipassive with a non-structurally case-licensed antipassive object ( $\Rightarrow$  CM<sub>2</sub> = lexical oblique case from V).
- ▷ **Accusative approach:** this is a true transitive with an accusative object ( $\Rightarrow$  CM<sub>2</sub> = accusative case from Voice).
- ⊗ Accusative and oblique case can be distinguished in three environments.
- ▷ Oblique case is licensed in Head-Comp relation along with  $\theta$ -assignment

(27)

- ▷ Accusative case may be licensed either via Head-Comp relation or via Head-Spec relation across the VoiceP boundary, i.e. ECM-licensing:

(28)

- ▷ **Environment 1:** CM<sub>2</sub> occurs on ECM subjects in productive causatives, demonstrating a case of Head-Spec licensing across VoiceP boundary:

(29) *Amis*

∅-pa-pi-lawup kaku **ci-Sawmah-an** ci-Panay-an.  
**AV-CAUS-PI-chase** 1SG.PIVOT **PN-Sawmah-CM<sub>2</sub>** PN-Panay-CM<sub>2</sub>  
 ‘I made *Sawmah* chase Panay.’ (AV-marked causative)

- The construction is a biclausal causative, containing two active, independent VoicePs.

- The CM<sub>2</sub>-marked causee c-commands the theme and behaves like an agentive EA.
- The causee shows the hallmarks of an ECM subject, located in a structural position (Spec of embedded VoiceP), where only structural accusative (and not lexical oblique case) is available.
- $\Rightarrow$  CM<sub>2</sub> shows the hallmark of structural accusative
- ▷ **Environment 2:** CM<sub>2</sub> also appears on derived objects in raising-to-object constructions, where lexical oblique case should be unavailable.

(30) *Amis*

- a. **Ma**-fana’ kaku [ ∅ mi-sakilif **ci-Sawmah**  
**AV**-know 1SG.PIVOT [ C AV-lie **SG.PIVOT-Sawmah**  
 ci-Kulas-an ].  
 PN-Kulas-CM<sub>2</sub> ]  
 ‘I know that Sawmah lied to Kulas.’
- b. **Ma**-fana’ kaku **ci-Sawmah-an**<sub>i</sub> [ ∅ mi-sakilif (**e.c.**)<sub>i</sub>  
**AV**-know 1SG.PIVOT **PN-Sawmah-CM<sub>2</sub>** [ C AV-lie (**e.c.**)<sub>i</sub>  
 ci-Kulas-an ].  
 PN-Kulas-CM<sub>2</sub> ]  
 ‘I know that *Sawmah* lied to Kulas.’ (CM<sub>2</sub> on derived objects)

- Across Philippine-type Austronesian languages, ‘raising’ in RTO like the above is optional.
- The dislocated phrase (XP) in this construction shows no case connectivity.
- Matrix-dependent case marking: the XP must carry CM<sub>2</sub>-marking when the matrix verb is in AV.
- Infelicitous to assume the derived object in RTO (either base-generated or derived via  $\bar{A}$ -movement) to be  $\theta$ -licensed by the matrix verb.
- $\Rightarrow$  CM<sub>2</sub> shows one other hallmark of structural accusative case

\* \* \* \* \*



- ▷ **Environment 3:** CM<sub>2</sub> is obligatorily absent in restructuring infinitives

(31) *Amis*

Tanam-**en** aku [RI **mi**-tangtang { **k-una** / \***t-una** }  
try-**PV** 1SG.CM<sub>1</sub> [RI **AV**-cook { **PIVOT-that** / \***CM<sub>2</sub>-that** }  
**titi** ].  
**pork** ]

‘I will try to cook that pork.’

→ Within a restructuring infinitive (RI), the verb must bear AV-marking.

→ Despite the local verb in AV-marking, the embedded theme must carry pivot-marking where the matrix clause is in PV (31).

⇒ The local AV-marked verb is incapable of CM<sub>2</sub>-licensing.

⇒ CM<sub>2</sub> must not be lexical oblique case, which is available in the RI

⇒ Its absence follows from the accusative case analysis.

▷ Defective Voice incapable of accusative-licensing (Wurmbrand 2001 et seq.).

▷ Same distribution of CM<sub>2</sub> in 19 other Philippine-type languages.

\* \* \* \* \*

⊗ **Conclusion:** CM<sub>2</sub> marks accusative (and not oblique) case; AV clauses are true transitives.

→ The baseline assumption of the ergative view – that the AV and the PV are distinguished by transitivity – cannot be maintained.

### 3.1.2 Evidence for CM<sub>1</sub> as nominative (and against the ergative view)

- Philippine-type Patient Voice clauses contains a CM<sub>1</sub>-marked EA:

(32) *Tagalog*

K<in>urot **ni** **AJ** si Lily.  
pinch<PV.PRF> **PN.CM<sub>1</sub>** **AJ** PN.PIVOT Lily

‘AJ pinched Lily’.

(Patient Voice)

- ▷ **Ergative approach:** the construction is an ergative-aligned transitive; the EA is licensed with inherent ergative case from transitive Voice (CM<sub>1</sub> as inherent ergative case):

(33)

- ▷ **Accusative approach:** this is a transitive clause with a nominative EA (CM<sub>1</sub> as nominative).

⊗ CM<sub>2</sub> shows two hallmarks of nominative case.

- ▷ **Trait 1:** CM<sub>1</sub> is not restricted to EA positions

- Unaccusative themes are accessible to CM<sub>1</sub>, as are EAs in unergatives/-transitives:

(34) *Tagalog*

a. Ni-lakar-an **ni** **Ivan** ang daan.  
PRF-walk-LV **PN.CM<sub>1</sub>** **Ivan** PIVOT road

‘Ivan walked on the road.’ (CM<sub>1</sub> on unergative agent)

b. H<in>ulug-an **ni** **Ivan** ang swimming pool.  
fall<PRF>LV **PN.CM<sub>1</sub>** **Ivan** PIVOT swimming pool

‘Ivan fell into the swimming pool.’ (CM<sub>1</sub> on unacc. theme)

(35) *Seediq*

a. P-puyas-an **na** **laqi** ka sapah=mu.  
IRR-sing-LV **CM<sub>1</sub>** **child** PIVOT house-1SG.POSS

‘The children will sing in my house.’ (CM<sub>1</sub> on unerg. agent)

b. H-huqil-an **na** **riso** **nii** ka Paran.  
IRR-die-LV **PN.CM<sub>1</sub>** **young.man** **this** PIVOT Paran

‘This young man will die in Paran.’ (CM<sub>1</sub> on unacc. theme)

- ▷ **Trait 2:** CM<sub>1</sub> is unique per CP and restricted to the highest DP
  - CM<sub>1</sub> is unique per CP and restricted to the highest DP (36); unlike ergative case in various languages, which may appear on multiple agentive arguments within the same clause (37):

(36) *Ergative case on multiple agents within the same clause*a. *Trumai (Isolate)*

Alaweru-k hai-ts axos-∅ disi-ka.  
 Alaweru-ERG 1sg.[ERG]child-ABS hit-CAUS

‘Alaweru made *me* hit the child.’ (Guirardello 1999:302)

b. *Macushi (Cariban)*

Imakui'pî kupî jesus-ya emapu'tî yonpa-'pî makiu-ya teuren.  
 bad do Jesus-ERG CAUS try-PST Satan.[ERG]frust

‘S unsuccessfully tried to make *J* do bad.’ (Abbott 1991:40)

(37) *CM<sub>1</sub> as unique per clause and restricted to the highest DP*a. *Amis*

Sa-pa-pi-nengneng aku tu/\*nu ising k-una pusi.  
 CV-CAUS-PI-see 1SG.CM<sub>1</sub> ACC[\*CM<sub>1</sub>]doctor PIVOT-that cat

‘I will ask *the doctor* to look at the cat.’

b. *Seediq*

S-p-tinun=mu ∅/\*na robo ka lukus.  
 CV-CAUS-weave=1SG.CM<sub>1</sub> ACC[\*CM<sub>1</sub>]Robo PIVOT clothes

‘I asked *Robo* to sew the clothes.’

c. *Tagalog*

I-p<in>a-nakaw=ko kay/\*ni AJ ang kotse.  
 CV-CAU<PRF>-steal=1SG.CM<sub>1</sub> PN.ACC[\*PN.CM<sub>1</sub>]AJ PIV car

‘I asked *AJ* to steal the car.’

⇒ This locality-sensitive distribution argues against the inherent ergative case view of CM<sub>1</sub>, but follows from a nominative analysis.

- Same distribution found across Philippine-type languages (Chen 2017).

## 3.1.3 ‘Pivot’ as a marker independent of case

- ▷ The observation so far: CM<sub>1</sub> and CM<sub>2</sub> marks nominative and accusative case, respectively.

(38) *Philippine-type alignment*

	a. AV	b. PV	c. LV	d. CV
external argument	<b>Pivot</b>	NOM	NOM	NOM
internal argument	ACC	<b>Pivot</b>	ACC	ACC
locative	P <sub>1</sub>	P <sub>1</sub>	<b>Pivot</b>	P <sub>1</sub>
benefactor	P <sub>2</sub>	P <sub>2</sub>	P <sub>2</sub>	<b>Pivot</b>

- ▷ Given that CM<sub>1</sub> marks the nominative, ‘pivot’ should not realize the same case (i.e. structural case from T or a certain head).

- ▷ This calls into question the traditional view that ‘pivot’ is a subject marker, realizing ABS/NOM case assigned to a derived A-position.

- ⊗ Productive causatives provide an ideal testing ground for examining the absolutive case view of pivot-marking.

(39) *Productive causatives: mapping between voice and case*

	a. AV	b. PV	c. CV
Causer	<b>Pivot</b>	NOM	NOM
Causee	ACC	<b>Pivot</b>	ACC
Theme	ACC	ACC	<b>Pivot</b>

- ▷ The constructions are morphologically identical except voice-marking.
- ▷ If ‘pivot’ marks the absolutive, there should be argument structure alternation between PV- and CV-marked causatives, so that ‘pivot’ marking skips the causee and mark the theme (alleged applied object).

- ⊗ Binding facts reveal that the alleged argument structure alternation is absent.

- The causee asymmetrically binds the theme regardless of voice (40)–(41):

⇒ Theme pivot bound by an agentive, accusative-marked causee (41)

⇒ The licensing of pivot-marking does not respect locality.

(40) *Tagalog*

- a. I<sub>1</sub>-p<in>a-li-linis=ko kay Juan **ang**  
 CV<sub>1</sub>-CAUS<PRF>RED-clean=1 SG.NOM PN.ACC Juan **CN.PIVOT**  
**kanya-ng sarili.**  
**3SG-POSS REFL**  
 ‘I asked Juan<sub>i</sub> to clean *himself*<sub>i</sub>.’
- b. P<in>a-pa-ligo=ko si AJ **ng**  
 CAUS<PV>.PRF>-RED-bathe=1 SG.NOM PN.PIVOT AJ **ID.ACC**  
**sarili niya.**  
**REFL 3SG**  
 ‘I am making *AJ* bathe himself.’

(41) *Puyuma*

- a. Ku=pa-saletra’-**anay** kan sawagu **tayta’aw.**  
 1 SG.NOM=CAUS-slap-**CV** SG.ACC Sawagu **3SG.REFL.PIVOT**  
 ‘I asked Sawagu<sub>i</sub> to slap *himself*<sub>i</sub>.’
- b. Puyuma  
 Ku=pa-saletra’-**aw** i sawagu **kanta’aw.**  
 1 SG.NOM=CAUS-slap-**PV** SG.PIVOT Sawagu **3SG.REFL.ACC**  
 ‘I asked *Sawagu* to slap himself.’

→ The invariable binding pattern unaffected by voice alternation indicates that pivot is a marker independent of case.

→ ‘Pivot’ does not mark absolutive, and is likely to be a marker for a certain information structure status (e.g. topic).

### 3.2 Evidence for Philippine-type voice as topic-indicating agreement morphology hosted in the C domain

#### 3.2.1 Voice behaves like agreement morphology

▷ Voice morphology obligatorily appears on the highest verbal head per CP.

▷ All the rest of the verbal heads carry default (DEF) voice marking.

(42) *Puyuma*

- a. Ku=beray-ay na walak kana bu’ir.  
 1 S.NOM=**give-LV**DEF.PIVOT child DEF.ACC taro  
 ‘I gave the child the taro.’
- b. Ku=talam-ay Ø-beray na walak kana bu’ir.  
 1 S.NOM=**try-LV**DEF-give DEF.PIVOT child DEF.ACC taro  
 ‘I tried to give the child the taro.’
- c. Ku=trakatrakaw-ay t<em>alam Ø-beray na walak  
 1 S.NOM=**secretly-LV**DEF-try DEF-give DEF.PIVOT child  
 kana bu’ir.  
 DEF.ACC taro  
 ‘I *secretly* tried to give the child the taro.’

▷ What does this constraint tell us?

▷ Austronesian-type voice is not valency-indicating affixes hosted within individual VoiceP.

#### 3.2.2 The locus of voice is high

▷ Voice morphology is hosted higher than Aspect

○ Voice affixes insert into aspect morphology rather than the verbal stem:

(43) a. *Puyuma*

D<em>a-deru i Atrung dra patraka.  
 <AV>PROG-cook PN.PIVOT Atrung ID.ACC meat

‘Atrung is cooking meat.’ (AV)

b. *Paiwan (Chang 2006)*

S<em>iu-siup ti Zepul nu S<em>iaw.  
 <AV>HAB-suck PN.PIVOT Zepul IRR.TEMP <AV>soup

‘Zepul sucks (it) when she eats soup.’ (AV)

- Assuming the Mirror Principle (Baker 1985; Harley 2013) holds, this indicates Austronesian-type voice is hosted in a projection *higher* than Aspect.

▷ Since Philippine-type languages are tenseless languages, this insertion fact suggests that voice is hosted high in the left periphery.

### Voice morphology inflects for mood

(44) *Puyuma*

- a. Ku=beray-ay i Senten dra paysu.  
 1S.NOM=give-[LV.IND]PN.PIVOT Senten ID.ACC money  
 ‘I gave *Senten* money.’ (LV indicative)
- b. Beray-i i Senten dra paysu!  
 give=[LV.IMP]PN.PIVOT ID.ACC money  
 ‘(You) give *Senten* money!’ (LV imperative)

▷ Mood is standardly assumed to be hosted in the C domain (e.g. Rivero & Terzi 1995; Han 2001; Noonan 2007), suggesting voice is hosted high.

### 3.2.3 Philippine-type voice as topic-indicating morphology

- Old insight in the literature: Pivots behave like *topics* (see, e.g., Shibatani (1998), Richards (2000), Pearson (2001, 2005), Rackowski (2002), Erlewine (2014), Chen (2017), Paul & Massam (2020); a.o.).

⊗ Evidence from discourse: in question-answer sequences with a clear discourse topic, the topic must be placed as pivot in the answer.

(45) *Puyuma*

- a. Makakuta i Pilay uninan?  
 AV.what.happen PN.PIVOT Pilay today  
 ‘What did *Pilay* do today?’ (⇒ Discourse topic: Pilay)
- b. D<em>eru (pro) dra abay.  
 <AV>cook (3SG.PIVOT) ID.ACC rice.ball  
 ‘*She* cooked rice balls’. (X topic: pivot-marked)

- c. \*Tu=deru-aw na abay.  
 3.NOM=cook-PV DEF.PIVOT rice.ball  
 (intended: ‘She cooked *rice balls*.’) (7 topic: not pivot-marked)

(46) *Tagalog: four ways to answer (46a)*

- a. Na saan ang kutsara ni Lia?  
 NA where PIVOT spoon PN.POSS Lia  
 ‘Where is *Lia’s spoon*?’ (⇒ Discourse topic: Lia’s spoon)
- = = = = = = = = = = = = = = = =
- b. Gamit ni Lia (ang kutsara).  
 use.PV PN.NOM Lia (PIVOT spoon)  
 ‘Lia is using (*it/the spoon*).’ (⇒ topic: theme pivot)
- c. I-p<in>ang-ka-kain ni AJ (ang kutsara).  
 CV-PANG<PRF>-RED-eat PN.NOM AJ (PIVOT spoon)  
 ‘AJ is eating with (*it/the spoon*).’ (⇒ topic: instrument pivot)
- d. Na-kita=ko=[ng k<in>uha ni Ivan (ang kutsara) ].  
 PRF.PV-see=1SG.NOM=[LK steal<PV.PRF> PN.NOM Ivan (PIVOT spoon) ]  
 ‘I saw that Ivan stole (*it/the spoon*).’ (⇒ topic: embedded pivot)
- e. Na kay Peter (ang kutsara).  
 NA with Peter (PIVOT spoon)  
 ‘*The spoon* is with Peter.’ (⇒ topic: existential pivot)

\* \* \* \* \*

### 3.3 Proposal: symmetrical voice as the spell-out of parallel chain

(47) *Main claim: ‘Philippine-type alignment’ is an illusion*

- a. It is the outcome of prominent topic-marking overriding case
- b. Philippine-type voice is Type II morphology that indexes the A-relation of topics and REL-phrases.

▷ **The design of Philippine-type languages**

- (a) **[u $\varphi$ ] on T**, probing the highest DP (i.e. subject).
- (b) **[u $\varphi$ ] on matrix Voice**, probing the closest DP (i.e. DO).
- (c) **A specific type of P** that selects only locative phrases.
- (d) **[u $\bar{A}$ ] on C**: a flat  $\bar{A}$ -probe that can be satisfied by either [TOP] or [REL], sat on a head distinct from T, labelled as C for simplicity.
- (e) **Parallel chains are spelled out**: where any of the two probes form a parallel chain, that chain is spelled out as verbal morphology.

▷ **Proposal**: Where a phrase is probed simultaneously by [u $\bar{A}$ ] and by (a), (b), or (c), the parallel chain is spelled out as a voice affix.

(48) *Parallel chain formation*

Two chains  $\alpha$  and  $\beta$  are related by parallel chain formation iff:

- i. Tail ( $\alpha$ ) = Tail ( $\beta$ ), and
- ii. Head ( $\alpha$ )  $\neq$  Head ( $\beta$ ) (Kandybowicz 2008:115)

▷ Namely, when a topic/REL-phrase agrees also with [u $\varphi$ ] (either on T or Voice), the parallel chain is spelled out as voice morphology.

▷ Each combination below is spelled out as a specific verbal affix:

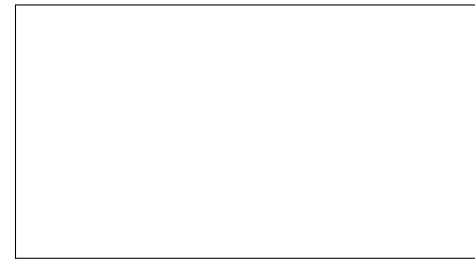
AV	spell-out of the parallel chain formed by (a) and (d)
PV	spell-out of the parallel chain formed by (b) and (d)
LV	spell-out of the parallel chain formed by (c) and (d)
CV	spell-out of the Agree relation with (d)

$\Leftrightarrow$  Voice indexes the parallel chains formed by (abstract) **topic agreement** and (a) **subject agreement**, (b) **object agreement**, (c) **locative agreement**, or (d) **nothing else**, respectively.

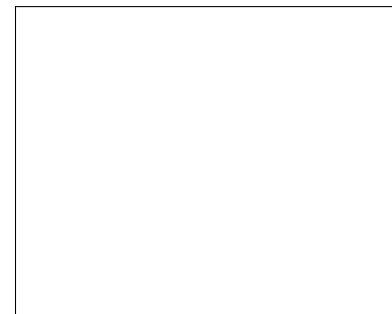
⊗ **The big picture**

- “AV” occurs when the pivot is the highest DP per CP
- “PV” occurs when the pivot is the 2nd highest DP
- “LV” occurs when the pivot is a locative phrase
- “CV” occurs when the pivot is something else (e.g. low DPs, adjuncts)

(49) *AV: When the topic is also the subject*



(50) *PV: When the topic is also the DO (2nd highest DP per CP)*



(51) *LV: When the topic is also the locative*



(52) A VOICE HIERARCHY

- a. AV > PV > CV
- b. LV is thematic-role oriented (temporal/locative-specific)

(53) Mapping between voice and pivot selection

	AV	PV	LV	CV
Unergatives	external argument	*	locative phrase	non-locative adjuncts
Unaccusatives	internal argument	*	locative phrase	non-locative adjuncts
Transitives	external argument	internal argument	locative phrase	non-locative adjuncts
Productive causatives	causer	causee	locative phrase	theme
Ditransitives	external argument	recipient	goal	theme
Control constructions	controler	controllee	n/a	theme
SVC	external argument	internal argument	locative phrase	non-locative adjunct
Generalization	pivot as subject	pivot as DO	pivot as locative	pivot as anything else

⊗ **Key generalizations**

- ▷ Voice does not inflect for case (contra Rackowski & Richards 2005).
  - Accusative-marked themes may trigger either PV or CV morphology, depending on its relative structural height.
  - There’s counter-evidence for triggers of LV and CV as always involving applicativization (contra Rackowski & Richards 2005).
- ▷ Voice-marking does *not* change the argument structure of a clause.
- ▷ Instead, it indicates the *relative structural height* of the pivot/topic with other phrases in the same clause.

3.3.1 Actor Voice

- ⊗ “AV” morphology patterns with abstract subject agreement in distribution
- ⊗ Possible triggers of AV are the highest DP per clause, including:
  - EAs in unergatives, transitives, ditransitives, causatives, and controls
  - IAs in unaccusatives and detransitives

(54) *Puyuma*

- a. M-*u*arak na walak i arasip.  
AV-dance DEF.PIVOT child LOC Arasip  
 ‘Atrung danced in Arasip.’ (AV unergative)
- b. M-*e*kan na bangsaran dra patraka.  
AV-eat DEF.PIVOT young.man ID.ACC meat  
 ‘The young man ate some meat.’ (AV transitive)
- c. M-*u*-*e*kan na patraka.  
AV-DETR-eat DEF.PIVOT meat  
 ‘The meat was eaten up.’ (AV detransitive)
- d. M<in>atray na bangsaran.  
AV<PRF> DEF.PIVOT young.man  
 ‘That young man died.’ (AV unaccusative)

- ⊗ **Proposal:** “AV” affix is the spell-out of the parallel chain formed by **the Agree relation with [uĀ]** and that with **[uφ] on T**

(55) *AV: When the subject is also the topic*



- ▷ **Consistent with the facts above . . .**
  - ▷ Intransitives of any type can be marked in AV.
  - ▷ Embedded EAs (e.g. causees, controllees) cannot trigger AV agreement (as they are not the highest DP per CP) (see §3.1.3).

### 3.3.2 Patient Voice

⊗ “PV” morphology patterns with abstract object agreement in distribution

⊗ Possible triggers of PV are the 2nd highest DP per clause, including:

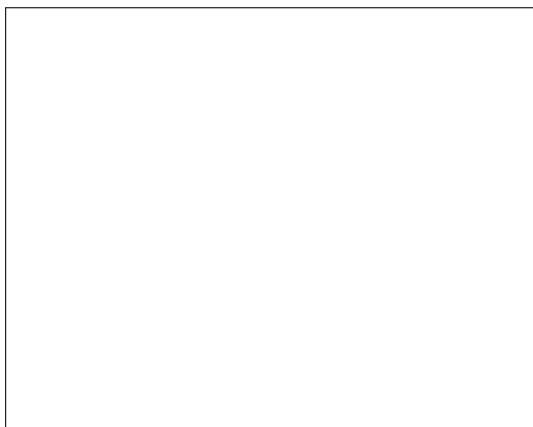
- **IAs** in simple transitives (56a)
- **Causees** (56b), **controllee**, **recipients in DOCs** (56c)
- **But not**: themes in causatives/DOCs/controls (lower DPs)

(56) *Amis*

- a. Tangtang-**en** ni Lisin **k-u** titi.  
 cook-**PV** PN.NOM Lisin **PIVOT-that** pork  
 ‘Lisin will cook *that* pork.’ (PV transitive)
- b. Pa-pi-takaw-**en** aku **k-una** wawa t-una paysu.  
 CAUS-PI-steal-**PV** 1SG.NOM **PIVOT-that** child ACC-that money  
 ‘I will ask *that* child to steal that money.’ (PV causative)
- c. Pafeli-**en** aku **k-una** wawa t-una paysu.  
 give-**PV** 1SG.NOM **PIVOT-that** child ACC-that money  
 ‘I gave *the* child that money.’ (PV ditransitive)

⊗ **Proposal**: “PV” affix is the spell-out of the parallel chain formed by **the Agree relation with [u $\bar{A}$ ]** and that with [u $\varphi$ ] **on matrix Voice**

(57) *PV: When the DO is also the topic*



#### ▷ Key evidence

- Intransitives cannot be marked in PV (since they have no *objects*).
- (Abstract) object agreement is also assumed to be **unique per clause** and target only the **2nd highest DP** – i.e. highest DP below matrix Voice – and not any other co-occurring objects (Baker 2012; Deal 2019), e.g.:

(58) *Amharic object agreement*

a. *Ditransitive*

Ləmma **l-Almaz** məs’əhaf-u-n sət’t’-at.  
 Lemma **DAT-Almaz** book-DEF-ACC give-(3MS)-**3FO**  
 ‘Lemma gave the book to *Almaz*.’ (Baker 2012:258)

b. *Productive causative*

Aster was-a-n as-metaitf-ññ.  
 Aster ball-DEF.ACC CAUS-hit-3FEM.S-**1SG.O**  
 ‘Aster made *me* kick the ball.’ (Duncan & Aberra 2009)

→ In DOC, object agreement probes the **recipient** and not the theme.

→ In causatives, object agreement probes the **causee** and not the theme.

### 3.3.3 Locative Voice

⊗ “LV” morphology is linked specifically to temporal/locative pivots.

⊗ Possible triggers of LV are restricted to locative phrases, including:

- Locative adjuncts in any constructions (59a–b)
- Sources/goals in prepositional datives (59d)

(59) *Paiwan* (Ferrell 1969:202; Chang 2006:195, 74)

- a. Qalup-**an** nua caucau tua vavuy **a** gadu.  
 hunt-**LV** NOM man ACC pig **PIVOT** mountain  
 ‘The man hunts while pigs in *the* mountains’ (LV transitive)

- b. P<in>a-pana'-an a icu a i maza ni palang  
 CAU<PRF>-shoot-LV PIVOT this LK LOC here PN.NOM Palang  
 tay kui ta zua venan.  
 PN.ACC Kui ACC that deer  
 'Palang made Kui shoot that deer *here*.' (LV causative)
- c. <in>aLap-an ti zepul ta za paysu ni lavakaw.  
 <PRF>take-LV PN.PIVOT Zepul ACC that money NOM Lavakaw  
 'Lavakaw took money from *Zepul*.' (LV ditransitive)

⊗ **Proposal:** “LV” affix is the spell-out of the parallel chain formed by the Agree relation with [ $u\bar{A}$ ] and that with  $P_{Loc}$  (60).

- **Supporting evidence:** Locative phrases in various Philippine-type languages are marked with a specific preposition *i* that does not mark other types of adjuncts.

(60) *LV: When the locative is also the topic*



### 3.3.4 Circumstantial Voice

- ⊗ “CV” morphology does not pattern with any type of A-agreement in distribution.
- ⊗ Possible triggers of CV are low DP or non-locative adjuncts, including:
  - DPs that are structurally low (61a–c)
  - Non-locative adjuncts (61d–f)

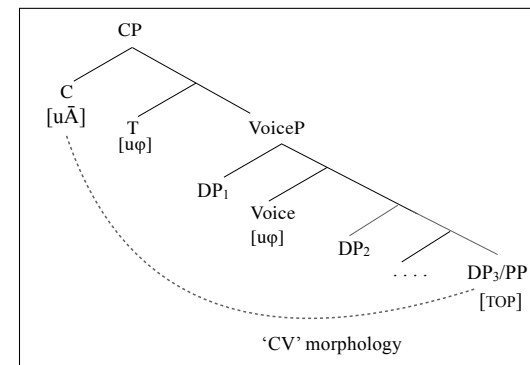
⇒ “CV” functions like a last resort voice that shows one-to-many relation with various types of adjunct.

(61) *Paiwan*

- a. Si-qihul=si' hiya' 'i' Ø-pa-patas ku' ruas.  
 CV-force=2SG.NOM 3SG.ACC LK AV-CAUS-write PIVOT book  
 'You forced him to read *the book*.' (CV controls)
- b. Ku=s<in>i-pa-'alup tay palang a icu a  
 1 SG.NOM=CV<PRF>-CAUS-hunt ACC Palang PIVOT this LK  
 vavuy.  
 boar  
 'I made Palang hunt *this wild pig*.' (CV causatives)
- c. 'u-s<in>i-vaik a q<em>aljuh ta vavuy ti Kapi.  
 1 S.NOM=CV PRF-GO LK <AV> ACC wild.pig PIVOT Kapi  
 'I went hunting wild pigs with *Kapi*.' (CV SVCs)
- d. 'u-s<in>i-patagilj=anga=sun a s<em>apay ta  
 1 SG.NOM=CV PRF-begin=COS=2S.PIVOT LK <AV>cultivate ACC  
 kaitang.  
 field  
 'I have started to cultivate the field for *you*.' (CV transitives)

⊗ **Proposal:** “CV” as the last resort voice: it's the spell-out of the Agree relation with [ $u\bar{A}$ ] (when the goal agrees with no other probe).

(62) *CV: When the topic is none of the above*





### 3.4 Interim conclusion

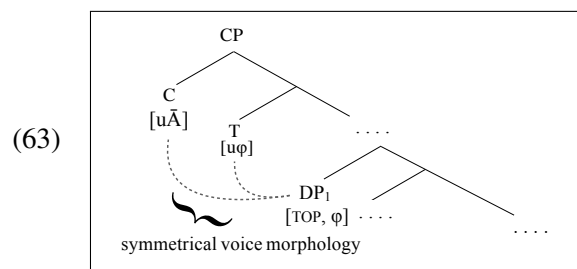
- ⊗ Austronesian-type voice is the spell-out of parallel chains that track the Agree relations probing topics and REL-phrases.
    - “AV” best characterized as **subject topic construction**
    - “PV” best characterized as **object topic construction**
    - “LV” best characterized as **locative topic construction**
    - “CV” best characterized as a **last resort construction**
- ⇒ These languages show the hallmarks of *discourse-configurationality* in the sense of Lee & Thompson (1980), É. Kiss (1995), and Miyagawa (2009, 2017).

## 4 Austronesian-type voice and its variation beyond Austronesian

### ▷ How unusual is this design?

- Similar voice systems in western Nilotic and Caucasian
  - Symmetrical voice is the spell-out of parallel chain
  - Symmetrical voice systems show various loci of variation

⊗ If symmetrical voice is indeed the spell-out of parallel chain, as in (63):



### Prediction: How would voice behave . . .

- **Variation 1:** Which parallel chains being spelled out as voice
- **Variation 2:** Which type of case alignment co-occurs with voice
- **Variation 3:** Which types of  $\bar{A}$ -operation triggers voice morphology
- **Variation 4:** Where the probes triggering the chain are located

\* \* \* \* \*

### 4.1 Variations 1–3: Voice distinction, case alignment, and extraction constraints

#### 4.1.1 Number of voice: which chains are spelled out as voice?

#### Symmetrical voice in Kumuk and Dinka (western Nilotic)

- Three-way verbal morphology indexing the grammatical role of the topic: subject || DO || others
- Nominative-accusative-style case alignment
- A ‘last resort’-type third voice (‘oblique topic construction’)
- Voice morphology present on the highest verbal head with default marking on all lower heads (similar to Austronesian)
- Same set of voice morphology present in several types of  $\bar{A}$ -operations.

- (64) a. *Kurmuk*  
 ʦáarák <sup>1</sup>bóor-ú dɛɛl kà ɲiɾ.  
 person skin-PST.SUBJ.T goat PREP knife  
 ‘The man skinned a goat with a knife.’ (subject topic)
- b. dɛɛl bóor-úʦ-**I** ɲà ʦáarák kà ɲiɾ.  
 goat skin-PST-**OBJ.T** NOM person PREP knife  
 ‘The man skinned *the* goat with a knife.’ (object topic)
- c. ɲiɾ bóor-úʦ-**”I** dɛɛl ɲà ʦáarák  
 knife skin-PST-**OBL.T** goat NOM person  
 ‘The man skinned a goat with *the* knife.’ (oblique topic)
- (Anderson 2015: 510)

- ▷ Verbal morphology inflects for the choice of the topic (64)–(65)

(65) *Dinka*

- a. **Áyén** à-càm cuḥin nẹ pǎal.  
Ayen 3s-eat.SV food P knife  
'Ayen is eating food with a knife.' (subject voice/topic)
- b. **Cuḥin** à-céem Áyèn nẹ pǎal.  
food 3s.eat-OV Ayen.GEN P knife  
'Ayen is eating *the food* with a knife.' (object voice/topic)
- c. **Pǎal** à-céemè Áyèn cuḥin  
knife 3s-eat.OBLV Ayen.GEN food  
'Ayen is eating food with *a knife*.' (oblique voice/ (topic)  
(van Urk 2015: 61)

- ▷ Genuine voice affix shown on the highest verbal head; all the rest carry default voice (similar to Philippine-type voice)

(66) *Dinka*

- a. Cuḥin à-céem Áyèn nẹ pǎal.  
food 3s-eat.OVAyen.GEN P knife  
'Ayen is eating *the food* with a knife.' (Object Voice)
- b. Cuḥin à-dóoc Ból cām  
food 3s-do.quickly.OVBol.GEN eat.NF  
'Bol is eating *the food* quickly.' (Object Voice)
- c. Cuḥin a-cíi Áyèn [vP cām nẹ pǎal].  
food 3s-PRF.OVAyen.GEN eat.NF P knife  
'Ayen has eaten *the food* with a knife.' (Object Voice)  
(van Urk 2015: 61, 84, 96)

- ▷ Voice morphology present in two other types of  $\bar{A}$ -operations:

(67) *Dinka*

- a. *Subject wh-question*  
Yè ḡà **cé** cuḥin cām?  
be who PRF.SV food eat.NF

'Who has eaten the food?' (van Urk 2015:96)

b. *Subject relativization*

tíḡ [CP **cé** Ból tíḡ ]  
woman.CS [ **PERF.SV** Bol see.NF ]  
'*the woman* that has seen Bol' (van Urk 2015:97)

c. *Object wh-question*

Yè ḡó **cíi** Ból cām?  
be what **PRF.OV** Bol.GEN eat.NF  
'What has Bol eaten?' (van Urk 2015:98)

d. *Object relativization*

tíḡ [CP **cíi** Ból tíḡ ]  
woman.CS [ **PERF.OV** Bol.GEN see.NF ]  
'*the woman* that Bol has seen' (van Urk 2015:97)

⇒ This voice morphology shares core traits with Philippine-type voice (van Urk 2015; Erlewine et al. 2017) and may well be the spell-out of parallel chain.

## o Symmetrical voice in Abaza (Caucasian)

- o Symmetrical voice co-occurring with **ergative case alignment**
- o At least five-way morphology indexing the grammatical role of *wh*-phrases: subject || non-subject || various types of adjuncts
- o Known as '*wh*-agreement' in the literature
- o A similar "last resort" voice: various types of non-absolutive DP sharing the same voice morphology
- o Relativization sharing the same set of voice morphology

(68) *Abaza*

- a. [awaʔa j-ʕa-ta-ʕa-k<sup>w</sup>a-z]  
there **REL.SUBJ**-CSL-LOC-remain-PL-PST.NFIN  
'those who remained there' (Subject RC (S))

- b. [a-ph<sup>w</sup>əspa j-lə-s-tə-z]  
 DEF-girl REL.SUBJ-3SG.F.IO-1SG.ERG-give-PST.NFIN  
 a-ĉa  
 DEF-apple  
 ‘the apple I gave to the girl’ (Subject RC (O))
- c. [a-ph<sup>w</sup>əspa ĉa lə-z-tə-z] a-ĉ’k<sup>w</sup>ən  
 DEF-girl apple 3SG.F.IO-REL.NSUBJ-give-PST.NFIN DEF-boy  
 ‘the boy who gave an apple to the girl’ (Nonsubj RC (A))
- d. [ĉa z-s-tə-z] a-ph<sup>w</sup>əspa  
 apple REL.NSUBJ-1SG.ERG-give-PST.NFIN DEF-girl  
 ‘the girl whom I gave an apple’ (Nonsubj RC (IO))
- e. d-h<sup>w</sup>a  
 3SG.H.ABS-say(IMP)  
 [jəz-zə-b-χ<sup>w</sup>ʔa-z]  
 3SG.N.ABS-REL.NSUBJ-BEN-2SG.F.ERG-buy-PST.NFIN  
 ‘Say whom you bought it for!’ (Nonsubj RC (AO))
- f. [a-karbəʒ’-k<sup>w</sup>a ʔa-də-r-baχ-wa-z]  
 DEF-brick-PL REL.LOC-3PL-ERG-CAUS-dry-IPF-PST.NFIN  
 a-baġ  
 DEF-shed  
 ‘the shed where bricks are made’ (Locative RC)
- g. [l-an d-an-ʔa-j-χ] asqan  
 3SG.F.IO-mother 3SG.H.ABS-REL.TMP-CSL-go-RE DEF.time  
 ‘at the time when her mother came back’ (Temporal RC)
- h. [d-š’š’ʔa-z] a-pš-ta  
 3SG.H.ABS-REL.MNR-lie-PST.NFIN 3SG.N.IO-be.like-ADV  
 d-š’ʔalχə-n  
 3SG.H.ABS-lie.down-RE-PST.FIN  
 ‘He lay down like he lay before.’ (Manner RC)  
 (Arkadiev & Caponigro 2020:6,7)

→ The same verbal morphology (*j-*) used for both S and O (i.e. subject) relativization.

→ Relativization of non-subject DPs (A/IO/AO) share a distinct affix (*z-*).

→ Extraction of different types of adjuncts employ different extraction affixes.

⇒ This morphology also shares the key traits with Philippine-type voice (Baier 2018) and may also be analyzed as the spell-out of parallel chain.

⊗ The exact parallel chains that trigger symmetrical voice morphology differ across Dinka, Abaza, and Philippine-type Austronesian languages.

(69) *A mini typology of voice distinctions*

	Subjects	Direct objects	Lower DPs	Locatives	Other adjuncts
Austronesian	Voice 1	Voice 2	Voice 4	Voice 3	Voice 4
Dinka/Kurmuk	Voice 1	Voice 2	?		Voice 3
Abaza	Voice 1	Voice 2 (ERG and other DPs)		Voice 3	(many other Voices)

⊗ The exact types of  $\bar{A}$ -operation that trigger symmetrical voice morphology differ across Dinka, Abaza, and Philippine-type Austronesian languages (Potsdam 2006, 2009 et seq.; van Urk 2015; Arkadiev & Caponigro 2020).

(70) Austronesian	topicalization, relativization (including <i>wh</i> -clefts)
Dinka (Nilotic)	topicalization, relativization, <i>wh</i> -questions
Abaza (Caucasian)	relativization, <i>wh</i> -extraction

→ Abaza voice present in both *wh*-extraction and relativization:

(71) *Abaza* (Arkadiev & Caponigro 2020:70,10)

- a. j-ʔa-ka-šá-da?  
 WH.SUBJ-CISL-LOC-fall(AOR)-QH  
 ‘Who fell?’ (Subject *wh*-question (ABS S))
- b. j-ʔá-b-g-ja?  
 WH.SUBJ-CISL-2SG.F.ERG-bring(AOR)-QN  
 ‘What did you bring?’ (Subject *wh*-question (ABS O))
- c. w-ʔa-z-rə-há-ja?  
 2SG.M.ABS-CISL-WH.NSUBJ-CAUS-FEAR(AOR)-QN  
 ‘What frightened you?’ (Non-subj *wh*-question (ERG A))
- d. ʒca z-la-r-fa-wa-ja?  
 soup WH.NSUBJ-ins-3pl.erg-eat-ipf-qn  
 ‘What do they eat soup with?’ (Non-subj *wh*-question (AO))

e. h-an-ba-ta-də-r-č'a-γ-wa-š?

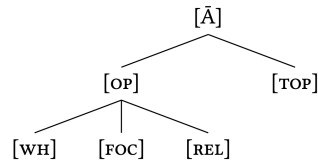
IPL.ABS-WH.TMP-Q.ADV-REP-3PL.ERG-CAUS-eat.ITR-RE-IPF-FUT

'When will they feed us again?' (Temporal *wh*-question)

▷ **Existing proposal:**  $\bar{A}$ -operations in some languages may be driven by a single, flat  $\bar{A}$ -probe – as proposed previously by for Dinka and for several Bantu languages (Kuno 1973; Miyagawa 2010; van Urk 2015).

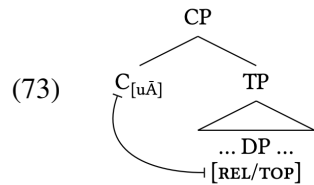
(72)  $\bar{A}$ -feature Geometry

$\bar{A}$ -features ([WH], [REL], [FOC], [TOP]) are hierarchically arranged. Probes may be relativized to different places on this hierarchy. (Aravind 2018; Baier 2018)



▷ That is, a probe may be satisfied by an  $\bar{A}$ -feature (represented [u $\bar{A}$ ]), or a feature lower down on the hierarchy, like [REL].

⊗ I argue that the apparent extraction constraint derives from topicalization and relativization as driven by a single, flat,  $\bar{A}$ -probe (73).



⇒ In this view, ‘pivot-only’ is essentially not an *extraction constraint*, but the same set of agreement morphology shared by topicalization and relativization.

▷ See van Urk (2015) and Miyagawa (2009) for the same solution for Dinka’s and Kinande’s extraction restriction.

**Prediction: how would pivots behave . . .**

○ **Variation 4:** Whether pivots behave like both an  $\bar{A}$ - and A-element

○ **Variation 5:** Whether the Agree relations involved also trigger  $\phi$ -feature agreement

○ **Variation 6:** Whether pivot  $\bar{A}$ -moves (as the outcome of Agree)

**Prediction: how would symmetrical voice evolve . . .**

○ **Variation 7:** whether the grammaticalization of *topic* > *subject* has taken place

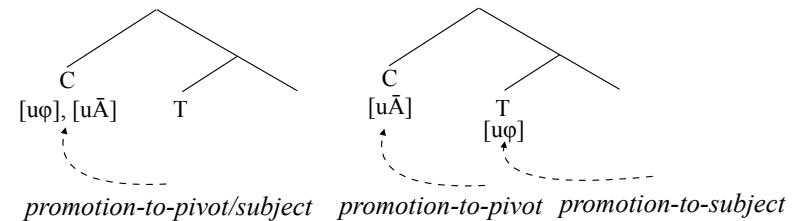
### 4.2 Variation 4: the locus of [u $\bar{A}$ ] and [u $\phi$ ]

▷ Symmetrical voice languages vary regarding the locus of the probes that form parallel chains

(74) *Variation in the locus of the  $\bar{A}$  and  $\phi$ -probe*

a. Dinka

b. Philippine-type Austronesian languages



▷ Dinka has been shown to lack the A/ $\bar{A}$  distinction, where the flat  $\bar{A}$ -probe and the  $\phi$ -probe are hosted on the same head.

▷ Contra Dinka, Philippine-type Austronesian languages demonstrate a clear A/ $\bar{A}$ -distinction, where promotion-to-pivot shows  $\bar{A}$ - and no A-properties:

(75)

	Dinka	Philippine-type AN languages
a. Reconstruction for Principle C ( $\bar{A}$ property)	7	X
b. New antecedents for anaphors (A-property)	X	7
c. No Weak Crossover effects (A-property)	7	X

▷ a. Reconstruction for Principle C(76) *Dinka: pivots do not reconstruct*\*Ròt-dè<sub>i</sub> à-nhiéer Bòl<sub>i</sub>.  
self-SG.3SG 3S-love.OV Bol.GEN(intended: ‘Bol loves *himself*.’) (Object Voice)(77) *Philippine-type AN languages: pivots reconstruct*a. *Amis*Ma-palu ni Kulas cingra tu.  
PV-beat PN.NOM Kulas 3SG.PIVOT REFL‘Kulas hit *himself*.’ (Patient Voice)b. *Tagalog*Hindi p<in>igil ni Lia ang sarili niya (na  
NEG <PV.PRF>control PN.NOM Lia PIVOT self 3SG.POSS (LK  
k<um>ain).  
eat<AV>)‘Lia cannot stop *herself* from eating.’ (Patient Voice)c. *Seediq*S<n>pi na Watan ka heya nanaq.  
dream<PRF.PV> PN.NOM Watan PIVOT 3SG REFL‘Watan dreamt of *himself*.’ (Patient Voice)d. *Puyuma*Tu=karatr-aw tayta’aw kan Pilay.  
3.NOM=bite-PV 3SG.PIVOT.REFL DEF.NOM Pilay‘Pilay hit *herself*.’ (Patient Voice)▷ b. New antecedent for anaphors(78) *Dinka: promotion to pivot creates a new binder for anaphors*Bòl<sub>i</sub> à-cíi [DP thùrá è ròt-dè<sub>i</sub>] nyòoth [CP kẹ̀ cùukù  
Bol 3S-PRF.OV picture P self-SG.3SG show.NF C PRF.1PL  
tùij].  
see.NF‘*Bol*, a picture of himself has shown that we have seen.’ (Object  
Voice) (van Urk 2015:111)(79) *Philippine-type AN languages: promotion-to-pivot creates no new  
binder for anaphors*a. *Amis*\*Ma-palu nira tu ci kulas.  
PV-beat 3SG.NOM REFL CN.PIVOT Kulas(intended: *Kulas*, himself has hit.’) (Patient Voice)b. *Puyuma*\*Tu=karatr-aw kantaaw i pilay.  
3.NOM=bite-PV 3SG.NOM.self PN.PIVOT Pilay(intended: ‘*Herself* has hit *Pilay*.’) (Patient Voice)c. *Seediq*\*S<n>pi na heya nanaq ka Watan.  
dream<PRF.PV> NOM 3SG REFL PIVOT Watan(intended: ‘*Himself* dreamt of *Watan*.’) (Patient Voice)d. *Tagalog*Sa-sampal-in ng kanyang sarili si Juan.  
CONT-slap-PV ID.NOM 3SG REFL(intended: *Himself* will slap *Juan*.’) (Patient Voice)▷ c. Crossover effects(80) *Dinka: promotion-to-pivot shows no Weak Crossover effects*Dhùk ébèñ<sub>i</sub> à-cíi thók-dè<sub>i</sub> kâac.  
boy every 3S-PRF.OV goat.CS-SG.3SG bite.NF‘His<sub>i</sub> goat bit *every boy<sub>i</sub>*.’ (van Urk 2015:110) (Object Voice)

- Promotion-to-pivot in Philippine-type AN languages shows the hallmark of  $\bar{A}$ -operations: Weak Crossover and (occasionally) marginal Weakest Crossover effects are both attested:

(81) a. *Puyuma*

Ku=pubibi-ay [kantu=dawa] [tu=uma  
 1SG.NOM=sow-LV [3.POSS.ACC=millet] [3.PIVOT.POSS=field  
 kana maydrangan driya].  
 LK old.persons every]

‘I sowed his/her<sub><i></sub> millet at every old person’s<sub><j/?/?i></sub> field.’

b. *Amis*

Sa-pi-tangtang aku [tu titi nangra] [ku siuy a  
 CV-PI-cook 3SG.NOM [ACC pork 3PL.POSS] [PIVOT pot LK  
 cimacima a ina].  
 every LK mother]

‘I cooked her<sub><i></sub> pork with every mother’s<sub><j/?/?i></sub> pot.’ (Patient Voice)

c. *Tagalog*

M<in>amahal ng kanyang<sub>i</sub> ama ang bawat anak<sub>i</sub>.  
 love<PV.PRF> NOM his father PIVOT every child

‘His<sub>i</sub> father loves every child<sub>j/?/?i</sub>.’ (Richards 2000) (Patient Voice)

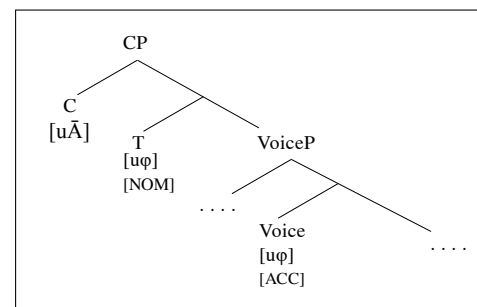
d. *Malagasy*

Novangian’-ny rainy ny mpianatra tsirairay omaly  
 PST.CV.visit-DET father-3 DET student each yesterday

‘His<sub>i</sub> father visited each<sub>?/?i</sub> student yesterday.’ (Patient Voice)  
 (Pearson 2001:107)

### 4.3 Variation 5: $\phi$ -feature agreement following Agree

- ▷ **Prediction:** Under the proposal in (82), the topic, subject, and/or the highest object (DO) may each trigger  $\phi$ -feature agreement.

(82) *The proposed design of Philippine-type Austronesian languages*

Given that . . .

- Morphological agreement is optional following Agree
  - Agree with either an A- or  $\bar{A}$ -probe may trigger  $\phi$ -feature agreement
- The prediction is indeed borne out:
- ▷ Co-occurrence of topic/pivot agreement and subject agreement<sup>2</sup>

(83) *Seediq*

Wada=**ku=na** bbe-un na Pawan ka yaku.  
 PST=**I SG.PIVOT=3 SG.SUBJ** hit-PV NOM Pawan PIVOT 1 SG

‘Pawan hit me.’ (Patient Voice)

(84) *Puyuma*

**Tu**<sub>i</sub>=trakaw-ay=**yu** dra paysu kan Senten<sub>i</sub>.  
**3.SUBJ**=steal-LV=**2 SG.TOP** ID.ACC money PN.NOM Senten

‘Senten stole money from you.’ (LV)

(85) *Kapampangan*

Seli=**ne** nitang tau ing bale.  
 buy.PV=**3 SG.TOP+3 SG.SUBJ** that.NOM-LK man PIVOT house.

‘That man bought the house.’ (Patient Voice)  
 (Kitano 2006:90)

▷ Object agreement is also attested in some Philippine-type languages:

(86) *Bunun* (Huang 1997:317,371)

a. M-adu'=**ik=su'**  
AV-like=**1SG.TOP=2SG.OBJ**  
'I like(d) you.' (AV transitives)

b. Ma-saiv=**ik=su'** tasa' ahil.  
AV-give=**1SG.TOP=2SG.OBJ** one book  
'I give/gave you a book.' (AV ditransitives)

c. Na=ni'=**ik** ma-saiv=**su'** haimangsut.  
FUT=NEG=**1SG.TOP** AV-give=**2SG.OBJ** thing  
'I will not give you anything.' (Negated AV ditransitives)

→ Analogous to Amharic object agreement, this morphology is unique per clause; targeting recipients and not themes in ditransitives (80b).

→ Topic agreement (*ik*) 'climbs' to the negator; object agreement (*su'*) does not.

⇒ Presence of these sets of  $\varphi$ -feature agreement reinforces the assumption that abstract topic agreement, subject agreement, and object agreement are presented in these languages.

\*See Chen (to appear) §5.3 for specific evidence for such morphemes being agreement and not arguments (pronominal clitics).

⊗ Languages displaying  $\varphi$ -feature agreement of these goals can be viewed as both agreement-based and discourse configurational.

▷ Topic-driven  $\varphi$ -feature agreement reported in at least three other families: Romance, Mixtec, and Bantu (Ripano: D'Alessandro 2020; Kinande: Baker 2003:113; San Martin Peras Mixtec : Ostrove 2018:220).

#### 4.4 Variation 6: Move following Agree

▷ Symmetrical voice languages also provide good evidence that Move is optional following Agree.

▷ In Abaza, voice morphology (e.g. *z-*) is present regardless of whether a *wh*-phrase stays in-situ or undergoes overt  $\bar{A}$ -movement (O'Herin 1993:35).

(87) *Abaza* (O'Herin 1993:45, 37)

a. Dizda kitab y-**z**-ima-m?  
who book 3si-**NSUBJ.WH**have-NEG  
'Who doesn't have a book?' (Wh-fronting)

b. S-kitab **dizda** y-na-**z**-axu?  
1s-book who 3si-PV-**NSUBJ.WH**-take  
'Who took my book?' (Wh-in-situ)

▷ The optionality also attested in western Austronesian.

▷ Languages with Austronesian-type voice display variation regarding whether or not the topic/pivot occupies a designated linear position.

#### ▷ Topic-final type

(88) *Malagasy* (Pearson 2005:389–390)

a. Mamono ny akoho amin'ny antsy **ny mpamboly**.  
AV.kill DET chicken with-DET knife **DET farmer**  
'The farmer is killing the chickens with the knife.' (AV)

b. Vonoin' ny mpamboly amin'ny antsy **ny akoho**.  
PV.kill DET farmer with-DET knife **DET chicken**  
'The chickens, the farmer is killing with the knife.' (PV)

c. Amonoan' ny mpamboly ny akoho **ny antsy**.  
CV.kill DET farmer DET chicken **DET knife**  
'The knife, the farmer is killing the chickens (with it).' (CV)

→ I assume this word order derives from topicalization followed by predicate fronting (Pearson 2001, 2018; Rackowski & Travis 2000).

▷ Topic in-situ type(89) *Paiwan* (Ferrell 1979:202)

- a. Q<m>alup a caucau tua vavuy i gadu tua vuluq.  
 <AV>hunt PIVOT man ACC pig LOC mountain OBL spear  
 ‘The man hunts wild pigs in the mountains with a spear.’ (AV)
- b. Qalup-en nua caucau a vavuy i gadu tua vuluq.  
 hunt-PV NOM man PIVOT pig LOC mountain OBL spear  
 ‘The man hunts while pigs in the mountains with a spear.’ (PV)
- c. Qalup-an nua caucau tua vavuy a gadu tua vuluq.  
 hunt-LV NOM man ACC pig PIVOT mountain OBL spear  
 ‘The man hunts while pigs in the mountains with a spear.’ (LV)
- d. Si-qalup nua caucau tua vavuy i gadu a vuluq.  
 CV-hunt NOM man ACC pig LOC mountain PIVOT spear  
 ‘The man hunts while pigs in the mountains with a spear.’ (CV)

▷ Flexible word order type

There are also languages that display flexible word order among nominals:

(90) *Puyuma* (Teng 2008:148)

- a. P<en>anguter dra dare’ na markataguin.  
 <AV>grab ID.ACC soul DEF.PIVOT couple  
 ‘The couple grabbed some soil.’ (AV)
- b. P<en>anguter na markataguin dra dare’.  
 <AV>grab DEF.PIVOT couple ID.ACC soul  
 ‘The couple grabbed some soil.’ (AV)

▷ All three types of languages display the same type of voice morphology and  $\bar{A}$ -extraction restrictions in relativization.

⊕ **Implication:** Move is not a necessary outcome of Agree with [uTOP], analogous to the optionality observed with wh-in-situ.

**5 Variation 7: Symmetrical voice and its decay**

- Well-known grammaticalization pathway: *topic*  $\gg$  *subject* (Li & Thompson; 1976; Givon 1979; Plank 1979; Mallinson & Blake 1981; Shibatani 1991; Heine & Kuteva 2004)
- ▷ **Existing claim:** Indo-European languages developed from topic-prominent languages to subject-prominent languages (Lehmann 1976)
- ⊗ Further evidence from western Austronesian: symmetrical voice evolving from a topic-indexing system into a subject-indexing system

(91) *Geographical distribution of Philippine-type and Indonesian-type voice*

- ⊗ “Indonesian-type voice” is a continuum in flux in transition from a **topic-indexing** to a **subject-indexing** voice system; namely: *topic*  $\gg$  *subject*.

(92) *Four diagnostics applied* (Patrianto & Chen 2023 a,b)

<i>A pivot phrase . . .</i>	
a. must be definite/specific	topic property
b. can surface as a reflexive theme in NAV	topic property
c. can function as a new binder in NAV	subject property
d. can be a PP adjunct in NAV	topic property





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