Rethinking Indonesian-type passives: Lessons from Javanese*

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1. Introduction

Javanese, a western Austronesian language with an Indonesian-type voice system, displays an understudied asymmetry in quantifier float (QF). When a clause is marked in actor voice (AV), a numeral quantifier (e.g., *sepolo* 'ten') can freely dislocate from its sentence-initial host and intervene between the host and aspectual auxiliary, as in (1).

(1) [____$_i$ Tonggo-ku] **sepolo**$_i$ wis nge-dol sawah.
[____ neighbour-1SG] **ten** PERF AV-sell rice.field
'Ten of my neighbors have sold rice fields.'

Where a clause is in object voice (OV), QF in the pre-auxiliary field turns unacceptable unless uttered with a special intonation, which yields a distinct reading. This is seen in (2), where dislocation of the same quantifier *sepolo* 'ten' between the fronted theme (e.g., 'ten of the rice fields') and the auxiliary *wis* yields semantic and grammatical consequences.

(2) *[____$_i$ Sawah-é] **sepolo**$_i$ wis ta'=Ø-dol. (object voice)
[____ rice.field-DEF] **ten** PERF 1SG=OV-sell
(intended: 'I have sold ten of the rice fields.')

In the so-called passive construction (3), QF in the pre-auxiliary field is also unacceptable, as in OV (2).

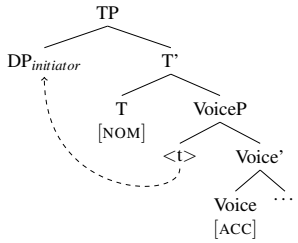
*Except where otherwise indicated, the data presented in this paper come from primary fieldwork on East Javanese (of which the first author is a native speaker), Northern Acehnese, Lowland Balinese, and Indonesian (elicited from a monolingual speaker) over the period of 2020 to 2023. We thank the following people for sharing their language with us: Awaludin Rusiandi and Anang Santosa for Javanese, Maria Anunsiata M.I. for Indonesian, Nyoman Sutrisna for Balinese, and Murhaban and Cut Ida Agustina for Acehnese. Thanks also to Bradley McDonnell, Miriam Meyerhoff, William O'Grady, Masha Polinsky, Sören Tebay, Jozina vander Klok, and Hedde Zeijlstra, as well as the audiences at NELS53, TripleAFLA, and the University of Hawai'i at Mānoa for helpful feedback.

(3) *[____$_i$ Sawah-é] **sepolo**$_i$ wis ḍi-dol ((ambè') tonggo-ku). (passive voice)
[____ rice.field-DEF] **ten** PERF PASS-sell by neighbor-1SG
(intended: 'Ten of the rice fields were sold (by her/him/my neighbour).')

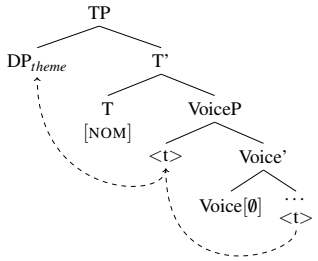
This voice-based asymmetry is surprising under the traditional split ergative approach to Indonesian-type voice, according to which the preverbal phrase in all three voices (1)–(3) invariably lands in [Spec, TP] via a single-step A-movement from the VoiceP phase edge, as in (4) (Suhandano (1994); Nurhayani (2014); Aldridge (2008); Cole et al. (2008); Legate (2014); a.o.). The additional pause present in AV constructions' pre-auxiliary field – evidenced by the QF fact in (1) – (3)is unexpected and left unexplained.

(4) The split ergative approach to Indonesian-type languages

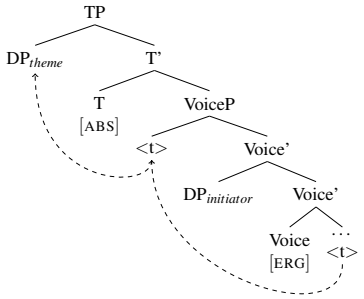
a. Actor Voice



b. Passive Voice



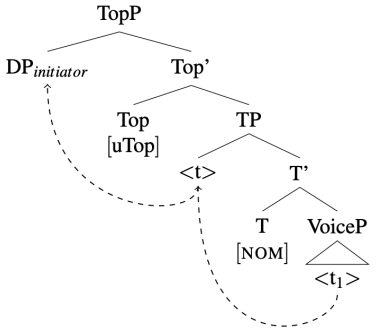
c. Object Voice



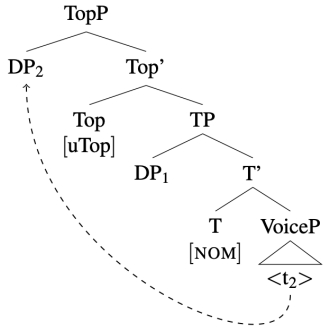
Building on this QF asymmetry, we demonstrate that an Ā-approach to Javanese voice better accounts for the various understudied asymmetries between the AV and the other two voices. Specifically, we show that the voice-based asymmetry (1)–(3) arises from subject-to-topic movement (5a), present only in subject topic constructions, the so-called Actor Voice (1). In constructions with a nonsubject topic – the so-called Object Voice (2) – QF in the pre-auxiliary field is banned because the theme topic Ā-moves directly from its postverbal θ-position (5b). Stranding in the subject position is therefore predicted to be unacceptable, exactly as shown in (2). We then present independent evidence that the so-called passive (3) is essentially an OV construction (2) with a third-person subject/agent. The fact that it patterns consistently with the OV in QF follows from this analysis.

(5) The Ā-approach to Javanese voice

a. AV (subject topic construction)



b. OV/passive (nonsubj. topic construction)



In this view, Javanese exhibits a run-of-the-mill accusative case system with obligatory topicalization in finite clauses, indexed by overt verbal morphology traditionally termed "voice," similar to Philippine-type and western Nilotic languages (Pearson (2005); Andersen (2015); Van Urk (2015); Chen (2017); a.o.). Javanese's voice system is therefore distinct from that of two neighboring languages, Acehnese and Indonesian, both of which have been analyzed as exhibiting voice-based split ergativity (e.g., Aldridge (2004); Cole et al. (2008)). We then present new data from Acehnese, Indonesian, and Balinese, demonstrating that "Indonesian-type passives" do not form a homogeneous group, and neither do their voice systems. Accordingly, the so-called "Indonesian-type voice" is best viewed as a cline of voice systems in transition from a topic-oriented to a subject-oriented system, with Javanese as a typical case of the former and Indonesian the latter. We then demonstrate that in languages with topic-oriented voice such as Javanese, the so-called passive is best analyzed as a nonsubject topic construction. This previously understudied locus of variation thus calls for a re-examination of similar constructions in other Indonesian-type languages.

The remainder of the paper is structured as follows. Section 2 outlines basic traits of Javanese voice and the main predictions of the A- vs. Ā-approach to this voice system. Section 3 presents evidence for the topic analysis of the pre-auxiliary phrase in Javanese's three voices. Section 4 puts forward further evidence that the so-called passive construction is best analyzed as involving nonsubject topicalization. Section 5 presents new comparative data from Indonesian, Acehnese, and Balinese, demonstrating an underexplored syntactic variation in the voice system of the four languages. Section 6 summarizes and concludes.

2. Javanese voice: the competing analyses

Javanese is traditionally described as possessing an Indonesian-type three-way voice system (e.g., Suhandano (1994); Ogloblin (2005); Nurhayani (2014); Robson (2014); a.o.). Voice alternation among AV (6a), OV (6b), and "passive" (6c) is exemplified below.

(6) a. **Bambang** wis **ng**-gènḍong aḍi'-é. (AV)
Bambang PERF **AV**-carry young.sibling-DEF
'Bambang has carried his little brother.'

b. **Aḍi'-é** wis ta'/mbo'/*ḍi=**Ø**-gènḍong (**aḍi'-é**). (OV)
young.sibling-3.POSS PERF 1SG/2SG/*3=**OV**-carry **y.s-3.POSS**
'I/you have carried his little brother.'

c. **Aḍi'-é** wis **ḍi**-gènḍong (**aḍi'-é**) ((ambè') Bambang). (Pass V)
y.s-3.POSS PERF **PASS/3**-carry **y.s-3.POSS** by Bambang
'S/he/Bambang have carried his little brother.'

The AV (6a) is characterized by a homorganic nasal prefix and English-style word order. The preverbal field is obligatorily filled by a DP that constitutes the *subject* in accusative languages – namely, the external argument in unergatives/transitives or the internal argument in unaccusatives. This argument follows the hanging topic (where present) and precedes aspectual auxiliary. Transitive themes must remain postverbal.

The OV (6b) features an unmarked bare verb and word order flexibility. The theme DP can either remain postverbal or surface in the pre-auxiliary field. The initiator/agent cannot surface as a full DP and is realized as a person proclitic attached to the verb; this proclitic is subject to a specific person constraint – it can only be in first or second person. Therefore, a sentence with a third-person initiator/agent cannot be constructed in OV.

The construction traditionally referred to as a passive (6c) is marked by the third-person verbal prefix *di-*, which is commonly labeled as a passive marker (Wedhawati and Arifin (2006); Robson (2014); Kraußе (2017)). To remain analysis neutral, we gloss this morpheme as 'PASS/3'. Similar to the OV, this construction also allows the theme (or any other type of nonsubject phrase, such as a PP; see 3.3) to either surface preverbally or remain postverbal. The external argument is obligatorily indexed by the third-person prefix *di-* and must be a third-person argument. This morpheme can be optionally cross-referenced by a *by*-phrase. Where the *by*-phrase is right-adjacent to the verb, the preposition can be freely omitted, as seen in (6c). In short, the OV and the so-called passive both employ specific person constraints that are in complementary distribution.

Core traits of the three voices are summarized in (7). For clarity, we use the term *pivot* hereafter to refer to the phrase eligible to surface in preverbal position in each voice.

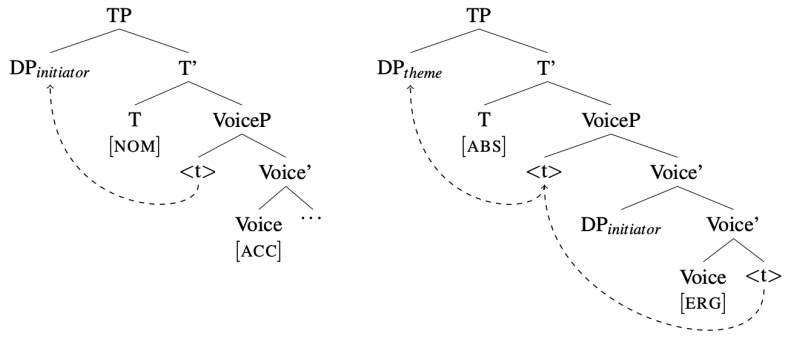
(7) Basic traits of Javanese voices

	AV	OV	Passive
voice morphology	homorganic nasal prefix	∅	(*di-*)
external argument	pre-verbal/pre-aux	1st/2nd person proclitic	3rd person verbal prefix
internal argument	postverbal	pre-verbal/pre-aux or postverbal	pre-verbal/pre-aux or postverbal

2.1 The split ergative analysis of Javanese voice (A-approach)

A central assumption of the split ergative approach to Indonesian-type voice is that voice alternation is encoded in A-syntax, with the pivot functioning as a genuine subject. The AV and the passive are assumed to be accusative-aligned, where the highest DP merges to [Spec, TP] and constitutes the nominative subject (8a). The OV is claimed to be ergative-aligned with an EPP feature on Voice, whereby the internal argument undergoes object shift across an immobile ergative DP, accesses [Spec, TP], and becomes the absolutive (8b) (e.g., Aldridge (2008); Cole et al. (2008); Legate (2014)).

(8) a. "AV" (subj. top. construction) b. "OV" (nonsubj. topic construction)

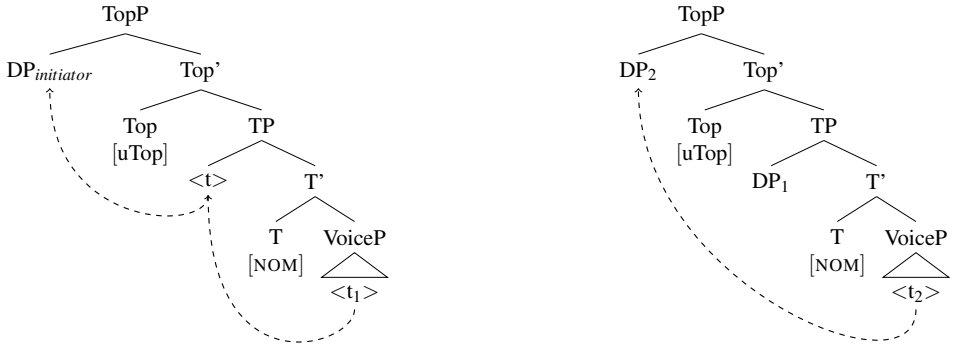


2.2 The topicalization analysis of Javanese voice (Ā-approach)

We argue instead that voice alternation in Javanese indexes topicalization, similar to Durie's (1985) approach to Acehnese. The key assumption is that the pivot in all three voices is an internal topic that Ā-moves to an Ā-position above the subject, which we label as [Spec, TopP] without committing to the cartographic approach to the A/Ā-distinction.

In this view, Javanese possesses an accusative case system with no voice-based split ergativity. We assume an ordinary subject position driven by [uD] on T, along with [uTOP] on an Ā-head, which triggers obligatory topicalization in all finite clauses. The so-called "AV" is essentially a subject topic construction where the highest DP of the clause first moves to [Spec, TP] before Ā-moving to [Spec, TopP] (9). The so-called "OV" involves a nonsubject topic that Ā-moves directly from its θ-position to [Spec, TopP], without landing in the subject position. We further argue that the alleged passive voice is essentially an OV that contains a third-person subject (which is usually an initiator/agent but may be an unaccusative theme). In this view, the obligatory person prefix in OV/passive is subject/φ-agreement on the verb. A direct implication of this analysis is that Javanese employs Philippine-type syntax, where voice alternation indexes topicalization (see, Richards (2000) for Tagalog; Pearson (2005) for Malagasy; Chen (2017) for Formosan languages). We refer to this analysis as the Ā-approach to Javanese voice.

(9) a. Subject topic construction (AV) b. Object topic construction (OV/passive)



Key assumptions of the competing analyses are summarized in (10). If the Ā-approach is on the right track, Javanese pivots should show topic and not subject properties. This predicts that the so-called "passive voice" is essentially a nonsubject topic construction with a theme topic (and not subject). We present specific evidence for this in section 3.

(10)

	A-approach to Javanese voice	Ā-approach to Javanese voice
a. Status of the pivot	subject (A-element)	topic (Ā-element)
b. Nature of voice alternation	alignment shift (acc vs. erg)	topicalization (subj vs. nonsubj)
c. Javanese's case alignment	split ergative	accusative
d. AV construction	accusative-aligned with NOM subject	accusative-aligned with NOM subject topic
e. OV construction	ergative-aligned with ABS theme	accusative-aligned with nonsubject topic
f. "Passive" construction	accusative-aligned with NOM subject	accusative-aligned with nonsubject topic

3. Javanese pivots as topics and not subjects

3.1 Definiteness/specificity constraints on pivots

Pivothood in Javanese is associated with obligatory definite/specific interpretation, a typical topic property. Regardless of linear word order, a pivot phrase must be definite-marked and would yield ungrammaticality without definite-marking. This constraint is absent on all non-pivot phrases, regardless of their thematic role or grammatical relation (11a–c).

(11) a. **Wong-*(é)** ng-guwa' tas-(é). (AV with an initiator pivot)
person-DEF AV-throw.away bag-DEF
'{The/*a} man threw {a/the} bag away.'

b. **Tas-*(é)** ta'/mbo'=Ø-guwa' **(tas-*(é))**. (OV with a theme pivot)
bag-DEF 1SG/2SG=OV-throw **bag-DEF**
'I/you have thrown away {the/*a} bag.'

c. **Lawuh-*(é)** ḍi-pangan **(kucing (iku))**. (passive with a theme pivot)
side.dish-DEF PASS/3-eat **cat** **DEM**
'{The/*a} sidedish was eaten by {that/a} cat.'

Importantly, pivothood is unique per clause. Where a ditransitive is in OV or passive, the definite/specific constraint applies only to one of the two objects (12a–b). Only the object subject to the constraint can appear preverbally; indefinite phrases must remain postverbal. This highlights pivothood's correlation with linear order (i.e., eligibility to surface preverbally) and definiteness/specificity (typical topic property).

(12) a. Nang taman, **arè' *(iku)** ta'/mbo'/ḍi-kè'-i ḍui'-(é).
PREP park **child DEM** 1SG/2SG/PASS/3-give-APPL money-DEF
'In the/a park, I/you/s/he gave {that/*a} child {the/some} money.'

b. Nang taman, **ḍui'-*(é)** ta'/mbo'/ḍi-kè'-no arè' (iku).
PREP park **money-DEF** 1SG/2SG/PASS/3-give-APPL child DEM
'In the/a park, I/you/s/he gave {that/a} child {the/*some} money.'

3.2 Binding facts

Further support for Javanese pivots as topics (Ā-elements) and not subjects (A-elements) comes from binding facts. If pivots are true subjects located in an A-position, as assumed by the split ergative approach to Javanese voice, a theme pivot should be free to constitute a new antecedent for anaphor and function as a binder (Miyagawa (2010); Van Urk (2015)), exactly as observed with the theme argument in English (13) and Acehnese passives (14). In both constructions, the theme can freely bind an anaphor embedded inside a *by*-phrase.

(13) **Medusa**$_i$ was poisoned by **herself**$_i$. (theme subject binds a *by*-phrase anaphor)

(14) **Tiep-tiep aneuk** geu-lindong **le mak droe-jih**. (Acehnese)
every child 3POL-protect **LE mother self-3FAM**
'Every child is protected by his/her mother.' (Legate (2014):15)

In Javanese, however, a theme pivot in the alleged passive cannot function as a binder and bind into a *by*-phrase (15a) and, instead, may surface as a reflexive bound by the third-person agent (which is indexed by the verbal prefix *di-* and an optional *by*-phrase) (15b).

(15) a. ***{Hero/ḍè'é}**$_i$ ḍi$_i$-jiwit-i ((ambè') awa'-é ḍéwé).
Hero/3SG PASS/3-pinch-APPL by body-3.POSS self
(Intended: 'Hero/s/he was being pinched by himself/herself.')

b. [**Awa'-é ḍéwé**]$_i$ ḍi$_i$-jiwit ((ambè') Hero).
[body-DEF self] PASS/3-pinch by Hero
'Himself/herself was pinched by him/her/Hero.'

This unexpected binding relation suggests that the *di*-construction may not be a genuine passive with a theme subject, contra the Acehnese *le*-construction (14). Importantly, the pivot in Javanese's OV also fails to function as a binder (16) and can instead surface as a reflexive (16), analogous to the observation from the so-called passive (15a–b). The same binding relation obtains in AV, which we do not include here due to space constraints.

(16) a. **Awa'-ku/mu** ta'/mbo'=Ø-lara-ni **ḍéwé** .
body-1SG/2SG 1SG/2SG=OV-hurt-APPL **self**
(Intended: 'I/you were hurt by my/yourself.')

b. **Awa'-ku/mu ḍéwé** ta'/mbo'=Ø-lara-ni.
body-1SG/2SG self 1SG/2SG=OV-hurt-APPL
'I/you hurt my/yourself.'

As the data show, voice alternation in Javanese has no impact on binding relations – which consistently follow the Thematic Hierarchy (Fillmore (1968); Larson (1988)) across all three voices. This invariable pattern follows from the topic approach to pivothood, which predicts no correlations between topicalization (voice alternation) and binding relations.[1] It also posits a direct challenge to the traditional A-approach to Javanese voice, which assumes promotion-to-pivot to be an A-operation anticipated to alter the binding relations within a clause, especially in the passive – exactly as observed in Acehnese (14).[2]

[1]Here, we exclude weakest crossover effects, which have not been observed in our data.

[2]The binding facts in OV (16) are inconclusive for evaluating the competing analyses, as ergative agents may bind absolutive objects in some ergative languages (Polinsky (2016)). However, as will be seen in section 4, new evidence from OV unaccusatives suggests that the ergative approach to OV is difficult to maintain. The take-home message here is therefore that the "OV" shows a binding relation expected for the current topicalization analysis – that voice alternation yields no change in binding relations.

3.3 PP's eligibility to constitute a pivot

The topicalization approach to pivothood assumes that the so-called "AV" involves subject topicalization and "OV/passive" nonsubject topicalization (2.2). A testable prediction is therefore that PPs should never receive pivot status in AV but should be eligible to do so in OV and "passive". This prediction is borne out by the data below – a PP in Javanese's OV and passive constructions can optionally appear in the preverbal position and conform to the definiteness/specificity constraint associated with pivothood (section 3.1). Where a PP surfaces preverbally and receives a definiteness/specificity interpretation, any theme DP must remain postverbal and need not be definite/specific. This suggests that the true pivot is the PP and not the theme, since Javanese pivothood is strictly tied to the definiteness/specificity constraint. Possible thematic role of the DP embedded under a pivot PP ranges from instrument (17a) to locative (17b), beneficiary, comitative, as well as reason (17c), demonstrating striking similarities with Philippine-type voice (see, e.g., Rackowski (2002); Chen (2017); Chen and McDonnell (2019)).

(17) PP pivots in Javanese OV/passive

a. **Ambè' hapé** ta'/mbo'/ḍi=jupu' sembarang gambar.
with cellphone 1SG/2SG/3=take any picture
'I/you/s/he took a picture with my/your/*a cellphone.'

b. **Nang omah** ta'/mbo'/ḍi=kirim surat opo aé.
to house 1SG/2SG/3=send letter what AE
'I/you/s/he sent any letter to my/your/*a house.'

c. **Gara-gara utang** ta'/mbo'/ḍi=jalu'-i ḍui' sopo aé.
because debt 1SG/2SG/3=ask.for-APPL money who AE
'I/you/s/he asked any person for money because of my/your/*some debt.'

As predicted by the current analysis, in OV/passive, a PP pivot surfaces in the linear position where DP pivots do in AV clauses, intervening between the hanging topic (which may be indefinite in Javanese) and aspectual auxiliary (e.g., *até*) (18). This reinforces the current view that the preverbal PP is a genuine pivot and not a hanging topic or an adjunct of some sort, as both are immune to the definiteness/specificity constraint.

(18) [Pirang-pirang kembang]$_{HT}$[**nang kebun** (***ndi aé**)] até
[several-RED flower] [**PREP garden which AE**] FUT
ta'/mbo'/ḍi=tandur.
1SG/2SG/PASS/3=plant
'Several flowers, in the/*any garden, I/you/she/he am going to plant (them).'

In contrast, the AV construction disallows a PP to surface in the pivot position (i.e., between a hanging topic and aspectual auxiliary), as in (19). This asymmetry follows con-

sistently from the current analysis, that the AV is a subject topic construction and should disallow a PP pivot – since a PP can not satisfy [uD] and be promoted to subject.

(19) *[Joko]$_{HT}$[nang omah-é] até m-oco buku.
Joko PREP house-DEF FUT AV-read book
(Intended: 'As for Joko, in the house (he) will be reading a book.')

PPs' eligibility to serve as a pivot in Javanese's OV and passive thus further undermines the A-approach to its voice system, which wrongly predicts that only DPs can constitute a pivot in all three voices. Crucially, the fact that PPs can function as the pivot in the *di*-marked putative passive further reinforces the conclusion from section 3.2 that the theme pivot in this construction does not behave like a genuine subject, but has a distinct syntactic status from AV pivots – which, as seen in (19), are subject to a "DP-only" constraint.

3.4 Flexibility in pivot selection

Further support for the topicalization approach to Javanese voice comes from ditransitives. Where a ditransitive is in the so-called OV or passive, either an adjunct PP or one of the two objects can freely surface between hanging topic and aspectual auxiliary and constitute the pivot. As expected, such PPs must be definite/specific (20a–c).

(20) a. [Nang warung (iku)]$_{HT}$**wong wèdo'** *(**iku**) ta'/mbo'/ḍi=kè'-i
[PREP restaurant DEM] **person female DEM** 1SG/2SG/3=give-APPL
(wong wèdo' *(iku)) [ḍui'] [nang mèjo-(é)].
person female DEM [money] [PREP table-DEF]
'In {a/the} restaurant, I/you/s/he gave {the/*a} woman {some} money on {her/a} table.'

b. [Nang warung]$_{HT}$**nang mèjo** *(**iku**) ta'/mbo'/ḍi=kè'-i ḍui' (nang
[PREP restaurant] **PREP table DEM** 1SG/2SG/3=give-APPL money PREP
mèjo *(iku)) [pirang-pirang wong wèdo'].
table DEM several-RED person female
'In{a/the} restaurant, I/you/s/he gave some women {some} money on {that/*a} table.'

c. [Nang mèjo]$_{HT}$**nang warung** *(**iku**) ta'/mbo'/ḍi=kè'-i ḍui'
PREP table **PREP restaurant DEM** 1SG/2SG/3=give-APPL money
wong wèdo' nḍi aé (nang warung *(iku)).
person female which AE PREP restaurant DEM
'On {her/a} table, I/you/s/he gave {the/a} woman {some} money in {the/*a} restaurant.'

This flexibility in pivot selection indicates that promotion-to-pivot is not subject to locality of [uD] and would not be an instance of promotion-to-subject – which must respect locality. The nonlocality in pivot selection thus further undermines the split ergative ap-

proach to Javanese voice and lends additional support to the topicalization approach, which predicts that nonsubject DPs and PPs are all eligible to serve as the topic/pivot.

4. "Passive" as nonsubject topicalization

We turn now to the structure of the putative passive. Recall that this construction shares the following similarities with OV: both allow the pivot to surface either preverbally or postverbally, and the pivot need not be a DP. In addition, both constructions exhibit a verbal affix that specifies the person number of the agent. Their structure is schematized in (21).

(21) (pivot) (auxiliary) prefix$_{\{1SG/2SG/3\}}$-V (pivot) nonpivot phrases (pivot)

We propose that both constructions contain a nonsubject topic that Ā-moves directly from its θ-position, and that the immobile verbal affix conventionally described as a proclitic is essentially subject agreement on the verb. The fact that the passive patterns consistently with the OV in quantifier stranding facts, allowing postverbal stranding and not pre-auxiliary stranding (22a–b) and contra the AV pattern (22c), follows from this analysis.

(22) a. *[___$_i$ Montor-é] **rolas**$_i$ até ta'=Ø-dandan-i. (object voice)
[___ car-DEF] **twelve** FUT 1SG=OV-fix-APPL
(intended: 'I am going to fix twelve of the cars.')

b. *[___$_i$ Montor-é] **rolas**$_i$ até ḍi-dandan-i ((ambè') konco-ku). (passive)
[___ car-DEF] **twelve** FUT 3-fix-APPL by friend-1SG.POSS
(intended: 'Twelve of the cars are going to be fixed (by him/her/my friend).')

c. [___$_i$ Konco-ku] **rolas**$_i$ ate ng-gawé layangan. (actor voice)
[___ friend-1SG] **twelve** FUT AV-make kite
'Twelve of my friends are going to make kites.'

Additional support of the current analysis comes from instances of unaccusative theme encoded as a proclitic in OV/passive. Consider (23), where a theme-like experiencer is encoded as a putative ergative proclitic in OV or passive-marked pseudo-clefts.

(23) a. Lindu sing **ta'/mbo'/ḍi**=Ø-kuatir-no.
earthquake REL **1SG/2SG/3**=OV-worry-APPL
'The thing that worries me/you is an earthquake.'

b. Udan sing **ta'/mbo'/ḍi**=mangkel-no.
rain REL **1SG/2SG/3**=irritate-APPL
'The thing that irritates me/you/her/him is the rain.'

Evidence from *wh*-constructions confirms that the theme-like experiencers encoded by the person prefix are indeed internal arguments. As seen below in (24), the stimulus of the

event can be modified by the agent-oriented adverb *meneng-meneng* 'secretly', suggesting that the experiencer is indeed a genuine internal argument.

(24) Sopo meneng-meneng sing **ta'/mbo'/di̇=**{neso/wedè}-ni?
who secretly REL **1SG/2SG/3=**{angry/fear}-APPL
'Who secretly {angered/frightened} me/you/him/her?'

The fact that an internal argument can be encoded as a person proclitic in Javanese's OV and passive thus undermines the traditional view that the proclitic is an ergative agent introduced in [Spec, VoiceP] (Aldridge (2004); Cole et al. (2008); Legate (2014)) and suggests that the morpheme is best analyzed as indexing a nominative subject – which is restricted by locality but not thematic role. We argue accordingly that this morpheme is best analyzed as an agreement affix that spells out the ϕ-features (person and number) of the subject; where the subject is in third-person, it can be optionally spelled out as a full DP encoded as a *by*-phrase, cross-referenced by subject agreement on the verb, as in (25).[3]

(25) Tahu-ne wis **di̇**-pangan ((**ambè'**) **konco-ku**).
tofu-DEF PERF **3**-eat **by** **friend-1SG**
'S/he/my friend ate the tofu.'

5. A cline of Indonesian-type voice: Insights from four languages

We have demonstrated that Javanese exhibits no voice-based split ergativity but a two-way "voice alternation" encoding subject vs. nonsubject topicalization. This conclusion raises an important subsequent question: would languages possessing a similar Indonesian-type voice system, such as Indonesian (26), fit well with the Ā-approach as well?

(26) Indonesian (Cole et al. 2008:1504–1509)

a. Tono membeli buku di toko buku. (AV)
Tono MENG-buy book LOC store book
'Tono bought a book at the bookstore.'

b. Topi ini sudah saya beli. (OV)
hat this PERF 1SG buy
'This hat has been bought by me.'

c. Kue ini di-makan ((oleh) Arna). (Passive)
cake this PASS-eat by Arna
'This cake was eaten (by Arna).'

[3] Although this adjunct must carry a preposition (*ambè'*) in modern Javanese when not immediately verb-adjacent, evidence from Old Javanese texts shows that this preposition is historically derived from the case marker *ni* (Poedjosoedarmo (2001)), which is a regular reflex of the Proto-Austronesian genitive-marking for nonpivot external arguments (Blust (2015); Chen (2017)).

New comparative data suggest the answer to be negative. Consider (27), which demonstrates an understudied variation among four voice systems known as the Indonesian-type.

(27)

	Variation among Indonesian-type voice systems			
A pivot phrase . . .	Javanese	Balinese	Acehnese	Indonesian
a. must be definite/specific	✓	✓	✗	✗
b. can surface as a reflexive in NAV	✓	✓	✗	✗
c. can bind a reflexive in NAV	✗	✗	✗	(✓)
d. can be a PP in NAV	✓	✗	✗	✗
e. allows pre-aux QF in AV	✓	✗	✗	✗
	pivots as topics (Ā elements)		pivots as subjects (A-elements)	
	Ā approach to voice		A- (split ergative) approach to voice	

As shown above, pivots in Indonesian behave fundamentally differently from those in Javanese. In line with the absence of a definiteness constraint, a theme pivot in Indonesian shows no reconstruction effects in reflexive binding, as in (28a), and can function as a new binder for anaphor (in written Indonesian), as in (28b). Both behaviors are anticipated if the pivot constitutes a genuine subject, but surprising if pivothood marks topichood.

(28) a. *__Diri-nya__ sendiri di-sakit-i oleh Rani. (Indonesian)
__body-3SG__ self PASS-hurt-APPL by Rani
(Intended: 'Herself was hurt by Rani.')

b. __Ayah-ku__ telah di-bohong-i oleh diri-nya sendiri.
__father-1S.POSS__ PERF PASS-lie-APPL by body-3SG self
'My father has been deceived by himself.'

In line with the observations above, Indonesian displays no voice-based asymmetry in pre-auxiliary QF, as seen in (29). This indicates the absence of obligatory subject-to-topic movement, reinforcing the view that pivots in Indonesian function as a true subject. This voice system thus fits well with the traditional split ergative analysis, which maintains that voice is encoded in A-syntax with pivots constituting genuine subjects.

(29) a. __Kawan-nya__ __*dua__ sudah meng-irim-i dia hadiah. (Indonesian)
__friend-3.POSS__ __2__ PERF AV-send-APPL 3SG gift
(Intended: 'Two of his friends have sent him gifts.')

b. __Sepeda-nya__ __*dua__ sudah aku per-baik-i.
__bicycle-3.POSS__ __2__ PERF 1SG CAU-good-APPL
(Intended: 'I have fixed two of his bicycles.')

While Acehnese's core syntax aligns consistently with Indonesian except for the binding pattern (27b), suggesting that it still preserves Javanese/Philippine-style syntax in its binding parameters, Balinese differs from both Javanese and Indonesian in various regards, possessing pivots showing a mix of Ā- (topic) and A- (subject) properties.

In fact, none of the four languages except written Indonesian allows a theme pivot to bind into a *by*-phrase in the putative passive, as summarized in (27b). This is distinct from English-style passives, where a theme subject can freely bind a reflexive embedded inside the *by*-phrase (e.g., *Medusa was poisoned by herself* (13)). This reveals that the so-called "Indonesian-type passives" should not be treated on par with canonical passives and calls for a closer examination of the structure of these passive-like constructions.

(30) *Si Budi ji-tipe le droe-keudroe jih. (Acehnese)
ART Budi 3-lie by self 3
(Intended: 'Budi was deceived/tricked by himself'.)

We conclude that the so-called "Indonesian-type voices" do not form a homogeneous group and should be viewed as a cline of voice systems in transition from a topic-oriented to a subject-oriented system (given that Philippine-type Austronesian languages – which are noncontroversially more retentive than the Indonesian-type, display topic-oriented voice systems (Pearson (2005); Chen and McDonnell (2019)). Finally, as this conclusion suggests, languages with an Ā-oriented voice system, such as Javanese, would not possess a genuine passive construction, but exhibit an Ā-operation (topicalization) superficially similar to passivization whenever the target of the movement is a theme (promotion-to-subject).

6. Conclusion

We have reported an underexplored syntactic variation among four languages known as the Indonesian-type. Drawing on novel data, we have first demonstrated that Javanese exhibits an Ā-oriented voice system that indexes subject vs. nonsubject topicalization, which is distinct from (and incompatible with) the existing split ergative analysis for the voice system of two neighboring languages, Acehnese and Indonesian. We then presented novel comparative evidence that the so-called "Indonesian-type passives" do not form a homogeneous group – some involve an instance of A-movement to subject, whereas others contain nonsubject topicalization, such as the putative passive in Javanese. This new locus of variation in Austronesian thus reinforces the view that surface-level typological traits – such as word order, presence or absence of voice morphology, or number of voice distinctions – are not reliable indicators of a language's underlying syntax. The current observation thus highlights the importance of approaching conventional typological classification with caution and the need to uncover potential syntactic variation in typologically similar languages.

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