

Rethinking Indonesian-type passives: Lessons from Javanese*

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Summary: lessons from Javanese . . .

- What looks like prototypical passivization (A-operation) may in fact be an instance of nonsubject topicalization (\bar{A} -operation).
 - The so-called "Indonesian-type passives" do not form a homogeneous group:
 - some constitute Indo-European-type passive (e.g., Acehnese)
 - some are instances of topicalization (e.g., Javanese)
 - Much variation exists within the so-called "Indonesian-type voice systems":
 - some display split ergativity (e.g., Acehnese, Indonesian)
 - some exhibit an accusative case system with overtly marked topicalization (e.g., Javanese).

1 The phenomenon

- Javanese (Austronesian), an Indonesian-type language with a three-way voice system, exhibits a *di*-marked construction traditionally analyzed as a passive (1).

(1) **Arè' iku** wis di-rangkul (**arè iku**) ((ambè') Joko). (PassV)
child DEM PERF PASS-hug (**child DEM**) ((PREP) Joko)
'That child was hugged by him/her(/Joko).'

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Core traits of the Javanese *di*-construction

(2) **Basic structure:** theme (AUX) *di*-V ((P) agent)_i (theme)

→ The theme:

- can freely surface before or after the verbal complex
- when preceding the verb, must also precede aspectual auxiliaries
- can cooccur with (and follow) a hanging topic

→ The agent:

- must be in third person (the passive marker *di*- is a third-person affix; we gloss it as “PASS/3” hereafter).
- can be optionally cross-referenced by a *by*-phrase (introduced by the preposition *ambe*) or a full DP (when immediately verb-adjacent).
- is always interpreted as a third-person argument regardless of the presence or absence of the *by*-phrase

1.1 The empirical starting point: Voice-based asymmetry in QF

- Unlike its active counterpart, the “passive” disallows quantifier floating in its pre-auxiliary field:

- **Actor voice** The universal quantifier *kabèh* ‘all’ can intervene between its sentence-initial host and the perfect marker *wis*:

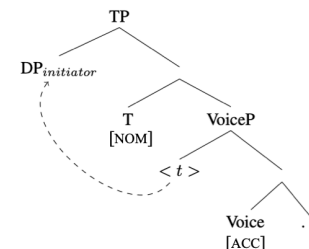
(3) [_i Konco-ku] **kabèh_iwis** m.angan tahu. (actor voice)
 [friend-1SG] **all** PERF AV.eat tofu
 ‘All my friends have eaten the tofu.’

- **Passive voice** Quantifier floating in the pre-auxiliary field is unacceptable.¹

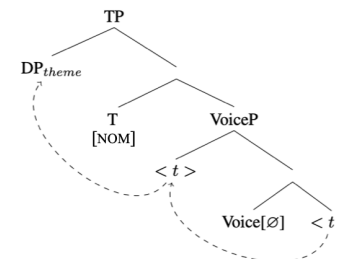
(4) *[_i Tahu-né] **kabèh_iwis** di-pangan ((ambè) konco-ku).
 [tofu-DEF **all** PERF 3/PASS-eat ((by) friend-1SG)
 (intended: ‘All the tofu were eaten (by s/he/my friend).’)

- This voice-based asymmetry is unexpected under the traditional approach to Javanese passive, according to which:
 - In both voices, the pre-aux phrase lands in [Spec, TP] via a one-step A-movement from the VoiceP phase edge:

(5) a. Actor voice



b. Passive voice



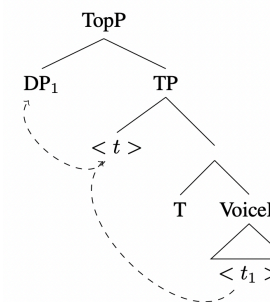
→ The additional pause in AV clauses’ pre-auxiliary field (indicated by the QF fact (3)) is unpredicted and left unexplained.

- ∞ This unexpected asymmetry calls for a re-examination of the nature of the *di*-construction and Javanese’s voice system overall.

1.2 Main claims

- An \bar{A} -approach to Javanese voice:
 - The voice-based QF asymmetry indexes a step of **subject-to-topic movement** present only in **subject topic constructions**, the “actor voice”:

(6) Claim: Javanese “actor voice” as subject topic construction

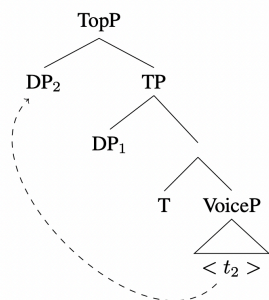


→ QF stranding in the pre-aux field (3) reflects the pause in [Spec, TP].

¹The dislocated universal quantifier *kabèh* in passive voice and object voice (6)-(7) can only be made unacceptable when pronounced with a significantly high intonation, which would derive a focal/emphatic meaning: ‘As for the tofu, ALL OF THEM, I have eaten.’ This differs significantly from (1), where dislocation of the quantifier is grammatical without any specific intonation and emphatic reading.

- In **nonsubject topic constructions**, the so-called “passive”, QF in the pre-aux field is banned because the theme topic \bar{A} -moves directly from its θ -position to [Spec, TopP]:

(7) Claim: Javanese passive as nonsubject topic construction



→ Stranding in the subject position ([Spec TP]) is predicted to be impossible, as seen exactly in (4).

- **Javanese syntax under the current view**

- accusative case alignment; overt verbal morphology indexes obligatory topicalization (subject vs. nonsubject)
 - Javanese voice is similar to western Nilotic and Philippine-type voice, which marks topicalization/ \bar{A} -agreement (Anderson 2015; van Urk 2015; Richards 2000; Pearson 2001, 2005; Chen 2017, 2021; see also Durie 1985 for Acehnese (rejected by Legate 2014).
- The so-called passive voice is essentially a nonsubject topic construction with a third-person agent:
 - *di-* is subject agreement with a 3rd-person subject.
 - The agent *by*-phrase is the spell-out of the full subject/NOM DP; the preposition historically developed from nominative-marking.
- Javanese “passive” involves no external argument demotion, distinct from Indo-European-style passive. Therefore:
 - the agent is not omissible (2).
 - the theme shows typical topic (and not subject) properties (§3).
 - the construction displays a binding pattern distinct from that of English passives (§3.2).

- ⊗ What superficially looks like Indo-European-style passivization (valency-decreasing operation) may in fact be nonsubject topicalization (\bar{A} -operation).
- ⊗ Much variation exists among “Indonesian-type passives,” some involve agent demotion (e.g., Acehnese) and some topicalization (e.g., Javanese).

2 Javanese voice basics

- Javanese is traditionally considered a typical Indonesian-type language with a three-way voice system (Suhandano 1994; Ogloblin 2005; Nurhayani 2014; Robson 2014; a.o.), as are Acehnese (Legate 2014) and Indonesian (Aldridge 2008; Cole et al. 2008).

(8) a. ACTOR VOICE

Siti wis ng-rangkul arè' iku.
Siti PERF AV-hug child DEM
 ‘Siti hugged that child.’

b. OBJECT VOICE

Arè' iku wis ta'/mbo'/*di= \emptyset -rangkul (**arè' iku**).
child DEM PERF 1SG/2SG/*3=OV-hug (**child DEM**)
 ‘I/you hugged that child.’

c. PASSIVE VOICE

Arè' iku wis di-rangkul (**arè' iku**) ((ambè') Joko).
child DEM PERF PASS/3-hug (**child DEM**) ((PREP) Joko)
 ‘S/he/Joko hugged that child.’

(9) Key traits of Javanese voices

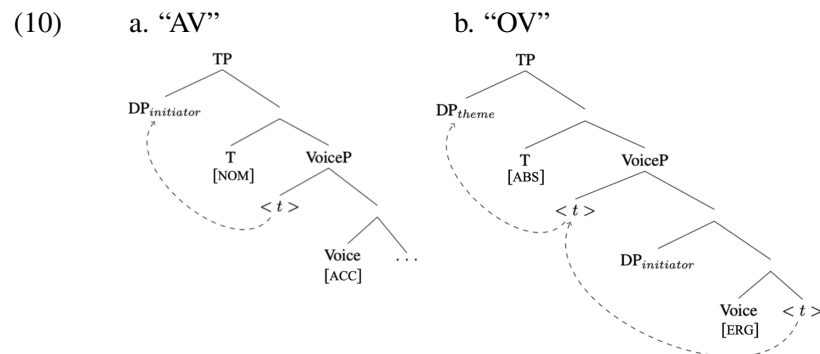
	AV	OV	Passive
voice morphology	homorganic nasal prefix	\emptyset	(<i>di-</i>)
external argument	pre-verbal/pre-aux	1st/2nd person proclitic	3rd person verbal prefix
internal argument	postverbal	flexible: pre-verbal/pre-aux or postverbal	flexible: pre-verbal/pre-aux or postverbal

Core traits of Javanese voices

- Actor voice:
 - marked by a homorganic nasal prefix
 - English-style word order: S (AUX) V O; transitive agent must be preverbal; transitive theme must stay postverbally
- Object voice:
 - The verb carries no overt voice morphology
 - The agent **can only be in 1st- or 2nd-person** and must surface as an immobile verbal proclitic (1st *ta'*; 2nd *mbo'*) and not a full DP
 - The theme can either stay postverbally or surface in the pre-verbal/aux slot
- Passive voice:
 - All three traits for OV apply, except that the agent **can only be in 3rd-person** and indexed by the 3rd-person prefix *di-*.

2.1 The split ergative approach to Javanese voice

- The traditional view: Indonesian-type voice marks case alignment split (e.g., Aldridge 2004, 2008; Cole et al. 2008; Legate 2014):
 - Actor/passive voice: nominative-accusative case alignment
 - Object voice: ergative-absolutive case alignment



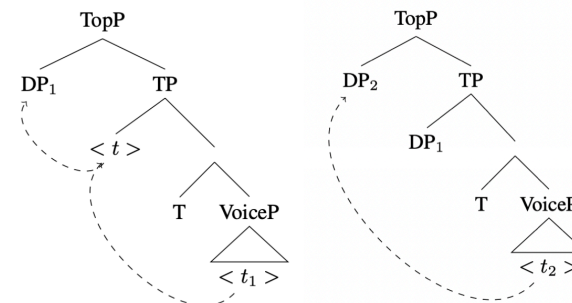
Two drawbacks of this analysis

- The person split between OV and passive (1,2 vs. 3) is left unexplained.
- The voice-based QF asymmetry is left unexplained.

2.2 The topicalization approach to Javanese voice

- Javanese voice marks subject vs. nonsubject topicalization (similar to Durie's 1985 analysis for Acehnese)
 - "Actor voice": subject topic construction
 - "Object voice": nonsubject topic construction with a 1st/2nd-person subject
 - "Passive voice": nonsubject topic construction with a 3rd-person subject

(11) a. Subject topic construction b. Object topic construction



2.3 Predictions of the competing analyses

- Hereafter, we refer to the preverbal phrase in each voice as the pivot.

Hypothesis A: The split ergative approach

- Pivots are subjects (A-elements) in [Spec, TP]
- Non-pivot external arguments are ergative DPs in [Spec, VoiceP]

Hypothesis B: The topicalization approach

- Pivots are topics (\bar{A} -elements) in [Spec, TopP] (\Rightarrow §3)
- Non-pivot external arguments are subject DPs in [Spec, TP] (\Rightarrow §4)

3 Evidence for pivots as topics (and not subjects)

- Javanese pivots show typical topic behaviors in four regards (3.1–3.4).

3.1 Definiteness/specificity constraints

- Javanese's pivothood is associated with definite/specific interpretation—a typical topic property.

→ Where a phrase is the pivot, it must be interpreted as definite/specific; this constraint is absent on all nonpivot phrases:

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

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

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

- Where an OV/passive clause contains two objects:

→ the definite/specific constraint applies only to one of the two;

→ only the one subject to the constraint can appear preverbally:

(15) Object voice

a. Nang taman, **arè**' *(**iku**) ta'/mbo'=Ø-kè'i
 PREP park **child** (**DEM**) 1SG/2SG=OV-give-APPL
 dui'-(**é**).
 money-(**DEF**)
 'In the/a park, I/you gave {that/*a} child {the/some} money.'

b. Nang taman, **dui**'-(**é**) ta'/mbo'=Ø-kè'-no arè'
 PREP park **money**-(**DEF**) 1SG/2SG=OV-give-APPL child
 (**iku**).
 (**DEM**)
 'In the/a park, I/you gave {the/a} child {the/*some} money.'

(16) Passive voice

a. Nang taman, **arè**' *(**iku**) di-kè'-i dui'-(**é**).
 PREP park **child** (**DEM**) PASS/3-give-APPL money-(**DEF**)
 'In the/a park, someone/s/he gave {that/*a} child {the/some} money.'

b. Nang taman, **dui**'-(**é**) di-kè'-no arè' (**iku**).
 PREP park **money**-(**DEF**) PASS/3-give-APPL child (**DEM**)
 'In the/a park, someone/s/he gave {that/a} child {the/*some} money.'

→ This highlights pivothood's correlation with **linear order** (i.e., ability to surface proverbially) and **definiteness/specificity**.

3.2 Binding facts

- Noncanonical binding fact (contra Indo-European-type passives):

- The theme can be bound by the agent and surface as a reflexive:

(17) [**Awa**'-**é** **déwé**]_i di_i-{gepu'/jiwit/cèt}.
[body-DEF self] PASS/3-{hit/pinch/paint}
 'Her/himself was {hit/pinched/painted} by him/her.'

- The theme cannot bind into a *by*-phrase agent:

(18) *{**AJ/dè'é**]_i di_i-jiwit-i ((ambè') awa'-**é** **déwé**).
AJ/3SG PASS/3-pinch-APPL ((by) body-DEF self)
 (Intended: 'AJ/he was being pinched by himself.')

→ This contrasts with the binding fact of canonical passives:

(19) English

Medusa_i was poisoned by **herself**_i.
 (theme subject binds into a *by*-phrase)

(20) Acehnese (Indonesian-type)

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

3.3 PP's eligibility to be a pivot

- A PP can surface as the pivot in OV/passive constructions
 - expected under the current analysis (⇒ the OV/passive constitutes non-subject topic construction)
 - unexpected under the traditional analysis (⇒ the pivots are attracted by [uD] and occupy [Spec, TP]).
 - Prediction: only DPs can function as pivots.
- Javanese PPs embedding an instrument, location, reason, benefactor, or comitative may serve as the pivot in OV/passive clauses. Such PPs:
 - must be interpreted as definite/specific
 - can surface either preverbally or postverbally, as do DP pivots
 - when present, any theme DP(s) must be postverbal and need not be definite/specific

(21) Javanese OV/passive

- Ambè' hapé** ta'/mbo'/di=jupu' sembarang gambar.
with cellphone 1SG/2SG/3=take any picture
'I/you/s/he took a picture with my/your/*a cellphone.'
- Nang omah** ta'/mbo'/di=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.'
- Gara-gara utang** ta'/mbo'/di=jalu'-i dui' 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.'
- Kanggo Joko/*arè'** ta'/mbo'/di=buka'-no lawang ndi aé.
for Joko/*child 1SG/2SG/3=open-APPL door which AE
'I/you/s/he opened any door for Joko/*a boy.'
- Ambè' Maria/*arè'** ta'/mbo'/di=resi'-i omah ndi aé.
with Maria/child 1SG/2SG/3=clean-APPL house which AE
'I/you/s/he cleaned any house with Mary/*a boy.'

- Evidence for such PPs as true pivots (and not hanging topics):
 - A hanging topic (which can be indefinite in Javanese) must precede the preverbal PP (which must be interpreted as definite/specific):

- (22) [Pirang-pirang kembang]_{HT}[**nang kebun** (***ndi aé**)
[several-RED flower] [PREP garden (**which** AE)]
ta'/mbo'/di=tandur.
1SG/2SG/3=plant
'Several flowers, in the/*any garden, I/you/she/he planted (them).'
- (23) [Pirang-pirang kembang]_{HT}[**kanggo Joko/*wong**] ta'/mbo'/di=tandur.
[several-RED flower] [PREP **Joko/man** 1SG/2SG/3=plant
'Several flowers, in the/*any garden, I/you/she/he planted (them).'

- In AV, the pivot must be a DP
 - This follows from the current analysis that the AV constitutes subject topic construction (⇒ the pivot/topic must be a subject DP)

- (24) *[Joko]_{HT}[nang omah-é] moco buku.
Joko PREP house-DEF AV.read book
(Intended: As for Joko, in the house (he) read a book.)

3.4 Flexibility in pivot selection

- ⊗ Promotion-to-pivot in Javanese is not subject to locality (!)
 - In ditransitives, either an adjunct PP or one of the two objects can freely surface in the pre-aux position (with no change in verbal morphology).
 - Promotion-to-pivot is not movement to [Spec, TP] (A-operation)
- (25) [Nang warung (iku)] **wong wèdo'** *(**iku**) ta'/mbo'/di=kè'-i
[PREP restaurant DEM] **person female DEM** 1SG/2SG/3=give-APPL
(wong wèdo' *(iku)) [dui'] [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.'

- (26) [Nang warung] **nang mènjo *(iku)** ta'/mbo'/di=kè'-i dui'
 [PREP restaurant] **PREP table DEM** 1SG/2SG/3=give-APPL money
 (nang mènjo *(iku)) [pirang-pirang wong wèdo'].
 (PREP table DEM) several-RED person female
 'In {a/the} restaurant, I/you/s/he gave some women {some} money on
 {that/*a} table.'
- (27) [Nang mènjo] **nang warung *(iku)** ta'/mbo'/di=kè'-i dui'
 PREP table **PREP restaurant DEM** 1SG/2SG/3=give-APPL money
 wong wèdo' ndi 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.'

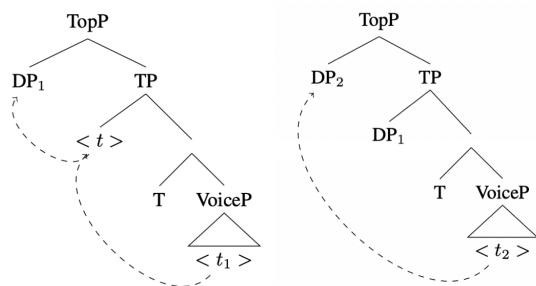
⊗ Promotion-to-pivot:

- is not subject to locality (of [uD])
- does not involve movement to [Spec, TP] (A-operation)

3.5 Asymmetry in linear flexibility

- Recall that AV pivots must be preverbal, but OV/passive pivot can either be preverbal or postverbal
- Assuming \bar{A} -movement can optionally be covert (common in western Austronesian), this follows from the current analysis:
 - \bar{A} -movement involved in AV: [Spec, TP] to [Spec, TopP] (preverbal)
 - \bar{A} -movement involved in OV/passive: θ -position to [Spec, TopP]

- (28) a. Subject topic construction b. Object topic construction



4 Evidence for Javanese's verbal prefix as subject agreement (and not ergative DPs)

- ⊗ **Proposal:** in Javanese, the highest DP of a given clause is probed by [uD] on T and merged to [Spec, TP].
 - In subject topic construction (AV), this DP further moves to [Spec, TopP] and becomes the pivot (28a)
 - In nonsubject topic construction (OV/passive), it stays in [Spec, TP] and triggers ϕ -agreement (person) on the verb (28b)
 - **Claim:** the alleged ergative proclitic in OV and the 3rd-person "passive prefix" *di-* is essentially {1st/2nd/3rd-person} subject agreement

4.1 Unaccusatives

- In OV, unaccusative themes can surface as a proclitic, as do transitive agents:

- (29) Nè' ngono **ta'/mbo'**= \emptyset -tibo nang jurang mau.
 if that.way 1SG/2SG=OV-fall P ravine Past
 'If so, I/you should have just fallen into the ravine.'

- The proclitic is not an ergative DP in [Spec, VoiceP]
- **Proposal:** the proclitic is essentially subject agreement on the verb

4.2 Experiential construction

- A theme-like experiencer can also surface as a proclitic in the OV/passive:

- (30) OV/passive
- a. Lindu sing **ta'/mbo'/di**= \emptyset -kuatir-no.
 earthquake REL 1SG/2SG/3=OV-worry-APPL
 'The thing that worries me/you is an earthquake.'
 - b. Udan sing **ta'/mbo'/di**=mangkel-no.
 rain REL 1SG/2SG/3=irritate-APPL
 'The thing that irritates me/you/her/him is the rain.'

- c. Macan sing **ta’/mbo’/di**=wedè-ni, dudu’ ulo.
 tiger REL **1SG/2SG/3**=worry-APPL NEG snake
 ‘The thing that frightens me/you/her/him is a tiger, not a snake.’

- o Placement of an agent-oriented adverb confirms that the theme-like proclitic is indeed an internal argument:

→ Consider (31), where the stimulus of the event is modified by an agent-oriented adverb *meneng-meneng* ‘secretly,’ suggesting that the experiencer is an genuine internal argument:

(31) OV/passive

- a. Sopo meneng-meneng sing **ta’/mbo’/di**=sedih-no?
 who secretly REL **1SG/2SG/3**=sad-APPL
 ‘Who secretly saddened me/you/him/her?’
- b. Sopo meneng-meneng sing **ta’/mbo’/di**=wedè-ni?
 who secretly REL **1SG/2SG/3**=affraid-APPL
 ‘Who secretly frightened me/you/him/her?’

4.3 Conclusion: Javanese passive as nonsubject topicalization

- “Voice” alternation in Javanese marks subject vs. nonsubject topicalization:

- o “Actor voice”: subject topic construction
- o “Object voice”: nonsubject topic construction with a 1st/2nd-person subj
- o “Passive voice”: nonsubject topic construction with a 3rd-person subj

→ Pivoothood is associated with topic properties

→ The 1st/2nd/3rd person prefix in the OV/passive shows distribution akin to subject agreement.

- ⊗ Quantifier floating asymmetry provides strong evidence for this:

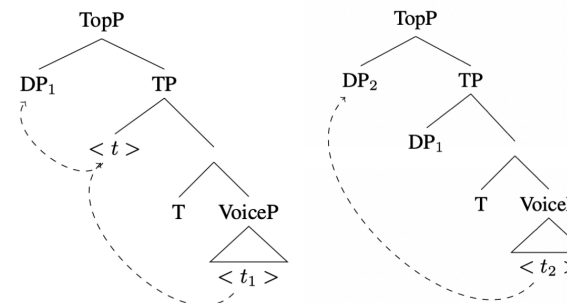
- OV (32) patterns with the passive (33) in not allowing pre-aux QF stranding, contra AV (34):

- (32) * $[__i$ Tahu-né] **kabèh_iwis** ta’=Ø-pangan. (object voice)
 $[__$ tofu-DEF] **all** PERF 1SG=OV-eat
 (intended: ‘I have eaten all the tofu.’)

- (33) * $[__i$ Tahu-né] **kabèh_iwis** di-pangan ((ambè) konco-ku).
 $[__$ tofu-DEF **all** PERF 3/PASS-eat ((by) friend-1SG)
 (intended: ‘All the tofu were eaten (by s/he/my friend).’)

- (34) $[__i$ Konco-ku] **kabèh_iwis** m.angan tahu. (actor voice)
 $[__$ friend-1SG] **all** PERF AV-eat tofu
 ‘All my friends have eaten the tofu.’

- (35) a. “AV” (subj topicalization) b. “OV/passive” (nonsubj topicalization)



- ⊗ Further evidence for the *di*-construction agent as the nominative:

Old Javanese texts show that the preposition for *by*-phrase agent historically developed from the Proto-Austronesian nominative-marking *ni*.

- (36) Old Javanese

Ujar-nika-ng-rat kabeh r-in-ngö **ni nghulun.**
 word-PART-DEF-people all PASS-hear CM **servant/1SG**

‘All of people’s words were listened by me.’ (Puspitorini 2015)

* * * * *

5 Implications: A cline of “Indonesian-type voice”

∞ **Question:** Do languages with an Indonesian-type three-way voice system form a homogeneous group in their passive structure?

Take-home message . . .

- Much variation exists within the so-called “Indonesian-type passive”
 - Some constitute Indo-European-type passives (e.g., Acehnese)
 - Some constitute nonsubject topicalization (e.g., Javanese)
- Much variation exists within the so-called “Indonesian-type voice”
 - Some involve a split ergative case system (e.g., Acehnese, Indonesian)
 - Some involve overtly marked topicalization (e.g., Javanese, Balinese).

Syntactic variation among Indonesian-type voice systems

- Indonesian, Acehnese, and Balinese all possess a three-way voice system known as “Indonesian-type”, as does Javanese. However:
 - Pivots in Indonesian and Acehnese show **subject properties**
 - Pivots in Javanese and Balinese show **topic properties**

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
a. must be definite/specific	✓	✓	✗	✗
b. creates a new binder for anaphors	✗	?	✓	✓
c. can surface as a reflexive	✓	✓	✗	?
d. can be a PP in non-AV voices	✓	?	✗	?
	topic properties		subject properties	
	Ā-approach		split ergative approach	

5.1 Definiteness/specificity constraints

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
a. must be definite/specific	✓	(✓)	✗	✗
	topic properties		subject properties	

- Javanese imposes a strict definiteness constraint on pivots (§3.1):

(37) **Wong-*(é)** ng-guwa' tas-(é). (AV; agent pivot)

person-*(DEF) AV-throw.away bag-DEF

‘{The/*a} man threw {a/the} bag away.’

(38) **Tas-*(é)** ta'mbo'=Ø-guwa' (**tas-(é)**). (OV; theme pivot)

bag-*(DEF) 1SG/2SG=OV-throw (**bag-*(DEF)**)

‘I/you have thrown away {the/*a} bag.’

(39) **Lawuh-*(é)** di-pangan (**kucing (iku)**). (Pass: theme pivot)

side.dish-*(DEF) PASS/3-eat (**cat (DEM)**)

‘{The/*a} sidedish was eaten by {that/a} cat.’

→ A PP pivot must be interpreted as definite/specific.

→ Nonpivot theme(s) must remain postverbal and need not be definite/specific.

- Balinese imposes a more relaxed definiteness constraint on pivothood:
 - Indefinite animate pivots must be introduced by an existential word
 - Animate pivots must be definite-marked; indefinite inanimate pivots are permitted.

(40) Balinese

a. *(Ada) anak ng-aukin Rani. (AV; agent pivot)

(EXST) person AV-call Rani

‘Someone called Rani.’

b. Umah a-bungkul suba adep tiang ibi. (OV; theme pivot)

house one-CLF PERF sell 1SG yesterday

‘I sold a house yesterday.’

- c. *Se-buah buku sudah di-tulis oleh-mu. (Pass: theme pivot)
 one-CLF letter PERF PASS-write by-3SG
 ‘(Intended: A book has been written by you.)’

- Indonesian pivots need not be definite/specific:

(41) Indonesian

- a. Se-seorang/seorang pria mem.anggil Rani. (AV; agent pivot)
 one-CLF/CLF man AV-call Rani
 ‘Someone/a man called Rani.’
- b. Se-buah buku di-temu-kan di sampah. (Pass; theme piv)
 one-CLF book PASS-find-APPL PREP garbage
 ‘A book was found in a rubbish bin.’
- c. Se-buah rumah sudah aku jual kemarin. (OV; theme pivot)
 one-CLF house PERF 1SG sell yesterday
 ‘I have sold a house yesterday.’

5.2 Binding pattern

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
b. creates a new binder for anaphors	✗	?	✓	✓
	topic properties		subject properties	

- *A theme pivot . . .*
 - cannot bind into a *by*-phrase agent in Javanese
 - can bind into a *by*-phrase agent in Indonesian, Balinese, and Acehnese

- (42) a. *AJ di-jiwit-i ((ambè’) awa’-é déwé). (Javanese)
 AJ PASS/3-pinch-APPL ((by) body-DEF self)
 (Intended: ‘AJ was pinched by himself.’)
- b. *Ben arè’ di-sayangi ema’-é déwé. (Javanese)
 every child PASS/3-love-APPL mother-DEF self
 (Intended: ‘Every_i child is loved by his_{j/*i} mother.’)

- c. Setiap anak di-sayang-i ibu-nya sendiri. (Indonesian)
 every child PASS-love.APPL mother-DEF self
 ✓ ‘Every_i child is loved by their_i mother.’
- d. Tiep-tiep aneuk geu-lindung le mak droe-jih. (Acehnese)
 every child 3POL-protect LE mother self-3FAM
 ✓ ‘Every_i child is protected by their_i mother.’ (Legate 2014:15)

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
b. can surface as a reflexive	✓	✓	✗	?
	topic properties		subject properties	

- *A theme pivot . . .*
 - can surface as a reflexive in Javanese and Balinese (⇒ topic)
 - cannot surface as a reflexive in Indonesian and Acehnese (⇒ subject)

- (43) a. [Awa’-é déwé]_i di_i-{gepu’/jiwit/cèt}. (Javanese)
 [body-DEF self] PASS/3-{hit/pinch/paint}
 ✓ ‘Her/himself was {hit/pinched/painted} by him/her.’
- b. Dewekne padidi sakit-ang-a ajak/teken Andra. (Balinese)
 3SG self hurt-APPL-3SG by Andra
 ✓ ‘Himself was hurt by Andra.’
- c. *Diri-nya_i sendiri di-sakit-i oleh-nya. (Indonesian)
 body-3SG alone PASS-hurt-APPL by-3SG
 (Intended: ‘Herself was hurt by her.’)

5.3 PP’s eligibility to be a pivot

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
c. can be a PP in non-AV voices	✓	?	✗	?
	topic properties		subject properties	

• *A PP . . .*

- can constitute a pivot in Javanese
- cannot constitute a pivot in Indonesian

(44) Javanese

- a. **Ambè' hapé** ta'/mbo'=jupu' sembarang gambar.
with cellphone 1SG/2SG=take any picture
 'I/you took a picture with my/your/*a cellphone.'
- b. **Nang omah** ta'/mbo'=kirim surat opo aé.
to house 1SG/2SG=send letter what AE
 'I/you sent any letter to my/your/*a house.'
- c. **Gara-gara utang** ta'/mbo'=jalu'-i dui' sopo aé.
because debt 1SG/2SG=ask.for-APPL money who AE
 'I/you asked any person for money because of my/your/*some debt.'
- d. **Kanggo Joko/*arè'** ta'/mbo'=buka'-no lawang ndi aé.
for Joko/*child 1SG/2SG=open-APPL door which AE
 'I/you/s/he opened any door for Joko/*a boy.'
- e. **Ambè' Maria/*arè'** ta'/mbo'=resi'-i omah ndi aé.
with Maria/child 1SG/2SG=clean-APPL house which AE
 'I/you/s/he cleaned any house with Mary/*a boy.'

(45) Indonesian

- a. ***Ke rumah** kau kirim sebuah sepeda.
PREP house 2SG send a bicycle
 (Intended: 'You send a bicycle to my house.')
- b. ***Karena hutang** ku-palak beberapa tetangga.
PREP debt 1SG-extort several neighbour
 (Intended: 'Because of (my) debt, I extorted some neighbours.')
- c. ***Untuk Rina** kau-beli-kan sebuah sepeda motor.
PREP Rina 2SG-buy-APPL a bicycle motor
 (Intended: 'You bought a motorcycle for Rina.')

- d. ***Dengan Maria** ku-bersih-kan beberapa rumah.
PREP Maria 1SG-clean-APPL several house
 'I cleaned several houses with Maria.'

* * * * *

⊗ **Conclusion**

Languages with the so-called "Indonesian-type voice/syntax" do not form a homogeneous group in terms of either case alignment or core syntax:

→ Indonesian and Acehnese fit well with a split ergative analysis (9a-b).

→ Javanese is best analyzed as accusative with overtly marked topicalization (10a-b).

<i>A pivot phrase . . .</i>	Variation in Indonesian-type voice			
	Javanese	Balinese	Indonesian	Acehnese
a. must be definite/specific	✓	✓	✗	✗
b. creates a new binder for anaphors	✗	?	✓	✓
c. can surface as a reflexive	✓	✓	✗	?
d. can be a PP in non-AV voices	✓	?	✗	?
	topic properties		subject properties	
	Ā-approach		split ergative approach	

References

- Aldridge, Edith. 2004. Ergativity and Word Order in Austronesian Languages. Ph.D. dissertation: Cornell University.
- Aldridge, Edith. 2008. Phase-based account of extraction in Indonesian. *Lingua* 118:1440–1469.
- Aldridge, Edith. 2012. Antipassive and ergativity in Tagalog. *Lingua* 122(3):192–203.
- Aldridge, Edith. 2017. Phi-Feature Competition: A unified approach to the Austronesian extraction restriction. In J. Kantarovich, T. Truong & O. Xherija (eds.), *Proceedings of the 52nd Meeting of the Chicago Linguistic Society (CLS 52)*.
- Anderson, Torben. 2015. Syntacticized topics in Kurmuk: A ternary voice-like system in Nilotic. *Studies in Language* 39 (3):508–554.
- Arka, I Wayan. 2003. Voice systems in the Austronesian languages of Nusantara: Typology, symmetry and Undergoer orientation. *Linguistik Indonesia* 21(1):113–39.
- Arka I Wayan and Malcolm Ross. 2005. *The many faces of Austronesian voice systems: Some New empirical studies*. Canberra: Pacific Linguist.
- Asikin-Garmager, Eli. 2017. Sasak voice. Ph.D. thesis, University of Iowa.
- Blust, Robert. 2015. The case markers of Proto-Austronesian. *Oceanic Linguistics* 54(2):436–91.
- Chen, Victoria. 2017. A reexamination of the Philippine-type voice system and its implications for Austronesian primary-level subgrouping. Ph.D. thesis: University of Hawai'i at Mānoa.
2021. Chen, Victoria. Tagalog voice as four bundles of Agree relations: Insights from binding. *Proceedings of the 38th West Coast Conference on Formal Linguistics (WCCFL 38)*, 94–104. Somerville, MA: Cascadilla Proceedings Project
- Chomsky, Noam. 1981. *Lectures on government and binding*. Dordrecht: Foris Publications.
- Chomsky, Noam. 1982. *Some concepts and consequences of the theory of government and binding*. MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, MA: MIT Press.
- Cole, Peter, Gabriella Hermon, and Yanti. 2008. Voice in Malay/Indonesian. *Lingua* 118:1500–1553.
- Davies, William. 1993. Javanese subjects and topics and psych verbs. *Linguistics* 31:239–277.
- Durie, Mark. 1985. *A grammar of Acehnese on the basis of a dialect of North Aceh*. Dordrecht: Foris.
- Himmelman, Nikolaus. 2002. Voice in Western Austronesian: An update. In F. Wouk and M. Ross (eds.), *The history and typology of Western Austronesian voice systems*, 7–15. Canberra: Pacific Linguistics.
- KrauBe, Daniel. 2017. A description of Surabayan Javanese: with special reference to its linguistic etiquette. Master Thesis, Goethe University.
- Legate, Julie. 2014. *Voice and v: Lessons from Achenese*. MIT Press.
- Miyagawa, Shigeru. 2010. *Why Agree? Why Move?* Cambridge, MA: MIT Press.
- Nomoto, Hiroki. 2022. The development of the English-type passive in Balinese. *Journal of the Humanities of Indonesia* 19(1), Article 6.
- Nurhayani, Ika. 2014. A unified account of the syntax of valence in Javanese. Ph.D. thesis, Cornell University.
- Ogoblin, Alexander. 2005. Javanese. In A. Adelaar and N. Himmelman (eds.), *The Austronesian languages of Asia and Madagascar*. London: Routledge.
- Paul, Ileana, and Diane Massam. 2021. Licensing null arguments in recipes across languages. *Journal of Linguistics* 57(4):815–839.
- Pearson, Matthew. 2001. The clause structure of Malagasy: A minimalist approach. PhD thesis, UCLA.
- Pearson, Matthew. 2005. The Malagasy subject/topic as an \bar{A} -element. *Natural Language and Linguistic Theory* 23:381–457.
- Poedjosoedarmo, Gloria R. 2002. Changes in word order and noun phrase marking from Old to modern Javanese: implications for understanding developments in western Austronesian “focus” systems. In F. Wouk and M. Ross (eds.), *The history and typology of western Austronesian voice systems*. Canberra: ANU.
- Polinsky, Maria. 2016. *Deconstructing Ergativity: Two types of ergative languages and their feature*. New York: Oxford University Press.
- Puspitorini, Dwi. 2015. Afiks Verbal Bahasa Jawa Kuno. PhD Dissertation. Jakarta: Universitas Indonesia.
- Rackowski, Andrea. 2002. The structure of Tagalog: Specificity, voice, and the distribution of Arguments. PhD dissertation, MIT.
- Rackowski, Andrea and Norvin Richards. 2005. Phase edge and extraction: A Tagalog case study. *Linguistic Inquiry* 36(4):565–99.
- Richards, Norvin. 2000. Another look at Tagalog subjects. In I. Paul, V. Phillips, and L. Travis (eds.), *Formal issues in Austronesian linguistics*, 105–16. Dordrecht, Neth.: Kluwer.

Robson, Stuart. 2014. *Javanese grammar for students*. Monash University Publishing.

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

Suhandano. 1994. Grammatical relations in Javanese: A short description. MA thesis, Australian National University.

Vander Klok, Jozina and Lisa Matthewson. 2015. Distinguishing already from perfect aspect: A case study on Javanese *wis*. *Oceanic Linguistics* 54(1):172–205.

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

Wedhawati and Sjamsul Arifin. 2006. *Tata Bahasa Jawa Mutakhir*. Penerbit Kani-sius: Yogyakarta.