

# Argument Possibilities in the Object Voice of East Javanese Indonesian

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## 1 Introduction

### 1.1 Grammatical voice

- Indonesian, like other Western Austronesian languages, possesses a **tripartite** voice system: active, passive, and object<sup>1</sup>:

(1) a. *Active voice*<sup>2</sup>

Dia sudah mem-beli buku itu  
3.SG PRF MEN-buy book DET  
“She has bought the book”

b. *di-Passive voice: optional agent*

Buku itu sudah di-beli (oleh dia)  
book DET PRF PASS-buy by 3.SG  
“The book has been bought (by her)”

c. *Object voice: obligatory pronoun agent in Standard Indonesian*

Buku itu sudah \*(dia) beli  
book DET PRF 3.SG buy  
“She has bought the book”

- Here, we focus on the object voice and observed morphosyntactic flexibilities in this configuration in East Javanese Indonesian (EJI)

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<sup>1</sup>The object voice has alternatively been termed **object preposing** (Chung 1976), **passive type two** (Dardjowidjojo 1978), **objective voice** (Arka & Manning 1998), **subjective passive** (Guilfoyle, Hung & Travis 1992), and **bare passive** (Nomoto 2020).

<sup>2</sup>Throughout this handout, I use the Leipzig Glossing Conventions for Indonesian data. I use standard orthography for data. Unless indicated otherwise, the data in this handout comes from original fieldwork.

- Standard Indonesian imposes two requirements on object voice:
  - Pronoun agent (or pronoun substitute, e.g. a kinship term)
  - Auxiliaries and negation precede agent

(1) c. Buku itu sudah dia beli  
 book DET PRF 3.SG buy  
 “She has bought the book”

- Neither of these restrictions unilaterally apply across Austronesian object voices (Nomoto 2020 for non-pronoun examples, Arka 2003 for examples of different word order patterns in Balinese object voice)

## 1.2 Introducing the Puzzle

- There appear to be flexibilities with respect to both of these characteristics in EJI:

(2) a. *Canonical object voice: pronoun agent, auxiliary-agent ordering*

Buku itu sudah aku beli  
 book DET PRF 1.SG buy  
 “I have bought the book”

b. *Pronoun agent, agent-auxiliary ordering*

Buku itu aku sudah beli  
 book DET 1.SG PRF buy  
 “I have bought the book”

c. *Non-pronoun agent, auxiliary-agent ordering*

Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy  
 “That girl has bought the book”

d. *Non-pronoun agent, agent-auxiliary ordering*

Buku itu perempuan tersebut sudah beli  
 book DET girl DEM PRF buy  
 “That girl has bought the book”

- At first glance, this distribution suggests that the EJI object voice is more flexible along both axes, compared to Standard Indonesian:

Standard Indonesian object voice		
	Auxiliary-Agent	Agent-Auxiliary
Pronoun agent	✓	X
Non-pronoun agent	X	X

East Javanese Indonesian object voice: at first glance		
	Auxiliary-Agent	Agent-Auxiliary
Pronoun agent	✓	✓
Non-pronoun agent	✓	✓

- Given the observed flexibility, and considering the typological significance of the object voice (Cole, Hermon & Yanti 2008), **what constitutes the object voice in EJI?**

- **My proposal:**

- (2) a. *Canonical object voice: pronoun agent, auxiliary-agent ordering*

Buku itu sudah aku beli  
 book DET PRF 1.SG buy

“I have bought the book”

- b. *Pronoun agent, agent-auxiliary ordering; active-voice topicalization*

Buku itu aku sudah beli  
 book DET 1.SG PRF buy

“I have bought the book”

- c. *Non-pronoun agent, auxiliary-agent ordering; active-voice topicalization and Focus movement*

Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy

“That girl has bought the book”

- d. *Non-pronoun agent, agent-auxiliary ordering; active-voice topicalization*

Buku itu perempuan tersebut sudah beli  
 book DET girl DEM PRF buy

“That girl has bought the book”

- (2c), despite having the same constituent order as (2a), is not object voice; word order is necessary but not sufficient in indicating grammatical voice in EJI
- However, some non-pronoun agents are still possible as EJI object-voice agents; the distribution cannot be solely accounted for on a categorical pronoun/non-pronoun status, but on a basis appears to take prosody into account

- What I will show:

East Javanese Indonesian object voice: revised		
	Auxiliary-Agent	Agent-Auxiliary
Pronoun agent	✓	X
Non-pronoun agent	Sometimes!	X

## 2 Findings from EJI

### 2.1 (2a) vs. (2b)/(2d): Agent-Auxiliary ordering is not object voice

- Guiding question for voice diagnosis: is the theme in Spec,TP?
- Attention here on (2a) vs. (2b); results for (2b) extend to (2d) as well
- Refresher:

(2) a. *Canonical object voice: pronoun agent, auxiliary-agent ordering*

Buku itu sudah aku beli  
 book DET PRF 1.SG buy

“I have bought the book”

b. *Pronoun agent, agent-auxiliary ordering*

Buku itu aku sudah beli  
 book DET 1.SG PRF buy

“I have bought the book”

- Indonesian is an SVO language (Chung 2007)
- EJI, like other varieties of Malay/Indonesian, permits  $\bar{A}$ -movement of the internal argument in active constructions in the absence of the *meN*- prefix:

(3) a. Apa<sub>i</sub> yang kamu (\*mem-)beli t<sub>i</sub>?

what that 2.SG (ME<sub>N</sub>-)buy

“What did you buy?”

b. Apa<sub>i</sub> yang kamu akan beli-kan t<sub>i</sub> untuk Minah?

what that 2.SG will buy-APPL for Minah

“What will you buy for Minah?”

- Intuition: (2b) looks like topicalization of an active sentence
  - And the evidence shows that this intuition holds!

• **Diagnostic 1 of 3: control** - adapting Chung's (1976) tools

– I embed the two constructions in (4) each under the same matrix clause in (5)

(4) a. *Canonical object voice: auxiliary-agent ordering*

Buku itu **bisa** **kamu** baca  
book DET can 2.SG read

"You can read the book"

b. *Pronoun agent, agent-auxiliary ordering*

Buku itu **kamu** **bisa** baca  
book DET 2.SG can read

"You can read the book"

– Standard approach to control: PRO resides in Spec,TP of the embedded clause

(5) a. Saya mem-beli buku itu [untuk **bisa** **kamu** baca]

1.SG MEN-buy book DET COMP can 2.SG read

"I buy the book for you to be able to read it"

*Context: Your friend really wants this book, but the book is too expensive for them to buy. You buy the book for them to be able to read that particular book.*

b. Saya mem-beli buku itu [untuk **kamu** **bisa** baca]

1.SG MEN-buy book DET COMP 2.SG can read

"I buy the book for you to be able to read (\*it)"

*Context: You are speaking to a young child who does not yet know how to read. You buy the book for them to be able to read in general.*

– Upshot: in (4a), the theme is indeed in Spec,TP

– In (4b), the theme is not in Spec,TP but up in the left periphery (Rizzi 1997)

– I schematize (5a) and (5b) in (6a) and (6b), respectively:

(6) a. [<sub>CP</sub> Aku beli buku itu<sub>i</sub> [<sub>CP</sub> untuk [<sub>TP</sub> PRO<sub>i</sub> T<sub>-Fin</sub> [<sub>AuxP</sub> bisa [<sub>VoiceP</sub> kamu baca t<sub>i</sub> ] ] ] ] ] ]

b. [<sub>CP</sub> Aku beli buku itu<sub>i</sub> [<sub>CP</sub> untuk [<sub>TP</sub> kamu (\*PRO<sub>i</sub>) T<sub>-Fin</sub> [<sub>AuxP</sub> bisa [<sub>VoiceP</sub> baca (\*PRO<sub>i</sub>) ] ] ] ] ] ]

- **Diagnostic 2 of 3: indefinite themes** - substituting indefinite DPs in the theme position
    - Gundel & Fretheim (2004): indefinites resist being topics
- (7) a. Sebuah buku sudah aku beli  
 CL book PRF 1.SG buy  
 "I have bought a book"
- b. \*?Sebuah buku aku sudah beli  
 CL book 1.SG PRF buy  
 \*"A book, I have bought"
- Claim: (2b) is an instance of topicalization
- **Diagnostic 3 of 3: prosody** - introducing a pause after the theme
    - Speakers report that a pause either maintains or improves the quality of sentences like (2b): BUKU ITU, aku sudah beli.
    - Weak evidence in favor of left-dislocation by topicalization, aligned with other observations on this prosody in Indonesian topicalization (e.g. Musgrave 2001)
  - Intermediate conclusion: if the agent precedes the auxiliary, then we do not have object voice but rather topicalization of an underlyingly active construction

## 2.2 (2a) vs. (2c): Auxiliary-Agent ordering does not equate to object voice

- (2a) and (2c) look to have the same constituent order
- Refresher:
 

(2) a. *Canonical object voice: pronoun agent, auxiliary-agent ordering*  
 Buku itu sudah aku beli  
 book DET PRF 1.SG buy  
 "I have bought the book"

c. *Non-pronoun agent, auxiliary-agent ordering*  
 Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy  
 "That girl has bought the book"
- I present evidence that (2c) is an instance of compound information-structural movement of an underlyingly active construction, despite having an pre-agent auxiliary
- **Diagnostic 1 of 2: prosody** - the introduction of a pause after the theme is crucial for some speakers in accepting a sentence like (2c): BUKU ITU, sudah perempuan tersebut beli, reminiscent of topicalization

- **Diagnostic 2 of 2: indefinites**

- Whereas sentences like (2a) allow for indefinite themes, sentences like (2c) are sensitive to definiteness, suggesting topicalization is at work

- (8) a. Sebuah buku akan aku beli  
 CL book will 1.SG buy  
 “I will buy a book”
- b. ?Sebuah buku akan perempuan tersebut beli  
 CL book will girl DEM buy  
 “A book, that girl will buy”

- But what about the word-order differences between (2b) and (2c)?

- (2b) has the auxiliary following the agent; the opposite holds for (2c)

- (2) b. *Pronoun agent, agent-auxiliary ordering*  
 Buku itu aku sudah beli  
 book DET 1.SG PRF buy  
 “I have bought the book”
- c. *Non-pronoun agent, auxiliary-agent ordering*  
 Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy  
 “That girl has bought the book”

- Proposal: (2c) is an instance of auxiliary fronting (Focus-movement) is occurring in addition to topicalization, a possibility brought up by Fortin (2009)
- Auxiliary fronting happening on its own in (9), in concert with topicalization in (10)

- (9) Sudah<sub>i</sub> kamu t<sub>i</sub> beli buku itu  
 PRF 2.SG buy book DET  
 “You ALREADY bought the book”  
*Context: You and your friend are at the bookstore and your friend wants to buy a book. You have already seen that book at your friend’s house.*
- (10) Surat itu<sub>i</sub>, sudah<sub>j</sub>-kah lakilaki tersebut t<sub>j</sub> tulis t<sub>i</sub>  
 letter DET PRF-FOC boy DEM write  
 “Has the boy written the letter?”

- Intermediate conclusion: if the auxiliary precedes the agent, then we do not necessarily have object voice

### 3 Toward an account of the EJI object-voice agent

#### 3.1 An exciting complication

- Section 3 suggests that constructions following object-voice word order but with non-pronoun agents are not actually object voice
- *But...* the diagnostics point to some such constructions actually being instances of the object voice!
- The criterion appears to lie in prosody: do the agent and verb in question form a sufficiently small phonological domain?

- (11) a. Sebuah buku akan aku beli beli  
 CL book will 1.SG buy  
 “I will buy a book”
- b. ?Sebuah buku akan perempuan tersebut beli  
 CL book will girl DEM buy  
 “A book, that girl will buy”
- c. Sebuah buku akan guru-ku beli  
 CL book will teacher-1.SG buy  
 “My teacher will buy a book”

- Between (11b) and (11c), we see that **some, but not all** non-pronoun agents are permissible in the object voice

#### 3.2 Accounting for the distribution of Object-Voice Agents

- Historical perspective: object and passive voice morphology may have descended from clitic agents attached to verbs (Wolff 1996)
- It then may be the case that prosodically light non-pronouns in EJI are able to cliticize onto the verb form, and this cliticization would also explain the prohibition any intervening material between agent and verb

- (12) a. \*Rumah itu akan aku besok jual  
 house DET will 1.SG tomorrow sell  
 “I will sell the house tomorrow”
- b. Rumah itu akan aku jual besok  
 house DET will 1.SG sell tomorrow  
 “I will sell the house tomorrow”



- However, we can observe a significant or complete loss of this sensitivity with prosodically heavier non-pronominal DP agents, consistent with an analysis of sentences like (2c) as not instances of object voice but rather as topicalized active sentences

(13) Rumah itu akan perempuan tersebut (?besok) jual  
 house DET will girl DEM tomorrow sell  
 “The house, that girl will sell tomorrow”

- Cliticization of an unpromoted agent to the verb is a phenomenon observed in Malagasy (Travis 2005)

- The granular, specific phonological unit remains for further work, but the results thus far motivate work in that direction, seeing as pronoun status alone cannot account for the distribution of object-voice agents:

(14) a. Sebuah buku akan [adik-ku] beli  
 CL book will younger.sibling-1.SG buy  
 “My younger sibling will buy a book”  
 b. ?Sebuah buku akan [adik saya] beli  
 CL book will younger.sibling 1.SG buy  
 “My younger sibling will buy a book”

(15) Preliminary Sketch: EJI Object-Voice Agent Criterion  
 The agent and the verb must form a sufficiently small phonological domain

- It might not be pronoun status that determines the distribution of object-voice agents but *ability to cliticize to the verb*, which could hinge on an agent being sufficiently prosodically light

## 4 Conclusion

- EJI demonstrates forms that comply with canonical object-voice word order and pronoun agent (2a) but also variations in auxiliary-agent relative ordering (2b) and in pronoun status of the agent (2c), as well as both factors at once (2d)

- (2) a. *Canonical object voice: pronoun agent, auxiliary-agent ordering*

Buku itu sudah aku beli  
 book DET PRF 1.SG buy

“I have bought the book”

- b. *Pronoun agent, agent-auxiliary ordering; active-voice topicalization*

Buku itu aku sudah beli  
 book DET 1.SG PRF buy

“I have bought the book”

- c. *Non-pronoun agent, auxiliary-agent ordering; active-voice topicalization and Focus movement*

Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy

“That girl has bought the book”

- d. *Non-pronoun agent, agent-auxiliary ordering; active-voice topicalization*

Buku itu perempuan tersebut sudah beli  
 book DET girl DEM PRF buy

“That girl has bought the book”

- I have motivated the following proposal:
    - Auxiliary-agent relative ordering is a necessary ingredient in the EJI object voice, but this ordering does not always indicate the object voice
    - The agent and verb must be able to form a sufficiently small phonological domain, perhaps for the agent to function as a clitic, in order to be part of a well-formed object-voice construction
  - Typological implications
    - Nomoto (2020) lays out an implicational hierarchy of languages and varieties in Malaysia and Indonesia according to permissible object-voice agents
- (16) 1st/2nd clitic pronouns > 3rd clitic pronouns > free pronouns > pronoun substitutes > kin terms > proper names > indefinites > definites > covert

(Nomoto 2020; 2)

- An upshot of this research: just because a variety's object voice permits a prosodically heavy, far-from-pronoun agent as in (2c) does not mean that such a construction is object voice

(2) c. *Non-pronoun agent, auxiliary-agent ordering*

Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy

"That girl has bought the book"

- Reconciling these categorical restrictions with a more nuanced prosodic account

- Looking ahead: formalizing the EJI restrictions on object-voice agents

- Bolstering diagnostic tests with quantifiers that are inherently non-topicalizable
- One ongoing exploration to account for non-pronoun agents in well-formed object voice: broader accounts of obligatory head-head adjacency and (pseudo) noun incorporation (Massam 2001 for Niuean, Pearson 2005 for Malagasy, Coon 2010 for Chol, Baker 2014 for Sakha and Tamil, Levin 2015 for Balinese)
- Levin (2015): constraints on what kinds of nominals can fit PNI could depend on language-specific constraints: e.g., whether or not PNI permits possessors
- Complication: data from EJI object voice show that some, but not all, possessors are allowed

(14) a. Sebuah buku akan [adik-ku] beli  
 CL book will younger.sibling-1.SG buy

"My younger sibling will buy a book"

b. ?Sebuah buku akan [adik saya] beli  
 CL book will younger.sibling 1.SG buy

"My younger sibling will buy a book"

- Also exploring Contiguity Theory of Richards (2016), Branan (2018): framework that relating phonological boundaries to syntactic probes and goals
- Further understanding the object-voice agent distributions in Madurese and Javanese, other languages spoken in the area

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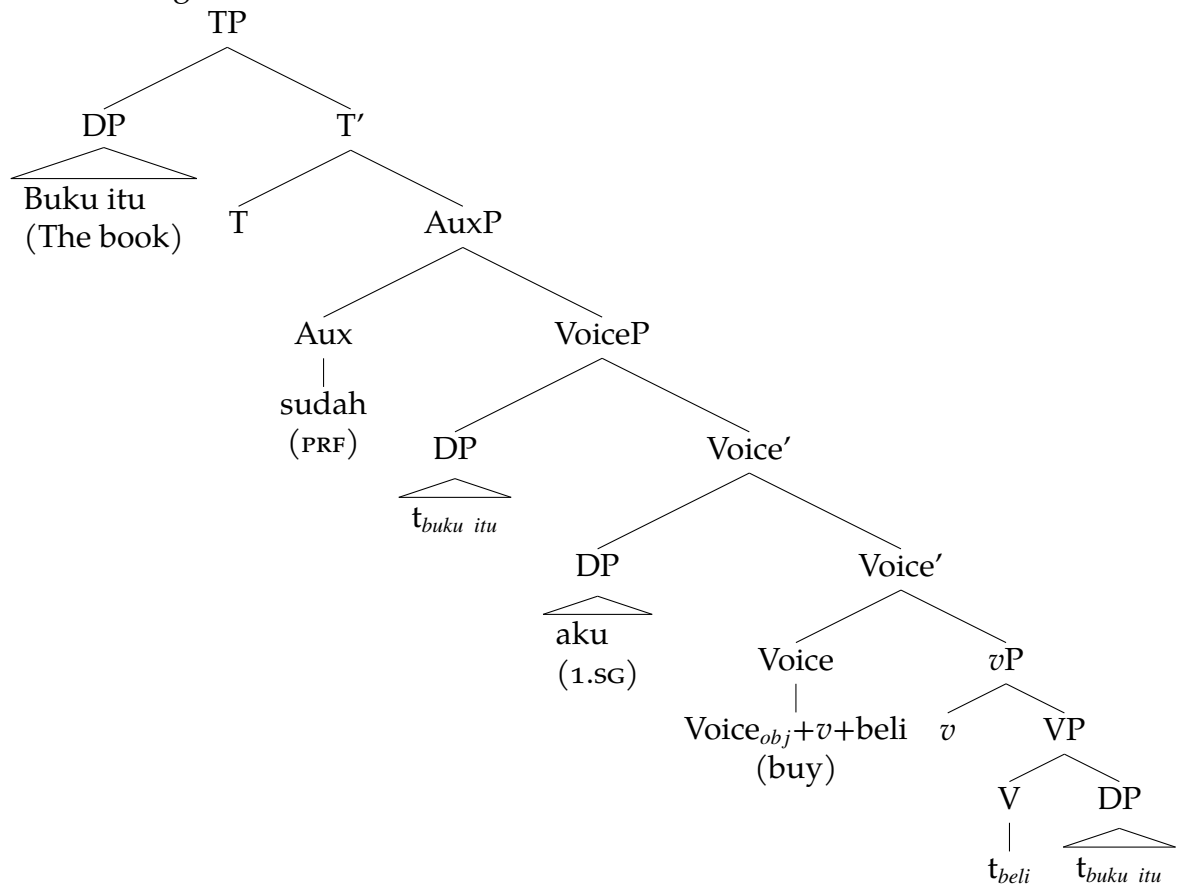
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## 7 Appendix: Derivations

- Following the standard contemporary treatment of object voice in Legate (2014), I represent the object voice as below
- Principles of the derivation:
  - The  $\text{Voice}_{obj}$  head has an  $\text{EPP}$  feature that attracts the theme argument from the complement of  $V$  up to the highest  $\text{Spec, VoiceP}$  position (Legate 2014)
  - $\text{Voice}_{obj}$  head assigns inherent Ergative case to the agent *aku* (Aldridge 2008)
  - The verb moves into  $v$  and then into  $\text{Voice}$ , following standard analyses like that of Cole, Hermon & Yanti (2008); following Legate (2014), I keep  $v$  and  $\text{Voice}$  as distinct heads with separate projections
  - The theme argument receives Nominative case from  $T$  and moves into  $\text{Spec, TP}$

- (17) Buku itu sudah aku beli  
 book DET PRF 1.SG buy  
 “I have bought the book”<sup>3</sup>



- For a sentence like (2c), replicated in (18), I have the following derivation:

<sup>3</sup>In the trees throughout this handout, I provide the a parenthesized gloss of the constituents in the tree, in the second line of the leaves containing Indonesian words.

- The Voice<sub>act</sub> head does not attract the theme up into the highest specifier position of VoiceP and does not assign inherent Ergative case to the agent, so the agent goes up to Spec,TP to satisfy the EPP and receives Nominative Case
- The theme *buku itu* has a Topic feature and is able to undergo movement out of the verbal projection to the highest specifier of the VoiceP phase before moving into the Spec,TopP position
- The auxiliary, being focussed, moves into the Focus projection

(18) Buku itu sudah perempuan tersebut beli  
 book DET PRF girl DEM buy  
 "That girl has bought the book"

