Variation in Extraction Possibilities in Malay/Indonesian
Edith Aldridge, University of Washington
aldr@uw.edu

1. Introduction

Some languages do not have C-T Inheritance.

⇒ Subjects move to [Spec, CP] for nominative case.
⇒ Objects cannot move over nominative subjects.

(1) Extraction Competition
Nominative case is valued by C.

Consequence: Movement over a subject is only possible when the subject has inherent case.

Late Archaic Chinese (5th-3rd C. BCE):

⇒ Subject movement to [Spec, CP]
⇒ No landing site for object movement

Free subject topicalization:

(2) a. 鄭伯亦惡之。 (Zuozhuan, Xi 31)
Zheng bo yi __ wu zhi.
Zheng earl also dislike 3.OBJ
‘And the Earl of Zheng also disliked him.’

b. C/TP
   <DP> C/T’
      <C/T
       zheng Bo
       C/T’
       vP
       v’
       v
       VP

Object topics are base generated high, resumed by a pronoun.

(3) 子路，人告之以有過。 (Mencius 3)
Zilu ren gao zhi yi you guo.
Zilu person tell 3.OBJ YI have error
‘Zilu, someone told him he made a mistake.’

In order to extract an internal argument, the subject has to be assigned inherent case.

⇒ Nominalized relative clause; subject with genitive case
a. 人之所畏 (Laozi 20)

\[ \text{ren zhi suo wei __} \]

\[ \text{person GEN REL fear} \]

‘what people fear’

b.

\[
\begin{array}{c}
\text{C/TP} \\
\text{OP} \\
\text{C/T’} \\
\text{C/T} \\
\text{vP} \\
\text{<OP>} \\
\text{\( v' \)} \\
\text{DP_{[GEN] ren zhi}} \\
\text{SUO} \\
\text{VP} \\
\text{V} \\
\text{<OP>}
\end{array}
\]

Loss of Extraction Competition in Early Middle Chinese (beginning 1\textsuperscript{st} C. BCE):

⇒ Loss of genitive case on subject forces learners to reanalyze erstwhile genitive subject as nominative, occupying a lower position.

⇒ Results in C-T Inheritance

**Proposal:** Same scenario for Indonesian/Malay languages

**But:** I will also break the diachronic process down into steps.

1. Loss of GEN/NOM case distinctions:
   ⇒ C-T Inheritance moves nominative case feature to T.
   ⇒ Bare verb cannot value accusative case.
   ⇒ [Spec, CP] is only available XPs not needing case.
   ⇒ Allows adjunct fronting and object relativization but not object topicalization

2. Bare verb reanalyzed as transitive:
   ⇒ Moving object values ACC with \( v \).
   ⇒ Full DP object can move to [Spec, CP]

2. Extraction Competition in Standard Indonesian

Only nominative subjects can undergo movement.

2.1. Basic facts

Standard Indonesian:

⇒ SVO basic word order
⇒ Nominative/accusative alignment
⇒ Active verbs with \( meN- \); Passive verbs with \( di- \)
Standard Indonesian


b. Buku itu di-beli (oleh Ali).
   book that PASS-buy by Ali 'The book was bought (by Ali).

A'-extraction restriction: Movement of subject

Standard Indonesian

(6) a. Siapa yang mem-beli buku-nya? (ACT SUBJ OK)
   who C ACT-give book-DEF 'Who bought the book?'

b. *Apa yang Ali mem-beli? (ACT OBJ *)
   what C Ali ACT-buy 'What did Ali buy?'

   *Apa yang di-beli (oleh) Ali? (PASS SUBJ OK)
   what C PASS-buy by Ali 'What was bought by Ali?'

Subject moves to [Spec, CP], valuing NOM; No landing site for object movement over the subject.

(7) C/TP
    DP[NOM] C/T'
        C/T vP
          <DP> v' v VP

2.2. Apparent counterexample: zero passives

Zero passives:
  ⇒ Internal argument (IA) subject
  ⇒ Pronominal external argument (EA) in immediate preverbal position
  ⇒ Bare verb stem

Standard Indonesian (Arka & Manning 1998: 3)

(8) a. Buku itu saya baca.
    book that 1SG read 'The book, I read.'

b. Buku itu ku-baca.
    book that 1SG-read 'The book, I read.'
Pronominal EA does not move to [Spec, C/TP].
⇒ [Spec, C/TP] still available for IA

Standard Indonesian (Arka & Manning 1998: 7)

(9) a. Rumah itu akan saya jual.
   house that FUT 1SG sell
   ‘The house, I will sell.’

b. *Rumah itu saya akan jual.
   house that 1SG FUT sell
   ‘The house, I will sell.’

Extraction targets IA:

Standard Indonesian (Cole & Hermon 2005: 66)

(10) [Buku [yang tidak akan kami baca __ ]] sangat menarik.
   book that not will we read very interesting
   ‘The book that will not be read by us is very interesting.’

Analysis: Zero passive as an ergative clause type:
⇒ EA receives inherent genitive case in [Spec, vP], cliticizes to V.
⇒ IA moves to [Spec, C/TP] for nominative case.

(11) C/TP
    Op[NOM] C/T'
    C/T NegP
    tidak Asp
    akan vP
    <OP> v'
    kami[GEN] v'
    v VP
    baca <OP>

Standard Indonesian pronominal case (Sneddon 1996):
⇒ Bound pronouns are cognate with GEN/ERG forms in other Austronesian languages.
⇒ Free forms are related to absolutive forms in other Austronesian languages.
(12)  | Bound | Free
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1st Person Sg.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| 1st Person Pl. (Inclusive) | --- | kita
| 1st Person Pl. (Exclusive) | --- | kami
| 2nd Person Sg. | mu | kamu, kau
| 2nd Person Pl. | --- | kalian
| 3rd Person Sg. | -nya | ia, dia
| 3rd Person Pl. | --- | mereka

2.3. SI summary

(13) Standard Indonesian Extraction Possibilities

DP\textsubscript{NOM}  \textit{meN-V\textsubscript{ACT} DP\textsubscript{ACC} …} (NOM EA can extract.)
DP\textsubscript{NOM} \textit{di-V\textsubscript{PASS} (oleh) DP\textsubscript{EA} …} (NOM IA can extract.)
DP\textsubscript{NOM} \textit{pro\textsubscript{GEN} V …} (NOM IA can extract.)

3. Challenge: Object Fronting in an Active Clause

Object movement in an active clause if active prefix \textit{meN-} is not on the verb.

\Rightarrow DP\textsubscript{SUBJ} V DP\textsubscript{OBJ} \quad \text{(OBJ can extract.)}

Bare verb stem: looks like zero passive

\Rightarrow But: EA can be full DP

Standard Indonesian \textbf{(Cole & Hermon 2005: 63)}

(14) a. [Orang yang [Ali \textit{jemput} ___]] adalah adik-nya.
person that Ali \textit{pick.up} is brother-his
‘The person that Ali picked up is his brother.’

b. [Orang yang [polisi \textit{tangkap} ___ \textit{di pasar}]]
person that police \textit{arrest} in market
\textit{telah \textit{men-curi tas}.}
\textit{already \textit{ACT-steal purse}}
‘The man that the police arrested in the market had stolen a purse.

EA can precede auxiliaries like negation and aspectual markers.

\Rightarrow EA must be in subject position.

Standard Indonesian \textbf{(Cole & Hermon 2005: 64)}

(15) a. [Buku [yang \textit{Budi} tidak akan \textit{baca} ___]] sangat menarik.
book that Budi not \textit{will read} very interesting
‘The book that Budi will not read is very interesting.’

b. [Anak [yang \textit{Wati} tidak \textit{pukul} i ___] itu \textit{men-angis}.]
child that \textit{Wati} not \textit{hit-APPL} that \textit{ACT-cry}
‘The child that Wati didn’t hit is crying.’

Ultimate proposal:

\Rightarrow Change: Reanalysis of preverbal external argument in zero passive as nominative subject.

\Rightarrow Trigger: Loss of genitive case
C-T inheritance takes place.
Subject moves to [Spec, TP] for nominative case.
Object moves to [Spec, CP]

(16) CP
    DP
    C′
    C
    TP
    DP[NOM]
    T′
    T[\textit{[u}Case\textit{]}} \triangleright vP
    \langle DP_{OBJ}\rangle \triangleright v′
    \langle DP_{NOM}\rangle \triangleright v′
v \triangleright VP \triangleright <DP_{OBJ}>

Evidence: Breakdown in case distinctions (free variation between free & bound forms)

Standard Indonesian (Arka & Manning 1998:3)
(17) a. Buku itu \textit{saya/kamu/dia} baca. (Free forms – not historically GEN)
    book that 1SG/2/3 read
    ‘The book, I/you/(s)he read.’

b. Buku itu \textit{ku-/kau-baca.} (Bound forms – historically GEN)
    book that 1SG/2-read
    ‘The book, I/you read.’

c. Buku itu di-baca-\textit{nya.} (Bound form)
    book that PASS-read-3
    ‘The book, (s)he read.’

Same with possessors:

Standard Indonesian
(18) a. rumah saya (Free form)

b. rumah -ku (Bound form)
    house 1SG
    ‘my house’

Prediction: Analysis in (16) predicts the possibility of other types of movement over a bare verb.
But: Relativization is possible but not topicalization.\(^1\)

\(^1\) This is also a problem for Sato (2008, 2012), who claims that object extraction takes place freely, but the prefix \textit{meN}- is not spelled out if the object moves.
Refining the proposal: Gradual change in the direction of (16)

1. Loss of GEN/NOM case distinctions:
   => C-T Inheritance moves nominative case feature to T.
   => Bare verb cannot value accusative case.
   => [Spec, CP] is only available XPs not needing case.
   => Allows adjunct fronting and object relativization but not object topicalization
2. Bare verb reanalyzed as transitive:
   => Moving object values ACC with v.
   => Full DP object can move to [Spec, CP]

4. Evidence for Gradual Change

Variation among Malay dialects as evidence for step-wise changes.2

4.1. Stage 1: Standard Indonesian

Active prefix required on transitive active verb:
\[
\Rightarrow \text{Active prefix in } v \text{ when } v \text{ can value ACC}
\]

Active prefix required on transitive active verb:
(21) a. Tono \textit{mem}-beli buku di toko buku.
   Tono \textit{ACT}-buy \textit{book} \textit{LOC} \textit{store} \textit{book}
   ‘Tono bought a book at the bookstore.’
   b. *Tono beli buku di toko buku.
   Tono buy \textit{book} \textit{LOC} \textit{store} \textit{book}
   ‘Tono bought a book at the bookstore.’

Active prefix \textit{meN}- is necessary to license applied object.

(22) Ali *(\textit{mem}-)beli-\textit{kan} Nuri buku. (Applied OBJ needs structural case.)
   Ali \textit{ACT-buy-APPL} Nuri \textit{book}
   ‘Ali bought Nuri a book.’

OK relativization in zero passive:

\[\text{Standard Indonesian (Cole et al. 2008: 1504)}\]

\[\text{Standard Indonesian (Cole & Hermon 2005: 64)}\]

(19) a. Anak itu tidak sedang \textit{kami} jempat.
   child that not PROG we pick.up
   ‘The child is not being picked up by us.’
   b. *Anak itu \textit{kami} tidak sedang jempat.
   child that we not PROG pick.up
   ‘The child is not being picked up by us.’

2 In addition to much of the data, the empirical generalizations are also largely based on Cole et al. (2008).
**Standard Indonesian** (Cole & Hermon 2005: 66)

(23) [Buku [yang tidak akan kami baca]] sangat menarik.
book that not will we read very interesting
‘The book that will not be read by us is very interesting.’

OK relativization in active:

**Standard Indonesian** (Cole & Hermon 2005: 64)

(24) [Buku [yang Budi tidak akan baca __ ]] sangat menarik.
book that Budi not will read very interesting
‘The book that Budi will not read is very interesting.’

OK clause-initial (topicalized) IA in zero passive but not active:

⇒ Only one specifier of C/T

**Standard Indonesian** (Cole & Hermon 2005: 64)

(25) a. Anak itu tidak sedang kami jempat. (Zero passive)
child that not PROG we pick.up
‘The child is not being picked up by us.’
b. *Anak itu kami tidak sedang jempat. (Active)
child that we not PROG pick.up
‘The child is not being picked up by us.’

**Revised analysis of active clause IA relativization:**

⇒ C-T Inheritance moves nominative case to T; subject moves to [Spec, TP].
⇒ Bare verb still cannot value case, so object cannot be full DP needing case.
⇒ Gap in relative clause is NP, does not need case.

(26) CP
    NP C’
      C TP
        DP[NOM] T’
          T[NOM] vP
            <NP> v’
              <DP[NOM]> v’
                v VP V <NP>

Supporting evidence:

⇒ Adjuncts can move over nominative subjects, because they do not need case.
Standard Indonesian (Cole et al. 2008: 1505)

(27) Mengapa Ali me-mukul Ahmad?
why Ali ACT-hit Ahmad
‘Why did Ali hit Ahmad?’

4.2. Stage 2: Mudung Darat

Mudung Darat

(28) a. Active prefix NOT required on transitive active verb
b. OK IA relativization in zero passive and active
c. OK IA topicalization in zero passive and active

Innovation: Active prefix N- not required on transitive verb:
⇒ Prefix not needed for v to value ACC

Mudung Darat (Cole et al. 2008: 1537)

(29) a. mariana meŋo? pilem ktun
Mariana N-look film cartoon
‘Mariana watches a cartoon movie.’
b. mariana teŋo? pilem ktun
Mariana look film cartoon
‘Mariana watches a cartoon movie.’

Topicalization in both zero passive and active:
⇒ C-T inheritance creates second specifier.

Mudung Darat (Cole et al. 2008: 1539)

(30) a. buku ko la kau bli
book this PFCT 2SG buy
‘You have bought this book.’
b. buku ko kau la bli
book this 2SG PFCT buy
‘You have bought this book.’
c. buku ko paʔ aku daʔ bli
book this father 1SG not buy
‘My father did not buy this book.’

Extraction in Mudung Darat active clause:
⇒ Moving object has accusative case
⇒ Object can move to [Spec, CP] because it does not need case.
5. Conclusion

Change in progress in varieties of Malay/Indonesian

Conservative varieties/languages have Extraction Competition.

(32) Extraction Competition
Nominative case is valued by C.

⇒ Only one [Spec, C/TP]
⇒ SUBJ moves for free to value case
⇒ OBJ cannot move over NOM SUBJ

Change: OBJ movement over NOM SUBJ

Stages
1. Loss of GEN/NOM case distinctions:
⇒ NOM can be inherited by T, allowing non-referential XP to move to [Spec, CP].
⇒ Bare verb cannot value case, so object cannot be referential

2. Bare verb reanalyzed as transitive:
⇒ Moving object values ACC with \( v \).
⇒ Referential object can move to [Spec, CP].

Appendix 1: Subject properties of pronominal EA in zero passive

Subject property of zero passive external arguments (EA):
⇒ EA can antecede reflexives.
Standard Indonesian (Arka & Manning 1998: 8)

(1) a. Diri-saya saya serah-kan ke polisi.
   self-1SG 1SG surrender-APPL to police
   ‘I surrendered myself to the police.’

b. Diri-nya mesti dia serah-kan ke polisi.
   self-3SG.GEN must 3SG surrender-APPL to police
   ‘(S)he must surrender herself/himself to the police.’

This patterns with active subjects, which also have the ability to bind reflexives.

Standard Indonesian (Arka & Manning 1998: 4)

(2) Saya men-ayerah-kan diri-saya ke polisi.
   1SG ACT-surrender-APPL self-1SG to police
   ‘I surrendered myself to the police.’

The full NP agent in *di*-passives cannot bind a reflexive in subject position.

Standard Indonesian (Arka & Manning 1998: 5)

(3) ?*Diri-nya di-serah-kan ke polisi oleh Amir.
   self-3SG.GEN PASS-surrender-APPL to police by 3SG
   ‘Himself was surrendered to the police by Amir.’

Another subject property of zero passive EA:
⇒ Control PRO

Standard Indonesian (Chung 1976: 90)

(4) a. ?Ahmed mereka, antyam [untuk PRO, men-akuti-nya].
   Ahmed they threaten for ACT-scare-him
   ‘Ahmed, they threatened to frighten him.’

b. ?Sendyata itu kita, buka [untuk PRO, mem-perbaik-i-nya].
   weapon that we open for ACT-repair-APPL-it
   ‘The gun, we opened to repair it.’

Appendix 2: Comparative evidence for zero passive as retention

Standard Indonesian pronominal case (Sneddon 1996):
⇒ Bound pronouns are cognate with GEN/ERG forms in other Austronesian languages.
⇒ Free forms are related to absolutive forms in other Austronesian languages.

<table>
<thead>
<tr>
<th></th>
<th>Bound</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Person Sg.</td>
<td><em>ku</em></td>
<td>saya, aku</td>
</tr>
<tr>
<td>1st Person Pl. (Inclusive)</td>
<td>---</td>
<td>kita</td>
</tr>
<tr>
<td>1st Person Pl. (Exclusive)</td>
<td>---</td>
<td>kami</td>
</tr>
<tr>
<td>2nd Person Sg.</td>
<td><em>mu</em></td>
<td>kamu, kau</td>
</tr>
<tr>
<td>2nd Person Pl.</td>
<td>---</td>
<td>kalian</td>
</tr>
<tr>
<td>3rd Person Sg.</td>
<td>-nya</td>
<td>ia, dia</td>
</tr>
<tr>
<td>3rd Person Pl.</td>
<td>---</td>
<td>mereka</td>
</tr>
</tbody>
</table>
Selayarese ergative (note resemblance to SI bound pronouns) and absolutive clitics:

(3) | ERG | ABS |
---|---|---|
1st Person Sg. | ku- | -a |
1st Person Pl. (Inclusive) | ri- | -ki |
1st Person Pl. (Exclusive) | io- | -kang |
2nd Person familiar | mu- | -ko |
2nd Person honorific | ri- | -kang |
3rd Person | la- | -i |

SI Zero passives are reminiscent of transitive clauses in more conservative Indonesian languages.

⇒ Ergative proclitic, absolutive enclitic agreement markers

Selayarese (Finer 1997: 679-80)

(4) a. la-keoʔ-a i Basoʔ  
   3-call-1SG HUM Baso  
   ‘Baso called me.’

b. ku-keoʔ-ko  
   1SG-call-2SG  
   ‘I called you.’

c. ak-kelong-ko  
   INTR-sing-2SG  
   ‘You sang.’

Objects can be extracted over ergative clitics.

Selayarese (Finer 1997: 688)

(5) a. la-taro-i doeʔ-iŋjo i Basoʔ ri lamari  
   3-put-3 money-the HUM Baso in cupboard  
   ‘Baso put the money in a cupboard.’

b. doeʔ-iŋjo la-taro i Basoʔ ri lamari  
   money-the 3-put HUM Baso in cupboard  
   ‘Baso put the money in a cupboard.’

More resemblances in Tagalog:

(6) | GEN/ERG | NOM/ABS |
---|---|---|
1st Person Sg. | ko | ako |
1st Person Pl. (Inclusive) | natin | tayo |
1st Person Pl. (Exclusive) | namin | kami |
2nd Person Sg. | mo | ka, ikaw |
2nd Person Pl. | ninyo | kayo |
3rd Person Sg. | niya | siya |
3rd Person Pl. | nila | siла |

(7) | GEN/ERG | NOM/ABS |
---|---|---|
Common noun | nang | ang |
Proper name | ni | si |
Tagalog is a VSO language with ergative alignment.

**Tagalog ergative alignment**

(8) a. D<um>ating ang babae. (Intransitive)
   <INTR.PRV>arrive NOM woman
   ‘The woman arrived.’

b. B<in>ili nang babae ang isda. (Transitive)
   <TR.PRV>-buy GEN woman NOM fish
   ‘The woman bought the fish.’

Only the absolutive (nominative) DP can undergo extraction (syntactic ergativity).

⇒ Inherent ergative (genitive) case on EA allows IA to undergo Agree with C/T, value NOM, and move to [Spec, C/TP].

Direct object extracts in transitive clause, but not external argument

(9) a. isda-ng b<in>ili nang babae (Transitive object: OK)
   fish-LK <TR.PRV>buy GEN woman
   ‘fish that the woman bought’

b. *babae-ng b<in>ili ang isda (Transitive subject: *)
   woman-ng <TR.PRV>buy NOM fish
   ‘woman who bought the fish’

Subject extracts in intransitive/antipassive clause, but not object

(10) a. B<um>ili ang babae nang isda. (Antipassive clause)
    <INTR.PRV>buy NOM woman GEN fish
    ‘The woman bought a fish.’

b. babae-ng b<um>ili nang isda (Intransitive subject: OK)
   woman-LK <INTR.PRV>buy GEN fish
   ‘woman who bought a/the fish’

c. *isda-ng b<um>ili ang babae (AP object: *)
   fish-LK <INTR.PRV>buy NOM woman
   ‘fish that the woman bought’

**Point:** Standard Indonesian zero passives involve movement of a nominative IA over genitive EA.

**References**


