

# Mouse in Mandar\*

Dan; *ddbrodki@ucsc.edu*

October 16, 2020

## 1 First Puzzle: Extraction Constraints in Austronesian and Beyond

### 1.1 Austronesian Basics

- AUSTRONESIAN: family of 1,200 languages spoken across Taiwan, the Philippines, Indonesia, and the Pacific (Blust 2013)
- TYPOLOGICAL FOCUS: ‘Philippine-Type’ languages (Ross 2002)
  - Geographically: the languages of Taiwan, the Philippines, certain parts of Indonesia
  - Not a genetic unit; various primary branches of both AN and WESTERN MALAYO-POLYNESIAN (Smith 2018)
- The VOICE system:
  - The syntactic ‘subject’ of the clause can originate in any core thematic position.
    - \* External argument, internal argument, benefactor, location, instrument (Chen 2017)
  - This argument shows various ‘special’ morphological properties:
    - \* Triggers distinct verbal morphology (Across the family)
    - \* Special case-marking (The Philippines, Taiwan; rare elsewhere)
    - \* Special agreement (Sulawesi)

#### (1) *Austronesian Voice Alternations*

*Tagalog*

- a. K-**um**-ain ng daga sa pinggan para sa aso **ang pusa**.  
AV-eat GEN rat OBL plate for PBL dog NOM cat  
‘The cat ate a rat on a plate for the dog.’
- b. Kinain-Ø ng pusa **ang daga** sa pinggan para sa aso.  
ate-PV GEN cat NOM rat OBL plate for PBL dog  
‘The rat was eaten by a cat on a plate for the dog.’
- c. Kinain-an ng pusa ng daga **ang pinggan** para sa aso.  
ate-LV GEN cat GEN rat NOM plate for PBL dog  
‘The plate was rat-eaten on by a cat for the dog.’
- d. I-kinain ng pusa ng daga sa pinggan **ang** aso.  
CV-ate GEN cat GEN rat OBL plate NOM dog  
‘The dog was rat-eaten for on a plate by a cat.’

Kaufman 2009:2

---

\*Deep gratitude to Jupri Talib and Nabila Haruna for their generosity in helping this project along. Special thanks to Sandy Chung for guidance throughout and to Judith Aissen, Kenyon Branan, Mitcho Erlewine, Dan Kaufman, Tyler Lemon, Jed Pizarro-Guevara, Justin Royer, Carly Sommerlot, Tamisha Tan, Maziar Toosarvandani, Erik Zyman, and the audiences at AFLA 27 and WLMA for discussion. All errors are mine.

- Previous Approaches
  1. CASE-AGREEMENT (Chung 1998, Rackowski & Richards 2005, Chen 2017)
    - Voice indexes case-features of the subject (not thematic roles: Rackowski 2002)
    - Spells out agreement located on: *c* (Chung), *τ* (R&R), or *v*, *appl*, or a combination of all of these (Chen)
  2. NOMINALIZATION (Starosta, Pawley & Reid 1982; Kaufman 2009)
    - The modern voice markers historically derive from nominalizing morphology used in embedded clauses.
    - Synchronically still true: ‘voice markers’ are really thematic nominalizers (cf. English *-er*, *-ee*)
    - Verbal clauses are really copular; ‘it was stol-**en**’ is really ‘it was a steal-**ee**’.
  3. ERGATIVITY (Payne 1982; Aldridge 2004 *et. seq*)
    - Austronesian languages really just ergative; additional voices involve applicatives (Aldridge 2004)
    - PATIENT VOICE: The apparent ‘passive’ is just the basic transitive; agent not demoted.
    - AGENT VOICE: The ‘active’ is really an antipassive; the object is demoted or incorporated.
- Universal agreement: the subject is the structurally ‘highest’ argument in the clause.

## 1.2 The Extraction Constraint

- FAMILY-LEVEL RESTRICTION: the subject *alone* can undergo A’-extraction.
  - Wh-movement, clefting, and relativization only available to the argument singled out by voice.
  - Non-subjects cannot undergo any of these processes.

### (2) *The Austronesian Extraction Restriction*

*Tagalog*

- |  |   |
|--|---|
| <p>a. Sino ang b-<b>um</b>-ili ng tela?<br/>         who ABS AV-buy GEN cloth<br/>         ‘Who bought the cloth?’</p> <p>b. *Sino ang <b>binili-Ø</b> ang tela?<br/>         who ABS buy-PV NOM cloth<br/>         INT: ‘Who was it bought by?’</p> | <p>c. Ano ang <b>binili-Ø</b> ng babae?<br/>         what ABS buy-PV GEN woman<br/>         ‘What was bought by the woman?’</p> <p>d. *Ano ang b-<b>um</b>-ili <b>ang</b> babae?<br/>         what ABS AV-buy NOM woman<br/>         INT: ‘What did the woman buy?’</p> |
|--|---|

- Mandar (South Sulawesi): fewer voices; same restriction
  - Mandar (South Sulawesi): two-way contrast between TRANSITIVE and ANTIPASSIVE voices.
  - Subject: identified by ABS agreement; no case-marking or special linear position.
  - Restriction: only the transitive object and antipassive subject can undergo extraction.

### (3) *Mandar Transitive*

- |   |  |   |
|---|--|---|
| <p>a. <i>Transitive Frame:</i><br/>         Tattaq=<b>o</b> <b>na</b>-itai<br/>         ASP=2.ABS 3.ERG-look.for<br/>         kamaq.<br/>         dad<br/>         ‘Dad’s still looking for you.’</p> | <p>b. <i>o-Extraction:</i><br/> <b>Iqo</b> tattaq <b>na</b>-itai<br/>         you ASP 3A-look.for<br/>         kamaq.<br/>         dad<br/>         ‘Dad’s still looking for you.’</p> | <p>c. <i>A-Extraction:</i><br/>         *<b>Kamaq</b> tattaq=<b>o</b><br/>         dad ASP=2.ABS<br/> <b>na</b>-itai.<br/>         3.ERG-look.for<br/>         ‘Dad’s still looking for you.’</p> |
|---|--|---|

### (4) *Mandar Antipassive*

<p>a. <i>Antipassive Frame:</i>  <b>Mat-tappas=aq</b>  ANTIP-wash=1.ABS  carecare.  clothes  ‘I’m washing clothes.’</p>	<p>b. <i>A-Extraction:</i>  <b>Yau mat-tappas carecare.</b>  i ANTIP-wash clothes  ‘I’m washing clothes.’</p>	<p><b>*Carecare</b>  clothes  <b>mat-tappas=aq.</b>  ANTIP-wash-1.ABS    INT: ‘I’m washing clothes.’</p>
---	---	--

- The first half of this restriction parallels ergative extraction constraints cross-linguistically (Aissen 2017).
  - Many languages restrict the extraction of transitive agents (Dixon 1994, Manning 1996, Deal 2016)
  - Mayan: the ergative cannot undergo WH-movement, relativization, or clefting (Larsen & Norman 1979).
  - REPAIR: Ergative extraction requires special ‘AGENT FOCUS’ morphology on the verb

(5) *Q’anjob’al: Extraction ok for S, O; not A* *Coon et al 2014:28-29*

<p>a. <b>Maktxel</b> max way-i?  who ASP sleep-ITV  ‘Who slept?’</p>	<p>‘Who did she see?’</p>	<p>INT: ‘Who saw you?’</p>
<p>b. <b>Maktxel</b> max y-il-a’?  who ASP 3A-see-TV</p>	<p>c. <b>*Maktxel</b> max-ach  who ASP-2B  y-il-a’?  3A-see-TV</p>	

(6) *Q’anjob’al: Ergative Extraction forces Agent Focus* *Coon et al. 2014:30*

<p>a. Maktxel max-ach il-on-i?  who ASP-2B see-AF-TV    ‘Who saw you?’</p>	<p>b. <b>Ix ix</b> max-ach  D woman ASP-2B  il-on-i.  see-AF-TV  ‘The woman who saw you’</p>	<p>c. <b>A ix Malin</b> max-ach iloni.  F D NAME ASP-2B see.AF  ‘it was Maria that saw you.’</p>
--	--	--

- QUESTION 1: Where does the extraction constraint come from?

### 1.3 Ergative Extraction: Previous Approaches

- The constraint against ergative extraction has been explained in three ways:

#### 1. THE ACCESSIBILITY APPROACH

- SUMMARY: ergative arguments cannot extract because they are invisible to the relevant probes.
  - Displacement parasitic on AGREE (Chomsky 2000); extraction possible *iff* a probe can target a DP.
  - Probes permit CASE-DISCRIMINATION; only agree with goals bearing certain cases (Bobaljik 2008).
  - ERGATIVE case frequently inaccessible (Otsuka 2006); ergatives invisible to key probes (Deal 2016).
  - RESULT: Extraction probes which discriminate for CASE cannot target ergative arguments.

(7) *The Accessibility Hierarchy* *Moravcsik 1974, Bobaljik 2008*

UNMARKED CASE > DEPENDENT CASE > LEXICAL/OBLIQUE CASE  
NOM, ABS > ACC, ERG > DAT, INST, COM

(8) *The Accessibility Approach:*

EECS arise when A’-probes can only target unmarked cases.

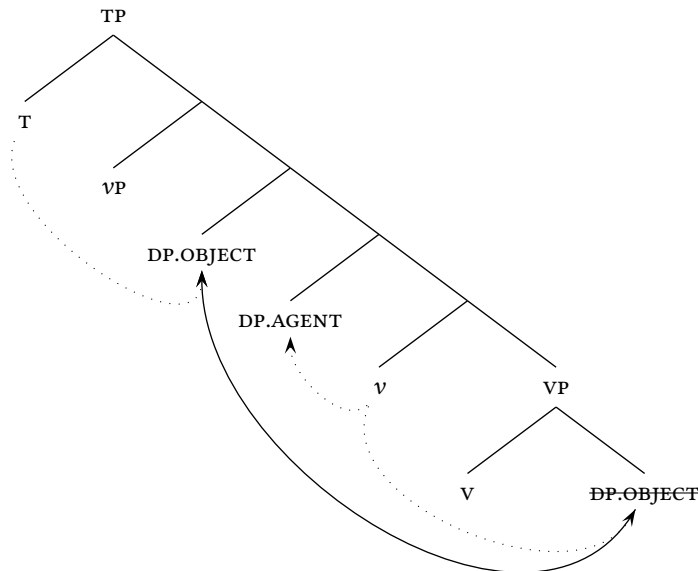
*Otsuka 2006, Deal 2016*

- ALTERNATIVE: ergative arguments embedded in (covert) prepositional phrases (Polinsky 2018)
  - RESULT: no ergative movement in constructions which ban PP-movement or P-stranding.

## 2. THE LICENSING APPROACH

- SUMMARY: Ergative extraction creates a fatal case-licensing problem.
  - STARTING POINT: Nominal arguments must interact with a probe to be licensed (Vergnaud 1977).
    - \* Typically: ERGATIVES licensed via AGREE with  $v^0$ ; ABSOLUTIVES via AGREE with T (Ordenez 1995)
    - \* RESULT: the object has to undergo movement above the subject to be LICENSED.

### (9) Licensing Schema: Object Moves to Interact with T



- EEC: object movement creates a LOCALITY problem which blocks ergative extraction.
  - A'-probes sensitive to intervention-based locality; attract only the closest thing (Rizzi 1990)
  - Syntactic Ergativity: arises when A'-probes are 'relativized to D' (Aldridge 2004)

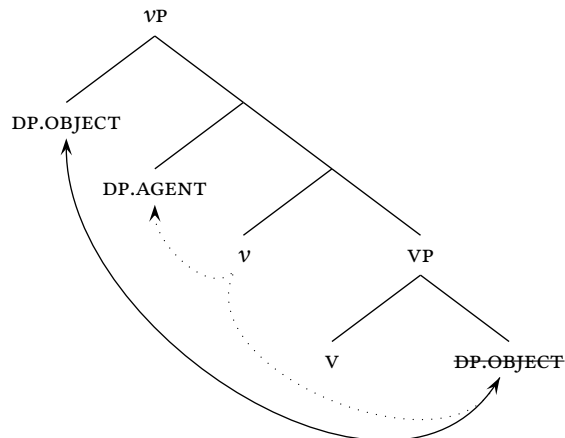
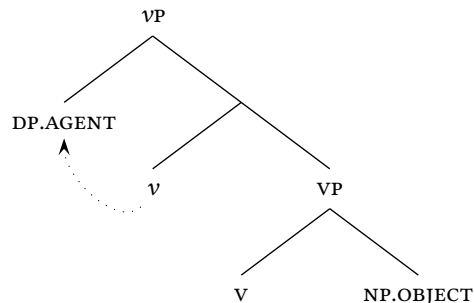
### (10) The Licensing Approach: Two Ingredients

- a. RELATIVIZED MINIMALITY: the probe on C can only interact with the highest DP. *Aldridge 2004*
- b. CASE-DRIVEN MOVEMENT: the object must shift to a position above the agent to be LICENSED.

- RESULT: Ergative extraction can only proceed in a configuration where the object remains low.
  - The ergative has to remain structurally above the object to be targeted by probes on c.
  - BUT: this configuration does not allow the object to receive CASE; cannot be licensed.
  - This licensing failure rules out the derivation entirely; impossible for the ergative to remain high.

## 3. The Intervention Approach

- SUMMARY: the EEC arises through intervention-based locality constraints alone.
  - Ergative extraction problematic for the same two reasons stated above:
    - (a) RELATIVIZED MINIMALITY: the probe on c can only interact with the highest DP. *Aldridge 2004*
    - (b) OBJECT SHIFT: the object moves to a position above the agent.
- HOWEVER: The locality problem arises for reasons independent of case.
  - Ergative languages show diverse strategies for object-licensing (Legate 2002, 2008, Aldridge 2004).
  - Certain objects still move to a position above the agent- but this step has nothing to do with case.
  - INSTEAD: Object shift forced by a ban on definite objects within the vp (Diesing 1992)
  - RESULT: DP objects invariably stand above the agent in certain ergative languages.

(11) *The Locality Approach: DP Objects generally Shift*a. *DP Objects; Shift, force EEC*b. *NP Objects: No Shift, No EEC*

## 4. CRITICAL REVIEW:

## (a) The Accessibility Approach:

- SUMMARY: The EEC reduces to some inherent problem with ergative arguments.
- No syntactic explanation; the ergative extraction constraint delinked from case and locality.
- RESULT: regardless of configuration, ergative arguments should *never* be able to extract.
- PROBLEM: obviously not true in e.g. Mayan languages; lacks explanatory insight.

## (b) The Licensing Approach:

- SUMMARY: The EEC comes down to a problem with case-licensing the object.
- RESULT: if the object can be licensed in some other way, ergatives should be able to extract.
- PROBLEM: looks wrong for Mayan; O-licensing available with ergative extraction (Coon et al. 2020)

## (c) The Pure Locality Approach:

- SUMMARY: The EEC comes down to the presence or absence of general object shift.
- RESULT: constructions where the object does not shift should permit ergative extraction.

## 1.4 Austronesian Extraction: A Critical Review

- The Austronesian lit. generally presupposes the locality approach to explain the restriction (Aldridge 2004).
  - Exception: Erlewine (2017); the Mitchoverse espouses the licensing approach; flirts with antilocality.
  - Cf. Chung (1998) & related approaches: voice is in c; voice selection triggered by extraction.
- General properties of Austronesian languages make other approaches difficult to maintain.
  - Licensing: objects regularly receive default (genitive) case alongside ergative arguments (1)
  - Discrimination: not just ergatives which can't extract; all obliques generally cannot.
- The transitive-antipassive split can be understood through object shift (Rackowski 2002)
  - Antipassive objects must be NPs; cannot be DPs or pronouns: 12
  - Antipassive objects take obligatory low scope; cannot bind floated quantifiers: 13-14
  - Antipassive objects cannot trigger agreement: 15.
  - This cluster of properties can be derived from a ban on object shift in the antipassive.

(12) *Antipassive verbs take NP Objects; Transitive verbs take DP Objects*

- a. <sup>2</sup>\***Na-/Mas**-saka=pa=i bau.  
3.PV/AV-catch=yet=3 fish  
'He's still catching fish.'
- b. **Na**-cinnuq=bando=o **iqo**?  
3.PV-kiss=REALLY=2 you  
'Did he really kiss you?'

(13) *Antipassive objects cannot be DPS; must scope low.*

- a. Indang=aq **mam**-baluq balenga genaq.  
NEG=1 AV-sell rice.cooker earlier  
OK: 'I didn't sell any rice cookers earlier.'  
NOT: 'There was one specific rice cooker..'
- b. \***Mac**-cinnuq=bandi=i **iqo**?  
AV-kiss=REALLY=3 you  
Int: 'Did he really kiss you?'

(14) *Antipassive objects cannot bind Quantifiers*

- a. **Na**-oloqi=**nasang**=i iting k-drama.  
3.PV-like=all=3 that k-drama  
'She likes all those k-dramas.' TRANS: O  
Not: they all like that k-drama.' \*AGENT
- b. **Mat**-tinroq=**nasang**=i posa-u balao.  
AV-chase=all=3 cat-1 mouse  
'My cats are all chasing mice.' ANTIP: A  
Not: 'my cat chases all mice.' \*OBJECT

(15) *Antipassive objects cannot trigger Agreement*

- a. Indang=**aq**=tuq yau **m**-eloq!  
NEG=1=EMPH I AV-want  
'I don't want to!' Pelenkahu et al. 1987: 2.14
- b. Iqda=**aq** **mu**-pessangi.  
NEG=1 2.PV-care.for  
'You don't care for me.' Muthalib & Sangi 1991: A362
- c. \***Maq**-itai(=aq)=**i** yau posa.  
AV-look.for=1=3 I cat  
INT: 'I'm looking for a cat.'

- Binding patterns support the story.
  - The locality approach holds that transitive clauses require object shift to a position above the agent.
  - Mandarin: the transitive object can bind into the agent; the agent behaves like an absolutive object.
  - Identical patterns reported across Indonesia (Balinese: Arka; Batak: Cole & Hermon 2008)

(16) *Transitive objects bind ergative anaphors*

- a. Na-ita **alawe-na** i=Adi di=jaramming.  
3.ERG-see self-3.GEN PRS=N GP=mirror  
'Himself saw Adi in the mirror.'
- b. I=Adi na-ita **alawe-na** di=jaramming.  
PRS=NAME 3.ERG-see self-3.GEN GP=mirror  
'Himself saw ADI in the mirror.'

## 1.5 Interim Conclusions

- Mandarin/Austronesian shows an extraction restriction like the ERGATIVE EXTRACTION CONSTRAINT (Aissen 2017)
- Locality seems like the right way to explain it: only the structurally highest argument can extract.
- Open question: what about transitive clauses where object shift should apply?

## 2 Agent Extraction: the Repair

### 2.1 Mayan: Agent Focus

- Mayan languages have a special way to circumvent the extraction constraint (6).
- AGENT FOCUS: lets the transitive agent extract over the object in WH-questions, clefts...

- PREVIOUS APPROACHES:
  - LICENSING WORLD: the AF suffix allows the object to be case-licensed low (Coon et al. 2014)
  - FUNCTIONAL ALTERNATIVE: AF morpheme disambiguates alignment (Stiebels 2006)
- AGENT FOCUS AND INTERVENTION:
  - Only one way to circumvent the EEC in the intervention world: keep the agent highest.
  - RESULT: the AF construction *must* allow the object to remain beneath the agent.
- MAYAN TYPOLOGY:
  - The various forms of AF across Mayan basically accomplish this goal.
  - The ANTIPASSIVE strategy:
    - \* Some languages use an object-demoting antipassive to get around the EEC: Q’eqchi’, Mam (Aissen 2017:10)
    - \* Others permit object-demotion alongside a dedicated agent focus: Tzutujil (Dayley 1985);... Tsotsil...
    - \* And some (i think) permit agent extraction from NP-incorporating antipassives, but contrast this with an agent focus construction for agent extraction with fully-transitive predicates (Q’anjob’alan?)
  - The AGENT FOCUS strategy:
    - \* The interesting construction involves ergative extraction over non-demoted DP objects.
    - \* Here: AF morphology allows agent extraction alongside DP objects which should shift.

(17) *Agent Focus Constructions in Q’anjob’alan; K’ichean*

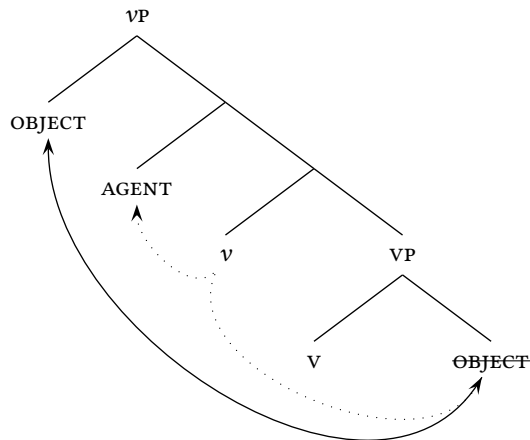
- |   |  |
|---|--|
| <p>a. Maktxel max-<b>ach</b> il-<b>on</b>-i?<br/>                 who ASP-2B see-AF-TV<br/>                 ‘Who saw you?’<br/>                 Q’anjob’alan; Coon et al. 2014:10</p> | <p>b. In x-<b>in</b>-il-<b>ow</b> le achi.<br/>                 1 PFV-1B-see-AF D man<br/>                 ‘I saw the man.’<br/>                 K’iche; Davies &amp; Sam-Colop 1990:523</p> |
|---|--|

(18) *The AF Solution: Two Logical Possibilities*

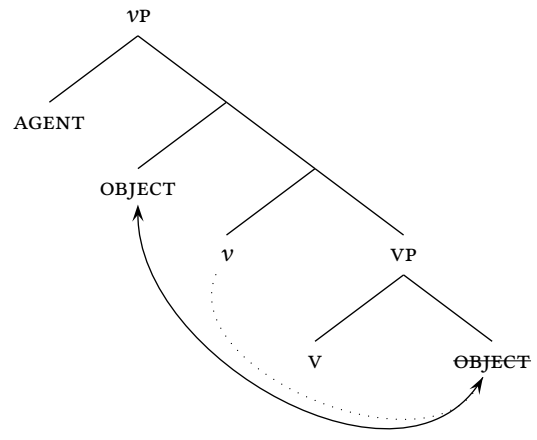
- a. The AF construction systematically lacks object shift (Q’anjob’alan: Coon et al. 2020:34-37)
- b. The AF construction allows object shift but allows it to target a position beneath the agent (K’ichean: *ibid*:37-40)

(19) *Special Object Shift with Agent Focus*

a. *Transitive: Object Shift above the Agent*



b. *Agent Focus: Object Shift below the Agent*



## 2.2 The Austronesian Analogue

- Mandar recruits the antipassive for transitive agent extraction; the general Austronesian pattern.
- Nevertheless: clauses with agent extraction do NOT look like typical antipassives.
  - Typical antipassive objects must be NP; cannot bind floated quantifiers; control agreement.
  - EXTRACTED-OVER antipassive objects:
    1. can be DPS; can even be pronouns!
    2. bind floating quantifiers OBLIGATORILY.
    3. control agreement.
  - Observation: these ‘antipassive’ objects can undergo object shift.

(20) *Agent Extraction allows AV objects to be specific, trigger agreement, associate with quantifiers.*

- |  |   |
|--|---|
| <p>a. Masa, <b>i=Cicciq mac-cinnoq=o i qo?</b><br/>         no.way, PRS=N AV-kiss=2 you?<br/>         ‘No way, Sita kissed you?’</p> | <p>b. <b>Yau maq-itai=nasang=i</b> sola-u.<br/>         I AV-look.for=all=3 friend-1.<br/>         ‘I’m the one who’s looking for all my friends’</p> |
|--|---|

- Object Agreement requires Shift
  - Object agreement cannot occur with predicates that ban object shift.
  - *Min-jari* ‘become’: forces objects to undergo pseudo-incorporation (21); bans movement.

(21) *Copular Verbs Ban Object Shift*

- |  |   |
|--|---|
| <p>a. Na=min-jari=<b>guru</b>=aq.<br/>         FUT=AV-become-teacher=1<br/>         ‘I’ll become a teacher.’</p> | <p>b. *?Na=min-jari=aq <b>to=Indonesia</b>.<br/>         FUT=AV-become=1 PERSON=PLACE<br/>         ‘I’ll become an Indonesian citizen.’</p> |
|--|---|

- **Extraction context:** this verb bans object agreement; other copular verbs follow suit (22).
- **Claim:** object agreement arises only when objects shift.

(22) *Copular Verbs Ban Object Agreement under Agent Extraction*

- |  |   |
|--|---|
| <p>a. Mang-ippi=aq <b>yau</b> min-jari(*=o) <b>iqo</b>.<br/>         AV-dream=1 I AV-become=2 you<br/>         ‘I dreamt that I became you.’</p> | <p>b. Nah, <b>yau</b> tania(*=o) <b>iqo</b>, tapi...<br/>         PRT I EQ.NEG=2 you but<br/>         ‘Well, I’m not you, but...’</p> |
|--|---|

- Applicative constructions: another argument for Shift.
  - The applicative *-ang* cannot co-occur with the regular ANTIPASSIVE (Pearson 2001)
  - This morphology can only surface when its object can shift: e.g. in PV (23a).

(23) *No Applicatives with Regular AV*

- |  |  |
|--|--|
| <p>a. *<b>Mam-be-ngang=aq</b> sola-u doiq.<br/>         AV-give-APPL=1 friend-1 money<br/>         Intended: ‘I gave my friend money.’</p> | <p>b. Mane <b>na-be-ngang=aq</b> yau doiq.<br/>         just.now 3.PV-give-APPL=1 I money<br/>         ‘He just gave me some money.’</p> |
|--|--|

- **Extraction:** the applicative can co-occur with the extraction antipassive (24).

(24) *Agent Extraction allows AV Applicatives*

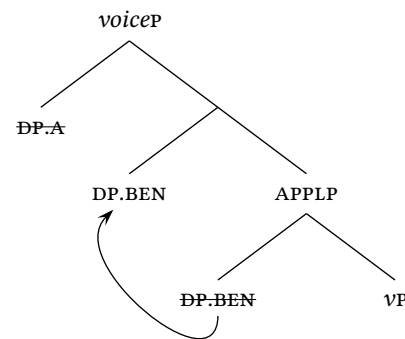


- a. Yau **mas-sola-ngang=i** dio  
 I AV-accompany-APPL=3 there  
 di=ramasakiq.  
 in=hospital  
 ‘I went with him to the hospital.’  
 Friberg & Jerniati 2000: Ex.170

- b. Na-sio=aq *pro*<sub>1</sub> lamba **mang-alli-ang=i**  
 3.PV-tell=1 *pro* go AV-buy-APPL=3  
 buku.  
 book  
 ‘She made me go buy him a book.’

Friberg & Jerniati 2000: Ex.248

- c. *Applicatives Shift when Agents Extract*



- **Proposal:** these constructions involve MOUSE: **Movement of Objects Under Subject Extraction**.
- The MOUSE construction involves a head syntactically distinct from the regular antipassive.
  - The Makassar Subgroup (South Sulawesi; close relatives): distinct MOUSE prefix (Friberg 1996).
  - **Coastal Konjo:** The regular AV morpheme *aN(N)*- triggers nasal suppletion (25).

(25) *Konjo: Agent Voice triggers Nasal Suppletion*

- a. Apa **na-kanre** ri eleq-na?  
 what 3.PV-eat in morning-3  
 ‘What does he eat in the mornings?’
- b. **Ang-nganre=i** Amir loka.  
 AV-eat=3 N banana  
 ‘Amir is eating bananas.’  
 Coastal Konjo; Friberg 1996:143-146

- **Mouse Contexts: Distinct Morphology**

- Regular AV morphology occurs when agents extract over nonspecific objects (26a).
- **Mouse Context:** a distinct prefix *aN-* which triggers no nasal suppletion (26b).

(26) *Mouse Constructions shows Distinct Morphology*

- a. Amir **ang-nganre loka**.  
 N AV-eat banana  
 ‘AMIR is eating bananas.’
- b. Ali **ang-kanre=i lamejaha-ta**.  
 N MOUSE-eat=3 sweet.potato-2  
 ‘ALI ate your sweet potato.’  
 Coastal Konjo; Friberg 1996:143-146

## 2.3 Modeling Mouse

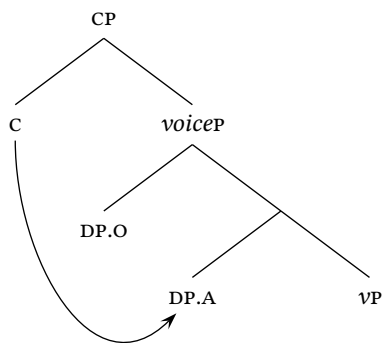
- MOUSE poses a problem for the intervention-based approach to extraction restrictions.
  - LOCALITY CONSTRAINT: only the highest argument can undergo A'-extraction (in Austronesian, Mayan...)
  - OBJECT SHIFT: places the object above the transitive agent; should ban agent extraction.
  - PUZZLE: what's going on?
- One approach: **Non-Highest Extraction**
  - MOUSE involves transitive syntax; the object shifts above the agent.
  - MOUSE morphemes would be surface allomorphs of regular transitive.
  - **Result:** c would attract the agent non-locally; the intervention account would be abandoned.

- Example: Newman (2020) proposes this schema for Mayan; Boskovic (2011) could also do it.

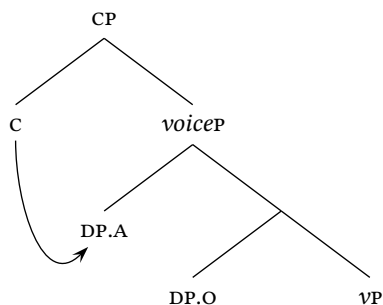
- The alternative: SPECIAL OBJECT SHIFT

- MOUSE involves a special kind of object shift which puts the object below the agent.
- RESULT: intervention-based account of extraction restrictions can be preserved.
- PUZZLE: formal implementation remains mysterious; send help.

(27) *PV Approach: Mouse involves PV*



(28) *Alternative: Mouse distinct from PV*



- MANDAR-INTERNAL EVIDENCE: we want approach 2.

- **Pattern:** the MOUSE object stops showing subject properties above *voiceP*.
  - \* **Significance:** the PV approach predicts that it should behave as a typical subject; it does not.

- **Preverbal Quantifiers**

- \* The preverbal quantifier *sangnging* ‘all’ strictly associates with the subject (29a).
- \* This quantifier cannot associate with non-subjects in either AV or PV (29b).

(29) *Preverbal Quantifiers associate with the Subject*

- |   |   |
|---|---|
| <p>a. <b>Sangnging me-cawa=i maq-ita kedo-na.</b><br/>                 all AV-laugh=3 AV-see act-3<br/>                 ‘They all laughed seeing what he did.’<br/>                 Sikki et al. 1987;B17</p> | <p>b. <b>Sangnging na-ita=o kanneq-mu?</b><br/>                 all 3.PV-see=2 grandparent-2<br/>                 ‘Did your grandfather see all of you?’<br/>                 NOT: ‘Did you see all of your grandpar-<br/>                 ents?’</p> |
|---|---|

- \* MOUSE context: *sangnging* strictly associates with the extracted agent, NOT the object (cf. PV; 29b).

(30) *Preverbal Quantifiers cannot associate with the Mouse Object*

- |   |  |
|---|--|
| <p>a. Innai <b>sangnging maq-ita=o?</b><br/>                 who all AV-see=2<br/>                 ‘Who.PLUR saw you.SG?’<br/>                 NOT: ‘Who saw you guys?’</p> | <p>b. Sola-u <b>sangnging map-pecawai=aq.</b><br/>                 friend-1 all AV-laugh.at=1<br/>                 ‘My friends all laughed at me.’<br/>                 NOT: ‘My friend laughed at all of us.’</p> |
|---|--|

- **Second-Position Agreement**

- The regular subject agreement probe sits in  $FIN^0$ ; agreement clitics strictly move to 2P.
- The clitics form a cluster with other 2P elements after the highest AUX (31b),

(31) *Subject clitics move to 2P; form a clitic cluster*

- a. Indang=**aq** meloq daiq maq-ellong ae!  
 NEG=1 want go.up AV-sing PRT  
 ‘Hey, I don’t want to go up and sing!’
- b. Pura=**tongang=i** u-tumae i=Cicciq e!  
 already=truly=3 1.PV-propose PRS=N PRT  
 ‘Hey, I really already proposed to Sita!’

- MOUSE CONTEXT: object agreement is verb-adjacent, not 2P (*cf.* PV; 31b).
- **Proposal:** the probe behind the MOUSE agreement is on *voice*<sup>0</sup>, NOT FIN<sup>0</sup>.

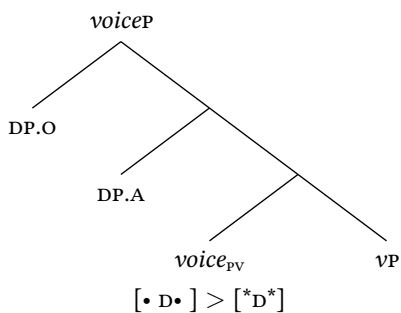
(32) *Mouse Clitics are verb-adjacent; cannot move to 2P*

- a. **Yau** indang meloq **mat-tuyuq=o** e!  
 I NEG want AV-tie=2 PRT  
 ‘Ok, I don’t want to marry you!’
- b. \***Yau** indang=**o** meloq **mat-tuyuq** e!
- c. **Yau** pura=**tongang mat-tumae=i** e!  
 I already=truly AV-propose=3 PRT  
 ‘Hey, I really already proposed to her!’
- d. \***Yau** pura=**tongang=i mat-tumae** e!

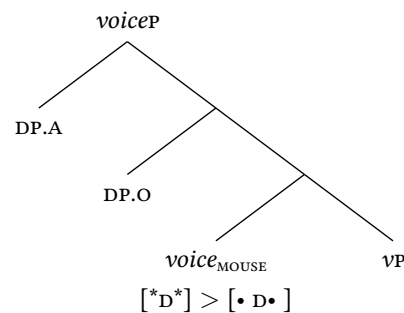
## 2.4 Analysis: Low Object Shift

- **Proposal:** the MOUSE construction involves a *voice*<sub>MOUSE</sub> which triggers low object shift (34).
  - Like *voice*<sub>AV</sub>: *voice*<sub>MOUSE</sub> keeps the external argument highest in the *voiceP* phase.
  - But: *v*<sub>MOUSE</sub> forces the agent to extract and bears an EPP feature which triggers object shift.
- **Implementation** (Complete stipulation; explanation in progress)
  - **Feature Ordering** (Heck & Müller 2007) to derive a tucking-in pattern (Richards 1997).
    - \* Two relevant features: trigger MERGE [**• F•**] and PROBE [**\*F\***]<sup>EPP</sup>
    - \* *voice*<sub>PV</sub>: [**\*D\***]<sup>EPP</sup> > [**• D•**]
    - \* *voice*<sub>MOUSE</sub>: [**• D•**] > [**\*D\***]<sup>EPP</sup>
  - **Result:** *voice*<sub>PV</sub> triggers shift above the agent; *voice*<sub>MOUSE</sub> trigger shift below it.

(33) *Patient Voice: Merge A, then Probe o*



(34) *Mouse: Probe o, then Merge A*



## 3 Conclusion

### 3.1 Summary: Mice in Mandar

- **Pattern:** Mandar provides evidence that AV clauses with agent extraction allow object shift.
  - The extraction antipassive takes DP objects; enforces no specificity restrictions
  - The extraction antipassive lets objects trigger agreement parasitic on object shift (22)
  - The extraction antipassive can take morphology which forces object shift, etc.
- **Significance:** Intervention-based accounts of the extraction restriction cannot allow regular object shift.

- Object shift targets a position above the agent in regular PV clauses (Rackowski 2002).
- The extraction probe should only be able to target the highest element (Aldridge 2004).
- Thus clauses with object shift should not allow agents to extract.
- **Solution:** MOUSE involves a distinct *voice*<sub>MOUSE</sub> which triggers low object shift and forces agent extraction.
  - Mandarin: MOUSE objects don't look like antipassive or transitive objects:
    - \* **Unlike AP Objects:** no antispecificity, control agreement, undergo some movement.
    - \* **Unlike Tr Objects:** no preverbal quantifiers (30), no 2P agreement (32).
    - \* They trigger agreement on *voice*; clitics surface on the verb, not in 2P (32).
  - Makassar, Konjo: *voice*<sub>MOUSE</sub> morphologically distinct from *voice*<sub>AV</sub>.
- **Key Point:** this analysis saves the intervention approach to extraction restrictions.
- Looking Forward: **Desiderata**
  - Really need a theory of specifier ordering; constraints on movement paths.
  - Mouse Schema: object shift can't tuck in, UNLESS it's under an argument which will A'-move.
  - Reformulation: external merge has to be (before/after) internal merge unless A'-features get involved?

### 3.2 The Family Picture

- **Generality:** many WMP languages appear to show MOUSE patterns.
  - Tagalog: specificity constraints on AV objects lift when agents extract (Mcfarland 1978).
  - Sqliq Atayal: AV objects can surface with absolutive marking when agents displace (Erlewine 2016).
  - South Sulawesi: the Mandarin agreement pattern recurs across the subfamily (Kaufman 2008).
  - Pamona (Pamona-Kaili, Central Sulawesi), Padoe (Bungku-Tolaki; Southeast Sulawesi): object pronouns surface in the absolutive case when agents extract (Vuorinen 1995, Mead 2002).

(35) *Atayal (Atayalic): Mouse Objects can take ABS case*

- |   |   |
|---|---|
| <p>a. Cyux <b>m</b>-aniq sehuq <b>qu</b> Yuraw.<br/>         AUX AV-eat taro ABS Yuraw<br/>         'Yuraw is eating taro.'</p> | <p>b. Ima wal <b>m</b>-aniq <b>qu</b> sehuq qasa?<br/>         who AUX AV-eat ABS taro that<br/>         'Who ate that taro?'<br/>         Sqliq Atayal; Erlewine 2016: 2-3</p> |
|---|---|

(36) *Padoe (Bungku-Tolaki): Mouse Pronominal Objects require ABS Case.*

- |  |  |
|--|--|
| <p>a. <b>Mo</b>-nahu=<b>aku</b>=to inehu.<br/>         UM-cook=1.ABS=PFV vegetable<br/>         'I cooked vegetables.'</p> | <p>b. Iiko kaa t-<b>um</b>-o'ori=<b>aku</b> kee?<br/>         2.ABS EMPH UM-know=1.ABS Q<br/>         'Do YOU know me?'<br/>         Pamona: Vuorinen 1995:105-110</p> |
|--|--|

### 3.3 Key Result: Explains Quirky Extraction

- Some languages permit agents to extract across surface PV morphology.
  - Selayarese (South Sulawesi): Finer & Basri 1987; (37).
  - Tagalog: certain idiolects permit agents to extract over PV morphology (Pizarro-Guevara 2020).
- **Problem:** this looks even worse for the intervention-based account of extraction restrictions!

(37) *Selayarese: Agent Extraction over Specific Patients forces PV morphology.*

a. **Ang**-alle=i doiq i=Basoq.  
 AV-take=3 money PRS=N  
 ‘Baso’ took (some) money.’

b. **i=Basoq la**-alle=i doiq-**injo**.  
 PRS=N 3.PV-take=3 money-the  
 ‘Baso’ took the money.’  
 Finer & Basri 1987: 142-143

(38) *Tagalog Idiolects allow Agent Extraction with PV.*

a. **Hotshots g-in-ulpi ang** Picanto.  
 TEAM PV-beat ABS TEAM  
 ‘The Hotshots beat Picanto in a landslide.’  
 Pizarro-Guevara (2020); cited from the online sports magazine Philstar.

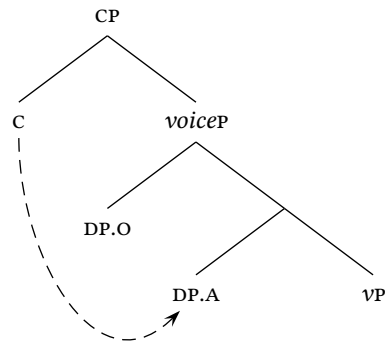
pa=ng mga servings ng prutas kada araw.  
 too=L PL servings GEN fruit each day.  
 ‘As for 7% of the younger people, they eat the recommended 2+ servings of fruit each day.’

b. Ang 7% ng mga kabataan **ay k-in-ain ang**  
 ABS NUM GEN PL youth AY PV-EAT ABS  
 i-ni-re-rekomenda=ng dalawa o higit  
 CV-ASP-ASP-recommend=L two or more

Pizarro-Guevara (2020); cited from *Prutas: Ang bagong cookie* (‘fruits: the new cookie’) on the website ‘Just Be Beauty.’

- **Solution:** These constructions involve  $voice_{MOUSE}$  spelled out as morphologically indistinct from PV.
  - **Prediction:** the objects in these constructions should behave like their Mandarin analogues.
- **Upshot:** the  $voice_{MOUSE}$  analysis defuses threats to the intervention approach to extraction restrictions.
  - The MOUSE analysis allows us to rule out constructions like (39).
  - Agent extraction contexts with specific objects involve the structure in (40) in Mandarin; likely elsewhere.
  - Surface voice puzzles (e.g. Tagalog) reduce entirely to morphological puzzles in spelling out  $voice_{MOUSE}$ .

(39) *Impossible: Non-Local Extraction*



(40) *Mouse Construction: Low Object Shift*

