Wh-Movement, Pseudoclefts, and Pied-Piping in Mandar

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Abstract

The structures of wh-initial questions in verb-initial languages have been a topic of ongoing debate. One productive line of research has identified many Austronesian languages as employing a pseudoclefting strategy, as in Malagasy (Paul 2001 and Pearson 2006), Tagalog (Richards 1998), Ilocano (Rafal 2009), Malay (Aman et al. 2010), Tsou (Chang 2000), Seediq (Aldridge 2002), Palauan (Georgopoulos 1991), and Marshallese (Willson-Sturman 2014). Mandar (South Sulawesi) shows several properties which make a parallel analysis seem promising: this language has null relativizers, allows HRCs in argument position, and requires wh-words to surface clause-initially. Pied-piping patterns, however, raise a problem: pseudoclefts have been observed to cross-linguistically resist pied-piping, but Mandar shows a pattern of pied-piping-with-inversion (PPWI) reminiscent of that seen in Mayan. This pattern occurs only with path complements to ‘intransitive’ motion verbs, and extraction facts suggest that path phrases in this position behave like objects rather than adjuncts. PPWI structures must then be treated as argument questions which cannot have the underlying structure of a pseudocleft. This makes Mandar another predicate-initial language which derives (some) argument questions via displacement.

1 Wh-Words, Possible Orders, and Possible Analyses

• Mandar permits wh-words to incorporate into verbs (1) or surface clause-initially (2). ¹

(1) Mam-[p]eang=apa=o?
   AV.DIST−fish=what=2.ABS
   'What are you fishing for?' (Incorporated)

(2) Apa mu-peang?
   what 2.ERG−fish
   'What are you fishing for?' (Clause−Initial)

• The wh-initial clause (2) could be derived via movement or a pseudocleft, as in (3)-(4). ²

(3) Innai na=mu-pile
   who FUT=2.ERG−choose
   Who will you choose?' (Movement)


²External factors provide evidence against a clefting analysis. As such, it is not discussed here.
1.1 Wh-Initial Questions in Austronesian

- Pseudocleft analyses of argument questions in Malagasy (Paul 2001 and Pearson 2006), Tagalog (Richards 1998), Ilocano (Rafal 2009), Malay (Aman et al. 2010); Tsou (Chang 2000); Seediq (Aldridge 2002), Palauan (Georgopoulos 1991), Marshallese (Willson-Sturman 2014).

- Movement analyses: Chamorro (Chung 2005), Rapa Nui (Potsdam and Polinsky 2011).

- Some languages treat arguments and adjuncts differently (Tagalog; Mercado 2004); others do not (Malagasy; Potsdam 2006).

2 Mandar: Quick Facts

2.1 Non-Syntax Facts

- Historical center of political power in West Sulawesi: ”Seven riverheads, seven deltas.”

- Roughly 500,000 speakers; EGIDS level 5 (At my site: worse, but healthier than others).

- Pied-piping patterns attested in languages adjacent to Mandar, not in closest genetic relatives.

2.2 Voice and Ergative-Absolutive Alignment

- Four voices: AV (-um-), PV (Ø- + erg proclitics), Passive (di-), Collective (si-).

- 2P ’Absolutive’ clitics index subject/pivot arguments: AV agents, Passive and PV objects.

<table>
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<tr>
<th>Table 1: Person-Marking Clitics</th>
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<td>PERSON</td>
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<td>ERGATIVE</td>
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<td>ABSOLUTIVE</td>
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(5) Mam-[p]eang=a’.

AV.DISTR-fish=ABS

‘I’m fishing.’

(6) U-peang=mo=i di’e bau penja=e.

1.ERG-fish=PFV=3.ABS this fish guppy=DEF

‘I fished up these guppies.’

(7) Mam-[p]eang=a’.

AV.DISTR-fish=ABS

‘I’m fishing.’

(8) U-peang=mo=i di’e bau penja=e.

1.ERG-fish=PFV=3.ABS this fish guppy=DEF

‘I fished up these guppies.’

- One absolutive clitic per clause; 3.abs clitic can drop when the referent is indefinite.

- Working hypothesis: absolutive clitics represent clitic doubling.
(7) Ma-sande=purung=nasang=Ø to=Amerika
   ADJ-sharp=nose=all       PERSON=America
   'Americans are all long-nosed.' (Indefinite Subject)

(8) Ma-sande=purung=nasang=i to=Amerika
   ADJ-sharp=nose=all=3.ABS   PERSON=America
   'The Americans are all long-nosed.' (Definite Subject)

2.3 Predicate Initiality

- Basic order VOSX; alternates with VOXS, VSOX. Also permits marked SVOX.
- VP, AP, PP, NP predicates all precede subjects;

(9) To=pole    Subbar=nasang=i   indi mahasiswa=e.
    PERSON=from West.Sulawesi=all=3.ABS this college.student=DEF
    'These students are all people from West Sulawesi.' (NP Predicate)

(10) Bassa=memang=i  tu’u pendapa’-na  to=Amerika  mua’ jaminan.kesehatan.
     like=indeed=3.ABS  that opinion-3.GEN PERSON=America  if  HEALTHCARE
     'American people’s opinions are like that when it comes to healthcare.' (PP Predicate)

- Predicates able to coordinate before subjects.
- Working hypothesis: predicate-initial order derived via VP-raising.

(11) [Ma’-jama=i  PR] anna [mam-baca=i] buku di’e mahasiswa=e.
     AV.DISTR-work=3.ABS HW CONJ AV.DISTR-read=3.ABS book this student=DEF
     'This student worked on his homework and read a book.' (Coordinated VPs)

(12) [Sa’bar=i] anna [ma-lappu=tongan=i] ana’-mu.
     patient=3.ABS CONJ ADJ-honest=true=3.ABS child-2.GEN
     'Your child is patient and truly honest.' (Coordinated APs; Sikki et al. 1987 C272)

3 Clefts and Pseudoclefts

3.1 Main Points

- Mandar permits null relativization and allows (H)RCs in argument position.
- HRCs that look like subjects show properties of subjects.
- Mandar shows wh-questions that look like real pseudoclefts.

3.2 Relativization Strategies

- Two relativization strategies: null relativizer Ø and the overt anu.
- The second is homophonous with a 'filler' noun meaning 'thing.'
3.3 Relative Clauses as Arguments

- Relative clauses regularly function as arguments.
- Typically demarcated with overt material at the edge: nominals, determiners, or *anu*.
- Two common heads: *to* = ‘person’, demonstratives *di’e*...=*e ‘this’ and *di’o*...=*o ‘that’.

(15) Secco-secco=pa=i to=[Ø= [me’-guru basa Mandar]]
RED-a.bit=IPFV=3.ABS PERSON=REL=AV.MED-learn language Mandar
'The people studying Mandar are still few.' (Argument RC with *to=*).

(16) Ma-raras=i di’o [Ø [na-ande to=Mandar]=o]
ADJ-spicy=3.ABS that REL 3.ERG-eat PERSON=MANDAR=DEF
'That stuff Mandar people eat is spicy.' (Argument RC with Demonstrative).

(17) Mammis=i [anu [na-balu’ dini]]
sweet=3.ABS REL 3.ERG-sell here
'What’s sold here is sweet.' (Argument HRC with Overt C).

- Headless relative clauses possible in the same positions.
- Like normal nominal arguments, these may be indexed with absolutive clitics if definite.

(18) Ma-i’di=mo=i [Ø [pole di=Mamuju]]
ADJ-many=PFV=3.ABS REL come GP=CITY
'The people moving into Mamuju are already a lot.' (AV Agent HRC).

(19) Na=andiang mu-irrang-i [Ø [ma’-basal Indonesia]].
FUT=NEG 2.ERG-hear-LOC REL AV.MED-language Indonesia
'You won’t hear anyone speaking Indonesian.' (PV Patient HRC).

3.4 Relative Clauses as Subjects

- The universal quantifier *nasang* shows us that RCs are subjects.
- This clitic must be interpreted with the subject/pivot of a clause.

(20) Mat-ta’e=nasang=i bunga ma-mea dambu.
AV.DISTR-hold=all=3.ABS flower ADJ-red rose.apple
'They’re all holding pink flowers.' (Read with AV Agent).

(21) Na-ta’e=nasang=i bunga ma-mea dambu.
3.ERG-hold=all=3.ABS flower ADJ-red rose.apple
'He’s holding all the pink flowers.' (Read with PV Patient).
• *Nasang* impossible in clauses with expletive or singular subjects.

(22) *Urang=nasang=mo=i
    rain=all=PFV=3.ABS

Intended: 'It’s all raining'

(23) *Ma-loppa=nasang=i matallo-na.
    ADJ=hot=all=3.ABS  sun-3.GEN

Intended: 'The sun’s all hot'

• *Nasang* can occur in clauses with argument (H)RCs.

• Conclusion: clauses like (24) have the structure (25).

(24) Donat=nasang=i [anu na-ande].
    donut=all=3.ABS REL 3.ERG-eat

'The things they ate were all donuts.'

(25) Donat=i [anu na-ande].
    PRED=3.ABS SUBJ

'The things they ate were donuts.'

3.5 Pseudoclefted Wh-Questions

• Nominals, determiners, or the overt relativizer can precede the remainder in wh-questions.

• These questions look like the pseudoclefts in (15)-(17). They might have the same structure.

(26) Innai [to=[O=[ma’-balu’ barras]]]? who PERSON=REL=AV.MED-sell raw.rice

'Who’s the person selling rice?'

(27) Apa [di’e [O [na-alli-ang=o=digena’]]=e]? what this REL 3.ERG-buy-BEN=2.ABS=earlier=DEF

'What’s this thing he bought for you just now?'

(28) Apa [anu [di-jama allo-allo]]?
    what REL PASS-work RED-day

'What’s the thing that gets done every day?’

3.6 Austronesian Analysis of Mandar Questions

• The ingredients are in place for a pseudocleft analysis of these questions.

• (H)RCs can occupy a subject position, seen above in (24)-(25).

• Mandar wh-pseudoclefts might have the ‘Austronesian’ structure shown in (29).

• Could bare wh-questions like (4) also have a structure like (29)?

(29) Apa [anu na-ande]?
    PRED SUBJ

'What she ate was WHAT?’

Typical Pseudocleft Analysis
(30) **Innai [Ø [na=mu-pile]]?**

PRED  SUBJ

'Who is the one that you’ll choose?’    (Pseudocleft Analysis of Bare WhQ)

- One problem: where is the absolutive clitic?

4 **Pied-Piping and Pseudoclefts**

4.1 Main Points

- Mandar Path and Axial Part prepositions show a PPWI pattern.
- PPWI is only available to PP complements of ‘intransitive’ motion verbs.
- This pattern suggests that PPWI clauses represent argument questions.

4.2 Cross-Linguistic Generalizations

- Questions that show pied-piping: not pseudoclefts.

(31) [About what] do they worry about what?  (Displacement)
(32) It is [about their income] that they worry.  (Cleft)
(33) *[About their income] is what they worry.  (Pseudocleft)

4.3 Mandar Prepositions

- Mandar has two relevant classes of preposition: Directionals and Locatives.
- Can be identified with Svenonius (2007)’s Path, Axial Part.
- Strict internal structure of PP: Path \ GP \ AxPart.

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<th>Table 2: Mandar Prepositions</th>
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(34) Umm-ondong=mo=i di’o to=gila=o   **dai’ di=aya meja!**

AV-jump=PFV=3.ABS that PERSON=crazy=DEF up   GP=top table

'That crazy person just jumped up on top of the table!'
Ye’, mel-lossor=da=a’  

PRT AV.MOT-crawl=LIN=1.ABS into one meter GP=inside cave  

‘Well, I only crawled in a meter inside the cave.’

Pole di=olo(-na)  

from GP=front(-3.GEN) house-3.GEN  

‘From in front of the house’

4.3.1 Prepositions really are Prepositions

• Path, AxPart must linearly precede their complements.
• Path, AxPart cannot move independently or surface clause-initially.

Di-wawa=mo=i  

PASS-bring=PFV=3.ABS GP=mountain up  

Intended: Nabilah got carried up the mountain. (Path precedes PP)

*Tama mil-lamba=i  

into AV.MOT-walk=3.ABS servant-3.GEN king GP=garden  

Intended: ‘The king’s servant went into the garden.’ (Path cannot front alone)

• Certain Path prepositions are required to license goals and sources.
• Path prepositions can also take bare nominal complements without di=.

Mak-kiring=i  

AV.DISTR-send=3.ABS letter teacher-1.GEN toward GP=student  

‘My teacher sends letters to the students.’ (Goal requires lao)

Sallang-ngu lao Puang kost-ta’.  

Greetings-1.GEN toward lord boarding.house-1.IN.GEN  

‘My greetings to your host father.’ (Paths can take bare complements)

• Prepositions can affect telicity.

Mal-laccar-ri=i  

AV.DISTR-throw-LOC=3.ABS book that child=DEF GP=teacher-LNK-3.GEN  

‘The students are pelting their teacher with books.’ (No Path; Telic)

(With Path; Atelic)

• Prepositions strictly resist reduplication, unlike N, Adj, Adv, and V.

Inna na-bayam-bayang sambayang tongat-tongan?  

which 3.ERG-RED-imagine prayer RED-true  

‘What is imagined to be true prayer?’ (V, A reduplicate; Muthalib and Sangi 1991 D53)

Mil-lamba=nasang=i  

AV.MOT-walk=all=3.ABS children RED-outward GP=RED-behind house-3.GEN  

Intended: ‘The kids are walking out to behind their house.’ (No RED with Path, AxPart)
4.4 Pied Piping with Inversion

- Focusing or questioning a path typically yields pied-piping with inversion.
- Regular pied-piping without inversion is ungrammatical.

(45) **Inna dai’** mu-ola *dai’*ina?
    *which up 2.ERG-go*
    'What did you go up?'  (PPWI with Wh)

(46) **Buttu dai’** u-ola *dai’*butte!
    *mountain up 1.ERG-go*
    'I went up a MOUNTAIN!'  (PPWI with Focus)

- Axial Part prepositions show the same pattern.
- Complex PPs linearly invert.

(47) **Inna aya** mu-oroi’-i?
    *which above 2.ERG-sit-LOC*
    'What are you sitting on top of?'  (PPWI with AxParts)

(48) **Inna lalang tama** na-lamba kandi’mu tama-lalang inna?
    *which inside into 3.ERG-walk little.sibling-2.GEN*
    'What did your little brother walk into the inside of?'  (Linear inversion of Complex PP)

4.4.1 PPWI does not involve Adjuncts

- Extraction patterns suggest that the PathPs displaying PPWI are arguments, not adjuncts.
- AV verbs allow adjuncts, but not objects, to extract.

(49) **Di=boyang=a’** ma’-elong *di=boyang.*
    *GP=house=1.ABS AV.MED-sing*
    'I sing in the HOUSE'  (AV Adjuncts can occur clause-initially)

(50) *Apa=o ma’-elong apa?*
    *what=2.ABS AV.DISTR-sing*
    Intended: 'What are you singing?'  (AV Objects cannot occur clause-initially)

- AV motion verbs ban PPWI (or regular fronting of PathP); unexpected if an adjunct.
- AV verbs ban similar extraction patterns with indirect objects.

(51) *Uma tama* mil-lamba=i pesio-na mara’dia?
    *garden into AV.MOT-walk=3.ABS servant-3.GEN king*
    Intended: 'The king’s slaves walked into the GARDEN.'  (AV: No Path PPWI)

(52) *Bos-mu lao* mak-kiring=o di’o laporan-mu a?
    *boss-2.GEN toward AV.DISTR-send=2.ABS that report-2.GEN PRT*
    Intended: 'You sent that report of yours TO YOUR BOSS, right?'  (AV: No IO PPW)

- The distribution of PPWI is actually tightly constrained.
• Adjunct Path Phrases cannot undergo PPWI in Passive and PV clauses.

(53) *Inna dai di-wawa=i i=Nabilah?
    which up PASS-carry=3.ABS PRS=NAME
    Intended: 'What did Nabilah get carried up?' (PASS: No Adjunct PPWI)

(54) *Inna dai na-wawa=i i=Nabilah?
    which up 3.ERG-carry=3.ABS PRS=NAME
    Intended: 'What did he carry Nabilah up?' (PV: No Adjunct PPWI)

• The only predicates which permit PPWI are 'intransitive' motion verbs in PV: see (45)-(48).

4.4.2 PPWI Clauses are not Pseudoclefts

• PPWI structures cannot take the overt relativizers or heads which appear in pseudoclefts.

• Some speakers permit dummy heads, however, in similar structures which lacks pied-piping.

• This pattern suggests that PPWI clauses cannot be pseudoclefts.

(55) Inna dai’ (*anu) mu-ola?
    which up REL 2.ERG-go
    Intended: 'What are you going up?' (No Overt C can be inserted)

(56) Inna [di’o [mu-ola dai’]=o]?
    which that 2.ERG-go up=DEF
    'What’s the thing you’re going up?' (Dummy head possible without PPWI)

4.5 Summary of the Problem

• PPWI clauses seem like argument questions that cannot be treated as pseudoclefts.

• This casts doubt on our speculation that bare wh-questions might always be pseudoclefts.

5 Copular Clauses and Absolutive Clitic Bans

5.1 Main Points

• Wh-initial clauses show a strange restriction on absolutive clitic placement.

• Copular NP predicates permit two orders: NP=ABS DP and DP NP.

• When DP subjects occur clause-initially, they can never be doubled by clitics.

• The same restriction applies to clause-initial wh-words. Could these be fronted pivots as well?

• Future question: what accounts for the ban on absolutive clitics in these cases?
5.2 Wh-clause clitic bans

- Absolutive clitic patterns set wh-questions apart from regular pseudocLEFTs.
- Pivots indexing the subject are strictly banned in the clauses below.

57) Apa(*=i) mu-print?
what=3.ABS 2.ERG-print
Intended: 'What are you printing?' (No ABS Clitics in Bare Wh-Question)

58) Innai(*=i) [di'o [O ma'-ita-i=rua=a']=q]?
who=3.ABS that REL AV.DISTR-see-LOC=still=1.ABS=DEF
Intended: 'Who is that person still looking for me?' (No ABS Clitics in 'Pseudocleft')

- There’s no external ban on absolutive clitics in copular clauses or with wh predicates.

59) Apa=o?
what=2.ABS
'What are you?' (ABS clitics available with nominal wh-predicates)

60) Guru-mu=a’ le’!
teacher-2.GEN=1.ABS PRT
'I’m your teacher, duh!' (ABS clitics available with regular nominal predicates)

5.3 Fronting Facts

- Copular clauses provide another environment where absolutive clitics are occasionally banned.
- Typical copular clauses have the order NP } ABS } DP.
- An inverted DP-initial order is available, but here ABS clitics are banned.

61) To=Amerika=i kandi'-u.
person=America=3.ABS younger.sibling-1.GEN
'My younger sibling is an American.' (NP } ABS } DP)

62) Kandi'-u to=Amerika.
younger.sibling-1.GEN PERSON=America
'My younger sibling is an American.' (DP } O } NP)

- When two DPs are equated, order is free but both configurations ban clitics.

63) I’o=rua=p to=u-pang-ipi’
2.FAM=still=IPFV PERSON-1.ERG-DISTR-dream
'The person I’m dreaming of is still you.' (Free Order; Clitic Never Possible)

64) To=u-pang-ipi’ i’o=rua=p.
person-1.ERG-DISTR-dream 2.FAM=still=IPFV
'The person I’m dreaming of is still you.' (Free Order; Clitic Never Possible)

- This pattern is attested elsewhere in Austronesian.
- Malagasy forces topicalization of one DP in DP-DP equative clauses (Paul 2009).
- Tagalog requires DPs to precede NPs in equative clauses as well (Kaufman 2018).
5.4 Parallels with Pivot Fronting

- The same ABS ban surfaces in subject-initial clauses.
- Clause-initial subjects and wh-words show the same pattern.

(65) $i=$Pani ma-lutta=sanna’=$(*) ma’-basa inggris.

\text{PRS=NAME ADJ-clever-ver} \text{ AV.MED-language English}

‘Pani’s very good at speaking English.’ (Fronted Subject cannot be doubled)

(66) Innai($*=$i) mu-ita-i?

\text{who 2.ERG-look-LOC}

‘Who are you looking for?’ (Fronted Wh-word cannot be doubled?)

- These three cases show similar properties:
  - A ‘Pivot’ constituent surfaces at the left edge of the clause.
  - No overt subordinating material separates the fronted constituent from the remainder
  - Absolutive clitics are banned from surfacing to index the fronted argument.
  - Question: can these parallels can be captured under a common displacement analysis?

6 Conclusions

- Mandar has the empirical tools to make a pseudocleft analysis of clause-initial wh plausible.
- Pied-piping & extraction patterns suggest that some argument questions involve displacement.
- Clitic insertion patterns may provide evidence for wh-movement in other wh-initial questions.
- Mandar: a predicate-fronting language that derives wh-initial argument Q’s via displacement.
7 Selected Bibliography


