

West Sulawesi: The Comparative Middle Field

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Abstract

1 West Sulawesi: Linguistic Scene

1.1 Linguistic Geography

- West Sulawesi (Indonesia, Sulawesi): spans the western corner of Sulawesi
- Low-lying coastal plains in the north and south, mountains in the interior
- Linguistic geography follows: Mamuju/Mandar on coasts, PUS, Ulumanda upriver
- Languages represent primary branches of Northern South Sulawesi (Austronesian)
- Mandar historical prestige language; Balanipa Sultanate (1600's-1905)
- All languages understudied and today, **threatened**: transmigration and urbanization

Table 1: Data Sources Directionals

Language	Lect	Source
MMJ	Mamuju City	Strømme (1994)
ULU	Labuan Rano, Orobatu	Speakers: Aldi Kurniady, Charles Firmansya
PUS	Sattoko	Speaker: Saldi
MDR	Ugibaru, Balanipa	Speakers: Jupri Talib, Nabilah Haruna

2 Basic Clause Structure

2.1 Ordering of Elements

- Common basic clause structure, shown in (1)¹
- Verbs precede core arguments, follow negation, TAM, material in C

(1) COMP } FOCUS } NEG } TAM } VERB } SUBJ, OBJ } ADJUNCT

¹Language Abbreviations: MMJ = Mamuju, ULU = Ulumanda', PUS = Pitu Ulunna Salu, MDR = Mandar. Glossing abbreviations include: 1, 2, 3 = 1st, 2nd, 3rd person, ABS = Absolutive, ADJ = Adjective, ADV = Adverbial, APPL = Applicative, ASP = Aspectual, AV = Agent Voice, CAUS = Causative, COMP = Complementizer, ERG = Ergative, EMPH = Emphatic, EX = Exclusive, FUT = Future, GEN = Genitive, HON = Honorific, IN = Inclusive, IPFV = Imperfective, IRR = Irrealis, LNK = Linker, MED= Middle, MOT = Motion, NEG = Negative, NMLZ = Nominalizer, PASS = Passive, PFV = Perfective, PLUR = Plural, PREP = Preposition, POSS = Possessive, PRT = Particle, STAT = Stative, TRANS = Transitivity, VBLZ = Verbalizer

- (2) Injolo'=ko apa' u'de mala ni-parenta api
 wait.first=2.ABS because NEG may PASS-command fire
 'Wait (for it to cook), because fire cannot be commanded' (Mamuju, Strømme 1991)
- (3) Wow, indang=a' rua ma'-pe'-guru-i iyau itingo!
 PRT NEG=1.ABS once AV.MED-MED.2-learn-TRANS I that
 'Wow, I have never studied that before!' (Mandar)

2.2 Verbal Systems

- Preverbal ergative proclitics, second-position absolutive enclitics
- AV-infix $\langle um \rangle$ infixes into prefixes in (2)²
- AV-forms basically intransitive; single arguments indexed by absolutive clitics
- Non-AV verbs transitive; agent and patient indexed with ergative and absolutive sets

Table 2: P-Series Verbal Prefixes

Morph	Gloss	AV	Gloss	Variant?
<i>pa-</i>	CAUS	∅	∅	∅
<i>paN-</i>	DISTR	<i>maN-</i>	AV.DISTR	∅
<i>pa'</i>	MED	<i>ma'</i>	AV.MED	∅
<i>pe-</i>	POSS	<i>me-</i>	AV.POSS	<i>pi-</i>
<i>peN-</i>	MOT	<i>meN-</i>	AV.MOT	<i>piN-</i>
<i>pe'</i>	MED.2	<i>me'</i>	AV.MED.2	<i>pi'</i>
<i>po-</i>	MED	<i>mo-</i>	AV.MED.3	∅
<i>pu-</i>	MOT2	<i>mu-</i>	AV.MOT.2	(absent)

- (4) Na=ma'-kelong=ka' di=mamuju
 FUT=AV.MED-sing=1.EX.ABS in=Mamuju
 'We're going singing in Mamuju!' (Ulumanda')
- (5) Andiang=pa=i=tau' puha k-um-ande
 NEG=IPFV=3.ABS=person already AV-eat
 'We haven't eaten yet.' (PUS)
- (6) Ku=kita=ko, mu=kita=a' to=yaku'
 1.ERG=see=2.ABS 2.ERG=see=1.ABS also=1SG
 'I see you, you see me too.' (Mamuju, Strømme 1991)
- (7) Melo=nasang=bande='o?
 want=all=Q=2.ABS
 'Do you actually want ALL of them?' (Mandar)
- (8) U-po-elo'=dua=nasang=i
 1.ERG-MED.3-desire=still=all=3.ABS
 'I still want all of them.' (Mandar)

- Tables (3), (4) present the ergative & absolutive clitic sets.
- Third-person clitic loss from north (Mamuju: complete) to south (PUS: starting)
- First-person inclusive innovations: PASS for ergative, 'person' + 3.ABS for absolutive

²This morphemic diversity reflects historical patterns of inter-familial borrowing, as the eight p-prefixes below all originate from PMP *pa, *paN, and *paR. Most prefixes only occur with small numbers of specific lexemes.

Table 3: Ergative Clitic Sets

LECT	1.SG	2.SG	3.SG	1.IN	1.EX	2.PL
MMJ	<i>ku-</i>	<i>mu-</i>	<i>na-</i>	<i>ni-</i>	<i>ku-</i>	<i>mu-</i>
ULU	<i>ku-</i>	<i>mu-</i>	<i>na-</i>	<i>ni-</i>	<i>ki-</i>	<i>mu-</i>
PUS	<i>u-</i>	<i>mu-</i>	<i>na-</i>	<i>ni-</i>	<i>i-</i>	<i>mi-</i>
MDR	<i>u-</i>	<i>mu-</i>	<i>na-</i>	<i>ni-</i>	<i>ni-</i>	<i>mu-</i>

Table 4: Absolutive Clitic Sets

LECT	1.SG	2.SG	3.SG	1.IN	1.EX	2.PL
MMJ	= <i>a'</i>	= <i>ko</i>	= \emptyset	= <i>tau'</i>	= <i>a'=ii</i>	= <i>ko=ii</i>
ULU	= <i>a'</i>	= <i>'o</i>	= <i>i/=∅</i>	= <i>ki'</i>	= <i>kang</i>	= <i>ko=a'</i>
PUS	= <i>a'</i>	= <i>'o</i>	= <i>i/=∅</i>	= <i>'i'</i>	= <i>kang</i>	= <i>ko=a'</i>
MDR	= <i>a'</i>	= <i>'o</i>	= <i>i</i>	= <i>tau'</i>	= <i>tau'</i>	= <i>'o</i>

2.3 VP-Internal Order

- All languages show flexible VSO-VOS word order; Mamuju examples (9)-(10).
- Absolutive typically follows the verb; Mandar examples (11)-(12) show slight ambiguity
- Prosody, fronting operations used to disambiguate: Mandar example (13)

- (9) Na=kua **guru-ng-ku'** **uwalu-sabu patap-pattiaru ruppia.**
 3.ERG=say teacher-LNK-1.GEN eight thousand four hundred rupiah
 'Our teacher says 8,400 rupiah.' (Mamuju, Strømme 1991)
- (10) Na=pa-ma-langka=bappa **sunga'-ta'** **Puang, Indo'!**
 3.ERG=CAUS-ADJ-long=hopefully life-2.HON.GEN God Mother
 'May god lengthen your life, Ma'am!' (Mamuju, Strømme 1991)
- (11) Na=patei **Ali Baco.**
 3.ERG=kill Ali Baco
 'Baco killed Ali' (less preferred: Ali killed Baco) (Mandar)
- (12) mam-patei **Ali Baco.**
 AV.DISTR-kill Ali Baco
 'Ali killed Baco' (less preferred: Baco killed Ali) (Mandar)
- (13) U-ita=i Baco na=patei Ali
 1.ERG-see=3.ABS Baco 3.ERG-kill Ali
 'I saw that Baco killed Ali!' (Mandar)

2.4 Comparative TP Structure

- Consistent structure across the group, shown in (5)
- All languages contrast realis and irrealis negation
- Different aspectual adverbial systems: two most common shown below
- Preverbal future clitic stands at bottom of middle field

Table 5: Middle Field Elements

LECT	NEG	IRR.NEG	ALREADY	STILL	FUT
MMJ	<i>u'de</i>	<i>da'a</i>	<i>pura</i>	<i>tatta'</i>	<i>na=</i>
ULU	<i>u'de</i>	<i>da'a</i>	<i>pura</i>	<i>tatta'</i>	<i>na=</i>
PUS	<i>andiang</i>	<i>da=</i>	<i>puha</i>	<i>tatta'</i>	<i>na=</i>
MDR	<i>(i)ndang</i>	<i>da=</i>	<i>pura</i>	<i>tatta'</i>	<i>na=</i>

2.4.1 Negation

- Negation precedes aspectual adverbs, modals, verbs and follows material in the C domain.
 - Ternary contrast between realis, irrealis, and equational (excluded) negation.
 - Negation represents the highest head which clitic regularly move to.
 - Irrealis negator procliticizes when no clitics follow in PUS, Mandar.
- (14) **U'de=pa** *pura* *mo-pa-rapa'* *so'bo'*
 NEG=IPFV already AV.MED-CAUS-meeting shaman
 'The shaman had not yet performed the ceremony.' (Mamuju, Strømme 1991)
- (15) **Da'a=tau'** *manating ne, aka' semata ku-chat=ki!*
 IRR.NEG=person ADJ-angry PRT COMP always 1.ERG-chat=1.IN.ABS
 'Don't get mad, ok? Because I'm always chatting you!' (Ulumanda')
- (16) **Andiang=pa=a'** *ma-ita lansung, mi-apa=i karewa-na dio*
 NEG=IPFV=1.ABS ADJ-see direct MED.3-what=3.ABS news-3.GEN there
 'I've never directly seen it, what things are like there.' (PUS)
- (17) **Da=mu-luppe-i** *balas ma'-basa inggris*
 IRR.NEG=2.ERG-forget-TRANS reply AV.MED-language English
 'Don't forget to reply using English!' (Mandar)

2.4.2 Aspectual Adverbs

- Aspectual adverbs always follow negation but precede verbs.
- Regularly attract all clitics across the subfamily
- Table (6) illustrates significant regional variance.
- Certain constituents (*mamanya*, *biasa*) show behavioral splits between languages.

Table 6: NSSul Aspectual Adverbs

LECT	ALREADY	STILL	CONTINUE	CURRENTLY	USUALLY	ONCE
MMJ	<i>pura</i>	<i>tatta'</i>	<i>tarrus</i>	<i>mamanya</i>	<i>biasa</i>	∅
ULU	<i>pura</i>	<i>tatta'</i>	<i>tarru'</i>	∅	∅	∅
MMJ	<i>puha</i>	<i>tatta'</i>	<i>tahu'</i>	<i>mamanya</i>	∅	<i>rua</i>
MMJ	<i>pura</i>	<i>tatta'</i>	<i>tarrus</i>	<i>mamanya</i>	<i>biasa</i>	<i>rua</i>

- (18) Mala **tatta'** *ma-gassing ana'-ta'*.
 can still ADJ-strong child-1.IN.GEN
 '[our children] can stay strong!' (Mamuju, Strømme 1991)

- (19) **Tarru'=ke'='o=ne** di Tobadak lambi' karahiang?
 continue=IPFV=2.ABS=Q PREP Tobadak arrive evening
 'Will you be in Tobadak straight until evening?' (Ulumanda')
- (20) **puha=mo=i=tau'** k)um⟨ande
 already=PFV=3.ABS=person AV-food
 'Have you eaten yet?' (PUS)
- (21) Iyo, **rua=to=ande=i** u-baca iting buku
 Yes once=also=EMPH=3.ABS 1.ERG-read that book
 'Yes, I've also read that book once' (Mandar)

2.4.3 Future Marking

- The future proclitic *na=* surfaces preverbally in all languages
- This element ordinarily never leaves its position but can be coaxed out by, e.g. VP ellipsis

- (22) **Na=ma'-kelong=ka'** di=Mamuju!
 FUT=AV.MED-sing=1.EX.ABS in=Mamuju
 'We're going out singing in Mamuju!' (Ulumanda')
- (23) **Na=malai=to=anda=a'** mua' bulan annang=i
 FUT=return=also=EMPH=1.ABS if month six=3.ABS
 'Yeah, I'll be coming home around June.' (PUS)
- (24) Andiang=i **na=u-luppe-i**
 NEG=3.ABS FUT=1.ERG-forget-TRANS
 'I won't forget.' (Mandar)
- (25) Ampele' meng-ka-tanda'=a' ingkai' mating di ingkita'
 then AV.MOT-STAT-arrive=1.ABS 1.EX towards PREP 1.IN
na=ma-bombang=ai na=u'de=ai?
 FUT=ADJ-wave=perhaps FUT=NEG=perhaps
 'Then we are just coming to ask you: "will there be waves or will there not?"'

2.5 Structural Conclusions

- These languages share a typical clausal order of VSO.
- Negation, aspectuals, and the future clitic precede the verb in a fixed order

3 Second-Position Clitics

- The NSSul subgroup has a huge 2P clitic inventory: absolutive, aspectual, adverbial clitics
- Mamuju contains two more clitic series: a plural marker and clitic demonstratives
- Table (7) presents the cross-familial order of adverbial elements below
- Table 15 illustrates their basic distributional pattern

- (26) ADV1 } ASP } ABS } ADV2

Table 7: General Clitic Placement

C	Negation	Aspect	Verb
C	∅	∅	VERB= X
C	∅	ASP= X	VERB
C	NEG= X	ASP	VERB

3.1 Absolutive Clitics

- Follow the first constituent in the middle field (negation, aspectuals, or the main verb)
- Contrast with tightly fixed ergative proclitics, which strictly precede the verb
- Examples (27)-(28) show basic placement, (29)-(30) show raising behavior.

- (27) **Ku=kita=ko mu=kita=a'** to=yaku'
 1.ERG=see=2.ABS 2.ERG=see=1.ABS also=1SG
 'I see you, you see me too.' (Mamuju, Strømme 1991)
- (28) **Da'a=tau'** ma-nating ne, aka' semata **ku-chat=ki'**!
 IRR.NEG=person ADJ-angry PRT COMP always 1.ERG-chat=1.IN.ABS
 'Don't get mad, ok? Because I'm always chatting you!' (Ulumanda')
- (29) **Andiang=pa=a'** ma-ita lansung mi-apa=i karewa-na dio
 NEG=IPFV=1.ABS AV.VBLZ-see direct MED.3-what=3.ABS news-3.GEN there
 'I've never really seen it directly, what things are like there.' (PUS)
- (30) **Pura=sannal=i** u-po-elo'
 already=very=3.ABS 1.ERG-MED.4-desire
 'Once I really wanted that (but I was rejected).' (Mandar)

3.2 Aspectual Clitics

- Common aspectual set exists across NSSul (divergent morphophonology simplified here)³
- Follow the first constituent in the middle field (negation, aspectuals, or the main verb)
- Invariably precede the absolutive clitics; follow the same distributional pattern.
- Examples (27)-(28) show basic placement, (29)-(30) show raising behavior.

Table 8: Aspectual Clitics

LECT	IPFV	PFV	EMPH
MMJ	=pa	=do	=mo
ULU	=ke'	=do	=mo
PUS	=pa	=mo	=mo
MDR	=pa	=mo	=mo

³The enclitics below are presented unchanged throughout the data, but these forms actually show coalescence effects across all four languages and further harmonization in Ulumanda'. In brief: the sequences =do=a', =mo=a', and =pa=a' coalesce to Mamuju =do', =mo', =pa', Ulumanda' (lacking =pa) =da', =ma', and PUS/Mandar (lacking =do) =ma', pa'. These latter three languages also contract =mo=i to =mi, though =i is otherwise marginal in Ulumanda' and PUS. Lastly, the Ulumanda' sequences =ke'=a' and =ke'='o harmonize to =kaka' and =koko'.

- (31) **Ma-rakka'=ii=do** su'be mam-bali
ADJ-afraid=PLUR=PFV come ANTIP-opponent
'They were all afraid to come fight.' (Mamuju, Strømme 1991)
- (32) **Ni-tunda=ke'** kappal l(um)olo'-ku'
PASS-delay=IPFV ship AV-fly-1.GEN
'My flight's still being delayed.' (Ulumanda')
- (33) **Andiang=pa=a'** ma-ita lansung mi-apa=i karewa-na dio
NEG=IPFV=1.ABS ADJ-see direct MED.3-what=3.ABS news-3.GEN there
'I've never really seen it directly, what things are like there.' (PUS)
- (34) **Mua'** buku Bumi Manusia, **pura=mo=i** u-baca
if book This Earth of Mankind, already=PFV=3.ABS 1.ERG-read
u-tamma'-i=mo=i
1.ERG-end-TRANS=PFV=3.ABS
'As for the book This Earth of Mankind, I've already read it to the end.' (Mandar)

3.3 Adverbial Clitics: Set 1

- The NSSul languages also show clitic adverbs which exhibit second-position effects as well
- Chart (26) above delineates one such class: adverbs preceding the ASP and ABS clitics
- Left-to-Right order reflects linear order of occurrence (as best can be determined)
- Note: all monosyllabic adverb clitics (and aspectuals) linearly follow disyllabic ones.
- Examples (35)-(38) illustrate base placement patterns in PUS, Mandar
- Examples (39)-(42) show raising in Mamuju, Ulumanda'

Table 9: Cross-Familial Inner Adverb Clitics

Language	TRULY	REALLY	ONCE	ALL	ACTUALLY	STILL	ONLY	MAYBE	AGAIN	ALSO	ONLY2
MMJ	<i>si'da</i>	<i>le'ba'</i>	<i>pissang</i>	<i>nasang</i>	<i>banggi</i>	<i>lolo</i>	<i>kale</i>	<i>ai</i>	\emptyset	\emptyset	<i>ki</i>
ULU	<i>si'da</i>	<i>le'ba'</i>	<i>pissang</i>	<i>nasang</i>	<i>bande</i>	<i>lolo</i>	<i>kale</i>	\emptyset	<i>bu</i>	<i>tu</i>	<i>de</i>
PUS	<i>sannal</i>	<i>le'ba'</i>	<i>pissang</i>	<i>nasang</i>	<i>bande</i>	<i>dua</i>	<i>kale</i>	<i>ai</i>	<i>bo</i>	<i>to</i>	<i>ra</i>
MDR	<i>sannal</i>	<i>le'ba'</i>	<i>pissang</i>	<i>nasang</i>	<i>bande</i>	<i>dua</i>	<i>kale</i>	<i>ai</i>	<i>bo</i>	<i>to</i>	<i>ra</i>

- (35) Moa' ita' **ma-sae=dua=pa=i=tau'** dini Indonesia a?
if 1.IN ADJ-long=still=IPFV=3.ABS=person here Indonesia PRT
'Bro, are you still going to be in Indonesia for a while?' (PUS)
- (36) **Ma-romo'=nasang=i** pi'-guru-ang basa di-pake
ADJ-easy=all=3.ABS MED.2-learn-NMLZ language PASS=use
'learning languages is all easy when they are being used.' (PUS)
- (37) Iya tongan=tu'u, **ka-rambo=sannal=i** 1 jam 30 menit indap=pa macet-na
yes correct=very STAT-far=very=3.ABS 1 hour 30 minutes NEG=IPFV traffic-3.GEN
'Yes, just right, it's very far: an hour and a half before the traffic.' (Mandar)
- (38) **Ma-nyamang=le'ba=bo=mo=i** ande-ta' di'e bongi de yaya
ADJ-tasty=really=again=PFV=3.ABS food-1.IN.GEN this night PRT PRT
'This food's really good again tonight!' (Mandar)

- (39) **U'de=banggi=ko** tallang?
 NEG=actually=2.ABS drown
 'You really didn't drown?' (Mamuju, Strømme 1991)
- (40) **U'de=kale=a'** mala ma-tindo!
 NEG=only=1.ABS can AV.VBLZ-sleep
 'I just can't sleep!' (Mamuju, Strømme 1991)
- (41) Narang ma-rao=do dai' allo, **u'de=lolo=pa** kaleba.
 finally ADJ-far=PFV upwards sun NEG=still=IPFV wake.up
 'Finally, the sun had already risen far up but he had still not awoken.' (Mamuju, Strømme 1991)
- (42) **Pura=tu=mo=a'** koi ande di=laeng-na
 already=also=PFV=1.ABS 1.SG eat in=other-3.GEN
 'I also just ate somewhere else.' (Ulumanda')

3.4 Adverbial Clitics: Set 2

- The NSSul languages show a second class of 2P adverbs that follow the ASP and ABS clitics.
- Mamuju has innovated a large set; other languages show parallel effects with fewer lexemes
- Chart (10) lists cross-familial adverbs of this class; linear order here not determined.
- Examples (43)-(45) illustrate base placement pattern in Mamuju, Mandar
- Examples (46)-(48) show raising in Mamuju, Mandar.

Table 10: Cross-Familial Outer Adverb Clitics

Language	FIRST	LATER	AGAIN	ALSO
MMJ	<i>injolo'</i>	<i>nenna</i>	<i>bomo</i>	<i>tomo</i>
ULU	<i>jou'</i>	\emptyset	\emptyset	\emptyset
PUS	<i>dolo'</i>	<i>nenna</i>	\emptyset	\emptyset
MDR	<i>dolo'</i>	<i>nenna</i>	\emptyset	\emptyset

- (43) Mane' **tituali=ii=nasang=bomo** sau di anngatang...
 then return=PLUR=all=again outwards PREP village
 'Then they all returned out to their villages...' (Mamuju, Strømme 1991)
- (44) Ampe' **ti-tundu=mo=a'=tomo**.
 then ADV-fatigue=EMPH=1.ABS=also
 'Then I got tired as well.' (Mamuju, Strømme 1991)
- (45) Mua' iyou melo=a' **ma'-kuasa-i=dolo'** publik speaking
 if 1.SG want=1.ABS AV.MED-power-TRANS=first public speaking
 'As for me, I want to master public speaking first.' (Mandar)
- (46) **U'de=bomo** ma-coa ku=sa'ding.
 NEG=again ADJ-good 1.ERG=feel
 'I don't feel good again.' (Mamuju, Strømme 1991)
- (47) Ampele' **u'de=mo=tomo** diang piso-ku' inne ma-tadang!
 Then NEG=EMPH=also exist machete-1.GEN this ADJ-sharp
 'And also, none of my knives were sharp!' (Mamuju, Strømme 1991)

- (48) **Da='o=dolo'** mi-osa umm-ande!
 IRR.NEG=2.ABS=first AV.POSS-stop AV-eat
 'Don't you stop eating first!' (Mandar)

4 Testing Second-Position Effects

- We know that all these clitics raise within the middle field (negation, aspectual adverbs)
- How do they interact with material above and below?

4.1 Below the Middle Field

- When the middle field is empty, clitics follow the first element of the predicate.
- When the predicate contains a VP or AP, the clitic follows V or A.
- Examples (49)-(52) briefly re-illustrate these patterns

- (49) Yaku' indo' **beang=a'=injolo'** doi'-ta' dua sa'bu ruppia
 1SG mother give=1.ABS=first money-1.IN.GEN two thousand rupiah
 'Hey mom, just give me 2,000 IDR first.' (Mamuju, Strømme 1991)

- (50) **Ku-kasse-i=tu=de** koi, andi'
 1.ERG-like-TRANS=also=only 1.SG bro
 'I also just like it, bro.' (Ulumanda')

- (51) **Ma-lolo=sannal=i**
 ADJ-pretty=very=3.ABS
 'really pretty!' (PUS)

- (52) **Ma-nyamang=le'ba=bo=i** ande-ta' di'e bongi de yaya
 ADJ-tasty=really=again=3.ABS food-1.IN.GEN this night PRT PRT
 'Your food will be really good again tonight!' (Mandar)

- Certain (non-clitic) elements, however, can intervene before these clitics.
- Directional markers, robustly attested across SSul: (53)-(81)
- Nominal predicates may show variability: splitting in Mandar degraded but not impossible

- (53) **Mas-sikola=a'** di bao di Makassar
 AV.MED-school=1.ABS PREP on PREP Makassar
 'I went to school up in Makassar' (Mamuju, Kaufman (P.C.))

- (54) Su'be **di bao=a'** di Ujung Pandang.
 come PREP on=1.ABS PREP Ujung Pandang
 'I am coming up from Ujung Pandang (Makassar)' (Mamuju, Strømme 1991)

- (55) **Lambi=a'** baho di Makassar
 come=1.ABS on PREP Makassar
 'I am coming up from Makassar' (Ulumanda')

- (56) Lambi **baho=a'** di Makassar
 come on=1.ABS PREP Makassar
 'I am coming up from Makassar' (Ulumanda')

- (57) Mahasiswa pole Sulawesi Barat=i=tau'
 Student from Sulawesi west=3.ABS=person
 'We are students from West Sulawesi' (Mandar)

- (58) ?Mahasiswa=i=tau' pole Sulawesi Barat
 Student=3.ABS=person from Sulawesi west
 'We are students from West Sulawesi' (Mandar)

4.2 Above the Middle Field

- Constituents above negation: modal and temporal adverbs, complementizers, wh-words.
- Table (11 illustrates the linear ordering of these elements.
- High adverbs and complementizers never attract aspectual clitics, but foci do.

Table 11: The Mamuju C-Domain

Comp	Topic	Focus	Adv3
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4.2.1 High Adverbs

- Two classes of pre-negation adverbial: Mamuju examples of each tabled below in (12).
- Mamuju, Ulumanda', Mandar data shows that these never attract clitics: (59)-(61).

Table 12: Mamuju High Adverbs

Modal		Temporal	
<i>maumuna</i>	although	<i>simata</i>	always
<i>barang</i>	perhaps	<i>n(am)arang</i>	finally
<i>sala-sala</i>	almost	<i>tappa</i>	suddenly
<i>biasa</i>	usually	<i>mane'</i>	just.then

- (59) **Narang** mole=a' su'be di bangking-ku'
 finally healed=1.ABS from PREP disease-1.GEN
 'Finally I healed from my disease' (Mamuju, Strømme 1991)
- (60) Da'a=tau' ma-nating ne aka' **semata** ku-chat=ki'
 IRR.NEG=person ADJ-angry PRT COMP always 1.ERG-chat=1.IN.ABS
 'Don't get mad because I always chat you!' (Ulumanda')
- (61) Hay, **mani** soro'=a' ma'-kuliah
 PRT just.then return=1.ABS AV.MED-study
 'Hey, I just came home from school.' (Mandar)

4.2.2 Complementizers

- The NSSul languages show common classes of complementizer tabled below in (14)
- Complementizers invariably fail to attract aspectual, absolute, and adverbial clitics.

- (62) Umba mu=ola sa-m-bongi **ampe'** u'de=**ko** diang ku=kita?
 which 2.ERG=go one-LNK-night so.that NEG=2.ABS EXIST 1.ERG=see
 'Where did you go last night so that I couldn't see you?' (Mamuju, Strømme 1991)

Table 13: Regional Complementizers

Language	IF	SO.THAT	BECAUSE
MMJ	<i>ampunna'</i>	<i>ampe'</i>	<i>apa'</i>
ULU	<i>puna'</i>	<i>anna'</i>	<i>aka'</i>
PUS	<i>moa'</i>	<i>anna'</i>	<i>apa'</i>
MDR	<i>mua'</i>	<i>anna'</i>	<i>apa'</i>

- (63) Tapi **puna'** mem-mata=a', tette' karrua=a'
 but if AV.MOT-eye=1.ABS, o'clock eight=1.ABS
 'But if I stay up all night, I (wake up at) eight o'clock. (Ulumanda')
- (64) Na=ma-lai=toanda=a' **moa'** bulan annang=i
 FUT=ADJ-come.home=too=1.ABS if month six=3.ABS
 'I'll come home in June.' (PUS)
- (65) Tongan=tu'u **apa'** mala=i di-pake media komunikasi bassa di'e
 correct=very because can=3.ABS PASS-use media communication like this
 'Just right, because we can use it as a medium of communication like this.' (Mandar)

4.2.3 Clause-Initial Focus

- (66) So far, the distribution of clitic elements can be described syntactically: they do not move past negation
- (67) Unfortunately, wh-words and clause-initial foci raise problems for this pattern.
- (68) NSSul languages contain two classes of wh-word: embedding verbs ('why,' 'how') and argument wh's, tabled in (14)
- (69) Mamuju, Ulumanda', and Mandar examples (70)-(72) show this second set attracts clitics

Table 14: Raising Wh-Words

Language	WHAT	WHO	WHICH
MMJ	<i>apa</i>	<i>sema</i>	<i>umba</i>
ULU	<i>aka</i>	<i>minna</i>	<i>umba</i>
PUS	<i>apa</i>	<i>innai</i>	<i>inna</i>
MDR	<i>apa</i>	<i>innai</i>	<i>inna</i>

The Mamuju examples below illustrate that every class of clitic freely attracts up to these adverbs. Supplementary data from other languages supports this conclusion below as well.

- (70) **Umba=nasang=mo** na=ola?
 which=all=EMPH 3.ERG=go
 'Where are they all going?' (Mamuju, Strømme 1991)
- (71) Aka mu-po-gau', **umba=do** mu-enge-i, **minna='o** siola?
 what 2.ERG-MED.3-deed which=PFV 2.ERG-place-TRANS who=2.ABS with
 'What are you doing, where are you, and who are you with?' (Ulumanda')
- (72) **Inai=mo** pura mak-kiring di'e nasang sura' le'mai ee?
 who=PFV already AV.MED this all letter to.here PRT
 'Who already sent all these letters in?' (Mandar)

- Focus-fronted pronouns and NPs attract clitics, but focused adjuncts do not:

- (73) **Yaku'=ii** man-jampang-i.
 1.SG=PLUR ANTIP-care.for-TRANS
 'I took care of them' (Mamuju, Strømme 1991)
- (74) **Bakso=do=koa'** mang-ande?
 bakso=PFV=2.PL.ABS AV.DISTR-eat
 'You all just ate bakso?' (Ulumanda')
- (75) **Iting elong=mo** mu-pa'-elong-i sangallo!
 that song=EMPH 2.ERG-MED-sing-TRANS earlier
 'THAT song you were singing earlier!' (Mandar)
- (76) **Di boyang** ma'-ellong=mo=a' sangallo.
 PREP house AV.MED-sing=PFV=1.ABS earlier
 'In the house I sang earlier' (Mandar)

4.3 Final Chart

- So, if we want to summarize these clitic patterns:

Table 15: General Clitic Placement

Comp	Focus	Modal Adv	Temporal Adv	Negation	Aspectual Adv	Verb	Directional
∅	∅	∅	∅	∅	∅	∅	DIR= X
∅	∅	∅	∅	∅	∅	VERB(= X)	DIR(= X)
∅	∅	∅	∅	∅	ASP= X	VERB	DIR
∅	∅	∅	∅	NEG= X	ASP	VERB	DIR
∅	∅	∅	TEMP	NEG= X	ASP	VERB	DIR
∅	∅	MOD	TEMP	NEG= X	ASP	VERB	DIR
∅	FOC= X	MOD	TEMP	NEG	ASP	VERB	DIR
C	FOC= X	MOD	TEMP	NEG	ASP	VERB	DIR

5 Traditional Models of Clitic Placement

- How can we theoretically model these placement patterns? Syntax, phonology, prosody?
- How do these NSSul clitics fit into a broader typology of clisis?

5.1 Typology of Approaches to 2P Clisis

Boskovic (2001) offers the following taxonomy:

- Strong Syntax: Clitic positioning fully determined by the syntax.
- Strong Phonology: Phonology places clitics (syntactic arguments) in second-position.
- Weak Syntax: Clitic placement syntactic but handled by prosody in a pinch.
- Weak Phonology: Clitics move wherever in the syntax; phonology filters out non-2P.

5.2 Problems with Strong Approaches

- Strong Syntax: clitics typically move to C (Franks 2000, Progovac 2000, Boskovic 1995)
- This approach requires host constituents to move to an even higher position.
- In NSSul, clitic hosts don't need to form constituents! (Directionals, nominal predicates)
- Strong Phonology: clitic consistently needs to move up to some clausal 2P
- In NSSul, complementizers and modal/temporal adverbs can't attract them!

5.3 Weaker Approaches: any hope?

5.3.1 Weak Phonology (Franks 1998, Boskovic 1995, 2001)

- Clitics move anywhere in the syntax; phonology filters out candidates that it doesn't like.
- Copy Theory of Movement (Chomsky 1991): syntax triggers movement, but PF ultimately decides where moving constituents are pronounced (based on orthogonal factors)
- Progovac (1996) on BCS: elements that can host 2P clitics can also sub-extract from DP
- Unfortunately, the problem should already be apparent for Austronesian...
- Chung (2003) presents the following Chamorro data; NSSul shows the same problem.

- (77) Famalao'an *hit* ginin todus i islas gi Pasifika
women we from all the islands LOC pacific
'We are women from all the islands of the Pacific.' (Chamorro; Chung 2003)
- (78) *Hayi [kime'=nya t] *hit*
who? buddy=AGR we
'Whose pals are we?' (Chamorro; Chung 2003)
- (79) Senji'=kale=mo roti ku-ande
a.bit=only=EMPH bread 1.ERG-eat
'I ate just a little bit of bread.' (Ulumanda')
- (80) *Roti aka mu-ande senji' t?
bread what 2.ERG-eat a.bit
'What bread did you just eat a bit of?' (Ulumanda')

5.3.2 Weak Syntax (Halpern 1995)

- Clitic movement basically syntactic; hosts normally move into the left periphery
- But if syntax fails to provide a host, prosody can force clitics to invert with what follows.
- This approach can explain why syntactic non-constituents can host clitics in SSul.
- It does, however, struggle with two facts: first, optionality in placement (re directionals)
- And second, that clitics don't need to occupy 2P (when preceded by unattractive things).

- (81) **Lambi(=a')** **baho(=a')** di Makassar
come(=1.ABS) on(=1.ABS) PREP Makassar
'I am coming up from Makassar' (Ulumanda')
- (82) Da'a=tau' ma-nating ne aka' **semata ku-chat=ki'**
IRR.NEG=person ADJ-angry PRT COMP always 1.ERG-chat=1.IN.ABS
'Don't get mad because I always chat you!' (Ulumanda')

6 Some Modern Perspectives

6.1 Approaches to Austronesian Clitics

- Chamorro (Chung 2003), Tagalog (Kaufman 2008) show similarly tricky systems
- Kaufman (2010): Tagalog 2P clitics the OT-governed output of feature-driven merge
- Chung (2003): Chamorro weak pronoun (clitic) placement falls to prosodic structure
- Chamorro clitic placement algorithm (following Prosodic Subcategorization, Inkelas 1990):

(83) i [p[p]=X]

- Several ways this looks good for NSSul:
- Syntactic constituency not crucial to define hosts (Nominal predicates, directionals)
- Mapping algorithm may skip functional heads, adjectival/adverbial modifiers
- This could (potentially) give us a way to explain, e.g. flexible host size
- But we still have a problem concerning the domain of application: how do we restrict 2P effects to the middle field (i.e. negation and lower) plus focused elements?

6.2 The Chunking Problem

- We want to define a specific domain for clitic effects in NSSul: TP.
- But identifying distinct prosodic units remains a serious field-wide debate.
- Direct vs Indirect mapping approaches, multi-tiered mapping theories (Bennet & Elfner 2018)
- Moreover, how can we get clitics to move up to focus as well?

6.3 McFadden & Sundaresan 2018: Intonation Phrase Extension

- Recasts the EPP, comp-trace effects, and others as prosodically-driven phenomena.
- Nothing to do with clitics- but some useful (and relevant) conceptual machinery.

Some novel ideas:

- Major prosodic domains defined as spell-out domains (Adger 2003, Selkirk 2011)
- Since C is a phase-defining head, TP represents an intonation phrase
- These prosodic domains can adjust in size when constituents move from their edges.

What are these authors trying to do?

- For McFadden & Sundaresan, the EPP reflects a syntactic fix to a prosodic problem
- Intonation Phrase Edge Generalization: left edges of intonation phrases MUST be filled.
- A cluster of patterns- like the EPP, comp-trace effects, and so on- stem from the following:

(84) Overt Subject Requirement: Spec-TP, the left edge of an IP, must be overt.

- This generalization basically accounts for the following:

(85) *[_{CP} [_{TP}^{intP} *pro*/PRO punched Alex?]]

(86) *Who did you say [_{CP} that [_{TP}^{intP} *t* punched Alex?]]

- But would seem to struggle with extremely simple clauses like:

(87) *_{[CP Who _[TP^{intP} t punched Alex?]]}

- McFadden and Sundaresan note, however, that a large body of literature has suggested that the sizes of phases can be altered by syntactic operations around them: Phase Extension (den Dikken 2007), Phase Sliding (Gallego 2010), Domain Suspension (Bobaljik & Wurmbrand 2013), etc.
- From this observation, they propose the mechanism below:

(88) Intonation Phrase Extension

”Given a syntactic constituent XP that would normally be aligned with an IntP boundary by the categorial route, if an element moves from the edge of XP into a constituent YP which contains XP, the IntP will be aligned with YP instead.”

- Basically, what this says is as follows: movement from the left edge of TP into C drags the boundary of the TP-intonation phrase with it.
- Consequently, the intonation phrase boundary in (89) moves up to C and its edge is filled.

(89) *_{[CP^{intP} Who _[TP t punched Alex?]]}

6.4 So what about NSSul?

Scoping back, McFadden & Sundaresan’s account proposes two things about prosodic structure:

- TP, as a spell-out domain, typically behaves as a single intonation phrase
- When focused constituents raise from its edge to C, the IP boundary follows.
These two points look pretty similar to the observed situation in NSSul, where:
- Clitics of all types raise in the middle field but usually not beyond it.
- Clause-initial focused material alone can coax these clitics out.
To solve our domain-bounding problem, then, we might basically suspect:
- These clitics behave as second-position elements within their IP, defined as TP in spell-out
- This typically lets them raise as high as the top of the middle field, but not beyond
- When focused constituents extract, however, this prosodic domain extends up to C.

6.5 Some Challenges for this approach

Deriving the intonation phrase extension facts:

- McFadden & Sundaresan: IP extension triggered by raising from Spec, TP into C.
- What does the syntax of this movement really look like in NSSul?

Satisfying the EPP in Verb-initial languages:

- McFadden & Sundaresan note properties which cluster in Spanish, Italian, Greek: allowing pro-drop, showing no comp-trace effects (Rizzi 1982), and not showing sensitivity to the IPEG. Why?
- Alexiadou & Anagnostopoulou’s (1998) old argument: Greek, Spanish can satisfy EPP with V-to-T.
- How can we translate this proposal into NSSul terms?
- More broadly, how do NSSul languages fit into the syntactic typology developed here?

Steps moving forwards:

- How does the basic VSO order derive, and how high does the verb get?
- What language-internal evidence do we have for prosodic structure?
- What effects (prosodic, syntactic) are tied with clitic placement variability?

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