

Second Position in Mandar: Issues and Analysis
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1 Background: Second Position in Mandar

1.1 Second Position

- Definition: *2P clitics* are *special clitics* which follow the first ‘word’ in the ‘clause’ (Wackernagel 1898).
- The proper analysis of their linear position & prosodic status raises several theoretical questions:
 - The definition of the ‘host’:
 - * Often surface only loosely in ‘second position’; frequent flexibility in linear position Taylor 1990
 - * Halpern’s (1992) split: ‘first word’ vs ‘first daughter’ systems; some languages permit two patterns.
 - The nature of the linearization operation:
 1. One view: 2P order fundamentally syntactic; 2P clitics are like v2 verbs. Terzi 1999
 2. Another view: clitics move to c; PF figures out the rest. Halpern 1996, Bošković 2001
 3. Yet another: linear order determined by the phonology; clitics positioned outside the narrow syntax.
 - * The STRONGSTART analysis: Anderson 1998
 - ALIGN constraints push clitics to the left; STRONGSTART bans clitic at the absolute edge.
 - **Result:** 2P the compromise position; clitics ‘as left-aligned as they can be.’
 - * The SUBCATEGORIZATION approach Chung 2003
 - Clitics subcategorize to surface in second position within a prosodic unit.
 - Disconnected from STRONGSTART; second position inherently the goal.
 - The internal structure of the clitic cluster:
 - * Syntax: does the cluster form a complex x^0 or not? Bošković 2001
 - * Prosody: does the cluster form a prosodic constituent independent of the host?

1.2 Mandar Background

- South Sulawesi (Austronesian); roughly 500,000 speakers; some work on related languages (Kaufman 2008).
- Word order: verb-initial; fairly free order of arguments postverbally; **clitic cluster appears in 2p.**

(1) *Verb-initial word order; clitics in 2P*

- | | |
|--|--|
| <p>a. Mappamula=<u>i</u> bunga i=Murni.
 plant=3 flower NAME
 ‘Murni is planting flowers.’
 Pelenkahu et al. 1983; 195</p> | <p>b. Pura=<u>i</u> nala bainena diqo bau.
 already=3 she.took his.wife that fish
 ‘His wife had already taken that fish.’
 Pelenkahu et al. 1985; 155</p> |
|--|--|

1.3 The Clitic Cluster

- The Mandar 2P inventory: roughly 40 forms.
 - Agreement markers and Aspect T
 - Force heads: question particles, optative marker (let it be that...) C
 - Demonstratives, pronouns, floated quantifiers D
 - VP-adverbs (very, exactly), TP-adverbs (now, later), CP adverbs (maybe, honestly). ADV
- Underlined clitics alternate with independent forms possible outside of 2P.

2. **Scope:** structurally ‘higher’ clitics surface farther to the right.
3. **X-factor:** disyllabic clitics form two classes; pronouns surface at the right edge.

- **Schema:** DISYLLABIC ADVERBS > MONOSYLLABIC ADVERBS > AGREEMENT > OTHER ADVERBS > PRONOUNS

(5) *Syllable Count Matters*

- | | | |
|---|--|---|
| a. Maqua= nasang = bo = mi .
say=all=again=PFV.3
‘They all said it again.’ | b. Masae= dua = di = tau dini?
long=still=JUST.3=you here
‘Will you be here for long?’
Friberg & Jerniati 2000 | c. *Masae= di = dua = tau dini?
d. *Masae= di = tau = dua dini?
e. *Masae= da = tau = dua = i dini? |
|---|--|---|

(6) *Height Matters*

- | | |
|--|--|
| a. Marumbo= sannal = dua = bandi ?
chubby=very=still=Q.3
‘Is he really still pretty fat?’ | b. Matindo= i = poleq = kapang = dioloq .
sleep=3=again=maybe=now
‘Now maybe he’s sleeping again.’ |
|--|--|

(7) *Linear Order mirrors Syntactic Height*

- | |
|---|
| a. <i>sannal</i> > <i>leqbaq</i> > <i>bega</i> > <i>dua</i> > <i>memang</i> > <i>banda</i> = <i>bappa</i>
very exactly excessively still indeed Q let.it.be.that |
| b. <i>bo</i> > <i>mo</i> = <i>pa</i>
again already yet |
| c. <i>pissang</i> = <i>poleq</i> > <i>kapang</i> = <i>palakang</i> = <i>todiq</i> > <i>dioloq</i> = <i>manini</i>
once again maybe seems poor.thing now later |

1.4 Interim Summary 1

- The Mandarin clitic cluster:
 1. forms some type of phonological unit (for portmanteau formation, harmony...)
 2. shows linear order sensitive to both structural height and phonological weight.
- But probably does not form a complex x^0 .
 - * The cluster splits up when the left periphery gets complex.
 - * RESULT: requires excorporation (Roberts, Bošković) if a single x^0 .
 - * Moreover: postsyntactic reordering within the x^0 based on phonological weight?

Appendix.

2 Clitic Placement is Postsyntactic

2.1 Family Precedent

- Syntactic approaches to 2P: difficult in this neighborhood.
 - Slavic languages: Progovac 1996, Terzi 1999,
 - * Story: 2P clitics like v2 verbs; move to c & something fronts above them.
 - * Independent properties make this seem reasonable: free word order + rampant subextraction.
 - * **Result:** basically any word order can be syntactified.
 - Philippine-type languages + Chamorro: much more difficult.
 - * Less flexible word order; drastically reduced possibilities for subextraction.
 - * Kaufman 2010 (on syntactic approaches to 2P): “A similar [syntactic] account for Austronesian languages seems **thoroughly hopeless**, as there exists a massive gap between the types of elements which can serve as clitic hosts and those which can be extracted in the normal syntax.” (p52)
- **Result:** postsyntactic approaches to 2P Anderson 1998, Chung 2003; cf. Finer 1999

2.2 Non-Syntactic Placement

1. The cluster surfaces consistently in 2P regardless of the host.

- Typically: follows the highest AUX within the middle field.
- Also: follows fronted locative adjuncts, temporal adjuncts, certain adverbs.
- **Point:** the class of things which hosts the clitic does not form a natural syntactic class.

(8) *Locative Adjuncts; Manner Adverbs*

a. Andiang=**i** pura meloq lamba sumombal i=Kacoq.
 NEG=3 already want go sail NAME
 ‘Kacoq never wanted to go sail.’ (Ba’dulu 1990)

b. Ceh, kaqdo=**aq** mupipal e!
 PRF, hard=1 you.slapped PRT
 ‘Hey, you hit me HARD!’

c. Pirang=**pai=tau** sung?
 when=IPFV.3=you.HON go.out
 ‘When are you leaving?’

2. The clitics surface in configurations which syntactic movement cannot create.

- No Subextraction: complex DPS and NP predicates generally cannot split.
- Nevertheless: agreement freely splits up the same constituents (though other clitics can’t).

(9) *The Clitic Cluster splits up complex NP, PP Predicates*

a. Guru-nna i=Majiq i=Dan.
 teacher-his NAME NAME
 Dan is Majid’s teacher.’

b. Guru-nna=**o** i=Majiq a?
 teacher-his=AGR NAME PRT
 ‘Are you Majid’s teacher?’

3. The clitics split up coordinate structures.

- Mandar has a pseudo-incorporation construction; NP objects group prosodically with v.
- The clitics strictly follow the object in these configurations; we’ll see more of this later.
- **Pattern:** clitics can split up coordinated sequences of PNI object.

(10) *Clitics follow incorporated objects; split coordinate objects.*

a. Maqitai **baine**=dua=pao a?
 look.for wife=still=IPFV.2 Q
 ‘You’re still looking for a wife, huh?’

b. Maqalli doqayu ato manuq=**o**=iqo?
 sell vegetable or chicken=2=you
 ‘Are you selling vegetables or chicken?’

c. Maqalli doqayu=**o** ato manuq?

- **Claim:** the clitics get linearized by non-syntactic operations.
 - Clitics follow a heterogenous class of elements: verbs, auxiliaries, adverbs, adjuncts.
 - Clitics split syntactic constituents in ways which syntactic operations cannot.
- Reasonable proposal: the clitics stay largely in-situ in the syntax; move only later on.
- Two questions:
 - What makes the clitics move?
 - What’s the resultant structure of the host + clitics?

3 The Prosody of Second Position

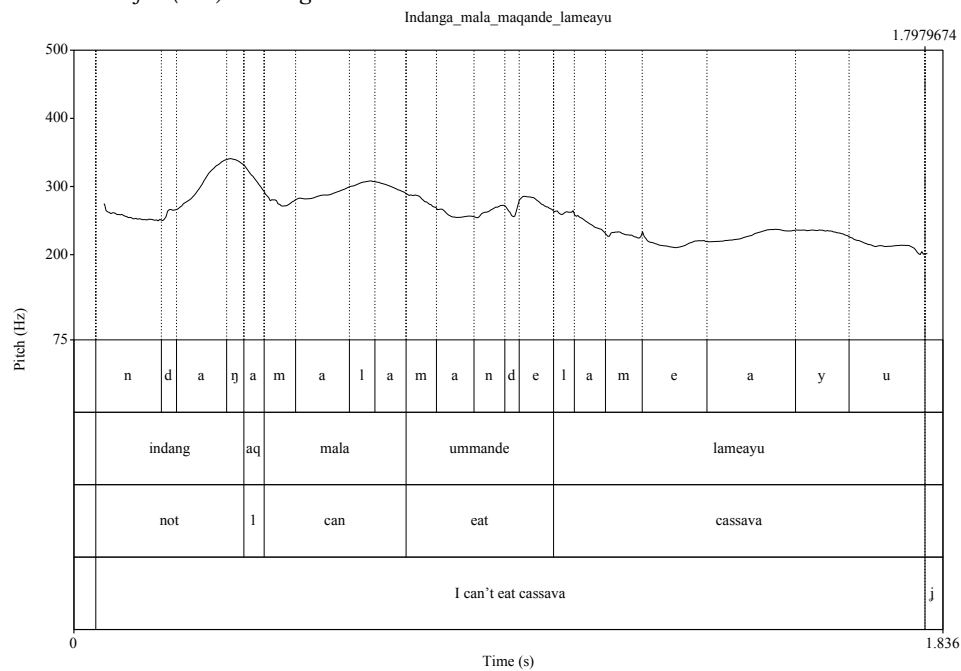
3.1 Prosodic Categories in Mandar

- **Background:** Prosodic Hierarchy Theory Nespor & Vogel 1986
 - Prosodic structure: built from strictly layered but recursive prosodic categories Itô & Mester 2009
 - Three fundamental units: WORD ω , PHONOLOGICAL PHRASE ϕ , INTONATIONAL PHRASE
- **Goal:** identify prosodic categories and phonetic correlates in Mandar.

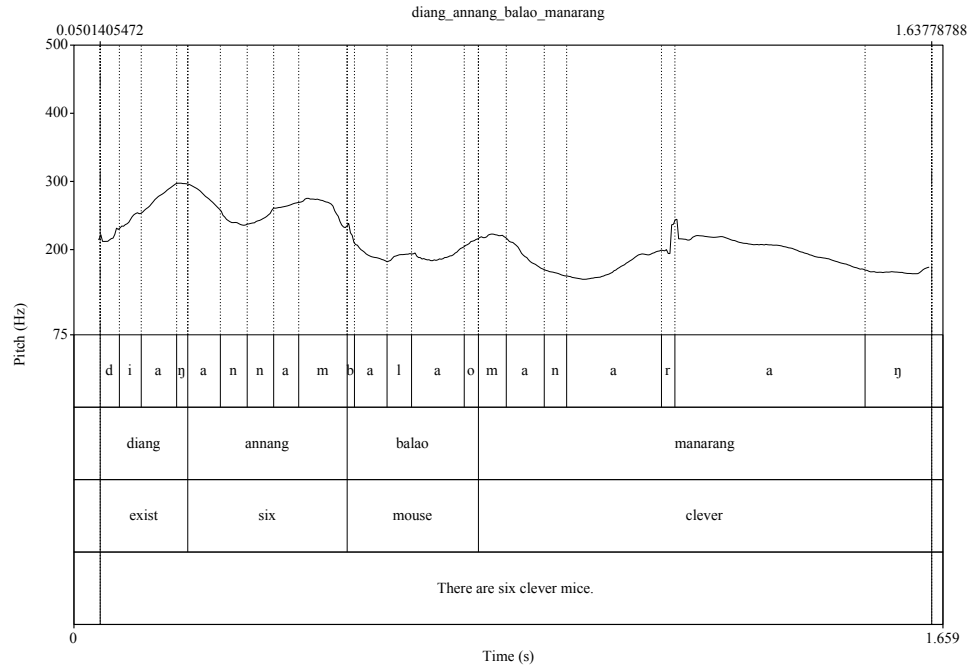
(11) *Sentence-Level Prosody: Some Examples*

- a. Indang=aq mala mande lameayu. b. Diang annang balao manarang.
 NEG=1 can eat cassava there.is six mouse clever
 ‘I can’t eat cassava.’ ‘There are six clever mice.’

c. *Pitch Track for (16a): indang ‘NEG’*



d. *Pitch Track for (??): annang ‘six’*



- Some prosodic observations:
 - Most independent things bear a consistent L*H- contour.
 - The entire string ends in final lengthening and a fall.
- Spoiler: some plausible conclusions:

3.1.1 The Word

- One type of prosodic unit shows three properties which pattern together:
 1. Stress: lengthening on the penultimate syllable.
 2. Pitch contour: L* on penult; H- at the right edge.
 3. Segmental phonology: domain for obligatory application of certain rules.
- **Proposal:** this thing looks like the prosodic word ω.

1. Word-level stress

- South Sulawesi languages generally show word-level stress Mills 1975; pace Himmelmann 2018
- Consistent lengthening on the penultimate syllable; secondary stress generally not detectable.
- **Proposal:** single right-aligned trochee/word (12c).

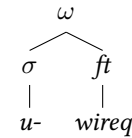
(12) Regular Penultimate Stress

- a. *mán.dar* ‘Mandar’ b. *to.map.po.lé.i* ‘visitors’ c. σ.σ.σ.(σ.σ)

2. Two Segmental Processes

- The voiced stops /b d/ lenite to [w r] within what looks like the word.
- Nasals denasalize and assimilate completely to following p t k s r l within the word.
- These rules apply absolutely here; show variation at higher levels.

- (13) a. *dundu* 'drink'
 b. *dundu-ang* 'a drink'
 c. *mu-rundu* 'you drink'
- (14) a. *bireq* 'hate'
 b. *mam-bireq* 'to.hate'
 c. *u-wireq* 'i hate'
- (15)



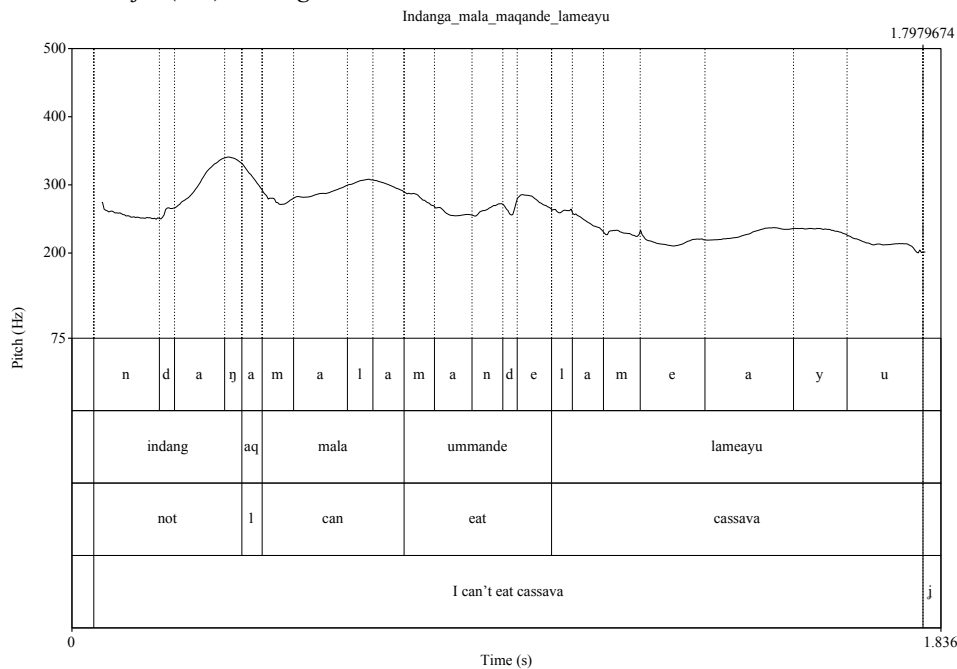
3. The L*H- contour

- The things which bear stress and force lenition often show the same surface contour.
 - The right edge bears a distinct H-.
 - A separate L* falls on the penultimate syllable.
- This same contour tends to appear on things which look like syntactic heads.

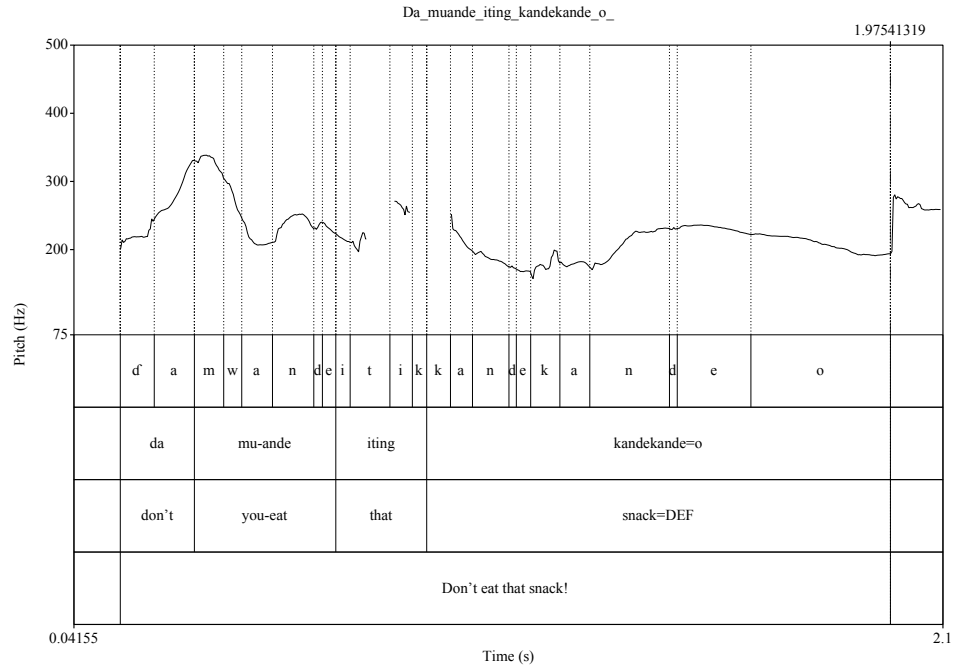
(16) *Preverbal Negation bears the H-*:

- a. **Indang**^H=aq mala^H mande^H lameayu^H. b. **Da**^H mu-ande^H iting^H kandekande=o^H!
 NEG=I can eat cassava DON'T you-eat that snack=DEF
 'I can't eat cassava.' 'Don't eat that snack!'

c. *Pitch Track for (16a): indang 'NEG'*



d. *Pitch Track for (16b): da 'DON'T'*

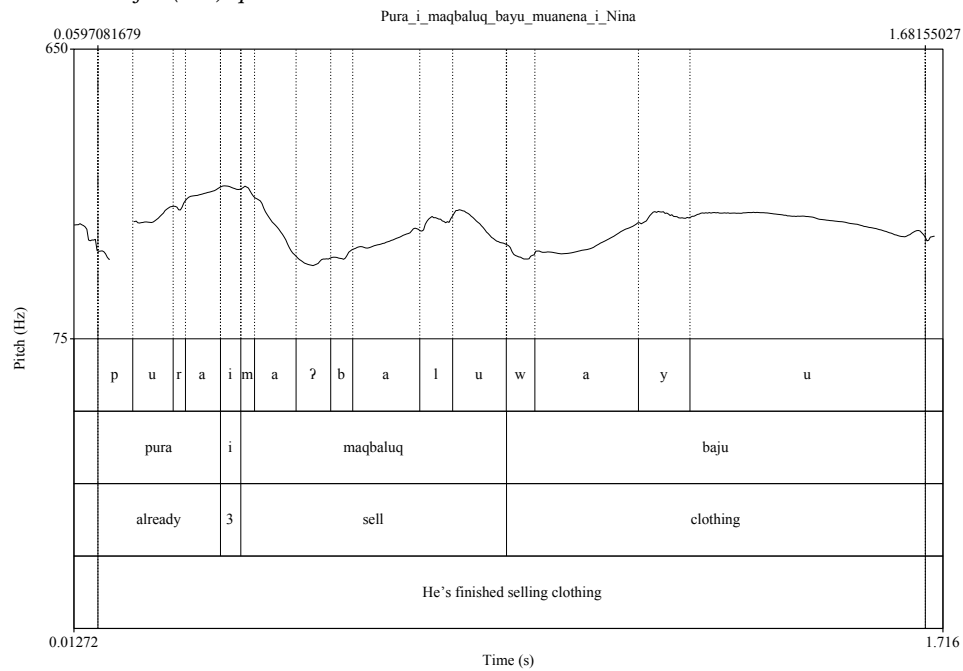


(17) *Aspectual Auxiliaries bear the H-*:

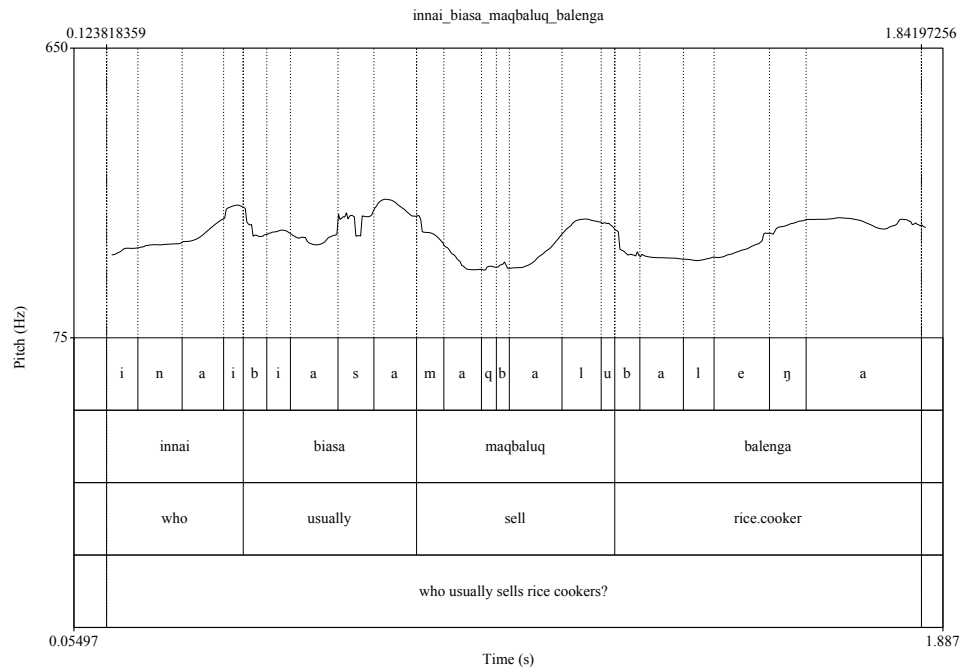
a. **Pura**^H=i maqbaluq^H bayu^H.
 already=he sell shirt
 'He's finished selling shirts.'

b. Innai^H **biasa**^H maqbaluq^H balenga^H?
 who usually sell rice.cooker
 'Who usually sells rice.cookers?'

c. *Pitch Track for (17a): pura 'ALREADY'*



d. *Pitch Track for (17b): biasa 'USUALLY'*

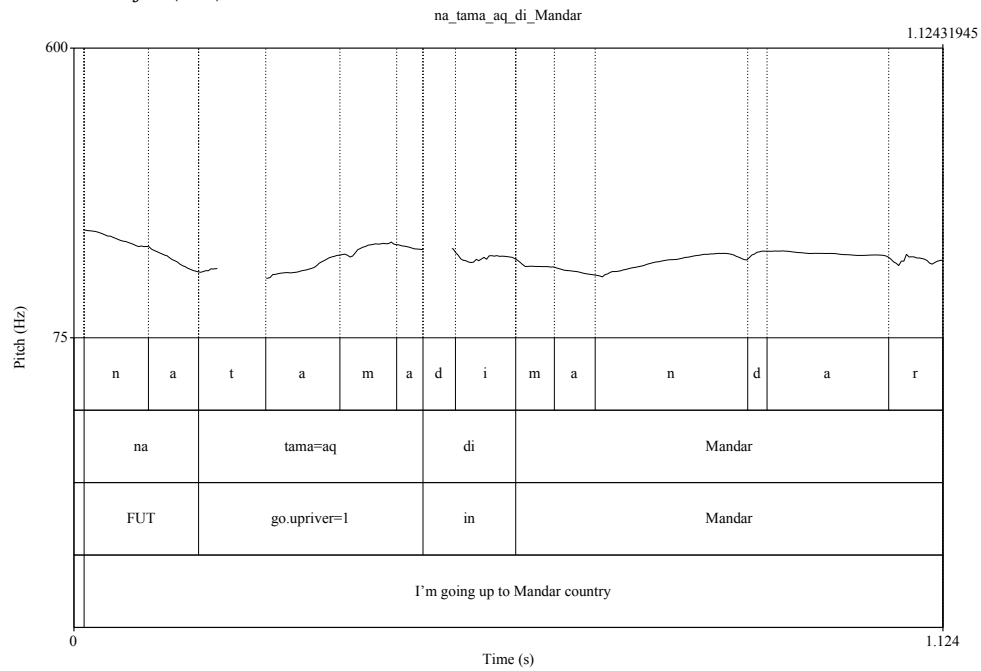


(18) Directional Prepositions bear the H-:

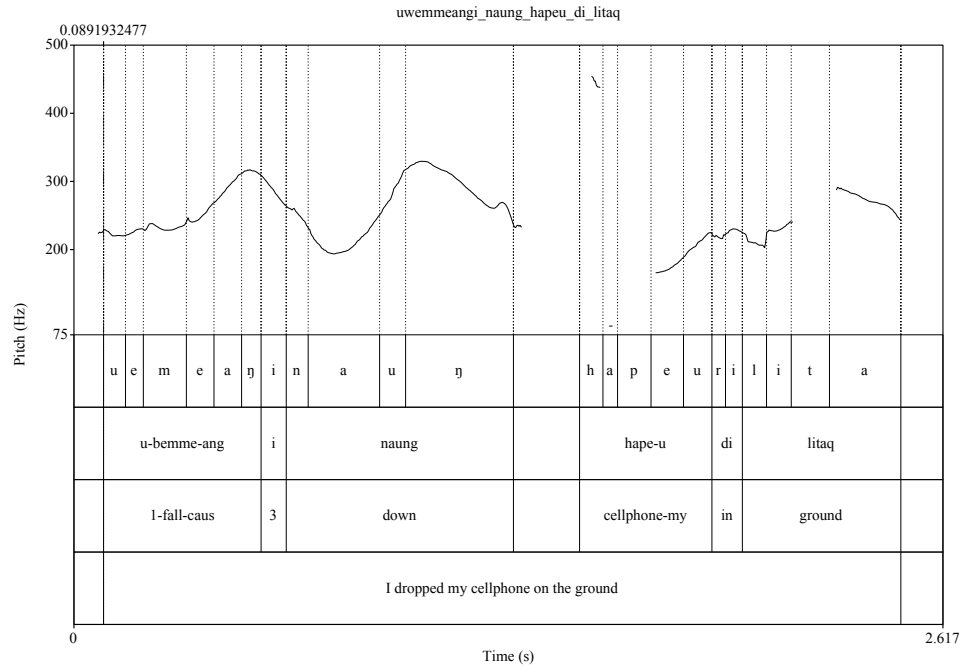
a. Na=**tama**^H=aq di Mandar^H
 FUT=INTO=I in Mandar
 'I'll go up to Mandar country.'

b. U-bemmean^H=i **naung**^H di litaq^H.
 I-drop=it down in ground
 'I dropped it on the ground.'

c. Pitch Track for (18a): *tama* 'INTO'



d. Pitch Track for (18b): *naung* 'DOWN'

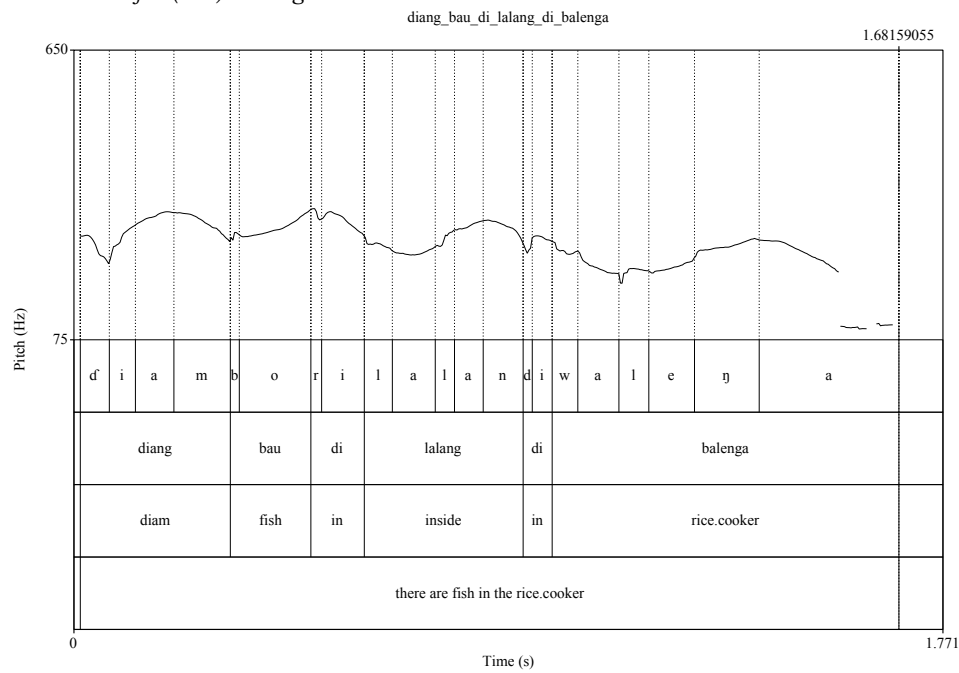


(19) *Locative Prepositions bear the H-*:

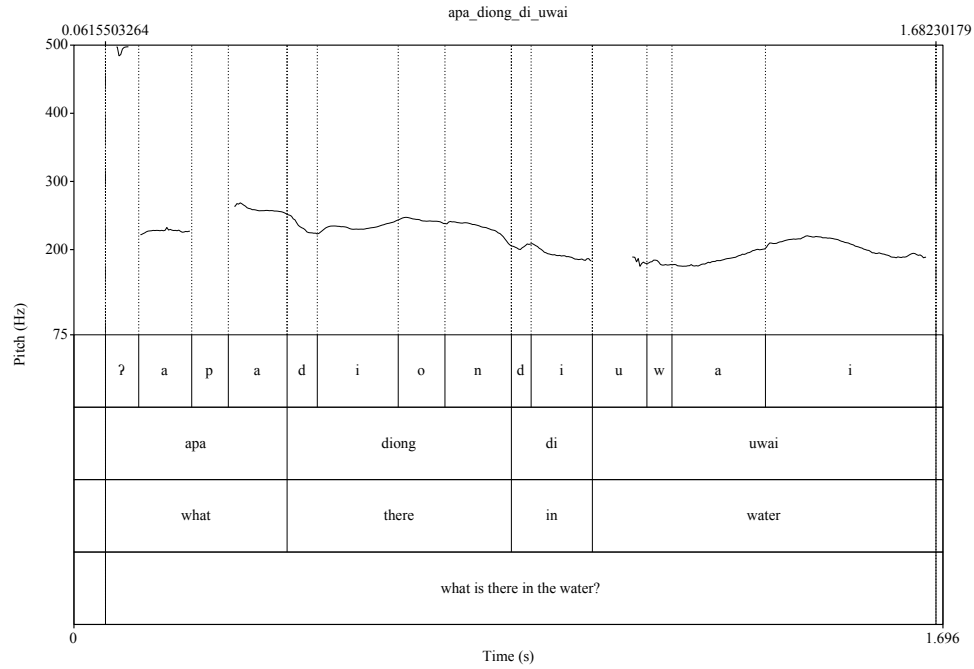
a. Diang^H bau^H di lalang^H di balenga^H.
 there are fish in inside in rice.cooker.
 ‘There are fish in the rice cooker.’

b. Apa^H diong^H di uwai?
 what down.there in water
 ‘What’s down in the water?’

c. *Pitch Track for (19a): lalang ‘IN.THERE’*



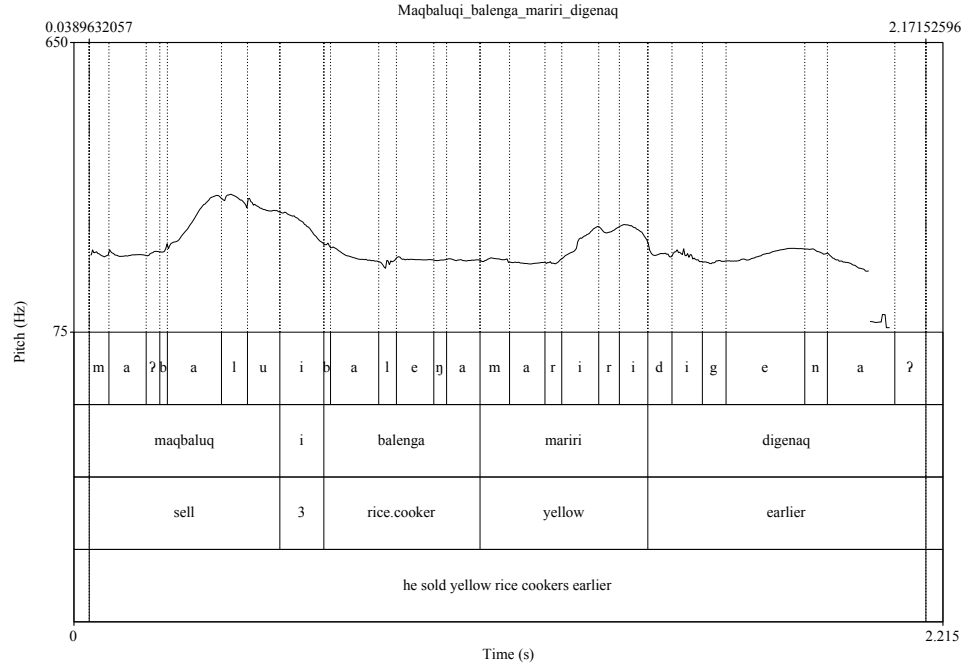
d. *Pitch Track for (19b): diong ‘DOWN.THERE’*



(20) *Temporal Adverbs bear the H-*:

- a. Maqbaluq^H=i balenga mariri^H digenaq^H.
 sell=he rice.cooker yellow earlier
 'He sold yellow rice cookers earlier.'

b. *Pitch Track for (20a): digenaq 'earlier'*



- **Proposal:** The relevant unit here is the prosodic word ω .
 - Other prosodic events: downstep in ϕ ; final lengthening in ι ; final fall in ι_{MAX}
 - **Alternative:** the L*H- unit is the ϕ_{MIN} .
- **Auxiliary System:** the agreement clitics strictly follow the first ω .

- The elements which host clitics all bear L*H-: NEG, AUX, V.
- Adverbs which surface linearly before NEG: do not bear L*H-; cannot host clitics.

Table 1: Strong and Weak Preverbal Elements

HOSTS					
	NEG		ASP		AUX
<i>indang</i>	NOT		<i>pura</i>	ALREADY	<i>mala</i> CAN
<i>da</i>	DON'T		<i>biasa</i>	USUALLY	<i>meloq</i> WANT
NON-HOSTS					
	MOD		TENSE		
<i>maka</i>	PROBABLY	<i>mane</i>	THEN		
<i>baraq</i>	HOPEFULLY	<i>sata</i>	ALWAYS		

(21) *Strong Elements Attract Clitics*

- a. **Ndan**=nasang^H=o mala^H mangino^H
 NEG=all=you can play
 'You all can't play (here).'
- b. **Mala**^H=i=tia^H=ia^H malai^H!
 can=he=only=him go.home
 'Only he can go home!'

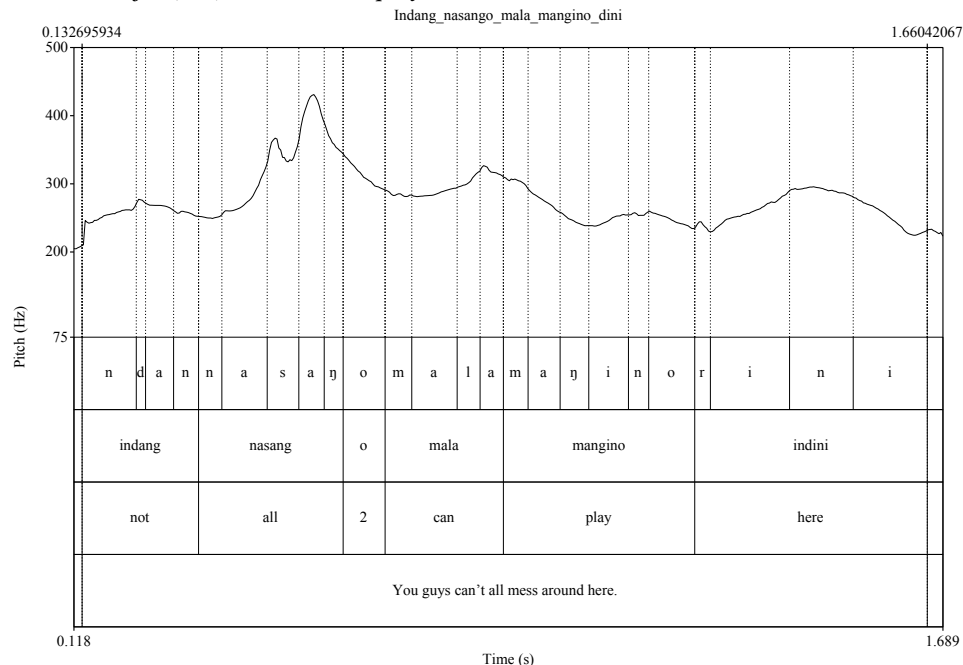
(22) *Weak Elements Never Attract Clitics*

- a. **Mane** naun=nasang^H=i mameang^H.
 then go.down=all=he fish
 'Then they went down to fish.'
- b. **Sata** indang^H=i mala^H!
 always NEG=she can
 'She never can!'

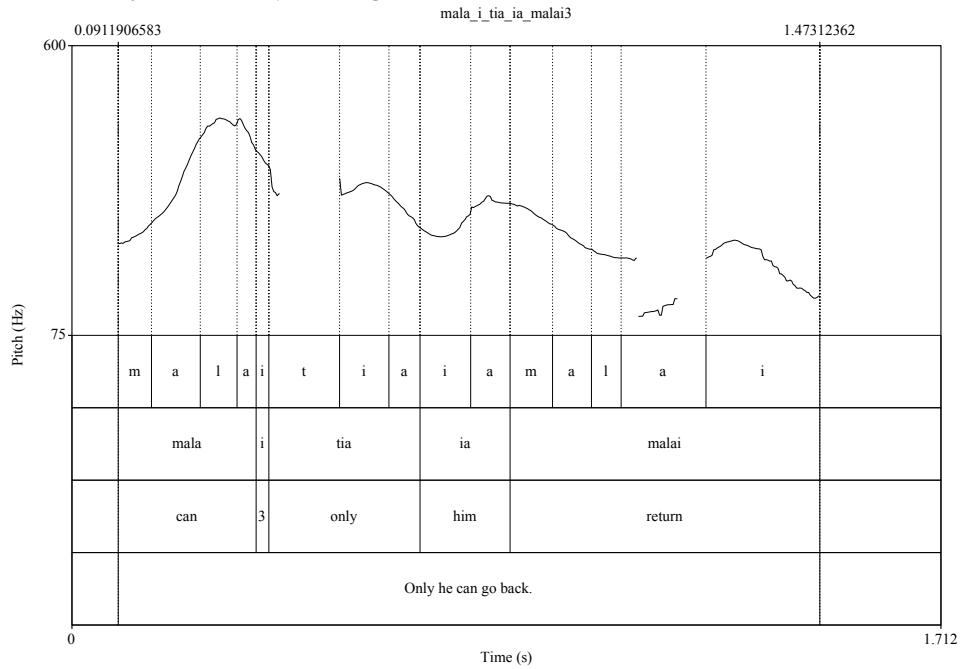
(23) *Pitch Tracks: Auxiliary System*

(24) *Strong Preverbal Elements attract Clitics*

- a. *Pitch Track for (26a): You can't all play here.*

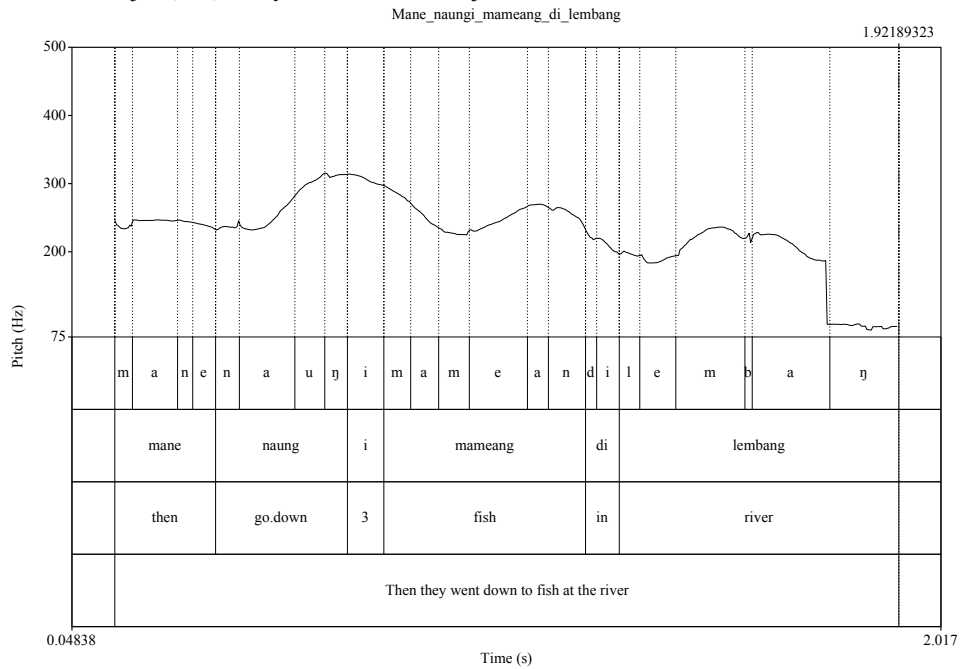


b. Pitch Track for (21b): Only he can go home.

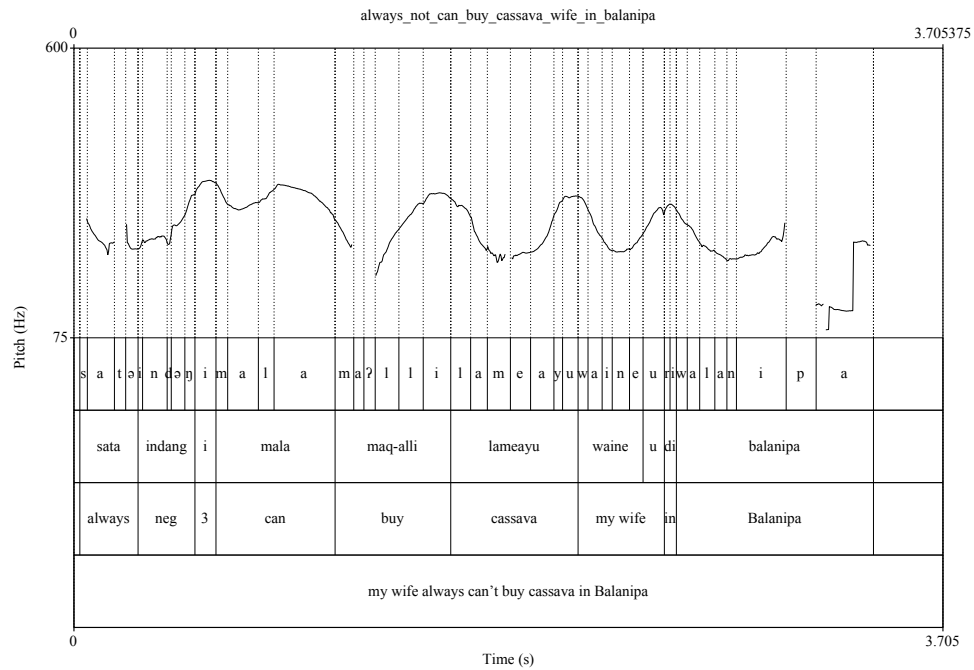


(25) Weak Preverbal Elements don't attract Clitics

a. Pitch Track for (22a): They all went down to fish in the river.



b. Pitch Track for (22b): My wife always can't buy cassava in Balanipa.

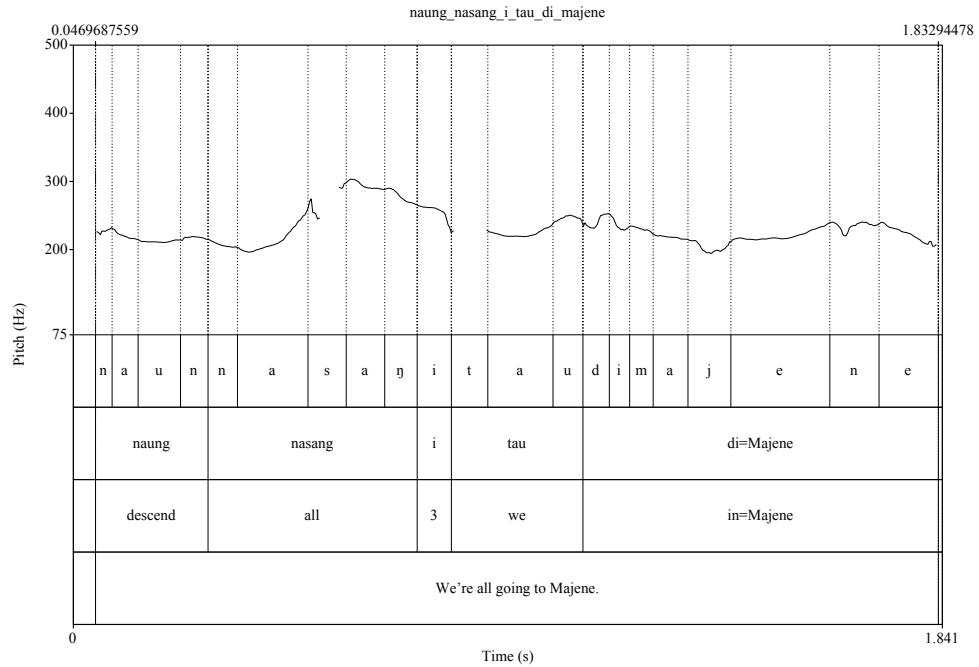


3.2 Prosodic Structure of the Cluster

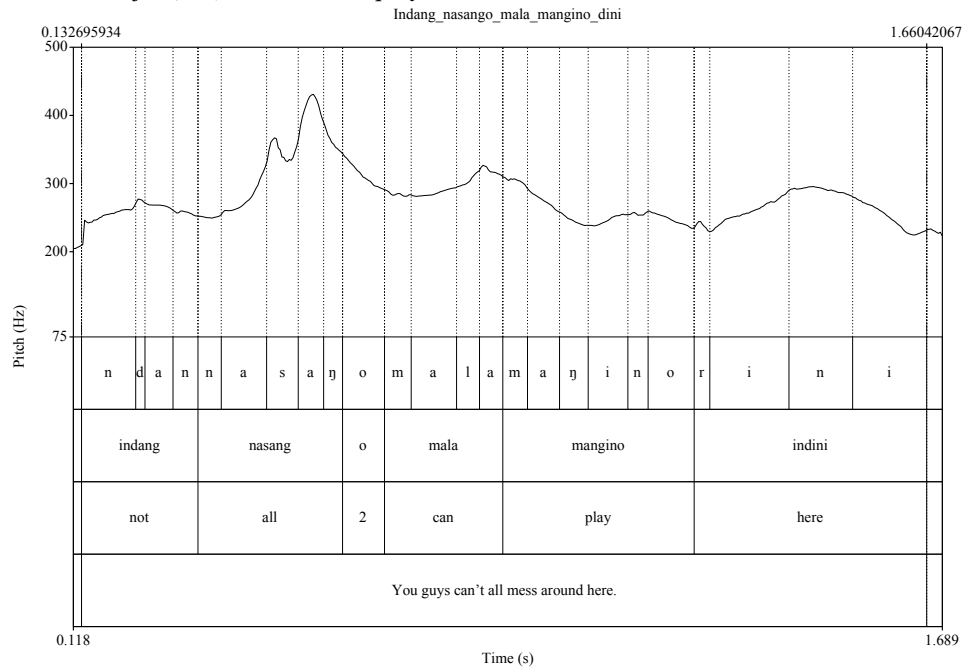
- **Observation:** the string which precedes agreement looks like a minimal word
 - Contour shape: completely flat till two syllables away from the agreement.
 - Primary stress: apparently penultimate in the constituent before agreement.
 - No evidence for other stress; intonational events.

(26) *The Pre-Agreement String: Flat and Unaccented*

- a. **Ndan**=nasang^H=o mala^H mangino^H
 NEG=all=you can play
 'You all can't play (here).'
- b. Naun=nasang^H=i=tau^H di Majene^H.
 descend=all=AGR=we in CITY
 'We're all going to Majene.'
- c. *Pitch Track for (26b): We're all going to Majene.*



d. Pitch Track for (26a): You can't all play here.



• **Pseudo-Incorporation:** same pattern.

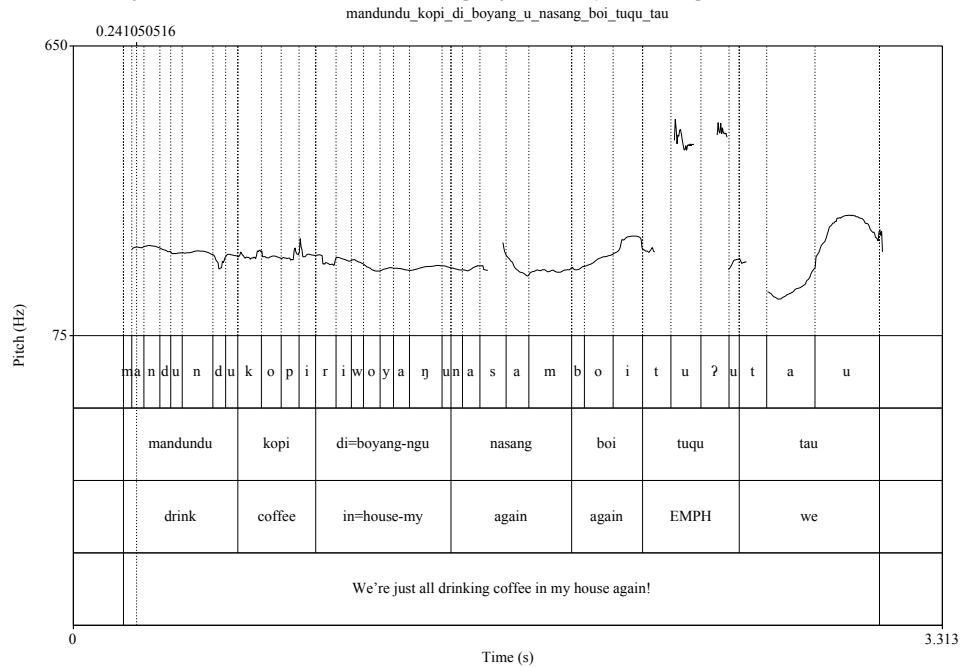
- Mandar permits NP objects and locative PPs to follow the verb and precede clitics.
- This construction: absolutely everything before the agreement gets flattened out.

(27) *Pseudo-Incorporation: Compression before Agreement*

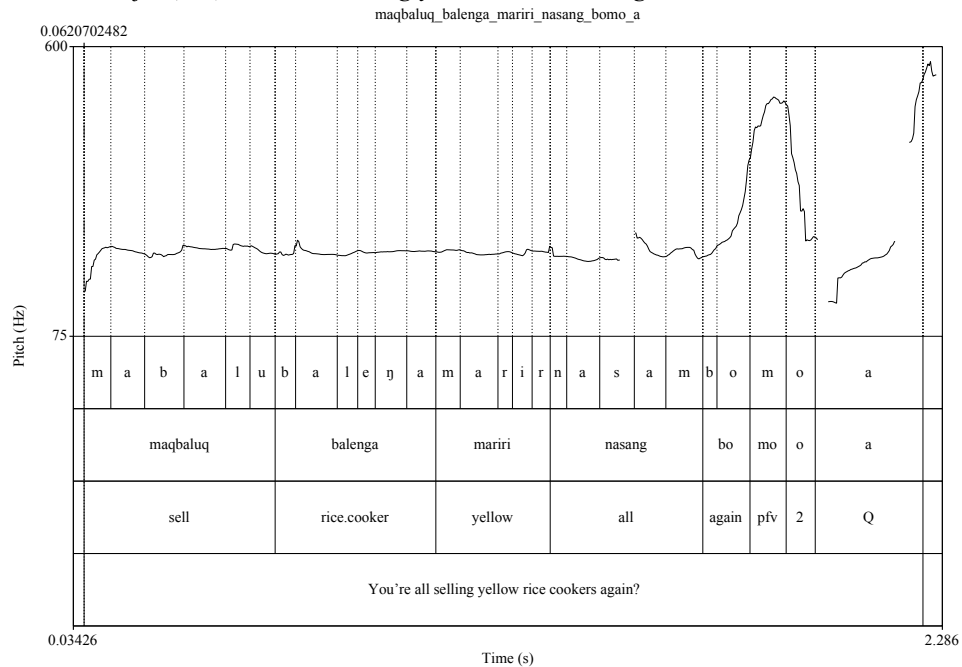
- a. Mandundu **kopi di boyangu=nasam=bo^H=i=tuqu=tau.**
 drink coffee in my.house=all=again=AGR=EMPH=we
 'We're ALL JUST DRINKING COFFEE IN MY HOUSE AGAIN!'

- b. Maqbaluq **balenga mariri=nasam=bo=mo^H=o** a?
 sell rice.cooker yellow=all=again=PFV=you Q
 ‘You’re ALL SELLING YELLOW RICE COOKERS AGAIN?!’

c. Pitch Track for (27a): *We’re all just drinking coffee in my house again.*



d. Pitch Track for (27b): *You’re all selling yellow rice cookers again?*

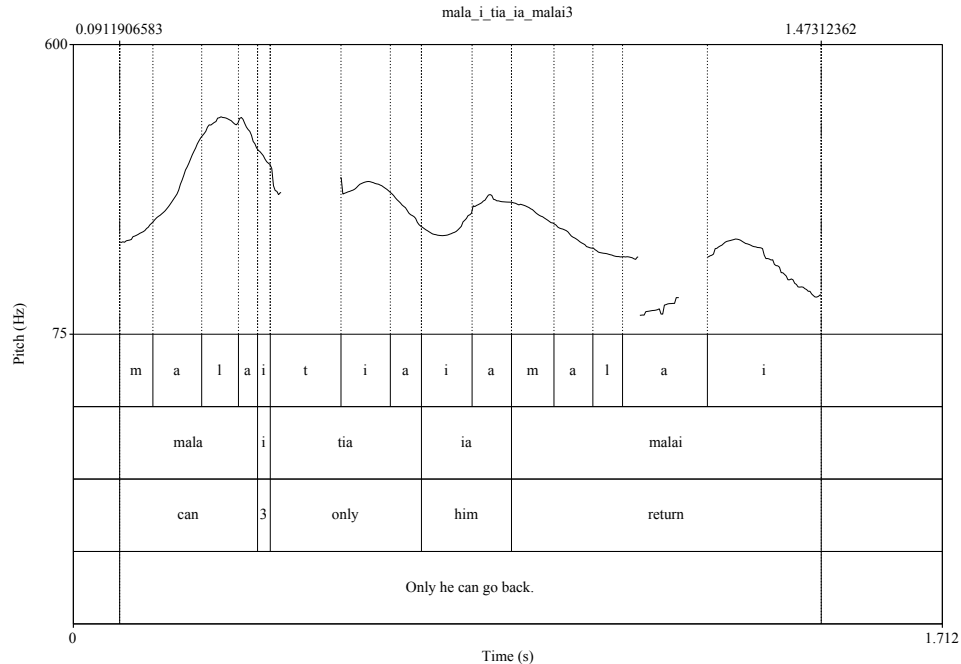


- Proposal: the HOST=AGR string forms a minimal prosodic word.
 - 2P elements which precede agreement adjoin as feet or stray syllables.
 - Single L*H- contour and penultimate stress because the host is an ω_{MIN}.
- Observation: the 2P clitics which follow AGR bear L*H- contours.

(28) *Clitics which follow Agreement: Independent Contours*

- a. Mala^H=i=**tia**^H ia^H malai^H.
 can=he=only him go.home
 'Only he can go home.'

b. *Pitch Track for (28a): Only he can go home.*



- **Claim:** these elements adjoin as independent words.

3.3 Brief Summary

- Mandarin 2P elements placed prosodically.
- The 2P elements form a cluster organized by:
 - Syllable count: disyllabic > monosyllabic > agreement > disyllabic again > pronouns.
 - Scope: structurally 'higher' clitics surface farther to the right in the cluster.
- The internal prosodic structure of the cluster:
 - Everything up to agreement forms a minimal ω : single L*H- contour and stress.
 - The clitics which follow agreement: apparently adjoin as independent ω s as well.

4 Appendix: Outstanding Issues

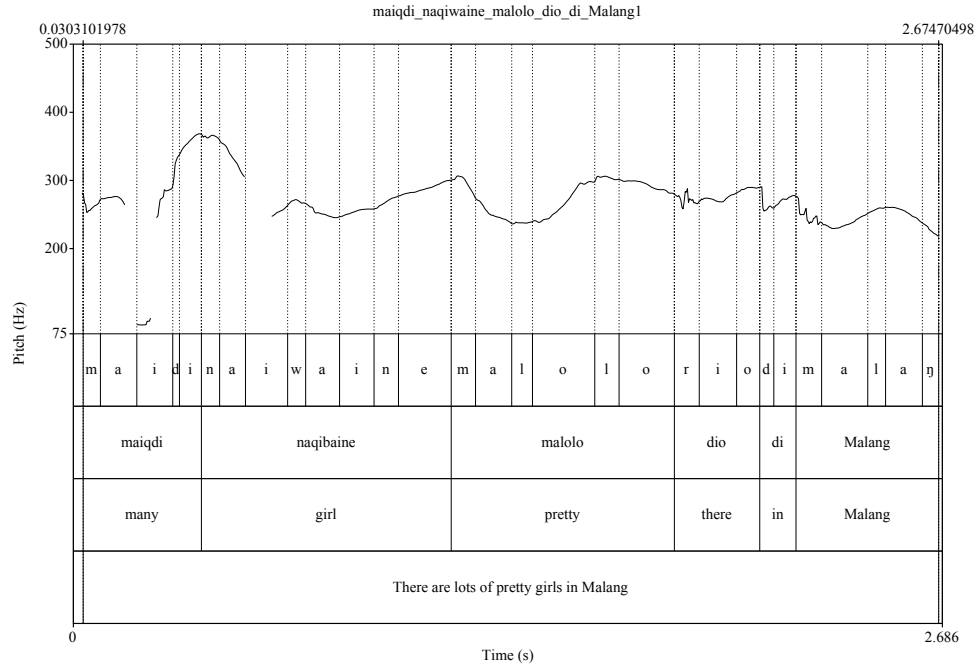
4.1 The Status of the L*H- Constituent

- Certain phrasal categories form a single L*H- constituent.
 - Nouns and adjectives can form independent L*H- domains or form a single one together.
 - Noun-adjective sequences *must* form L*H- domains when the DP contains a D.
 - Complex PPs: also form single L*H- units when preceded by the preposition *di*.

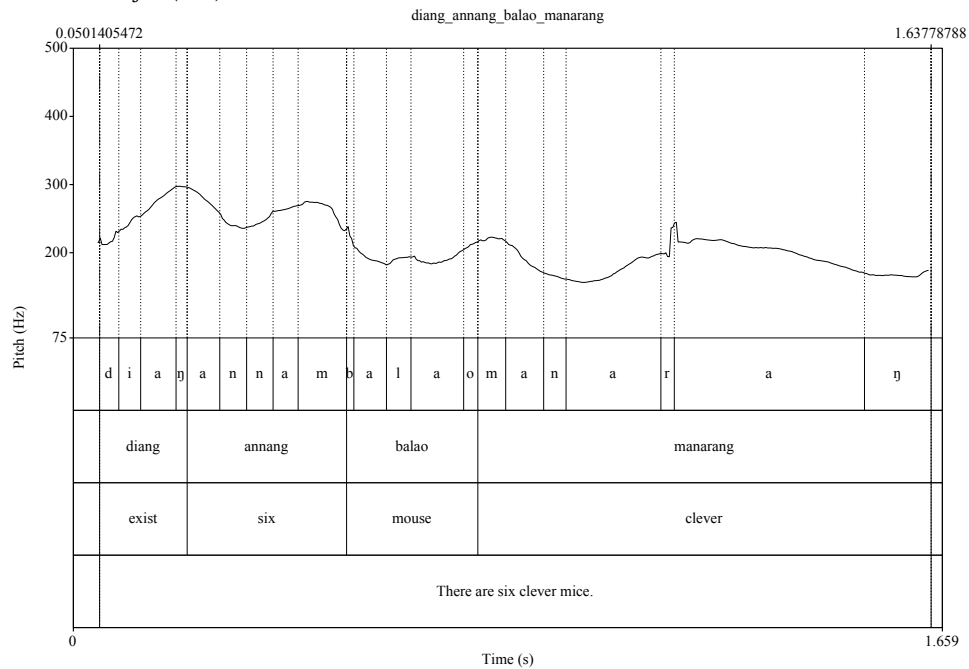
(29) *Noun and Adjective bear Independent L*H-*

- a. Maiqdi^H **naqibaine^H** **malolo^H** dio^H di Malang^H.
 Many girl pretty there in city
 ‘There are lots of pretty girls in Malang’
- b. Diang^H annang^H **balao^H** **manarang^H**.
 there.are six mouse clever
 ‘There are six clever mice.’

c. *Pitch Track for (29a): There are lots of pretty girls in Malang.*

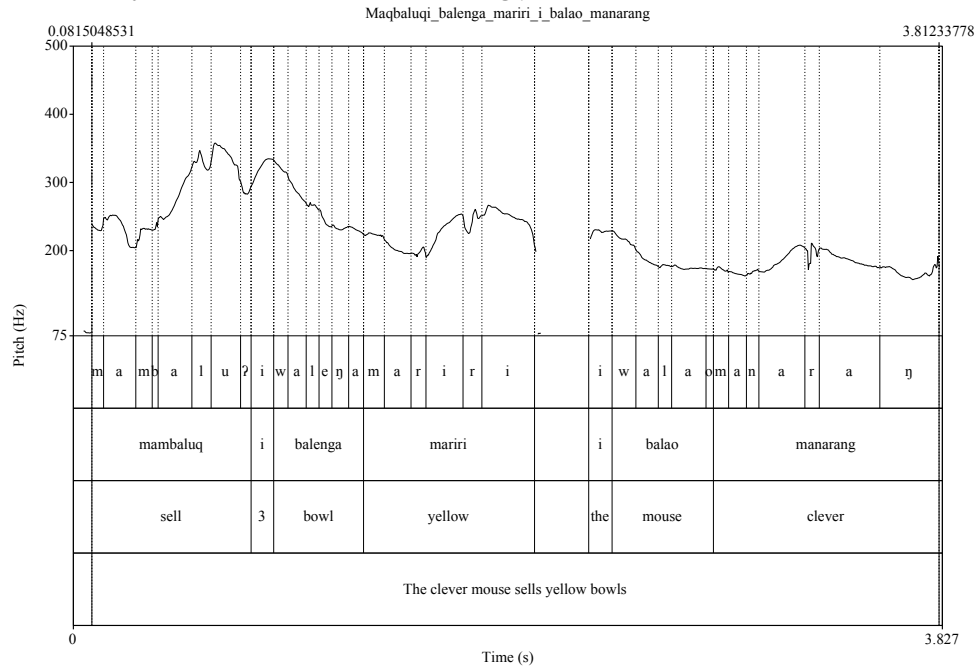


d. *Pitch Track for (29b): There are six clever mice.*

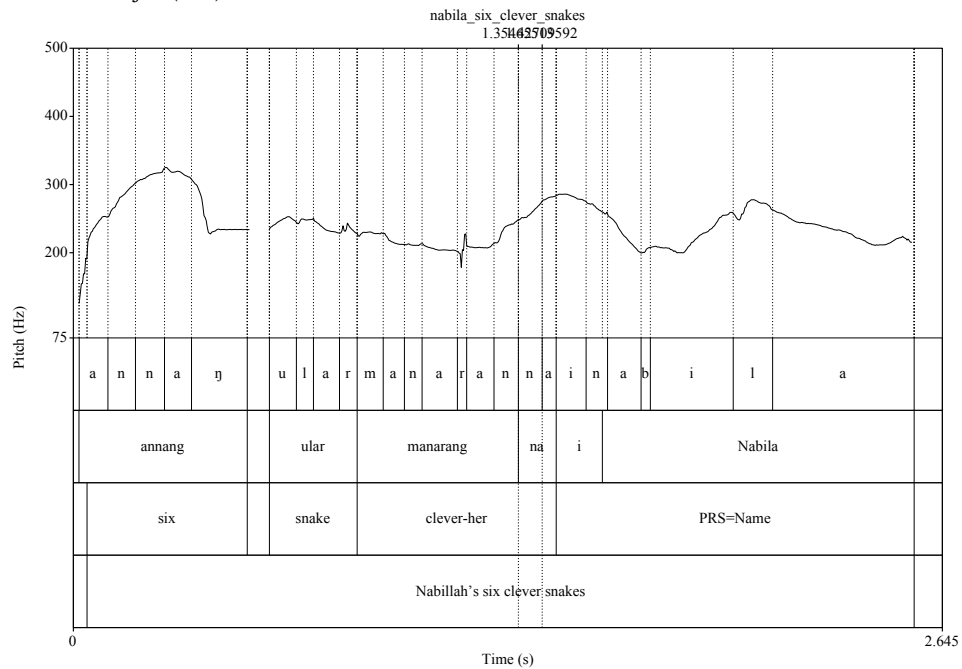


(30) *Noun and Adjective bear a single L*H- with overt D*

- a. Mambaluq^H=i balenga mariri^H i balao manarang^H .
 sell=he rice.cooker yellow THE mouse clever
 ‘The clever mouse is selling yellow bowls.’
- b. Annang^H ular manaran-na^H i=Nabila^H .
 six snake clever-her NAME
 ‘Nabila’s six clever snakes.’
- c. *Pitch Track for (30a): The clever mouse is selling yellow bowls.*

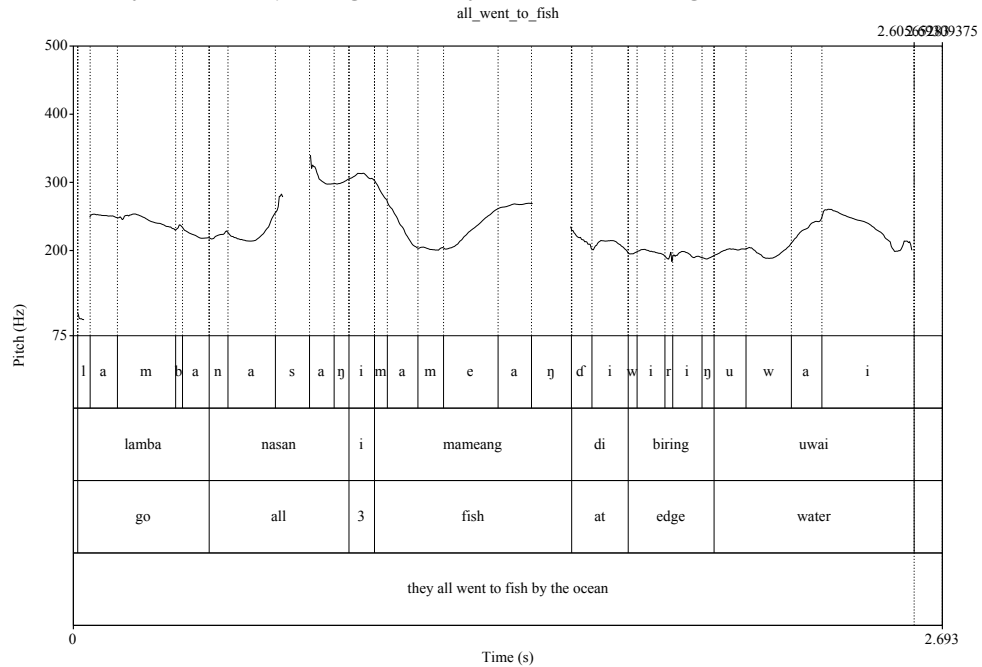


- d. *Pitch Track for (30b): Nabila’s six clever snakes.*

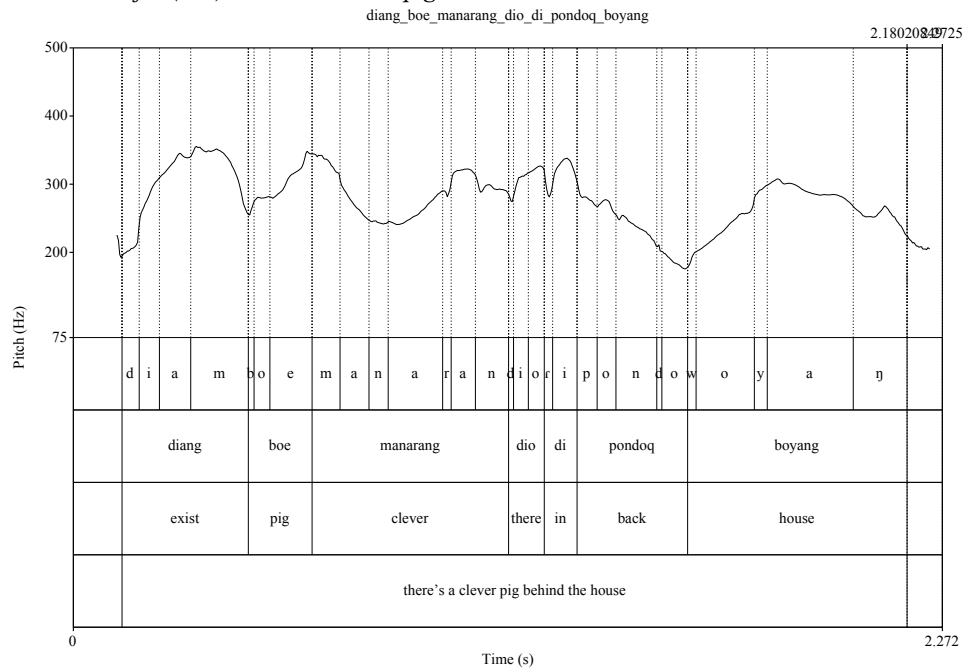


(31) Complex PPs form a single L*H- Domain

- a. Na=naung=nasam^H=mi mameang^H di biring uwai^H
 FUT=descend=all=PFV.HE fish in edge water
 'They'll all go down to fish at the water's edge.'
- b. Diang^H boe^H manarang^H dio^H di pondoq boyang^H.
 there.is pig clever there in back house
 'There's a smart pig out behind the house.'
- c. *Pitch Track for (31a): They'll all go down to fish at the water's edge.*



- d. *Pitch Track for (31b): There's a smart pig out behind the house.*



- **Claim:** this structure involves prosodic smothering.
 - Overt D and P force complex NPs to phrase as single ωs.

- Alternative: the L*H- accent actually associated with ϕ ; makes everything more tricky.

4.2 Syntactic Height Matters

- The clitics show different behavior when the left periphery gets complex.
 - Some clitics raise to overt c: *mau* 'although' hosts 2P elements.
 - Some clitics raise to follow clause-initial foci; an even bigger problem.
- Problem: not clear how a prosodic account of clitic placement can get these effects.