

## Central Claim: Match-based system is insufficient for weak pronoun placement in Chamorro, instead Alignment constraints are required.

### 1. Chamorro weak pronouns

- Chamorro [Mariana Islands, Austronesian] is a **(flexible) VSO** language [5,6,7,14]
- Weak pronouns (WPs) in Chamorro are **prosodically deficient** and are in “complementary” distribution with independent pronouns and full DPs [6,7]

	Weak
1 sg.	yu' [dzu?]
2 sg.	hao [haw]
3 sg.	gui' [gwi?]

- Kao patgon-nã **hao** adyu na ma'estra?  
Q child-AGR you that L teacher  
'Are you the child of that teacher?'
  - \*Kao patgon-nã **si Dolores** adyu na ma'estra?  
Q child-AGR Dolores that L teacher  
'Is Dolores the child of that teacher?'
- Weak pronouns are:
    - unstressed [6]
    - enclitics [6]
    - second position** [1]
    - free clitics** (don't effect word-level phenomena) [6]
- Malagu' **gui'** nuebu na kareta t.  
AGR.want she new L car  
'She wants a new car.'
  - Malagu' nuebu na kareta **i lahi-nmami**.  
AGR.want new L car the son-AGR  
'Our son wants a new car.'
- Weak pronouns are typically subjects, originating in a rightward specifier of TP

### 2. Position generalizations

- For head + complement structures, WP must follow the head**
- Ma'a'nao yu' cha'ka AGR.afraid 1.SG rats  
'I am afraid of rats.'
  - \*Ma'a'nao cha'ka yu' AGR.afraid rats 1.SG  
'I am afraid of rats.'
- Partial DPs, and other non-syntactic constituents can precede the WP** [6]
- Ma'estro-nñã **gui'** si Carmen. teacher-AGR he Carmen  
'He is Carmen's teacher.'
  - \*[Ma'estro-nñã si Carmen] **gui'**. teacher-AGR Carmen he  
'He is Carmen's teacher.'
- WP placement is flexible with certain modified structures** [6]
- [[<sub>AP</sub> Aguagat] [<sub>NP</sub> na patgun]] **gui'** naughty L child he  
'He's a naughty child.'
  - [[<sub>AP</sub> Aguagat] **gui'** [<sub>NP</sub> na patgun]] naughty he L child  
'He's a naughty child.'
- But is rigid when the modified host is on the left** [6]
- [[<sub>NP</sub> [<sub>NP</sub> Famalao'an] **hit** [<sub>pp</sub> ginin todus l islas gi Pacifika]] women we from all the islands LOC Pacific  
'We are women from all the islands of the Pacific.'
- Syntax is important for determining clitic position, but syntax is also regularly violated, indicating a need to appeal to prosody

### 3. Prosodic movement accounts

- Chamorro WP placement previously accounted for using prosodic subcategorization & alignment mapping [6]
- Irish weak pronoun postposing is motivated by prosodic well-formedness within a Match-Theory system [4]

### 4. Analysis: Match insufficient, Alignment needed

- Systems tested with SPOT [2]: Match system vs Align system**
- Constraints:**
  - Align-R:** align <sub>XP</sub> with some  $\phi$
  - Align-L:** align [<sub>XP</sub> with some  $\phi$
  - Match:** match [<sub>XP</sub>] with ( $\phi$ )
  - BinMin:**phis need 2+ children
  - EqualSis:** same category sisters
  - NoShift:** don't move terminals
  - StrongStart:** no clitics on the left
- Match system:** no ranking prefers moving the clitic. The desired candidate is harmonically bound.

	[ <sub>TP</sub> [ <sub>XP</sub> a [ <sub>XP</sub> b]] [ <sub>DP</sub> clitic]]	EqSis	SS	Match	Bin	NoShift
☹	((a clitic) (b))	*		**	*	*
	((a) (b clitic))	*		***W	*	L
★	((a b) clitic)	*		**	L	L

- Align system:** same prosodic markedness, but uses two Align mapping constraints to map from syntax to prosody

#### Crucial rankings

- Align-R >> NoShift:** clitic movement improves the alignment of rightward prosodic boundaries

Input	Winner	Loser	EQ	SS	AL-L	Bin	AL-R	NS
[[a [b]] [clitic]]	{{(a clitic) (b)}}	{{(a) (b clitic)}}					W	L

- Align-L >> BinMin & NoShift:** keeping the clitic in-situ would improve binarity, but worsens boundary alignment on the left

Input	Winner	Loser	EQ	SS	AL-L	Bin	AL-R	NS
[[a [b]] [clitic]]	((a clitic) (b))	{{(a b) clitic}}			W	L		L

- StrongStart >> Align-L:** alignment is not more important than preventing weak material in a strong position

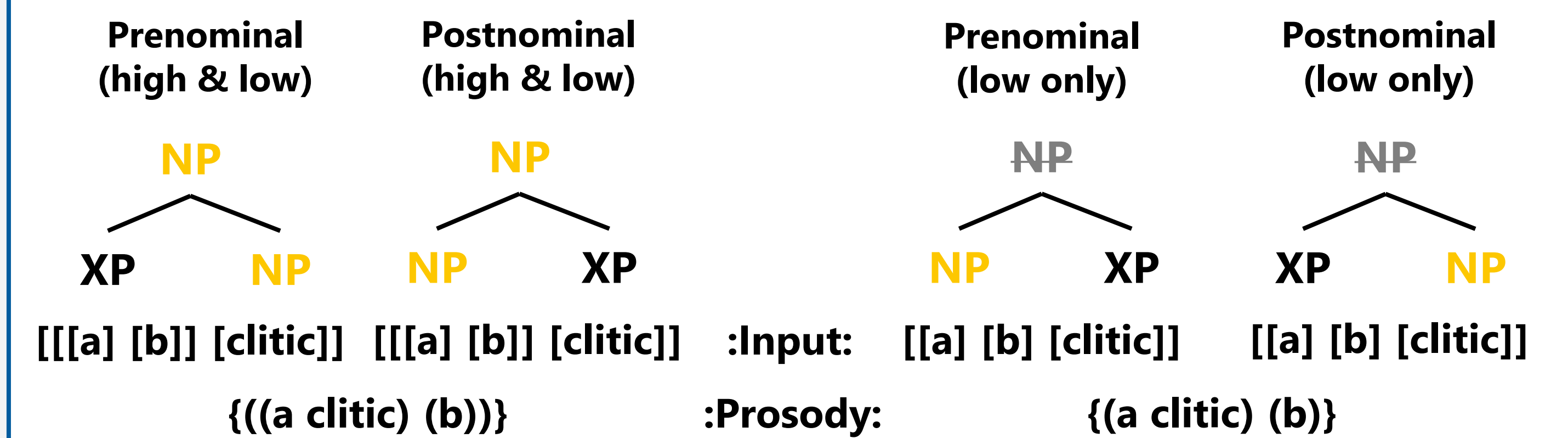
Input	Winner	Loser	EQ	SS	AL-L	Bin	AL-R	NS
[[a] [clitic]]	{{(a clitic)}}	{{(clitic a)}}		W	L	W	W	W

- Equalsisters >> BinMin:** clitic movement also improves prosodic well-formedness, not just boundary mapping

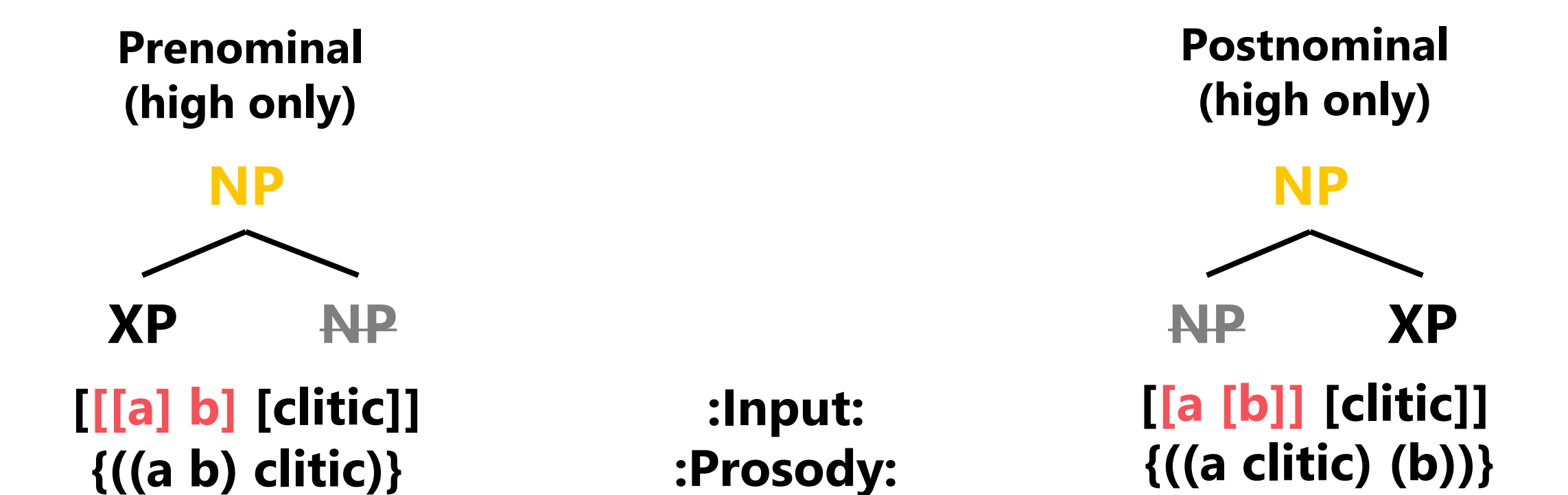
Input	Winner	Loser	EQ	SS	AL-L	Bin	AL-R	NS
[[a [b]] [clitic]]	{{(a clitic) (b)}}	{{(a (b clitic)}}	W			L	W	L

### 5. Optionality of clitic placement

- Optionality of clitic placement is dependent on which side the host occurs on in modification structures (see 9 - 11)
- Optionality is analyzed by assuming different levels of projections for modified XPs are visible in syntax-prosody mapping [3,6,15]



- Having **only** the highest projection visible is required to differentiate between pre- and post-nominal modified structures



### CONCLUSION:

- Chamorro weak pronoun placement cannot be captured in a Match-based prosodic system.**
- Alignment mapping constraints & prosodic well-formedness work together to motivate leftward clitic movement**
- Suggests Match may not be active in a Chamorro system, either not present or ranked very low**
- Specific projection visibility for syntax-prosody mapping is required to differentiate structures for optionality**

### 7. Future work

- More complex structures (e.g. coordinate structures, topicalization, etc.) are difficult for all existing accounts. [6]
- Weak pronouns may also originate as objects. These are crucial cases for testing leftward movement over rightward movement.
- Finding phonetic or phonological diagnostics for phi boundaries will help confirm the predictions made by this account.

### Si Yu'us ma'asi'!

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References: [1] Anderson. (2005). *Oxford University*. [2] Bellik & Kalivoda. (2015). *Syntax-Prosody in OT*. [3] Bellik & Kalivoda. (2016). *Proceedings of AMP*. [4] Bennett, Elfner, McCloskey. (2016). *Linguistic Inquiry*. [5] Chung. 1998. *University of Chicago*. [6] Chung. 2003. *Linguistic Inquiry*. [7] Chung. 2020. *University of California, Santa Cruz*. [8] Elfner. 2012. *University of Massachusetts, Amherst*. [9] Ito, J., & Mester, A. (2008). *Lexical Classes in Phonology*. [10] McCarthy & Prince. (1993). *Yearbook of Morphology*. [11] Myrberg. (2010). *Stockholm: Acta Universitatis Stockholmiensis*. [12] Revised Chamorro-English Dictionary. [13] Selkirk. (2011). *The handbook of phonological theory*. [14] Topping & Dungca. (1973). *University of Hawaii Press*. [15] Truckenbrodt. (1999). *Linguistic Inquiry*.