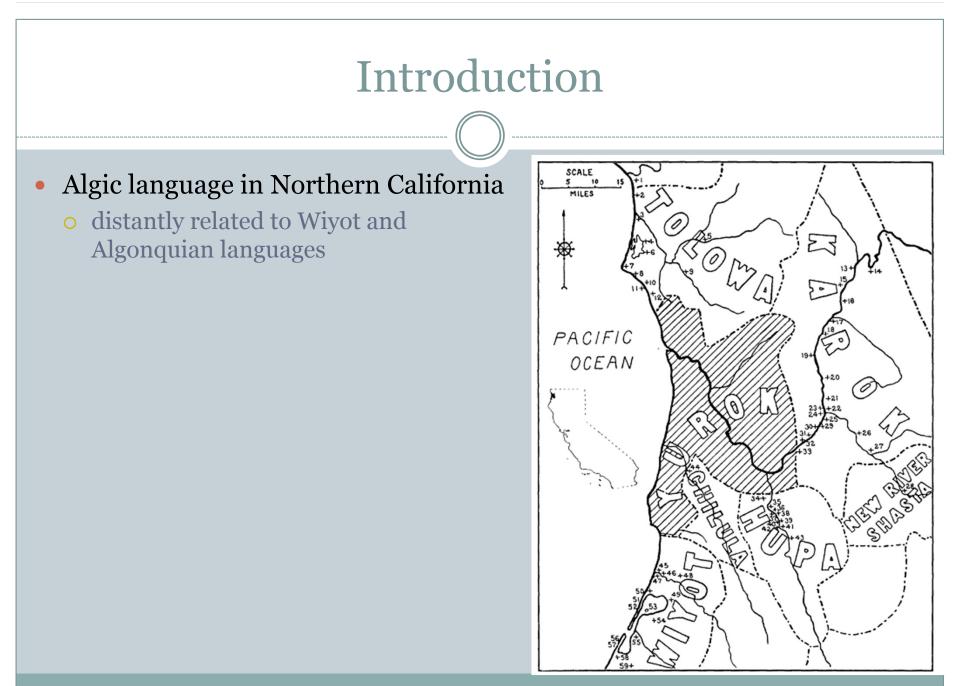
Preverbal Nonaffixal Ordering in Yurok (Algic)

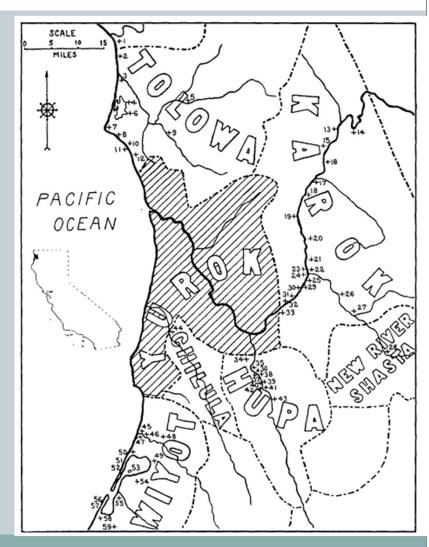
HERMAN LEUNG UC BERKELEY GRAMMARGEDDON (QP FEST) 11/10/2014



Introduction

- Algic language in Northern California
 - distantly related to Wiyot and Algonquian languages
- Over 70 preverbs (particles in preverbal position)
 - Various functions such as TAM, quantification, negation, manner, motion, etc.
- Modal (1) **Cho'** kemey-em'. (LC-01-2, 2007) MOD go.home-2S 'Go home.'

Motion (2) Nu hl'os! (GT3-06, 2003) MOT get.IMP 'Go get it!'



Adverbial	Time ('still wet'), kithwale kithwa
Auverbiai	<u>Time</u> ('still, yet'): kitkwela, <mark>kitkwo</mark> , tkwola, ('and then'): to's
	(and then): to s
	<u>Other</u> : 'eni ('completely, all over'), <mark>k'eso</mark> ('apparently, it seems')
Comparative	fini, nini, noni
Directional, Locational,	
Circumstantial	Locational: ii, ni, o
(DirLocCirc)	<u>Circumstantial</u> ('by, for, from, with,' etc.): 'emehl , mehl
Manner	noo ('like others'), s(h)oo ('thus, thusly')
Modal	<u>Imperative</u> : chi, cho <u>Desiderative</u> : kito, kitow
	Irrealis: si (would, could, should)
	<u>Necessity, Possibility, Future</u> : <mark>ki</mark> (will, can, must)
Motion	nu ('go do X')
Negative (+ other)	<mark>'emi, mi, mo</mark> , <mark>mos</mark> , mosi, <mark>paas</mark> , <mark>s(h)emi</mark>
	<mark>ʻimi</mark> (ʻi + mi), <mark>nimi</mark> (ni + mi), <mark>kimi</mark> (ki + mi),
	<u>Emphatic</u> : <mark>'imoksu</mark> , <mark>kenimi</mark> , <mark>nimok(w)su</mark>
	<u>Existential</u> : nimok'w(s) ('there is not, not any, none')
Quantifier	kichu ('each'), <mark>chpi</mark> ('only'),
	'all': <mark>chu</mark> (chyu), <mark>nikichu</mark> , <mark>ikichu</mark> , kikichu (+ FUTURE), <mark>numichu</mark>
Time reference	Future: kesi, kit (INCEP), kiti (NEAR FUTURE), kiki (FUT + CONSEC)
	Present: kich (COMPL), 'och, 'ochkaa (DUR)
	<u>Past</u> : 'ap, \rightarrow ho [*] \leftarrow , 'el, 'ela, 'esi, mela, mep, 'ochkich (RECENT PAST), 'u, 'uma, wo (ho.PAST when preceded by negative preverb)
	wo (no.PAST when preceded by negative preverb)
	Modal/Future/Past/Other ??: ko
	<u>Unrestricted</u> : <mark>'iki, niki</mark> (CONSEC); kap ('then'); mesi (SUBSEQ); wo'ni (CONTEMP)
Modal + Motion	<mark>ku</mark> (ki + nu)
Modal + Circumstantial	kihl (ki + mehl)
Time + motion	kitu (kiti + nu); 'ema/'eme, \rightarrow ma \leftarrow (me, maloh) (PAST.PUNCTUAL + MOTION)

Yurok preverbs, by general semantic category

Preverb clusters

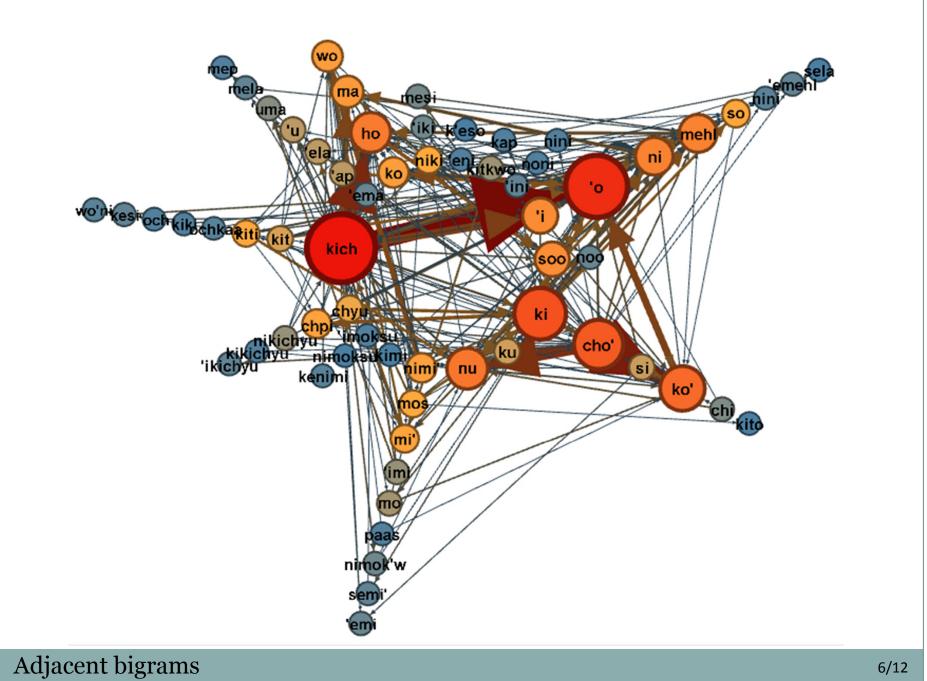
- Preverbs may cluster
 - Up to groups of at least 4 within a clause/predicate attested
 - (3) Cho nikichu 'ap 'emehl 'r'grp 'wo-'o'lehl! (YL, 1951)
 MOD all/every TIME CIRC tell 3-house
 'Go and tell the news at every house!'
- There can be intervening material between the preverbs
 Only pronouns, adverbs, or numerals intervene (Robins 1958)
 - (4) Cho poy ko 'o key ku k'e-rahchin. (YL, 1951)
 MOD front MOD? LOC sit the 2-friend.
 'Your friend must sit in front.'

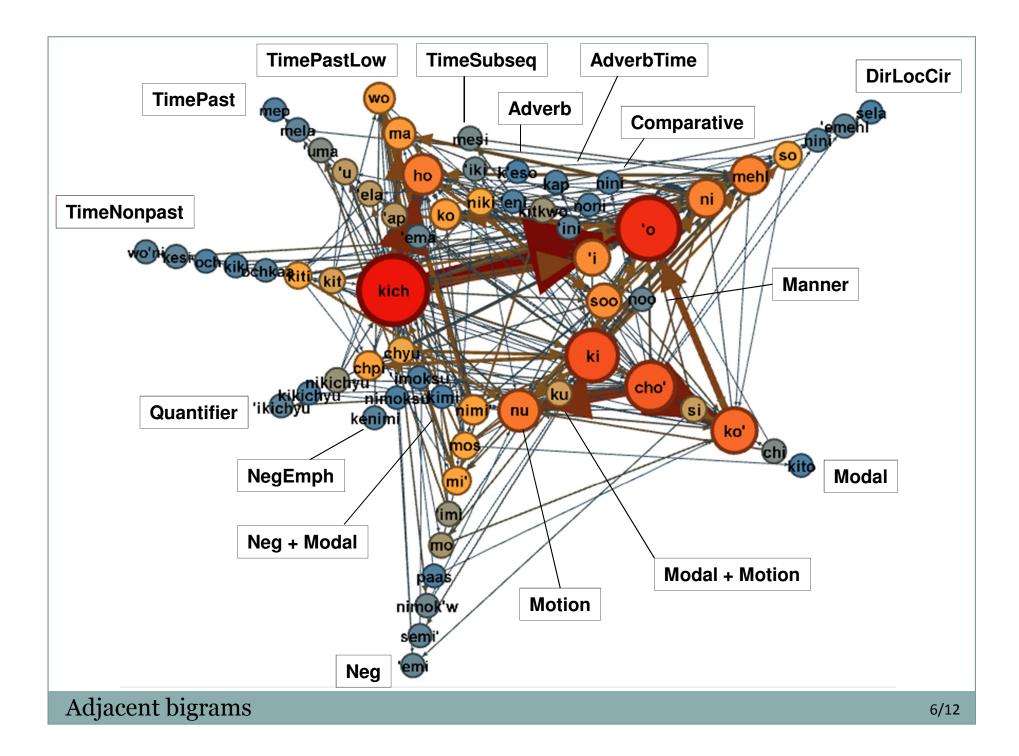
Research Questions

- What are the ordering facts of preverbal particles in Yurok?
- What constraints govern these ordering facts?
- Typological and theoretical questions
 - Non-affixal counterpart to verbal morphology in agglutinating languages?
 - How do the ordering facts stack up with existing theories of ordering constraints?

Research Questions + Method

- What are the ordering facts of preverbal particles in Yurok?
- What constraints govern these ordering facts?
- Typological and theoretical questions
 - Non-affixal counterpart to verbal morphology in agglutinating languages?
 - How do the ordering facts stack up with existing theories of ordering constraints?
- Look at bigram patterns (adjacent and nonadjacent)
- Categorize preverbs into semantic bins and examine bin bigrams
 - Non-coocurrence restrictions might be expected of preverbs of highly similar functions
- Continually analyze data and recategorize bins as needed





	Following preverb																
Preceding preverb		Adv time	Adv	Neg Emph	Neg	Quant	Comp	Neg + Modal	Modal	Time Nonpa st	Time Subse q	Time Past	Time Past Low	DLC	Motio n	Manne r	Mod + Mot
	Adverb time				6							1	4	5			
	Adverb								1				1				
	Neg Emph								1						1		
	Negation				2				22	7		16	49	4	1	3	1
	Quantifier								17	3		2	1	19	1	3	2
	Comparat ive						1		3				1				
	Neg + Modal																
	Modal				9	22	2		90	4	10	10	2	103	61	23	5
	Time Nonpast				15	7			12	4		13	82	167	17	4	
	Time Subseq		1		1				2	4			7	9	1	1	
	Time Past									3		2	3	12			
	Time Past Low					1			1			1	8	12		18	
	DLC	2			5			1	20	5	3	3	62	39	19	14	
	Motion					1			5	1				3			5
	Manner				3				1		1		2	8			
	Modal + Motion								2					4			

Adjacent bigrams by category

7/12

Findings (thus far)

- General order observed:
 - Modal/Time Nonpast > Time Past > DirLocCir > Time Past Low > Motion/Manner

Findings (thus far) + Case Study

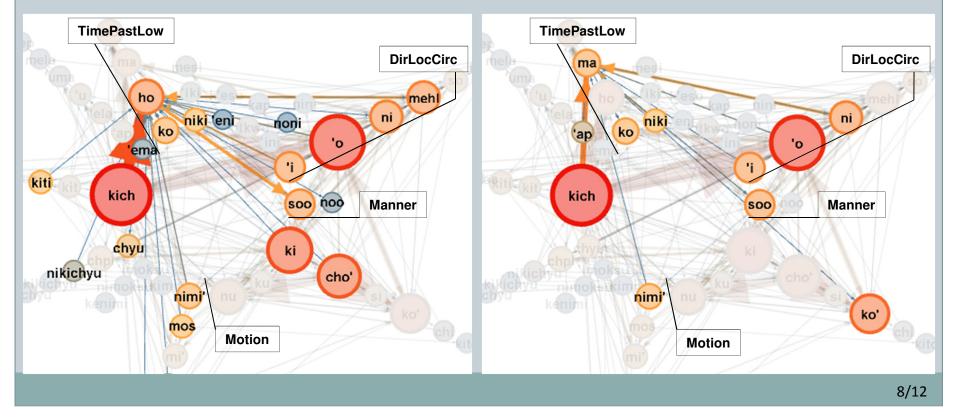
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- Why "Time Past Low" so low?

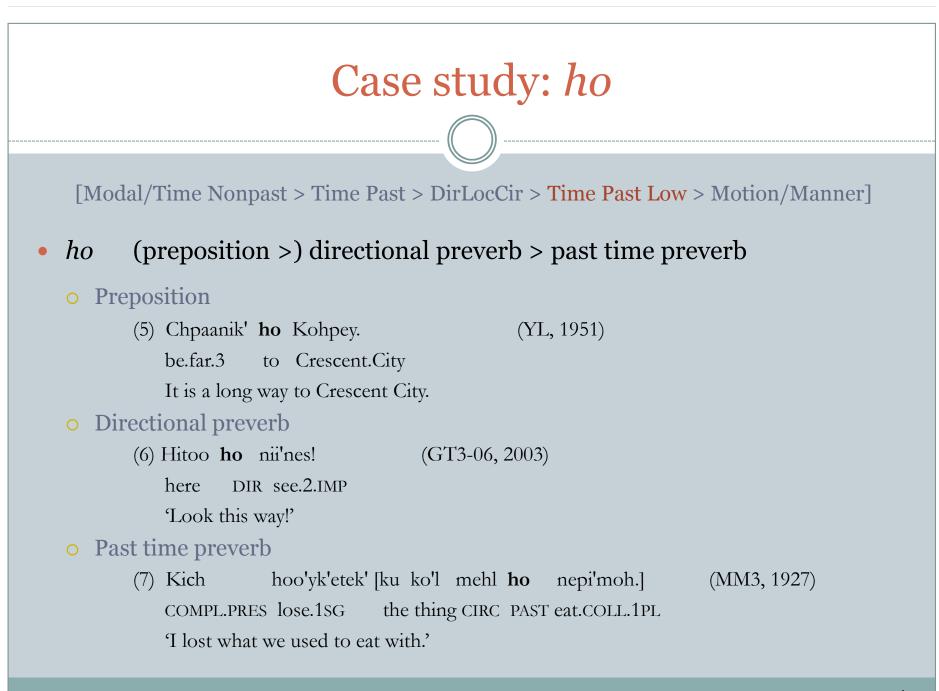
Findings (thus far) + Case Study

- General order observed:
 - Modal/Time Nonpast > Time Past > DirLocCir > Time Past Low > Motion/Manner
- Why "Time Past Low" so low? Two core examples:

ho (directional/past)

ma (past + motion)





Case study: *ma*

[Modal/Time Nonpast > Time Past > DirLocCir > Time Past Low > Motion/Manner]

(YL, 1951)

ma past + motion > past only

- Past + motion
 - (8) Nek kem ma chege'loh.
 I too PAST.MOT gather.seaweed
 'I too went seaweed gathering.'

• Past (+ metaphorical motion?)

(10) Ni ma kaamu'n '-uuksoh. (LA138-057, 1980) LOC PAST(.MOT?) grow.badly 3-child 'His or her child is deformed.'

Case summary

[Modal/Time Nonpast > Time Past > DirLocCir > Time Past Low > Motion/Manner]

- *ho* and *ma* have overlapping functions (past time) and never co-occur
- both are or have low preverb components, diachronically or synchronically (directional *ho*, motion in *ma*), and stay low despite time semantics

Case summary + Ongoing questions

[Modal/Time Nonpast > Time Past > DirLocCir > Time Past Low > Motion/Manner]

- *ho* and *ma* have overlapping functions (past time) and never co-occur
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- How do the Yurok preverb ordering facts stack up with existing theories of ordering constraints?
 - Templatic (e.g., Hyman 2003)
 - Semantic/syntactic scope (e.g., Rice 2000)
 - Morpho/phonological (e.g. Inkelas 1993, Paster 2006)
 - Processing (e.g., Hay and Plag 2004, Plag and Baayen 2009)
 - Acquisition (e.g., Ryan 2010)
 - Historical

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 - Acquisition (e.g., Ryan 2010)
 - Historical
- What about other preverbs (and preverb bins)? And counter orders?

 \leftarrow ho and ma

 \leftarrow ho and ma



Hay, Jennifer and Ingo Plag. 2004. What constrains possible suffix combinations on the interaction of grammatical and processing restrictions in derivational morphology. *Natural Language & Linguistic Theory 22*: 565-596.

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All Yurok data from:

University of California. 2001-2014. Yurok Language Project Digital Archive [YLPDA]. http://linguistics.berkeley.edu/~yurok