

# TYOLOGY AND MINIMALISM

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## Minimalism

- (1) All we have is Merge and relations created by Merge
- (2) The derivational approach is inherently asymmetric (existing + newly added structure)
- (3) 'Unary Merge': Merge adds an element from a resource (Numeration) to a work space (Derivation)

Merge  $\alpha$  to  $\beta$  yielding  $\langle \alpha, \beta \rangle$

- (4) Asymmetry in natural language is omnipresent, but: is it structural or a function of the linearization requirement (spell-out) ? (cf. Chomsky 2005)
- (5) Present suspicion: if we have asymmetry in the output and in the derivational procedure, one is a function of the other.
- (6) Generalized Linear Correspondence Axiom:

$\langle \alpha, \beta \rangle \equiv / \alpha \beta /$

## Dependency

- (7) Central hypothesis:

For any current derivation  $\beta$ , Merge  $\alpha$  to  $\beta$  turns  $\beta$  into a dependent of  $\alpha$

- (8) Indicators of dependency:
  - a. prosody
  - b. morphology
  - c. interpretation
- (9) Caveat: phonology may interfere (cliticization, cf. Klavans 1985, Zwart to app.)
- (10) Prosody: nuclear stress rule (nuclear stress on most deeply embedded complement)
- (11) Generalized nuclear stress rule: nuclear stress on dependent element in ordered pair
- (12) Simplex (family) names vs. phrases/complex names/some place names
- (13) VROEG in de wei (simplex family name)  
vroeg in de WEI (corresponding phrase)  
jeroen van de WEIJER (complex name)  
hoogerHEIDE (place name)
- (14) Same prosodic pattern in juxtapositions/lists:

enumerations	abbreviations/acronyms
phone numbers	time/amount indications
sports results	reduplications
construct state/dvandva composita	asyndetic coordinations

- (15) Morphology/interpretation: agreement, predication, reflexivity
- (16) schema: dependency established by merging  $\alpha$  to  $\beta$ , realized on a term of  $\beta$

**Conjunction: symmetry ?**

- (17) Kayne/Munn analysis: [<sub>&P</sub> A [ & B ]]
- (18) I saw John today and Mary
- (19) *Hmar, Sino-Tibetan*
  - a. bimol-in fà:k á tùm thù á hril  
Bimol-ERG eat 3SG intend COMP 3SG tell  
'Bimol says that he intends to eat.'
  - b. à húŋ à cún thù-cù á húŋ hril  
3SG come 3SG and message-DEF 3SG come tell  
'He came and told the message.'
- (20) \* [ he told the message-and ] he came
- (21) cf. Carstens on serialization in verb-final languages:  $V_1-V_2, *V_2-V_1$
- (22) If this is the general pattern, then:
  - a) the second member is a dependent of the first member
  - b) conjunction is marked on the second member
  - c) marking takes place through a left edge element (linker, head)
- (23) These are the kind of things one can test in a sample

**Sampling**

- (24) Purpose: assess linguistic variation (*variety sample*)
- (25) Universe: human language (faculty of language)  
Frame: extant languages  
Stratification: partitioning of the frame in language families
- (26) Language families:
  - a. lumping (Ruhlen 1991)
  - b. splitting (Gordon 2005 = Ethnologue)
- (27) Variety sample requires splitting strategy: close to 100 families
- (28) Quality assessment:
  - a. representation
  - b. weighting for homogeneity/diversity
  - c. coverage
- (29) Representation: proportional to size, but: systematic over/underrepresentation
- (30) Diversity: function of a) number of branchings, and b) size of terminal groups
- (31) Coverage: function of representation of subgroupings, weighted for domination
- (32) Practice:
  - a) balance of curiosity and economy
  - b) convenience of available excellent descriptions

(33) Size: 214 languages, may grow to 250.

### Head position

(34) A language is head-final/initial if V and P (or one of them if the other is missing) are final/initial

INITIAL			FINAL			SPLIT		
95			89			13		
V/P	V	P	V/P	V	P	V/P	V	P
79	14	2	64	18	7	10	0	3
						V-in	P-in	
						8	2	
								V-in
								2
								V-fin
								1

### Conjunction position (noun phrase conjunction)

INITIAL			FINAL			MIXED				OTHER		
135			12			26				39		
h-in	split	h-fin	h-in	split	h-fin	in fin	in poly	poly fin	3 way	poly	no data	tbd
85	3	47	0	2	10	11	10	2	3	16	18	5

### Conjunction types

- (35) a. juxtaposition > list + summary element (pronoun, also, them being, all, etc.)  
 b. comitative (with)  
 c. true conjunction (and)

### Final conjunctions

LANGUAGE	SUMMARY	COMITATIVE	TRUE
35:3 Slave	X	X	
56:2 Yaqui	(X?)	X	
58:1 Ika		X	
64:1 N Junín Quechua		X	
65:1 Jaqaru		X	
71:1 Yagua	X		
72:1 Bora	X	X	
75:1 Sanumá	X		
76:1 Barasano	X		
76:2 Retuarã	X		
82:1 Paumarí	X		
86:1 Trío	X		

12 languages using final conjunction only

(36) *Bora, Witotoan*

- a. Péédoro-o, Jóáa-á, Perípe-é, éhdume péé téhullévu  
 Pedro-RED Juan-RED Felipe-RED this quantity go away

(Thiesen 1996:75)

'Pedro, Juan, and Felipe went away.'

- b. Péedoró-mútsi-kye Jóáá-ma ájtyúmííbe  
 Pedro-DU-ACC Juan-with see:1SG  
 'I see Pedro and Juan.'

LANGUAGE	SUMMARY	COMITATIVE	TRUE
3:1 Logbara	X	X	(X?)
7:6 Kalasha-ala	X		X*
10:1 Kolyma Yukaghir		X	
12:1 Ket		X	
15:2 Kham	X		
19:21 Baram Kayan	X		
33:4 W Desert Lg	X	X	
33:5 Kayardiid	X		
35:2 Navaho		X	
46:1 Hualapai	X	(X)	
56:1 Shoshone		X	
64:2 Imbabura Quichua	X		
73:1 Pirahã	X		
83:1 Tariano		X	
85:1 Wari'	X		
94:1 Kwaza			X*

\* also used as initial conjunction

**final conjunctions used by 16 languages with mixed conjunction types**

(37) *Kwaza, Unaffiliated*

- a. zjwãu ho'Beto-tja mani'ni 'ja-wa-ki (Van der Voort 2004:706)  
 João Roberto-CSO fish eat-INDEFSU-DEC  
 'João and Roberto eat fish.' (CSO = cosubordinator)

- b. si xyi-a-'ta oja-'nã-a-ki Ba'hozo-nã (Van der Voort 2004:707)  
 I you-1PL-CSO go-FUT-1PL-DEC Barroso-LOC  
 'I and you we are going to Barroso.'  
 [lit: me, you, we being, we go to Barroso]

(38) *Kalasha-ala, Nuristani, Indo-European*

- a. e meši ye e muša (Degener 1998:166)  
 a woman and a man 'a woman and a man'

- b. meši moša ye (meši-moša-y) (Degener 1998:166)  
 women men and 'man and woman'

(39) *Logbara, C Sudanic, Nilo-Saharan*

- a. à mu èri pie àkú-a (Crazzolara 1960:100)  
 we go he and home-to  
 'I and he go home.' (cf. *pi* 'to complete')

- b. ètóo p`i mù dɪ a'ú-ã bε (Crazzolara 1960:101)  
 hare and go then fowl-DIM with

'the hare and a small fowl went together.' (cf. *X-pi* = *X c.s.*)

(40) True conjunctions are initial conjunctions

### Development

(41) *Shoshone, Uto-Aztecan*

a. Nüü tangummü ma'e wasüwükkikwant'ih (Dayley 1989:338)  
I man with hunt-going to  
'The man and I are going to hunt.'  
'I am going to hunt with the man.'

b. Nüü müattsia punikkappühantü tatsiumpim ma'e (Dayley 1989:338)  
I moon-OB saw star with  
'I could see the moon and stars.'

c. Nümmü sapettü namiangkütaippühantü wahattü niam püanümü  
we:EXC there were sent two my cousins  
  
ma'e nü namiangküppühantü sapettü natiingwakkatu (Dayley 1989:339)  
with I were sent there school-to

'We were sent there, my two cousins and I were sent there to school.'

d. Antsi n Tepi taona ka mi'akwa (Dayley 1989:339)  
Angie and Debbie town to went  
'Angie and Debbie went to town.' (*n* < *and*)

e. Antsi n Tepi ma'i miakoppühantü (Dayley 1989:339)  
Angie and Debbie with went around  
'Angie and Debbie went around.'

f. Apüttü tūnga Noitü tūnga Tseekki sutümmü wainniha hipimminna  
Albert and Lloyd and Jake those wine-OB drink-HAB  
'Albert and Lloyd and Jake, they always drink wine.' (Dayley 1989:341)

g. Nüü müattsia punikkappühantü tūnga tatsiumpim ma'e (Dayley 1989:342)  
I moon-OB saw and star with  
'I could see the moon and the stars.'

(42) Common pattern (20 languages): comitative postposition turned into initial conjunction (Zwart 2005a).

(43) *Kinnauri, Sino-Tibetan*

a. əñ rəñ do: chañ due (Sharma 1988:91)  
1SG:GEN with 3SG:GEN son be:3PAST  
'His son was with me.'

b. gə rəñ ki bi-tič (Sharma 1988:182)  
1SG:DIR and you:HON go-FUT:1DU.INCL.HON  
'I and you will go.'

### What does it mean?

- (44) a. Even 'parallel' coordinations are asymmetric  
b. The asymmetry is marked on the second member  
c. The marker is a left edge element



agreement and dependency marking typology. *LWPL*.

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