# Some notes on coordination in head-final languages

## Jan-Wouter Zwart

TIN-dag, Utrecht, January 29, 2005

### 1. Head-final vs. head-initial languages

	V/P	V/P diverging		V unclear	only V or	<sup>.</sup> P clear
	converging	V	Р		V	Р
initial	58	4	1	-	5	2
final	53	1	4	-	9	5
total	111	5	5	12	14	7

Table 1: head-final/initial languages in a 144-language sample

## 2. Coordination

b.	asyndetic (juxtaposition)	A B	A B C
	monosyndetic	A & B	A & B & C
	polysyndetic	& A & B	& A & B & C
(2) a.		A & B	& A & B
b.		A B &	A & B &

### 3. Monosyndetic NP-coordination

INITIAL	FINAL
108	16

Table 2: position of monosyndetic NP-conjunction in a 144 language sample

(3) Final conjunction is rare

(4) Latin, Italic, Indo-Hittite

- a. senatus populus-*que* romanus senate people-and roman 'the Senate and the people of Rome'
- b. ingenia fecunda totius-*que* naturae capacia (Plinius, *Nat.* Q. 2, 190) mind<sub>NTR</sub>:PL prolific:NTR.PL entire:GEN-and nature:GEN able to grasp:NTR.PL 'minds that are prolific and able to grasp the entire universe'

(common inscription)

c. obtestantur per amicitiam per-que sua antea fideliter acta beseech:3PL by friendship through-and 3sg:Poss before loyally perform:PART.PERF 'they beg in the name of (their) friendship and their prior loyal behavior' (Sallustius, Jug 71,5)

(5) -que is a 'second position' initial conjunction

(6) *2P initial conjunctions in the sample* West Greenlandic, Wardaman, Evenki, Amharic, Hausa, Turkish, Fon (7) West Greenlandic, Eskimo-Aleut

ippassaq tikip-put aqagu=*lu* ikinnguta-at tiki-ssa-put (Fortescue 1984:120) yesterday arrive-3PL:IND tomorrow=and friend their-PL arrive-FUT-3PL:IND 'They arrived yesterday and their friends will arrive tomorrow.'

(5) Turkish, Turkic, Altaic

H H	iş-in-e work-3sg-D		git-ti go-PAST		ev-in-e house-3sg-dat	dön-dü return-PAST		
	park-ta park-LOC	-	-dı-m y-PAST-1SC	9			(Kornfill	t 1997:109)

'Hasan went to work, Ali returned home, and I stayed in the park.'

### 4. Correlations (Stassen 2003:775)

- (6) a. final coordination > V-final language
  - b. V-initial language (and overt conjunction) > initial coordination
- (7) Languages using final conjunction as the only strategy

Logbara (Central Sudanic, Nilo-Saharan)	P-final, V unclear
Slave (Athabaskan, Na-Dene)	V/P-final
Yaqui (Uto-Aztecan)	V/P-final
Ika (Chibchan)	V/P-final
Barasano (Tucanoan)	V/P-final
Paumarí (Arawakan)	P-final, V-initial (?)

	V/P	V/P diverging		V unclear	only V or	P clear
	converging	V	Р		V	Р
initial	0	1	0	-	0	0
final	4	0	1	-	0	1
total	4	1	1	1	0	1

Table 3: head-final/initial languages among those using final monosyndetic noun phrase coordination as the only strategy

(8) Languages using final conjunction as an optional strategy (monosyndetic conjunction only)

Kolyma Yukaghir (Uralic-Yukaghir) Kham (Mahakiranti, Sino-Tibetan) Baram Kayan (Borneo, Austric) Western Desert Language (Pama-Nyungan, Australian) Navaho (Athabaskan, Na-Dene) Hualapai (Hokan) Wari' (Chapacura-Wanham) Ket (isolate) V/P-final V-final V/P-initial unclear V/P-final V/P-final V/P-initial V/P-final

	V/P	V/P diverging		V unclear	only V or	· P clear
	converging	V	Р		V	Р
initial	2	0	0	-	0	0
final	3	0	0	-	2	0
total	5	0	0	1	2	0

Table 4: head-final/initial languages among those using final monosyndetic noun phrase coordination as optional strategy

#### 5. Pseudo-final conjunctions

- (9) Summary strategy: a. copula (Paumarí, Wari')
  - b. number expression (Barasano)
  - c. pronoun (Amele, Baram Kayan)
  - d. focus marker (Western Desert Language, Slave, Barasano)

(Chapman & Derbyshire 1991:189)

(10) Paumarí, Arawakan

,	kodi-abi'i-a	bi-a-ka-vi-kha-hi	ida	kidi-hado	abiha	kodahi
	my-father-ERG	3SG-away-N:CLASS-COM-MOT-TH	I DEM,F	his-knife	arrow	bow

vanami *ki-hi-ki* paddle N:CLASS-AUX-DESC

'My father took his knife, arrow, bow and paddle.' (lit. 'took them his knife arrow bow paddle *being*')

(11) Wari', Chapacura-Wanham Cotem We wata' ca' na ca CW 1SG:EMPH this:NTR 3SG:REAL.PAST/PRES INFL:NTR.REAL.PAST/PRES

towet'iripainxirimca'tabe at:PRES1PL.INCL:REAL.PAST/PRES:3NTRhousethis:NTREMPH

'Cotem We and me (lit. 'thus it was') stayed here at the house.' (Everett & Kern 1997:163)

(12) Barasano, Tucanoan
 yu kak-u Pauru to-kã-rãk-u yã-bu yua
 1sg parent-MASC.SG Paul that-count-with-MASC.SG be-PAST:NON3 1EXC
 'Myself, Dad and Paul (that's how many of us) were there.' (Jones & Jones 1991:134)

(13)Baram Kayan, Borneo, Austric en na' uvui nah dalo' Anyi' ji Jau ji Uvang ji pah them Uvang one ACT he call VFOC Anyi' one Jau one also 'He called them-Anyi, Jau, and Uvang.' (Clayre & Cubit 1974:72)

- (14) Western Desert Language, Pama-Nyungan, Australian mimyma-⊘ ngaa-nya= pulanya tjitji-⊘= kamu mother-ABS this-ABS OBJ:3DU child-ABS also '...this woman and child also.'
   (Glass & Hackett 1970:66)
- (15) Slave, Athabaskan, Na-Dene lidí ts'ęt'úh chu náehndí tea cigarette too 1sG:bought
   'I bought tea and cigarettes.'
   (Rice 1989:1066)

(16)	Barasano, Tucanoan <del>ũbu</del> -a rõbi-a dake-rã <i>kẽde</i> yã-ka-bã ĩdã male-PL female-PL young-AN:PL also be-far:PAST-3PL 3PL 'There were men, women and children there.' (Jones & Jones 1991:133)							
Eviden	Evidence that these are really focus markers:							
(16)	Slave, Athabaskan, Na-Dene Mary chu shéeti Mary too 3:ate 'Mary too has eaten.' (Rice 1989:1067)							
NB, the	e summary strategy is not specific to head-final languages							
6. Th	e comitative strategy							
Conne	ction with summary strategy: Logbara							
(17) a.	Logbara, Central Sudanic, Nilo-Saharan ὲtɔ́ɔ p`i mù dî a'ú-ấ bɛ (Crazzolara 1960:101) hare and/P∟ go then fowl-DIM with/also ʿthe hare and a small fowl went together.'							
b.	à mu èri <i>pie</i> àkú-a (Crazzolara 1960:100) we go he and home-to 'I went home with him.'							
Pure c	omitative final conjunctions							
(18)	Yaqui, Uto-Aztecan húnen=su tesó-po lú'u-te-k húu'u labén híawa-i thus=EMP cave-to end-VERB-PERF that violin sound-PART							
	'áapa čiba'áto- <i>mak</i> nau lu'u-te-k (Dedrick & Casad 1999:363) harp goat-with together end-VERB-PERF							
	'The violin music in the cave thus ended [and] the harp and the goat all ended together right there.'							
	VERB = verbalizer, PART = participializer							
(19)	<i>Ika, Chibchan</i> ribru rapi- <i>sin</i> pa ú (Frank 1990:38) book <sub>FLAT</sub> pencil <sub>LONG</sub> -with put down:FLAT AUX 'Put the book and the pencil down!'							
(20)	Kolyma Yukaghir, Uralic-Yukaghir tabun-ge erie-t jaqte-de-jle tude eje johotī- <i>n'e</i> min-delle that-LOC hate-SS:IMP song-POSS-ACC his bow arrow-COM take-SS:IMP							
	tabud-e tāt ajī-m (Maslova 2003:314) that-INST CA shoot-TR:3SG							
	'Since he hated the song, he took his bow and arrows and shot at her.'							
	(CA = connective adverbial)							

(CA = connective adverbial)

- Hualapai, Hokan
  John-ch Mary-m hwák-k Banya:nyuwa ya:m-j-ay-k-yu
  John-su Mary-COM 3:be two-ss Phoenix 3:go-PL-IRR-SS-AUX/be
  'John and Mary are going to go to Phoenix.'
  (Watahamogie 2001:414)
- (22) Ket, isolate ba:t ba:m-as' dol'i'n' old man old woman-COM live:3PL.PAST 'The old man and the old woman lived.'

(Werner 1997:321 fn 2)

According to Mithun (1988:339), the comitative construction is "originally used to circumvent coordinate noun phrases", an elaboration of a more basic asyndetic construction which has a similar purpose. She notes that "conjoined noun phrases are actually relatively rare in spontaneous discourse, (...) considerably rarer than conjoined clauses" (1988:337). The observation Mithun makes is that in narrative, distinct entities are preferably introduced by distinct information units, e.g. separate clauses, after which they can be referred to by plural pronouns. This suggests that juxtapositions and genuine comitative constructions are not strictly speaking coordinations.

### 7. Grammaticalization of comitative markers as conjunctions

postpositional languages	66
of these, using comitative strategy	25
of these, comitative element becomes initial conjunction	15

Table 5: final comitative markers used as initial conjunctions

(23) Languages deriving initial conjunctions from postpositions/verbs

Dogon	Burmese
Suppire	Northern Qiang
Turkish	Mikir
Japanese	Lavukaleve
West Greenlandic	Slave
Ladakhi	Navaho
Kinnauri	Haida
Kokborok	

NB, four others have developed a bisyndetic coordination pattern, which also involves the introduction of an initial conjunction.

(24)	Japanes	-	•	anese					
a.	Mary g	ga J	John	to	kekkor	sita	(Kuno 1973:116)		
	- 1		John	with	marrie	d l			
	'Mary ma	arried Jo	hn.'						
b.	• • • • • •		Mary	ga	kekkor		(Kuno 1973:116)		
			Mary	NOM	marrie				
	'John and	d Mary n	narried	1.′					
(05)	Kinnerui	Llimala	winh C	ing Tibe	100				
(25)	Kinnauri,					duo	(Sharma 1099:01)		
a.		rən	dor		chań	due be:2040T	(Sharma 1988:91)		
	1SG:GEN 'His son y			GEN	son	be:3past			
		was witt	i me.						

b.	gə <i>rən</i> ki 1sg:Dir and you:HON 'I and you will go.'	bi-tič go-fut:1du.incl.hon	(Sharma 1988:182)		
(26) a.	Kokborok, Jingpho-Konyak-E ram bi-bi-bay p Ram his-elder.sister-with o 'Ram will come with his elder	(Pai 1976:56)			
b.	bɔ- <i>bay</i> bə-ta 3н∪м-and his-elder.brother 'He and his elder brother are	5	(Pai 1976:86)		
(27) a.	· ·	sə-ва kaː э-LOC go:PROSP:1SG	(LaPolla 2003:96)		
b.	mutsitşu- <i>ղo</i> -tugantşu zəpə Mutsitşu-coм-Tugantşu earth ʻMutitsu and Tugantsu wante	I-LOC DIR-come-PROSP-CHST	(LaPolla 2003:95)		
	NB, PROSP = prospective aspect, CH	IST = change of state marker			
(28) a.	<i>Mikir, Sino-Tibetan</i> la- <i>pen</i> na corapno 3sg-ass 2sg eat 'You eat with him.'	n	(Jeyapaul 1987:76)		
b.		penchil pencil	(Jeyapaul 1987:135)		
(29) a.	Lavukaleve, East Papuan, In ma-mita'keu-mal va 3PL.POSS-dog-PL PL.DEF ( with their dogs'	vo-ne	(Terrill 2003:159)		
b.		e-ma-re vo-mal 3sg.ntr.ob-take-INF come-DU	nala MASC.DU.DEF		
	finala Sepo <i>ne</i> 3DU.MASC.FOC S <sub>MASC</sub> and	Laumate L <sub>MASC</sub>	(Terrill 2003:160)		
	'The two men who brought the church were Sepo and Laumate.'				
(30) a.	Slave, Athabaskan, Na-Dene ?įyę bee hé tadįt meat knife with 2sg: 'You cut the meat with the kn	iwee cut	(Rice 1989:1073)		
b.	hịníi tsá <i>hé</i> tehk past beaver with mus 'In the past, people hunted b	9.1			

(31) a.	<i>Haida, Na-Dene</i> kilraad- <i>7ad</i> xàaydas- <i>7ad</i> tIljing xàaydaraay- <i>7ad</i> hIlnagid Tsimshians-with Haidas-with Bellabellas-with Tlingits
	gud-7ilaa gina-ra suu-s-ii (Skidegate; Enrico 2003:1080) REC-different thing-PP sing-PR-TC
	'Tsimshians and Haidas and Bellabellas and Tlingits were singing different songs.'
b.	kyaa.n q'aal-gee- <i>rahl</i> taaw-ee-7isan 'la gya.alatl'a.a-gan
	can empty-DF-with food-DF-too 3PL bring-PA 'She brought the empty cans and the food.' (Masset; Enrico 2003:1081)
(32) a.	<i>Turkish, Turkic, Altaic</i> Hasan Ali- <i>yle</i> opera-ya git-ti-⌀ (Kornfilt 1997:115) H A-with opera-DAT go-PAST-3SG 'Hasan went to the opera with Ali.'
b.	Ali- <i>yle</i> Zeynep dün sinema-ya git-ti-ler (Kornfilt 1997:114) A-with Z yesterday cinema-DAT go-PAST-3PL 'Ali and Zeynep went to the cinema yesterday.'
(33) a.	Suppire, North Central Niger-Congo, Niger-Kordofanian Uru na ŋ-káágé sà ù kàcììyí bàrà Bàmbɛmɛ wúyi he:ЕмРн pRog INTR-go:IMPF go his bones:DEF add Babemba poss:DEF(IISG)
	na Sogo Kanha na (Carlson 1994:267) on Sikasso town at
	'He was going to go add his bones to Babemba's in Sikasso.'
b.	Mu <i>bárà</i> mìì na, wùù sí ỳ-kàrè Sukwoo na (Carlson 1994:268) you add me on we FUT FUT-go Sikasso at 'You and I, we will go to Sikasso.'
8. Ot	ther final elements developing into initial conjunctions
focus	markers
(34) a.	Lezgian, Northeast Caucasian(Haspelmath 1993:328)Zun-niq <sup>h</sup> üre-na(Haspelmath 1993:328)1sg:abs-alsosmile-AOR'I also smiled.'
b.	Isa-di- <i>ni</i> Ali-di sada-sada-w ğil-er wuga-na (Haspelmath 1993:327) Isa-ERG-CONJ Ali-ERG one-one-ADESS hand-PL give-AOR 'Isa and Ali shook hands.'
(35) a.	Kayardild, Pama-Nyungan, Australian ngada ban (Evans 1995:395) 1sg.nom too
b.	riya-thi nga-rr-a banga-y kabathaa-th <i>bana</i> banga-a bana banga-a east-REM 1-DU-NOM turtle-мLOC catch-ACT and turtle-NOM and turtle-NOM
	bana banga-a (Evans 1995:394) and turtle-NOM

'Way in the east we two caught turtles and turtles and turtles and turtles.'  $_{\rm MLOC}$  = modal locative case, expressing 'instantiated' modality

(36) a.	Monguor mori nige horse one 'There is not	<i>da</i> also a single h	uguā not exist orse.'				(De Smedt	& Mostaert ´	1964:51)
b.	mori <i>da</i> horse and 'Hitch up the	rdźiger donkey horse and	/ hitch.u			(	De Smedt 8	Mostaert 19	964:163)
Noncor	mitative prepo	sitions							
(36) a.	<i>Ainu, Korean</i> nupuri ka hills top.o 'Someone ca	<i>wa</i> f from	hotuypa call.in.loud		p of the	mountair	ı.'	(Tamura 20	000:133)
b.	otcike huray tray wash 'Wash and w		pirpa wipe y.'					(Tamura 20	000:149)
Suffixe	s								
(37)	<i>Amharic, Ser</i> kä-gäbäya from-market 'I brought sal	čäw- <i>ər</i> salt-an	n <i>na</i> bärbäri d pepper	l:br	äţţa <sup>w</sup> h ought			(Leslau 20	)02:154)
(38)		/a-tu-a-ʔa SG-give-3	SG-IND	Ċ			(M	acDonald 19	990:247)
(39) a.	<i>Kiowa, Tanoa</i> báòː ⊘-né cat 2/3so 'They are my	-dòː 3.AG-1SG.F			mí: almost	⊘-né-p'≎ 2/3sg.ao	•	J.OB-lose:PE (Watkins 19	
b.	òːpàl sép closer rain 'The rain is g		rive-coming					(Watkins 19	980:272)
С.	màːyí <i>gɔ̀</i> woman and	k'yą́ːhį́ man	X					(Watkins 19	980:288)
9. Otł	ner cases of h	nead-final	languages	using ir	itial co	njunctior	าร		

(40) Kolyma Yukaghir, Uralic-Yukaghir
 pajpe tāhile mēmē (Maslova 2003:318)
 woman CA bear
 'The woman and the bear.'

(41)	<i>Kabardian, West Caucasian</i> p'śə- <i>k'wə</i> -z ten-plus-one 'eleven'	(Colarusso 1992: 159)			
(42)	<i>Logbara, Central Sudanic, Nilo-Saharan</i> möödrí <i>drì-nï</i> àlö ten on-it one 'eleven'	(Crazzolara 1960:38)			
(43)	<i>Mao Naga, Kuki-Chin-Naga, Sino-Tibetan</i> okhro kaxi <i>ye</i> khodu kali dao two and gun one 'two daos and a gun'	(Giridhar 1994:454)			
(44)	<i>Central Asmat, Trans New Guinea, Indo-Pacific</i> Juwúr <i>enĕrim</i> Ew dog and crocodile [story title]	(Voorhoeve 1965:172)			
(45)	Canela, Ge-Pano-Carib capi <i>me</i> kryt ma tẽ (Po Capi and Kryt away go 'Capi and Kryt go away.'	pjes & Popjes 1986:150)			
(46)	Basque, isolate lagun eta ahaide-ei agur egi-n d-⊘-ie-⊘ friend and relative-PL:DAT salute make-PERF 3ABS-PRES:AUX2 'He has greeted his friends and family.'	-3PL:DAT-3SG:ERG (Saltarelli 1988:90)			
(47)	Ket, isolateətnahissɨj-diŋtaɔn'qɨːn,s'ɛ?n1PL:POSSforest?-NONMASC:SG:ADESSmanyelk:PLreindeer:PL				
	haj qoʻn duγiʻn' and bear:PL live:3PL	(Werner 1997:321)			
	'In our forest live many elks, reindeer and bears.'				
(48)	Daga, Trans New-Guinea, Indo-Pacific wata ge manapawa yesterday and day before yesterday 'yesterday and the day before yesterday'	(Murane 1974:95)			
10. Head-final languages borrowing initial conjunctions					
(49)	<i>Djingili, Australian</i> ŋargu'lii <i>an</i> ŋuilaimbirgari Tommy and Ned	(Chadwick 1975:97)			
an < English and					
(50)	<i>Lezgian, Northeast Caucasian</i> güzel wa č'exi šeher beautiful CONJ big city 'a beautiful and big city'	(Haspelmath 1993:330)			
	wa < Turkic < Arabic wa				

	ve < Arabic wa			
	wing of conjunctions is quite common, for reasons discussed in Mithun of no case where the borrowed element is a final conjunction.	(1988:351-352). However,		
11. Bi	syndetic conjunction			
(52)	Amele, Madang, Indo-Pacific Banag ca Bunag ca ale due bele-si-a B add B add 3DU dance go-3DU-HOD.PAST 'Banag and Bunag have gone to the dance.'	(Roberts 1987:105)		
Often,	monosyndetic initial conjunction presents the unmarked case:			
(53) a.	<i>Marind, Trans New-Guinea, Indo-Pacific</i> nok namèk <i>a</i> nok namùk <i>a</i> 1sG brother and 1sG sister and 'my brother and my sister'	(Drabbe 1955:135)		
b.	inah a izakod two and one 'three'	(Drabbe 1955:26)		
Bisynd	detic conjunction involving summary strategy			
(54) a.	<i>Daga, Trans New-Guinea, Indo-Pacific</i> nenip Bure <i>ge</i> nenip Dukuik <i>dere</i> bird Bure and bird Dukuik two 'the Bure bird and the Dukuik bird'	(Murane 1974:94)		
b.	wata <i>ge</i> manapawa yesterday and day before yesterday 'yesterday and the day before yesterday	(Murane 1974:95)		
12. He	ead-initial languages using final conjunctions?			
The o	nly candidates seem to involve the summary strategy:			
(55)	Eastern Kayah Li, Karen, Sino-Tibetan vē ?omā kā Mòphrè n <i>ś</i> Pímò s <i>ī</i> 1sg lie down COM.PRT Mophre NE Pimo and them 'I slept between Mophre and Pimo.'	klēmēkū between (Solnit 1997:171)		
(56)	Mapudungu, Andean (iñché) eymi inchiu i-y-u I you:sg we:D∪ eat-IND-1NONSG-D∪ 'You and I ate.'	(Smeets 1989:177)		
13. Ex	xplanation and conclusion	14. References		
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(Lewis 1986:206)

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zwart@let.rug.nl ! http://www.let.rug.nl/~zwart/