

Some notes on coordination in head-final languages

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TIN-dag, Utrecht, January 29, 2005

1. Head-final vs. head-initial languages

	V/P converging	V/P diverging		V unclear	only V or P clear	
		V	P		V	P
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

- (1) a. asyndetic (juxtaposition) A B A B C
 b. monosyndetic A & B A & B & C
 c. polysyndetic & A & B & A & B & C
- (2) a. initial A & B & A & B
 b. final 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* (common inscription)
 senate people-and roman
 'the Senate and the people of Rome'

b. *ingenia fecunda totius-que naturae capacia* (Plinius, *Nat. Q.* 2, 190)
 mind_{NTR: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'

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*
 Hasan iş-in-e git-ti Ali ev-in-e dön-dü
 H work-3SG-DAT go-PAST A house-3SG-DAT return-PAST

ben-de park-ta kal-dı-m (Kornfilt 1997:109)
 I-and park-LOC stay-PAST-1SG

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

- (16) *Barasano, Tucanoan*
 ũbɔ-a rōbi-a dake-rã kēde 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)

Evidence that these are really focus markers:

- (16) *Slave, Athabaskan, Na-Dene*
 Mary chu shéetj
 Mary too 3:ate
 'Mary too has eaten.' (Rice 1989:1067)

NB, the summary strategy is not specific to head-final languages

6. The comitative strategy

Connection with summary strategy: Logbara

- (17) *Logbara, Central Sudanic, Nilo-Saharan*
 a. ètóo p`i mù dʃ a'ú-ã bɛ (Crazzolara 1960:101)
 hare and/PL go then fowl-DIM with/also
 'the hare and a small fowl went together.'
 b. à mu èri pie àkú-a (Crazzolara 1960:100)
 we go he and home-to
 'I went home with him.'

Pure comitative 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-mak 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) *Ika, Chibchan*
 ribru rapi-sin pa ú (Frank 1990:38)
 book_{FLAT} pencil_{LONG}-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 johotĩ-n'e min-delle
 that-LOC hate-SS:IMP song-POSS-ACC his bow arrow-COM take-SS:IMP
 tabud-e tāt aji-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)

- (21) *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' dól'ir'n' (Werner 1997:321 fn 2)
 old man old woman-COM live:3PL.PAST
 'The old man and the old woman lived.'

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) *Japanese, Korean-Japanese*
 a. Mary ga John to kekkonsita (Kuno 1973:116)
 Mary NOM John with married
 'Mary married John.'

- b. John to Mary ga kekkonsita (Kuno 1973:116)
 John with Mary NOM married
 'John and Mary married.'

- (25) *Kinnauri, Himalayish, 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 rəŋ ki bi-tič (Sharma 1988:182)
 1SG:DIR and you:HON go-FUT:1DU.INCL.HON
 'I and you will go.'

(26) *Kokborok, Jingpho-Konyak-Bodo, Sino-Tibetan*

a. ram bi-bi-bay phay-anu (Pai 1976:56)
 Ram his-elder.sister-with come-will
 'Ram will come with his elder sister.'

b. bə-bay bə-ta baŋar-ɔ θaŋ-ɔ (Pai 1976:86)
 3HUM-and his-elder.brother market-to go-PRES
 'He and his elder brother are going to the market.'

(27) *Northern Qiang, Sino-Tibetan*

a. qa khumtsi-ŋɑ tiantse-βɑ ka: (LaPolla 2003:96)
 1SG Khumtsi-COM store-LOC go:PROSP:1SG
 'I am going to the store with Khumtsi.'

b. mutsiŋsu-ŋɑ-tugantŋsu zəpəq-ta ho-lu-ɑ:ji (LaPolla 2003:95)
 Mutsiŋsu-COM-Tugantŋsu earth-LOC DIR-come-PROSP-CHST
 'Mutsiŋsu and Tugantŋsu wanted to come to earth.'

NB, PROSP = prospective aspect, CHST = change of state marker

(28) *Mikir, Sino-Tibetan*

a. la-pen na corapnon (Jeyapaul 1987:76)
 3SG-ASS 2SG eat
 'You eat with him.'

b. notbuk, kitap pen penchil (Jeyapaul 1987:135)
 notebook book and pencil

(29) *Lavukaleve, East Papuan, Indo-Pacific*

a. ma-mita'keu-mal va vo-ne (Terrill 2003:159)
 3PL.POSS-dog-PL PL.DEF 3PL-with
 'with their dogs'

b. airal mima e-ma-re vo-mal nala
 man:DU way of life_{NTR} 3SG.NTR.OB-take-INF come-DU MASC.DU.DEF

finala Sepo ne Laumate (Terrill 2003:160)
 3DU.MASC.FOC S_{MASC} and L_{MASC}

'The two men who brought the church were Sepo and Laumate.'

(30) *Slave, Athabaskan, Na-Dene*

a. ?jyɛ bee hé tadjhwee (Rice 1989:1073)
 meat knife with 2SG:cut
 'You cut the meat with the knife.'

b. hjnii tsá hé tehk'ái kwik'íi t'áh kagenjwe (Rice 1989:1067)
 past beaver with muskrat gun with 3PL:hunted
 'In the past, people hunted beaver and muskrat with guns.'

- (31) *Haida, Na-Dene*
- a. kilraad-7ad xàaydas-7ad tljijng xàaydaraay-7ad hllnagid
 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-*rahl* taaw-ee-7isan 'la gya.alat'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) *Turkish, Turkic, Altaic*
- a. Hasan Ali-yle opera-ya git-ti-∅ (Kornfilt 1997:115)
 H A-with opera-DAT go-PAST-3SG
 'Hasan went to the opera with Ali.'
- b. Ali-yle 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) *Suppire, North Central Niger-Congo, Niger-Kordofanian*
- a. Uru na η-káágé sà ù kàcìiyí bàrà Bàmβεμε wúyi
 he:EMPH 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 bàrà mìl na, wùù sí η-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. Other final elements developing into initial conjunctions

focus markers

- (34) *Lezgian, Northeast Caucasian*
- a. Zun-*ni* q^hüre-na (Haspelmath 1993:328)
 1sg:abs-also smile-AOR
 'I also smiled.'
- b. Isa-di-*ni* 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) *Kayardild, Pama-Nyungan, Australian*
- a. ngada *ban* (Evans 1995:395)
 1SG.NOM too
- b. riya-thi nga-rr-a banga-y kabathaa-th *bana* banga-a *bana* banga-a
 east-REM 1-DU-NOM turtle-MLOC 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.'
 MLOC = modal locative case, expressing 'instantiated' modality

- (36) *Monguor*
- a. *mori nige da uguā* (De Smedt & Mostaert 1964:51)
 horse one also not exist
 'There is not a single horse.'
- b. *mori da rdžigeni χulōx* (De Smedt & Mostaert 1964:163)
 horse and donkey hitch.up
 'Hitch up the horse and the donkey.'

Noncomitative prepositions

- (36) *Ainu, Korean-Japanese*
- a. *nupuri ka wa hotuypa* (Tamura 2000:133)
 hills top.of from call.in.loud.voice
 'Someone called in a loud voice from the top of the mountain.'
- b. *otcike huraye wa pirpa* (Tamura 2000:149)
 tray wash and wipe
 'Wash and wipe the tray.'

Suffixes

- (37) *Amharic, Semitic, Afro-Asiatic*
- kā-gābāya čāw-ənnā bārbārre amätta^wh* (Leslau 2002:154)
 from-market salt-and pepper I:brought
 'I brought salt and pepper from the market.'
- (38) *Tauya, Adelbert Range, Indo-Pacific*
- fei-ti ya-tu-a-ʔa* (MacDonald 1990:247)
 boil-CONJ 1SG-give-3SG-IND
 'She cooked it and gave it to me.'
- (39) *Kiowa, Tanoan*
- a. *báò: ø-né-dò: gò mí: ø-né-p'òy*
 cat 2/3SG.AG-1SG.PAT:DU.OB-be and:SS almost 2/3SG.AG-1SG.PAT:DU.OB-lose:PERF
 'They are my cats and I almost lost them.' (Watkins 1980:293)
- b. *ò:pàl sép ø-cándé-à: nò pàhì: bà-t'á:dáy*
 closer rain 3SG-arrive-coming and:DS clearly 2PL-get wet:PERF
 'The rain is getting closer and it's obvious that we'll get wet.' (Watkins 1980:272)
- c. *mà:yí gò k'yá:hì:* (Watkins 1980:288)
 woman and man

9. Other cases of head-final languages using initial conjunctions

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

- (41) *Kabardian, West Caucasian*
 p'šə-k'wə-z (Colarusso 1992: 159)
 ten-plus-one
 'eleven'
- (42) *Logbara, Central Sudanic, Nilo-Saharan*
 möödrí dri-ní àlò (Crazzolara 1960:38)
 ten on-it one
 'eleven'
- (43) *Mao Naga, Kuki-Chin-Naga, Sino-Tibetan*
 okhro kaxi ye khodu kali (Giridhar 1994:454)
 dao two and gun one
 'two daos and a gun'
- (44) *Central Asmat, Trans New Guinea, Indo-Pacific*
 Juwúr eněrim Ew (Voorhoeve 1965:172)
 dog and crocodile
 [story title]
- (45) *Canela, Ge-Pano-Carib*
 capi me kryt ma tē (Popjes & Popjes 1986:150)
 Capi and Kryt away go
 'Capi and Kryt go away.'
- (46) *Basque, isolate*
 lagun eta ahaide-ei agur egi-n d-∅-ie-∅
 friend and relative-PL:DAT salute make-PERF 3ABS-PRES:AUX2-3PL:DAT-3SG:ERG
 'He has greeted his friends and family.' (Saltarelli 1988:90)
- (47) *Ket, isolate*
 ətna hissij-din̄ta ɔn' qɪ:n, s'ɛʔn
 1PL:POSS forest?-NONMASC:SG:ADESS many elk:PL reindeer:PL

 haj qo'n duyi'n' (Werner 1997:321)
 and bear:PL live:3PL

 'In our forest live many elks, reindeer and bears.'
- (48) *Daga, Trans New-Guinea, Indo-Pacific*
 wata ge manapawa (Murane 1974:95)
 yesterday and day before yesterday
 'yesterday and the day before yesterday'

10. Head-final languages borrowing initial conjunctions

- (49) *Djingili, Australian*
 ŋargu'lii an ŋuilaimbirgari (Chadwick 1975:97)
 Tommy and Ned

 an < English and
- (50) *Lezgian, Northeast Caucasian*
 gūzel wa č'exi šeher (Haspelmath 1993:330)
 beautiful CONJ big city
 'a beautiful and big city'

 wa < Turkic < Arabic wa

- (51) *Turkish, Turkic, Altaic*
 sen ve ben (Lewis 1986:206)
 you and I

ve < Arabic wa

Borrowing of conjunctions is quite common, for reasons discussed in Mithun (1988:351-352). However, I know of no case where the borrowed element is a final conjunction.

11. Bisyndetic conjunction

- (52) *Amele, Madang, Indo-Pacific*
 Banag ca Bunag ca ale due bele-si-a (Roberts 1987:105)
 B add B add 3DU dance go-3DU-HOD.PAST
 'Banag and Bunag have gone to the dance.'

Often, monosyndetic initial conjunction presents the unmarked case:

- (53) *Marind, Trans New-Guinea, Indo-Pacific*
 a. nok namèk a nok namùk a (Drabbe 1955:135)
 1SG brother and 1SG sister and
 'my brother and my sister'
 b. inah a izakod (Drabbe 1955:26)
 two and one
 'three'

Bisyndetic conjunction involving summary strategy

- (54) *Daga, Trans New-Guinea, Indo-Pacific*
 a. nenip Bure ge nenip Dukuik dere (Murane 1974:94)
 bird Bure and bird Dukuik two
 'the Bure bird and the Dukuik bird'
 b. wata ge manapawa (Murane 1974:95)
 yesterday and day before yesterday
 'yesterday and the day before yesterday'

12. Head-initial languages using final conjunctions?

The only candidates seem to involve the summary strategy:

- (55) *Eastern Kayah Li, Karen, Sino-Tibetan*
 vē ʔomā kāl Mòphrè nē Pimò sī klēmēkū
 1SG lie down COM.PRT Mophre NE Pimo and them between
 'I slept between Mophre and Pimo.' (Solnit 1997:171)
 (56) *Mapudungu, Andean*
 (iñché) eymi inchiu i-y-u (Smeets 1989:177)
 I you:SG we:DU eat-IND-1NONSG-DU
 'You and I ate.'

13. Explanation and conclusion

14. References