1. Introduction: context of the research

(1) Minimalist hypothesis: language faculty builds up structure by recursively applying Merge

(2) Merge = application of $\alpha$ to $\beta$ yielding $<\alpha,\beta>$ (i.e. asymmetric)

(3) General idea: Merge $\alpha$ to $\beta$ turns $\beta$ into the dependent of $\alpha$

(4) Question: is linear order a direct translation of the dependency relation, s.t. $<\alpha,\beta> = /\alpha\beta/$?

(5) If the complement is a dependent of the head, a positive answer to (4) implies universal head-initial structure (cf. Kayne 1994)

(6) Given the possibility of movement, (4) can only be studied in ‘primitive syntactic objects’ such as juxtapositions and concatenations

(7) Is coordination head-initial? Look at coordination in head-final languages.

(8) Hmar, Sino-Tibetan
   a. bimol-in fà:k á tûm thû á hrîl
      Bimol-erg eat 3sg intend comp 3sg tell
      'Bimol says that he intends to eat.'
   b. á hûŋ á cûn thû-cû á hûŋ hrîl
      3sg come 3sg and message-def 3sg come tell
      'He came and told the message.'

2. Sample

! 164 languages
! variety sample
! 19 families (Ruhlen 1991) + 3 additional categories (isolates, pidgins/creoles, sign languages)
! slight underrepresentation of Niger-Kordofanian (large/homogeneous), Austro (id.), and Indo-Pacific (scarcity of data)
! currently being upgraded to a 215 language sample of 97 families (Gordon 2005)

3. Quantitative analysis

(9) Head-initial/final based on position of V and/or P w.r.t. their complement

<table>
<thead>
<tr>
<th></th>
<th>V AND P CLEAR</th>
<th>V OR P CLEAR</th>
<th>UNCLEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONVERGING</td>
<td>DIVERGING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>V</td>
<td>P</td>
<td>V</td>
</tr>
<tr>
<td>Initial</td>
<td>65</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Final</td>
<td>49</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>TOTAL=164</td>
<td>114</td>
<td>5</td>
<td>23</td>
</tr>
</tbody>
</table>
In sum

<table>
<thead>
<tr>
<th></th>
<th>NUMBER OF LGS</th>
<th>PERCENTAGE OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HEAD-INITIAL</strong></td>
<td>77</td>
<td>47</td>
</tr>
<tr>
<td><strong>HEAD-FINAL</strong></td>
<td>67</td>
<td>41</td>
</tr>
<tr>
<td><strong>UNCLEAR/DIVERGING</strong></td>
<td>20</td>
<td>12</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>164</td>
<td>100</td>
</tr>
</tbody>
</table>

Position of monosyndetic conjunction (n = noun phrase, c = clause)


<table>
<thead>
<tr>
<th></th>
<th>&amp;n AND &amp;c CLEAR</th>
<th>&amp;n OR &amp;c CLEAR</th>
<th>UNCLEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CONVERGING</td>
<td>DIVERGING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&amp;n</td>
<td>&amp;c</td>
<td>&amp;n</td>
</tr>
<tr>
<td><strong>INITIAL</strong></td>
<td>94</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>FINAL</strong></td>
<td>2</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>96</td>
<td>2</td>
<td>42</td>
</tr>
</tbody>
</table>

NB1 some languages display more than one pattern
NB2 unclear = no data (16) + hard to classify, mostly polysyndetic (20)

In sum

<table>
<thead>
<tr>
<th></th>
<th>NUMBER OF LGS</th>
<th>PERCENTAGE OF TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>&amp;-INITIAL</strong></td>
<td>134</td>
<td>82</td>
</tr>
<tr>
<td><strong>&amp;-FINAL</strong></td>
<td>13</td>
<td>8</td>
</tr>
<tr>
<td><strong>UNCLEAR/DIVERGING</strong></td>
<td>38</td>
<td>23</td>
</tr>
</tbody>
</table>

NB the numbers don’t add up because languages may display more than one pattern

Provisional conclusions:

a. Final conjunctions are rare
b. Final clause conjunctions are exceedingly rare
c. If a conjunct is marked, it is the second conjunct
d. If the conjunct is marked by a head/linker, it precedes its complement

What about Latin?

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)
   ‘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)

-que is a ‘second position’ initial conjunction

2P initial conjunctions in the sample

Amharic, Evenki, Fon, Hausa, Kalasha-al, Lezgian, Turkish, Wardaman, West-Greenlandic
(17) **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.'
```

(18) **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-la kal-di-m (Kornfilt 1997:109)
I-and park-LOC stay-PAST-1SG
```

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

(19) ‘postpositive’ conjunctions ([A=& B], Haspelmath 2000) invariably seem to involve cliticization, no evidence for head-final structure

### 4. Qualitative analysis

(20) **Three types of noun phrase conjunction** (Mithun 1988, Stassen 2003, Haspelmath 2000)

a. **and** coordination (conjunctive strategy)

b. **with** coordination (comitative strategy)

c. **also/they** coordination (summary strategy)

(21) **Abun, West Papuan: comitative**

```
Apner git sugit si Fredik si Musa (Berry & Berry 1999:97)
Apner eat food with Fredik with Musa
'Apner dined with Fredik and Musa.'
```

(22) **Kalasha-ala, Nuristani: summary**

```
zaga, ištri, şarmal di sārot?
son wife cattle also healthy
'De (your) son, wife, and cattle healthy?'
```

(23) **Baule, Kwa: comitative + summary**

```
wūsī kpongbo nī se be nū
wash:IMP basin with pot 3PL inside
'Wash the basins and pots.'
```

(24) **Elements used in the summary strategy:**

a. copula (Hualapai, Paumarí, Wari')

b. number expression or 'together' (Barasano, Daga, Enets, Kham)

c. pronoun (Amele, Baram Kayan, Baule, Mapudungu)

d. focus marker (Amharic, Baram Kayan, Barasano, Kalasha-ala, Kham, Slave, Wari', Western Desert Language)

(25) **Final &n: type of coordination strategy**

<table>
<thead>
<tr>
<th>LANGUAGE</th>
<th>AND</th>
<th>COMITATIVE</th>
<th>SUMMARY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barasano (Jones &amp; Jones 1991:134)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Enets (Künnap 1999:38)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Hualapai (Watahomigie et al 1999:414)</td>
<td>(X)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ika (Frank 1990:38)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Kalasha-ala (Degener 1998:161,166)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Ket (Werner 1997:321)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Language</td>
<td>Reference</td>
<td>And</td>
<td>And/Com</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>----------------------------------</td>
<td>-----</td>
<td>---------</td>
</tr>
<tr>
<td>Kolyma Yukaghir</td>
<td>Maslova 2003:313,318</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Logbara (Crazzolara 1960:100)</td>
<td>X?</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Navaho (Reichard 1974:322-323)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Paumari (Chapman &amp; Derbyshire 1991:189)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Slave (Rice 1989:1066)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Tubu (Lukas 1953:166)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Wari’ (Everett &amp; Kern 1997:164-165)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>W Desert Language (Glass &amp; Hackett 1970:66)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Yaqui (Dedrick &amp; Casad 1999:363)</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

(26) *Kalasha-ala, Nuristani*

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

b. meši-moša-y (fixed expression) (Degener 1998:166)
   women-men-and 'men and women'

(27) *Logbara, Central Sudanic*

à mu ěri pie ąkū-a (Crazzolara 1960:100)
we go he and home-to 'I went home with [sic] him.'

NB, the inclusory effect (a plural pronoun used for a singular one under coordination) is almost exclusively found with the comitative strategy, suggesting *pie* is not simply 'and'.

(28) *Tubu, Saharan (Kaširda dialect)*

wūdăn arkō ye (Lukas 1953:166)
gazelle goat and

NB, other dialects have *A ye B* or *A ye B ye*, which is also used in complex numerals.

(29) **Generalization**

No language in the sample uses final *and*-conjunctions exclusively.

(30) **Idealization**

*And*-conjunctions are always initial.

(31) Initial *and*-conjunction next to final comitative/summary conjunction:

a. *Kalasha-ala, Nuristani* (22) vs. (26)

b. *Ket*

øtna hissi-j-diñta on' qi:n, s'sʔn haj qo'n duy'i:n'
1PL:POSS forest?-NONMASC:SG:ADESS many elk:PL reindeer:PL and bear:PL live:3PL
'In our forest live many elks, reindeer and bears.' (Werner 1997:321)

c. *Kolyma Yukaghir*

tudă tāndiet odul-pe kereke-pul-n'ẽ tāhile erpeje-pul-n'ẽ
that time CA Yukaghir-PL Koryak-PL-COM and Even-PL-COM [=RECIP]

kimd'ũ-nun-ni (Maslova 2003:319)
fight-HAB-3PL:INTR

'That is how Yukaghirs fought with Evens and Koryaks long ago.'
the comitative construction is “originally used to circumvent coordinate noun phrases”, an elaboration of a more basic asyndetic construction which has a similar purpose. Mithun 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/summary constructions and comitative constructions are not strictly speaking coordinations.

5. The diachronic dimension

Grammaticalization of comitative markers as conjunctions

<table>
<thead>
<tr>
<th>Postpositional Languages (where COM = Postposition)</th>
<th>56</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of these, using comitative strategy</td>
<td>21</td>
</tr>
<tr>
<td>Of these, comitative element becomes initial conjunction</td>
<td>15</td>
</tr>
</tbody>
</table>

Languages deriving initial conjunctions from postpositional comitative elements

<table>
<thead>
<tr>
<th>Burmese</th>
<th>Kinnauri</th>
<th>Navaho</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogon</td>
<td>Kokborok</td>
<td>Northern Qiang</td>
</tr>
<tr>
<td>Haida</td>
<td>Ladakhi</td>
<td>Slave</td>
</tr>
<tr>
<td>Japanese</td>
<td>Lavukaleve</td>
<td>Suppire</td>
</tr>
<tr>
<td>Ket</td>
<td>Mikir</td>
<td>Turkish</td>
</tr>
</tbody>
</table>

NB, two others (Kobon, Amele) have developed a bisyndetic coordination pattern, which also involves the introduction of an initial conjunction.

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.’

Kinnauri, Himalayish, Sino-Tibetan

a. aṅ raṅ do: chaṅ due (Sharma 1988:91)
   1SG:GEN with 3SG:GEN son be:3PAST
   ‘His son was with me.’

b. ge raṅ ki bi-tič (Sharma 1988:182)
   1SG:DIR and you:HON go:FUT:1DU.INCL.HON
   ‘I and you will go.’

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.’

   3HUM:and his-elder.brother market-to go:PRES
   ‘He and his elder brother are going to the market.’
(38) **Northern Qiang, Sino-Tibetan**  
a. qa khumtsi-ŋa tionsa-va kə: (LaPolla 2003:96)  
1SG Khumtsi-COM store-LOC go:PROSP:1SG  
‘I am going to the store with Khumtsi.’

b. mutsišu-ŋa-tuganšu zapeq-ta ho-λu-α:-ji (LaPolla 2003:95)  
Mutsišu-COM-Tuganšu earth-LOC DIR-come-PROSP-CHST  
‘Multsu and Tugantsu wanted to come to earth.’

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

(39) **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

(40) **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-ma lala  
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.’

(41) **Slave, Athabaskan, Na-Dene**  
a. ʔiye bé hé tadjhwee (Rice 1989:1073)  
meat knife with 2SG:cut  
‘You cut the meat with the knife.’

b. ʔini tšá hé tehk’áí kwik’li t’áh kagenjwe (Rice 1989:1067)  
past beaver with muskrat gun with 3PL:hunted  
‘In the past, people hunted beaver and muskrat with guns.’

(42) **Haida, Na-Dene**  
a. kilraad-7ad xàaydas-7ad tlijing xàaydaraay-7ad hlnagid  
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-geeh-rah’ taaw-ee-7isan ‘la gya.alat’la-a-gan  
can empty-DF with food-OF-too 3PL bring-PA  
‘She brought the empty cans and the food.’ (Masset; Enrico 2003:1081)

(43) **Turkish, Turkic, Altaic**  
H A-with opera-DAT go-PAST-3SG  
‘Hasan went to the opera with Ali.’
A-with Z yesterday cinema-DAT go-PAST-3PL
‘Ali and Zeynep went to the cinema yesterday.’

5.1 Other final elements developing into initial conjunctions

! focus markers

(44) Lezgian, Northeast Caucasian
a. Zun-ni qüre-na (Haspelmath 1993:328)
1sg:abs-also smile-AOR
‘I also smiled.’

Isa-ERG-CONJ Ali-ERG one-one-ADESS hand-PL give-AOR
‘Isa and Ali shook hands.’

(45) Kayardild, Pama-Nyungan, Australian
a. ngada ban (Evans 1995:395)
1SG.NOM too

b. riya-thi nga-rr-a bangya-y kabathaa-th bana bang-a bang-a
east-REM 1-DU-NOM turtle-MLOC catch-ACT and turtle-NOM and turtle-NOM
bana bang-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

(46) Monguor
a. mori nige da uguâ (De Smedt & Mostaert 1964:51)
horse one also not exist
‘There is not a single horse.’

b. mori da rdžigeni ɣulôx (De Smedt & Mostaert 1964:163)
horse and donkey hitch.up
‘Hitch up the horse and the donkey.’

! Noncomitative postpositions

(47) Ainu, Korean-Japanese
a. nupuri ka wa hotuyupa (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

(48) Amharic, Semitic, Afro-Asiatic
kä-gäbbäya čäw-anña bärbärre amätta"h (Leslau 2002:154)
from-market salt-and pepper I:brought
‘I brought salt and pepper from the market.’
(49)  **Tauya, Adelbert Range, Indo-Pacific**
fei-ti ya-tu-a-ʔa
boil-CONJ 1SG-give-3SG-IND
‘She cooked it and gave it to me.’

(50)  **Kiowa, Tanoan**
a. bâö: o-né-dô: gô mi: o-né-p’ôy
cat 2/3SG.AG-1SG.PAT:DU.OB 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. ɔ:pâl sép o-când-â: nô pâh: bà-t’ô:ddy
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:yi gô k’yâ:h]:
woman and man
(Watkins 1980:288)

!  **Verbs**

(51)  **Suppire, North Central Niger-Congo, Niger-Kordofanian**
a. Uru na ŋ-kâагé sâ ð kâcîiyí bàrà Bâmbem: wûyi
he:EMPH PROG INTR-go:IMPF go his bones:DEF add Babemba POSS:DEF(IISG)
na Sogo Kanha na on Sikasso town at
(Carlson 1994:267)

‘He was going to go add his bones to Babemba’s in Sikasso.’

b. Mu bârà mîl na, wûù sî ŋ-kârê Sukwoo na
you add me on we FUT FUT-go Sikasso at
(Carlson 1994:268)

‘You and I, we will go to Sikasso.’

6.  **Other cases of head-final languages using initial conjunctions**

(52)  **Kolyma Yukaghir, Uralic-Yukaghir**
paipe tâhihî mêmê
woman CA bear
‘The woman and the bear.’
(Maslova 2003:318)

(53)  **Kabardian, West Caucasian**
p’sä-k’wâ-z
ten-plus-one
‘eleven’
(Colarusso 1992: 159)

(54)  **Logbara, Central Sudanic, Nilo-Saharan**
möödrí dri-ni’ âlô
ten on-it one
‘eleven’
(Crazzolara 1960:38)

(55)  **Mao Naga, Kuki-Chin-Naga, Sino-Tibetan**
okhro kaxi ye khudu kali
daos two and gun one
‘two daos and a gun’
(Giridhar 1994:454)

(56)  **Central Asmat, Trans New Guinea, Indo-Pacific**
Juwûr enêrim Ew
dog and crocodile
[Voorhoeve 1965:172]
Canela, Ge-Pano-Carib

(57) capi me kryt ma tê
Capi and Kryt away go
‘Capi and Kryt go away.’

Basque, isolate

(58) lagun eta ahaide-ei agur egi-n d-ie-er
‘He has greeted his friends and family.’

Ket, isolate

(59)

Daga, Trans New-Guinea, Indo-Pacific

(60) wata ge manapawa
yesterday and day before yesterday
‘yesterday and the day before yesterday’

6.1 Conjunctions borrowed into head-final languages

(61) Djingili, Australian

(62) Lezgian, Northeast Caucasian

(63) Turkish, Turkic, Altaic

(64) Generalization

Borrowed conjunctions are invariably initial

7. Bisyndetic conjunction

(65) Amele, Madang, Indo-Pacific

(66) Generalization

If there is an unmarked monosyndetic counterpart to bisyndetic conjunction, it is initial.

(67) Marind, Trans New-Guinea, Indo-Pacific

A. nok namèk a nok namùk a
1SG brother and 1SG sister and
‘my brother and my sister’

B. inah a izakod
two and one
‘three’
(68) **Daga, Trans New-Guinea, Indo-Pacific: involving summary strategy**

a. nenip Bure *ge* nenip Dukuik *dere*  
   'the Bure bird and the Dukuik bird'

b. wata *ge* manapawa  
   'yesterday and the day before yesterday'

8. **Head-initial languages using final conjunctions?**

The only candidates seem to involve the summary strategy:

(69) **Eastern Kayah Li, Karen, Sino-Tibetan**

\begin{align*}
\text{vē} & \text{ 1SG lie down} \\
\text{ǐmō} & \text{COM.PRT} \\
\text{kā} & \text{Mophre} \\
\text{nē} & \text{Pimō} \\
\text{sī} & \text{Mīphre NE} \\
\text{kīmēkū} & \text{Pimo and them between}
\end{align*}

'i slept between Mophre and Pimo.'  

(Solnit 1997:171)

(70) **Mapudungu, Andean**

\begin{align*}
\text{(ińché) eymī} & \text{inchiu i-y-u} \\
\text{you:SG we:DU eat-IND-1NONSG-DU}
\end{align*}

'You and I ate.'  

(Smeets 1989:177)

9. **Conclusion**

(71) a. *and*-conjunctions are universally initial  
   b. there appears to be a universal developmental path from final comitative and summary elements to initial conjunctions  
   c. borrowed conjunctions are universally initial  
   d. where polysyndetic conjunction has an unmarked monosyndetic counterpart, it is always of the initial type

(72) In the domain of coordination, head-final languages have a strong preference for head-initial structure

**Appendix: list of languages in the sample**

*Khoisan:* !Kung, [to be decided]; *Niger-Kordofanian:* Krongo, Soninke, Toucouleur, Temne, Grebo, Dogon, Nateni, Suppire, Mundang, Ngbaka, Kalabari, Baule, Fon, Yoruba, Degema, Igbo, Jukun, Ibibio, Duka, Birim, Tiv, Tikar, Limbum, Etung, Ewe, Kikuyu, Nkore-Kiga; *Nilotic-Saharan:* Dilling, Lango, Logbara, Tubu, Songhai; *Afro-Asiatic:* Kabyle, Lele, Margi, Hausa, Kafa, Iraaq, Gulf Arabic, Amharic; *Kartvelian:* Georgian; *North Caucasian:* Kabardian, Lezgian; *Indo-Hittite:* Goi, Kalasha-ala, Dimili, Portuguese, Breton, Dutch, Russian, Albanian; *Uralic:* Kolyma Yukaghir, Enets, Hungarian; *Altaic:* Turkish, Mongou, Evenki; *Korean-Japanese:* Ainu, Japanese; *Chukchi-Kamchatkan:* Chukchi; *Esquimaux:* West Greenlandic, Aleut; *Dravidian:* Brahui, A BJP Maria, Tamil; *Sino-Tibetan:* Cantonese, Ladakhi, Konkani, Eastern Kayah, Mao Naga, Burmese, Digaru, Northern Qiang, Mikir; *Austro:* [to be decided]; *Vietnamese:* Chrai, Khmer, Temiar, Kam, Tsou, Chamorro, Tagalog, Ivatan, Hiligaynon, Mongondow, Muna, Baram Kayan, Malagasy, Sama, Acehnese, Toba Batak, Roti, Kambera, East Makian, Lus, Kivala, Loni, Tiri, Sie, Iaai, Ponapean, North Efate, Fijian, Samoan; *Indo-Pacific:* Nabak, Kobon, Central Asmat, Marind, Daga, Amele, Tauya, Esu, Nimbora, Abin, Arapesh, Abam, Yimas, Lavukaleve, [to be decided]; *Australian:* Dyrbal, Kayardild, Western Desert Language, Djingil, Wardaman, Gooniyandi; *Na-Dene:* Slave, Navaho, Tlingit, Haida; *Amerind:* Eastern Ojibway, Nootka, Tuscara, Jokuts, Cackichue, Coos, Hualapai, Kiowa, Yaqui, Chalcatongo Mixtec, Ika, Saija, Mapudungu, Barasano, Guarani, Paumari, Ware, Hixkaryana, Kadiwew, Canela; *Isolates:* Basque, Burushaski, Ket, Nivkh; *Pidgins/creoles:* Ndyuka, Mauricien, Naga Pidgin, Cape Verdean Creole; *Sign Languages:* American Sign Language.

Faculty of Arts, P.O. Box 716, NL-9700 AS Groningen, The Netherlands  
zwart@let.rug.nl ! http://www.let.rug.nl/~zwart/