## Agreement with conjuncts

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1. Overview. Agreement with conjoined subjects of contrasting grammatical genders has generated a great deal of interest lately (see Boskovič 2009, Marušič et al 2015, Mitchley 2015, Nevins \& Marušič to appear, and Murphy \& Puškar 2018, Taraldsen et al 2018 among others). Because Bantu languages have a particularly large number of genders, they should provide information beyond what can be gleaned from exploration of 2 or 3 gender systems.

I am drafting a fill-in-the-blank questionnaire to elicit agreement with every possible pairing of matching and mismatching conjuncts in Bantu. Thus, in addition to $1+1,2+2,3+3,4+4$ etc, my questionnaire is designed to elicit $1+3,1+5,1+7,1+9,3+1,3+5,3+7 \ldots$ and plural pairings $2+4$, $2+6,2+8,2+10$ and their inverses through all combinations of mismatched singulars and mismatched plurals, and in addition, conjunctions of human with non-human-denoting nouns. Because there is ambiguity between 'and' and 'with' in many Bantu languages it is important to include tests of the conjuncts controlling anaphora (i.e. if the nouns meaning 'lawyers' and 'students' are in different noun classes, what does 'lawyers and/with students saw each other' mean? If a language permits conjunctions of humans and non-humans 'boys and/with dogs saw each other/themselves' would also be quite revealing.'

Though I have over 150 items already, the questionnaire is still evolving. I propose to develop this as an online Afranaph project. Consultants will be asked to construct lists of [+/-human] nouns in each class and then will be given instructions to conjoin them as subjects of a different predicate like 'disappear together', talk to each other', 'separated' etc. If a language has object markers that can co-occur with overt objects there will be an additional questionnaire covering agreement with conjoined objects.
2. Preliminary results. Eight native Xhosa speaking students at University of the Western Cape went through part of this questionnaire with me, focused on subject agreement with conjoined plural [+human] nouns. Though some indicated more than one acceptable alternative, the choices of agreement that they supplied revealed complex patterns of preferences that support the following characterization:
(1) Hierarchies of preference in the choice of subject agreement with conjoined [+human] plural conjuncts of mismatching classes, for eight Xhosa speakers
a. Class $2>$ Class 4
b. Class $2>$ Class 6
c. First Conjunct Agreement > Last Conjunct Agreement > Default Agreement

These generalizations are based on striking contrasts in the choices speakers including those below, where FCA = first conjunct agreement, LCA = last conjunct agreement, and default = class $2 b a$. With conjunctions of the form [ $2+\mathrm{N}$ ], the choice of FCA was unanimous.
(2) A-ba-ntwana nee-n-tombi ba-ya-cula.
'The children and the girls are singing.'

For $[10+2],[8+2],[10+6]$ and $[10+4]$, LCA was offered by some, but FCA was the majority preference:
(3) l-za-nuse na-ba-ntwana zi/ba-ya-cul-a.
[FCA > LCA 6:2]
8-8-mediums and.2-2-children 8SA-DISJ-sing-FV
'The young ladies and the children are singing.'
(4) a. I-in-tombi na-ba-ntwana $\quad$ zi/ba-ya-cul-a.
[FCA>LCA 5:3]
10-10-girls and.2-2-children $8 \mathrm{sA} / 2 \mathrm{sA}$-DISJ-sing-FV
'The young ladies and the children are singing.'
b. l-in-tombi na-ma-polisa $\quad$ zi $/ a / b a$-ya-cul-a.
[FCA>LCA> default 6:1:1] $\overline{10-10-g i r l s ~ a n d .6-6-p o l i c e ~} \quad \overline{8} \mathrm{SA} / 6 \mathrm{sA} / 2 \mathrm{sA}-\mathrm{DISJ}-$ sing-FV 'the young ladies and the policemen are singing.'
(5) $\frac{\text { A-ma-gqirha ne-z-anuse }}{\text { 6-6-doctors and.8-8diviners }} \quad \frac{\text { a-sebenz-a ndawonye. }}{6 \text { SA-work-FV together }}$
'The traditional doctors and the diviners are working together.'
These results motivate (1)c. But despite their general preference for FCA over LCA and default, speakers chose LCA by a wide margin for [4+2] and [6+2] conjunctions.
(6) I-mi-gewu na-ba-ntwana ba-(i/zi)-ya-cul-a $\quad$ [LCA>FCA \& [-human] default 5:2:1]

4-4-criminals and.2-2-children $2 \mathrm{sA} / 4 \mathrm{SA} / 8 \mathrm{SA}-\mathrm{DISJ}$-sing-FV
'The criminals and the children are singing.'
(7) A-ma-polisa na-ba-ntwana ba-ya-cul-a.
[LCA > FCA 6:2] 6-6-polisa and.2-2-children 2SA-DISJ-sing-FV 'The policement and the children are singing.'

This argues that there is avoidance of 6 and 4 agreement when a class 2 controller is available even though it is the second conjunct; hence (1) a,b, ordered so as to bleed (1)c.

This is not the end of the story, however. In $[4+\mathrm{N}]$ conjunctions, results were quite mixed, and default was the most frequent choice. Agreement with [6+4] conjuncts behaved similarly. Class [4+10] conjunctions yielded two instances of FCA, three of LCA, and three selections of default $b a$-. Results for class $[4+8]$ conjunctions were much the same.
(8) I-mi-gewu ne-en-tombi _-ya-cul-a.

4-4-criminals and.10-10-girls DISJ-sing-FV
'The criminals and the young ladies are singing.'
[Results: FCA x 2, LCA x 3, default x3]
Taken together, these results suggest that speakers prefer to avoid LCA, default agreement, class 4 agreement and class 6 agreement. When they cannot satisfy all of these preferences at once, variation arises regarding what option wins and what loses.

For Xhosa itself there is much more to be learned including how [-human] nouns compare. Comparing languages will surely add tremendously to what is known about conjunct agreement cross-linguistically; see Mitchley (2015) for an illuminating study of three Bantu languages.

