SQUIB

Conjunction resolution is nonsyntactic, say paucals

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Conjunctions of paucals trigger either paucal or plural agreement. The choice is semantic, not syntactic, and therefore argues against syntactic feature calculuses for conjunction resolution.

A complex feature calculus seems necessary to determine how a conjunction agrees given the agreement properties of its conjuncts. Copying, the basis of Agree, alone cannot produce a 2^+ plural (–atomic) from two (+atomic) singulars, nor 3^+ plural (–atomic –minimal) from two (–atomic +minimal) duals (features as per Harbour 2014). Data from paucal conjunctions argue against positing complex manipulations, however. Reinforcing similar conclusions from gender (Wechsler & Zlatić 2003; Despić 2017; Nevins 2018) and more general studies (Dalrymple & Kaplan 2000; King & Dalrymple 2004; Kučerová 2018), paucals point to conjunction resolution being largely semantic.[1]

Biak and Fijian display the same variable behaviour regarding conjunctions of paucals, despite the distance between their respective branches of Eastern Malayo-Polynesian. If both paucals are small enough for their sum to fall within the typical paucal range, then their conjunction is typically paucal too. If both are at the upper end of the paucal range, then their sum falls beyond the typical paucal and their conjunction is plural. The difference in outputs cannot arise from operations on features, as the featural representation of paucal is uniform (Harbour *op. cit.*). Instead, it involves determining the number of referents (an extrasyntactic process), choosing the features appropriate for that number, and importing the result back into the syntax.

In Biak for instance (Suriel Mofu, p.c.), the conjunction *inai skoya ma roma skoi* 'the girls and the boys' in (1)–(2) contains two paucal conjuncts, indicated by the morpheme *sko-*. When these are taken to refer to three children each, the verb reflects the total number of six via paucal marking (*sko-fnak* '3PAU-play').

(1)   Inai sko- ya ma roma sko i sko- fnak kayame.
           girl 3PAU-DET and boy 3PAU-DET 3PAU-play together
           'The girls and the boys play together.'

When, by contrast, the paucal conjuncts are taken to refer to nine children each, the verb reflects the total of 18 via plural agreement (*si-fnak* '3PL.AN-play'):

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[1] I toyed with, then quickly abandoned, a feature calculus for conjunctions, but have lately seen the idea reemerge in early-stage work elsewhere. This squib is a plea for inaction. The structure of the argument does not depend on whether the locus of feature calculus is the conjunction itself or number-related heads in the verbal projection (as per recent work on pluractionality; e.g., Henderson 2017).

(2)   Inai sko- ya ma roma sko- i   si   fnak kayame.
        girl 3PAU-DET and boy 3PAU-DET 3PL.AN-play together
        'The girls and the boys play together.'

Thus, in Biak, the agreement controlled by a conjunction of two paucals is determined by counting referents, not by manipulating features.

   The same facts and conclusions hold for Fijian (Eroni Lomata, p.c.). The conjunction *iratou na qasenivuli kei iratou na gone* 'the teachers and the children' in (3)–(4) consists of two paucals, as indicated by *iratou*. If taken to refer to three people each, the verb is preceded by the third person paucal subject marker *eratou*:

(3)   Eratou cakacakavata o   iratou na   qasenivuli kei iratou na   gone.
        3PAUS work   ART.PN 3PAU ART.N teacher   and 3PAU ART.N child
        'The teachers and the children are working.'

If the conjuncts are taken to refer to nine people each (or if the number nine is made explicit, as was done when initially setting this scenario up), the subject marker switches to plural *era*.

(4)   Era   cakacakavata o   iratou na   qasenivuli (lewe   ciwa) kei
        3PLS   work   ART.PN 3PAU ART.N teacher   CL.PERS nine and
        iratou na   gone (lewe   ciwa).
        3PAU ART.N child CL.PERS nine
        'The (nine) teachers and the (nine) children are working.'

Again, then, the feature identity of the conjunction depends on the total number of referents, not on the features of its conjuncts.

   Shilliday (1989: 78) reports the same finding and expresses dissatisfaction with the best syntactic analysis he can devise within a GPSG framework, which can be viewed as supporting resolution being an extrasyntactic process.[2]

   Removing conjunction resolution from the syntax brings Biak and Fijian paucals into line with those of Tunisian Arabic (Myriam Dali, p.c.), which require extrasyntactic mechanisms for a different reason. The Tunisian paucal ranges from two (displacing an obsolescing dual) to about nine (or more, in the right setting). It is expressed via a repurposing of the contrast between intercalating and concatenating plurals. In nouns with both, the concatenated plural ("sound" plural in Arabist terminology) is paucal, and the intercalated ("broken") plural is the true plural. As in Biak and Fijian, the sum of two paucals can be either paucal or plural (leaving aside the additional difference that the paucal is facultative in Tunisian). If both are small, say two, then their total, four, is still within the range of the paucal and uses the concatenated form. In (5), 'my goats', 'your goats', and 'our goats' are all built on *me'z-et* 'goat-PAU':

(5)   me'z-et- i   me- tfehm- u   m'a me'z-et- ek. khalli nḥottu
        goat-PAU-1SG PROG-get along-3PL with goat-PAU-2SG HORT put.1PL
        me'z-et- na fi fard kouri.
        goat-PAU-1PL in same pen
        'My goats get along with your goats. Let's put our goats in the same pen.'

However, if we have nine goats each, their total is (typically) classed as plural. So, 'our goats' in (6) uses intercalated *m'iz* (and the paucal is infelicitous):

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[2] My thanks to Reviewer 5254 for bringing this discussion to my attention.

(6)   me'z-et- i   me- tfehm- u   m'a me'z-et- ek.   khalli nḥottu
          goat-PAU-1SG PROG-get along-3PL with goat-PAU-2SG HORT put.1PL
          m'iz-   na fi fard kouri.
          goat.PL-1PL in same pen
          'My goats get along with your goats. Let's put our goats in the same pen.'

An intersentential Agree relation that calculates the feature identity of 'our goats' from those of 'my goats' and 'your goats' is not to be countenanced. Yet, even in a single sentence with 'my goats' and 'your goats' syntactically accessible to 'our goats', an Agree-based calculation would be questionable as Agree for paucal features in Tunisian Arabic is unmotivated. In contrast to Biak and Fijian, the language never expresses paucal beyond the noun. 'My goats', whether paucal or plural, triggers uniform agreement on its verb, *metfehmu* 'get along'. The extrasyntactic approach required for Biak and Fijian is independently required for Tunisian Arabic.

Paucals are latecomers to the theory of grammatical number. So, unsurprisingly, their properties have rarely been considered in relation to what the calculus of number features can accomplish. However, they mount a clear case that conjunction resolution cares about referents not features and so is semantic not syntactic.

Acknowledgements

Competing Interests

The author has no competing interests to declare.

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