

Syncretism in gender/number: puzzles from Yelmek verbal suppletion

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SYNCRETISMS IN GENDER/NUMBER: Kramer (to appear) examines a novel type of syncretism between gender/number that she labels ‘convergent to gender’, in which plural agreement morphology is consistently syncretic with that of a particular gender. Kramer evokes the feature deleting operation Impoverishment to capture such syncretisms, arguing that gender features are deleted in the presence of plural, allowing an underspecified vocabulary item to be inserted for both plural and one gender. Assuming the semantically unspecified/default gender indicates the absence of gender features, this leads Kramer to the following prediction:

- (1) In a language where gender and number are simultaneously syncretic, the VI [Vocabulary Item] used for plural agreement will be the same VI used for default gender agreement.

That is, since gender is deleted in these contexts, the only available VI must be one unspecified for gender (i.e. default). The Yelmek language has extensive verbal suppletion triggered by the number and gender of the internal argument, and exhibits widespread and consistent syncretism between suppletive forms of verbs with plural and feminine singular objects. However it is *masculine* that is the functionally unmarked gender in Yelmek (e.g. masculine is used when the gender is unknown or unimportant), thus apparently contradicting Kramer’s prediction. However other data suggest that although masculine is the default gender for purposes of gender assignment, the feminine verbal stem is the more basic form; for example, the feminine singular form of the verb is used for all first and second persons regardless of their gender, and is the form used when there is a change in valency. This suggests a mismatch between default nominal gender, and default (verbal) stem form. We argue that Kramer’s prediction can be maintained if what we call default gender assignment in Yelmek is not the absence of a gender feature, but actually the assignment of masculine gender.

THE DATA: Yelmek is a member of the Yelmek-Maklew family, a small but top-level language family spoken in southern New Guinea. Original fieldwork has uncovered that the language distinguishes two grammatical genders (masculine/feminine), which are only ever realised by the form of the verb; however only ever for third person, and the distinction is neutralised in plural contexts. Gender often patterns semantically (i.e. male humans trigger masculine agreement etc.), but many cases of gender assignment are semantically opaque. There is a singular/plural distinction. Yelmek exhibits a pattern of verbal suppletion whereby transitive verbs undergo suppletion conditioned by the gender and/or number features of its object (as well as some intransitive subjects- not discussed here). Some other languages show similar suppletion based on number, e.g. Hiaki (Bobaljik and Harley 2017), Marori (Arka 2012); however Yelmek is the only language we know of where gender is additionally relevant. This object phi-conditioned suppletion affects a comparatively large proportion of Yelmek verbs to some degree (roughly half of the transitive verbs).

There is attested syncretism between verbs with masculine and feminine objects, and between those with feminine and plural objects; however, there are no cases attested whereby the verb allomorphy exhibits syncretism of masculine and plural forms to the exclusion of the feminine form. When taking the conditioning features masculine, feminine, and plural into account, there are five logically possible syncretism patterns – for some ordering of these

features: AAA, AAB, ABB, ABC, and ABA; for the moment we'll assume an ordering of masculine <feminine <plural.

| | MASC.OBJ. | FEM.OBJ. | PL.OBJ. | |
|------------|-----------|----------|---------|------------|
| AAA | iblo | iblo | iblo | 'chase' |
| AAB | elie | elie | epge | 'give' |
| ABB | ejepe | oijopo | oijopo | 'hold' |
| ABC | ele | olo | emge | 'put' |
| ABA | – | – | – | N/A |

The generalisation that thus arises is that if the feminine is suppletive wrt the masculine, so must the plural be suppletive wrt the masculine (i.e. ABB, ABC, but *ABA).

IS THIS TRUE *ABA? This pattern is thus strongly reminiscent of *ABA patterns in syncretism as analysed for comparative/superlative adjectival morphology (Bobaljik 2012), case (Caha 2009), pronouns (Smith et al. 2018), clusivity (Moskal 2018), and others. Most such analyses explain the absence of ABA patterns through containment/incremental structure, so that the presence of each subsequent feature prohibits the insertion of a Vocabulary Item associated with a less specific input (i.e. via the Elsewhere Principle). However such an analysis here would require incremental specification, such that plural contains (or selects) only feminine nouns (i.e. [[[NP]FEM.]PL.]); we see little evidence semantically, morphologically, or in syntactic behaviour to justify such a representation, and therefore suggest this is not a true *ABA pattern, as it does not plausibly involve containment. Note however we will continue to make reference to the syncretism patterns using this terminology.

THE REPRESENTATION OF GENDER/NUMBER: We assume the following representations of gender and number in Yelmek: number is [\pm pl], masculine is the privative feature [MASC], and feminine is the absence of any gender feature. Like Kramer's (to appear) analysis in a range of languages, we assume an obligatory impoverishment operation in Yelmek consistently deletes gender feature(s) in the presence of plural. We also similarly assume that this suppletion is regulated via contextual stem allomorphy (Bobaljik and Harley 2017; Weisser to appear). To demonstrate: AAA signals no suppletion; ABC signals a three way contrast of [+pl], [MASC] and an elsewhere form; AAB signals a contrast of [+pl] versus [-pl]; an exponence rule like in (2) will derive ABB patterns:

- (2) Yelmek verbal exponence (ABB pattern)
- $$\begin{array}{l} \sqrt{\text{HOLD}} \Leftrightarrow \text{ejepe} \quad / \quad] \text{[MASC]} \\ \sqrt{\text{HOLD}} \Leftrightarrow \text{oijopo} \quad \quad \quad (\text{elsewhere}) \end{array}$$

If feminine has no formal representation itself, no lexical item can single out feminine singular without also including masculine singular (i.e. only targeting [-pl] results in an AAB pattern); an ABA pattern is thus unstatable, assuming this representation of the features.

CONCLUSIONS: As masculine is the gender assigned by default in Yelmek, the patterns of syncretism between suppletive verbal stems seem *prima facie* a counterexample to Kramer's prediction in (1). However as the feminine form of the verb appears to be the default verbal stem, the Yelmek data suggest a difference between which gender is default in regards to gender assignment (in this case masculine), and which is default in regards to formal marking (in this case feminine). Assuming this, Yelmek no longer represents a counterexample.