Everyone left the room, except the logophor: *ABA patterns in pronominal morphology

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1. Introduction. This presentation will investigate *ABA syncretism patterns in pronominal forms. I present morphological evidence that anaphors, logophors, exophors and pronouns are semantically related to each other in a theoretically significant way, such that they share an underlying structure complete with syntactically operative features. For present purposes, an anaphor is a variable (i.e. it requires a Sloppy reading) that takes a local c-commanding antecedent; a logophor is a variable that takes a non-local antecedent, in whose scope it sits; an exophor is not a variable (i.e. it requires a Strict reading) and picks out a discourse-prominent antecedent; and a pronoun is not a variable, and is free to take any antecedent it likes.

2. Patterns of Syncretism. Consider the sentence in (1), and its Logical Functions.

(1) Only Piglet thinks that Tigger loves α .

 α

- a. Only Piglet λx (x thinks that Tigger λy (y loves y)) ANAPHOR
- b. Only Piglet λx (x thinks that Tigger λy (y loves \boldsymbol{x})) LOGOPHOR
- c. Only Piglet λx (x thinks that Tigger λy (y loves z)), where z =Piglet EXOPHOR
- d. Only Piglet λx (x thinks that Tigger λy (y loves z)), where $z \neq$ Piglet PRONOUN

In English, the first LF corresponds to the PF pronunciation in which the anaphor himself replaces α in (1), while the latter three LFs are all possible when α is replaced by him. This represents an ABBB syncretism pattern. At the time of writing, I have data from 70 languages (representing 13 language families and one isolate) which support five further syncretism patterns given these four LFs: AAAA (e.g. Georgian, Tongan), AAAB (e.g. Turkish, Korean), AABB (e.g. Cantonese, Japanese), ABBC (e.g. Basque, Yoruba), and ABCC (e.g. Beijing Mandarin, Malayalam). Given four LFs, a total of 14 syncretism patterns are logically possible. The six attested share one significant property: the syncretisms are all adjacent. One contiguous pattern remains unattested in my language sample: AABC. Work is ongoing to try to find a case of this pattern. In addition to this, the seven non-contiguous syncretism patterns are unattested; AABA, ABAA, ABAB, ABAC, ABBA, ABCA, ABCB (the case of no syncretism, ABCD, also remains unattested).

I analyse this data in the Distributed Morphology (Halle & Marantz, 1993) and Minimalist (Chomsky, 1993) frameworks. Following a long line of scholars (e.g. Jakobson, 1962; Halle & Marantz, 1993; Harley, 2008; Caha, 2009), I assume that the syncretism of two items indicates that they share an underlying feature. The core questions this presentation sets out to answer then, are these: what features underlie pronominal forms, and how do they combine?

3. Transparent Morphology. Consider the Peranakan Javanese of Semarang (PJS) data in (2)-(4) (Cole *et al*, 2007).

- (2) Tono ketok awak-e dheen dhewe nggon kaca, Siti yaya. ✓ Sloppy Tono see BODY-3 3SG DHEWE in mirror Siti also *Strict
- (3) T. ngomong nek B. ketok **awak-e dheen** nggon kaca, S. yaya. \checkmark Sloppy T. say.N COMP B. see **BODY-3 3SG** in mirror S. also \checkmark Strict z=T.

(4) Tono ngomong nek Bowo ketok dheen nggon kaca, Siti yaya. ✓ Sloppy Tono say.N COMP Bowo see 3SG in mirror Siti also ✓ Strict

Let's start with *awake dheen dhewe*; it's the most morphologically complex pronominal form, and also the most semantically restricted. It takes only a local Sloppy reading, and is therefore PJS's anaphor. *Awake dheen* is one morpheme poorer, and thus by hypothesis, must realise a proper subset of the features realised by *awake dheen dhewe*. It can take a long-distance Sloppy and a Strict exophoric reading, making it both a logophor and an exophor. *Dheen* is more simplex still, comprising only one morpheme. Since it must realise a proper subset of *awake dheen*'s features, we can ignore the fact that it can take non-local Sloppy and Strict readings (since some additional mechanism must be permitting this (see §4 below)), and focus only on its ability to take a Strict pronoun reading. This demonstrates that *dheen* is PJS's pronoun. The only feature arrangement compatible with the PJS data is one in which each feature belongs to the terminal node of a layered tree, such that P is on the lowest node, and A is at the top: [A[L[E[P]]]] (5). Each node on the tree necessarily contains all the nodes below it (*The Containment Hypothesis*, Bobaljik (2012)). With such a structure, syncretism can only occur between adjacent pronominals; non-adjacent syncretisms are impossible.



4. Variable Exponence. Syncretism patterns are not the only way in which languages can vary: pronominal forms can also overlap with each other. PJS presents such an example. Awake dheen has two possible readings (3). Both are also available to dheen (4). This data is problematic for any theory which assumes the Maximal Subset Principle (MSP), since awake dheen realises a greater number of features (E, P) than dheen (P), and therefore should always be inserted for the exophoric and logophoric readings. Awake dheen is also able to take an anaphoric reading,

despite the existence of *awake dheen dhewe*. In order to explain these overlaps there must be some mechanism that neutralises the MSP. The mechanism I adopt is Probabilistic Impoverishment (Nevins & Parrott, 2010), in which rules of impoverishment (feature deletion) apply only sometimes. In order to account for the PJS data, I argue for three rules of impoverishment ($^{\%}L \rightarrow \emptyset$; $^{\%}A \rightarrow \emptyset$; $^{\%}E \rightarrow \emptyset$), which apply in that order. I also propose that the pronominal tree is subject to the *Russian Doll Deletion Constraint* (Ackema & Neeleman, forthcoming), such that only the outermost layer of the tree is available for deletion. The PJS data is thus accounted for exactly. Variations of this solution will generate an adequate typology of possible and impossible variable exponence.

5. References. Ackema & Neeleman, forthcoming. Features of Person. * Bobaljik, J. D. (2012). Universals in Comparative Morphology * Caha, P. (2009). The Nanosyntax of Case. * Chomsky, N. (1993). A Minimalist Program for Linguistic Theory. * Cole, P., Hermon, G., Tjung, Y., Sim, C. Y., Kim, C. (2007). Anaphoric Expressions in the Peranakan Javanese of Semarang. * Halle, M., Marantz, A. (1993). Distributed Morphology and the Pieces of Inflection. * Harley, H. (2008). When is a Syncretism More Than a Syncretism? * Nevins, A., Parrott, J. K. (2010). Variable Rules Meet Impoverishment Theory.