Lexical Stability and Kinship Patterns in Australian Languages

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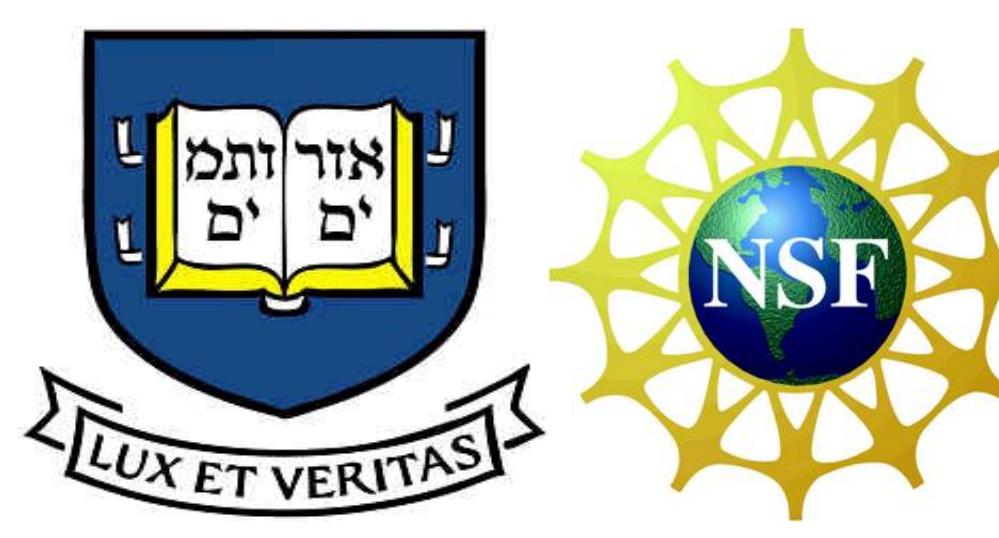
Overview

- How stable are semi-closed class lexical categories?
- Does system stability exist independently of lexical form stability?
- Is there evidence for paradigmatic changes in these categories (Traugott and Dasher, 2002; Anttila, 2003)?
- ⇒ Test with kinship data from Pama-Nyungan (Australian) languages, in particular, sibling terms.

Why Kinship?

- Universal language category;
- Claims to be both 'stable' phylogenetically and etymologically conservative (Dumont, 1953; Smith, 1963; Friedrich, 1966);
- Allows investigation of system vs. lexical stability;

Data and Methods

- 181 Pama-Nyungan languages (see map), coded for sibling system type (Murdock, 1968; Jordan, 2011)
- Data from Bowern's comparative files and Austkin;
- Lexical reconstructions using comparative method (Rankin, 2003);
- Bayesian trait correlation analysis (with BayesTraits (Pagel et al., 2004)) using phylogeny from Bowern and Atkinson (2012);

Bayesian Ancestral State Reconstruction

- Probabilistic reconstruction of features to proto-languages
- Maximum Likelihood method
- Comparison of evolutionary models (evaluated with Likelihood Ratio)
  - Number of parameters [1, 2, 3, 12]
  - "Fossilizing" nodes (to test support for lexical reconstructions)

	eB	eZ	yB	yZ
Relative Age	A		B	
Sex of referent	A	B	A	B
Rel. Age and sex of referent	A	B	C	D
Sex distinction for older sibs	A	B		C
Age distinction for male sibs	A	B	C	B
Unreconstructible	??	??	??	??
Ambiguous	A	B	C	B/D

- Sex of referent + relative age
- Relative age + sex of referent for older siblings only
- Relative age + sex of referent for male siblings only
- Ambiguous (no yZ term recorded)
- Relative age
- Sex of referent
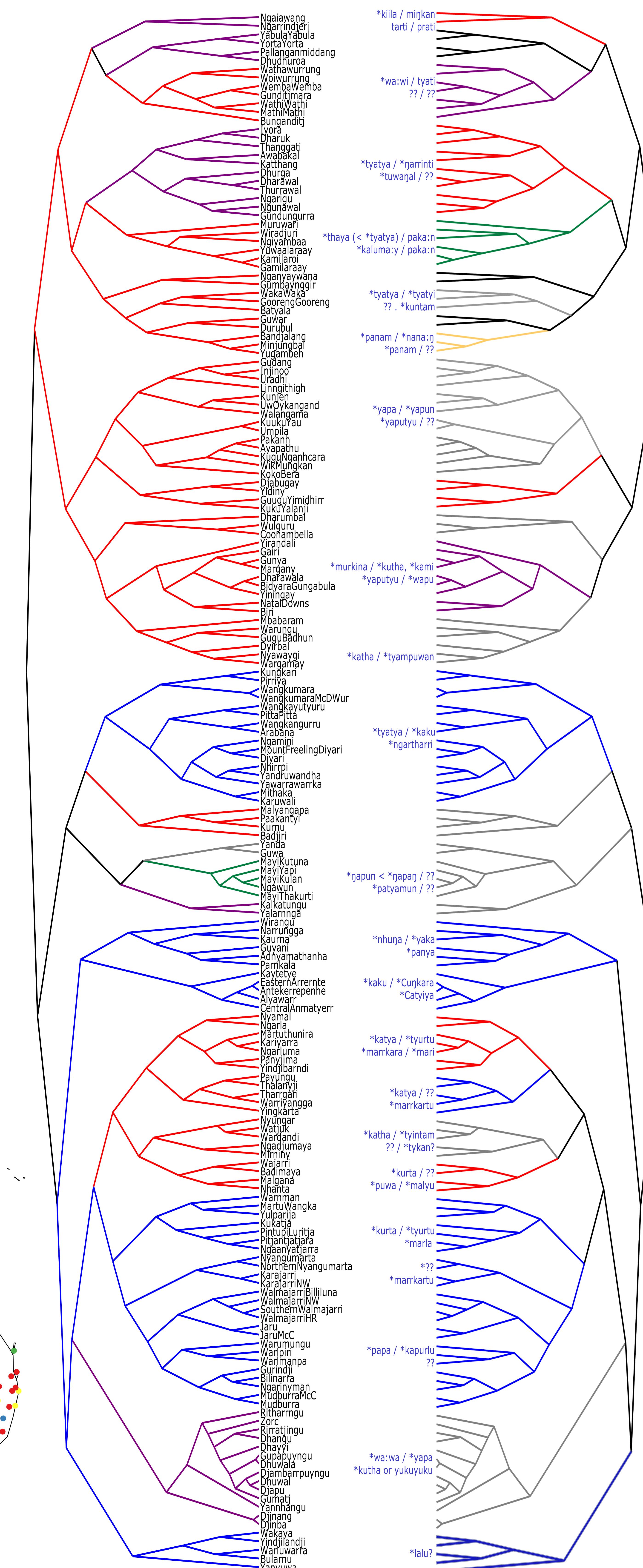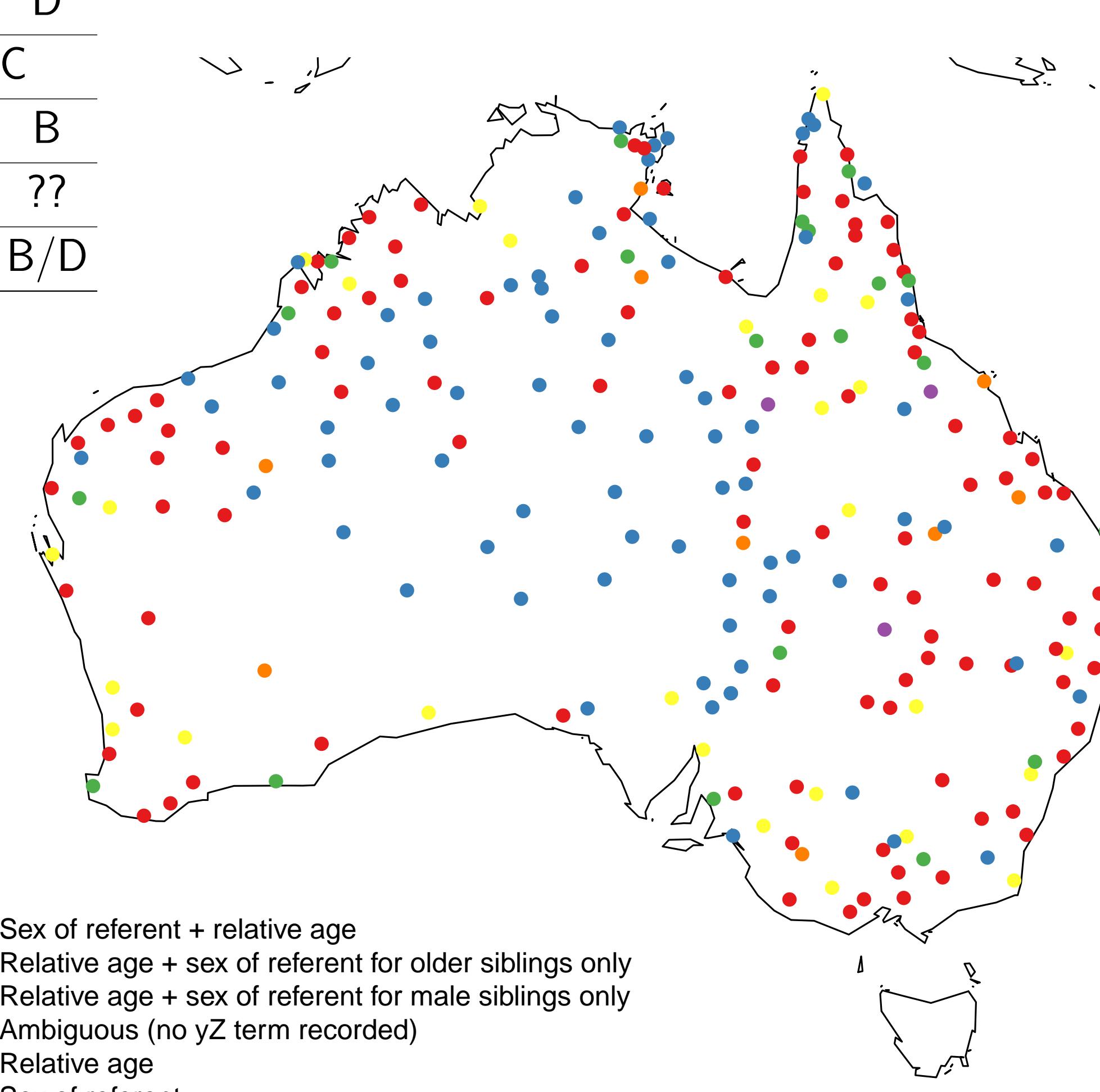
Results : Trait Inference

- 2-parameter model (increasing complexity vs. decreasing) significantly outperforms 1-parameter model [log BF=7]
- Root node fossilization provides positive (but not strong) evidence for a four-term reconstruction [log BF=3.1]
- Lower level subgroups show differing degrees of support (clades with decisive support are colored)
- Three-term systems predominate in the West, while four-term systems characterize Eastern/Central groups.

Results : Comparative Method

- Extensive heterogeneity; few terms reconstructible beyond basic groups.
- Severe instability in 'sister' terms (particularly yZ) leads to difficulties in system reconstructions.
- Few loans: (27/885 items: 3%)
- Much semantic shift, including from
  - kin terms: Karnic *kaku eZ ~ FF ~ SC; Maric *kami eZ < FM; Arandic *katya yB < eB
  - human nouns Thura-Yura *nhungar '< man'; *yapa 'eB ~ man'
  - body parts *katha 'eB < head';
  - other lexical items: Yolŋu *wakinŋu* 'rubbish'; Wangkayutyuru *kupa* 'yB < small';
  - Some evidence for derivation by affixation: Paman *yapa-
- Three conflicts (Central NSW, Mayi, Bandjalang) between lexical and trait reconstructions.

Conclusions

- Kinship systems show greater stability than the lexicon marking them;
- Shifts between three-term and four-term systems (in both directions).

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