

Spoken and gestural reference strategies in Matukar Panau for verbal and non-verbal predication

Danielle Barth & Kira Davey

Australian National University

ARC Centre of Excellence for the Dynamics of Language



Midas and Sul Pain Mager describe picture stimuli in Matukar, Papua New Guinea.

This talk presents findings of an exploratory corpus study of the endangered language, Matukar Panau (Oceanic, Papua New Guinea), focusing on multimodal expressions of referents. This talk focuses on the co-occurrence of referential gestures with demonstratives, lexical noun phrases, pronouns and tokens of zero expression in both verbal (1) and non-verbal (2) predication. We find that referential bodily gestures are particularly used for disambiguating a new or bridging referent, and that familiar referents are more likely to be indicated with a gesture, particularly in non-verbal predication.

Over 3000 clauses have been annotated using the GRAID (Haig & Schnell 2014) and RefIND (Schiborr et al. 2018) schemes for three task types in the Matukar Panau corpus: 1) single speaker free-topic language documentation videos and conversational picture tasks where participants look at either 2) familiar or 3) foreign stimuli photographs. These annotation schemata allow us to keep track of whether referents are new, given, or inferable from context, their form (lexical Noun Phrase [NP], pronoun, affix, zero), their syntactic function (S, A, P, other), their frequency in a text, their animacy, and whether the predication is verbal or non-verbal, among other things. We have also added an additional layer of annotation to our data, indicating whether or not a bodily gesture is specifying the referent. These include various manual points, points with the head, manual depictions of referents and/or referent trajectories and constructed action of the referent (Cormier 2014, Cormier et al. 2010, Cormier et al. 2013).

Like many Oceanic languages, Matukar Panau has optional expression of arguments (3a, 3b). This allows us to explore if the occurrence of referential gestures is

conditioned by the same factors as the expression of spoken referents. Generally we find that they are, with gesture being less frequent and especially dependent on speaker styles. We also find that gesture reinforces a verbal expression rather than being used in place of it (cf. Hodge et al. 2019 on high numbers of semiotic strategies for new referents in Auslan including pointing, lexical signs and mouthing). This helps establish a referent topic between interlocutors. Pointing gestures also often accompany questions about referents, whether or not the questions are genuinely seeking information or are performative to encourage an interlocutor to name a referent (4). In narratives, it is more likely to see depicting or constructed action gestures. These do not establish a referent directly, but referents can be implied based on the start and end positions of gestures, helping to resolve zero expression ambiguity (1). It is also clear that some speakers use gestures more often than others, seemingly to increase the entertainment of storytelling. This is in line with studies of Matukar Panau gesture in other domains such as reported speech and thought (Hodge et al., under review).

This study fits in within the well-studied domain of reference typology, one that has benefited from corpus linguistic approaches. Matukar Panau's linguistic features make it a complex addition to the cross-linguistic sample. We also expand on this domain by adding a gestural component, as well as assessing the impact of conversational interaction. This study demonstrates the need for corpus annotation to encode material that would otherwise be invisible to corpus linguistic analyses, including zero expressed referents and bodily gestures.

1. *di-tariuti-nge*

3pl.A-cut-R:I:PFV

[chopping gesture at position of object cut]

'They cut it' Kadagoi Rawad Forepiso - DGB1-ples05-banana 0:12.7-0:14.2

2. *main ha-di garma-n tai*

PROX CL-3pl head-3sg DUB

[point to referent on picture card]

'This must be their head [of school]' Tukanpain Francis - DGB1-50pics-rm_tp 1:49.4-1:51.1

3a. *ngau ong nga-sumen-o-nge*

1sg 2sg 1sg.A-ask-2sg.P-R:I:PFV

3b. *nga-sumen-o-nge*

1sg.A-ask-2sg.P-R:I:PFV

'I asked you' (Elicitation)

4. *do main hai kap y-abi-sa-nggo? gab y-abi-sa-nggo?*

CONJ PROX who cup (Tok Pisin) 3sg-hold-up-R:I:IMPV cup 3sg-hold-up-R:I:IMPV

[point to referent on picture card]

'And who is lifting up this cup? Lifting up this cup?' John Bogg - DGB1-PNGpics12-jb_bk
8:05.7-8:09.2

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