

**ROTATING THE PAMAN COMPASS:
TRACING PATHWAYS OF SEMANTIC CHANGE IN DIRECTIONAL ADVERBS**

Alice Gaby, Laurits Stapput Knudsen, Bill Palmer, Jean-Christophe Verstraete, &
Oscar Whitehead

Speakers of Australian Aboriginal languages are renowned for their ‘dead reckoning’ orientation abilities, and correspondingly frequent use of terms translated as ‘north’, ‘south’, ‘east’ and ‘west’ (e.g. Levinson 2003). But while such terms are widely attested across the continent (67% of the Australian languages sampled by Hoffmann, Palmer & Gaby 2022), the directions they denote do not always align with the corresponding compass point, as defined by magnetic north. Moreover, in the more than twenty Paman languages investigated in this study, we find case after case of cognate terms indexing different directions in sister languages (Breen 1993; Nash 2013). For example, proto-Paman **ciiparr* ‘south’ has modern reflexes ranging from *thiprr* ‘south’ (in Yir-Yoront; Alpher 1992) to *jibarr* ‘southwest’ (in Kuku Yalanji; Hershberger & Hershberger 1986) to *yiipay* ‘southeast’ (in Kuuku Ya’u) to *yiir* ‘west’ (in Kukatj; Breen 1993). In some communities, all four cardinal directions participate equally in the apparent skewing, maintaining the perpendicularity of the two axes. Thus the four Guugu Yimidhirr directionals are “rotated slightly clockwise from standard Western compass directions, possibly reflecting the line of the coast, prevailing winds, or the seasonal arc of the sun” (Haviland 1998: 29). In other cases, all four directions are skewed in accordance with a principle that disrupts their perpendicular arrangement. This can be seen in Kuku Yalanji’s directional terms being semantically restricted to landward directions (N-NW, NW-W, SW-S and SE), contrasting with an entirely separate term denoting the easterly ‘seawards’ direction (Patz 2002: 69).

For the most part, the attested shifts support the finding that words that are closely semantically related—and what could be more so than a paradigm of directional terms—are especially prone to undergoing parallel semantic changes in order to preserve the semantic relationships that hold between them (Lehrer 2011; see also Urban 2014: 286). However, directional skewing may apply to axes independently of one another. In Kuuk Thaayorre, only the nominally north-south axis is rotated, such that it is not perpendicular with east-west (Gaby et al. 2017). In Umpila, the nominally east-west axis is based on the contrast between a mountainward/inland direction and the sea, while terms denoting ‘northeast’ and ‘southeast’ index prevailing seasonal winds (Hill 2002: 72). As well as tracing the various shifts in meaning evidenced in reflexes of the proto-Paman

directional terms, we will explore some of the ways in which speakers repair the disruptions caused to the directional system by such shifts; namely, borrowing, coining, and recruiting new members of the directional paradigm via metonymy. For example, the gap created by shifting the meaning of Umbuygamu *uwa* (<**kuwa* ‘west’) to denote ‘east’ was filled by the recruitment of *agar* (< **wangkar* ‘up’, attributed to Hale by Alpher 2019) to denote ‘west’ (due to Umbuygamu country being situated to the east of the Great Dividing Range).

Each of the semantic changes considered here is the product of tensions between semantic persistence, drift, system coherence, and adaptation to new territories. While none of these factors is determinative alone, these comparative data indicate the adaptability of people and their languages to their local environment, shifting communicative needs, and cognitive coherence.

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