Absolute spatial cognition without Absolute spatial language

Alice Gaby, Joe Blythe, Hywel Stoakes
Monash University, Macquarie University, University of Melbourne
alice.gaby@monash

Australian languages are famed for having complex and frequently-used Absolute (or geocentric) directional terms, calculated with respect to axes anchored in the landscape. Exceptionally, however, the non-Pama-Nyungan language Murrinhpatha furnishes its speakers with only Intrinsic terminology, in the absence of either Absolute or Relative (egocentric) terms. This paper considers how Murrinhpatha speakers communicate about locations and directions in the absence of ternary spatial terminology. It also explores how Murrinhpatha speakers solve linguistic and non-linguistic experimental tasks which force participants to attend to Absolute or Relative cues.

In more natural communicative settings, Murrinhpatha speakers are found to rely heavily upon gesture to add directional information to non-oriented deictic expressions (Blythe et al., forthcoming). In more specialized problem-solving tasks, we find that Murrinhpatha speakers in aggregate favour Absolute solutions, while also drawing on the Relative frame of reference (in proportions not unlike those documented for speakers of so-called 'Absolute languages' such as Tzeltal; Majid et al. 2004: 110). In other words, Absolute cognition does not depend on Absolute language. Further light is shed by the qualitative analysis of language use in tasks such as the 'Man and Tree' (Pedersen et al. 1998). Here, Murrinhpatha speakers are shown to coerce Intrinsic spatial terminology and landmark terms into 'quasi-Absolute', 'quasi-Relative', and even 'quasi-Intrinsic' uses. These findings help elucidate the complex interrelationships between language, culture and cognition. Moreover, they may even offer a window on the origins and development of Absolute and Relative frame of reference terminology.

Blythe, Joe, Kinngirri Carmelita Mardigan, Mawurt Ernest Perdjert & Hywel Stoakes. Forthcoming. Pointing out directions in a "directionless" language. *Open Linguistics*.

Majid, Asifa, Melissa Bowerman, Sotaro Kita, Daniel Haun & Stephen Levinson. 2004. Can Language Restructure Cognition? The Case for Space. *Trends in Cognitive Sciences* 8.3: 108–114.

Pederson, Eric, Eve Danziger, Stephen Levinson, Sotaro Kita, Gunter Senft & David Wilkins. 1998. Semantic typology and spatial conceptualization. *Language* 74: 557–589.