

Metaphor Directionality and Sociopolitical Complexity

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This paper presents some results from an online cross-linguistic experimental study of metaphor comprehension in some of the languages of Indonesia, demonstrating a correlation between metaphor directionality and sociopolitical complexity.

As noted by Lakoff and Johnson (1980), Kogan et al (1989), Glucksberg and Keysar (1990) and others, metaphors exhibit a pervasive directionality, founded in conceptual hierarchies. As argued in Porat and Shen (2017) such directionality is observable not just in the conventionalized metaphors that we are all familiar with but also in novel and anomalous metaphors, such as the following:

- (1) (a) Forgetfulness is like a mackerel
(b) # A mackerel is like forgetfulness

In (1) above, the (a) variant is preferred to the (b) variant because it conforms to the tendency for abstract concepts to be explicated in terms of concrete ones rather than the other way around. To explore possible patterns of variation in metaphor comprehension, we adapted the Context Experiment first developed in Porat and Shen (2017). In this experiment, subjects are presented with 22 novel comparisons in the less natural order, such as that in (1b). Beneath each comparison, two potential speakers are offered, and subjects are asked to choose which of the two is more likely to have uttered the comparison. An example experimental stimulus derived from (1) above is presented in (2) below:

- (2) A mackerel is like forgetfulness
a very old man
a fisherman

The experiment thus pits the directionality of conceptual hierarchies against the asymmetries of grammar, posing subjects with a dilemma. In accordance with the tendency to explicate abstract entities in terms of concrete ones, the comparison should be about forgetfulness, and hence the speaker is more likely to be the very old man. However, the grammatical structure of the sentence is such that the mackerel is the subject, and hence the speaker is more likely to be a fisherman. Who wins?

In English, grammar tends to win; for example, in (2), speakers tend to prefer the fisherman over the very old man as the more likely speaker. However, in other languages, different preferences are in evidence. In this paper, we present two findings based on experimental results from a sample of languages, including English, Hebrew, Standard Arabic, Rural Palestinian Arabic, Standard Japanese, Osaka Japanese, Standard Indonesian, Jakarta Indonesian, Minangkabau and Abui. First, the larger the polity size associated with the language, the stronger the grammatical effect; for example, within some of the languages of Indonesia, the grammatical effect is stronger in Jakarta Indonesian than in Minangkabau, and stronger in Minangkabau than in Abui. Secondly, the higher the socioeconomic status of the subjects the stronger the grammatical effect; this tendency is revealed in a comparative study of Minangkabau speakers of different socioeconomic status.

The results of this paper join forces with other ongoing studies demonstrating correlations between complexity of grammatical and sociopolitical structures; see Chen et al (2023). In particular, the present findings may be viewed within the broader perspective of a journey from symmetry to asymmetry manifest in cognitive architecture, in ontogenesis and in phylogenesis. In the case at hand, the weaker grammatical asymmetries in languages of low polity complexity and speakers of low socioeconomic status would appear to point towards an earlier stage in the evolution of metaphors in which the comprehension of metaphors was more symmetric than it is now.

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