Topsy-turvy: Intrinsic frames of reference and canonical orientation in Yucatec
Presentación oral

This paper presents the first study of the principle of canonical orientation (POCO) in a non-European language and the first to have found evidence that POCO may be language-specific. POCO states that in order for the location of an object (the figure) to be described with respect to a reference object (the ground) in an intrinsic frame of reference (FoR) projected from the geometry of the ground, the ground must be in canonical orientation from the perspective of the observer (Levelt 1984, 1996). Thus, POCO predicts that English speakers will not use (1) as a description of Figure 1a or 1b, nor (2) as a description of Figure 2, nor (3) as a description of Figure 3:

(1) The ball is under the chair
(2) The ball is on top of/above the chair
(3) The ball is beside the chair

Yet, just such descriptions do appear to be produced regularly by speakers of Yucatec Maya. E.g., (4) is a description of Figure 1a:

(4) Le=bòola=o’, y=àanal te’l tu’x k-u=kutal
DET=ball=D2 A3=under DADV where IMPF-A3=sit:INCH.DIS
máak=o’, kóoh-ol tu=chan ba’l-il (...) person=D2 hit:MIDDLE-INC PREP:A3=DIM thing-REL
‘The ball, under there where a person sits, (it’s) touching (the chair’s) thing (...)’

We draw on descriptions of the Ball & Chair pictures (B&C; Bohnemeyer 2008) by five dyads per language of Yucatec and English speakers. B&C comprises 4x12 pictures featuring a ball and a chair in varying spatial configurations. The participants reference these differences in order to match the pictures of each set while a screen between them prevents them from visual attention sharing. 12 of the 48 pictures feature the chair in non-canonical orientation (i.e., not standing up). 10 of these afford unique intrinsic solutions. 20% of the Yucatec descriptions of these 10 pictures feature intrinsic FoRs, compared to 4% of the English descriptions. We interpret this finding in light of the fact that intrinsic FoRs play a much larger role overall in Yucatec discourse: 56% of all pictures elicited intrinsic descriptions in Yucatec, compared to just 22% in English. Some configurations appear to be more resistant to POCO violations than others. Thus, Figure 1b was described intrinsically more often than any of the other items. POCO thus appears to be a violable constraint, and its relative strength varies with language and configuration.
References