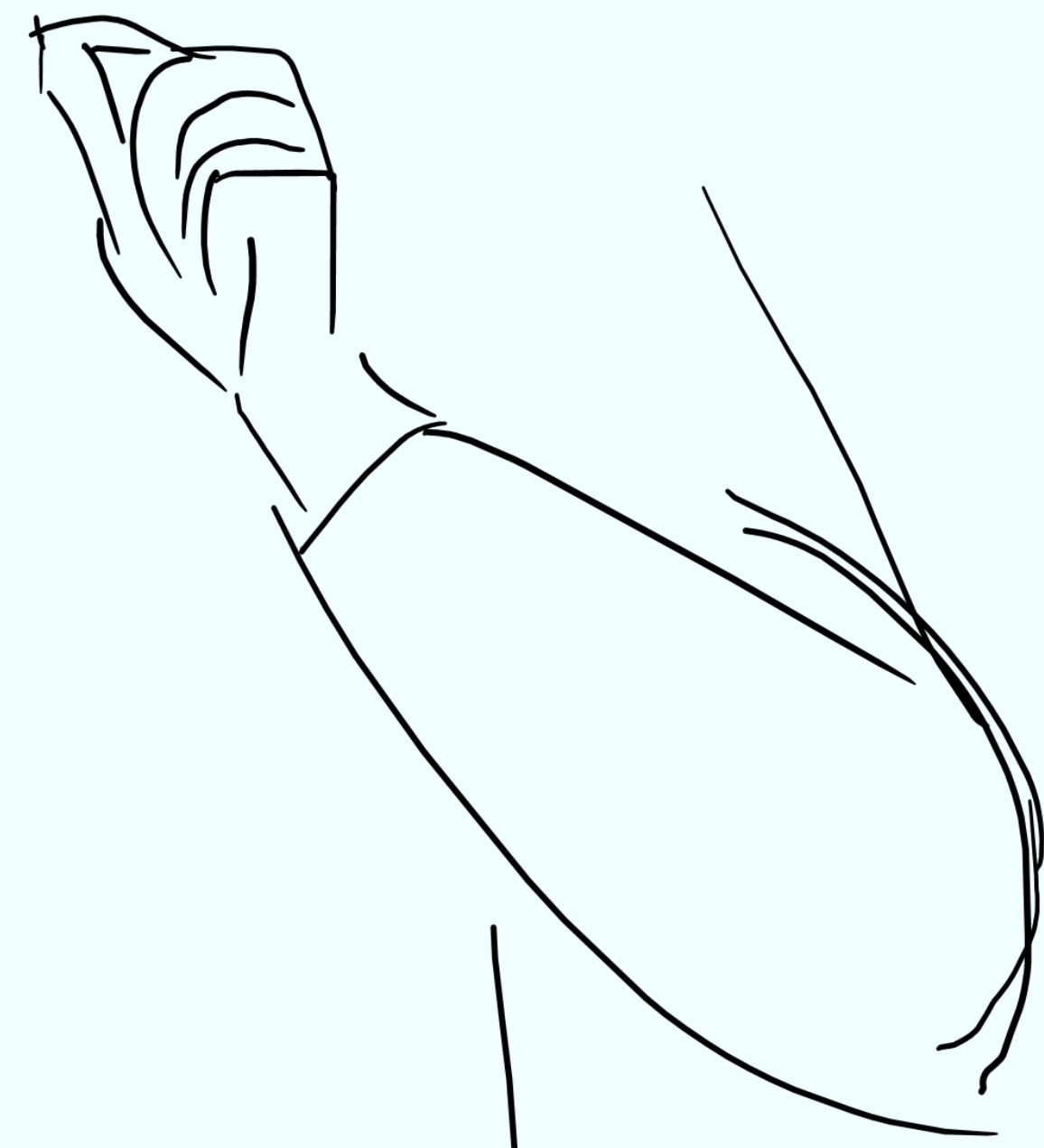


Synchronicity of prosody and gestures

a bibliographic search for Romance




McNeill Synchronicity Rules

a gesture, a manual movement that is entangled to the speech stream, is **time locked to a phonological peak**, a semantic content, and a pragmatic function (McNeill, 1992)

This was largely based on Kendon's (2004) work comparing British School Units and Gesture Phrases

Experimental approaches

grasp how prosody and impact gesture alignment or if this misalignment can hinder understanding

Mostly focus on prominence and specific tasks (pointings) 

e.g. Esteve-Gilbert & Prieto (2013) argue that pointing impacts prosodical alignment

Kinematic

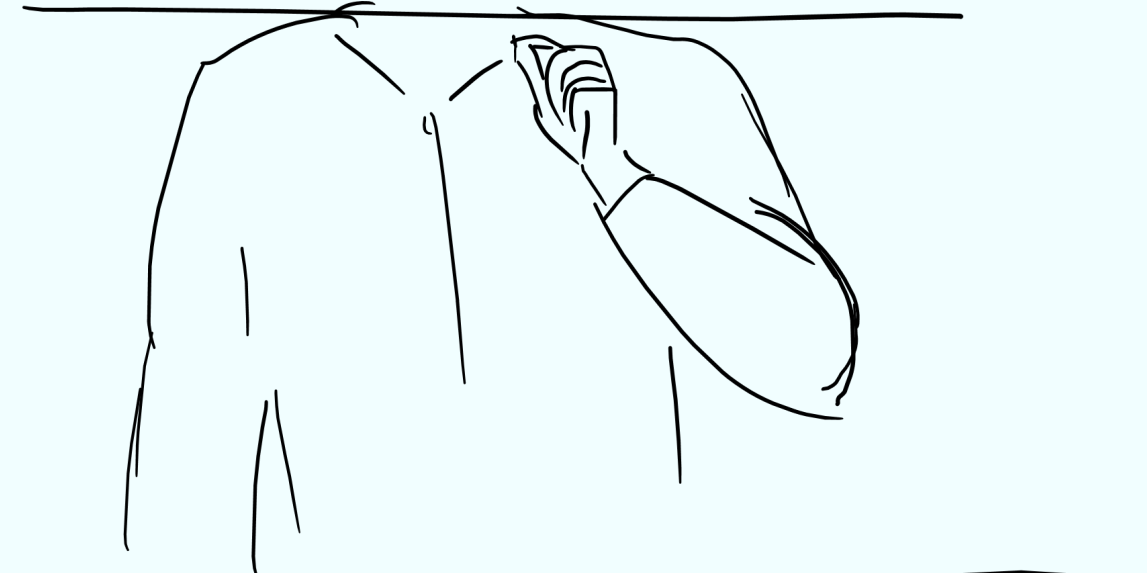
approaches try to make sense of movement patterns themselves rather than relying on an annotator interpretation

Corpus approaches

point to gestures starting before speech, mostly relating pitch accents and gesture apices

Variability found in corpora hinders most generalizations

e.g. Loehr (2004): pitch accents and apices are within 17ms, but SD 341ms



Its explanatory power lies with physiological relations between speech and gesture

e.g. Pouw et al. (2020) relates respiratory-vocal oscillations with kinematic features

All approaches do not fully explain speech-gesture misalignments, and their pragmatical values. Romance languages present a strategic way of attacking the problem as despite having a fairly similar phonological inventory, they are differ majorly in their prosodical features (intonation, timing, phrasing).