

Kinesic code-switching among bi-culturalists

Purpose

The purpose of this study is to find out if people who belong to two cultures (bi-culturalists) and have two first languages also change their kinesics when they switch from speaking in one language to another. Is there a deeper connection between the communication systems behind such a change? Goldin-Meadow (2003) and McNeill (2000) suggest that language and gestures go together as one communication system. A language used in an expressive culture should be accompanied by vivid gestures while a language used in a reserved culture should be accompanied by moderate gestures. This study can support or question the one-system hypothesis.

Method

The participants in the study identify themselves both with Swedish culture (a reserved culture) and Mozambican culture (an expressive culture). They speak Swedish and Portuguese. Seven individuals, three men and four women, participated in four test conditions each with the same interviewer:

- An interview in Portuguese, face-to-face (10 minutes)
- An interview in Swedish, face-to-face (10 minutes)
- An interview in Portuguese, audio only (9 minutes)
- An interview in Swedish, audio only (9 minutes)

The full test was recorded at 179 frames per second by an eight-camera motion capture system. Every participant had 21 markers on strategic body parts to measure gesture activity.

Result

After statistical analysis (the motion capture system generates over 100,000 data units per marker and test condition), it is very clear that the participants move their hands and heads more when they speak Portuguese compared to when they speak Swedish. There is also an interesting asymmetry in their hand movements when the participants speak Portuguese. They move their right hand significantly more than their left. The difference is altogether stronger in the face-to-face conditions. This supports the hypothesis that spoken language and gestures go together.

[By: Mikael Jensen and Linnea Moreira Emanuelsson](#)

[University of Gothenburg](#)

[Department of Applied IT](#)

Title: Kinesic code-switching among bi-cultural

By: Mikael Jensen and Linnea Moreira Emanuelsson

University of Gothenburg

Department of Applied IT

(Unit for Cognition and Communication)

Forskningsgången 6

412 69 Göteborg

mikael.jensen@gu.se

031-722 2342