

Papers II: KNOWING BODY

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Embodiment.

The present research set out to consider dynamic sources of bodily feedback, starting with movement rhythms and shape as defined in the Kestenbergs Movement Profile (KMP; Kestenbergs et al., 1999) and their effects on the cognitive-affective system.

In a series of experiments on the influence of movement qualities and shape on cognition, affect and attitudes I investigated dynamic movement feedback from basic dimensions of movement on the cognitive-affective system; specifically, approach vs avoidance motor behaviour (Cacioppo et al., 1993), growing vs shrinking movement (shape), and smooth vs. sharp movement rhythms (qualities; Kestenbergs et al., 1999).

Results suggest that movement qualities influence affect but not cognition: sharp movements caused significantly more negative affect than smooth movements. Shape had a main effect on affect and attitude: participants in the approach condition reported more positive affect and evaluated arbitrary Chinese ideographs more positive than subjects in the avoidance condition. Movement qualities moderated the influence of movement shape on affect and attitudes.

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The Motivated Movement

In more recent times challenging new explorations have been done on grasping (M. Jeannerod), gesturing (D. McNeill, A. Clark, G. Calbris), touching (M. Ratcliffe), and pointing (S. Kelly), yet a more holistic approach to the kinesthetic living body seems to be needed. An attempt will be made in this paper to try to relate simple movements (cutting a cake or driving a car) as embedded into more complex behavioral situations (having a desert or being exposed to the traffic). The latter is also to include the symbolic or cultural. The “knowing body” emerges then as a consequence of the proposed approach. Such a body inhabits the space that is by no means neutral, but is rather meaningfully structured (whereby meaningfulness is not to be reduced exclusively to the propositionality). The “corporeal competence” thus far outgrows mechanical skills and is to be perceived as belonging to cultural experience.

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The midwife case and embodied cognition

An important aspect of Embodied Cognition is the so called 'physical grounding project' that involves: 'understanding how cognitive contents must ground out in (terms of) the agent's embodied experience and physical characteristics' (Anderson 2003, p. 92).

In Collins et al. (2006) it was demonstrated that so-called interactional expertise, developed through linguistic interaction without full scale practical immersion in a culture, exists (see also Collins 2004; Collins 2007). In their ability to use language, interactional experts are indistinguishable from so-called contributory experts, who on the other hand are identified by their full scale practical immersion in the specialist area under discussion. Seemingly, interactional and contributory experts differ with respect to their source of knowledge. While contributory experts gain their explicit knowledge from explicit discourse and theorizing, imbued with analytical and logical rationality (and implicit linguistic knowledge) as well as actual bodily experiences, imbued with irrational, non-logical and holistic experiences, interactional experts gain their knowledge solely from discourse and theorizing (including implicit linguistic knowledge).

To explore the extent to which embodied knowledge is significant to language, we ran experiments employing the procedure presented in Collins et al. (2006) using midwives who were or were not themselves mothers. According to the idea of interactional experts, midwives without the experience of giving birth should be linguistically indistinguishable from midwives that had given birth due to years of immersion in the community.

Contrary to the findings on perfect pitch and colour blindness reported in the study by Collins et al., our results seem to suggest that bodily knowledge does have a significant impact on linguistic skills.

References:

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