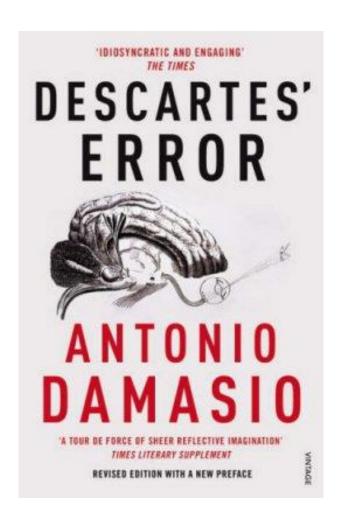


Success depends less on materials, techniques, and linguistic analyses, and more on what goes on inside and between the people in the classroom.

Stevick, 1980: 4



- The human brain and the rest of the body constitute an indissociable organism.
- 2. The organism interacts with the environment as an ensemble...
- 3. The physiological operations that we call mind are derived from the structural and functional ensemble rather than from the brain alone.

Damasio, A. (1994, 2006) *Descartes' Error,* London: Vintage

Brains are in bodies, bodies are in the world, and meaningful action in these worlds is in large part socially constructed and conducted.

Churchill, E., Okada, H., Nishino, T., and Atkinson, D. (2010) 'Symbiotic gesture and the sociocognitive visibility of grammar in second language acquisition'. *The Modern Language Journal*, 94, p. 237.

## "The body is in the mind".

Johnson, M. (1987) *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*, Chicago: Chicago University Press, p. xxviii.

"Put very simply, cognition is embodied, language as a cognitive entity is embodied, and learning as a cognitive process can also be embodied."

Holme, R. 2009. *Cognitive Linguistics and Language Teaching*. Palgrave Macmillan, p 62.

"Acting out word meanings helps schoolage children to increase their L1 vocabularies."

"Enacting or miming a verb resulted in better retention than explaining it."

Lindstromberg, S. & Boers, F. 2005. From Movement to Metaphor with Manner-of-Movement Verbs. *Applied Linguistics* 26.

"Pronunciation asks for a physical learning and teaching style, a kinaesthetically insightful practice. It must help students to connect with the muscles that make the difference".

Adrian Underhill, personal communication

Language is developed in context, as use in context shapes language resources;

Language is applied in context, as context selects the language action to be performed;

Language is adapted for context, as the experience of past language use is fitted to the here and now.

Larsen-Freeman, D., and Cameron, L, (2008) *Complex Systems and Applied Linguistics*, Oxford: Oxford University Press, p. 69)

'During conversations we imitate each other's expressions, even each other's syntactic constructions... If one person engaged in a dialogue uses the word "sofa" rather than the word "couch," the other person engaged in the dialogue will do the same.'

lacoboni, M. (2008) Mirroring People: The New Science of How We Connect with Others, New York: Farrar, Straus and Giroux,

"Extended systems theorists... reject the image of mind as a kind of input-output sandwich with cognition as the filling....

Instead, we confront an image of the local mechanisms of human cognition quite literally bleeding out into body and world."

Clark, A. (2011) Supersizing the Mind: Embodiment, Action, and Cognitive Extension, Oxford: Oxford University Press. p.70.

"Gesture ... continuously informs and alters verbal thinking, which is continuously informed and altered by gesture (i.e., the two form a genuinely coupled system)"

Clark, A. (2011) Supersizing the Mind: Embodiment, Action, and Cognitive Extension, Oxford: Oxford University Press. (p.125).

Gestures are components of speech, not accompaniments but actually integral parts of it.

McNeill, D. (2012) How Language Began: Gesture and Speech in Human Evolution, Cambridge: Cambridge University Press, p. 2.

## Types of gesture:

- deictic gestures (pointing)
- beats
- representational gestures
- pragmatic and interactional gestures

Gestures enhance learners' communicative competence by:

- chunking information; adding emphasis to key information
- increasing redundancy and reducing ambiguity
- managing turn-taking
- as a communication strategy, to compensate for linguistic difficulties
- reducing cognitive load
- demonstrating empathy

"Gestures ... occupy a unique position in human behaviour: they are bodily actions, but they are also cognitive actions".

Streeck, J. 2009. *Gesturecraft: The manu-facture of meaning.* Amsterdam: John Benjamins, p. 171.

"Learning is more discovering how to align with the world than extracting knowledge from it."

Atkinson D. (2010) 'Extended, embodied cognition and second language acquisition', *Applied Linguistics*, **31**, 599-622. (p. 610)

"An understanding of what goes on in the interactions is best arrived at by close examination of the talk and embodied behavior of group work participants".

Frazier, S. (2007) 'Tellings of rememberances "touched off" by student reports in group work in undergraduate writing classes', *Applied Linguistics*, 28/2, p. 207.

Jacknick, C., and Thornbury, S. (2013) 'The task at hand: Noticing as a mind-body-world phenomenon,' in Bergsleithner, J., Frota, S., & Yoshioka, J.K. (eds) *Noticing & Second Language Acquisition: Studies in honor of Dick Schmidt,* Manoa: University of Hawai'i Press.

Thornbury, S. (2013) 'The learning body,' in Arnold, J. & Murphey, T. (eds.) *Meaningful Action: Earl Stevick's influence on language teaching*. Cambridge. Cambridge University Press.