

On metaphor and gestures: *What's new?*

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*you still learn
something from that
about how another
group of people
sees the world
and how difficult
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to translate
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so neatly
into your own
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– philosopher Martha Nussbaum
on the value of learning a foreign language
("Conversations with history", <http://conversations.berkeley.edu/>)

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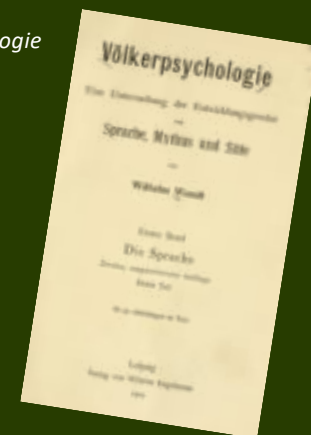
Metaphor and gesture: What's new?

- What's old?
- What's less old?
- What's new/current?
- What *could* be new?

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Metaphor and gesture: What's old?

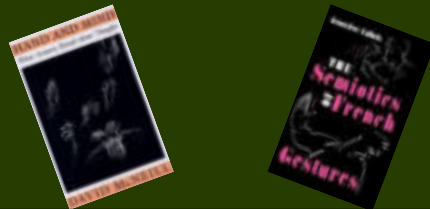
- W. Wundt (1904) *Völkerpsychologie*



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Metaphor and gesture: What's "old"?

- W. Wundt (1904) *Völkerpsychologie*
- D. McNeill & E. Levy (1982) "Conceptual representations in language activity and gesture"
- D. McNeill (1985) "So you think gestures are nonverbal?"
- D. McNeill (1992) *Hand and mind: What gestures reveal about thought*
- G. Calbris (1990 [1984]) *The semiotics of French gestures*



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Metaphor and gesture: What's less old?

- R. Webb (1996) "Linguistic features of metaphoric gestures" (PhD thesis, U. of Rochester)
- A. Cienki (1998) "Metaphoric gestures and some of their relations to verbal metaphoric expressions"
- E. Sweetser (1998) "Regular metaphoricity in"
- C. Müller (1998) *Redebegleitende Gesten*



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Metaphor and gesture: What's less old?

- A. Cienki & C. Müller (Eds.) (2008) *Metaphor and gesture*
- A. Cienki & C. Müller (2008) "Metaphor, gesture, and thought" (*Cambridge handbook of metaphor and thought*)
- C. Müller (2008) *Metaphors dead and alive, sleeping and waking. A dynamic view*



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Metaphor and gesture: Where are we now?

- Some important points:
 - Gesture is inherently dynamic
 - Gesture is spatial, but also motoric/kinesthetic (felt bodily)
 - Gesture as "expressive movement" (Müller, Kappelhoff)
 - Metaphor in gesture appears by **representing** an (abstract) idea **in the physical form** of something else

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"Literal" iconic mapping

Idea of something physical
expressed in spatial form
(gesture)

as I'm centering

[as if holding clay to position it in the center of the pottery wheel]



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"Literal" iconic mapping

Idea of something physical
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What about abstract ideas?

Metaphoric mapping

Abstract idea expressed in spatial form (gesture)

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Example from
UCLA Library
Broadcast
NewsScape
(Tong 2015)




What about abstract ideas?

he holds dual citizenship

Metaphoric mapping

Abstract idea expressed in spatial form (gesture)
Topic Vehicle

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to POSSESS is to HOLD

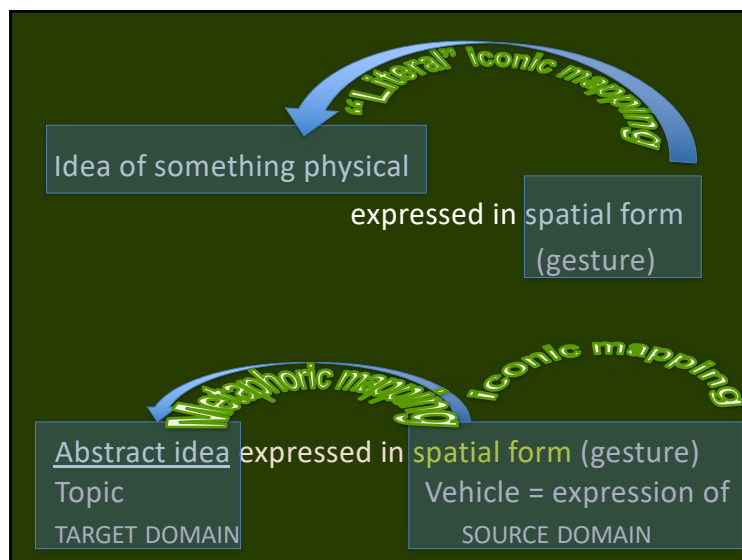
What about abstract ideas?

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Metaphoric mapping

Abstract idea expressed in spatial form (gesture)
Topic TARGET DOMAIN Vehicle = expression of SOURCE DOMAIN

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Metaphor and gesture: Where are we now?

• Methods

Testing of them:
Brazilian Portuguese: Lisboa, Graça, & Avelar 2019;
Polish: Juszczak 2017

– Guidelines for identifying metaphor in gesture

- Metaphor Identification Guidelines – Gesture / MIG-G (Cienki 2017, in *Routledge Handbook of Metaphor and Language*)

The guidelines are structured as follows:

1. identify the gesture strokes;
2. describe the four form features of each stroke;
3. identify if the gesture serves any referential function. If so,
4. identify the mode(s) of representation;
5. identify the physical referent(s) depicted in the gesture(s) (the potential Source domain);
6. identify the contextual topic being referenced (the potential Target domain);
7. is the topic being identified via a resemblance in experience to the referent depicted via the gesture? If so, the gesture can be identified as metaphorically used via the mapping that the topic [This Target Domain] is being likened to the referent depicted [This Source Domain].

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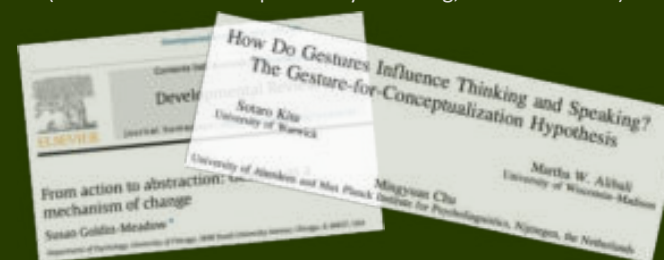
Metaphor and gesture: What's new/current?

- Research from cognitive science/cognitive psychology/psycholinguistics
- Research from linguistics
 - Research on different semantic domains
- Applications

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Metaphor and gesture: What's new/current?

- Research from cognitive science/cognitive psychology/psycholinguistics
 - conceptualization of ABSTRACT vs. CONCRETE (PhD thesis near completion by Yao Tong, VU Amsterdam)



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Embodied meaning, inside and out: The coupling of gesture and mental simulation

Tyler Marghetis, San Diego (USA)
Benjamin K. Bergen, San Diego (USA)

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Metaphor and gesture: What's new/current?

- Research from cognitive science/cognitive psychology/psycholinguistics
 - gesture in teaching mathematics

Research Report
Gesturing Gives Children New Ideas About Math
Susan Goldin-Meadow, Susan Wagner Cook, and Robert A. Weisberg
University of Chicago

Embodiment in Mathematics Teaching and Learning: Evidence From Learners' and Teachers' Gestures
Martha W. Alibali
Department of Psychology
University of Wisconsin-Madison
Michael J. Nebel
Department of Educational Psychology
University of Wisconsin-Madison

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Gestures and learning mathematics

- $3 + 4 + 5 = ___ + 5$ Susan Goldin-Meadow:



<https://www.youtube.com/watch?v=IXaQAtGvbFc>

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Metaphor and gesture: What's new/current?

- Research from cognitive science/cognitive psychology/psycholinguistics
 - gesture in teaching/learning foreign languages

Pedagogical Gestures as Interactional Resources in Teaching and Learning Tense in the ESL Grammar Classroom
Abby Mueller Dobs
Wayne State University

How to make yourself understood by international students: The role of metaphor in academic tutorials
Jeannette Littlemore, Fiona MacArthur, Alan Cienki and Joseph Holloway

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Metaphor and gesture: What's new/current?

- Research from linguistics, communication studies
 - Research on different semantic Target domains
 - TIME
 - DISCOURSE

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Metaphor and gesture: What's new/current?

- Research on temporal metaphor in gesture

With the Future Behind Them: Convergent Evidence From Aymara Language and Gesture in the Crosslinguistic Comparison of Spatial Construals of Time

Rafael E. Núñez^a, Eve Sweetser^b (2006)



Fig. 13. Example of a forward index finger pointing gesture cofined with the Spanish word *antiguamente* ("long ago, in the past").

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Metaphor and gesture: What's new/current?

- Research on temporal metaphor in gesture
 - Santiago et al. (2007), "Time (also) flies from left to right"
 - Brown (2012), "Time and space in Tzeltal: Is the future uphill?"
 - Casasanto & Jasmin (2012), "The hands of time: Temporal gestures in English speakers"
 - Jamalian & Tversky (2012), "Gestures alter thinking about time"
 - Cooperrider & Núñez (2013), "Across time, across the body: Transversal temporal gestures"
 - Walker & Cooperrider (2016), "The continuity of metaphor: Evidence from temporal gestures"
 - Li (2017), "Time on hands: Deliberate and spontaneous temporal gestures by speakers of Mandarin"
 - Gu (2018), *Chinese hands of time* (PhD thesis, Tilburg U.)
 - Winter & Duffy (2020), "Can co-speech gestures alone carry the mental time line?"

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→ especially *timelines* in gesture

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Metaphor and gesture: What's new/current?

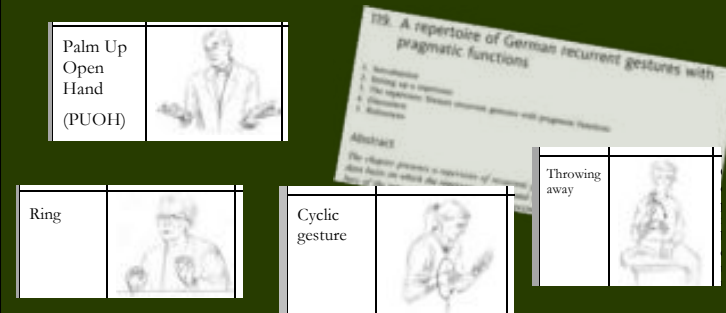
- Research on gestures about DISCOURSE
 - Streeck (2009) on "speech-handling"
 - offering
 - moving topics aside
 - rejecting



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Metaphor and gesture: What's new/current?

- Research on gestures about DISCOURSE
 - Bressem & Müller (2014)



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Metaphor and gesture: What's new/current?

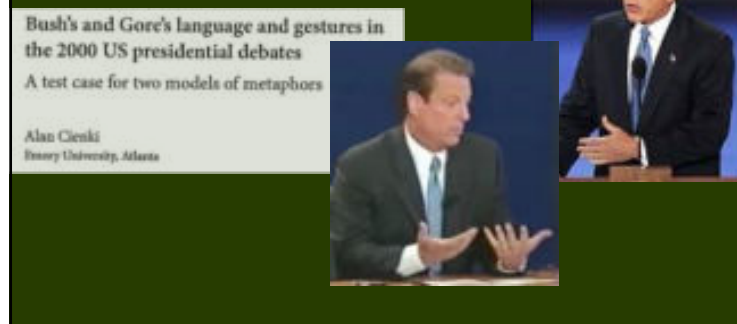
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Metaphor and gesture: What's new/current?

- Applications:
 - Political discourse



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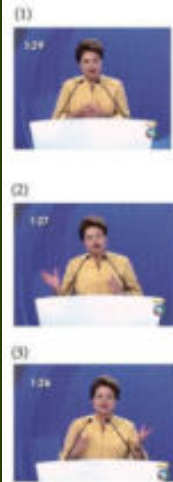
- Applications:
 - Political discourse

The Role of Gestures in the Construction of Multimodal Metaphors: Analysis of a Political-Electoral Debate

O papel dos gestos na construção de metáforas multimodais: análise de um debate político-eleitoral

Marta Araújo Miranda^a
Universidade Estadual do Sudoeste da Bahia
Vitória da Conquista - Bahia / Brasil

Paulo Henrique Aguiar Mendes^{ab}
Universidade Federal do Rio de Janeiro
Rio de Janeiro - Minas Gerais (Brasil)



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Metaphor and gesture: What's new/current?

- Applications:
 - Political discourse
 - Business discourse, entrepreneurs, management

Sensegiving in entrepreneurial contexts: The use of metaphors in speech and gesture to gain and sustain support for novel business ventures

Joep P. Cornelissen and Jean S. Clarke
Leeds University Business School, UK

Alan Cienki
The University of Manchester

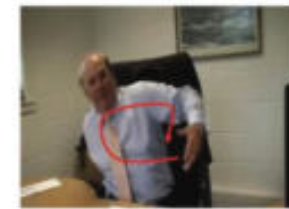


Figure 3. Cycle of Opportunity Identification and Explanation (gesture 1b)

(1b)
products, opportunities, invoices, cash ...

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Metaphor and gesture: What's new/current?

- Applications:
 - Political discourse
 - Business discourse, entrepreneurs, management

The use of verbal and gestural metaphor in explanations of management theory

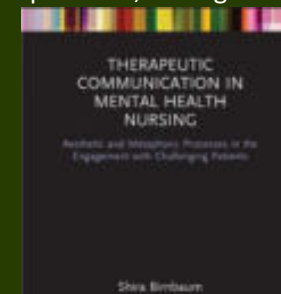
Jeannette Littlemore



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Metaphor and gesture: What's new/current?

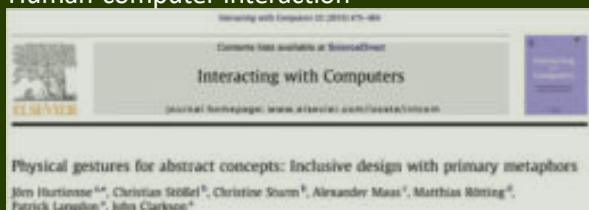
- Applications:
 - Political discourse
 - Business discourse, entrepreneurs, management
 - Therapeutic discourse



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Metaphor and gesture: What's new/current?

- Applications:
 - Political discourse
 - Business discourse, entrepreneurs, management
 - Therapeutic discourse
 - Human-computer interaction



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Metaphor and gesture: What's new/current?

- Important issues: *whose metaphors we are talking about?* (Cienki 2020)
 - the Speaker's?
 - the Listener's? (the *Attender's* [Clark 1996])
 - the Researcher's? (an after-the-fact attender)

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Metaphor and gesture: What's new/current?

- Important issues: the variable *attention to metaphor* by speakers and listeners/viewers (Di Biase-Dyson & Egg 2020)
 - Meta-communicative awareness (Cienki 2020) to differing degrees in
 - speech production (tuning devices [Cameron & Deignan 2003]; Goatly 1997])
 - gesture production (use of space, dynamism, gaze [Cienki & Mittelberg 2003; Müller 2008b])
 - signals of different degrees of awareness of *others'* use of metaphor, heard in speech and/or seen in gesture

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Metaphor and gesture: What's new/current?

- Important issues: *gradability of metaphoricity* (Cienki 2020; Müller 2008a, 2008b) in terms of
 - the conventionality of a *mapping* in a culture (LIFE IS A JOURNEY versus LIFE IS A BANANA)
 - the degree of cognitive *activation* of a mapping in the given moment
 - the conventionality of a metaphoric *expression* in a culture ('follow your dreams' versus 'don't trip over your inhibitions')

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Metaphor and gesture: What *could* be new?

- We could have more contributions from:
 - cultural anthropology, ethnographic methods
 - little is known about gesture use in most parts of the world beyond North America and Europe
 - Africa (Northern, Sub-Saharan)
 - Asia (Western, Central, Northern, Eastern, Southern)
 - South America
 - Indigenous languages around the world

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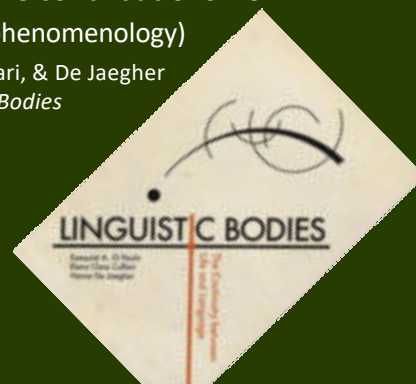
Metaphor and gesture: What *could* be new?

- We could have more contributions from:
 - cultural anthropology, ethnographic methods
 - revealing background knowledge of cultural models
 - Calbris (1990) on etymologies in gesture
 - Danesi (1995) on “conceptual fluency” in the metaphors used in a given culture (re: learning a second language)

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Metaphor and gesture: What *could* be new?

- We could have more contributions from:
 - Philosophy (esp. phenomenology)
 - see Di Paolo, Cuffari, & De Jaegher (2018), *Linguistic Bodies*



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Metaphor and gesture: What *could* be new?

- We could have more contributions from:
 - Artistic research (including movement studies)



Mike O'Connor's
PhD project on *lines*
<http://www.awaitingdog.com/MikeOConnor/Main.html>



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Conclusions – What is highlighted by studying metaphor in gesture?

you still learn something from that about how another group of people sees the world and how difficult it is to translate that so neatly into your own language



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Conclusions – What is highlighted by studying metaphor in gesture?

- The important role of metonymy (synecdoche) in visual metaphor
- The prevalence of ontological metaphor in gesture (and thus in thought, on some level) (Chui 2017; Cienki 2003)
- The dynamic nature of metaphoric expression/interpretation and metaphoric thinking
- Gesture is a semiotic system where the normative constraints on form-meaning correspondences are in many ways less fixed than they are in spoken language
 - Note the complexity of researching meaning-expression in such a system!

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“The essence of metaphor is understanding and experiencing one kind of thing in terms of another”

(Lakoff & Johnson 1980: 5)

“metaphorizing as embodied interactivity involves experiencing and understanding one realm of experience in terms of another”

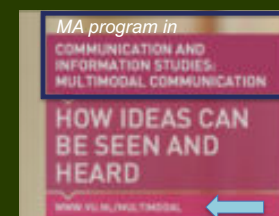
(Müller 2019: 76)

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Thank you!

<https://research.vu.nl/en/persons/alan-cienki>

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