
CAC 9

Non-verbal Communication

OBJECTIVES

- Introduce varieties of non-verbal communication
 - Understand existence of relationships between different modes of communication
 - Introduce 'para-language'
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OUTLINE

- The “universality” of facial expression?
 - Language and gesture
 - Gesture *instead* of language
 - Posture as communication
 - Para-language
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Types of NVC

- Gesture
 - Facial expression
 - Posture / body attitude
 - Para-language
-

Types of NVC: by function

- **Emblems:** directly translate into words or phrases
 - **Illustrators:** accompany and “illustrate” verbal messages
 - **Affect displays:** communicate emotional meaning
 - **Regulators:** coordinate, monitor, maintain, or control the speaking of another individual
 - **Adaptors:** emitted without conscious awareness and that usually serve some kind of need (scratching etc)
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DeVito, J. A., O'Rourke, S., and O'Neill, L. (2000). *Human communication*. Addison Wesley Longman.

Speech-related

- Gestures often are a part of verbal communication
 - Emphasis
 - Reference
 - Turn regulation
 - Perhaps less *conscious* than speech
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Facial Expression

- How many different facial expressions of emotion can you think of?

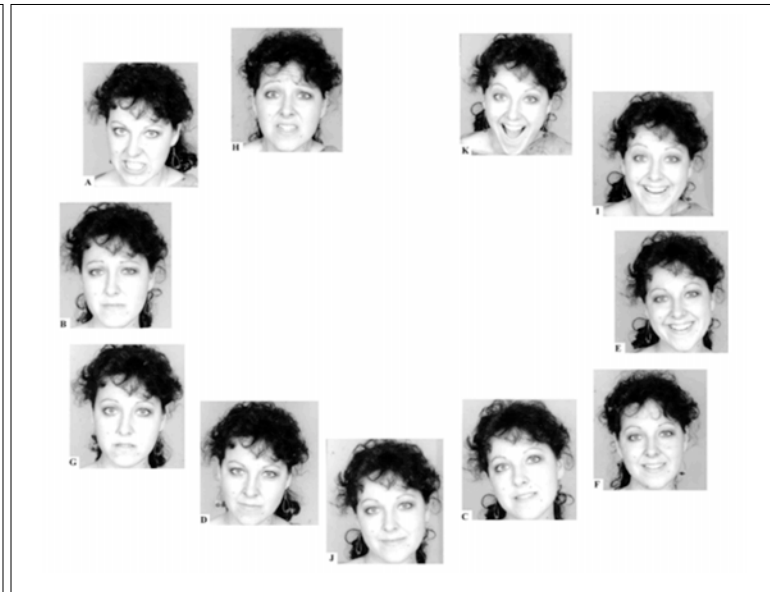
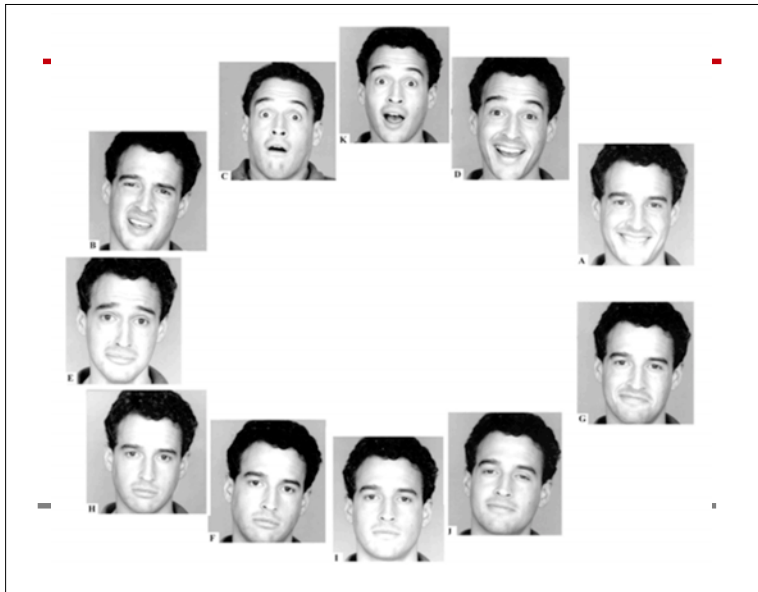
The Universality Assumption

“Happiness, surprise, fear, anger, contempt, disgust, and sadness—these seven emotions, plus or minus two, are recognized from facial expressions by all human beings, regardless of their cultural background.”

Russell, J.A. (1995) Is There Universal Recognition of Emotion From Facial Expression? A Review of the Cross-Cultural Studies, *Psychological Bulletin* (114)1:102-141

“the universality of facial expressions of emotion is no longer debated in psychology”

Matsumoto, D. (1990) Cultural similarities and differences in display rules. *Motivation and Emotion* (14):195



Accuracy of recognition

	happy	surprise	sadness	fear	disgust	anger
American	97.0	91.0	73.0	88.0	82.0	69.0
Swedish	96.5	81.0	74.5	67.0	84.5	81.5
Greek	93.5	80.2	54.3	67.8	87.5	80.0
Chinese	92.0	91.0	91.0	84.0	65.0	73.0
Japanese	93.8	79.2	66.8	58.2	55.8	56.8
Ethiopian	86.8	50.5	52.0	58.5	54.8	37.3

Gender / culture effects?

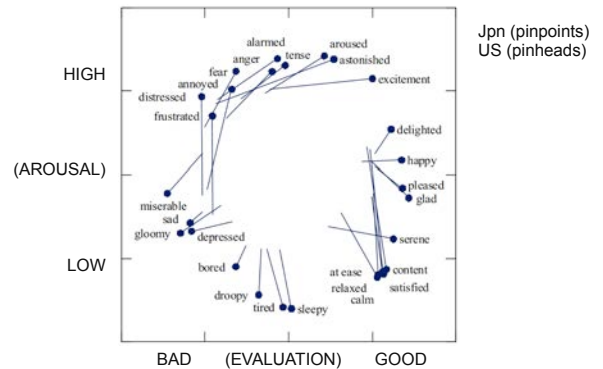
- Americans are more accurate than the Japanese at recognizing four of the six emotions, regardless of the culture or gender of the poser being judged.
- Neither the culture nor gender of the poser affected Americans' judgments of the photos, whereas females were more easily identified than males by the Japanese
- The Americans and Japanese agreed that happiness was the easiest to identify and that fear the hardest.

David Matsumoto (1992) "American-Japanese Cultural Differences In The Recognition Of Universal Facial Expressions" *Journal Of Cross-Cultural Psychology*

Assumptions

- Universality of facial muscle movement in all human beings
 - Certain facial movements are manifestations of the same emotions
 - Observers everywhere attribute the same emotions to the same facial movements
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Talking about the same things?



Boster, J. S. (2005). Emotion categories across languages. *Handbook of categorization in cognitive science*, 187-222.

Eye movements

Probably universal as they are thought to relate to cognitive processes in the brain and people's brains function in pretty much the same way.

- Up & left – remembering past experience and processing emotions
 - Left – remembering a sound
 - Up – general info processing/thinking
 - Up & right - remember recent occurrences and making logical assessments
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Cultural variation

Theoretical causes of *cultural* variation:

- some gestures/facial expressions are 'cultural' some more universal
 - norms which may inhibit, mask, exaggerate?
 - cultural influences on *causes* of emotion
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Posture Matching/Mirroring



Romeo and Juliet

ACT I. SCENE I. Verona. A public place.

SAMPSON: Nay, as they dare. I will bite my thumb at them; which is a disgrace to them, if they bear it.

Enter ABRAHAM and BALTHASAR

ABRAHAM: Do you bite your thumb at us, sir?

SAMPSON: I do bite my thumb, sir.

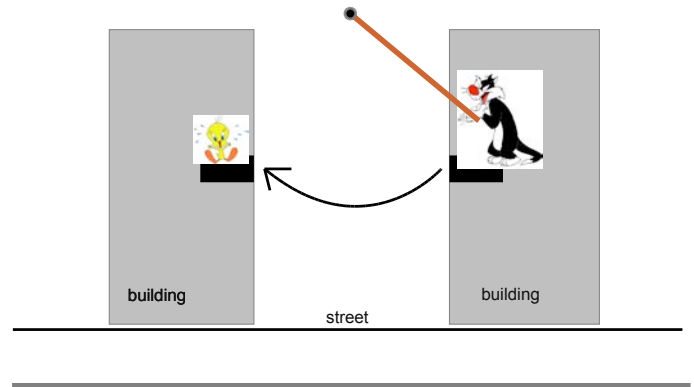
ABRAHAM: Do you bite your thumb at us, sir?

Hand gestures

- Complements to spoken content
- Independent of spoken content



Gestures depend on language



Kita and Özyürek

“In Turkish and Japanese, there is no readily accessible expression that semantically encodes **agentive change of location with an arc trajectory**. There is no verb that corresponds to the English intransitive verb “to swing” as in “the cat swings across the street”

What does cross-linguistic variation in semantic coordination of speech and gesture reveal? Evidence for an interface representation of spatial thinking and speaking. Jnl of Memory and Language, 2003

Results

- “*Biru kara biru e*”
- “*Kotori no ho o megakete ikun desu*”
- “*Tobi utsuro to shita*”
 - Japanese speakers produced more gestures (than English speakers), and more purely lateral gestures not encoding the arcing movement.

Describing gesture



A manual of gesture: embracing a complete system of notation, together with the principles of interpretation and selections for practice – Albert BACON, 1872

Description works best...

Speech: *and he grabs the bird and then when he comes down again um*
 RH: clenched above head to enact grabbing, then brought down to waist level, and then held there with the same hand shape.

(1.1) [the weight]
 RH: continues to be held.
 LH: open hand, palm facing slightly up & right, knuckles pointing slightly left & away from body; located above the left thigh; moves slightly up and back down.

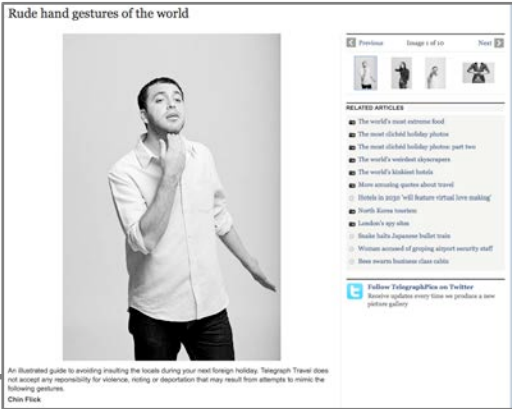
(1.2) [follow-]
 RH: continues to be held.
 LH: open hand, palm facing slightly up & right, knuckles pointing slightly left & away from body; located above her left hip in the same manner as (1.1) but reaches a higher level.

(2.1) [so it hits him on]
 RH: palm faces left & toward body; hand moves straight down.

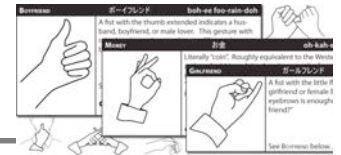
(2.2) [the head]
 RH: palm faces left & toward body; hand moves straight to right (slightly up)
 [and he winds up rolling down the str-]
 RH: palm faces left and then turns down; hand moves in a down-then-up arc to the right.

(2.3) [let because it aaaa]
 RH: TO REAPPEAR IN (2.5): THE PALM FACES TOWARD BODY AND THE KNUCKLES POINT UP. THE HAND MOVES TOWARD THE THROAT; PALM FACES RIGHT AND KNUCKLES POINT TOWARD BODY; HAND MOVES DOWN TO BELLY LEVEL. TO REAPPEAR IN (2.5) THE WRIST ROTATES IN THE DIRECTION OF THE LITTLE FINGER, SO THAT THE PALM FACES RIGHT AND THE KNUCKLES POINT AWAY FROM BODY. THEN THE HAND MOVES RIGHT. (The above-mentioned movements are performed in a smooth sequence.)

Independent Gestures



Japan...



Etc etc etc ... POPULAR ITALIAN GESTURES - BROUGHT TO YOU BY ITALIA ROMANO -



Para-language

Voice set: the physiological and physical peculiarities which allow identification of mood, state of health, age, sex, body build

Voice qualities: degree of control of pitch range, articulation, rhythm, resonance, and tempo

Vocalization: specifically identifiable noises (sounds); laughing, crying, and whispering, as well as *uh-huh* (affirmation) or *uh-uh* (negation).

George Trager, *Paralanguage*, 1958

Unexpected effects...

“In one Bolivian language [...] **nasalization** carries an honorific or a super-polite function, whereby individuals of a lower socioeconomic status address those of higher ranks with a prominence of nasalization for all vowels in the utterance. **Labialization**, found in French, German, and Scandinavian languages, occurs in English only with baby talk. Loveday has also noted that **velarization**, a characteristic of Liverpool English, is a sign of masculinity in some Arab languages.”

Pennycook, A. (1985). Actions speak louder than words: Paralanguage, communication, and education. *TESOL Quarterly*, 19(2):259-282.

Next Week

- Chronemics: how we think about and use 'time'
- **To read:** *Cultural Diversity in People's Understanding and Uses of Time* BRISLIN and KIM, 2003