

Application of Communication Theories

Thr, July 9 (Week 3.5)

Text Messengers

Almost the simplest form of communication:

One person sending words to another person.

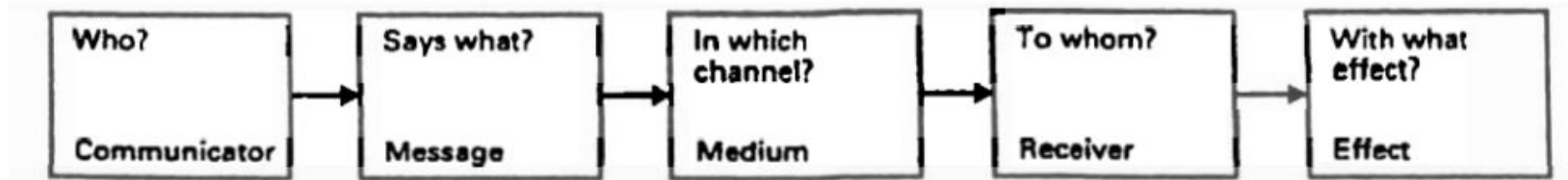
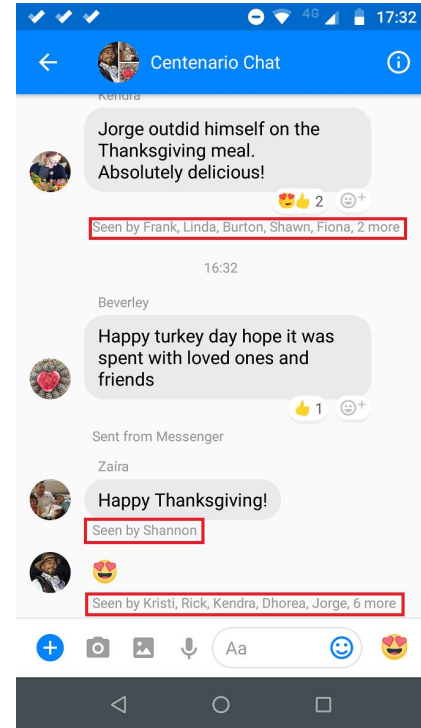


Fig. 2.1.1 The Lasswell Formula with corresponding elements of the communication process (Lasswell 1948).

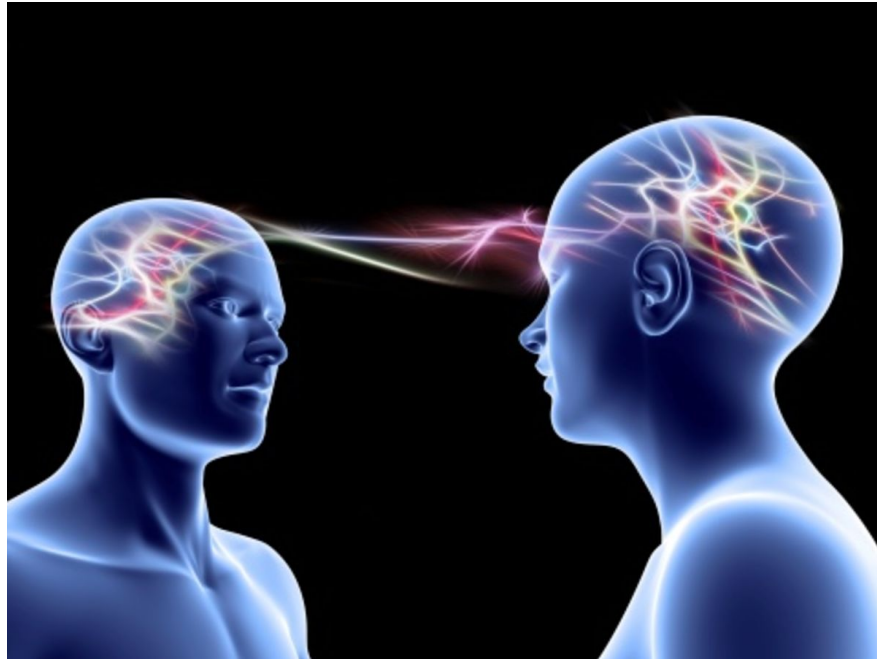
Text Messengers

Maybe not...



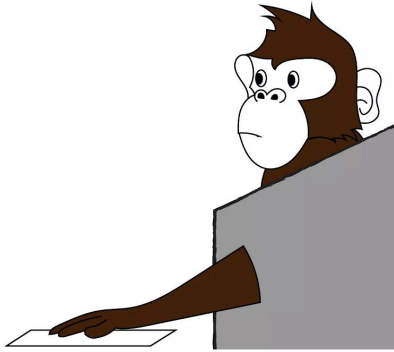
Face-to-face Communication as the Gold Standard

We are built to like talking to each other.

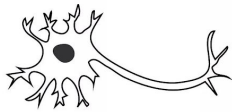


Mirror Neuron

(A) Monkey at rest

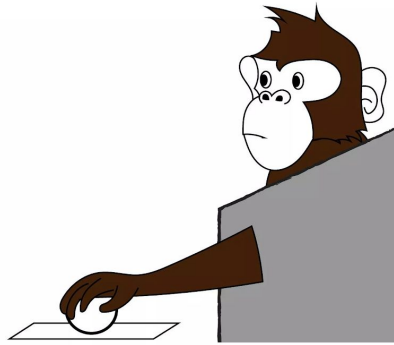


A mirror neuron is in a **resting state**

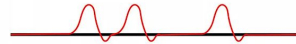


(No electrical signals)

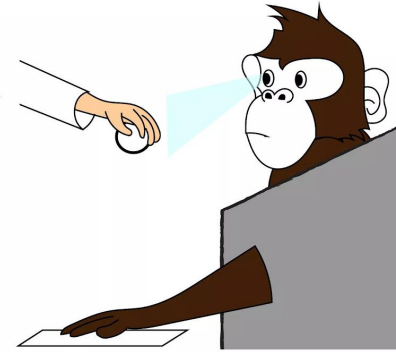
(B) Grasping execution



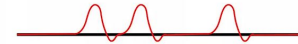
A mirror neuron **fires**



(C) Observation of grasping movements



A mirror neuron **fires**



Synchrony

Emotional, behavioral, and etc.

Chameleon Effect (Chartrand & Bargh, 1999)

: People behaviorally mirror each other by simply seeing each other. Also, they like people mimicked them.

Verbal and Nonverbal Communication

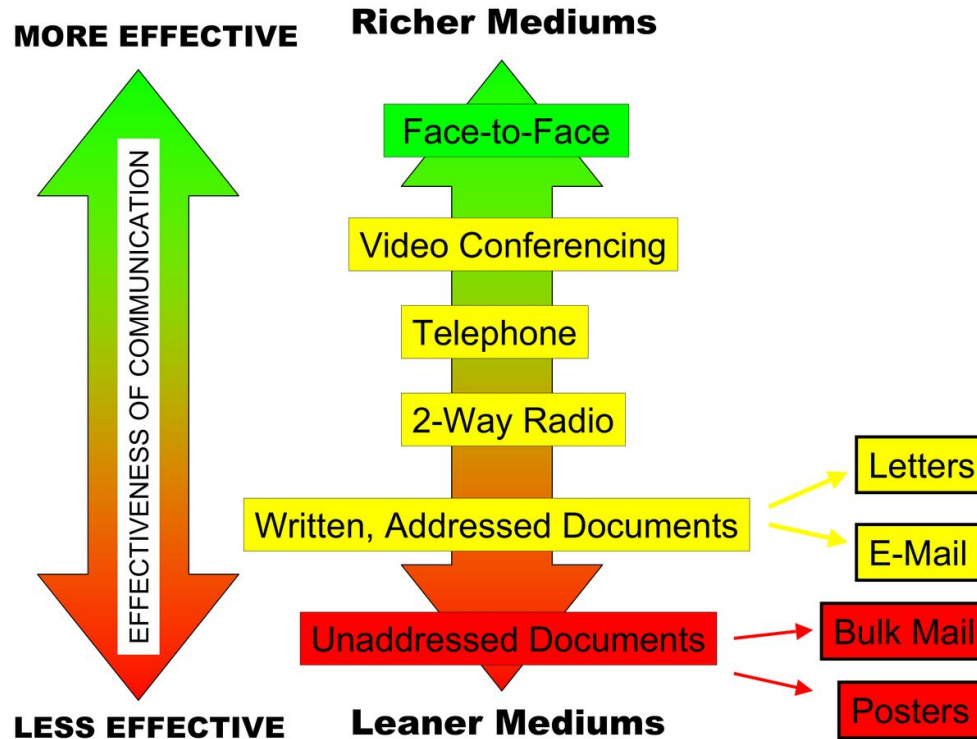
Verbal communication: what you speak

Nonverbal communication: what other things you do

Text Messengers:

verbal communication in an unnatural form (compared to phone calls)

Media Richness Theory (Daft & Lengel, 1986)



The Case of Messengers

Is having more information channels the better?

A text messengers that immediately sends every letter typed.

vs.

A text messenger that sends messages only after the send button.

Grice's Maxims (1975)

The maxim of quantity

: where one tries to be as informative as one possibly can, and gives as much information as is needed, and no more.

The maxim of quality

: where one tries to be truthful, and does not give information that is false or that is not supported by evidence.

The maxim of relation

: where one tries to be relevant, and says things that are pertinent to the discussion.

The maxim of manner

: when one tries to be as clear, as brief, and as orderly as one can in what one says, and where one avoids obscurity and ambiguity.

Hyperpersonal Communication (Walther, 1996)

Are more communication channel always better?

Maybe people, over time, learn how to deal with the restriction.

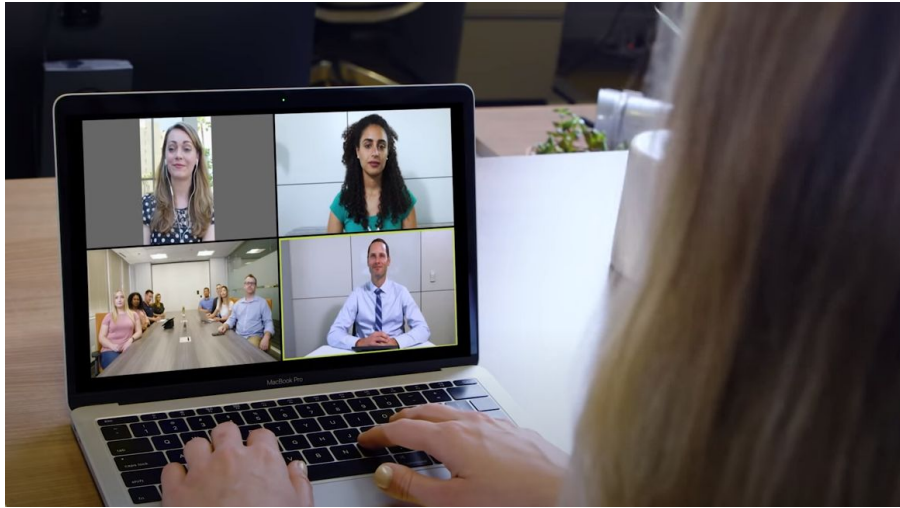
Text Messages vs. Video Conferencing

When do people use text messages, even when they are sure the other person is in front of their phone?

Media Richness Theory vs. Hypercommunication Theory

The Case of Video Conferencing

Would face-to-face become the golden standard this time?



Video Conferencing Issues

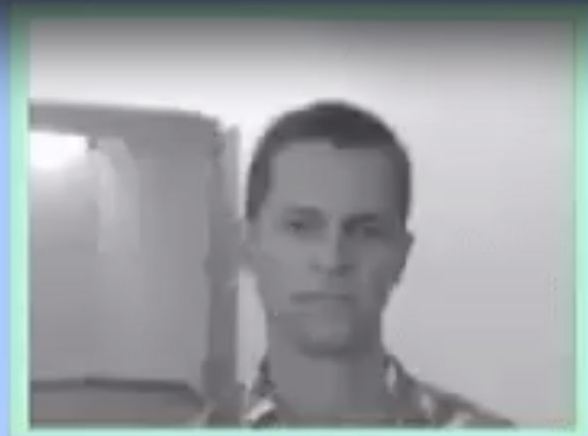
Verbal vs. nonverbal: how much is the video stream important?

Degree of details: which do we want to see? Every pixel of each other's face?

Backgrounds: do people need to see others' backgrounds?

Trade-off Related to Network bandwidth:

Better resolution? Lower latency? Facial Expressions? Backgrounds?



A Deeper Look at Video Conferencing



Worker in field wears head-mounted camera, microphone, and speaker



Expert in office sees what worker sees, hears worker

A Deeper Look at Video Conferencing

- *Object-focused discussion*
 - Verbal/vocal is grounded against/augments visual content
- *Person-focused discussion*
 - verbal cues and nonverbal cues redundant
- *Mixed Discussions*
 - verbal and nonverbal/visual provide complementary content/affect cues

A Deeper Look at Video Conferencing

“Is this the
brake cable?
Uh huh.
Okay, is that
in place?”

**OBJECT
FOCUSED**

“I think we ought
to emphasize
the quality of the
bikes we sell,
even if it means
a lower overall
volume.”

**PERSON
FOCUSED**

“I’ve never really
seen a brake
cable like this.
I’m not sure I
know how it
goes into place.
Do you think it’s
okay if I work on
something else?”

MIXED FOCUS

The Case of AR Telepresence



<https://youtu.be/NVujUnskuhs>