

# HRI Reading Group

@ Instituto Superior Técnico

Meeting #6 (13 Abr 2018)

**Welcome!**

# Paper

## Communication: The context of change

Barnlund, D.C.

(2011) Communication theory (pp. 6-24)



# Insights

Transparency is key

Communication arises  
from conflict between  
ideas, beliefs, etc.

Context-dependency

Social bubbles are  
dangerous

Two-way  
communication  
(Speaker also listens)  
[Teacher/student  
types relationship  
would benefit more  
from that]

Assumptive world of  
the individual

Group performance >  
most capable  
individual perf.  
w/ communication

Required openness

Communication  
“improves” models  
(less accurate)

# Objections

- There can be communication without conflict.
- Examples are not necessarily as pertinent in our modern world, where education is less unidirectional, and where communication gets much more complex to understand in the context of social networks.

# Artificial agents and Humans communicating

- At the simplest level (e.g., industrial): clarification mechanisms
- Goal of communication is key
- What is the role of “small talk” in the context of social robots? Can it be considered to be “communication”?
- Social Conventions are crucial for acceptability but also flow of communication (very context/modality/channel/embodiment-dependent).
- Broader question: Who are we communicating with? The agent itself, the designer, the company/owner, ...  
If it's teleoperated, probably the operator. Otherwise, ... ? (it is unclear!)  
People have different perceptions about to whom are they talking.

“Communication is facilitated when there is a frank and full exposure of the self. [...] The willingness to be **transparent** leads to a further condition that promotes healthy interaction.”

- Deception is started to be seen in some contexts such as games. Will that affect the expectation of undeceptive transparency we associate with robots?
- Truthfulness in humans seems doubted only based on experience. Assumed truthful until proved otherwise.
- Deception as a way for: manipulation, coping, social, ...
- We still view them as tools
- Situations where humans are not transparent for a good reason:
  - Social norms
  - Ethical dilemmas
  - Humor
- User/stakeholder's good is what we should maximize for

## Some relevant excerpts from the text

“Each stands to gain: The speaker because he can test what he believes and because it is rewarding to be understood; the listener because he can broaden his experience and because it is stimulating to understand.”

“Perceptual biases, taken together, constitute what has been called the ***assumptive world of the individual***. [...] Unless this symbolic world is kept open and responsive to continuing experience, men are forced to live out their lives imprisoned within the constructs of their own invention.”

“For most people, change is **threatening**. It is the old and familiar that is trusted; the **novel and unknown that arouses alarm**. [...] The degree to which fear is aroused is usually proportional to the extent to which **core values** are placed in question.”

**Who is bringing the  
refreshment next week?**

HRT Reading Group

@ Institute Superior Medicine

Meeting #7 (20 Apr 2019)