The Media Equation

Thr, July 16 (Week 4.5)

What makes us human?

Walking up straight and using tools?

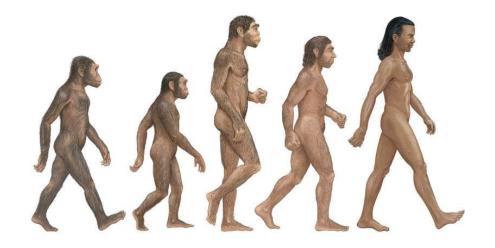


What makes us perceived as humans?

Making our brain to consider an object as human ≠ The object being human

Things that we automatically perceive as human \supset Things defined as human





Evolution of Our Brain

Social brain hypothesis (Dunbar, 2003): our intelligence is product of our struggle to solve social problems.

Not an answer, but at least partially captures the strengths of our brain:

Processing situations with other people.

Our brain is hard-wired and heavily optimized to solve social problems.

Result: we see human-like objects, we consider them human.

McLuhan: media as extensions of man

A perspective towards media.

Maybe, media are not only extensions, but maybe can perceived as one of us...

Computers as Social Actors (Nass et al., 1994)

Previous belief (from common sense): people and our brains are smart to tell computers are computers. Computers are not supposed to be perceived as social actors (i.e., humans).

New finding: our brains are not smart enough and cannot stop perceiving and acting toward computers as if they are more than electronic devices.

Politeness Study (Nass et al., 1999)

Study: participants learned from a computer, and then evaluated the computer in 3 ways: using the computer they used for learning, another computer, using pen & pencil.

Result: better evaluation when given through the same computer.

(Extra: people explicitly responded that they knew the computers were computers, which was obvious.)

Interpretation: people were "polite" towards computers.

Media Equation (Reeves & Nass, 1996)

Interactions with computers, television, and new media are fundamentally social and natural.

Simplified version of the theory:

Media = Real life

Application to Media Equation to AR/VR

The sophisticated feedbacks from media (e.g., computers) give people the illusion of facing other people, and this makes them social actors.

If computers with textual feedbacks are enough for our brains...

Our take: AR virtual humans will definitely become social actors.

The Theoretical Bases Behind AR Virtual Humans

Media Equation: People will perceive virtual humans as social actors and act towards them based on social conventions, automatically.

Social Influence Theory: Virtual humans that should look it is controlled by a human and act like a human enough, which will mean all of them in the future, will have social influence.

Place Illusion & Plausibility: People will act as if they are in the real world in the virtual environments that induce place illusion and plausibility, which will also mean all of them as technology advances.