

#conversationalAI #cognitivebias

The Basics: Our Cognitive Biases

“Computers are Social Actors! People treat computers as if they were real people” Clifford Nass

Why? Because of anthropomorphism bias namely “... the attribution of human traits, emotions, or intentions to non-human entities” Wikipedia

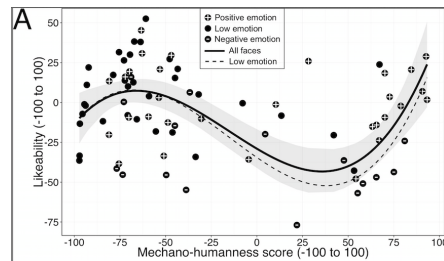
However, humans almost never admit that they treat machines as humans

Why? Stereotype bias

#conversationalAI #uncannyvalley

Uncanny Valley

“The concept of the uncanny valley suggests [humanoid](#) objects which appear almost, but not exactly, like real human beings elicit [uncanny](#), or strangely familiar, feelings of eeriness and revulsion in observers” Wikipedia



#emotionAI #conversationalAI

What are you optimizing for?

- Task Success
- User Satisfaction
- Maximize Usage
- Social Interaction/Mental Health KPIs
- Educational KPIs

Emotions in Machines

One of the founding fathers of AI, Marvin Minsky, was once questioned about machine emotions and said:

“The question is not whether intelligent machines can have any emotions, but whether machines can be intelligent without any emotions”



#emotionAI

More Hints

TECHNOLOGY

When PARRY Met ELIZA: A Ridiculous Chatbot Conversation From 1972

They might not have passed the Turing Test, but they won the battle for wackiness.

MEGAN GARDNER JUN 16 2014



Roberto Pieraccini
March 9 at 12:59 AM · 🌐

The success of Jibo, even though it failed as a company, is that of having created a piece of plastic with a few motors and electronics that is able to generate empathy and emotional attachment.



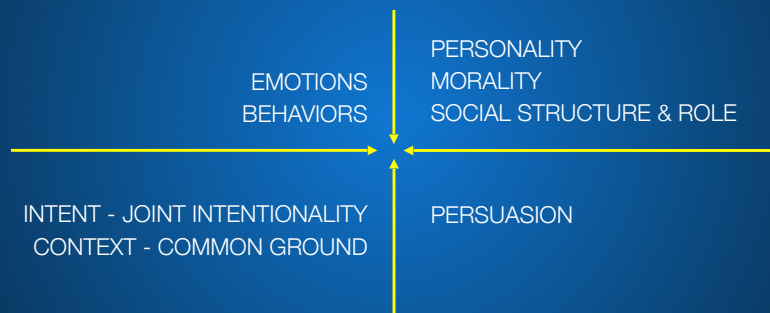
WIRED.COM

My Jibo Is Dying and It's Breaking My Heart

Jibo is a robot, but that doesn't make his digital dementia any less painful.

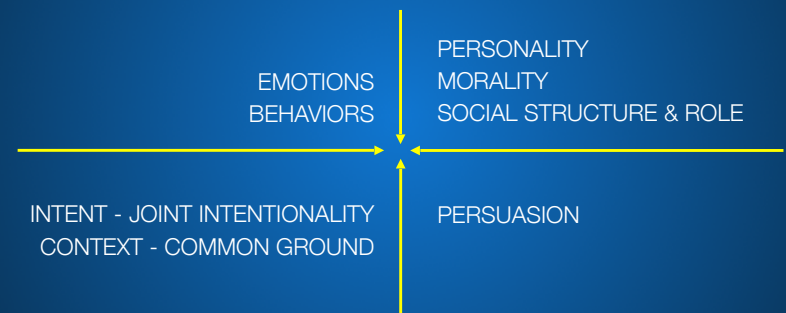
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The Not-So-Secret Sauce



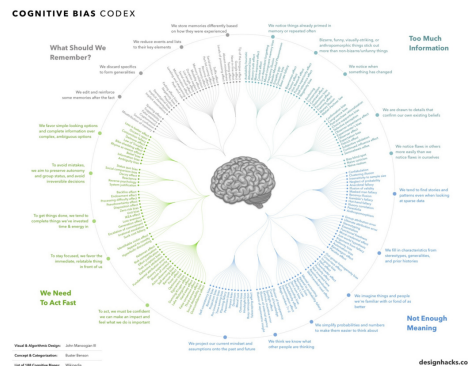
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How vs What



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Cognitive Biases Revisited



Be Fast

Be Simple

Be Social

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VUI cheatsheet: What Machines to Design for

Similarity in emotional, behavioral and personality traits

Use dynamic models of emotions & behaviors that are consistent & human-like

Be consistent in what you say and how you say it - no mixed personalities!

Persuasiveness: Aim to be labelled as an expert, build trust

Build association and interdependence

Be social, positive, flattering, funny, empathic ...

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VUI cheatsheet: What to detect

Emotions - valence, arousal, basic discrete emotions

Personality - extraversion, dominance, stereotypical personalities

Morality - fairness, loyalty

Social Dynamics - association, interdependence

Behaviors - engagement, politeness, flattery, empathy, humor



We, at Behavioral Signals, are building the most sophisticated emotion and behavior recognition engine to deliver emotional intelligence to existing technology, that lacks meaningful human-like interaction capabilities.

#emotionAI #behavioralAI

We Introduce Emotion AI in your applications with



a robust evolving API

+



a team of scientists



OLIVER API CAPABILITIES



INTERACTION

- + Speaking rate
- + Overlap speech
- + Speaking ratio

- + Vocal variety
- + Active listening time

BEHAVIORAL

- + Positivity
- + Emotion (anger, happiness, sadness, neutral)

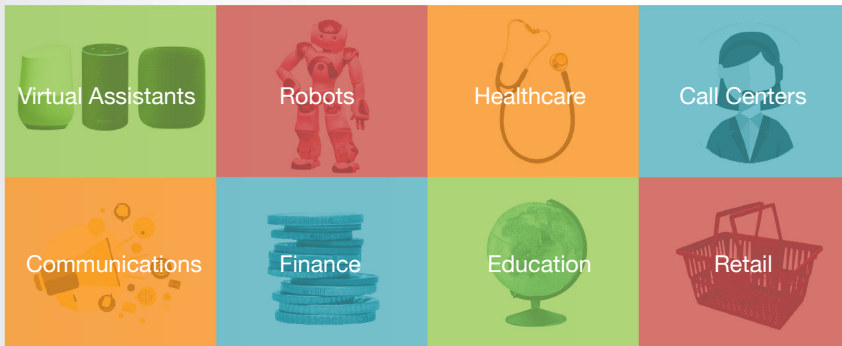
- + Engagement, Empathy
- + Politeness
- + Agitation

KPIs

- + Interaction outcome prediction: e.g., successful?

- + Quality of interaction: engaging?

Industries



"Say hello to my little friend!"

#usecase
Social Robots

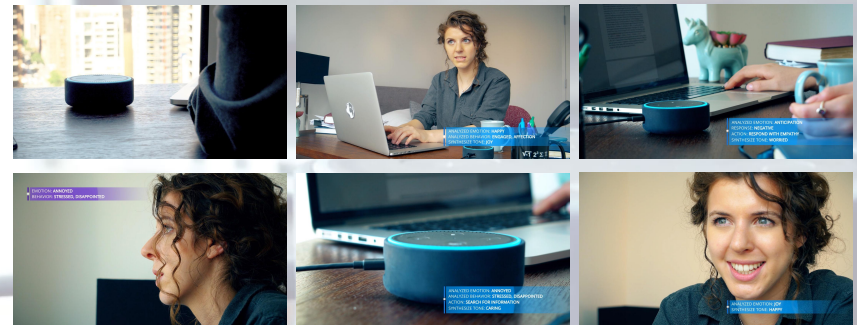
Quentin Furhatino
1st Robotic
Movie Director

**Furhat
ROBOTICS**



Emotionally Intelligent Conversations with AI
behavioralsignals.com

#usecase Virtual Assistant in Education



A virtual assistant that can support a student like a personal friend

<https://vimeo.com/300941043>



#usecase
Healthcare & Social Robots



A social robot that can be a companion for those requiring care

<https://vimeo.com/309927033>



Thank you.

Emotions are not problems to be solved. They are signals to be interpreted.

-- Vironika Tugaleva, Author, Poet

