

# Conclusions

## Lecture 10

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Social AI



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# Social AI

- Social Intelligence is the ability that helps people to **interact effectively with others**;
- Social interaction is far from being a mechanical phenomenon, but it involves **patterns and regularities** that can be **modelled**, **analysed** and **synthesised**;
- **Social AI** leverages on these patterns and regularities to **replicate social intelligence**;
- Social intelligence is a **bottleneck** towards the **seamless integration** of AI in everyday life;
- There are significant **risks**, but also important **opportunities**.

# The Risks

“You’ll need to give this mind **some rules to live by**. How about a prohibition against lying? [...] But social life teems with harmless or even helpful untruths [...] **Who’s going to write the algorithm for the little white lie** that spares the blushes of a friend?”

# Judgments

“[...] the normative ideal to which we should hold **full-blooded human intelligence** [...] a form of dispassionate deliberative thought , **grounded in ethical commitment** and responsible action, **appropriate to the situation** in which it is deployed.”

# Reckoning

“[...] **calculative prowess** at which computer and AI systems already excel - skills of extraordinary utility and importance [...] but skills embodied in devices that **lack the ethical commitment, deep contextual awareness, and ontological sensitivity of judgment.**”

# Risks

“Two things do terrify me [...] (i) that we will rely on reckoning systems in situations that require genuine judgment; and (ii) we will shift our expectations on human mental activity in a reckoning direction.”

# Opportunities

“[...] learn how to use AI systems to **shoulder the reckoning tasks** at which they excel [...] strengthen, rather than weaken, our commitment to judgment, dispassion, ethics, and the world.”

# Key-Points

- It is about the **nature of people** as much as it is about the **functioning of machines**;
- **Mathematics is the bottleneck**, the only problems that AI can address are those that can be represented in mathematical terms;
- Ethical decision-making is a key difference between human and artificial intelligence, no way to delegate it to machines;
- The important thing is to **optimise the interaction** between AI and humans so that each of them can give their best.

# Humans and Artificial Agents

“It was eerie to be standing by this naked man, struggling between what I knew and what I felt.”

# Humans and Artificial Agents

“Can human beings relate to computer or television programs in the same way they relate to other human beings? [...] this book concludes that **people** not only can but do **treat computers, televisions, and new media as real people and places.**”

# Risks

“[...] while social robots can have benefits for humans [...] it is also possible that they can inflict harm - emotional harm [...] herein lies the hitherto underestimated danger, the potential for humans’ emotional dependence on social robots.”

# Opportunities

“[...] for a social mammal such as a human, companionship and social interaction are of crucial psychological importance [...] It may also be possible one day to build technology that completely fulfils these needs.”

# Key-Points

- AI technologies “disguise” as humans to move from background to foreground and seamlessly integrate our life;
- Human cognition, at an unconscious level, is unable to make a difference between artificial and natural agents;
- The media equation makes artificial agents effective and satisfactory;
- Artificial agents can produce natural feelings, good or bad, like other humans do, but they tend to produce only good ones.

# Conclusions

- Modelling, analysis and synthesis of verbal and nonverbal behaviour are an **ideal field for the progress of AI**;
- The major **challenges** outlined in the previous slides are an exceptional **opportunity for innovation**;
- The **interdisciplinary collaboration** with human sciences poses multiple problems that are **unusual in the rest of AI**;
- Social AI will play a fundamental role in the optimisation of **human-AI interaction**, probably the **key-problem of the next decade**.

# Thank You!