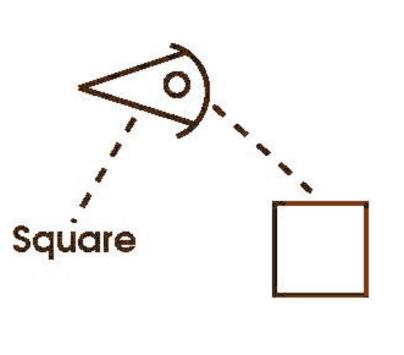


Introduction: The Nature of Knowledge

"Knowledge is always knowledge of. The framework on which it is hung, be it representational or non-representational, not only has no usefulness but has no meaning on its own."

- Knowledge as a natural kind?
- Concept vs. object vs. subject.
- Conceptual vs. non-conceptual.
- *Knowing that* vs. *knowing how.*
- Low-level vs. high-level.
- A common conceptual schema?



The Anthropocentric Stance

"There is no way, when we talk about 'knowledge representation', that this knowledge can fail to be knowledge in a human sense, which is to say, from a human point of view."

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- Intelligence: the ability of a subject (or "agent") to apply knowledge.
- The Turing Test and Daniel Dennett's "intentional stance".
- Blay Whitby (1997): The Turing Test as AI's "blind alley".
- To we want to define intelligence so that only human intelligence qualifies?
- ♦ Whitby (2003): "Science has to be interested in the whole space of intelligence." Yes, but....

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Levels, Meta-Levels and Representations

Representations

Complex and potentially reusable constructions of themselves reusable symbols. Level

A certain perspective *or* a generalization from physical dimensions.

Another Level

Either an abstraction away from that level or a level that *that* level is itself an abstraction away from. (Meta-level: an abstraction away from any given level.)

A Description from Geometry

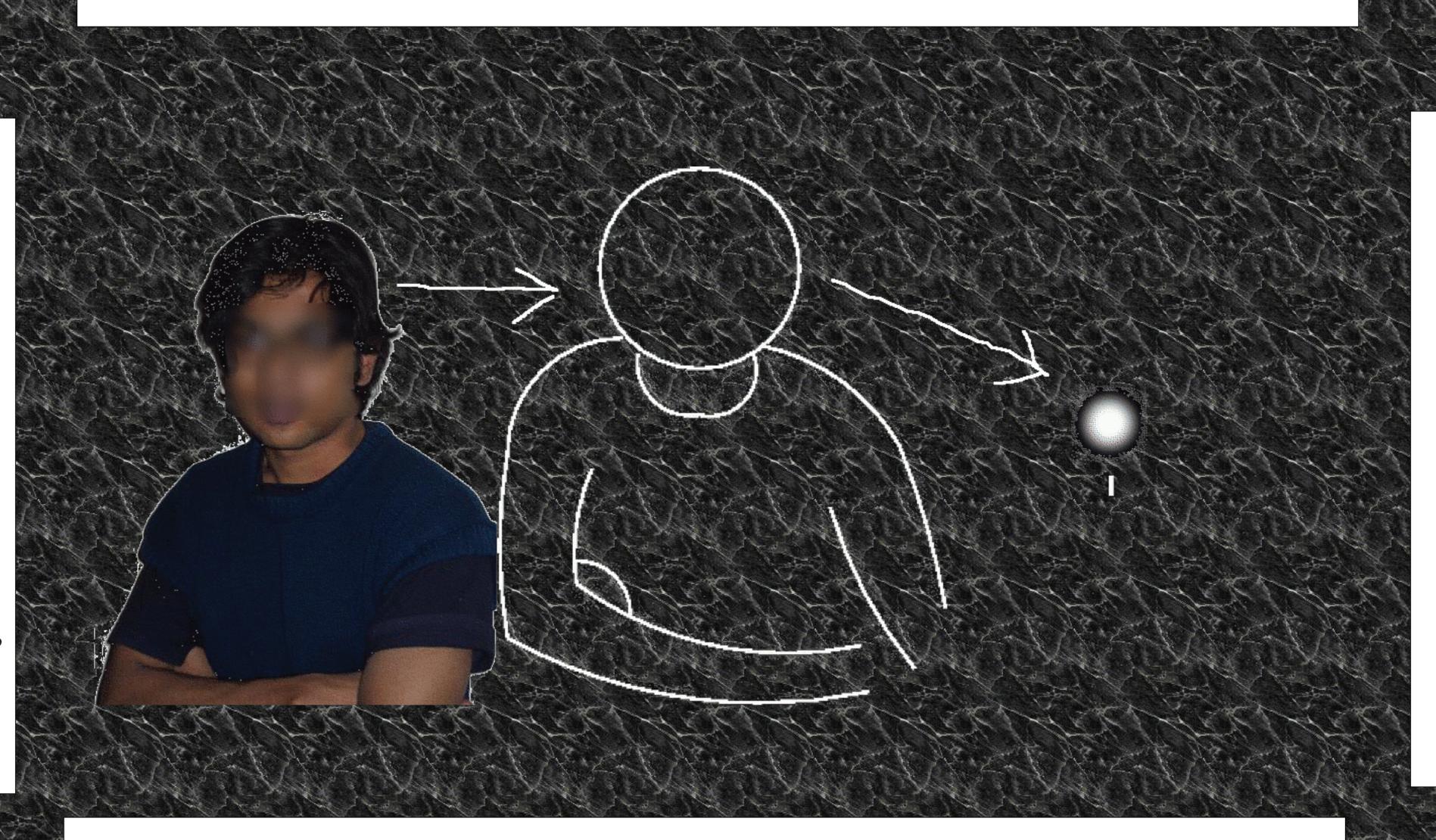
Knowledge as Personal: The Representation of Self in the Representation of Knowledge

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The Other as Self

"What is this strange someone who I thought was like me but isn't?"

- **SELF** and **OTHER** as high-level mental representations.
- **SELF** as the initial model for **OTHER**: "like-me-but-not-me"s.
- Imposition of SELF onto NOT-SELF.
- Differences belie the similarities.
- What to do when the script breaks down.



The Self as Other (I_1)

"There is a truth in the old idea that other people are the mirrors by which we view ourselves. Take the metaphor of a web: there is a sense in which each of us is the center point of her own web; there is another sense in which each of us is just another point in the web...."

- **OTHER** as the model for **SELF**.
- The face in the mirror.
- First-order representation.
- Representation of the organism as a whole.
- Compare Damasio's (2000) concept of the **CORE SELF**.

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"The I₂ is, if we are careful not to confuse the metaphor with the reality, the homunculus sitting in his Cartesian theatre of the mind, controlling the shell of an organism in which he sits...."

Third-order representation. No sense of agency.

- Concepts exist independently of neither subjects nor objects.
- One way to account for the subject is to model it internally to the representational system.
- Fears of taking an "anthropocentric stance" are unwarranted or answerable. The anthropocentric stance offers one approach to understanding our mental representations of "self" and "other" and how they relate.
- A "meta-level argument" shows how our different notions of "self" relate in a hierarchical fashion.

Damasio, Antonio (2000). THE FEELING OF WHAT HAPPENS: Body, Emotion and the Making of Consciousness. Vintage (Random House), London. Whitby, Blay (1997). Why the Turing Test is AI's Biggest Blind Alley, available online from <u>http://www.cogs.susx.ac.uk/users/blayw/tt.html</u> Whitby, Blay (2003). The Myth of AI Failure, CSRP 568, available from http://cogslib.informatics.scitech.susx.ac.uk/csr_abs.php?type=csrp&num=568&id=9340.



The Self as "Myself" (I_2)

- Second-order representation: representation of a representation.
- One step further removed from the original.

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- The representation of the organism as "mind".
- The self-reflective self: the person who is "me".
- Close to Damasio's notion of the "autobiographical self".

The Self Impoverished (I_2)

- "Who does the 'I' who thinks 'I' think that 'I' is?"
- The self-reflective self's sense of *itself*.
- A collection of some descriptions.
- Subject to revision and manipulation.

What forces us to stop here? Why no I₁?

CONCLUSIONS

References