

AAAI Symposium on AI and consciousness 2007

AI and Consciousness

Igor Aleksander, Imperial College London

For 47 others

Our leaders at AAAI



Antonio Chella

Robots that
explore spaces
must have a
sense of self



Riccardo Manzotti

C is also in
the world

A couple of simple but
incompatible thoughts

1

All living **intelligent systems** appear
to be conscious.

A couple of simple but
incompatible thoughts

2

To suggest that any **existing AI system** is conscious is seen as science fiction or charlatanism.

This stimulates those who feel that informational systems and theories have sufficient powers of explanation to, at least, ask whether the role of consciousness in living systems may be modelled, understood and exploited.



So, things happen ...

Some history of 'machine models of consciousness'....

2001: Cold Spring Harbour Workshop

2001 Swartz foundation workshop on Machine
Christof Koch's concluding comments in the final report

The only near universal consensus at the workshop was that, in principle, one day computers or robots could be conscious. In other words, that we know of no fundamental law or principle operating in this universe that forbids the existence of subjective feelings in artefacts designed or evolved by humans.

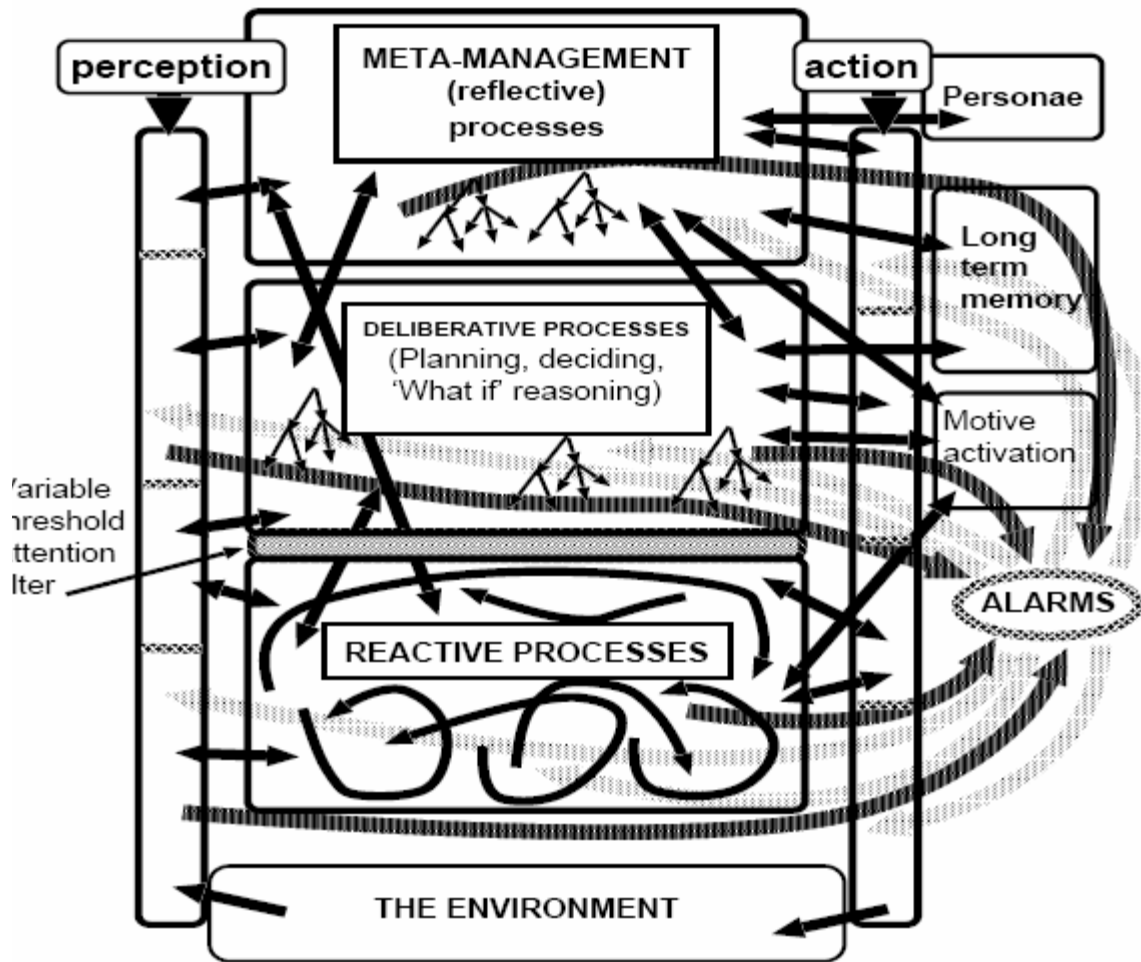
Our 'psychiatrist' (?)

Calculate
differentiation
and
integration

Giulio Tononi



'Much done in Artificial Consciousness is bogus'



Aaron Sloman

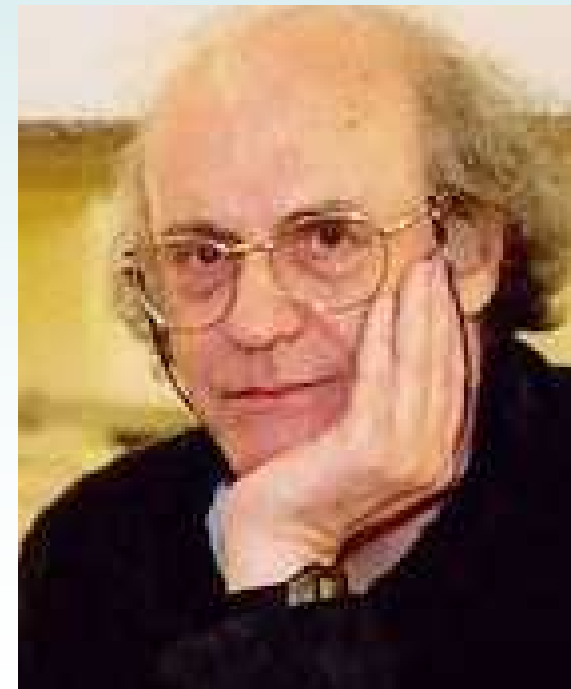


Figure 2: *H-Cogaff* – a three layer architecture.

Our Jimminy Cricket type of Conscience

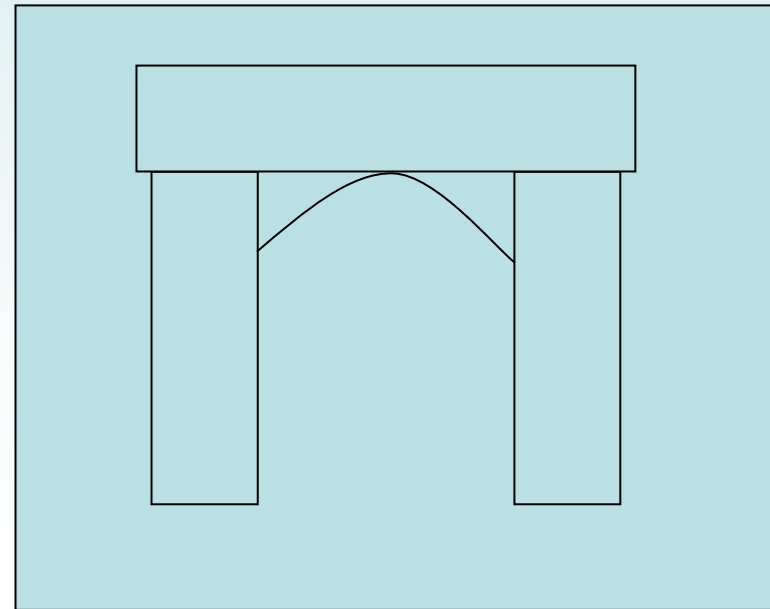
CANT BE
DONE!

Because we
have no way of
assigning causal
powers to **feeling**

Steve Harnad



Ron Chrisley Synthetic Phenomenology

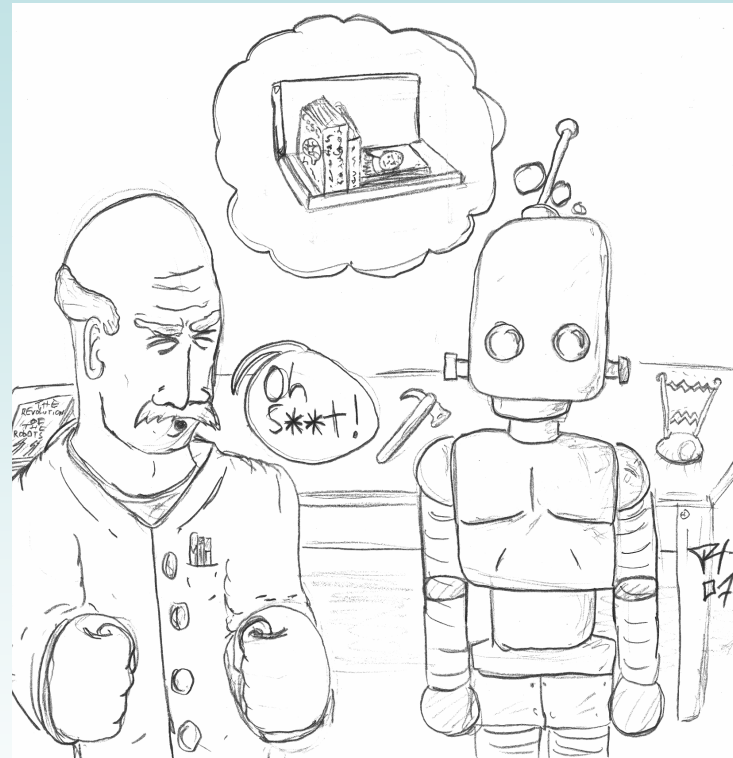


Beware of mirror tests of 'self'

Pentti Haikonen



Caution! The Best Schemes of Mice and Men...



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*At the end of the day Dr. Crank had developed a **shelf-conscious** robot.*

Our sympathetic philosopher

The importance of the body in the process of being conscious.

Susan
Stuart





Ben
Kuipers



Ricardo Sanz



Uma
Ramamoorth

Gerry
Hesslow

Marco Mirolli

Dustin
Connor

10 poster
contributors

Outcomes?

The C-word must be used with care:

weak AC (Building machines to clarify C) is OK, but systematic methodologies for this are in their infancy.

strong AC (Building machines that ARE C) is controversial, although it may contribute to weak AC.

The main task for AC researchers is to be more convincing!