

The Search for A Soul: ICA London Sept 2004

From the advertisement for this event

How do we define the human soul?

**If it requires memory, desire,
self-consciousness and self-reflection,
where does it begin and where does it end?**

Hmmmm.....

How many people here have souls?

Does this computer have one?

Blurb on the ICA Web Site

(<http://www.ica.org.uk/>)

How do we define the haecceitas of human life?

- If it requires memory, desire, self-consciousness and self-reflection, where does it begin and where does it end?
- Are we born with it, or does it require interaction with others?
- Could we construct it - or would a robot have to construct its own?
- Does the aged - or diseased - brain lose verbal communication yet retain a core imprint of character in the physical self?

Who needs Haecceity? What is it?

What does all this mean?

DICTIONARY DEFINITIONS

“thisness”

Do I have it? What about ‘thatness’, or ‘hereness’ or ‘nowness’ ??

“the essence that makes something the kind of thing it is
and makes it different from any other”

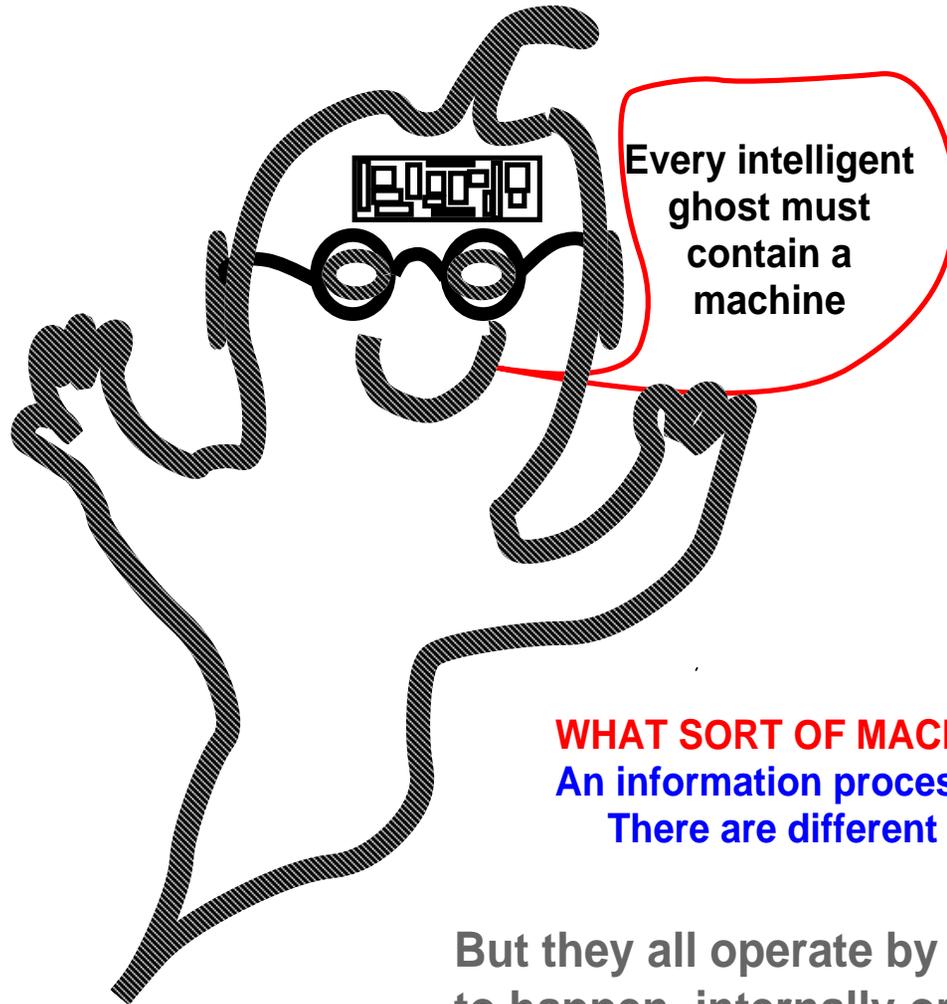
But what if I am not unique?

My identical twin might exist in some remote part of the universe just like earth?

Uniqueness is over-rated!

Is a soul a ghost in the machine?

What philosophers tend to forget - but the ghost of Gilbert Ryle knows well....



WHAT SORT OF MACHINE?

An information processing machine.

There are different sorts.

But they all operate by causing things to happen, internally or externally.

What sort of information processing machine?

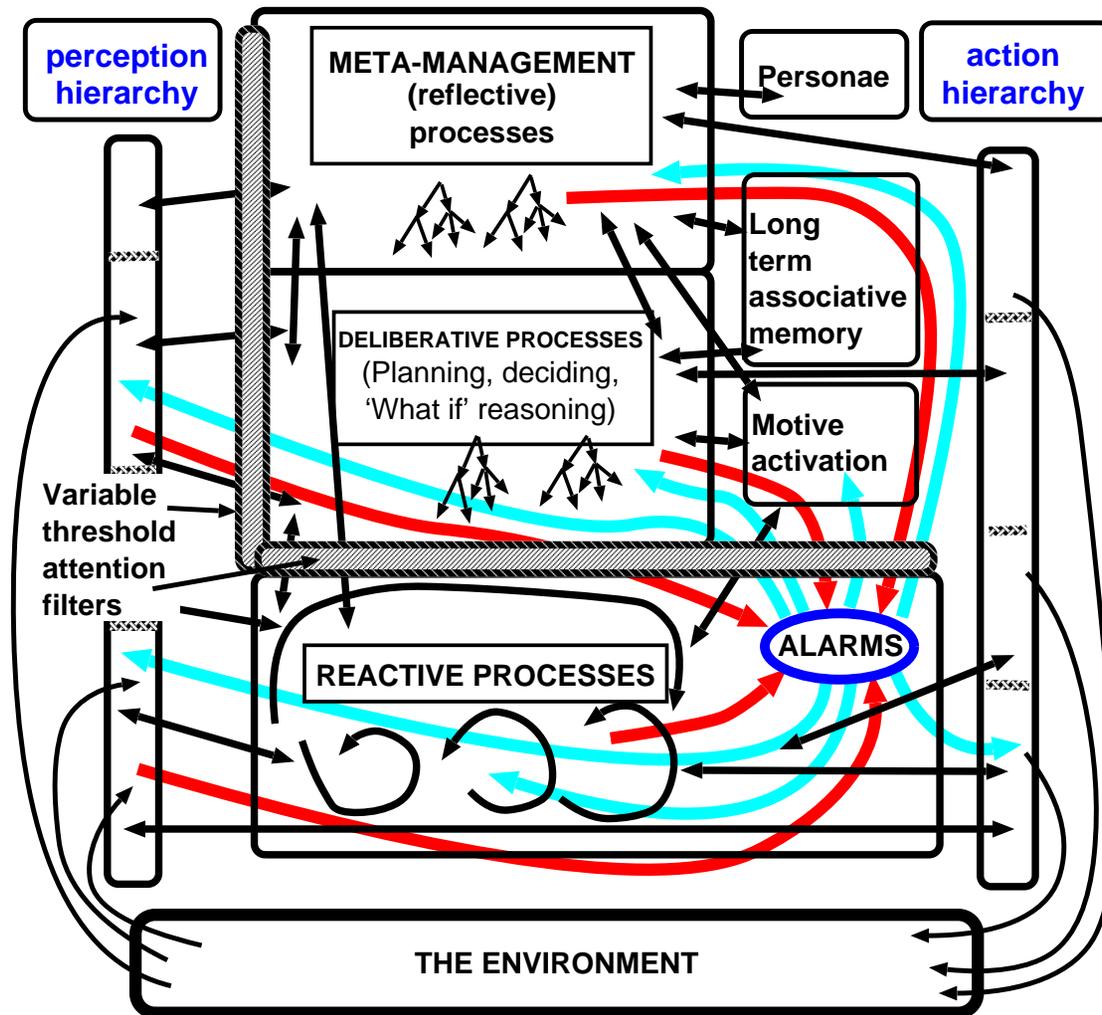
SOME EXAMPLES

(time permitting)

Some simple examples of running virtual machines with different sorts of capabilities (different sorts of causal powers).

- Talking machine (pretty dumb - does nothing unless sentence typed in)
- Moving-flocking
- Emoting
- Herding
- Interleaving reacting and planning
- Infant and carer

They will need complex architectures



For more on this see the Birmingham [Cognition and Affect](http://www.cs.bham.ac.uk/~axs/) project web site: <http://www.cs.bham.ac.uk/~axs/>

CONCLUSION

Souls are of interest only insofar as they sense and act,
on the environment, and on themselves.

We don't yet know what souls **are** because we don't yet
know all the things they **do**.

As we learn more and more about what they do, so will we
increase our chances of knowing how they can be
designed and built.

It is very likely that some aspects can be designed and others will have to be built by
the working souls themselves as they discover what sort of environment they are in
and how they need to interact with it.

Please join the project:
only 300, or maybe 3000, more years to go.

THANK YOU

THANKS

THIS MACHINE HAS A LINUX SOUL

I am very grateful to
the developers of **Linux**
and other free, open-source,
platform-independent, software systems.

LaTeX was used to produce these slides.

Diagrams are created using **tgif**, freely available from

<http://bourbon.cs.umd.edu:8001/tgif/>

Demos are built on **Poplog**

<http://www.cs.bham.ac.uk/research/poplog/freepoplog.html>