

ROBOTS WILL NOT HAVE FREE WILL

Do humans have free will?

What is free will?

Originally it was God's escape from responsibility

Believers were worried:

How could an almighty, all-knowing, omnipotent creator allow innocent people to be murdered, babies to die of horrible diseases.

Note: These slides were originally prepared for a light-hearted debate at the end of a one day conference organised by the British Computer Society in honour of Sidney Michaelson, at the University of Edinburgh, on 7th April 2001.

<http://www.dcs.napier.ac.uk/~mac/ifaces.htm>

**The 'theological' answer:
It is all a result of free-will:
humans have free-will when they lie, cheat,
murder, and con innocent little old ladies
out of their life-long savings**

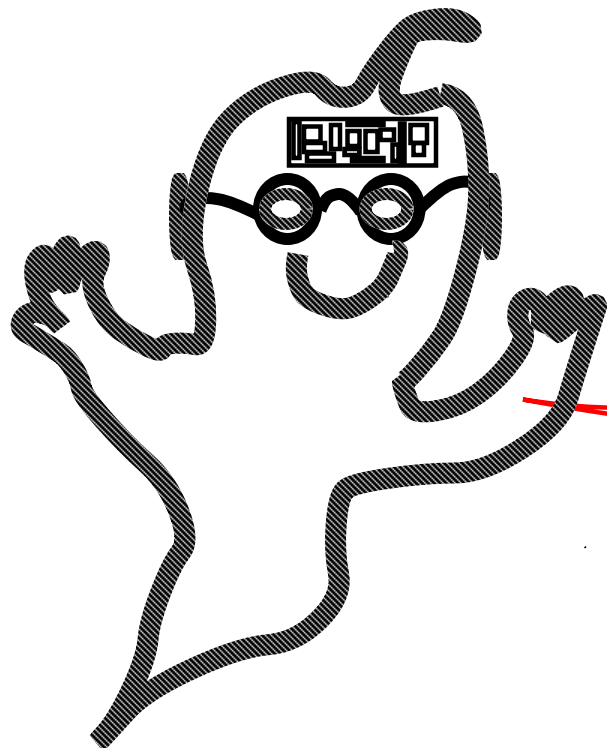
And when it's not humans it's Satan

**E.g. when a coal-tip buries a
primary school, horrible diseases
strike us down.**

**Either way, the idea is that decisions that
come out of free-will cannot be caused
by anyone or anything but the decider.**

**That is supposed to let God off the hook:
God cannot be the cause!**

What they all forgot - but the ghost of
Gilbert Ryle knows well....

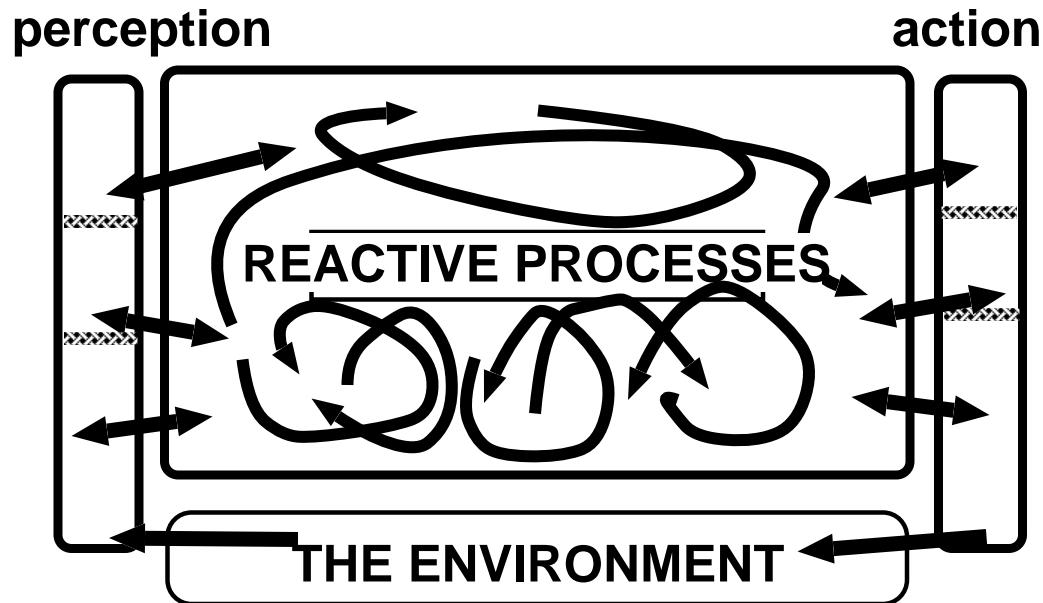


Every intelligent
ghost must
contain a
machine

WHAT SORT OF MACHINE?
An information processing machine.
There are different sorts.

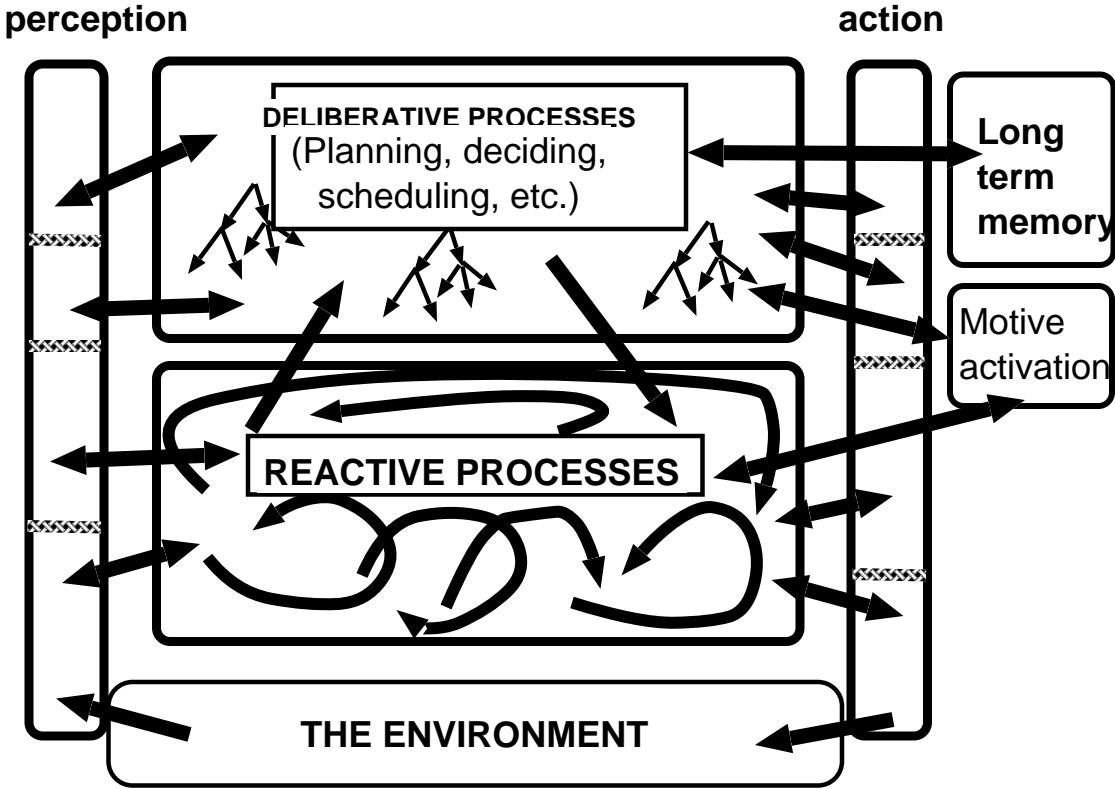
But they all operate by causing things
to happen, internally or externally.

One very common type - found in all biological organisms:



Reactive architectures:
our evolutionary ancestors and much of
what we are, E.g. most of our control
of bodily functions, posture, etc.

A more complex, hybrid type of information processing machine:



Humans, and some other animals, also have deliberative capabilities, like intelligent robots.

**Humans also have a concurrent
meta-management layer, which
may give the illusion that we have
the "theological" type of free-will**

**But that's just another part
of the information processing
machine.**

(Shown at the end)

Humans have (most of the time) a certain kind of freedom:

Our actions come from our own beliefs, desires, preferences, hopes fears, etc., as opposed to external influences that we cannot resist

But that is not good enough for "free will" theorists, who want us to be undetermined also.

But if we were undetermined, we could not function as biologically effective machines, e.g. eating when hungry, avoiding dangers, etc.

**So,
having free-will is both undesirable and
impossible anyway -- since we are all
well-designed information-processing
machines**

**(designed mostly by biological evolution, and
partly by our environment, our parents,
our culture).**

**Well-designed, human-like, robots
will not have it either!**

**So, robots, like humans, will
not have 'free-will':**

Vote

Against

The

Motion!

This was a light-hearted contribution to a debate
on the motion "*This house believes that robots will have free will.*"

To find out what I really think (about confusions in the question), look at:

<http://www.cs.bham.ac.uk/~axs>

<http://www.cs.bham.ac.uk/research/projects/cogaff/misc/four-kinds-freewill.html>

For anyone interested: The H-CogAff Architecture

See <http://www.cs.bham.ac.uk/research/projects/cogaff/03.html#200307>

