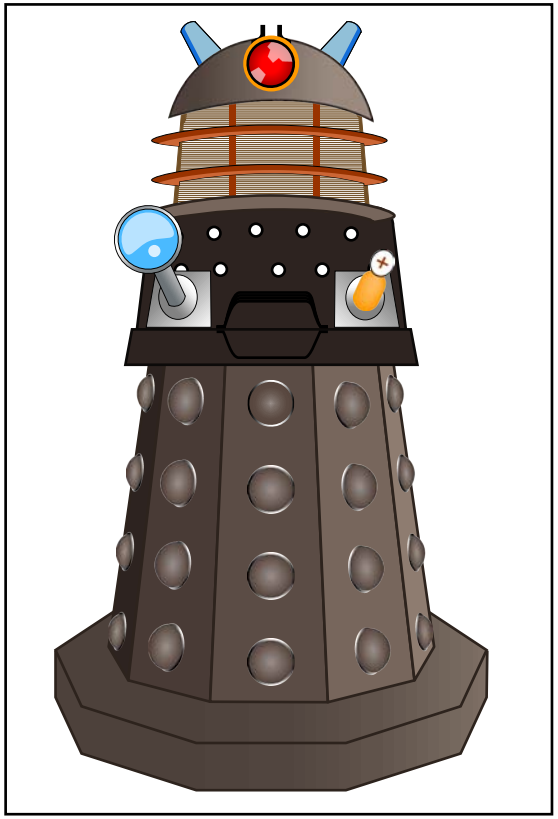
24.09 Minds and Machines
Fall 11 HASS-D CI

the Chinese room argument
(preliminaries): arguments and intentionality



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chatbots on God

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http://youtu.be/WnzlbyTZsQY

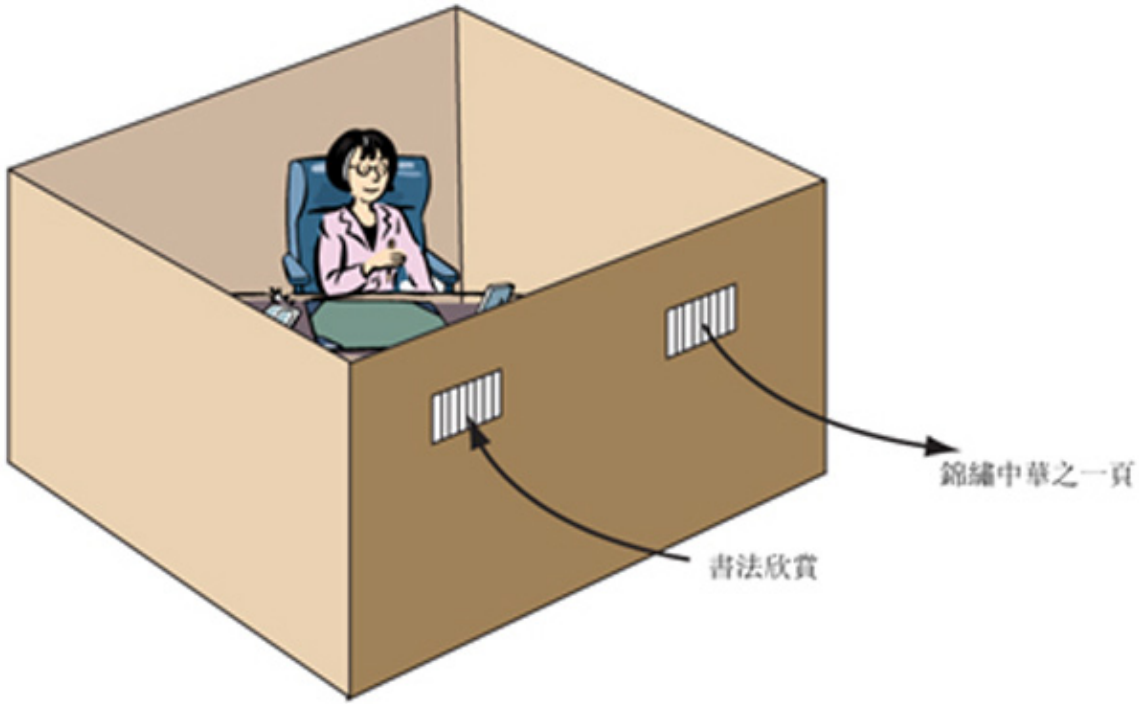
see also http://cleverbot.com/

can computers think?

Searle's 'Chinese room argument'

first, arguments and intentionality

intentionality figures prominently in 'Minds, brains, and programs'



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arguments

an argument is a list of sentences (statements), P1,...Pn, C

the Pi are the premises, and C is the conclusion

see the *guide to logic and argumentation*

two concepts to master: validity and soundness

valid or invalid?

P1: Romney is a Martian

P2: If Romney is a Martian, Perry is from Venus

C: Perry is from Venus

P1: Bachmann is not a Martian

C: Bachmann is not a Martian

P1: Perry is from Venus

P2: Perry is not from Venus

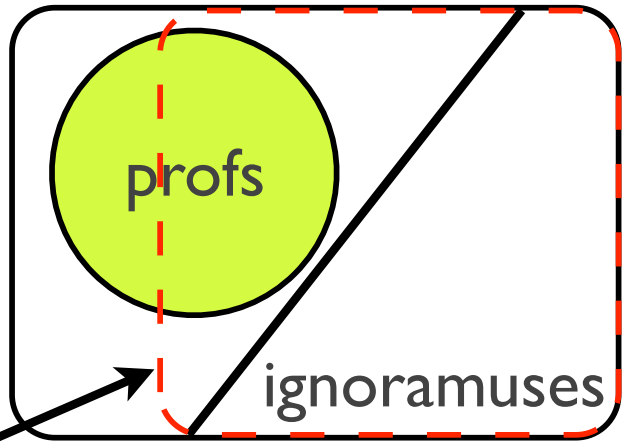
C: Bachmann is a Martian

valid or invalid?

P1: no professors are ignorant

P2: all ignorant people are vain

C: no professors are vain

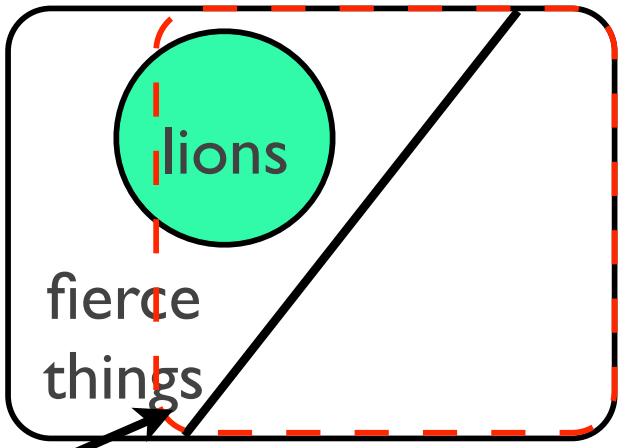


vain people

P1: all lions are fierce

P2: some lions do not drink coffee

C: some creatures that drink coffee are not fierce

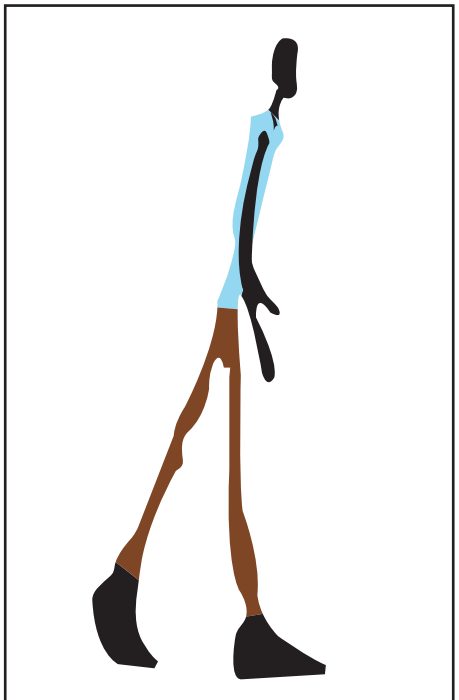


coffee abstainers

examples of intentionality

Fido is furry

Fido is furry!



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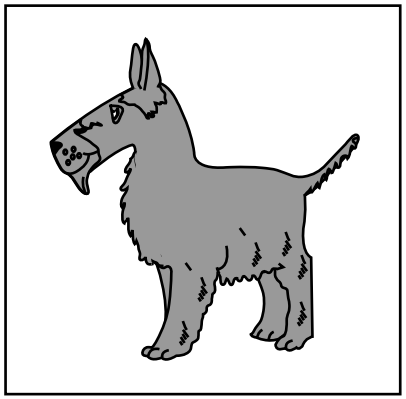
Fido es peludo

Fido is furry



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intentionality

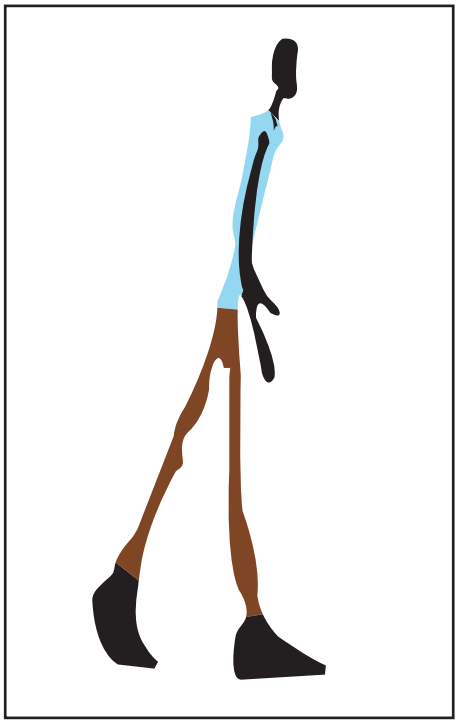
...is that feature, possessed by (e.g.) words and mental states, of being 'about'—representing, referring to—something. The belief that Fido is furry is a mental state that is about Fido. And the word 'Fido' refers to the dog, Fido. So these are two examples of intentionality.

NB: don't confuse intentionality with intending something. The latter is just one example, along with believing and desiring, of an intentional mental state.

derived vs. underived intentionality

Fido is furry

Fido is furry!



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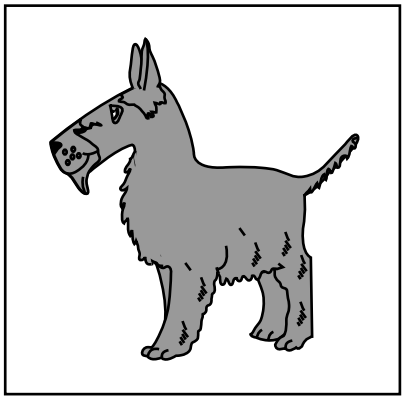
Fido es peludo

Fido is furry



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derived vs. underived intentionality

Something has derived intentionality just in case its intentionality can be explained in terms of the intentionality of something else (see Searle, *Mind: A Brief Introduction*, 5.) Plausibly, 'dog' refers to dogs in virtue of the beliefs, intentions, etc., of English speakers—hence 'dog' has derived intentionality; my belief that dogs have fur is an intentional state, and doesn't have its intentionality in virtue of the intentionality of anything else—hence my belief has underived (or original) intentionality. If thinking is conducted in a language written in the brain, then the words of this language have underived intentionality.

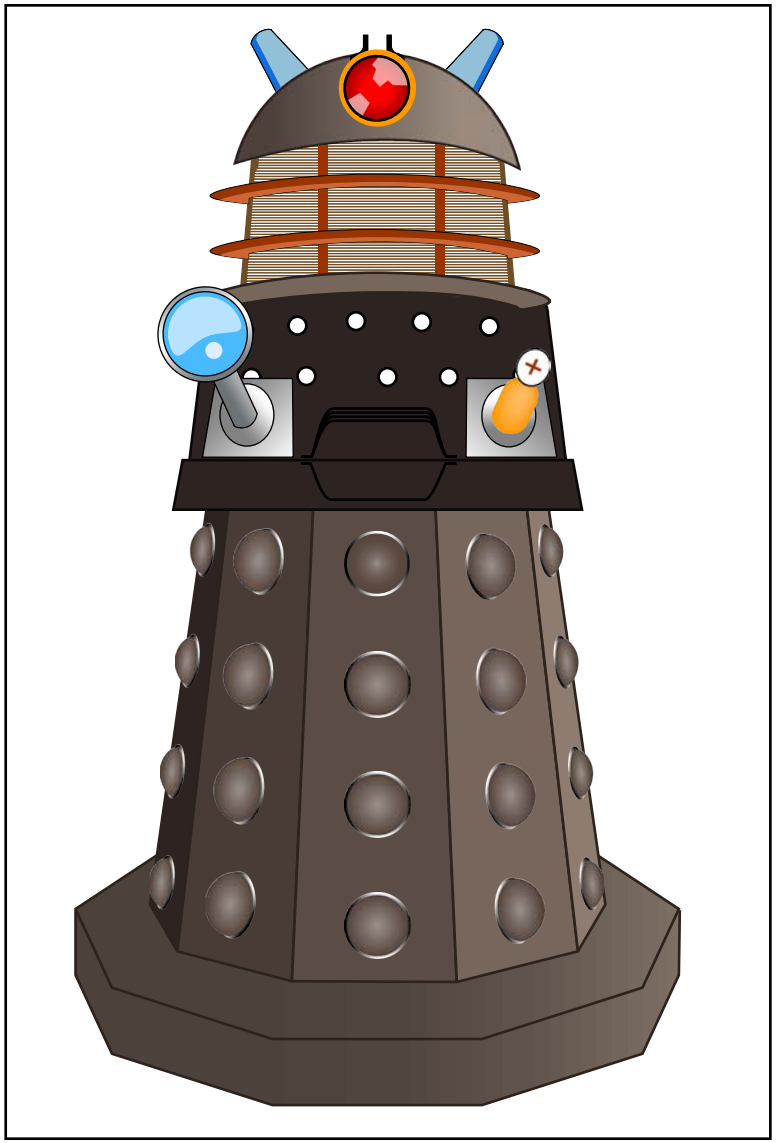
underived intentionality and the CRA

Searle's Chinese room argument is directed against the claim that instantiating a computer program is sufficient for underived intentionality

- it is plainly not sufficient for derived intentionality (the designers of the program might not take it to be 'about' anything)

reading for next session

read Searle, 'Minds, brains,...', and Block



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