Minds and Machines
spring 2003

- website
- times and places
- books
- assignments
- grading
- recitations

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"Without consciousness the mind-body problem would be much less interesting. With consciousness it seems hopeless."
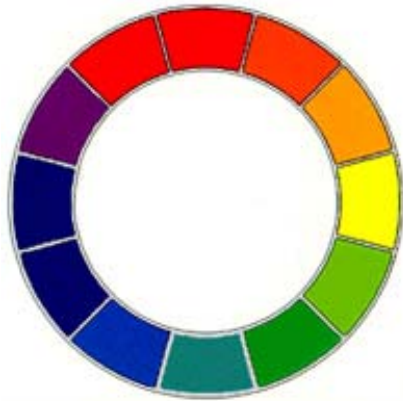
Nagel, "What Is It Like to Be a Bat?"

- cf. the "digestion-body problem"

Zombies

- not Hollywood zombies
- physical duplicates of us, but lacking conscious experience entirely
- zombies are imaginable, but are they possible?
- "materialists" say no; "dualists" say yes
- cf. a "digestion zombie"

The "inverted spectrum"

- devised by Locke, *An Essay Concerning Human Understanding* (1689)

- someone might have color experiences that are "inverted" with respect to yours

Invert's experiences
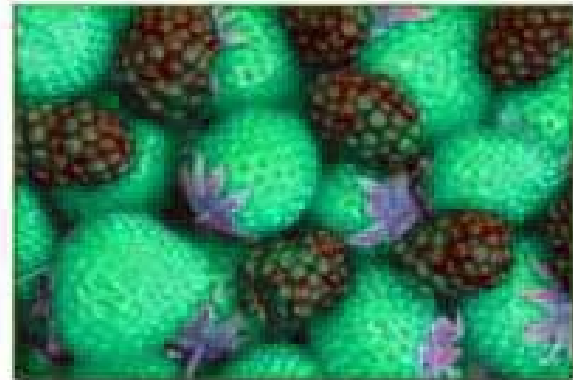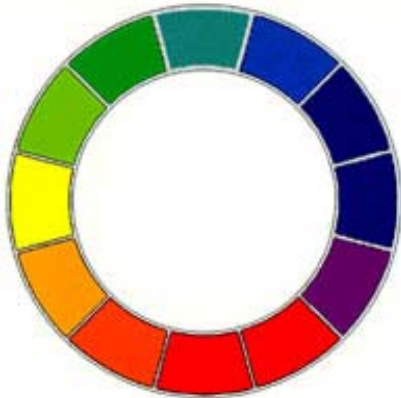
- arguably, an empirical possibility
- some philosophers think the thought experiment refutes various "materialist" theories of the mind

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Topics (I)

- warmup: the Chinese room
- dualism
- behaviorism
- the identity theory
- functionalism

Topics (II)

- content: intentionality and externalism
- content: psychosemantics
- anomalous monism and mental causation
- consciousness and intentionality
- consciousness and its place in nature
- the knowledge argument
- the explanatory gap and Kripke's argument revisited

Can computers think?

- according to "Strong AI", "the mind is to the brain, as the program is to the computer hardware"

- Searle's "Chinese room argument" purports to show that Strong AI is false

WEAK AI
The principle value of the computer in the study of the mind is that it gives us a very powerful tool -- e.g. it enables us to *simulate* various kinds of mental processes. (Cf. WEAK ARTIFICIAL METEOROLOGY.)

Obviously correct (ditto WEAK AM).

STRONG AI
An appropriately programmed computer literally has mental states (in particular, cognitive states). (Cf. STRONG AM -- an appropriately programmed computer literally has meteorological states.)

Disputable, and disputed by Searle. (STRONG AM, at least, is obviously false.)

The Chinese room

- A program: an algorithm (mechanical recipe) for transforming symbols into symbols

- The thought experiment exploits the fact that computer programs can be "multiply realized"

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"…you behave exactly as if you understood Chinese, but all the same you don't understand a word of Chinese. But if going through the appropriate computer program for understanding Chinese is not enough to give *you* an understanding of Chinese, then it is not enough to give *any other digital computer* an understanding of Chinese"

So, Strong AI is false

?

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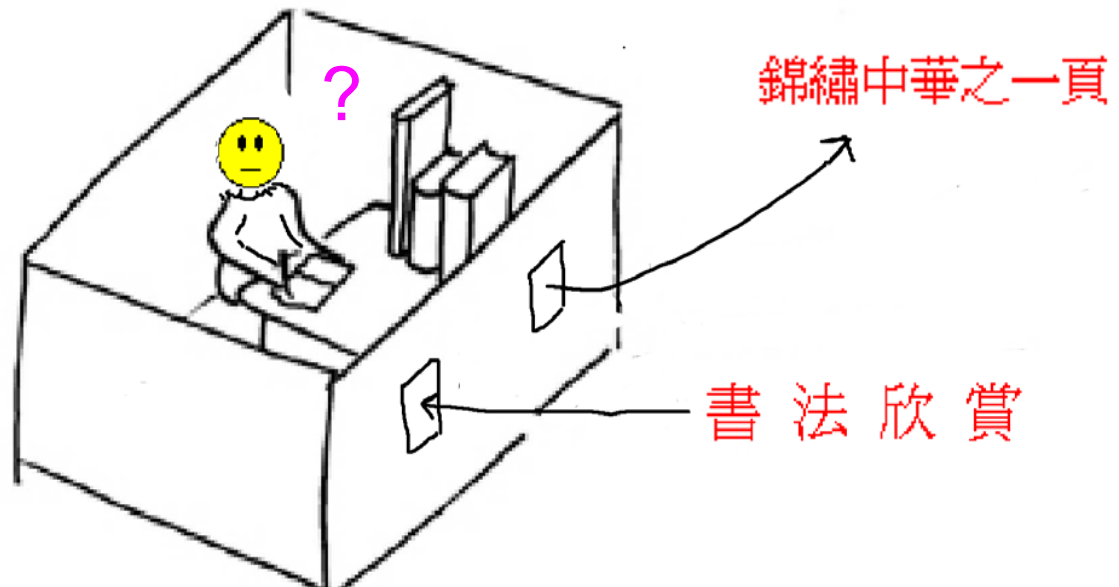
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- read Searle for next class