

24.09 Minds and Machines

spring 2007

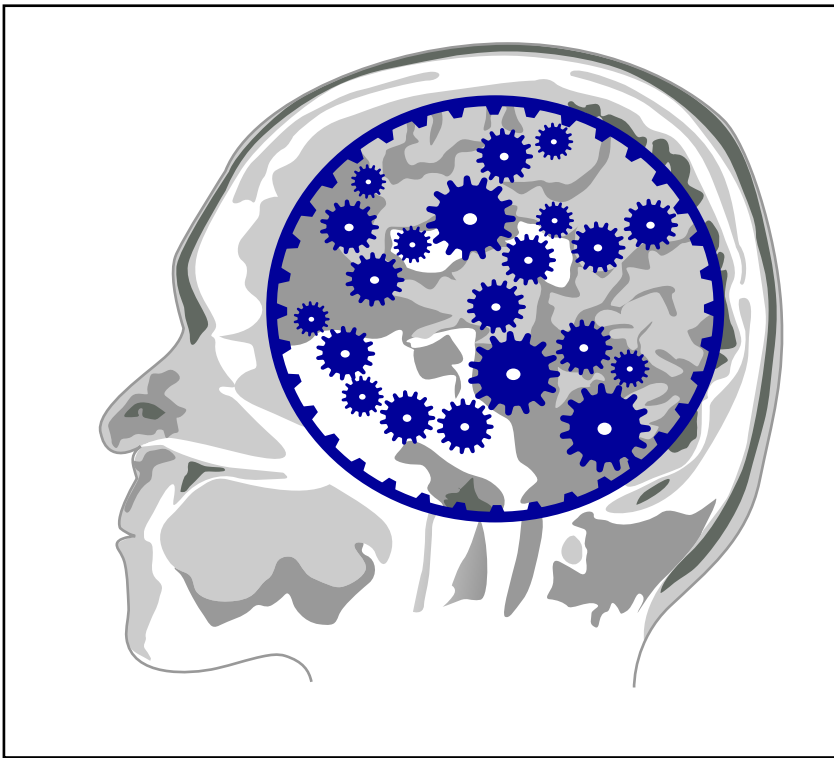


Figure by MIT OCW.

- after class salon today
- first paper topic available this friday
- paper guidelines to be distributed in recitation
- Dilip introduced

- arguably, the behaviorist confuses epistemology with metaphysics
 - how we find out about others' mental states
- versus
- what mental states are

roadmap

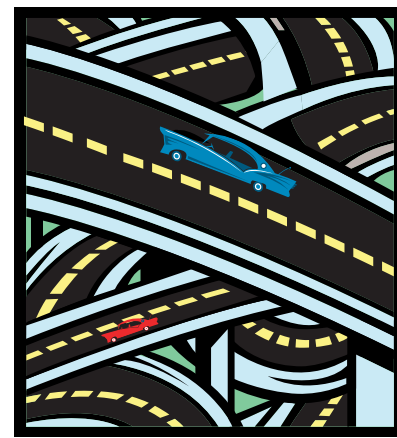
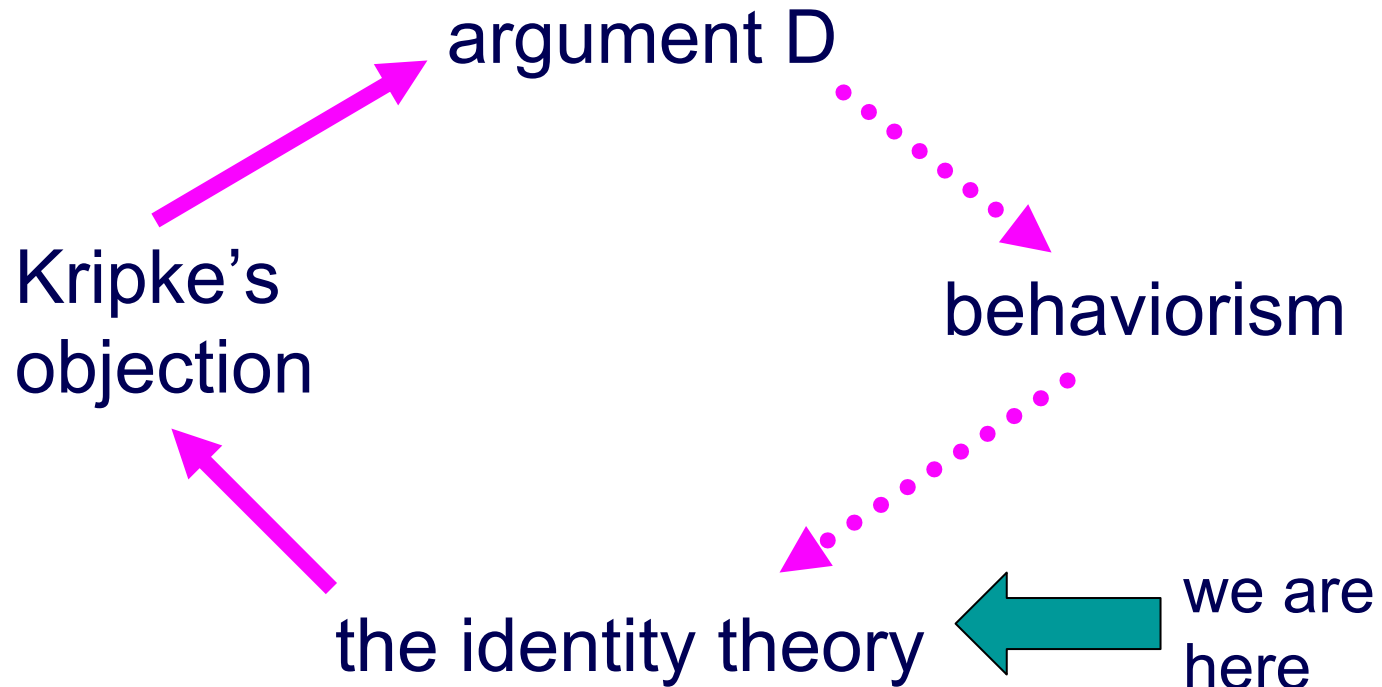


Figure by MIT OCW.



the identity theory

- proposed by JJC Smart and UT Place in the 1950s
- a “theoretical identity”
water=H₂O
heat=molecular kinetic energy
pain=c-fibers firing
(“c-fibers” is just a placeholder for a more realistic candidate)

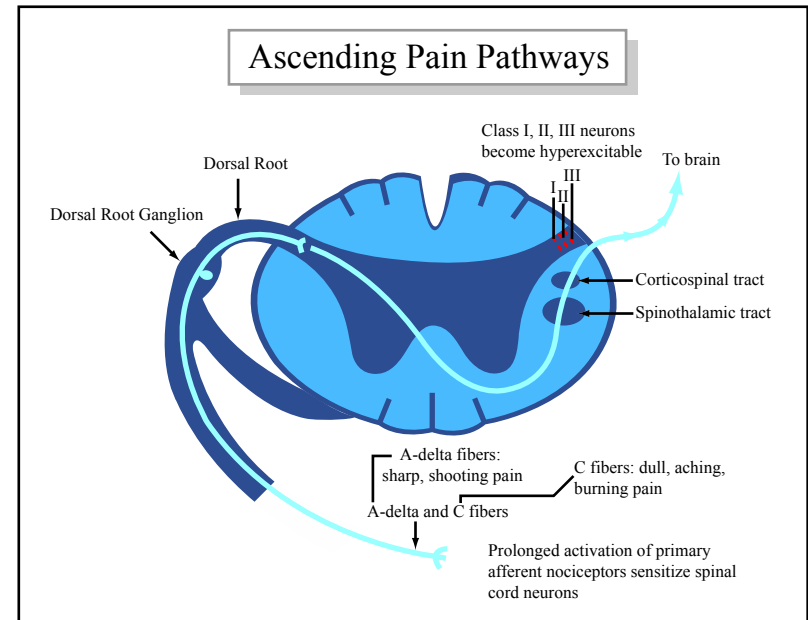


Figure by MIT OCW.

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Follow the link to the right.

- <http://www.arts.adelaide.edu.au/humanities/philosophy/utplace.html>

“Sensations and brain processes”

“the suggestion I wish to resist is...that to say ‘I have a yellowish orange after-image’ is to report something irreducibly psychical.

Why do I wish to resist this suggestion? Mainly because of Occam’s razor...That everything should be explicable in terms of physics...except the occurrence of sensations seems to me to be frankly unbelievable. Such sensations would be ‘nomological danglers,’ to use Feigl’s expression.”

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J. J. C. Smart.

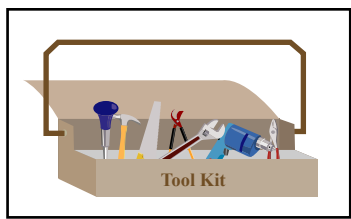
William of Ockham (1287-1347)

- Ockham was a nominalist: properties (or “universals”) don’t exist
- “Ockham’s razor”: entities are not to be multiplied without necessity

Image removed due to copyright restrictions.
William of Ockham.

identity

- an equivalence relation
- correlation vs. identity
 - footprints≈the burglar / Bill Sykes=the burglar
- ‘is’ of predication / identity
 - Twain is famous / Twain is (=) Clemens
- strict or numerical identity vs. “identical twins”
- “analytic” vs. “synthetic” identities
 - the shortest bachelor=the shortest adult unmarried male
 - the morning star=the evening star



from the philosophical toolkit:

Figure by MIT OCW.

types and tokens

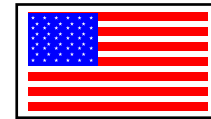
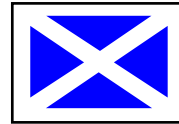
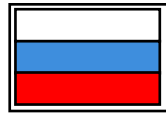
- this terminology is due to the “American Pragmatist” C. S. Peirce (1839-1914)

- example 1

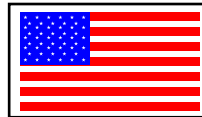
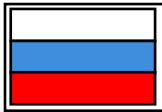
how many words in this sentence? ‘The cat sat on the mat’

6 tokens, 5 types

- example 2
how many flags?



Figures by MIT OCW.



6 tokens, 3 types

“type-type” vs “token-token” identity theories

- pain = c-fibers firing
 (“type-type”)
- Smith’s pain at 10am = c-fibers firing in Smith at 10am
 Jones’ pain at 11am = d-fibers firing in Jones at 11am
 ...
 (“token-token”)

the Smart/Place theory is a “type-type” identity theory

- despite the terminology, “type-type” identity theories are not best understood in terms of the “type-token” distinction
- it is better to think of the “type-type” theory as identifying properties rather than types
 - note that the American flag—taken either as a type or a token—is not a property
- the property of being in pain = the property of having firing c-fibers

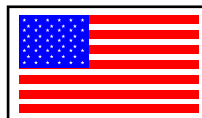


Figure by MIT OCW.

- the property of being in pain = the property of having firing c-fibers

implies:

- every event of feeling pain is identical to an event of undergoing firing c-fibers (and vice versa)
- so the so-called “type-type” identity theory implies a strong sort of token-token identity theory

Twain and Clemens

(see Block and Stalnaker, 382)

Image removed due to copyright restrictions.
Photograph of an aged Mark Twain.

≈

or

=?

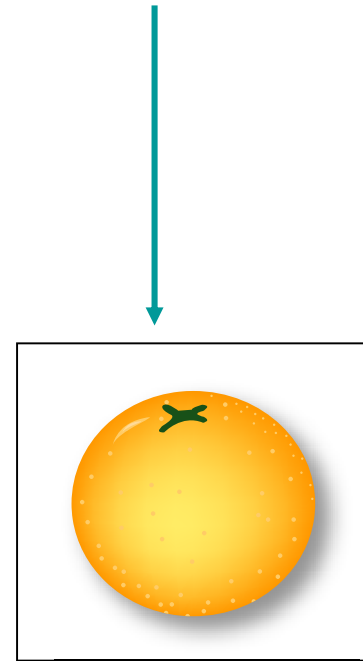
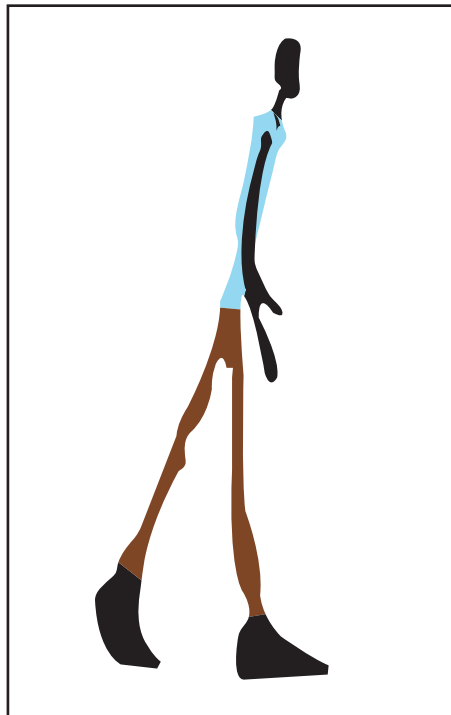
Image removed due to copyright restrictions.
Photograph of a youthful Samuel Clemens.

Mark Twain
born in Florida, Missouri, on
November 30, 1835...died in
Connecticut on April 21, 1910

Samuel Clemens
born in Florida, Missouri, on
November 30, 1835...died in
Connecticut on April 21, 1910

the experience vs. the object of
the

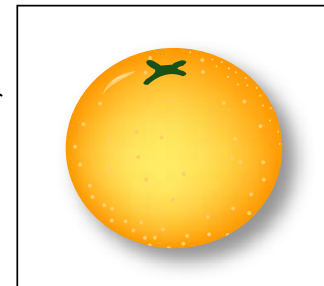
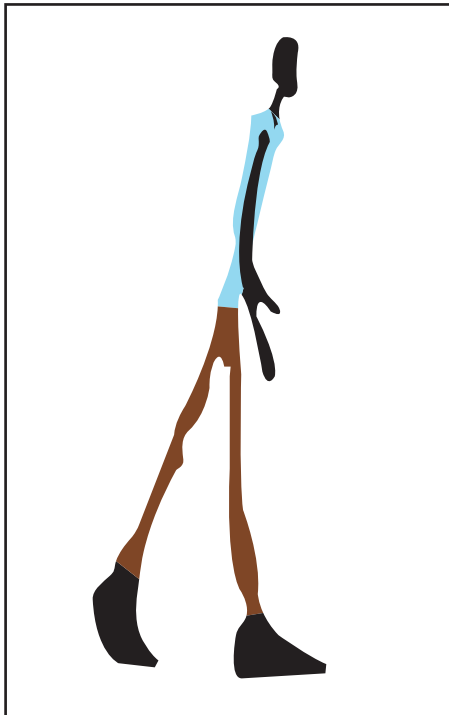
experience



Figures by MIT OCW.

the object of the experience is
colored orange, not the
experience itself

the experience = such-and-such
brain process



Figures by MIT OCW.

the identity theory does not identify
the object of the experience with a
brain process

objection: the after-image is orange, but the
brain process is not orange
so the after-image is not a brain process.
(cf. “Objection 4”)

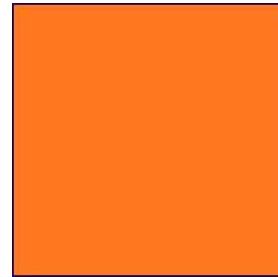
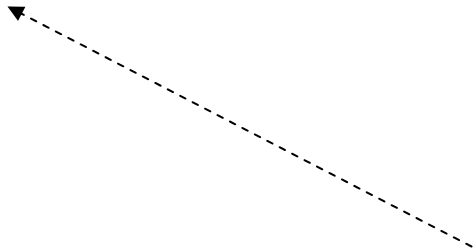
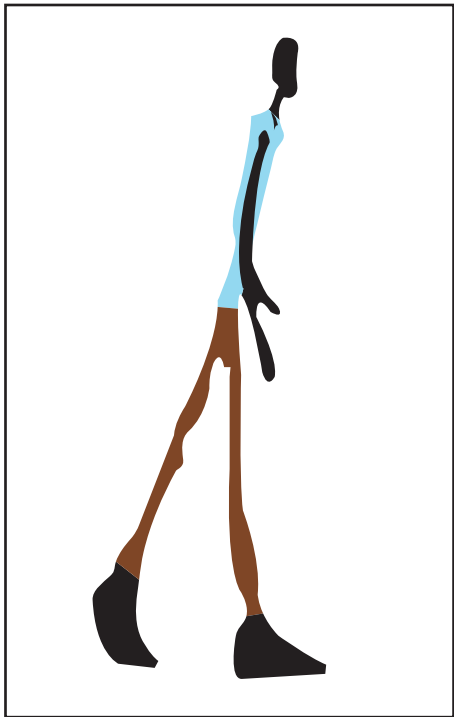


Figure by MIT OCW.

“I am not arguing that the after-image is a brain process, but that the experience of having an after-image is a brain process...”

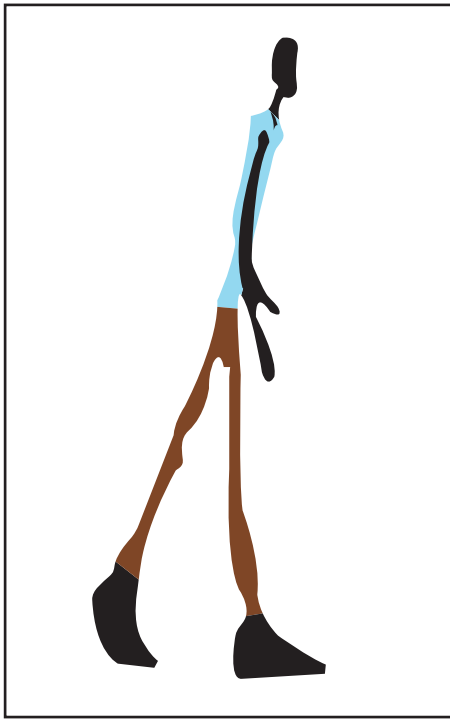
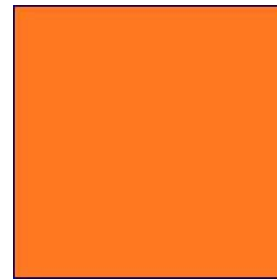


Figure by MIT OCW.



“There is, in a sense, no such thing as an after-image or a sense-datum, though there is such a thing as the experience of having such an image”

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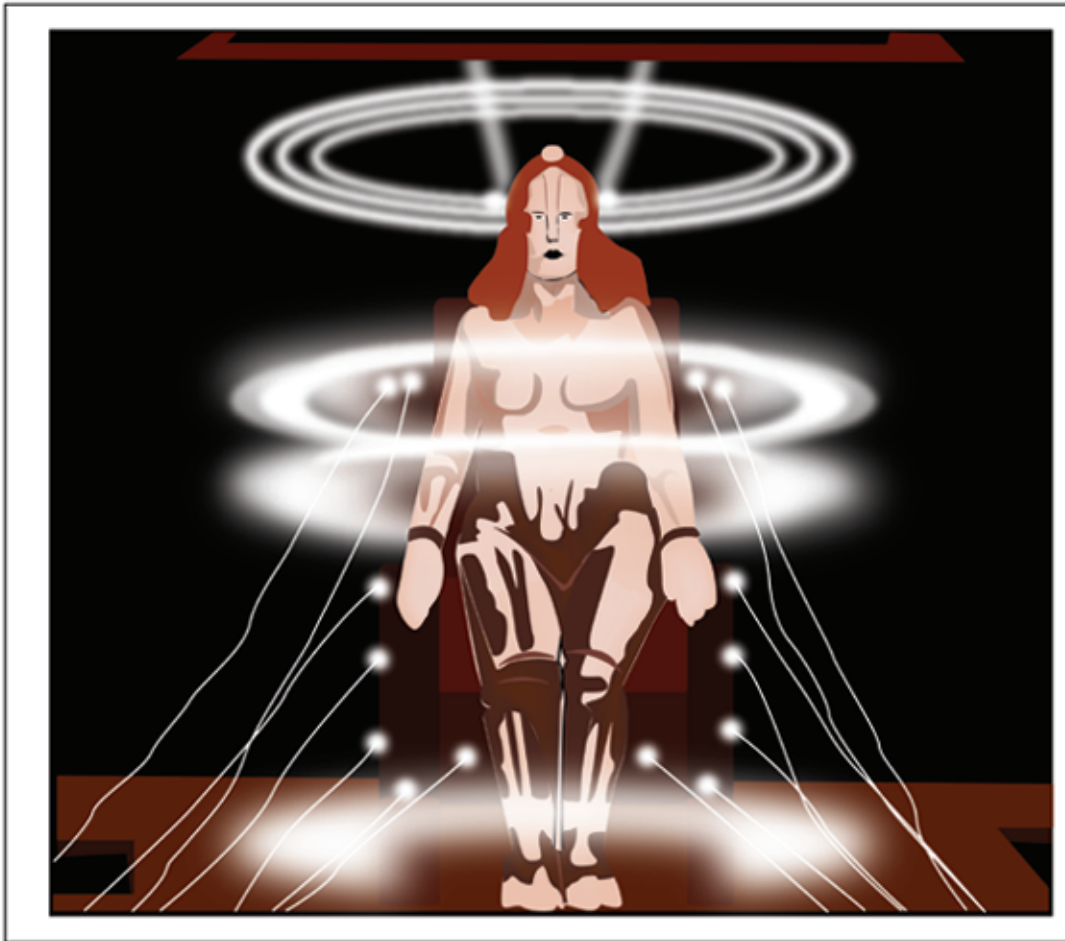


Figure by MIT OCW.

- remember the random “pop quizzes”!