

# 24.09 Minds and Machines

## spring 2007

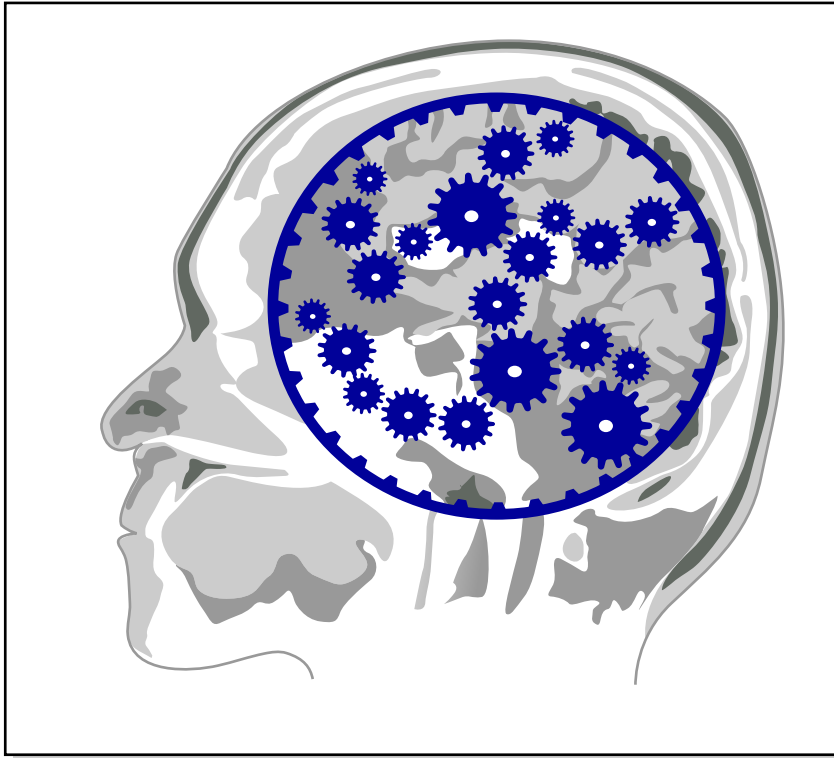
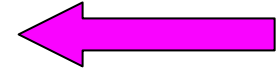


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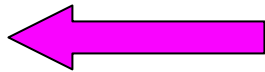
- Chalmers on consciousness and its place in nature

# resisting the knowledge argument

1 imprisoned Mary knows all the physical facts

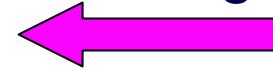


hence:

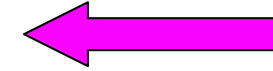


2 if physicalism is true, Mary (before her release)  
knows all the facts

3 after her release, Mary learns something—something  
she couldn't have known while imprisoned



4 if Mary learns something, she learns a fact



hence (from 3, 4):

5 Mary learns a fact

hence (from 2, 5):

6 physicalism is false



Figure by MIT OCW.

# knowledge-how and knowledge-that

- Ryle argued that “knowledge-how” (e.g. knowing how to swim) is not reducible to “knowledge-that” (e.g. knowing that kicking one’s legs makes one swim faster)
- does Mary really just acquire “know-how”?
- after all, it looks as if she could express her new knowledge she leaves the room by saying “Aha!, I didn’t know before that seeing red is like this, but now I do know that seeing red is like this”

# “Consciousness and its place in nature”

- the “easy problems of consciousness”
  - how do we “discriminate stimuli...report information...monitor internal states...”?
- the “hard problem of consciousness”
  - “how and why do physical processes give rise to experience? why do not these processes take place ‘in the dark’, without any accompanying state of experience?”

# physicalism (materialism)

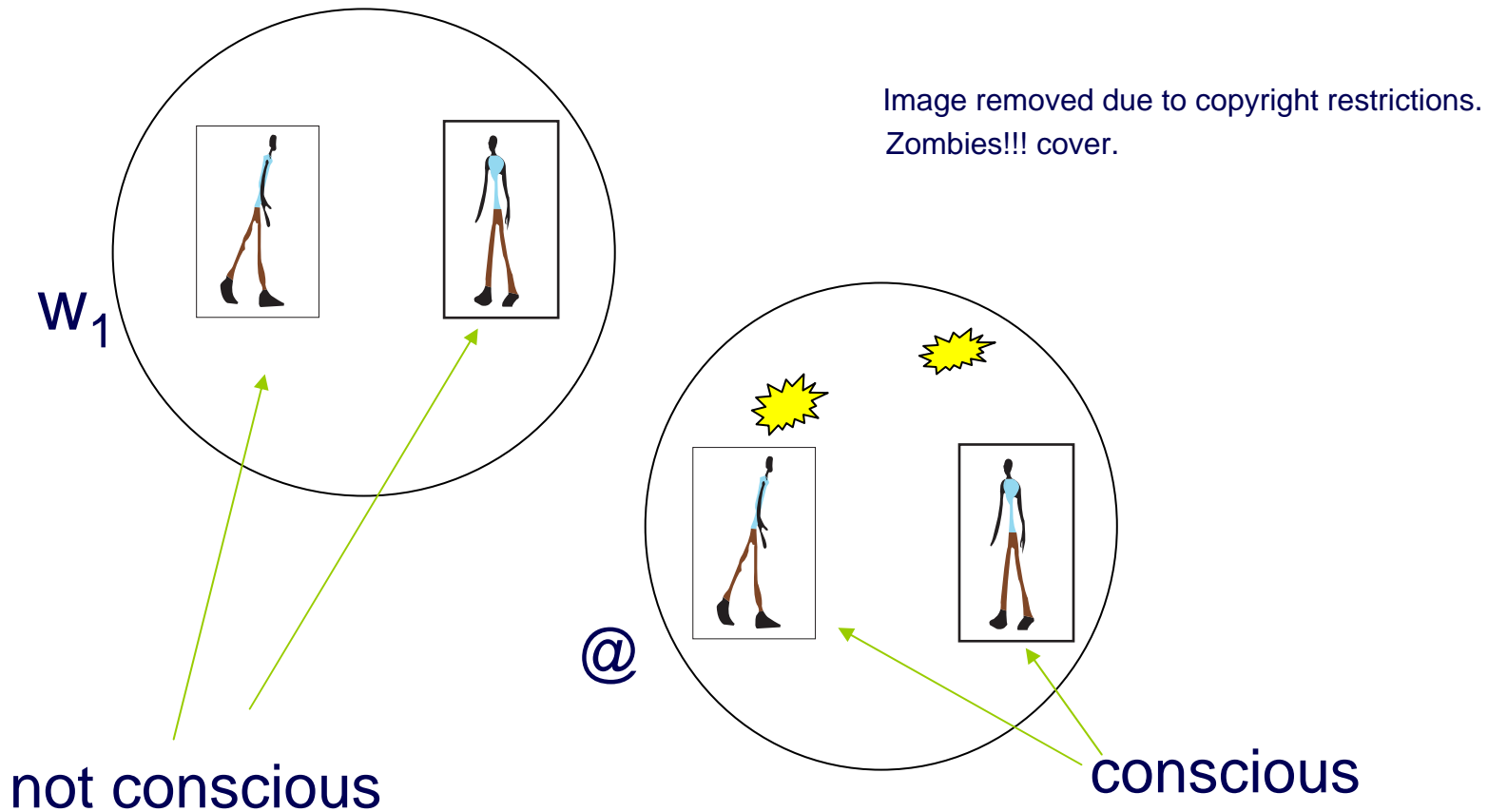
- a minimal (and slightly oversimplified) statement of the view:

any possible world that is a physical duplicate of the actual world is a duplicate simpliciter

- in particular, there are no “zombie” worlds

# a zombie world

$w_1$  is a molecule-for-molecule replica of @



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# the conceivability argument (a.k.a. “argument D”)

1. it is conceivable that zombies exist
2. if (1), it is metaphysically possible that zombies exist (there is a possible world in which zombies exist)
3. if it is metaphysically possible that zombies exist, then consciousness is nonphysical
4. consciousness is nonphysical

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# the explanatory and knowledge arguments

- ✓ the knowledge argument
- omitted: the explanatory argument
  - see Levine, 'Materialism and Qualia: the Explanatory Gap', in Chalmers



# type-A materialism

- denies premise 1:
  - it is conceivable that zombies exist

“The obvious problem with type-A materialism is that it appears to deny the manifest”

# type-B materialism

- denies premise 2:
  - if it is conceivable that zombies exist, it is metaphysically possible that zombies exist
- the main problem for type-B materialism is essentially Kripke's objection to the identity theory: the apparent possibility of zombies cannot be satisfactorily explained away

## recall Kripke's objection to the identity theory



absence of mke,  
felt as heat

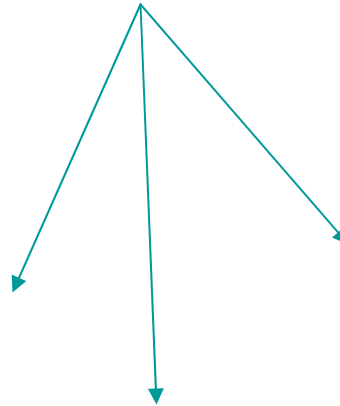
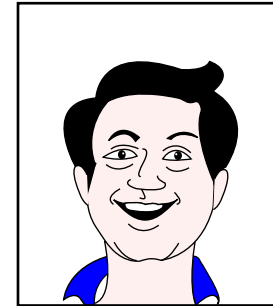
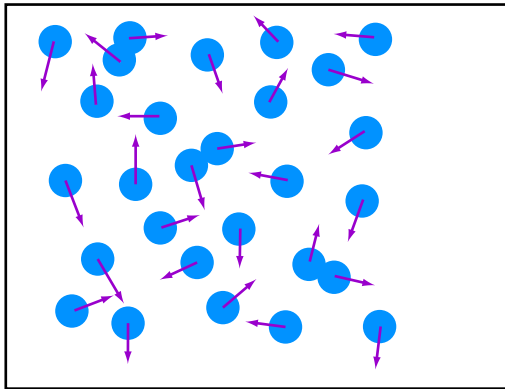


Figure by MIT OCW.

- this situation is possible
- but: it's not a situation in which there's heat but no mke
- it's a situation in which there's the sensation of heat but no mke

mke, not felt as heat



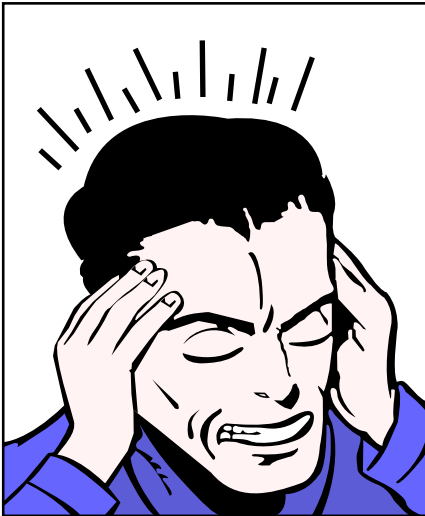
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- this situation is possible
- but: it's not a situation in which there's mke but no heat
- it's a situation in which there's mke but no sensation of heat

absence of  
c-fiber firing,  
felt as pain

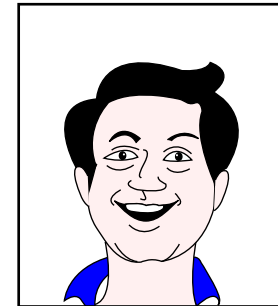
c-fiber firing,  
but not felt as  
pain

A



i.e. pain!

B



i.e. no pain!

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- situations A and B are possible (apparently)
- in B there's c-fiber firing but no sensation of pain
- but: this is a situation in which there's c-fiber firing but no pain
- B is a “partial zombie” situation

actual (conscious) Paris and Nicky



zombie Paris and Nicky



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- the zombie situation is possible (apparently)
- it is a situation in which Paris and Nicky are physically just as they actually are, but do not “feel conscious” (cf. p. 256)
- but: this is a situation in which Paris and Nicky are physically just as they actually are, but aren't conscious!

# type-C materialism

- denies this version of premise 1:
  - it is ideally conceivable that zombies exist
- accepts this version of premise 1:
  - it is prima facie conceivable that zombies exist
- denies this version of premise 2:
  - if it is prima facie conceivable that zombies exist, then it is metaphysically possible that zombies exist
- suggested by “What is it like...?” and McGinn, “Can we solve...?”  
“the type-C view...is not ultimately a distinct option”

# type-D dualism (interactionism)

- accepts the conclusion
- denies the causal closure of the physical:
  - sometimes the correct causal explanation of a physical event (e.g., the rising of Fred's arm) cannot be given in solely physical terms
- 'D' is for Descartes
- “By far the most influential objection to interactionism is that it is incompatible with physics”
- recall our earlier discussion of dualism



# type-E dualism (epiphenomenalism)

- accepts the conclusion
- accepts the causal closure of the physical:
  - the correct causal explanation of a physical event (e.g., the rising of Fred's arm) can always be given in solely physical terms
- “physical states cause phenomenal states, but not vice versa”
- see the “zombie twin” objection on p. 264
- “epiphenomenalism is a coherent view...[but] it is an inelegant view, producing a fragmented picture of nature”

# type-F monism (panprotopsychism)

- accepts/denies ??? (wait for discussion of Stoljar next week)
- “consciousness is constituted by the intrinsic properties of fundamental physical entities...phenomenal or protophenomenal properties are located at the fundamental level of physical reality”

# type-F monism (panprotopsychism)

- the “combination problem” (James)
  - “our phenomenology has a rich and specific structure...[how can] a large number of individual microphysical systems, each with their own protophenomenal properties...add up to this rich and specific structure...?”

“type-F monism...may ultimately provide the best integration of the physical and the phenomenal within the natural world”

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# a taxonomy of theories

- type-A materialism (a priori physicalism)
- type-B materialism (a posteriori physicalism)
- type-C materialism (a priori mysterianism)
- type-D dualism (cartesian interactionism)
- type-E dualism (epiphenomenalism)
- type-F monism (panprotopsychism)

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spring 2007

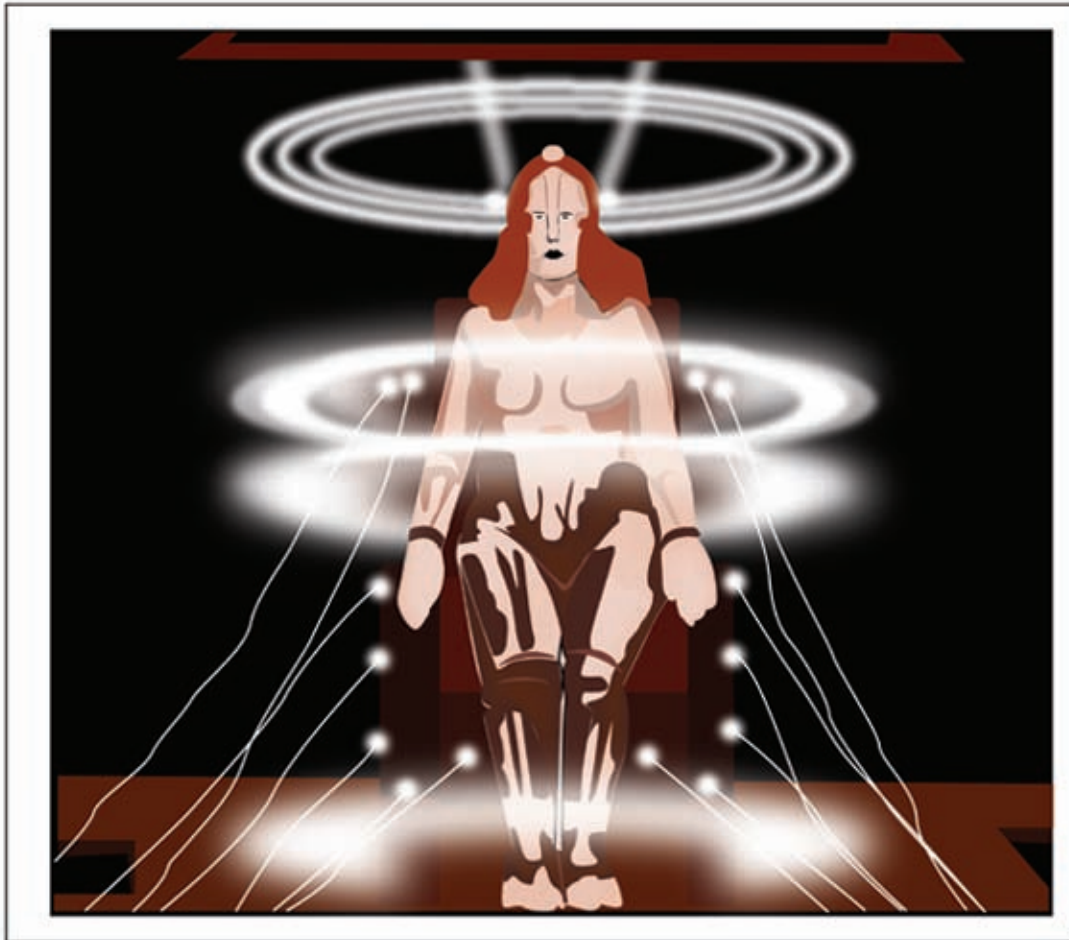


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- continue reading Chalmers, 'Consciousness and...'