

PHIL 1305

Are **we** living in
the Matrix?

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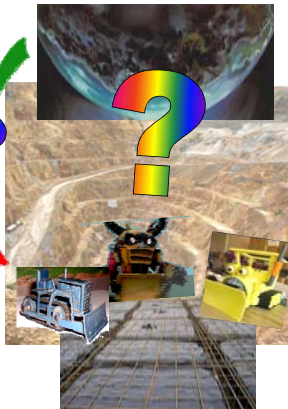
Descartes' plan

1. Bulldoze uncertain beliefs.
2. Find a certain foundation.
3. Establish that God exists.
4. Count on God to rule out worries about the external world.



What Descartes Accomplished

1. Bulldoze uncertain beliefs. ✓
2. Find a certain foundation. ?
3. Establish that God exists. X
4. Count on God to rule out worries about the external world. X



A possible way out

Use "abductive" inferences that are probable, but not certain.

- We aren't certain electrons are why lights turn on and motors spin, but it's reasonable to believe in electrons as the most probable explanation for all these events.
- Maybe our belief in daggers is reasonable as the most probable explanation for all our dagger-seemings.



But, Bostrom says...

Probabilistic reasoning should lead us to conclude we're probably in a Matrix, not out in the "real world".



(Without God) we **can't know for sure** what the external world is like – we **could be** living in a matrix.

We **can know with high probability** that we **actually are** living in a matrix.



Inductive Arguments

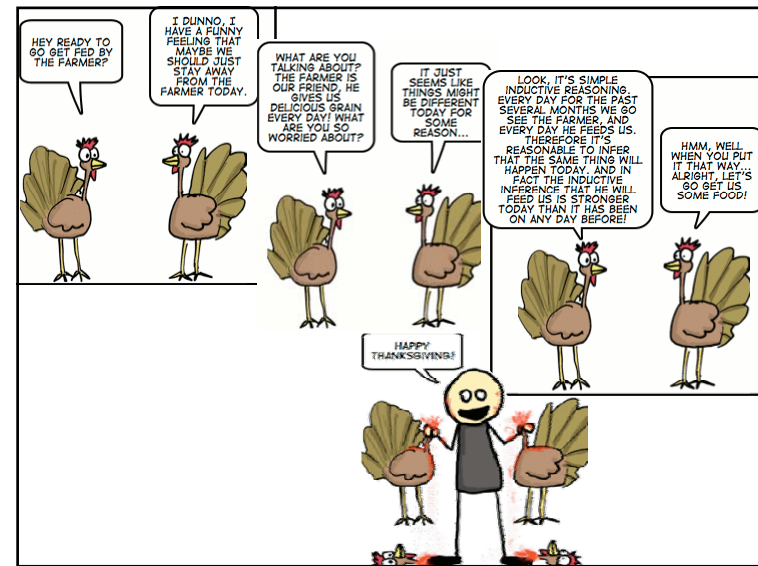
A weak guarantee: "If the premises are true, then the conclusion is probably true."



A large random sample of A's have been B's.

So (probably) all A's are B's.

- generalizing from a sample to other things outside that sample.
- the conclusion re-uses words/concepts that were observed to be true of the sample.





Bostrom's Simulation Argument

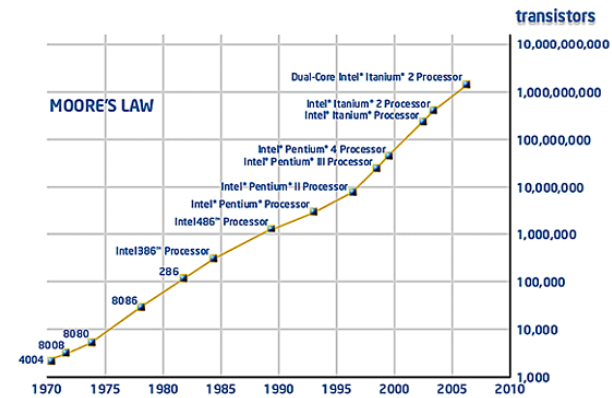
P1. Technology will advance so people can make matrices (simulations containing beings with experiences like ours).

P2. If people can make matrices, they will make a lot of matrices.

C1. So, out of all the beings with experiences like ours, most will be in matrices.

C2. So, we're probably in a matrix ourselves.

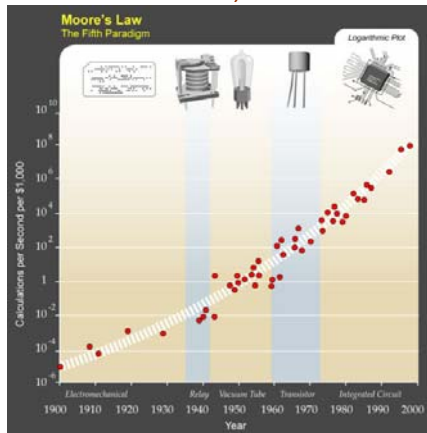
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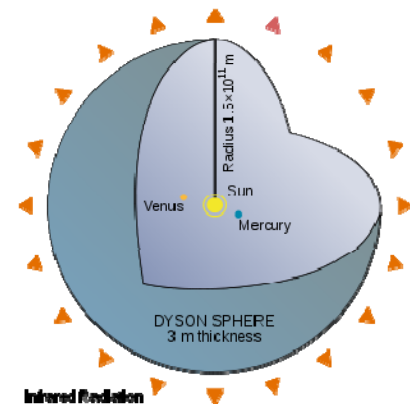
Exponential growth of computational power continued even as we went through very different sorts of computational technology.

Will this trend continue after we reach the physical limits of transistors?



P1. Technology will advance so people can make matrices (simulations containing beings with experiences like ours)

We (or some alien species) might someday dismantle moons, asteroids and even planets to build massive solar-powered computers with tremendous computational power.



1a. Humans and/or aliens will develop computational power that far exceeds the computational power of our brains.



1b. If a computer simulation includes a detailed simulation of the computations our brains perform, then it would contain a being with experiences like ours.

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P1. In the philosophy of mind section, we'll see that *functionalism* accepts 1b, and is widely accepted by philosophers and cognitive scientists. This premise could be wrong, but many people would be surprised.



P2. If people can make matrices, they will make a lot of matrices.

To understand Earth's history?
To explore alternate histories?
Immersive artwork?
Holodeck adventures?
Realistic "AI" opponents for computer games?
An interesting screensaver?
...



If you know that three "real people" and three simulated people are all having the sort of experience you're having, what are the chances you're one of the sims?

50%



What if it's 3 “real people” and
27 simulated people?



90%

Moral: The more matrices you think will end up
having been built, the more likely it is you're in one.



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Four Possible Responses

- 1a. Say that our technology (and that of any alien species) will collapse or stall out before reaching immense computational power.
- 1b. Say that a computer carrying out the same computations as our brains (even down to the finest details) would not have our experiences.
2. Say that any beings with the power to simulate a world like ours would be too ethical or too disinterested to do so.
3. Accept that we're probably simulations ourselves.

What difference does it make?

Is life in a matrix as good as life “in reality”?

Is a matrix more likely to end abruptly?

Would being in a matrix affect religion?

What sort of afterlife might a matrix allow?

