

inputs, outputs, and other mental states. from machine state functionalism by locating computational states rather than in the various possible implement them. A given computation (2 x 2, med by many different machine table operations is also referred to as psychofunctionalism.

of Computationalism

consciousness assumes the following 3 premises.
/ physical system running an
chine table is sufficient for supporting

necessary that the system support
states the system would have gone into

ysical systems engaged in the same
identical mentality (assuming they have
of physicalism in the "Does physicalism
conscious?" arguments on this map.

40 Tim Maudlin, 1989

Computationalism contradicts itself. Imagine 2 machines are engaged in the same physical activity and are running the same consciousness program. One of these machines supports counterfactual states, whereas the other doesn't. The computationalist must claim, based on the nontriviality condition, that the machine capable of supporting counterfactual states is conscious and the other isn't. But this contradicts the supervenience thesis: each machine exhibits the same physical activity, but according to computationalism only one is conscious.

Note: The machines Maudlin describes are actually complex systems of water troughs, hoses, chains, and pipes.



Tim Maudlin

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counterfactual: Counterfactuals are conditional (if-then) statements whose "if" clause runs counter to the facts of reality. For example, the statement "if pigs had wings then they would fly" is a counterfactual, because the "if" clause—that pigs have wings—is false.

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Does physicalism show that computers can be conscious?

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51

Building a conscious machine. Physicalism lays the foundation for a conscious computer, but other important conditions must be also be satisfied before the project of building a conscious computer will have any chance of success.

55 Gottfried Leibniz, 1714
A conscious machine could not be explained by its physical workings.

If we were to walk into an enlarged machine that could "think, feel, and have perception," nothing witnessed could explain its conscious qualities.



Gottfried Leibniz

Corbis-Bettman

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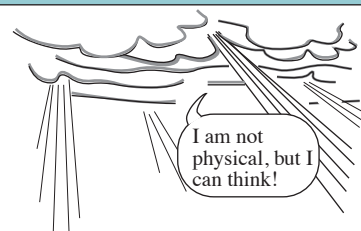
56 Keith Gunderson, 1985

The relationship between physicalism and machine intelligence cannot be settled a priori. We should not assume that physicalism applies categorically to everything in the universe. Physicalism may be true for machines or for humans, or for both, but there is no intrinsic a priori way to settle the matter.

a pri • o • ri: Literally, "prior to" experience. a priori knowledge (in the form of concepts, propositions, or judgements) is knowledge gained or applied without recourse to experience of the world. Proposed examples of a priori knowledge include that $2 + 2 = 4$, that all material bodies exist in space and time, and that God exists.

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57 Dieter Birnbacher, 1995
What about God? Belief in a Christian god is incompatible with the claim that consciousness requires a physical basis. God can presumably think, yet is not physical or biological.



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from analogy

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