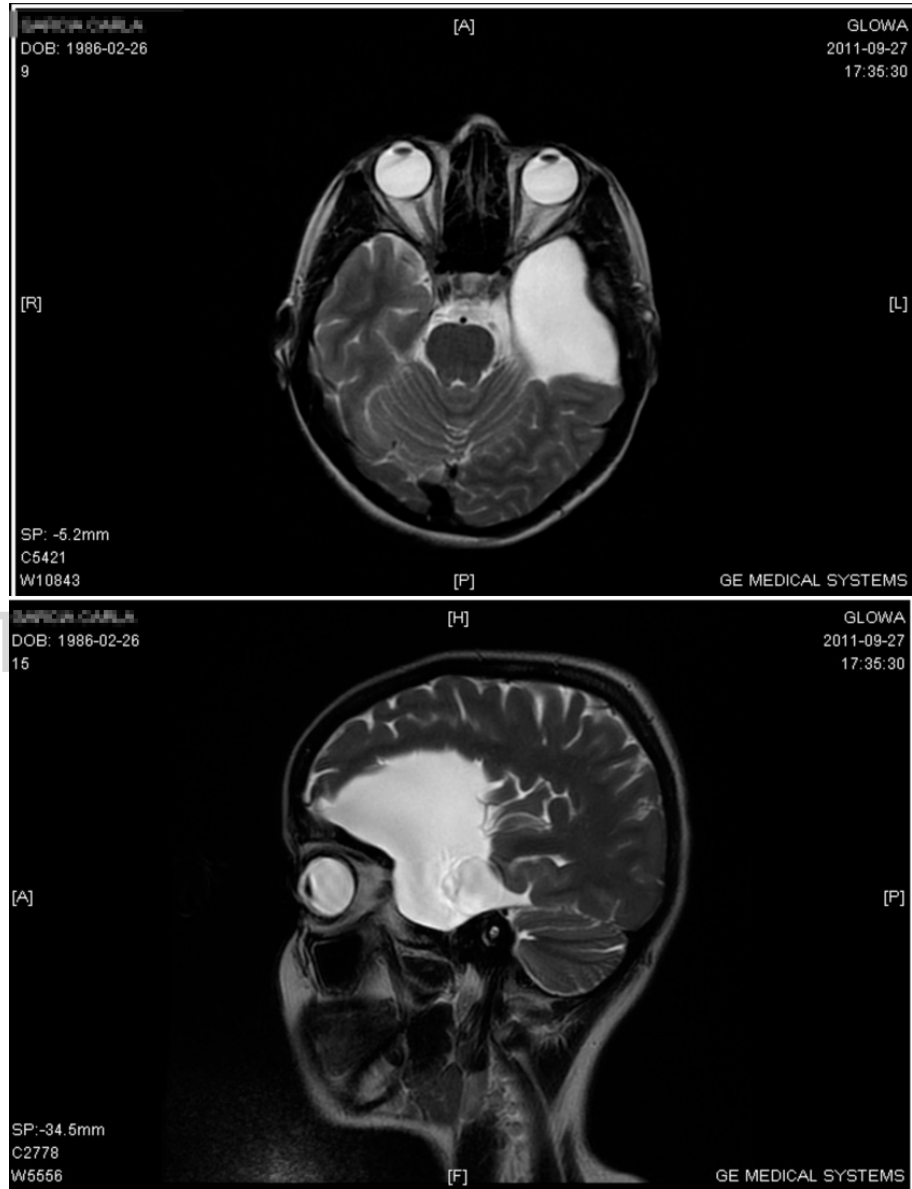


Do I Have Free Will?

Part I: The Challenge from Determinism

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Part II: Terminism

MRI scan of an arachnoid cyst
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I Free will and responsibility

To say that we have free will is to say that what we do is in some sense “**up to us**”. What this means is itself a source of debate, but it means something like this:

- Various alternative options are **open to us** (alternative possibilities)
- We can **choose among them** in accordance with our intentions, desires, etc. (control).
- What we do **originates** in us, and not in external causes (origin).

Why does it matter whether or not we have free will?

Free will seems to be a **necessary condition for moral responsibility**. If we don't have free will—if our actions are never up to us—then we seem to be excused responsibility for everything we do, and deserve neither reward nor punishment, praise nor blame.

2 The challenge from determinism

Premise 1 (determinism):

Our actions are determined by facts beyond our control.

Premise 2 (incompatibilism):

If our actions are determined by facts beyond our control, then we do not have free will.

Conclusion:

We do not have free will.

Your reaction to this valid argument defines your position in the traditional free will debate.

Reject Premise 1 → you are a 'libertarian'

Accept Premise 1 but reject Premise 2 → you are a 'compatibilist' or 'soft determinist'

Accept both premises and the conclusion → you are a 'hard determinist'

3 Why believe determinism?

Physical determinism: The initial conditions of the universe and the laws of physics determine everything that happens.

- Physical determinism, when combined with the claim that the initial conditions of the universe and the laws of physics are **beyond our control**, entails determinism in the sense that challenges free will.
- For a long time, **Newtonian physics** was widely seen to have vindicated physical determinism.

3 Why believe determinism?

Laplace's demon:

“We may regard the present state of the universe as the effect of its past and the cause of its future. An intellect which at a certain moment would know all forces that set nature in motion, and all positions of all items of which nature is composed, if this intellect were also vast enough to submit these data to analysis, it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atoms; for such an intellect nothing would be uncertain and the future just like the past would be present before its eyes.”

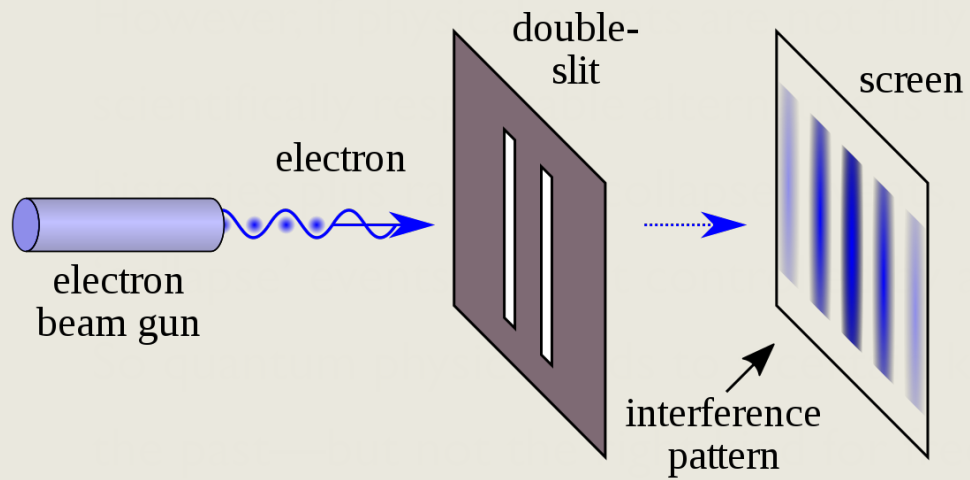
Pierre-Simon Laplace, *A Philosophical Essay on Probabilities*, 1814
(trans. Truscott and Emery, 1902)

3 Why believe determinism?

Q: But what about **quantum physics**? Isn't quantum physics **indeterministic**?

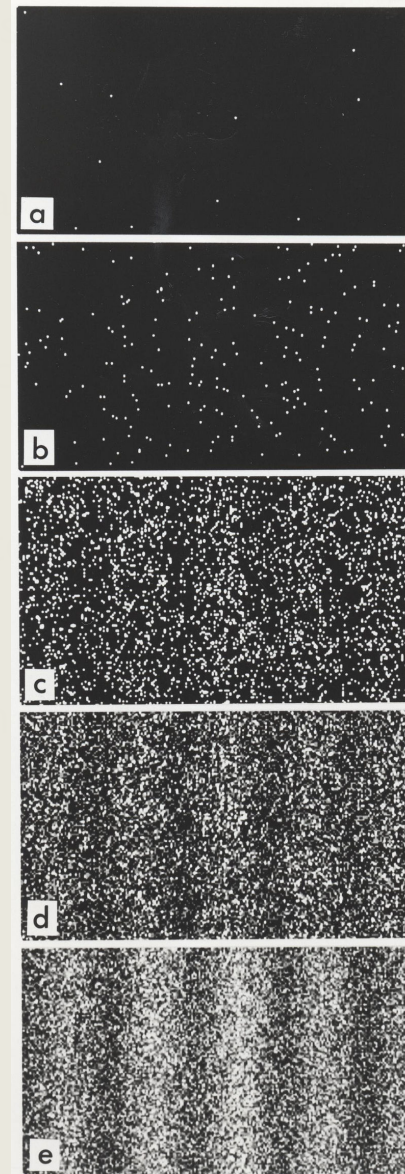
- Quantum physics (on the most common interpretations) rejects physical determinism.
- However, if physical events are not fully determined by prior histories, the scientifically respectable alternative is that they are determined by prior histories plus random 'collapse' events, and the outcomes of these random 'collapse' events are not controlled by agents.
- So quantum physics leads to a certain kind of 'openness' of the future given the past—but not the right kind for free will.

3 Why believe determinism?



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Q: But what about **quantum physics**? Isn't quantum physics **indeterministic**?

- Quantum physics (on the most common interpretations) rejects physical determinism.
- However, if physical events are not fully determined by prior histories, the scientifically respectable alternative is that they are determined by prior histories plus **random 'collapse' events**, and the outcomes of these random 'collapse' events are **not controlled by agents**.
- So quantum physics leads to a certain kind of 'openness' of the future given the past—but not the right kind for free will.

4 Why believe incompatibilism?

The **consequence argument** sharply formulates the challenge to free will from physical determinism. The basic idea is simple:

Assuming physical determinism, my actions are logical consequences of facts beyond my control. But if my actions are logical consequences of facts beyond my control, then my actions themselves are beyond my control—so I don't have free will.

4 Why believe incompatibilism?

Here is a simplified reconstruction of the argument:

P = Complete specification of the initial condition of the universe

L = Complete specification of the laws of physics

- 1 (Assumption of physical determinism) P & L entails that I do action A at time t .
- 2 (Premise) P & L is beyond my control.
- 3 (From 1-2) The fact that I do A at t is beyond my control.
- 4 (Premise) If the fact that I do A at t is beyond my control, then I do not have free will.
- 5 (From 3 and 4) I do not have free will.

4 Why believe incompatibilism?

Here is a simplified reconstruction of the argument:

P = Complete specification of the initial condition of the universe

L = Complete specification of the laws of physics

R = Complete specification of all random quantum events.

- 1 (Assumption of quantum indeterminism) P & L & R entails that I do action A at time t .
- 2 (Premise) P & L & R is beyond my control.
- 3 (From 1-2) The fact that I do A at t is beyond my control.
- 4 (Premise) If the fact that I do A at t is beyond my control, then I do not have free will.
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Here is a simplified reconstruction of the argument:

Transfer of powerlessness:

If A is beyond my control, and the fact that A entails B is beyond my control, then B is beyond my control.

Example:

It's beyond my control that **all men are mortal and Socrates is a man.**

It's beyond my control that the above facts **entail that** Socrates is mortal.

Therefore: It's beyond my control that **Socrates is mortal.**

5 (From 3 and 4) I do not have free will.

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Transfer of powerlessness:

If A is beyond my control, and the fact that A entails B is beyond my control, then B is beyond my control.

Example:

It's beyond my control that **the final score of Chelsea vs Man United was 1-0.**

It's beyond my control that a final score of 1-0 **entails that** Chelsea won.

Therefore: It's beyond my control that Chelsea won.

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5 Summary

- To say that we have free will is to say that our actions are “up to us”. This means that various alternative options are **open to us**, we can **choose among them** in accordance with our intentions and desires, and our actions **originate** in us and not in external causes.
- Free will is plausibly a necessary condition for **moral responsibility**. If an agent is not acting of their own free will, we don't hold them morally responsible for their actions.
- The historically most influential challenge to free will is the challenge from **determinism**, the idea that our actions are determined by facts beyond our control.
- One version of determinism is **physical determinism**, famously illustrated by **Laplace's demon**.
- Some interpretations of quantum physics reject physical determinism... but not in a way that makes any obvious room for free will.
- The challenge to free will from physical determinism is sharply formulated in the **'consequence argument'**.

Next time: Compatibilist escape routes... and the challenge from neuroscience