

Free Will

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14 The Nature of Reality

*Congratulations!
Today is your day.
You're off to Great Places!
You're off and away!*

Oh, the Places You'll Go!

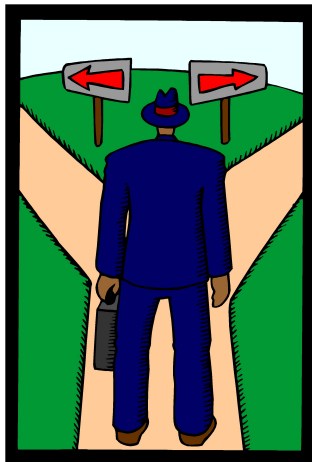


From Dr. Seuss, *Oh, the Places You'll Go!*

*You have the brains in your head.
You have the feet in your shoes.
You can steer yourself
any direction you choose.
You're on your own. And you know what you know.
And YOU are the guy who'll decide where to go.*

Importance of the topic

- We think we can freely choose to do many actions, think many thoughts, etc.
 - raising my arm
 - becoming a philosopher
 - to kill or not to kill
 - to exit which door after class
- A lack of free will would threaten the very fabric of society:
 - killing someone freely means culpability and punishment
 - coerced killing does not
 - Darrow story; mental disease
 - Genetic discoveries



The problem

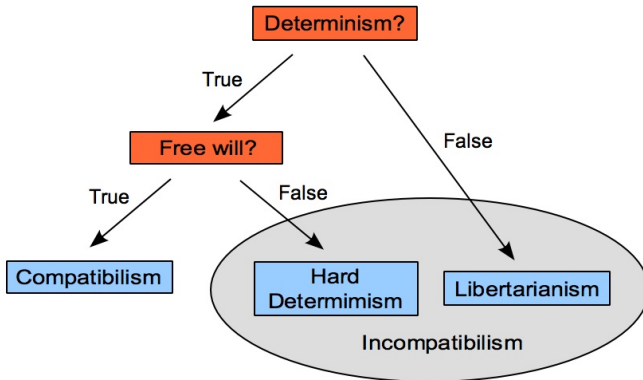
- Laws of physics, biology, psychology, etc. govern us, and they may determine our choices. From the perspective of particles evolving since the Big Bang, there may be only one possible future.
- Whether you go through the upper or lower door at the end of lecture may have been 'decided' 13 billion years ago! Examining the present in close enough detail, your choice has already been determined.



Positions

Problem (simplified statement): free will vs. determinism

Responses (equally simplified):



This leaves the position of an **uncommitted sceptic**, acc. to whom there is no free will, but who suspends judgment on determinism.

What is determinism?

Definition (Determinism)

Determinism: the complete state of the universe is compatible with only one future and past history.

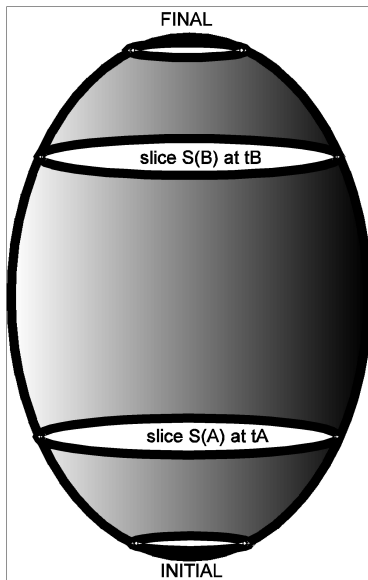
People often thought that determinism was true because of the **Principle of Sufficient Reason (PSR)**.

Illustrations of PSR:

- 1 Buridan's ass
- 2 bean machine, Galton box



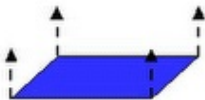
Illustration of determinism



3 METAPHYSICS OF TIME

Presentism

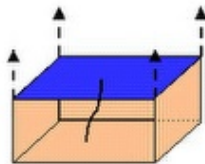
"Nowism"



The Present

Possibilism

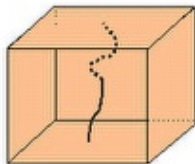
"The Tree Model"



Past & Present

Eternalism

"The Block Universe"



Past, Present, & Future

Searle examples: hypnotized people making up excuses for their behavior



Sir Alfred Jules Ayer (1910-1989): logical positivism



- brought ideas of logical positivist movement from Vienna and Berlin to English-speaking world
- logical positivism: empiricism and verificationism

Ayer's compatibilism

- Determinism necessary for free will?
- “But now we must ask how it is that I come to make my choice. Either it is an accident that I choose to act as I do or it is not. If it is an accident, then it is merely a matter of chance that I did not choose otherwise; and if it is merely a matter of chance that I did not choose otherwise, it is surely irrational to hold me morally responsible for choosing as I did. But if it is not an accident that I choose to do one thing rather than another, then presumably there is some causal explanation of my choice: and in that case we are led back to determinism.”

Ayer's Theory

- Not free action v. determined action
- But free action v. constrained action
- Examples of constraints: physical compulsion, hypnosis, gun to head, kleptomania
- Everything is caused, but some causes are constraining causes, whereas others are not.

Actions are free if

- 1 The person chose what he/she wanted to; he/she would have done otherwise if he/she had so chosen.
- 2 The action is done without constraint/compulsion.
- 3 The action was consciously chosen from one among many.

Harry Frankfurt (* 1929): alternative compatibilism



- Rejection of **PAP (Principle of Alternate Possibilities)**: An agent is responsible for an action only if said agent is free.
- Actions are free (very roughly) when they flow from one's self, when you do what you want.
- Self is not desires.
- Self is higher-order desires, reflective endorsement.
- More on Frankfurt and free will

Don't all causes equally necessitate? What exactly is the difference between kleptomaniac and us? Aren't my choices determined? Does it matter how my self comes about?

More problems for compatibilism...

- Van Inwagen, assuming that laws of nature are entailment relations:
 - No choice in p
 - No choice in $p \rightarrow q$
 - Therefore, no choice in q
 - Strange experiments: rewiring examples (Evil neuroscientists makes changes in your belief box such as to make you hate your brother and kill him—on some versions of compatibilism you would have done so freely)
- ⇒ reasons for incompatibilism



Indeterminism to the rescue of free will?

- Many interpretations of quantum mechanics say the world is fundamentally indeterministic.
- indeterminism \neq uncaused



Is determinism required for moral responsibility?



“Furthermore, to say that my actions proceed from my character, or more colloquially, that I act in character, is to say that my behavior is consistent and to that extent predictable: and since it is, above all, for the actions that I perform in character that that I am held to be morally responsible, it looks as if the admission of moral responsibility, so far from being incompatible with determinism, tends rather to presuppose it. But how can this be so if it is a necessary condition of moral responsibility that the person who is held responsible should have acted freely?”

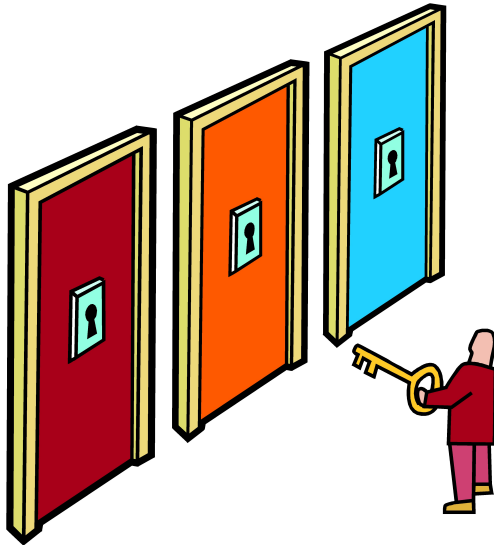
Ayer, p. 18

A Frankfurt counterexample: Joe, Smith and Black

- 1 If Joe blushes at t_1 , then if no one intervenes Joe will decide to kill Smith at t_2 .
- 2 If Joe doesn't blush at t_1 , then if no one intervenes Joe will not decide to kill Smith at t_2 .
- 3 If Black sees no blush at t_1 , Black will force Joe to decide to kill Smith at t_2 ; but if Black sees a blush he does nothing.
- 4 Joe blushes at t_1 , decides to kill Smith at t_2 .

Joe is **very** naughty and morally responsible, but he couldn't do otherwise.

Is being able to do otherwise important?



Roderick Chisholm (1916-1999): libertarianism



- **libertarian**; introduced distinction between 'agent causation' from 'event causation', now influential in incompatibilism (recanted distinction late in life)
- 1964 Lindley Lecture: saw free will as a metaphysical problem; asserted that an agent who performs an act is completely free and uncaused, a **causa sui**
- More on Chisholm and free will

Chisholm sees same kind of trilemma as Ayer does:

- There is a conflict among the ideas that human beings can be responsible for their actions, that these acts are determined by their causes, and that some of the events essential to the act are not caused.
- What makes an action yours? If the cause of an agent's action is some state or event for which the agent is not responsible, then the agent is not responsible for 'his/her' action. Are you responsible for the beliefs and desires you have?
- We can't be responsible for an event that happened by chance.
- But we can't be responsible for one for which we couldn't do otherwise—that means that there had better not be causal conditions sufficient for one not doing otherwise.
- Mmmm...

Answer: agent causation

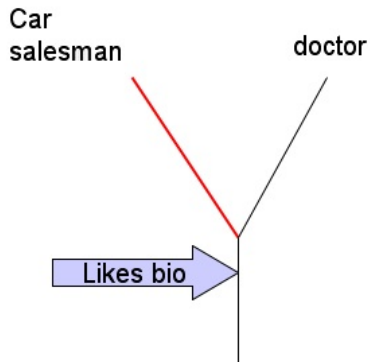
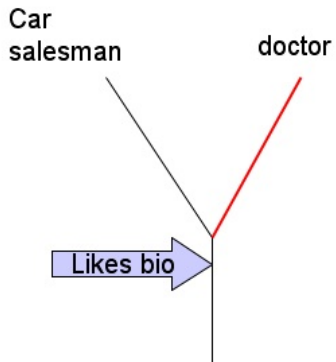
Agent causation (Stanford Encyclopedia), go to Section 3

- What lies 'between' determinism and indeterminism? "We must not say that every event involved in the act is caused by some other event; and we must not say that the act is something that is not caused at all. The possibility that remains, therefore, is this: We should say that at least one of the events that are involved in the act is caused, ... [by] the agent—the man." (p. 30)
- Inanimate objects: causation is between events
- Animate objects like us: causation can also be a relation solely between an event and an agent. Some events are not caused by other events, but are caused by agents. You agent-cause your brain states to be what they are. Your physical desires do not necessitate what you decide; instead they incline you to certain acts.
- **Transeunt Causation**: refers to an event causing another event.
- **Immanent Causation**: refers to an agent causing an event.
- Determinism, then, refers to just transeunt causation.

“In earlier writings on this topic, I had contrasted agent causation with event causation and had suggested that ‘causation by agents’ could not be reduced to ‘causation by events.’ I now believe that that suggestion was a mistake. What I had called agent causation is a subspecies of event causation. My concern in the present study is to note the specific differences by reference to which agent causation can be distinguished from other types of event causation.”

(“Agents, Causes, and Events: The Problem of Free Will,” in *Agents, Causes, and Events: Essays on Indeterminism and Free Will*, ed. T. O’Connor, 1995)

- There is no way of explaining what an agent's causing an event consists of if the event is not caused by any other event, not even a change in the agent's own state (beliefs, reasons). (endorsed by Chisholm)
- Prime Mover
- Obscure
- Luck
- From the 'armchair' we're saying that the science of psychology is necessarily incomplete



Nietzsche in *Beyond Good and Evil*: scepticism

“The causa sui is the best self-contradiction that has been conceived so far, it is a sort of rape and perversion of logic. But the extravagant pride of man has managed to entangle itself profoundly and frightfully with just this nonsense. The desire for ‘freedom of the will’ in the superlative metaphysical sense, which still holds sway, unfortunately, in the minds of the half-educated; the desire to bear the entire and ultimate responsibility for one’s actions oneself, and to absolve God, the world, ancestors, chance, and society involves nothing less than to be precisely this causa sui and, with more than Baron Münchhausen’s audacity, to pull oneself up into existence by the hair, out of the swamps of nothingness...”
(1886, §21)



Nietzsche 1886

Galen Strawson: against agent causation, scepticism

- 1 When you act, you do what you do, in the situation in which you find yourself, because of the way you are.
- 2 To be truly or ultimately morally responsible for what you do, you must be truly or ultimately responsible for the way you are, at least in certain crucial mental respects. (Obviously you don't have to be responsible for your height, age, sex, and so on.)
- 3 You can't be ultimately responsible for the way you are in any respect at all, so you can't be ultimately responsible for what you do.
- 4 To be ultimately responsible for the way you are, you must have somehow intentionally brought it about that you are the way you are.

And the problem is then this. Suppose

- 5 You have somehow intentionally brought it about that you are the way you now are, in certain mental respects: suppose you have brought it about that you have a certain mental nature Z , in such a way that you can be said to be ultimately responsible for Z .

For this to be true

- 6 You must already have had a certain mental nature Y , in the light of which you brought it about that you now have Z . If you didn't already have a mental nature then you didn't have any intentions or preferences, and can't be responsible for the way you now are, even if you have changed.)

But then

- 7 For it to be true that you are ultimately responsible for how you now are, you must be ultimately responsible for having had that nature, Y , in the light of which you brought it about that you now have Z .

So

- 8 You must have brought it about that you had Y .

But then

- 9 you must have existed already with a prior nature, X , in the light of which you brought it about that you had Y , in the light of which you brought it about that you now have Z .

Do we have free will at all?

The Libet experiment



- Benjamin Libet (1916-2007), researcher in the Department of Physiology of UC San Francisco
- first awardee of the Virtual Nobel Prize in Psychology by the University of Klagenfurt in 2003, “for his pioneering achievements in the experimental investigation of consciousness, initiation of action, and free will”
- At a congress in 1977, Libet found that a second was too long a time in a volitional movement between the first preparations made by the brain and the actual movement
- Susan Blackwell: “Many philosophers and scientists have argued that free will is an illusion. Unlike all of them, Benjamin Libet found a way to test it.” (Commentary at *Guardian Unlimited*, 28 August 2007)

Kornhuber and Deecke (1965): Bereitschaftspotentiale

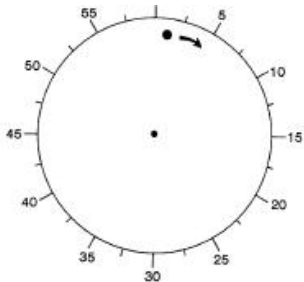
Kornhuber, H.H.; Deecke, L., 'Hirnpotentialänderungen bei Willkürbewegungen und passiven Bewegungen des Menschen: Bereitschaftspotential und reafferente Potentiale', *Pflügers Arch* **284** (1965): 1-17

- Kornhuber and Deecke (1965): 'Bereitschaftspotential' measurable **up to one second** before actual movement
 - **Bereitschaftspotential**: readiness potential (RP), measure of activity in the motor cortex of the brain leading up to voluntary muscle movement
 - absurd result, since subjects would **freely choose** the moment when they would raise their arm
- ⇒ between moment of free decision and movement, there must be at least almost a second...
- common unchallenged assumption: that the conscious decision must be made **before** the brain initiates the movement
 - Libet set out to test this assumption, and got some surprising results...

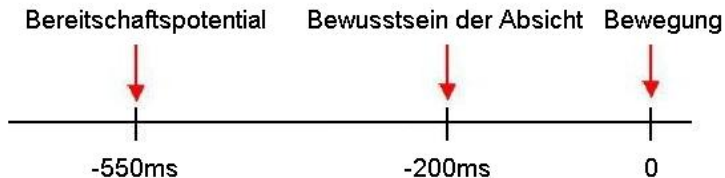
The Libet experiment (1979)

Libet, B. et al., 'Time of conscious intention to act in relation to onset of cerebral activity (readiness potential). The unconscious initiation of a freely voluntary act', *Brain* **106** (1983): 623-642.

- Problem: how to measure moment of conscious decision?
 - subjects of course couldn't make a signal or tell Libet when they make the decision, as these signals themselves would of course be subject to an unknown delay of a volitional action
- ⇒ subjects were asked to memorize the position of a pointer on a rotating dial when they made the conscious decision to move their right hand



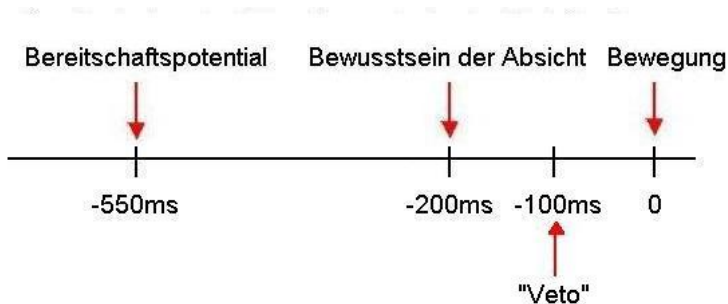
Results of the experiment



- ⇒ a full quarter second **before** the conscious decision to move the hand was taken, the brain starts to prepare the movement...
- ⇒ seeming conclusion to be drawn from experiment: our conscious volitional act (such as the intention to perform a certain hand movement) occur **after** the brain has determined what to do
- ⇒ conscious intention to move seems to be **effect** of a previous subconscious decision, rather than the **cause** of the volitional movement!

Libet's own interpretation

- Libet doesn't like this interpretation, as it would degrade humans to mere automata with our intentions and consciousness only an epiphenomenon without causal power
- ⇒ **Veto theory**: we have the power to intervene by aborting an action for which the brain has already initiated action:



Problems with Libet's interpretation

- Libet's own interpretation has a decisive weakness: if a conscious decision is preceded by an unconscious brain activity, then why would that not also be the case for the conscious veto?
- Basic question: is there an immaterial mind, or is consciousness nothing but the result of physical occurrences in the brain?
- In the latter case, there's no problem with the interpretation of Libet's results: if consciousness rests on physical events, there is nothing surprising in the fact that our free will is initiated by some physical process.
- Although he doesn't believe in free will, says neurophysiologist [Wolf Singer](#), "I go home in the evening and hold my children responsible if they have committed foolish acts, because of course I assume that they could have done otherwise."