

FREE WILL VS. DETERMINISM

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

Our topic today is the challenge to free will posed by **determinism**.

More precisely, our topic is the relationship between freedom of the will and determinism, and a cluster of arguments which seem to show that free will can be neither compatible nor incompatible with determinism — and hence is impossible.

What is “determinism”?

"Determinism is the thesis that only one continuation of the state of things at a given moment is consistent with the laws of nature."

Consider a timeline of the history of the universe.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

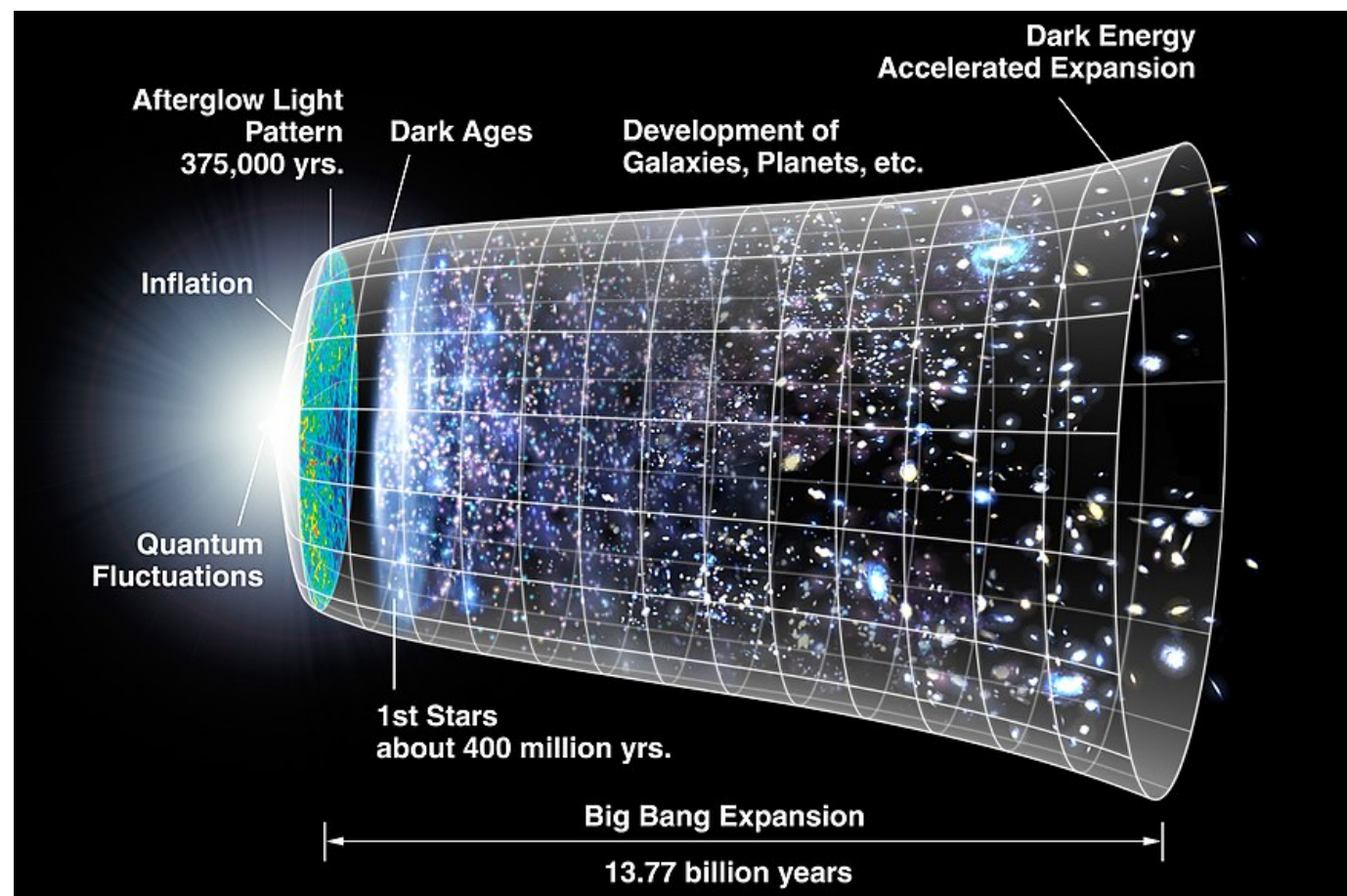
free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

"Determinism is the thesis that only one continuation of the state of things at a given moment is consistent with the laws of nature."

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What determinism says is that, given a full specification of the state of the universe at one time, the laws of nature tell you exactly what will happen at every later time.

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One picturesque way to think of it is in terms of ‘rolling back history.’ Imagine that we roll back the clock to the year 1500. If determinism is true, then — so long as we hold fixed the laws of nature — history since then would unfold in precisely the way that it has.

Sometimes people use ‘determinism’ as a name for the thesis that there is no free will, so that determinism rules out free will by definition. That is not how we are using the term. Determinism is a thesis about the laws of the nature. It is then an open question whether we could have free will in a world with deterministic laws.

We are **not** assuming that determinism is true. We are just explaining what it would mean for determinism to be true.

If we are not assuming that determinism is true, then why are we talking about it? The answer is that it is a good way to raise a question about the conditions under which free will is possible.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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We are all familiar with the idea that some facts about ourselves are determined by factors outside of our control. Obvious examples include things like hair color and height, which are determined by our genetic inheritance. But we often also explain personality traits, and likes and dislikes, in terms of both our genetic inheritance and the way in which we were raised. Others might be explained in terms of various features of our environment.

So we can raise this question:

Suppose that **everything** about me — my likes and dislikes, my choices and decisions — is ultimately determined by factors outside of my control. Is that compatible with me having free will?

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

Suppose that **everything** about me — my likes and dislikes, my choices and decisions — is ultimately determined by factors outside of my control. Is that compatible with me having free will?

yes

no

Then free will is compatible with determinism, since that would be just one way in which stuff about me could be determined by factors outside of my control.

This called a **compatibilist** view of free will.

Then free will is incompatible with determinism, since if determinism were true everything about me would be ultimately determined by factors outside of my control.

This called a **libertarian** view of free will.

This gives us three possible views about freedom of the will.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

Compatibilism

Freedom of the will is real, and compatible with determinism.

Libertarianism

Freedom of the will is real, and incompatible with determinism.

There is no free will.

Just by thinking about it, we can see that exactly one of these must be true. If free will is real, one of the left two boxes must be true; and if free will is not real, the rightmost box is true.

The argument we are going to talk about today capitalizes on this fact. The **master argument against free will** tries to show that both of the left two boxes are false.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
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THE MASTER ARGUMENT AGAINST THE REALITY OF FREE WILL

1. Either (i) Compatibilism is true or (ii) Libertarianism is true or (iii) there is no free will.
2. Compatibilism is false.
3. Libertarianism is false.
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- C. There is no free will.

free will
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determinism

against
compatibilist
free will

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Premise (1) says that one of the boxes must be true. Premise (2) says that it is not the left box, and premise (3) says that it is not the middle box.

The only remaining possibility is that there is no free will.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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The only remaining possibility is that there is no free will.

It is important to see that this argument does not assume the truth of determinism. It just assumes that if free will is real, it must either be compatible with determinism or not. It then tries to rule out both possibilities.

Now, so far we have been given no reason to think that either premise (2) or premise (3) is true. We're now going to look at two arguments — one for (2), and one for (3).

Let's start with (2), which says that Compatibilism is false.

Compatibilist views of free will can be hard for some to get their minds around. How **could** I have free will if everything about me is, ultimately, determined by factors outside of my control?

It may help to sketch one story of compatibilist theory of free will. Suppose that Maria stays in for the night. What does it take for Maria's act of staying in for the night to be free?

First, you might think, she must **choose** or **decide** to stay in.

But that's not quite enough. Suppose that, unbeknownst to her, Maria's door is locked from the outside. Then it looks like her staying in is not free, since the other option — going out — was not really open to her.

Even if she had chosen to go out, she couldn't have.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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So maybe we should require, in addition to Maria choosing to stay in, that it be true that if she **had** chosen to do otherwise, she **would have** done otherwise.

This kind of claim — about what would have happened if something had been different — is called a 'counterfactual.' So we might call this the counterfactual theory of free will:

The counterfactual theory of free will

A's φ ing is free if and only if (i) A chose to φ and (ii) if A had chosen not to φ , A would not have φ 'd.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

The counterfactual theory of free will

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Let's suppose that this theory of free will is true. Would this make free will compatible with determinism?

It seems that it would. Suppose that Maria's choice to stay in is, ultimately, fully determined by factors outside of her control. It is still true that she chose to stay in.

And it might also be true that, if she had chosen to go out, she would have succeeded in doing so. Of course, it was determined by factors outside of her control that she did choose to stay in. But the world could have been such that Maria was determined to choose to go out; and if the world had been that way, she would have gone out.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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On this kind of view, the key questions are: did I choose to do this? And: if I had chosen to do otherwise, would I have been able to? If the answer to both questions is "yes," your act is free. Whether or not your choices are ultimately explainable by your genetic inheritance, your upbringing, or other factors outside of your control just doesn't enter into it.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

Now that we have a grip on determinism and on one view of free will which would arguably be compatible with determinism, let's look at the central argument against the view that free will is compatible with determinism.

This is the **consequence argument**.

One way to present this argument starts with two very plausible premises.

No one has any choice about the state of the world in the distant past.

No one has any choice about what the laws of nature are.

Last time, we talked about the idea that we might now have a choice about some past facts — for example, you might have a choice now about whether the belief your roommate formed yesterday about what you would do today was true.

One way to present this argument starts with two very plausible premises.

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Last time, we talked about the idea that we might now have a choice about some past facts — for example, you might have a choice now about whether the belief your roommate formed yesterday about what you would do today was true.

But, even if this were correct, this would not seem to extend to the present case. It seems very clear that I do not now have a choice about the physical state of the universe thousands of years ago.

It also seems very plausible that the laws of nature are not, in any sense, up to me.

And it seems clear that if I don't have any choice about the above facts, I also don't have any choice about their combination.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

No one has any choice about the state of the world in the distant past.

No one has any choice about what the laws of nature are.

No one has any choice about the combination of the state of the world in the distant past + the laws of nature.

Now remember that, if determinism is true, the state of the world 10 million years ago is consistent with only one possible future.

A different way to put this point is that, if determinism is true, the laws of nature + the state of the universe in the distant past **necessitate** everything about the future.

If determinism is true, then the state of the world in the distant past + the laws of nature necessitate every future action.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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If determinism is true, then the state of the world in the distant past + the laws of nature necessitate every future action.

But now recall a principle familiar from our discussion of fate and foreknowledge:

If we have no choice about some facts, and those facts necessitate X, we have no choice about X.

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No one has any choice about what the laws of nature are.

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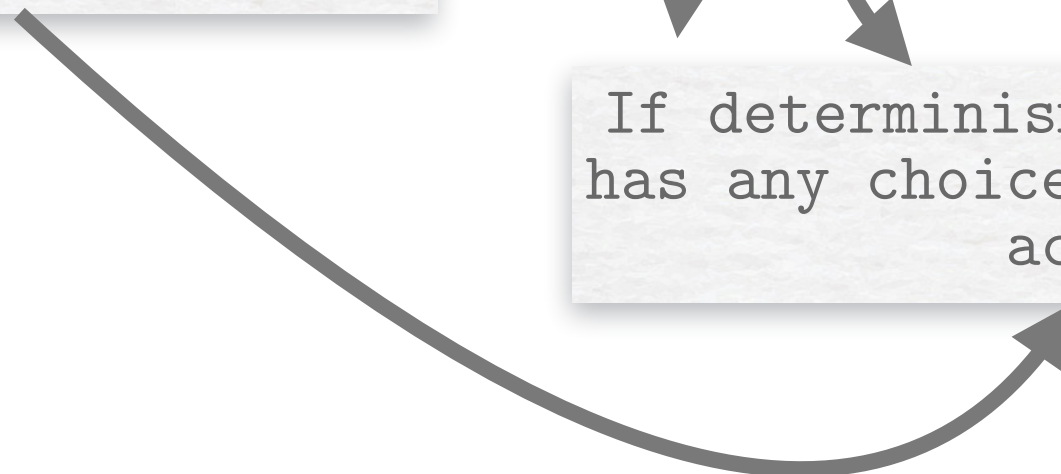
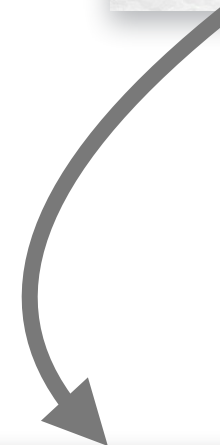
If we have no choice about some facts, and those facts necessitate X, we have no choice about X.

If determinism is true, no one has any choice about any future action.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will



THE CONSEQUENCE ARGUMENT

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

1. No one has any choice about the state of the world in the distant past.
2. No one has any choice about what the laws of nature are.
3. No one has any choice about the combination of the state of the world in the distant past + the laws of nature. (1,2)
4. If determinism is true, then the state of the world in the distant past + the laws of nature necessitate every future action.
5. If we have no choice about some facts, and those facts necessitate X, we have no choice about X.

C. If determinism is true, no one has any choice about any future action. (3,4,5)

The conclusion of the consequence argument says that if determinism is true, there are no free actions. So the truth of determinism is **incompatible** with the existence of free actions.

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This conclusion is reached on the basis of just three key assumptions:

No one has any choice about the state of the world in the distant past.

No one has any choice about what the laws of nature are.

If we have no choice about some facts, and those facts necessitate X, we have no choice about X.

I want now to look at one way in which a compatibilist might respond to this argument, and this is to focus on the last of these assumptions.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

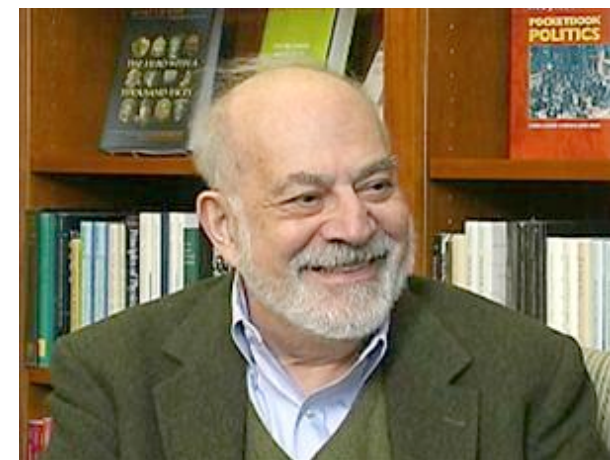
against
incompatibilist
free will

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Let's call this 'the no choice principle.' As we saw last time, is not hard to come up with examples which make this principle seem plausible.

So the No Choice Principle has much to be said for it. But it has also been challenged. The most important challenges are due to the contemporary philosopher Harry Frankfurt.



free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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Here's a more recent version (due to John
Martin Fischer) of the kind of example
Frankfurt used to challenge the no choice
principle.

“Imagine, if you will, that Black is a quite nifty
(and even generally nice) neurosurgeon. But in
performing an operation on Jones to remove a brain
tumor, Black inserts a mechanism into Jones’s brain
which enables Black to monitor and control Jones’s
activities. Jones, meanwhile, knows nothing of this.
Black exercises this control through a sophisticated
computer which he has programmed so that, among
other things, it monitors Jones’s voting behavior.
If Jones were to show any inclination to vote for
Bush, then the computer, through the mechanism in
Jones’s brain, intervenes to ensure that he actually
decides to vote for Clinton and does so vote. But if
Jones decides on his own to vote for Clinton, the
computer does nothing but continue to monitor -
without affecting the goings-on - in Jones’s head.”

Suppose now that Jones decides “on his own” to vote for Clinton. In this case the mechanism which Black has inserted in Jones’ brain never kicks on and forces Black to do anything.

In this situation, is Black’s act of voting for Clinton free?

You might think: yes. After all, Black decided to do this, and nothing forced him to do so.

But now consider the following points:

Jones had no choice about the fact that Black inserted the mechanism into his brain.

The presence of the mechanism in his brain (we can imagine) necessitates that Jones will vote for Clinton. After all, there are only two options; either Jones will do it on his own, or the mechanism will make him do it.

Despite these facts, it seems that Jones freely voted for Clinton.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

More generally, Frankfurt cases look like examples of actions in which the agent was determined to do something by factors outside of his control, and was nonetheless free. So it looks like an argument for Compatibilism.

If we have no choice
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How should a Libertarian who wants to defend the above principle respond?

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

We've now completed the defense of premise (2) of our master argument:

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2. Compatibilism is false.
3. Libertarianism is false.
-
- C. There is no free will. (1,2,3)

If you find the consequence argument plausible, then it is natural to reject premise (3) of the master argument. What's so bad about adopting Libertarianism, and saying that free will is real, and incompatible with determinism?

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

We can introduce an argument against Libertarianism with a thought experiment:

The Randomizer

Scientists have created a small device called a Randomizer. Pushing a button on the Randomizer starts an indeterministic process which results in a 0 or a 1. Alex's brain is hooked up to a Randomizer. When he is deciding whether to do something, this pushes the button on the Randomizer. If the Randomizer generates a 1, this makes him do the action. If the Randomizer generates a 0, this makes him not do the action.

Now ask yourself: is Alex's choice free? It seems very clear that it is not. It is not up to Alex what he does; and free actions have to be up to the person doing the action.

Now ask yourself: is Alex's choice free? It seems very clear that it is not. It is not up to Alex what he does; and free actions have to be up to the person doing the action.

This suggests:

If an act is free, then
the agent must control
whether it happens.

But now consider the idea that free will requires the falsity of determinism. If this is true, then it must be that free actions (or their immediate causes) are undetermined:

If Libertarianism is true,
then, if there are free
actions, those actions are
undetermined by anything
prior to the action.

After all, if free actions **could** be determined by the prior state of the world, then free will would be compatible with determinism. But we are assuming that it isn't.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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But consider what an undetermined act would be. It would be an action which is such that the entire history of the universe up to that point is consistent with the act either happening or not happening. So if the act happens, nothing **makes** it happen. In particular, nothing that the person who does the action, or anyone else, does makes the action happen.

So it is not up to anyone whether the action happens. But this suggests:

If an action is
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free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

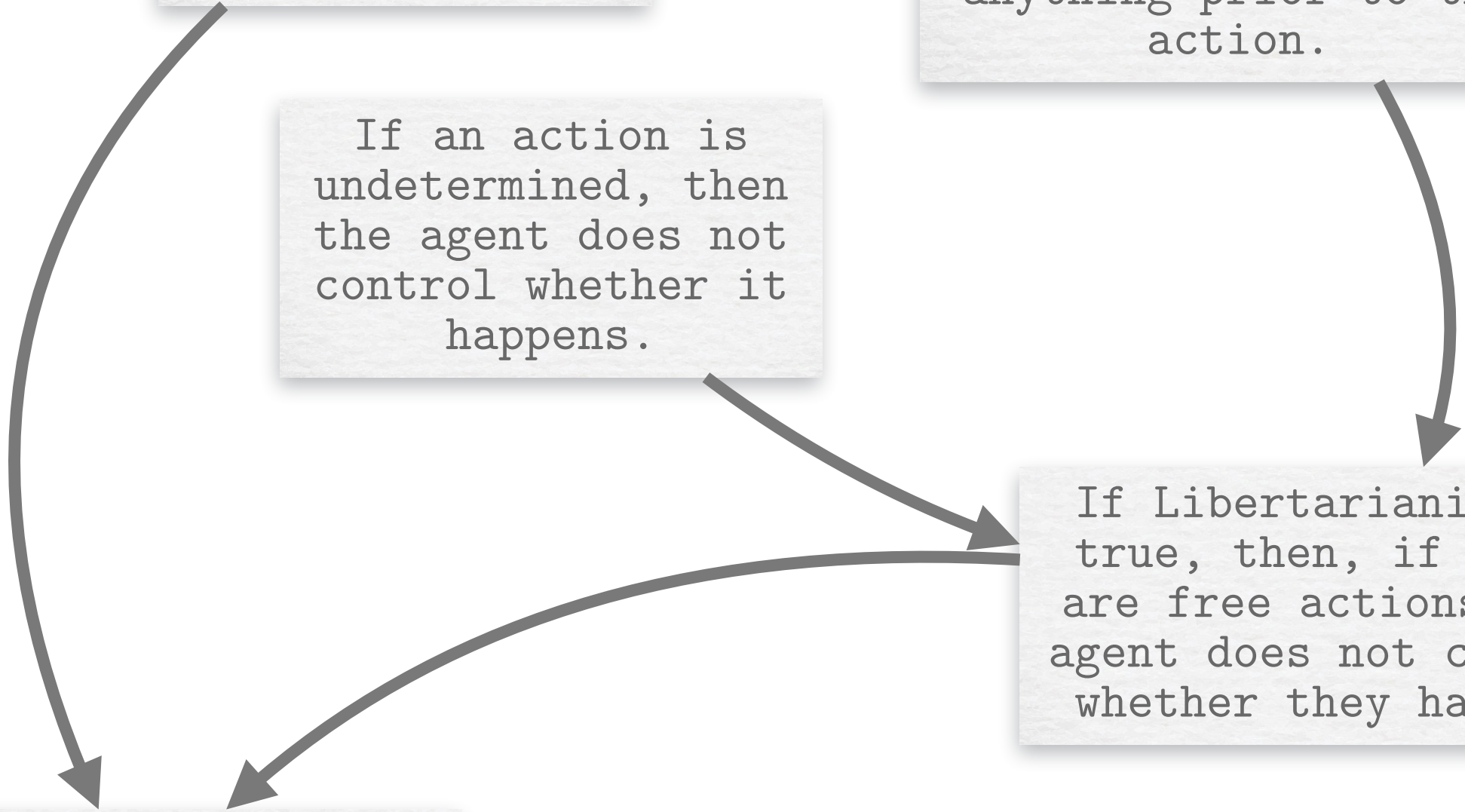
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free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

THE CONTROL ARGUMENT

1. If Libertarianism is true, then, if there are free actions, those actions are undetermined by anything prior to the action.
2. If an action is undetermined, then the agent does not control whether it happens.
3. If Libertarianism is true, then, if there are free actions, the agent does not control whether they happen. (1,2)
4. If an act is free, then the agent must control whether it happens.

C. If Libertarianism is true, then there are no free actions. (3,4)

Libertarianism is the view that free will is real and incompatible with determinism. So, if the conclusion of this argument is true, Libertarianism is false.

How should the Libertarian reply to this argument?

1. If Libertarianism is true,
then, if there are free
actions, those actions are
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to the action.

One idea is to focus on the first premise. Maybe the action itself
wouldn't have to be undetermined; maybe it would be enough for
the decision preceding the action to be undetermined.

But, arguably, this would not help very much. For then it looks like
the **decision** will (by the above reasoning) not be under the control
of the agent. But then it looks like it cannot be up to the agent
whether she performs the action.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

2. If an action is undetermined, then the agent does not control whether it happens.

One might instead call into question the second premise.

There are two main arguments in favor of this premise.

The first is related to the “Randomizer” example we have already discussed. The idea is that if some action of mine is undetermined, it is just **as if** I had a Randomizer implanted in in my brain. What could the relevant difference be between the Randomizer and some non-deterministic process in my brain?

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

2. If an action is undetermined, then the agent does not control whether it happens.

The second is based on a different thought experiment.

The roll-back

You have the power to roll back history to an earlier moment and then re-start it. Veronica has just decided that she wants to major in Philosophy rather than Accounting, and this decision was undetermined. So you roll back history to a moment just before her decision; this time, Veronica chooses Accounting. You do this 800 times. In 412 of the trials, she chooses Philosophy; in the other 388, she chooses Accounting.

If we consider trial #801, it will seem to us random which one Veronica chooses. But there is no real difference between the 801st trial and the first one. So no undetermined actions are really under the control of the agent.

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free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

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 2. If an action is undetermined, then the agent does not control whether it happens.
 3. If Libertarianism is true, then, if there are free actions, the agent does not control whether they happen. (1,2)
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But this is very bad news for free will if you found the consequence argument convincing. For that argument seems to show that free will is **incompatible** with determinism.

The problem here is summed up in this quote from David Hume:

“It is commonly allowed that mad-men have no liberty. But were we to judge by their actions, these have less regularity and constancy than the actions of wise-men, and consequently are farther removed from necessity. Our way of thinking in this particular is, therefore, absolutely inconsistent.”

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will

One way to state the conclusion of the control argument is that free will **requires** determinism.

But this is very bad news for free will if you found the consequence argument convincing. For that argument seems to show that free will is **incompatible** with determinism.

And if free will both requires determinism and is incompatible with it, then the very idea of free will seems to be contradictory. If this is right, then the idea of a free action is like the idea of a married bachelor. Being a married bachelor both requires being married and is incompatible with being married; so it is impossible for there to be a married bachelor. It is a contradictory concept. Our argument so far suggests that freedom of the will is similarly impossible.

The problem is that our idea of free action seems to require that those actions be both undetermined and under our control. The master argument is based on the idea that no action could have both of these features.

free will
and
determinism

against
compatibilist
free will

against
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But: it really does seem like we have free will! If you agree with that, then it seems that this is not a belief which we should give up easily.

Then the question to ask yourself is whether you think that the consequence argument or the control argument is more likely to have a flaw — and what that flaw might be.

free will
and
determinism

against
compatibilist
free will

against
incompatibilist
free will