Fate and free will

From the first person point of view, one of the most obvious, and important, facts about the world is that some things are up to us — at least sometimes, we are able to do one thing, and also able to do another, and get to choose between those things. That's to say: we have free will.

It is clear that any argument for the conclusion that we don't have free will — that we never really choose between actions we are able to do, that nothing is really up to us — would undermine a central aspect of our view of the world, and would be extremely surprising. Hence such an argument will, by our definition, count as a paradox.

Freedom of the will is one of those things which, while it certainly seems real, can seem harder and harder to understand the closer we look. To many philosophers, it has seemed that, once we accept certain features of the world, we can see that they leave no room for freedom of the will.

We'll be discussing several arguments of this sort. Or topic today is the oldest such argument: the challenge to freedom that comes from **fate**. To say that our actions are fated is to say that it is already true now that we will do certain things in the future.

Many have thought that recognition of truths about the future is enough to move us to adopt the attitude that Taylor (in the optional reading) calls **fatalism**:

> "The fatalist, then is someone who believes that whatever happens is and always was unavoidable. He thinks that it is not up to him what will happen a thousand years hence, next year, tomorrow, or the very next moment."

What we want to know is: why might one adopt this fatalistic attitude in response to reflection on the existence of truths about the future?

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Let's first discuss the main points of the story, before asking what the story shows about freedom of the will.

The story begins with the writing of an interesting book:

> Let us suppose that God has revealed a particular set of facts to a chosen scribe who, believing (correctly) that they came from God, wrote them all down. The facts in question then turned out to be all the more or less significant episodes in the life of some perfectly ordinary man named Oslo.

> The book eventually found its way into various libraries, where it gathered dust until one day a high school teacher in Indiana, who rejoiced under the name of Osmo, saw a copy on the shelf.

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> ...Osmo, with the book pressed tightly under his arm, dashed across the street for some coffee, thinking to compose himself and then examine the book with care. … Osmo became absolutely engrossed … he sat drinking coffee and reliving his childhood, much of which he had all but forgotten until the memories were revived by the book now before him. He had almost forgotten about the kitten, for example, until he read this observation: "Sobbing, Osmo takes Fluffy, now quite dead, and buries her next to the rose bush."

Osmo then turns later in the book:

> .. it occurred to him to turn to Chapter 26, to see what might be said there, he having recently turned 26. He had no sooner done so than his panic returned, for what the book said was *true*! That it rains on his birthday, for example, that his wife fails to give him the binoculars he had hinted he would like like, and so on … How, Osmo pondered, could anyone know that apparently before it happened? For these were quite recent events, and the book had dust on it. Quickly moving on, Osmo came to this: "Sitting and reading in the coffee shop across from the library, Osmo, perspiring copiously, entirely forgets, until it is too late, that he was supposed to collect his wife at the hairdresser's at four."

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Disregarding his wife's plight, Osmo continues:

it now occurred to him to check the number of chapters in this amazing book: only twenty-nine! But surely, he thought, that doesn't mean anything … no one could possibly know how long this or that person is going to live. … So he read along, although not without considerable uneasiness and even depression. … But then the book ended on a terribly dismal note. It said: "And Osmo, having taken Northwest flight 569 from O'Hare, perishes when the aircraft crashes on the runway at Fort Wayne, with considerable loss of life, a tragedy rendered the more calamitous by the fact that Osmo had neglected to renew his life insurance." And that was all. That was the end of the book.

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> (About three years later our hero, having boarded a flight for St. Paul, went berserk when the pilot announced that they were going to land at Ft. Wayne instead. According to one of the flight attendants, he tried to hijack the aircraft and divert it to another airfield. The Civil Aeronautics Board cited the resulting disruptions as contributing to the crash that followed as the plane tried to land.)

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First, we should ask: why did Osmo come to believe that he had no free will?

The answer is pretty clear: he came to believe this on the basis of reading a book which detailed his future, and which was such that all of its predictions ended up being true. But of course he did not know anything about the book other than that all of its predictions were true; so his evidence was really just that there was a collection of truths about his future.

Second, was Osmo justified in believing that he lacked free will? And was he right?

Third - if you think that Osmo was right - we can ask: are we any different than Osmo? If so, how?

One might present this series of questions in the form of an argument for the conclusion that we lack free will, as follows:

1. Osmo lacks free will.
2. Osmo would have lacked free will even if he had not read the book of his life.
3. If Osmo had not read the book of his life, he would have been just like us.

C. We lack free will (1,2,3)

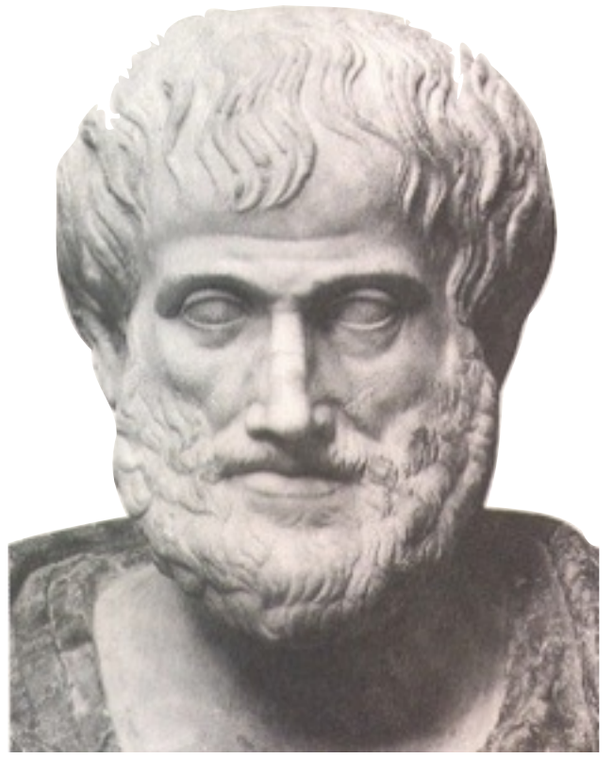
Suppose that you grant premises 1 and 2. You might still think that we could reasonably deny 3. After all, if Osmo had not read the book of his life, the book would still have been there in the library in Indiana. And (so far as we know) none of us has a book of our lives gathering dust in Indiana. One might therefore wonder whether we can put together an argument for fatalism which does not depend on the thought-experiment involving Osmo and the book.

… if all propositions whether positive or negative are either true or false, then any given predicate must either belong to the subject or not, so that if one man affirms that an event of a given character will take place and another denies it, it is plain that the statement of the one will correspond with reality and that of the other will not. For the predicate cannot both belong and not belong to the subject at one and the same time with regard to the future.

Thus, if it is true to say that a thing is white, it must necessarily be white; if the reverse proposition is true, it will of necessity not be white. Again, if it is white, the proposition stating that it is white was true; if it is not white, the proposition to the opposite effect was true. And if it is not white, the man who states that it is making a false statement; and if the man who states that it is white is making a false statement, it follows that it is not white. It may therefore be argued that it is necessary that affirmations or denials must be either true or false.

Now if this be so, nothing is or takes place fortuitously, either in the present or in the future, and there are no real alternatives; everything takes place of necessity and is fixed. …

In fact, arguments of this sort, and concerns about what they show, are almost as old as philosophy itself. One prominent argument of this sort can be found in the writings of Aristotle.



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But what are the premises from which this conclusion is supposed to follow?

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In the first paragraph of this passage, Aristotle considers the claim that every proposition - every claim - must be either true or false. Here he seems particularly interested in propositions about the future: claims that some event will take place.

The key claim here seems to be that if one man affirms that an event will happen and another denies it, one of the two must be speaking truly. That is, if E is some future event:

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In the **second paragraph**, Aristotle says that there is a certain connection between truth and necessity; the central claim here seems to be that if it is true that something has a property, then it necessarily has that property. So, applying that to our example,

If it is true that E will happen, then necessarily E will happen.

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C. Either it is necessary that E will happen, or it is necessary that E will not happen. (1, 2, 3)

This already seems to be enough to get us to Aristotle's conclusion: the claim that whatever will happen will happen of necessity.

Is this argument valid? What is the form of the argument?

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One might see it as having this form:

P or Q
If P, then R
If Q, then S

R or S

This is a valid form of argument; whatever sentences you substitute in for P, Q, R, and S, you will get an argument which is such that its premises guarantee its conclusion - i.e., if its premises are true, its conclusion always will be as well.

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And if the conclusion of this argument is true, then, as Aristotle says, it seems that there are no real alternatives. If it is necessary that I will eat pizza for dinner, and hence impossible that I not eat pizza, how can **not** eating pizza be a real alternative for me?

It thus seems that Aristotle provides us with an argument against the possibility of free will which relies only on purely logical principles about truth.

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But let's take a closer look at this argument — and in particular at premises 2 and 3.

At first glance, premises 2 and 3 look difficult to deny. After all, there does seem to be a necessary connection between truth and what is the case - isn't it impossible for it to be true that E will happen without E happening? And isn't this just what the second premise says?

Not quite. In fact, both premises 2 and 3 are ambiguous between two importantly different interpretations.

Let's look at premise 2. Here are two things that premise 2 might mean:

2A. The following claim is a necessary truth: if it is true that E will happen, then E will happen.

2B. If it is true that E will happen, then the following is necessary: E will happen.

Let's look at these two interpretations, beginning with 2B. Let's suppose that it is true that I will end class at 11:19 today. Does this imply that it is **necessary** that I will end class at 11:19 today - i.e., that it is **impossible** that I not end class at 11:19 today?

It doesn't seem so; if we don't already think that it is impossible for some event not to happen, why should learning that it is true that it will happen change our minds? Can't some claims be true, without being necessary?

So it seems that if premise 2 of Aristotle's argument is to be understood as 2B, then this premise is false.

So let's see if, instead, 2A might better serve Aristotle's argument.

1. Either it is true that E will happen, or it is true that E will not happen.
2. If it is true that E will happen, then necessarily E will happen.
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So let's see if, instead, 2A might better serve Aristotle's argument.

2A, unlike 2B, seems to be true, which is of course good for Aristotle's argument.

The problem with 2A is not that it is false, but that when we understand premise 2 in this way, Aristotle's argument turns out to be **invalid**.

Consider the following form of argument:

> p
> The following is a necessary truth: if p, then q
>
> ---
>
> Necessarily, q

Is this argument valid? Can you think of any sentences you can substitute in for "p" and "q" which make the premises true and the conclusion false?

How about:

> Grass is green
> The following is a necessary truth: if grass is green, then grass is green
>
> ---
>
> Necessarily, Grass is green.

Are the premises of this argument true? How about the conclusion? What does this show about the form of argument we are discussing?

Let's now apply this lesson to Aristotle's argument.

1. Either it is true that E will happen, or it is true that E will not happen.
2. If it is true that E will happen, then necessarily E will happen.
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C. Either it is necessary that E will happen, or it is necessary that E will not happen. (1, 2, 3)

Why, exactly, did we think that Aristotle's argument was valid in the first place? That was because we took it to be of the form:

P or Q
If P, then R
If Q, then S

R or S

But if we interpret 2 as 2A, it is **not** of this form. Can you see why? What would "P" and "R" be?

2A. The following claim is a necessary truth: if it is true that E will happen, then E will happen.

Rather, if we interpret 2 as 2A (and 3 in the same way) the argument is of this form:

P or Q
Necessarily, if P, then R
Necessarily, if Q, then S

Necessarily R or necessarily S

And this is **not** valid.

Summing up: it seems that we have two interpretations of Aristotle's premise 2. On interpretation 2A, the premise is true, but the argument is invalid. On interpretation 2B, the premise is false. So **neither interpretation makes the argument sound.**

So it seems that the argument we found in Aristotle is not convincing. But perhaps this is because we have not correctly interpreted the argument with which Aristotle was concerned.

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Little is known of the life of Cronus, and none of his writings survive. But the Master Argument was much discussed in antiquity; one important summary of the argument was given by Epictetus, a Greek philosopher who lived in the 1st and 2nd centuries A.D., in his *Discourses*.

> The argument . . . appears to have been proposed from such principles as these: there is in fact a common contradiction between one another in these three positions, each two being in contradiction to the third. The propositions are, that everything past must of necessity be true; that an impossibility does not follow a possibility; and that something is possible which neither is nor will be true. Diodorus observing this contradiction employed the probative force of the first two for the demonstration of this proposition, "That nothing is possible which is not true and never will be."

Epictetus isolates three propositions:

E1. Everything past is necessary.
E2. An impossibility cannot follow from a possibility.
E3. Something is possible which is not and will not be true.

According to Epictetus, Diodorus tried to show that E1 and E2 imply the falsity of E3. What would it mean for E3 to be false? If it is not true that something is possible which is not and will not be true, it follows that everything which is and will be true is necessary - which is just the conclusion for which Aristotle aimed.

Our question then is: how can E1 and E2 be used to show that the future is necessary?

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Our question then is: how can E1 and E2 be used to show that the future is necessary?

A good way to approach this question is by recalling the first premise of Aristotle's argument:

1. Either it is true that E will happen, or it is true that E will not happen.

One might think that if this claim is true, then it was also true in the past. So one might think that the following must be true:

PAST-1. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

PAST-1, together with Epictetus' claim E1, seems to imply:

NEC-1. Either it is necessary that it is true that E will happen, or it is necessary that it is true that E will not happen.

But we now have the makings of an argument for the conclusion of the argument Aristotle discussed. Consider premises 2 and 3 of Aristotle's argument, under interpretation 2A:

2A. It is necessary that: if it is true that E will happen, then E will happen.

3A. It is necessary that: if it is true that E will not happen, then E will not happen.

An interpretation of the Master Argument of Diodorus Cronus

PAST-1. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

E1. Everything past is necessary.

NEC-1. Either it is necessary that it is true that E will happen, or it is necessary that it is true that E will not happen.

2A. It is necessary that: if it is true that E will happen, then E will happen. (PAST-1,E1)

3A. It is necessary that: if it is true that E will not happen, then E will not happen.

C. Either it is necessary that E will happen, or it is necessary that E will not happen. (NEC-1, 2A, 3A)

This argument is quite similar to the argument we found in Aristotle. It has exactly the same conclusion, and uses two of the same premises (on one interpretation), 2A and 3A. But this argument seems to succeed where Aristotle's failed, because of two additions.

These are, first, premise E1, which says that the past is necessary, and, second, that the first premise assumes not just that either it is true that E will happen or that E will not happen, but that this was also true in the past. (This is the difference between premise 1 in Aristotle's argument and PAST-1 above.)

The second assumption seems quite plausible. How about the first assumption, that the past is necessary?

This might at first seem odd; couldn't you have decided to skip class today? And doesn't this mean that a certain past event, namely your coming to class, is not necessary?

It certainly seems to. But when the ancients used "necessary" in arguments of this sort, they meant something a little broader than we have meant. They meant something like: "outside of my control" or "true no matter what I do." On this interpretation, it looks like E1 is quite plausible.

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E1. Everything past is necessary.

NEC-1. Either it is necessary that it is true that E will happen, or it is necessary that it is true that E will not happen. (PAST-1,E1)

2A. It is necessary that: if it is true that E will happen, then E will happen.

3A. It is necessary that: if it is true that E will not happen, then E will not happen.

C. Either it is necessary that E will happen, or it is necessary that E will not happen. (NEC-1, 2A, 3A)

So it seems that we have good reason to believe PAST-1, E1, 2A, and 3A - and these are all of the independent premises in the argument. But remember the worry we had about Aristotle's argument using 2A and 3A: the worry there was not that a premise was false, but that the argument was **invalid**. Does the conclusion of the Master Argument really follow from NEC-1, 2A, and 3A?

This last step of the argument seems to be of this form:

Necessarily P or necessarily Q
Necessarily (if P then R)
Necessarily (if Q then S)

Necessarily R or necessarily S

Is this valid? How might you argue that it is, or is not?

How about the earlier step from PAST-1 and E1 to NEC-1?

An interpretation of the Master Argument of Diodorus Cronus

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E1. Everything past is necessary.

NEC-1. Either it is necessary that it is true that E will happen, or it is necessary that it is true that E will not happen.

2A. It is necessary that: if it is true that E will happen, then E will happen. (PAST-1,E1)

3A. It is necessary that: if it is true that E will not happen, then E will not happen.

C. Either it is necessary that E will happen, or it is necessary that E will not happen. (NEC-1, 2A, 3A)

The Master Argument seems to provide a serious challenge to the reality of free will - and one which only assumes that the past is out of our control, along with some plausible-seeming logical principles.

It is hard to know how to respond to this argument. It appears valid, and it has only four independent premises: PAST-1, E1, and 2A and 3A. 2A and 3A seem trivially true. This means that if we want to defend the reality of free will, we have just two options.

First, we can deny premise E1: **we can say that, in at least some cases, we have control now over how things were in the past.**

This sounds crazy. But consider the sorts of "truths about the past" that we're talking about here. They are truths like: yesterday, it was true that I would end this lecture 10 minutes early. If we think that it is now up to me when I end lecture today, why not also think that it is now up to me what was true yesterday about my lecture?

You might think that these sorts of "truths about the past" — truths which are partly about the future — are not necessary, even if some truths about the past — like Notre Dame losing its bowl game — are. Is this plausible?

We'll discuss this in more detail when we turn to paradoxes involving freedom and God's foreknowledge.

A second option is that **we can deny that there are any truths about the future**. In the context of the above argument, this involves denying the first premise, PAST-1.

An interpretation of the Master Argument of Diodorus Cronus

PAST-1. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

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A second option is that **we can deny that there are any truths about the future**. In the context of the above argument, this involves denying the first premise, PAST-1.

Let's think for a second about what this means. It seems to mean that, in the past, the following claim was not true:

Either E will happen, or E will not happen.

This, of course, is just Aristotle's premise 1. The problem is that, later in the passage we read for today, Aristotle gave an argument for the conclusion that the denial of the above claim leads to contradiction.

> Again, to say that neither the affirmation nor the denial is true, maintaining, let us say, that an event neither will take place nor will not take place, is to take up a position impossible to defend. … if an event is neither to take place nor not to take place the next day … it would be necessary that a sea-fight should neither take place nor fail to take place on the next day.

This argument seems to run as follows: suppose that this claim is false. Then it is not true that either it is true that E will happen or true that E will not happen. So, it is not true that E will happen and not true that E will not happen. But this is a contradiction; hence our initial supposition must be false.

We can adopt Aristotle's line of reasoning here to give a reductio of the denial of PAST-1:

1	Not (it was true in the past that E will happen or it was true in the past that E will not happen)	denial of PAST-1
2	If Not (p or q) then Not-p and Not-q	
3	Not (it was true in the past that E will happen) & Not (it was true in the past that E will not happen)	1, 2
4	It was not true in the past that E will happen & it was not true in the past that E will not happen	3
5	If it was not true in the past that E will not happen, then it was true in the past that E will happen	
C	It was not true in the past that E will happen & it was true in the past that E will happen.	4, 5

However, let's think a bit more closely about this style of argument. In particular, let's think about premise 5.

If we deny that there are any truths about the future, we should not, it seems, begin to think that every claim about the future is for that reason **false**. After all, if the claim that E will happen is false, then it seems to follow that E will not happen - but this, just as much as the claim that E will happen, is a claim about the future.

Rather, it seems, we should think of claims about the future as simply lacking a truth-value - as "indeterminate." If we think of them this way, then it seems that we should reject the rule of classical logic known as the **Law of the Excluded Middle** - which says that for any proposition P, either P or not-P must be true.

Now focus on premise 5 of our attempted defense of premise 1 of the Master Argument. This asks us to say that if it is not true that E will not happen, then it is true that E will happen. But is this sort of claim in general true if the Law of the Excluded Middle does not hold?

Further, if we reject the Law of the Excluded Middle, then reductio ad absurdum is not, in general, a legitimate form of argument. Can you see why?

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Thus it seems that we can escape the Master Argument against the possibility of free will if we are willing to give up the idea that there are truths about the future (and, in so doing, also give up the Law of the Excluded Middle).

It is worth noting a connection between this sort of response to the Master Argument and an argument we have already discussed: McTaggart's proof of the unreality of time. Remember that in response to that argument, we saw that one possible view was to adopt a B-theory of time, and deny that there are any simple properties of being past, present, or future (other than past, present, or future, relative to a certain time in the B-series). If we adopt this view, then it does not seem as though we can deny that there are any truths about the future while accepting that there are truths about the past and present.

Further, this sort of response to the challenge fate poses to free will runs into an obvious complication in a theological setting. After all, a traditional attribute of God is omniscience - and this is taken to include knowledge of the future, including future human free actions. But if God **knows** things about the future, doesn't it follow that there must be **truths** about the future? And, if so, it looks like PAST-1 will be true, leaving us without a response to the Master Argument.

This is a topic to which we will return.