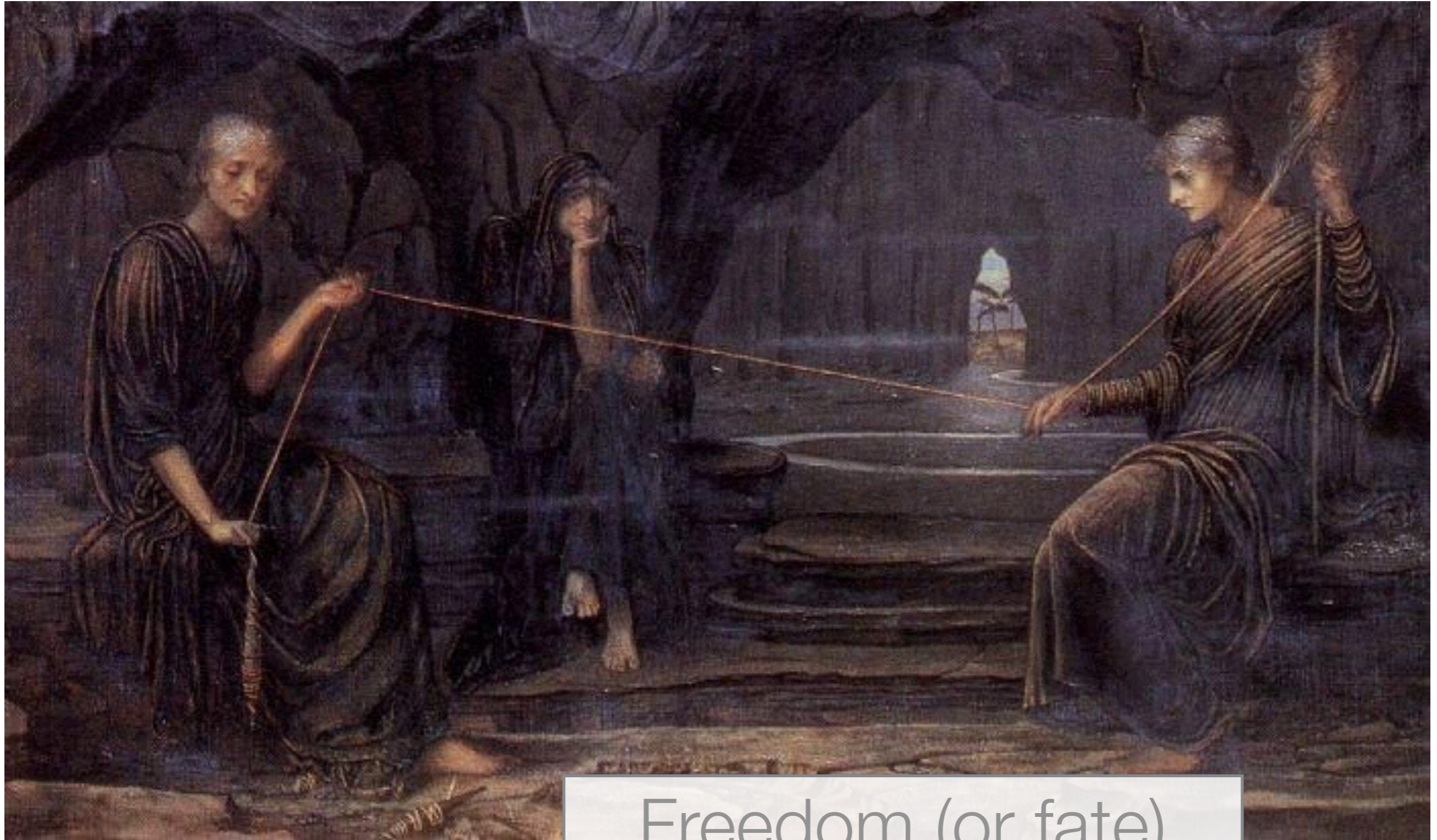


What is real?



Freedom (or fate)

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.

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.

In the next two classes, we will be asking whether freedom of the will is real. Our 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.

So to believe in fate is to believe that it is already true now that we will perform certain free actions in the future. To be a **fatalist** is to believe that this fact rules out the possibility of free will.

Why might fatalism seem plausible? Imagine that all of the facts about your life — past, present, and future — are written down in a dusty book in a library somewhere. So, for example, near the end of the in the first quarter of the book, one might find the sentence ‘[insert your name here] entered South Dining Hall at 5:46 on 3/24/2015, and filled [his/her] plate with beef stroganoff.’

Suppose that there were similarly detailed descriptions of every event in your life, and that there were no errors, no matter how small. Wouldn't the fact that everything you will do tomorrow is already written down in the book show that you don't now have any control over whether, tomorrow, you will eat beef stroganoff? And doesn't this show that you don't have any free will about what you will eat tomorrow (or anything else you will do)?

Notice that we are not imagining that the book is making you do things, or that it has some mysterious causal power over your actions. The mere existence of the book — the mere existence of truths about your future — seems to pose a challenge to your freedom.

Of course, one might resist this. One might say that the existence of truths about one's future doesn't make one's actions less than free; it might be one's destiny to make a certain choice without that choice being less than free. (A popular example: the idea that two people can be 'meant for each other,' or 'destined to end up together.')

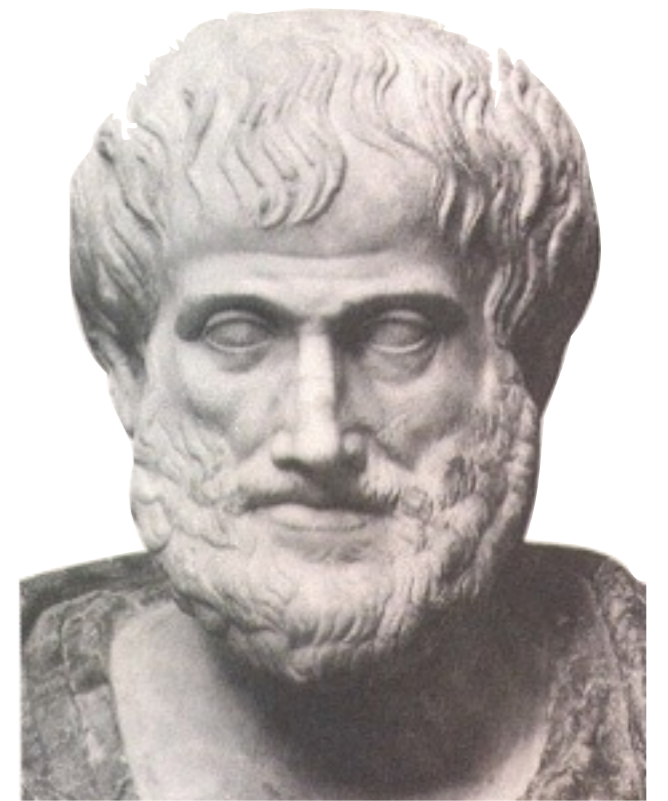
So let's ask whether there are any convincing arguments for fatalism.

... 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. ...

One prominent argument of this sort can be found in the writings of Aristotle.



The conclusion of the argument Aristotle is considering is clear enough: he says that **if this be so, there are no real alternatives; everything takes place of necessity.**

By 'necessary' here Aristotle means something like 'outside of our control' or 'not up to us.'

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

... 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.

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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 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:

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

... 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.

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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. ...

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

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 it is necessary that E will happen.

If it is true that E will not happen, then it is necessary that E will not happen.

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

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

If it is true that E will not happen,
then it is necessary that E will not
happen.

Either it is necessary that E will happen,
or it is necessary that E will not happen.

And this seems to give us our fatalist conclusion: that everything that will happen is necessary, and hence not up to us — not the sort of thing about which we have free choice.

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 it is necessary that E will happen.
3. If it is true that E will not happen, then it is necessary that E will not happen.

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

Is this argument valid?

It seems to be of the following form:

P or Q
If P then R
If Q then S

R or S

Is every argument of this form valid?

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 it is necessary that E will happen.
3. If it is true that E will not happen, then it is necessary that E will not happen.

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

Are the premises of this argument true?

Look at premises 2 and 3. They say that, if it is true that something will happen, then it is necessary — out of our control — that it will happen. This seems to assume just the connection between fate and fatalism that we wanted an argument for. Why should we assume that if it is true that we will do something, that we can't perform that action freely?

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 it is necessary that E will happen.
3. If it is true that E will not happen, then it is necessary that E will not happen.

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

Premises 2 and 3 do sound true. But that is because they are ambiguous between two different interpretations. Let's use ' $P \rightarrow Q$ ' to represent 'If P, then Q.' Then we can represent our two different interpretations of premise 2 as follows:

2A. It is true that E will happen \rightarrow it is necessary that E will happen.

2B. It is necessary that (it is true that E will happen \rightarrow E will happen)

Which of these is true? Which would make the argument valid?

It appears that neither is both uncontroversially true, and makes the argument valid. This gives us a way around Aristotle's argument for fatalism.

A different interpretation of Aristotle's reasoning is that he has in mind an argument often attributed to another Greek philosopher during the 4th century B.C., Diodorus Cronus, which in antiquity was called the "Master Argument."

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."



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Epictetus isolates three propositions, which he takes to be contradictory.

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.

If E3 is false, then everything which will be is necessary. So if E3 is false, then fatalism is true. So to get an argument for fatalism, we need to figure out why Epictetus thought that E1 and E2, which look plausible, imply the falsity of E3.

E1. Everything
past is necessary.

E2. An impossibility
cannot follow from a
possibility.

For our purposes it will be useful to replace E2 with the following equivalent principle:

E2*. A necessary
consequence of something
necessary is itself necessary.

A first step in reconstructing the argument is to recall the first premise of Aristotle's argument:

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:

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.

E2*. A necessary consequence of something necessary is itself necessary.

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

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.

Now recall that there seems to be a necessary connection between truths about the future and which events will happen in the future:

2B. It is necessary that (it is true that E will happen \rightarrow E will happen)

3B. It is necessary that (it is true that E will not happen \rightarrow E will not happen)

E1. Everything past is necessary.

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

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.

E2*. A necessary consequence of something necessary is itself necessary.

2B. It is necessary that (it is true that E will happen \rightarrow E will happen)

3B. It is necessary that (it is true that E will not happen \rightarrow E will not happen)

Either it is necessary that E will happen or it is necessary that E will not happen.

1. Everything past is necessary. (E1)
 2. Either it was true in the past that E will happen, or it was true in the past that E will not happen.
 3. 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. (1,2)
 4. It is necessary that (it is true that E will happen \rightarrow E will happen)
 5. It is necessary that (it is true that E will not happen \rightarrow E will not happen)
 6. A necessary consequence of something necessary is itself necessary. (E2*)
-
- C. Either it is necessary that E will happen or it is necessary that E will not happen. (3,4,5,6)

The move from 3,4,5,6 to C may seem less than obvious. It is of this form:

Necessarily P or Necessarily Q

Necessarily (P \rightarrow R)

Necessarily (Q \rightarrow S)

Necessary consequences of necessary things are necessary

Necessarily R or Necessarily S

1. Everything past is necessary. (E1)
 2. Either it was true in the past that E will happen, or it was true in the past that E will not happen.
 3. 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. (1,2)
 4. It is necessary that (it is true that E will happen \rightarrow E will happen)
 5. It is necessary that (it is true that E will not happen \rightarrow E will not happen)
 6. A necessary consequence of something necessary is itself necessary. (E2*)
-
- C. Either it is necessary that E will happen or it is necessary that E will not happen. (3,4,5,6)

The Master Argument is a very challenging argument for the believer in free will. It is very hard to deny any of premises 4, 5, or 6. So it looks like the most promising places to attack the argument are premises 1 and 2.

Let's discuss premise 2 first.

2. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

To deny this premise is to deny that there are any truths about future free actions. In the reading for today, Aristotle gives us an argument that denying claims like this 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.

If we deny 2, Aristotle says, we must be saying that neither will E happen, nor will it not happen. But that is to say that it is both not the case that E will happen, and that it is not the case that E won't happen. And that is a contradiction.

2. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

We can present Aristotle's argument as a reductio of the denial of premise 2, as follows:

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 premise 2)
 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)

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 premise 2)
 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)

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.

If we reject the Law of the Excluded Middle, which premise of Aristotle’s argument can we reject?

2. Either it was true in the past that E will happen, or it was true in the past that E will not happen.

So it seems that we can escape Aristotle's attempt to show that logic alone requires us to accept premise 2 of the Master Argument. One might, however, think that science gives us good reason to accept this premise. For if we deny that there are any truths about future free actions, doesn't this require that there be a fundamental distinction between past, present, and future? And doesn't this require an A-theory of time of the sort which Einstein's theory of relativity calls into question?

One might also think that there is theological reason for accept premise 2. For if God is omniscient, doesn't God have to know our future actions? And if God knows what we will do, there must be truths about what we will do for God to know.

This is something to think about. But let's turn to our other possibility for resisting the Master Argument: denying premise 1.

1. Everything past is
necessary. (E1)

To deny this premise is to 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 the truth that the dinosaurs went extinct at the end of the Cretaceous period — are. Is this plausible?

Let's turn to our last reading for today. It is not an argument for fatalism as such — it's not an argument at all, but a piece of science fiction. But it does present an interesting argument against the reality of free will.

The argument begins with the Predictor: a device with a button and an LED light which is equipped with a 'negative time delay' designed to deliver the result that, whenever the button is pushed, the light flashes one second [earlier](#).

Imagine the effect of holding a device like this in your hand: you will always find, when the light flashes, that you press the button one second later. This will happen invariably, even if you really, really want to resist pressing the button after the light flashes.

In the story, people who have a Predictor long enough come to believe that they have no free will. Do you think that you would come to believe this, if you had a Predictor?

In the story, people who have a Predictor long enough come to believe that they have no free will. Do you think that you would come to believe this, if you had a Predictor?

Would you be right to form this belief?

So now consider a possible scenario in which someone exactly like you would get a Predictor. By the above line of thought, this person would lack free will. But that Predictor did not **take away** their free will; it just shows them that they never had any. So they lacked free will before getting a Predictor.

But this person was stipulated to be exactly like you. So you don't have free will, either.

How might this line of thought be turned into an explicit argument, with premises and a conclusion?