

It seems that 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.

We've just seen that the question of whether we are free is closely connected to questions about the existence of God. But it also seems closely connected to moral questions, especially to do with moral responsibility.

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. 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 three classes, we will be asking whether freedom of the will is real. We will be discussing the three most important challenges to the reality of free will: the three most important attempts to show that free will is an illusion.

Our topic today is the oldest such argument: the challenge to freedom that comes from fate.

Our topic today is the oldest such argument: the challenge to freedom that comes from fate.

What does it mean to believe in fate? To believe in fate is to believe that there are now truths about all of the future actions that any of us will undertake.

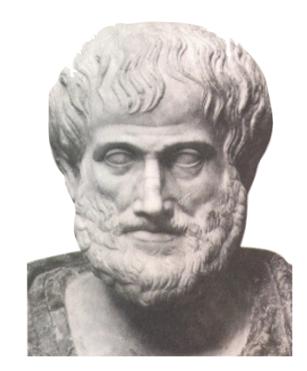
So, for example, if fate is real then it is already true now that you will marry a certain person. Or, to pick a more grim example, there is already a truth about the exact moment you will die, and how.

We might 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 3/24/2017, and filled [his/her] plate with beef stroganoff.'

Of course, there is no such book. But, if fate is real, then there could be. The truths are all there, whether or not they have been written down.

Is there such a thing as fate?

We can give two arguments that there is. The first is given in one of our readings today, from Aristotle.



... 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.

Aristotle's argument begins with a statement of the following logical principle:

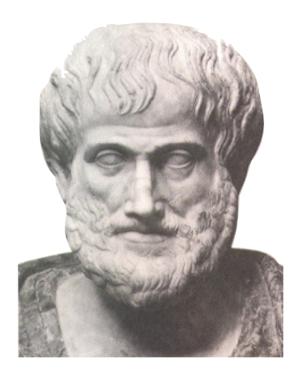
The law of the excluded middle Every proposition is either true or false.

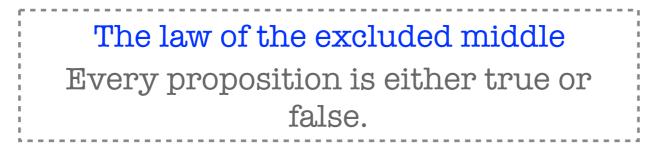
## The law of the excluded middle

Every proposition is either true or false.

Suppose that this is true. Why think that it implies that there are truths about every action that we will perform in the future? Aristotle gives us the following argument:

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.





To see what Aristotle is thinking, let's look at two propositions about a possible future free action of yours.

Some day, you will decide to get married.

You will never decide to get married.

If the law of the excluded middle is true, then each of these claims is either true or false. Obviously, both cannot be true, since that is a contradiction.

Could both be false? If they were, Aristotle points out, it follows that you will never decide to get married (the negation of the first) and that it is not true that you will never decide to get married (the negation of the second). But that is a contradiction too. The law of the excluded middle Every proposition is either true or false.

To see what Aristotle is thinking, let's look at two propositions about a possible future free action of yours.

Some day, you will decide to get married.

You will never decide to get married.

So it must be that, if the law of the excluded middle is true, then one of these claims is true, and one of them is false.

But to endorse this is just to believe in fate, since it is to say that there is now a truth about whether you will some day decide to get married.

And nothing depended on this particular choice of an example. So, for any possible future action of yours, there is now a truth about whether you will perform it, and fate is real.

A second argument in favor of the reality of fate is less logical than theological.

On standard views, God knows everything about the universe — including everything that will happen in the future. But then God knows every action that you will perform for the rest of your life.

And if this is true, then there must be truths about every future action you will perform — after all, one can't know something if it isn't true. So God's knowledge of the future seems to show that fate is real.

So a strong case can be made that fate is real. Let's now turn to the crucial question: if fate is real, does this rule out the possibility of genuine free will?

The view that fate rules out free will is called fatalism. So it is possible to believe in fate without being a fatalist: one might think that there are now truths about all of the future actions you perform, but that you still have free will.

But many people find fatalism quite plausible. If it is now true that you will perform some action in the future, how could you have a genuine choice in the future about what you will do?

What we want to know is whether this intuitive thought can be turned into a convincing argument.

One of the most important arguments for fatalism is 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."



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, which he takes to be contradictory.

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

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

If "necessary" in this argument meant what we have been meaning by it so far in this class, then E1 would be obviously false.

But that is not what Epictetus meant by it. Instead, he meant something like "now out of anyone's control."

On this interpretation, E1 looks plausible, since it does seem that we cannot now change the past.

How about E2?

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

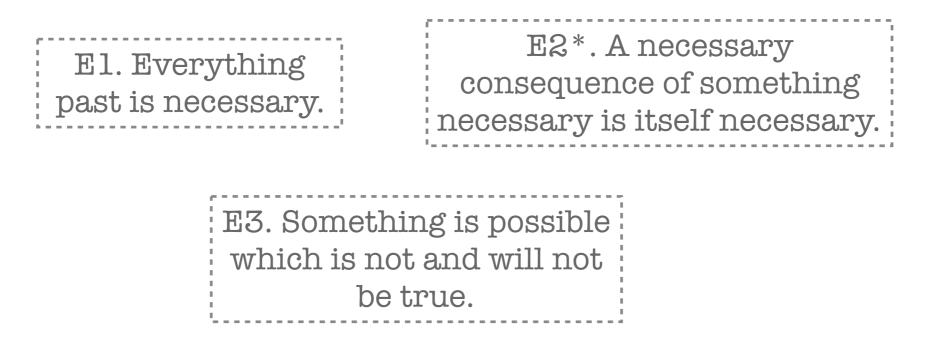
How about E2?

For our purposes it will be useful to replace E2 with the following principle, which is equivalent to E2 but easier to understand:

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

This (given the way that we are understanding "necessary") says that if P is out of our control, and it is also out of our control that if P then Q, then Q is also out of our control.

Is this plausible?

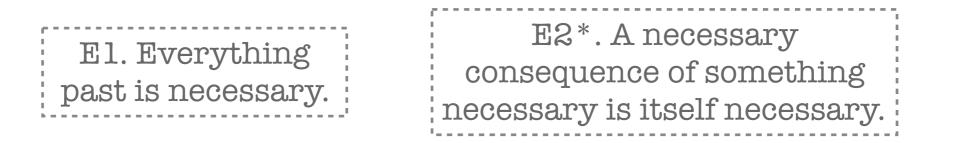


The Master Argument is an attempt to show that these three claims are inconsistent. If they are, then if the first two are true, E3 must be false. To put this another way, if the first two are true, then the negation of E3 must be true.

One way to state the negation of E3 is to say that, for any action A,

Either it is necessary that you will do A or it is necessary that you will not do A.

And if this is true, there is no such thing as free will.



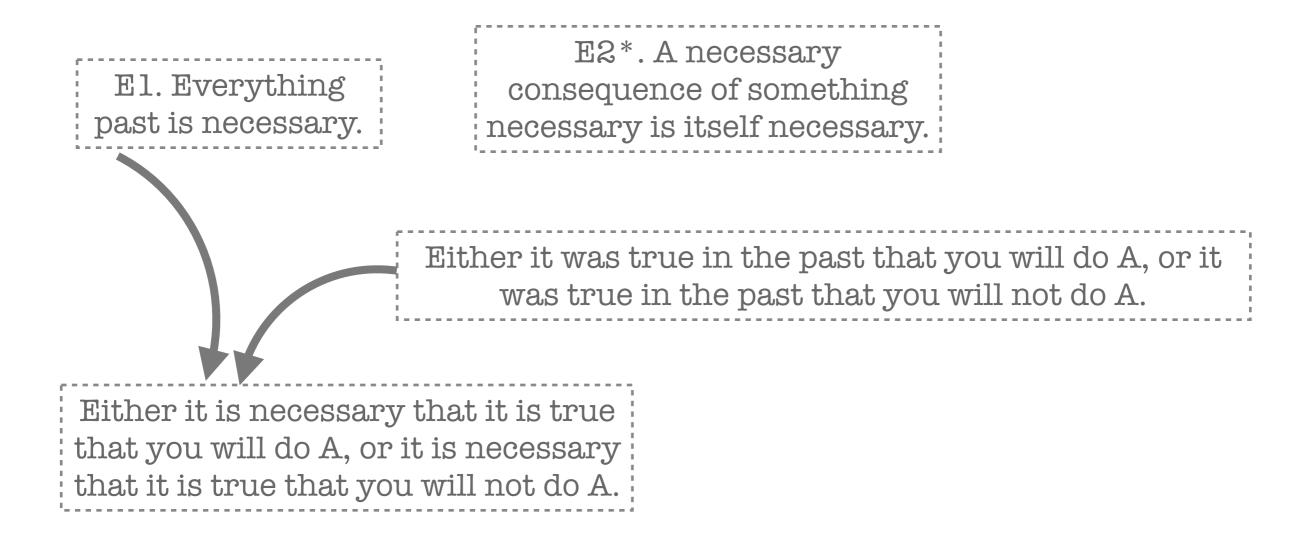
A first step in reconstructing the argument is to begin with the following consequence of the law of the excluded middle:

Either it is true that you will do A, or it is true that you will not do A.

Here you can substitute any possible action for "A" — e.g., "marry person X" or "get a philosophy-themed tattoo on such-and-such date."

One might think that if this claim is true, then it was also true in the past. After all, it is not like the law of the excluded middle was not true yesterday! So one might think that the following must be true:

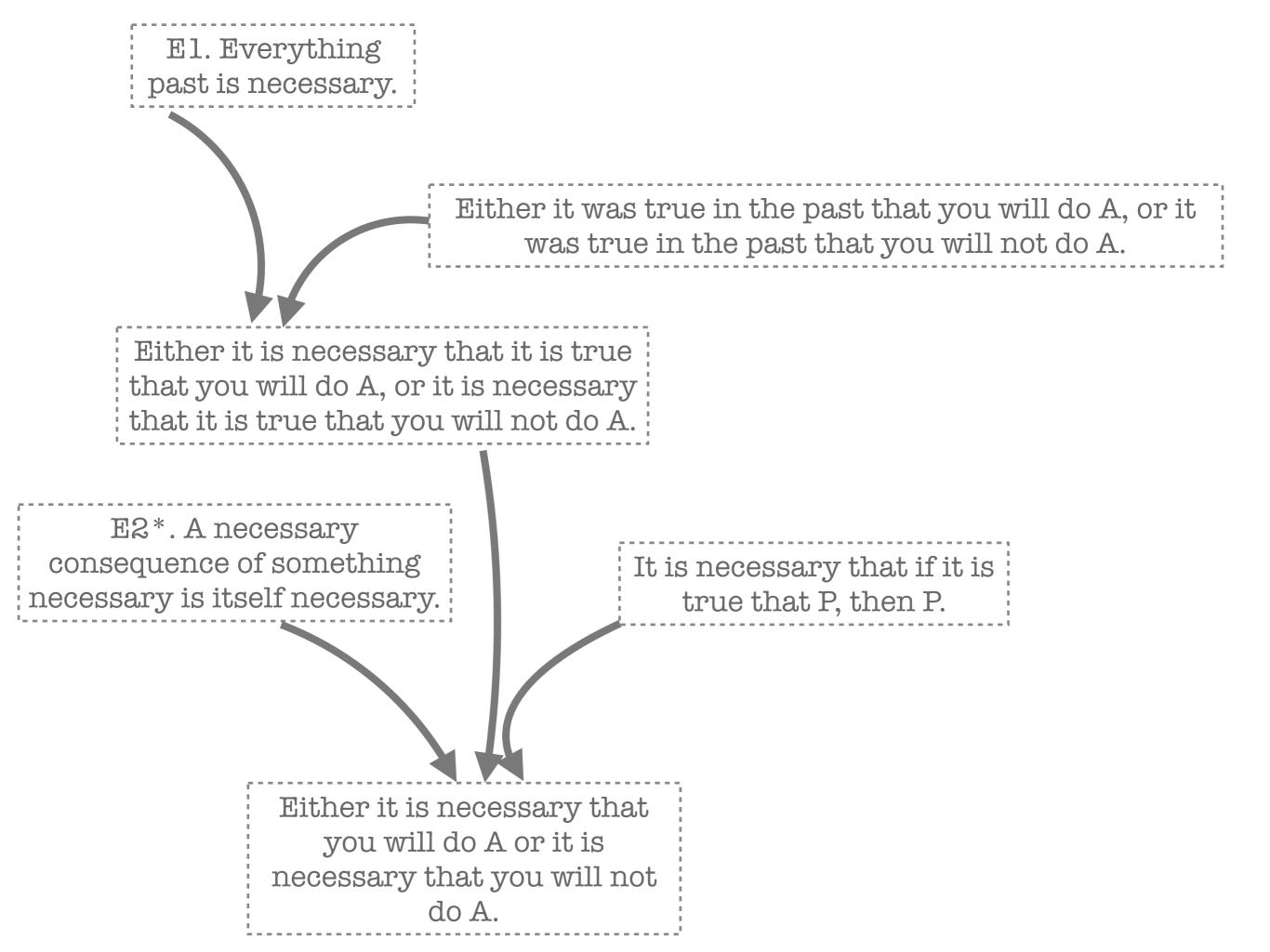
Either it was true in the past that you will do A, or it was true in the past that you will not do A.



To get to our conclusion, we just need one more assumption: that there is a necessary connection between what is true and what is the case.

It is necessary that if it is true that P, then P.

To illustrate, imagine that you have no control over the fact that it is true that you will one day marry. Could you have control over whether you will one day marry? It seems not.

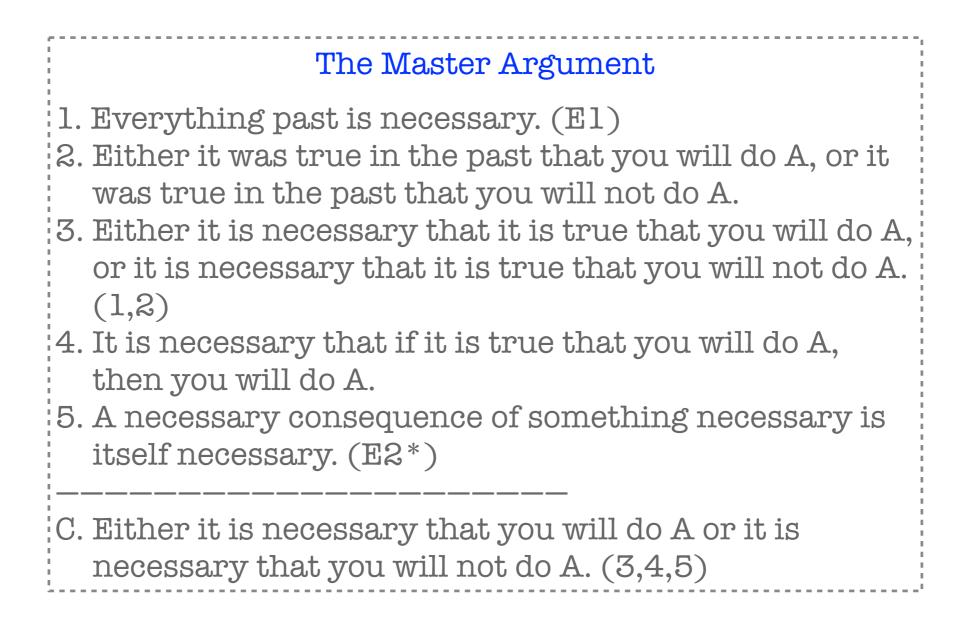




- 1. Everything past is necessary. (E1)
- 2. Either it was true in the past that you will do A, or it was true in the past that you will not do A.
- 3. Either it is necessary that it is true that you will do A, or it is necessary that it is true that you will not do A.(1,2)
- 4. It is necessary that if it is true that you will do A, then you will do A.
- 5. A necessary consequence of something necessary is itself necessary. (E2\*)

C. Either it is necessary that you will do A or it is necessary that you will not do A. (3,4,5)

The move from 3,4,5 to C may seem less than obvious. Is this step valid?



The Master Argument is a very challenging argument for the believer in free will. It is very hard to deny either premise 4 or 5. 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 you will do A, or it was true in the past that you will not do A.

To deny this premise is to deny the law of the excluded middle. On this view, certain propositions are not true, and not false — rather, they are simply 'indeterminate.' They just lack a truth value. So this is basically a way of denying that there is such a thing as fate.

This is different than saying that claims about future actions are false for if you say that some proposition P is false, then you are committed to the negation of P being true. (This is what allowed Aristotle to derive the contradiction in the argument discussed earlier.)

Rather, on this sort of view, we say that both the proposition that you will marry person X and the proposition that you will not marry person X simply have no truth-value.

2. Either it was true in the past that you will do A, or it was true in the past that you will not do A.

We have already seen one argument against this sort of view: it involves denying that God has knowledge of what will happen in the future. For if there are no truths about what will happen in the future, then there is nothing for God to know.

Does this involve denying God's omniscience? Not necessarily; we might still say that God knows all the true propositions, which seems like a reasonable definition of omnipotence.

Still, one might think that denying God's knowledge of future actions is at least in tension with various claims about God put forward by the major religions.

2. Either it was true in the past that you will do A, or it was true in the past that you will not do A.

But there is also another sort of objection to the denial of (2), which has nothing to do with God. This focuses on the way that we think about predictions.

Suppose that you say to a friend, 'I bet Jane is going to decide to major in philosophy.' And then suppose that, a month later, after long deliberations, Jane does indeed make the right choice and decide to major in philosophy. We would be inclined to say: 'What you said about Jane was true.'

Doesn't this imply that there was already a truth about what Jane was going to decide, back when you made the prediction?

Let's turn now to another response to the argument: the denial of premise (1).



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 now set the Master Argument to the side, and turn to our second argument for fatalism. One of the themes of this class is that you can encounter philosophy in places other than the writings of professional philosophers. Throughout the course we'll discuss various places where philosophy comes into contact with science. But in the reading for today, we see a short example, from the science fiction writer Ted Chiang, of finding philosophy in literature.

Chiang's story 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.

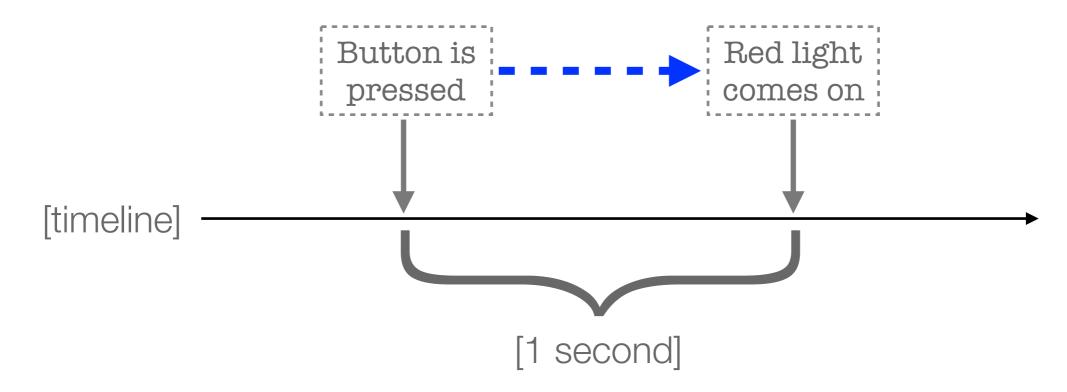
To get clear about what Chiang is imagining, let's begin with a much more boring device, called the Repeater.

To get clear about what Chiang is imagining, let's begin with a much more boring device, called the Repeater.

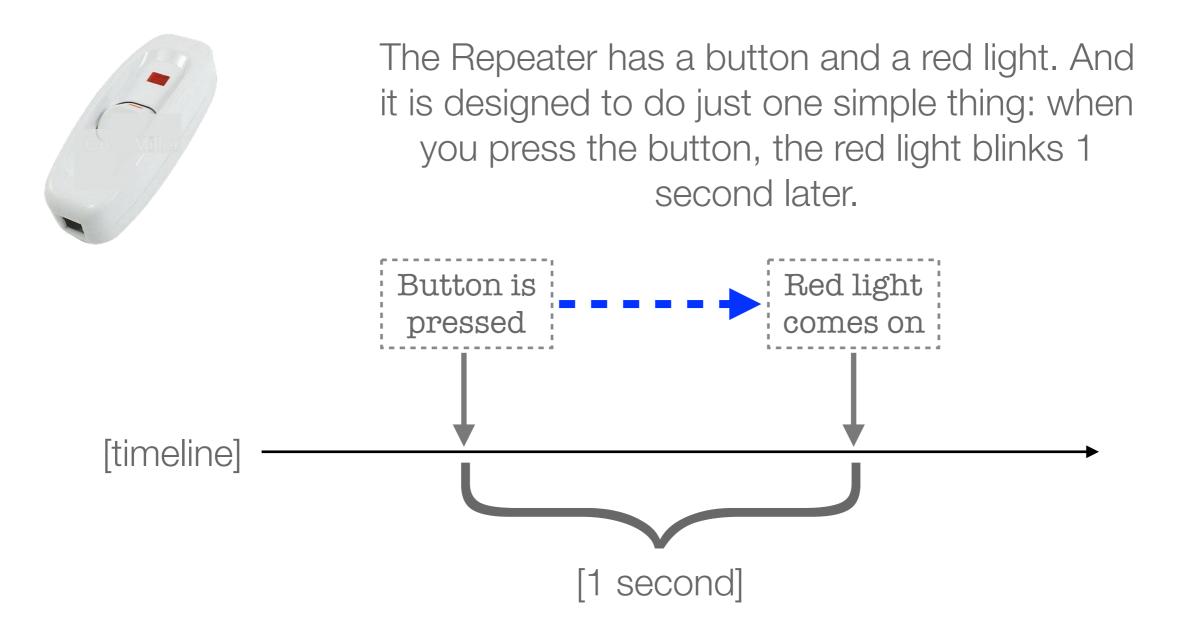


The Repeater has a button and a red light. And it is designed to do just one simple thing: when you press the button, the red light blinks 1 second later.

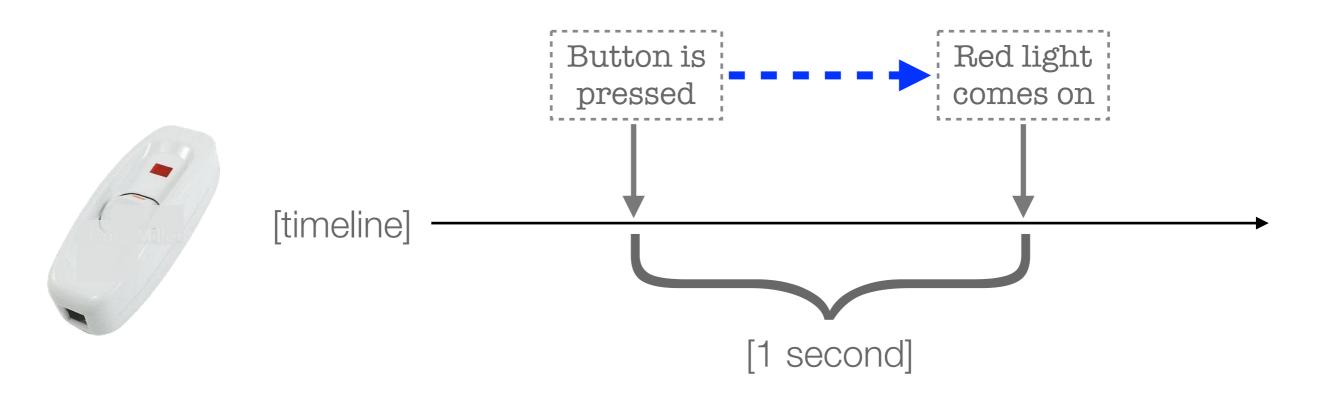
So its behavior might be diagrammed like this:



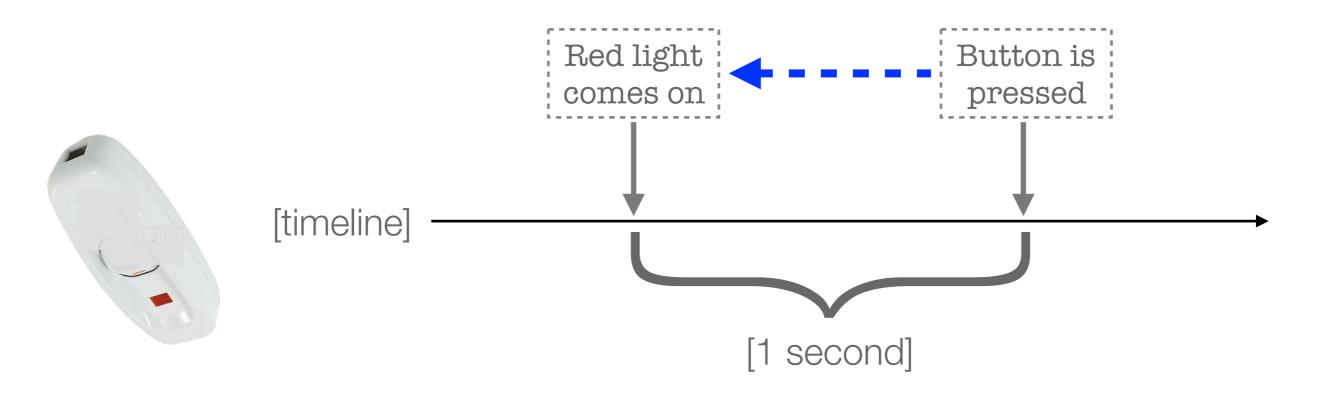
To get clear about what Chiang is imagining, let's begin with a much more boring device, called the Repeater.



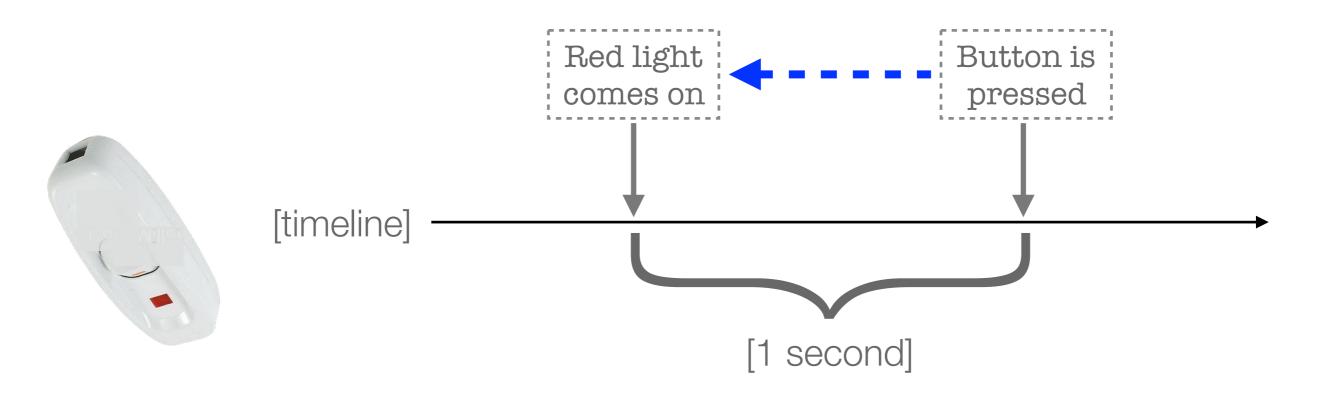
Here the timeline represents the time passed between the two events — 1 second — and the blue arrow represents the direction of causation. (The button pressing causes the light to come on.)



The Predictor looks much the same as the Repeater. But it works a bit differently.

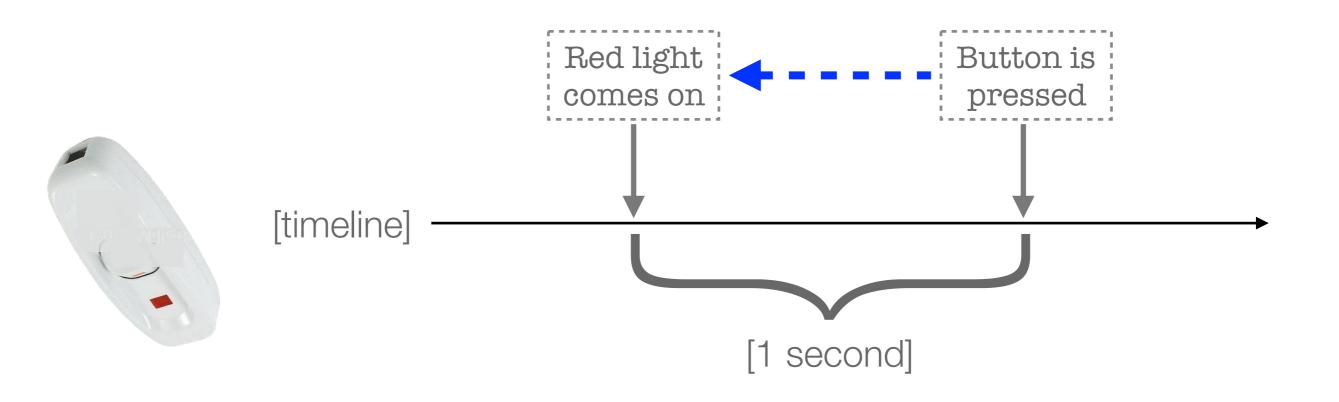


Some things are the same. There is still a one second interval between the button pressing and the red light coming on; and the button pressing still causes the light to come on. But now the button pressing causes the light to come on one second before the button is pressed.



## Here is how Chiang describes the experience of using a Predictor.

Most people say that when they first try it, it feels like they're playing a strange game, one where the goal is to press the button after seeing the flash, and it's easy to play. But when you try to break the rules, you find that you can't. If you try to press the button without having seen a flash, the flash immediately appears, and no matter how fast you move, you never push the button until a second has elapsed. If you wait for the flash, intending to keep from pressing the button afterwards, the flash never appears. No matter what you do, the light always precedes the button press.

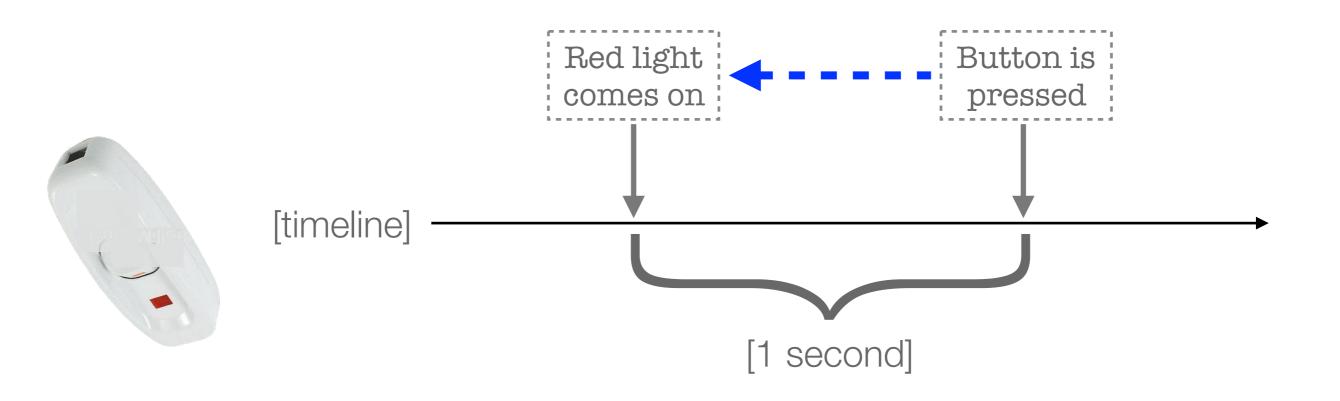


Chiang thinks that people in possession of a Predictor would come to believe that they have no free will. Do you think that he's right about what such people would think?

## Do you think that the people would be correct that they lacked free will?

Now, one might reasonably point out that there are no Predictors

- the story is fiction, after all. But a reasonable case can be made that this fictional example poses a challenge to our free will.



Begin with a question: is it possible for the Predictor to exist?

This would require two things. The first is fate: there must now be a fact about what you will do 1 second from now.

The second is the possibility of backward causation: later events causing earlier ones. This is a possibility which has been taken seriously in physics. One way in which you might think of certain kinds of cases of backward causation is as mini-instances of timetravel: a signal travels back in time from the pressing of the button to cause the red light coming on at a prior time. 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?