

Minds, Machines and Freedom

living in a material world



George Matthews, Plymouth State University

2020

Turing's claims

Turing's claims

the universal machine

It is possible to build a machine that can do **anything** (that can be described).

Turing's claims

the universal machine

It is possible to build a machine that can do **anything** (that can be described).

thinking = computation

Everything that we do with our minds and our bodies can be described.

What machines are good at.

What machines are good at.



What machines are not so good at.

What machines are not so good at.



The Puzzle of Freedom

The Puzzle of Freedom

Everything that happens has a cause.

We are often free to choose to do one thing or another.

If I am caused to do something
I am not free to do otherwise.

The Puzzle of Freedom

Everything that happens has a cause.

We are often free to choose to do one thing or another.

?

*Each of these claims seems to be true on its own, but can they all be true **at the same time**? It is hard to see how.*

If I am caused to do something
I am not free to do otherwise.

The Puzzle of Freedom

Everything that happens has a cause.

We are often free to choose to do one thing or another.

Either we are caused, but not free; free but not caused; or somehow free and caused at the same time. This gives us three philosophical strategies for discussing freedom.

If I am caused to do something
I am not free to do otherwise.

The Puzzle of Freedom

Everything that happens has a cause.

We are often free to choose to do one thing or another.

False

Determinism accepts that everything has a cause and that causes and freedom are incompatible, and so **denies that we are really free.**

If I am caused to do something
I am not free to do otherwise.

The Puzzle of Freedom

Everything that happens has a
False
cause.

We are often free to choose to
do one thing or another.

Libertarianism accepts that we are free and that causes and
freedom are incompatible, and so **denies that everything has a
cause.**

If I am caused to do something
I am not free to do otherwise.

The Puzzle of Freedom

Everything that happens has a cause.

We are often free to choose to do one thing or another.

Compatibilism accepts that we are free and that everything has a cause, and so **denies that causes and freedom are incompatible.**

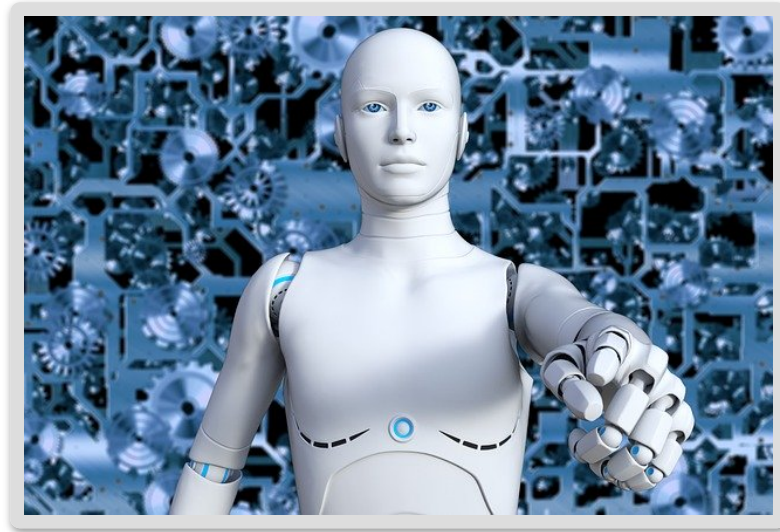
If I am caused to do something
I am not free to do otherwise.

False

What's at stake

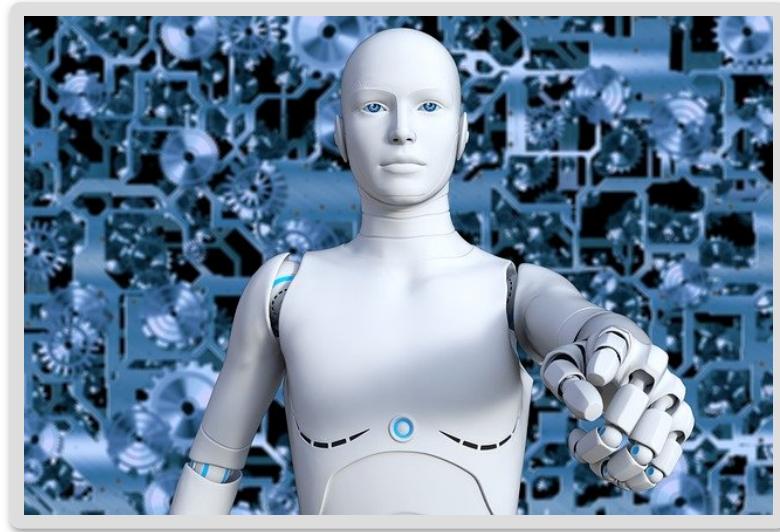
What's at stake

Freedom is important



What's at stake

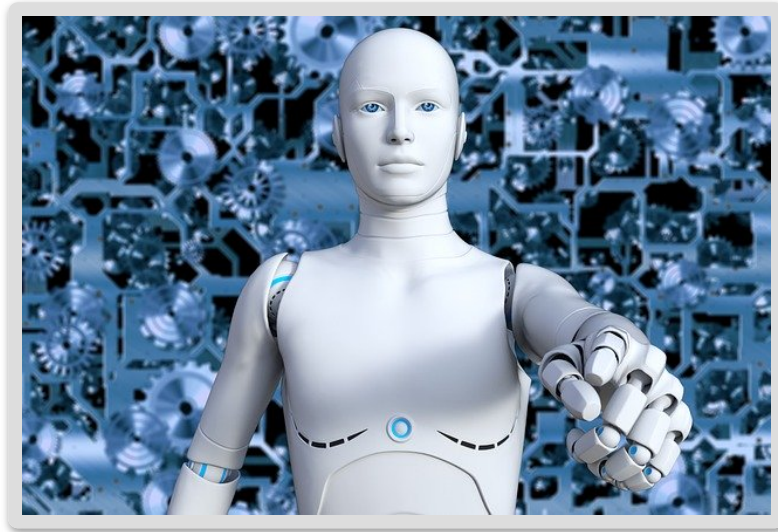
Freedom is important



- Our lives seem to unfold as a series of real choices.

What's at stake

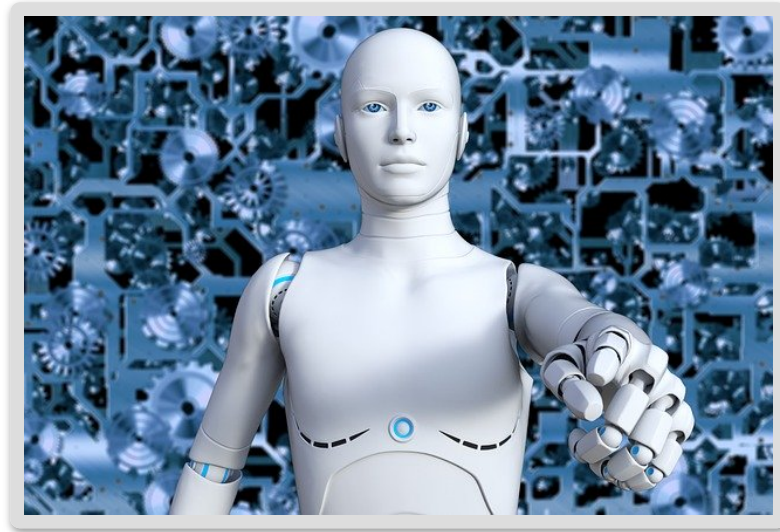
Freedom is important



- Our lives seem to unfold as a series of real choices.
- We hold people responsible for many of their actions and that assumes that they *have a choice* in each case.

What's at stake

Freedom is important



- Our lives seem to unfold as a series of real choices.
- We hold people responsible for many of their actions and that assumes that they *have a choice* in each case.
- Life would seem meaningless without the ability to choose.

What's at stake

Freedom is mysterious



What's at stake

Freedom is mysterious



- Whatever happens seems to have a cause.

What's at stake

Freedom is mysterious



- Whatever happens seems to have a cause.
- Explaining *anything* seems to involve showing why it had to happen, the mechanisms behind the scenes.

What's at stake

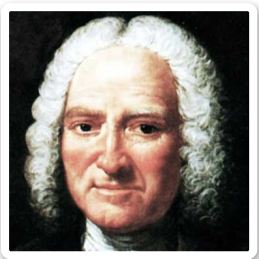
Freedom is mysterious



- Whatever happens seems to have a cause.
- Explaining *anything* seems to involve showing why it had to happen, the mechanisms behind the scenes.
- As scientific understanding progresses we may seem more and more like complex machines.

Determinism

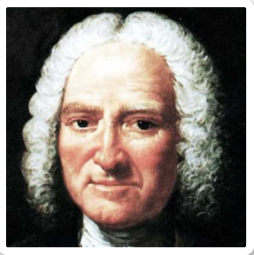
Determinism



Baron D'Holbach
1723-1789

Determinism

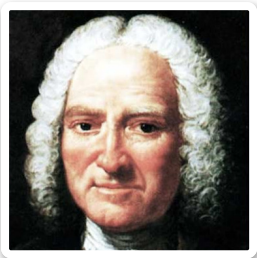
"Man's life is a line that nature commands him to describe upon the surface of the earth without him ever being able to swerve from it."



Baron D'Holbach
1723-1789

Determinism

"Man's life is a line that nature commands him to describe upon the surface of the earth without him ever being able to swerve from it."

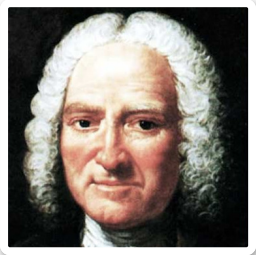


Baron D'Holbach
1723-1789

- Holbach was impressed by the successes of physics at predicting the motion of objects and foresaw the extension of these successes to explanations of human beings.

Determinism

"Man's life is a line that nature commands him to describe upon the surface of the earth without him ever being able to swerve from it."

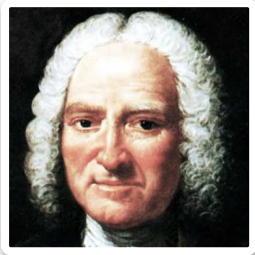


Baron D'Holbach
1723-1789

- Holbach was impressed by the successes of physics at predicting the motion of objects and foresaw the extension of these successes to explanations of human beings.
- For him, our sense of freedom is an illusion, a result of us not knowing what causes us to do what we do.

Determinism

"Man's life is a line that nature commands him to describe upon the surface of the earth without him ever being able to swerve from it."

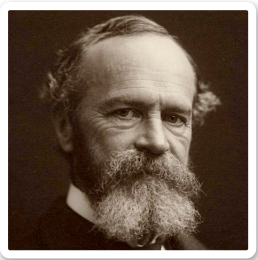


Baron D'Holbach
1723-1789

- Holbach was impressed by the successes of physics at predicting the motion of objects and foresaw the extension of these successes to explanations of human beings.
- For him, our sense of freedom is an illusion, a result of us not knowing what causes us to do what we do.
- Does it even make sense to *argue* about determinism? If the answer we find compelling is pre-determined why bother saying anything at all?

Libertarianism

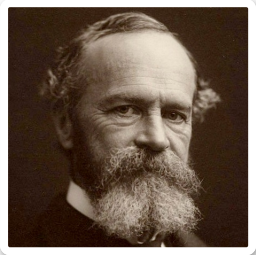
Libertarianism



William James
1842-1910

Libertarianism

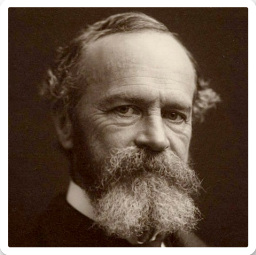
"Of two alternative futures ... both may now be really possible, and the one becomes impossible only [when] the other excludes it by becoming real."



William James
1842-1910

Libertarianism

"Of two alternative futures ... both may now be really possible, and the one becomes impossible only [when] the other excludes it by becoming real."

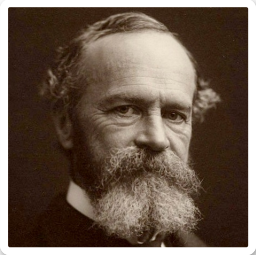


William James
1842-1910

- Libertarians like James defend our common-sense understanding of ourselves as free agents.

Libertarianism

"Of two alternative futures ... both may now be really possible, and the one becomes impossible only [when] the other excludes it by becoming real."

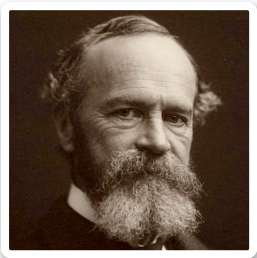


William James
1842-1910

- Libertarians like James defend our common-sense understanding of ourselves as free agents.
- We experience ourselves as making choices and not as being caused to pick one option over another.

Libertarianism

"Of two alternative futures ... both may now be really possible, and the one becomes impossible only [when] the other excludes it by becoming real."



William James
1842-1910

- Libertarians like James defend our common-sense understanding of ourselves as free agents.
- We experience ourselves as making choices and not as being caused to pick one option over another.
- And yet we may wonder whether we can trust our experiences of ourselves. Doesn't science often show us the previously hidden causes of things in our experience?

Compatibilism

Compatibilism



W.T. Stace
1886-1967

Compatibilism

"Acts freely done are those acts whose immediate causes are the psychological state in the agent. Acts not freely done [have causes] external to the agent."



W.T. Stace
1886-1967

Compatibilism

"Acts freely done are those acts whose immediate causes are the psychological state in the agent. Acts not freely done [have causes] external to the agent."



W.T. Stace
1886-1967

- Stace offers a distinction between two ways we might be caused as a way out of the debate between determinism and libertarianism.

Compatibilism

"Acts freely done are those acts whose immediate causes are the psychological state in the agent. Acts not freely done [have causes] external to the agent."



W.T. Stace
1886-1967

- Stace offers a distinction between two ways we might be caused as a way out of the debate between determinism and libertarianism.
- When we are not free we are caused to do things by external forces; when we are free we *cause ourselves* to do certain things.

Compatibilism

"Acts freely done are those acts whose immediate causes are the psychological state in the agent. Acts not freely done [have causes] external to the agent."



W.T. Stace
1886-1967

- Stace offers a distinction between two ways we might be caused as a way out of the debate between determinism and libertarianism.
- When we are not free we are caused to do things by external forces; when we are free we *cause ourselves* to do certain things.
- Does this account of human freedom simply offer one mystery in place of another? Let's look more closely...

Reasons and causes

Reasons and causes



Maybe the debate about freedom and determinism is the wrong debate.

Reasons and causes



Maybe the debate about freedom and determinism is the wrong debate.

- We can be *caused* to do things in a variety of ways, pushed by internal and external forces acting on us.

Reasons and causes



Maybe the debate about freedom and determinism is the wrong debate.

- We can be *caused* to do things in a variety of ways, pushed by internal and external forces acting on us.
- Some of these involve having *good reasons* to do one thing or another.

Reasons and causes



Maybe the debate about freedom and determinism is the wrong debate.

- We can be *caused* to do things in a variety of ways, pushed by internal and external forces acting on us.
- Some of these involve having *good reasons* to do one thing or another.
- Is this is the key to understanding how and when we are free?

Reasons and causes



Maybe the debate about freedom and determinism is the wrong debate.

- We can be *caused* to do things in a variety of ways, pushed by internal and external forces acting on us.
- Some of these involve having *good reasons* to do one thing or another.
- Is this is the key to understanding how and when we are free?

Consider some examples...

Reasons and causes

I am not going to work today because I quit.



Reasons and causes

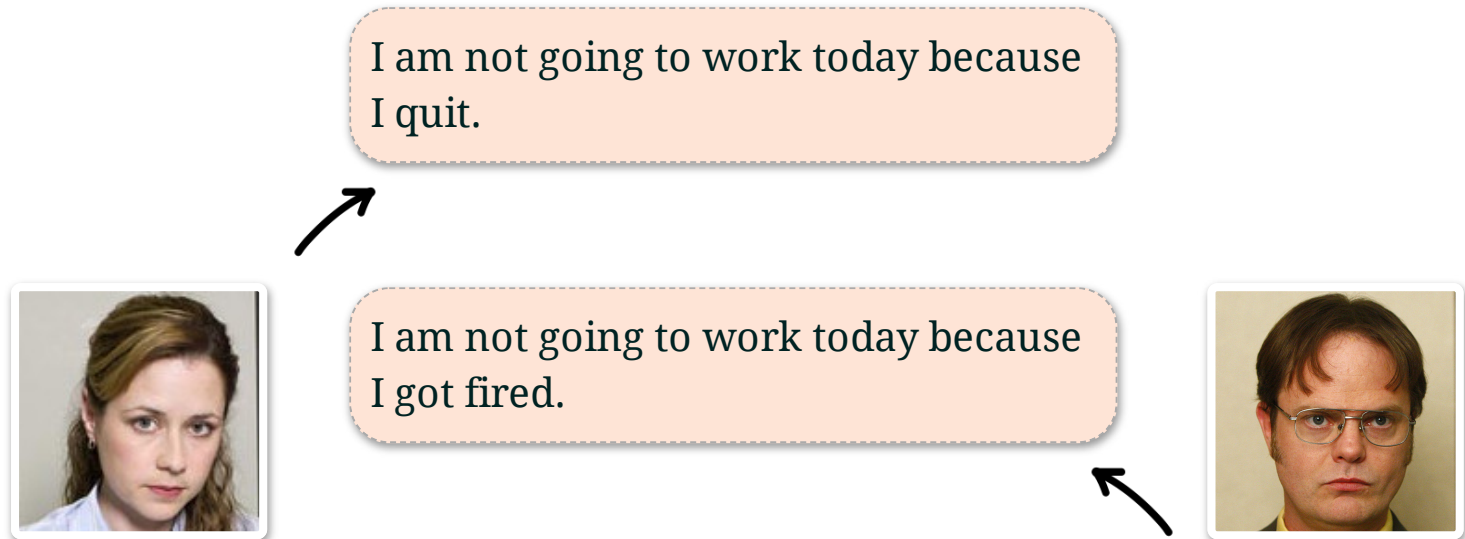
I am not going to work today because I quit.



I am not going to work today because I got fired.



Reasons and causes



We may quit a job because it doesn't fit in with our carefully considered plans, but given the role of bosses in our society getting fired leaves us no choice.

Reasons and causes

I gave money to charity because I wanted to help.



Reasons and causes

I gave money to charity because I wanted to help.



I gave money to the man who pointed a gun at me.



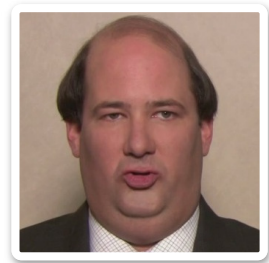
Reasons and causes



I gave money to charity because I wanted to help.



I gave money to the man who pointed a gun at me.



Threats of force are ways of coercing us to go against our own wishes, acts of charity reflect our own wishes to help others.

Reasons and causes

I take drugs because I want to relax
after a long day at work.



Reasons and causes

I take drugs because I want to relax after a long day at work.



I take drugs because I am hopelessly addicted and can't stop myself.



Reasons and causes

I take drugs because I want to relax after a long day at work.



I take drugs because I am hopelessly addicted and can't stop myself.



Addictions can trap us since they can affect brain physiology such that our ability to say "no" to our own impulses is impaired. The line between responsible adult use of potentially addictive substances and behaviors and addiction can be fuzzy.

Free will?

Free will?

?

The idea that we have something called free will is difficult to explain. What might possibility explain our ability to initiate actions freely while nothing else that exists seems to have this power?

Free will?



The idea that we have something called free will is difficult to explain. What might possibly explain our ability to initiate actions freely while nothing else that exists seems to have this power?

- Traditionally it was held to be a special power of the human soul, that which connects us with the being who most exemplifies free will, God.

Free will?



The idea that we have something called free will is difficult to explain. What might possibly explain our ability to initiate actions freely while nothing else that exists seems to have this power?

- Traditionally it was held to be a special power of the human soul, that which connects us with the being who most exemplifies free will, God.
- Many scientists doubt that such a power exists and so refer to freedom as an illusion, similar to the illusion that the sun moves in the sky while in fact it is the earth that moves on its own axis.

Free will?



The idea that we have something called free will is difficult to explain. What might possibility explain our ability to initiate actions freely while nothing else that exists seems to have this power?

- Traditionally it was held to be a special power of the human soul, that which connects us with the being who most exemplifies free will, God.
- Many scientists doubt that such a power exists and so refer to freedom as an illusion, similar to the illusion that the sun moves in the sky while in fact it is the earth that moves on its own axis.

But what then about legal and moral concepts of freedom that seem essential to our social lives and understanding of ourselves?

Free won't!

Free won't!

?

Maybe we should instead talk about "free won't." After all don't we act freely when we learn to say "no" to our own worst impulses?

Free won't!



Maybe we should instead talk about "free won't." After all don't we act freely when we learn to say "no" to our own worst impulses?

- Human freedom depends on the region at the front of the brain called the "pre-frontal cortex" which serves to *prevent* impulses to act from going further.

Free won't!



Maybe we should instead talk about "free won't." After all don't we act freely when we learn to say "no" to our own worst impulses?

- Human freedom depends on the region at the front of the brain called the "pre-frontal cortex" which serves to *prevent* impulses to act from going further.
- Many streams of brain activity, ranging from our instinctual and emotional impulses to our symbolic reasoning, converge here giving us the ability to filter out some impulses and pursue some others based on conscious thought processes.

Free won't!



Maybe we should instead talk about "free won't." After all don't we act freely when we learn to say "no" to our own worst impulses?

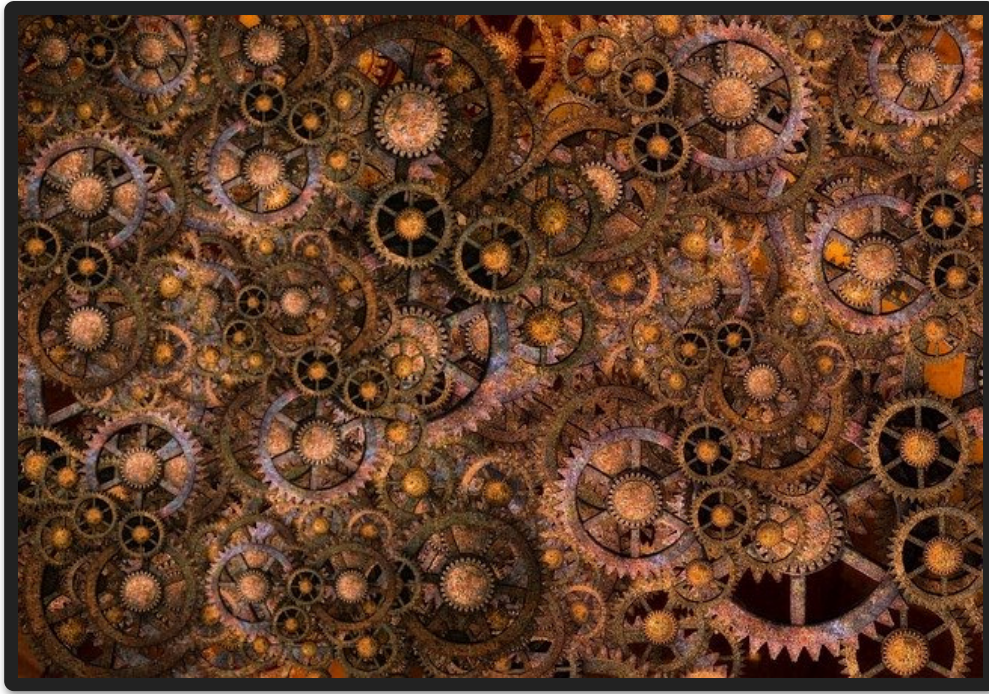
- Human freedom depends on the region at the front of the brain called the "pre-frontal cortex" which serves to *prevent* impulses to act from going further.
- Many streams of brain activity, ranging from our instinctual and emotional impulses to our symbolic reasoning, converge here giving us the ability to filter out some impulses and pursue some others based on conscious thought processes.
- Responsible adults are presumed to be able to make deliberate choices in this way.

Find out more

Freedom and Determinism: from the Crash Course video series here is a great account of the tricky debate about freedom and determinism.

Compatibilism: also from the Crash Course, the next in the series about the compatibilist attempt to resolve the problem.

Free Will: a comprehensive account of the philosophical question of freedom at the *Internet Encyclopedia of Philosophy*.



[Credits](#)

Built with:

[Rstudio](#)

[xarignan](#) html presentation framework

[download this presentation](#) or [print it](#)

[editorial suggestions and comments](#): requires a (free) GitHub account.