## CHAPTER 6

## Free Will and Determinism

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## The Problem

Suppose you are kidnaped and forced to commit a series of terrible murders. The kidnaper makes you shoot a first victim by forcing your finger to squeeze the trigger of a gun, hypnotizes you into poisoning a second, and then throws you from an airplane, causing you to squash a third. Miraculously, you survive the fall from the airplane. You stagger from the scene, relieved that the ordeal is over. But then, to your amazement, you are apprehended by the police, who handcuff you and charge you with murder. The parents of the victims scream obscenities at you as you are led away in disgrace.

Are the police and parents fair to blame you for the killings? Obviously not, for you have an unassailable excuse: you did not act of your own free will. You couldn't help what you did; you could not have done otherwise. And only those who act freely are morally responsible.

We all believe that we have free will. How could we not? Renouncing freedom would mean no longer planning for the future, for why make plans if you are not free to change what will happen? It would mean renouncing morality, for only those who act freely deserve blame or punishment. Without freedom, we march along pre-determined paths, unable to control our destinies. Such a life is not worth living.

Yet freedom seems to conflict with a certain apparent fact. Incredibly, this fact is no secret; most people are fully aware of it. We uncritically accept free will only because we fail to put two and two together. The problem of free will is a time bomb hidden within our most deeply held beliefs.

Here is the fact: *every event has a cause*. This fact is known as **determinism**.

We all believe in causes. If scientists discovered debris in the upper stratosphere spelling out 'Ozzy Osbourne!', they would immediately go to work to discover the cause. Was the debris put there by a renegade division of NASA comprised of heavy-metal fans? Was it a science project from a school for adolescent geniuses? If these things were ruled out as causes, the scientists would start to consider stranger hypotheses. Perhaps aliens from another planet are playing a joke on us. Perhaps the debris is left over from a collision between comets, and the resemblance to the name of the heavy-metal singer is purely coincidental. Perhaps different bits of the debris each have different kinds of causes. Any of these hypotheses might be entertained. But the one thing the scientists would not contemplate is that there simply is no cause whatsoever. Causes can be hard to discover, or coincidental, or have many different parts, but they are always there

It's not that uncaused events are utterly inconceivable. We can imagine what it would be like for an uncaused event to occur. For that matter, we can imagine what it would be like for all sorts of strange things to occur: pigs flying, monkeys making 10,000 feet tall statues from jello, and so on. But it is reasonable to believe that no such things *in fact* occur. Likewise, it is reasonable to believe that there are in fact no uncaused events—that is, it is reasonable to believe in determinism.

Our belief in determinism is reasonable because we have all seen science succeed, again and again, in its search for the underlying causes of things. Technological innovations owe their existence to science: skyscrapers, vaccination, rocket ships, the internet. Science seems to explain everything we observe: the changing of the seasons, the movement of the planets, the inner workings of plants and animals. Given this track record, we reasonably expect the march of scientific progress to continue; we expect that science will eventually discover the causes of everything.

The threat to freedom comes when we realize that this march will eventually overtake *us*. From the scientific point of view, human choices and behavior are just another part of the natural world. Like the seasons, planets, plants, and animals, our actions are studyable, predictable, explainable, controllable. It is hard to say when, if ever, scientists will learn enough about what makes humans tick in order to predict everything we do. But regardless of when the causes of human behavior are *discovered*, determinism assures us that these causes *exist*.

It is hard to accept that one's own choices are subject to causes. Suppose you become sleepy and are tempted to put down this book. The causes are trying to put you to sleep. But you resist them! You are strong and continue reading anyway. Have you thwarted the causes and refuted determinism? Of course not. Continuing to read has its own cause. Perhaps your love of metaphysics overcomes your drowsiness. Perhaps your parents taught you to be disciplined. Or perhaps you are just stubborn. No matter what the reason, there was some cause.

You may reply: 'But I felt no compulsion to read or not to read; I simply decided to do one or the other. I sensed no cause'. It is true that many thoughts, feelings, and decisions do not *feel* caused. But this does not really threaten determinism. Sometimes the causes of our decisions aren't consciously detectable, but those causes still exist. Some causes of behavior are preconscious functions of the brain, as contemporary psychology teaches, or perhaps even subconscious desires, as Freud thought. Other causes of decisions may not even be mental. The brain is an incredibly complicated physical object, and might 'swerve' this way or that as a result of certain motions of its tiniest parts. Such purely physical causes cannot be detected merely by directing one's attention inward, no matter how long and hard and calmly one meditates. We can't expect to be able to detect all the causes of our decisions just by introspection.

So: determinism is true, even for human actions. But now, consider any allegedly free action. To illustrate how much is at stake here, let's consider an action that is horribly morally reprehensible: Hitler's invasion of Poland in 1939. We most certainly blame Hitler for this action. We thus consider him to have acted freely. But determinism seems to imply that Hitler was not free at all.

To see why, we must first investigate the concepts of **cause** and **effect**. A cause is an earlier event that *makes* a later effect happen. Given the laws of nature,<sup>1</sup> once the cause has occurred, the effect *must* occur. Lightning causes thunder: the laws of nature governing electricity and sound guarantee that, when lightning strikes, thunder will follow.

Determinism says that Hitler's invasion of Poland was caused by some earlier event. So far, there is little to threaten Hitler's freedom. The cause of the invasion might be something under Hitler's control, in which case the invasion would also be under his control. For instance, the cause might be a decision that Hitler made just before the invasion. If so, then it seems we can still blame Hitler for ordering the invasion.

<sup>1</sup> Chapter 9 discusses laws of nature.

But now consider this decision itself. It is just another event. So determinism implies that it too must have a cause. This new cause might be an even earlier decision Hitler made, or something his advisers told him, or something he ate, or, more likely, a combination of many factors. Whatever it is, call this cause of Hitler's decision to invade Poland 'c'. Notice that c also caused the invasion of Poland. For as we saw above, a cause is an earlier event that makes a later event happen. Once c occurred, Hitler's decision had to occur; and once that decision occurred, the invasion had to occur.

We can repeat this reasoning indefinitely. Determinism implies that *c* must have an earlier cause  $c_1$ , which in turn must have an earlier cause  $c_2$ , and so on. The resulting sequence of events stretches back in time:

$$\ldots c_2 \rightarrow c_1 \rightarrow c \rightarrow$$
 the decision  $\rightarrow$  the invasion

Each event in the sequence causes the invasion, since each event causes the event that occurs immediately after it, which then causes the next event occurring immediately after that one, and so on. The final few events in this sequence look like ones under Hitler's control. But the earlier ones do not, for as we move back in time, we eventually reach events before Hitler's birth.

This argument can be repeated for any human action, however momentous or trivial. Suppose an old man slips while crossing the street, and I laugh at him instead of helping him up. Using the above chain of reasoning, we can show that my laughter was caused by events before my birth.

Things now look very bad for freedom. Hitler no longer seems to have had a free choice about whether to invade Poland. I seem to have had no choice but to laugh at the old man. For these actions were all caused by things outside our control. But then what was morally wrong about what Hitler or I did? How can we blame Hitler for invading Poland if it was settled before his birth that he would do it? How can we blame me for laughing? How can we blame anyone for anything?

We can restate the challenge to freedom in terms of physics. Any action or decision involves the motion of sub-atomic particles in one's body and brain. These sub-atomic particles move according to the laws of physics. Physics lets us calculate the future positions of particles from information about (i) the previous states of the particles, and (ii) the forces acting on the particles. So, in principle, one could have examined the sub-atomic particles one hundred years before the invasion of Poland, calculated exactly how those particles would be moving one hundred years later, and thereby calculated that Hitler would invade Poland. Such calculations are far too difficult to ever complete in practice, but that doesn't matter. Whether or not anyone could have completed the calculations, the particles were there, before Hitler's birth, and the fact that they were there, and arranged in the way that they were, made it inevitable that Hitler would invade Poland. Once again, we have found a cause for Hitler's invasion that already existed before Hitler was born. And the existence of such a cause seems to imply that Hitler's invasion of Poland was not a free action.

And yet, it *must* have been free, for how else can we *blame* him for this despicable act? The time bomb has exploded. Two of our most deeply held beliefs, our belief in science and our belief in freedom and morality, seem to contradict each other. We must resolve this conflict.

## Hard Determinism

The simplest strategy for resolution is to reject one of the beliefs that produce the conflict. One could reject free will, or one could reject determinism.

The rejection of free will in the face of determinism is called hard determinism. Think of the hard determinist as a hard-nosed

intellectual who tolerates no softies. Free will conflicts with science, so free will has got to go. Here is a typical hard determinist speech:

We must get used to the idea that no one is really responsible for anything. Belief in freedom and moral responsibility was a luxury of a pre-scientific age. Now that we have grown up, we must put aside childish ways and face the facts. Science has disproved the existence of freedom and morality.

Can we live with this depressing philosophy? Philosophers must seek the truth, however difficult it may be to accept. Maybe hard determinism is one of those difficult truths. Hard determinists might attempt 'damage control', arguing that life without freedom is not as bad as one might think. Society might still punish criminals, for instance. Hard determinists must deny that criminals deserve punishment, since the crimes were not committed freely. But they can say that there is still a use for punishment: punishing criminals keeps them off the streets and discourages future crimes. Still, accepting hard determinism is nearly unthinkable. Nor is it clear that one *could* stop believing in free will, even if one wanted to. If you find someone who claims to believe hard determinism, here's a little experiment to try. Punch him in the face, really hard. Then try to convince him not to blame you. After all, according to him, you had no choice but to punch him! I predict you will find it very difficult to convince him to practice what he preaches.

Hard determinism is a position of last resort. Let's see what the other options look like.