**Socrates (469–399 BC)**: Notorious gadfly philosopher, sentenced to death for impiety and corrupting the youth.

**Plato (427–347 BC)**: Cornerstone of Western philosophy, wrote extremely sophisticated dialogues featuring his mentor Socrates, founded the Academy.

**Aristotle (400–320 BC)**: His system of metaphysical and scientific thought dominated the West for nearly 2000 years, student of Plato, founded the Lyceum.

**Epicurus (341–270 BC)**: Figurehead of atomism, materialism, hedonism, and irreligion.

**Cicero (106–43 BC)**: Brought Greek philosophy into the Latin West, exerted an enormous influence on Western thought.

**Plotinus (204–270)**: Figurehead of Neoplatonist emanationism, regarded all matter as *the* evil to be overcome.

**Augustine of Hippo (354–430)**: Harmonized Greek Neoplatonism with Western Christianity, attacked Christian heresies.

**al-Kindi (800–870)**: The first Islamic philosopher in the Greek tradition, helped translate Aristotle into Arabic, rationalist.

**al-Farabi (872–951)**: Baghdad Aristotelian, preoccupied with logic and method, systematic Neoplatonist.

**Avicenna (980–1037)**: Extremely influential and innovative Islamic systematic polymath from Central Asia, emanationist.

**al-Ghazali (1055–1111)**: Mystic, acute critic of Aristotelian philosophy, natural causality, and rationalist morality.

**Averroes (1126–1198)**: Defended Aristotelian philosophy and natural causality against al-Ghazali, denied the religious conception of an individual afterlife.

**Maimonides (1138–1204)**: Jewish philosopher writing in Arabic, developed demythologized non-literal *via negativa* theology.

**Anselm of Canterbury (1033–1109)**: Brought careful step-by-step argumentation into Latin medieval theology.

**Thomas Aquinas (1225–1274)**: Undisputed master of Scholastic systematizing, harmonized the new Aristotelianism with Western Christianity.

**Duns Scotus (1265–1308)**: 'The Subtle Doctor', defended a univocal account of being, a voluntarist account of natural law, and a higher form of intellectual cognition.

**William of Ockham (1285–1344):** Moved dramatically to radical voluntarism and nominalism, advocated church-state separation and opposed monastic property.

**Thomas Hobbes (1588–1679)**: Uncompromising materialist, empiricist, egoist, moral/political conventionalist; reviled as an enemy of morality and religion.

**René Descartes (1596–1650)**: Father of modern philosophy, modern science, modern mathematics.

**Baruch Spinoza (1632–1677)**: Combined Hobbes and Descartes into a rationalistic anti-religious pantheistic Stoicism; "the first who reduced atheism into a system" (Bayle).

**John Locke (1632–1704)**: Developed highly influential program of empiricist psychology and metaphysical skepticism, defended rights-based political liberalism.

**Nicolas Malebranche (1638–1715)**: Thoroughgoing Cartesian rationalist, defended radical causal occasionalism.

**Isaac Newton (1643–1727)**: Most astonishingly successful scientific thinker in the history of civilization.

**Gottfried Leibniz (1646–1716)**: Genius polymath, developed novel form of idealism from modern rationalism and traditional Aristotelianism.

**Samuel Clarke (1675–1729)**: Popularized Newton's scientific work, defended Newtonian philosophical views in written debates with Leibniz and anti-religious 'freethinkers'.

**George Berkeley (1685–1753)**: Attacked modern theory of matter on Lockean grounds, developed a radical idealist metaphysics.

**Thomas Reid (1710–1796)**: Attacked modern 'way of ideas', defended what he considered 'common sense' views.

**David Hume (1711–1776)**: Followed Lockean program to develop a thoroughly naturalistic theory of human psychology and society, and a deeper form of metaphysical skepticism.

**Immanuel Kant (1724–1804)**: Systematically reconstructed modern rationalist metaphysics within the limits of Humean skepticism, thereby founding 'German idealism'.

**Jeremy Bentham (1748–1832)**: Legal reformer who defended a purely utilitarian account of morality and law.

**G. W. F. Hegel (1770–1831)**: Systematically developed his own version of German idealism, featuring a theory of stage-by-stage historical development.

**J. S. Mill (1806–1873)**: Raised a Benthamite, his utilitarianism attended to character development and its societal influences; defender of individual liberty and women's rights.

**Søren Kierkegaard (1813–1855)**: Attacked Kantian/Hegelian universalism in the name of an 'absurd' and demanding individual religious faith.

**Karl Marx (1818–1883)**: Put British economics into a modified Hegelian (materialist) framework to critique industrial capitalism.

**William James (1842–1910)**: Pioneering psychologist, co-founder of 'American pragmatism'.

**Friedrich Nietzsche (1844–1900)**: Attacked Christian values and metaphysical system-building as harmful illusions that can drain the life from great creative souls.

**Edmund Husserl (1859–1938)**: Founder of phenomenology (the study of conscious experience as structured around objective 'intentional objects').

**Bertrand Russell (1872–1970)**: Mathematical logician, political activist, co-founder of analytic philosophy.

**Ludwig Wittgenstein (1889–1951)**: Brilliant exponent and critic of analytic philosophy, saw language as the source of philosophical problems, student of Russell.

**Martin Heidegger (1889–1976)**: Examined human experience in order to address the neglected and fundamental 'question of Being', student of Husserl.

**W. v. O. Quine (1908–2000)**: Mathematical logician, argued that philosophy ought to be continuous with the natural sciences.

**Do humans have free will?**

*Divine foreknowledge and free will*

Traditionally speaking, God is supposed to have knowledge of everything—including every single thing that will ever happen in the future. And of course since God's knowledge is *infallible*, it is impossible for God to be wrong. But then it follows that God knows every decision I will ever make, and that it's *impossible* for me to do anything other than what God knows I will do. Does this take away my free will? Let's make the plausible assumption that *free will requires alternatives*.[1] In other words, for me to have free will in some practical decision I make, there has to be more than one thing I can possibly do. And so if only one course of action is possible for me, then I am no more free than a planet following its orbital path. Then we may ask: does God's infallible foreknowledge leave me bound to a single alternative, thereby taking away my free will? If so, then theistic religions—whose laws and punishments assume that we can be held responsible for our decision-making—are in trouble.

Before examining this question, we should distinguish it from other questions. We shall set aside the narrow question of *predestination*: we are not asking whether God chooses people for heaven before they are ever born, or whether people can do things on their own to help their chances of heaven. Nor are we asking whether God has actively *ordained* the future: even if God were a pure observer, never doing anything to actually *affect* the future, he might still have infallible knowledge of the future. And as Augustine famously pointed out, there seems to be a big difference between foreseeing an action and *forcing* an action.

The question, then, is whether foreknowledge takes away the alternative possibilities needed for free will. Here is how the argument goes:

1. God knows and has always known everything I will do in the future.
   *After all, God must know absolutely everything: he is essentially omniscient.*
2. It is impossible for God to be wrong.
   *After all, God's knowledge is infallible.*
3. Therefore, it is impossible for me to do anything else in the future [follows from 1 and 2].
   *That is, it is impossible for me to act contrary to God's infallible knowledge of my future actions.*
4. To have free will, I must have more than one possible action.
   *In other words, free will requires alternatives.*
5. Therefore, I do not have free will when it comes to my future actions [follows from 3 and 4].

Thus if God knows I'll tell a lie tomorrow, then it's impossible for me not to tell a lie tomorrow, which means I have no free will when it comes to telling a lie tomorrow, and so it's not really my fault. And notice that this same reasoning applies to *all human actions*: every single action was foreseen by God, and therefore every single action is unfree.

*Revisionary solutions*

First, let's consider a drastic solution often traced back to Aristotle.[2] This solution completely rejects premise 1, maintaining that God does not in fact know the future. But isn't God all-knowing? And so there had better not be any facts out there that God does not know, right? Yes, but what if *there aren't any facts about the future*? What if claims about the future like "I will tell a lie tomorrow" are currently neither true nor false, and do not acquire a truth-value of true or false until the relevant future arrives? If propositions about the future do not even have a truth-value yet, then not even an all-knowing God knows what the future will bring. The cost of this solution is that it has a hard time making sense of the divinely inspired *prophecies* that are found in theistic religions.

Second, consider a solution often associated with Augustine.[3] This solution rejects premise 4, maintaining that all it takes to perform a free action is a *will* that is responsible for your actions. Suppose that nothing is blocking the connection between your will and your action. Suppose that if you were to will *x*, you would do *x*, and if you were to will *y*, you would do *y*. Then, according to this solution, it doesn't really matter whether it is possible for you to will or act contrary to God's foreknowledge. Perhaps God knows you're going to will *x* and then do *x*, so that *y* (along with every other alternative) is impossible for you. No matter. All that matters is the hypothetical point that *if* things were to go differently, and *if* you were to will *y*, then (since nothing is keeping your will from effectively resulting in action) *y* is what you would do. As long as your will is able to effectively result in action, as long as your will has "a very important place in the order of causes", you are acting freely. This is a form of **compatibilism**, and we will examine it later.

*Accommodating solutions*

To appreciate other solutions, we must take notice of a very subtle and very important point: strictly speaking, 3 does not follow from premises 1 and 2. That is, even given that God knows I will do *x*, and even given that it's impossible for God to be wrong, it does not strictly follow that it's impossible for me not to do *x*. All that follows is that it's impossible for me not to do *x without God already knowing that I would not do x*.

To see why, it helps to put the discussion in terms of alternate possible worlds in which things go differently than in the actual world. In some possible worlds, God knows I'll do *x* and so *x* is what I end up doing. In other possible worlds, God knows I'll do *y* and so *y* is what I end up doing. Of course, in no world is God *unaware* of what I'll do, and in no world is God ever *wrong* about what I'll do. But this doesn't take away all the different possibilities. So even if God infallibly knows I'll do *x*, and so *x* is what I end up doing, that doesn't take away all the possible worlds where I do *y* instead. Things still could have gone that way, and these alternative possibilities are not eliminated by God's infallible foreknowledge of the actual world.[4]

It also helps to see what missing ingredient must be added to premises 1 and 2 in order for 3 to follow. Premise 2 gives us a necessary truth, i.e. one that is fixed and unchangeable and beyond control. It says my future actions *must necessarily* correspond to God's foreknowledge. But we can't conclude that *my actions* are necessary and restricted to a single alternative, not unless we can assume that *God's foreknowledge* is necessary and restricted to a single alternative. And this is an assumption we

[1] We will later see reason to doubt this assumption.

[2] See his *De Interpretatione* 9 discussion of the sea battle.

[3] See Book 3 of his *On the Free Choice of the Will*, and also *City of God* 5.9–10.

[4] In symbolic modal logic, where '$\Box$' symbolizes necessity, we can say that (1) $p$ and (2) $\Box(p \rightarrow q)$ do not entail (3) $\Box q$. Equivalently, where '[IMP]' symbolizes impossibility, we can say that (1) $p$ and (2) $[\text{IMP}](p \,\&\, \sim q)$ do not entail (3) $[\text{IMP}]\sim q$.

cannot make: all premise 1 would say is that God knows I'll do *x* in the *actual* world, and it doesn't say anything about what *must* be the case, about whether there are *other possible worlds* in which God knows I'll do something else. So to get 3, we would need a stronger version of premise 1. We would need some reason for thinking that God's foreknowledge is in some way necessary: i.e. fixed and unchangeable and beyond control.[5]

And it turns out that there is such a reason. The missing ingredient is **the fixity of the past**: what's past is past, it's now 'set in stone', and there's absolutely nothing I can do about it, nothing I can to do to change it.[6] And so I can't do anything about what God has always known. All those other possible pasts, in which things go differently up to now, are irrelevant to me, because I am now stuck with the past as it actually went. For me, the past as a whole (including God's foreknowledge) really is restricted to a single alternative. So premise 1 can be strengthened:

1′. It is a fixed fact of the past that God has always known everything I will do in the future.

From here the argument continues as before. My future actions must necessarily correspond to what God has always known, and of course there's nothing I can do about that. And so it follows that there's nothing I can do about my future actions. In short, I have no free will because I cannot change what God has always infallibly known.

Now let's consider two solutions that try to get around the fixity of the past. First, you might say that God's foreknowledge isn't really part of the fixed past, because of God's special relationship to time. Recall that God is traditionally conceived of as *eternal* and indeed **timeless**. And according to an influential account from 6th-century philosopher Boethius, all moments of time are equally *present* to God. Now, even if the past is in some relevant sense fixed, perhaps the same cannot be said of the present: if someone had infallible knowledge of the present, presumably that wouldn't take away anybody's free will. So perhaps God's foreknowledge is something like knowledge of the present and therefore harmless. A general objection to timelessness-based solutions is that *timelessly eternal truths* might seem every bit as fixed and unchangeable as *past truths*: it's not like I can do more to change 2+2=4 than to change Caesar's assassination. But what about *eternally present* truths? Here it is harder to say.[7]

Second, you might say that God's foreknowledge isn't really part of the fixed past, because his foreknowledge is ultimately about the future. Here there is a distinction between **hard facts and soft facts**. Hard facts belong to the past in every way—e.g., Caesar was assassinated in 44 BC—and are therefore fixed. But soft facts are supposed to straddle time, belonging to the past in one way, but ultimately directed at the future: e.g., it was true in 44 BC that JFK would be assassinated in 1963. And it is not clear whether soft facts are fixed and unchangeable in the same way as hard facts: e.g., surely Oswald could not affect Caesar's assassination, but perhaps he could affect that age-old proposition about JFK's assassination. So if God's foreknowledge is only a soft fact (being about the future and all), then even though it belongs to the past in some sense, it might not partake of the fixity of the past, which means we might be able to change it. The trick here is finding solid criteria for what counts as a soft fact, and showing that God's foreknowledge qualifies.[8]

*Free will and determinism*

In contemporary philosophy, the free will debate is commonly divided into three alternative views: hard determinism, soft determinism, and libertarianism. **Hard determinism** is the view that we have no free will because determinism is true. **Soft determinism** is the compatibilist view that we have free will even though determinism is true. **Libertarianism** is the view that determinism is false and that this allows us to have free will. In other words, to the question "Do we have free will?", hard determinists say "No, because we live in a deterministic universe", soft determinists say "Yes, but free will is a fairly down-to-earth capacity that's *compatible* with determinism", and libertarians say "Yes, and free will is an exceptional capacity that's *incompatible* with determinism".

This means the debate is fairly complicated. The three-view debate between theists and agnostics and atheists is comparatively simple: roughly speaking, it is all about a single question ("Does God exist?"), and the different views lie on a single scale (from "Yes" to "We can't know" to "No"). But in the three-view debate over free will and determinism, the different views agree on some questions and disagree on others, and it is important to get clear on the different questions and keep them separate from each other. Examine the following diagram, and see if you understand why the three views answer the different questions the way they do.

| | "Is determinism true?" | "Is free will compatible with determinism?" | "Do we have free will?" |
|---|---|---|---|
| Hard det. | ***Yes*** | ***No*** | ***No*** |
| Soft det. | ***Yes*** | ***Yes*** | ***Yes*** |
| Libert. | ***No*** | ***No*** | ***Yes*** |

Both hard and soft determinists agree that the universe is completely **deterministic**: i.e., every state of the universe follows necessarily from previous states of the universe and the laws of nature, with no wiggle room whatsoever. And this means that *human activity* is every bit as deterministic as the rest of the natural world: chemicals, stars, rivers, plants, animals, machines, etc. Of course, scientists are not all that sure about the strict truth of determinism. On some common interpretations of quantum mechanics, many micro-level physical phenomena (e.g., radioactive decay) are not strictly deterministic: given the exact same initial state, a variety of different outcomes may follow. It's not *utter chaos*—there are still statistical laws that assign fixed probabilities to the different outcomes—but there is no determining factor to explain which outcome will occur at a given time (e.g., *when exactly* a carbon-14 atom will emit a beta particle). But it would be a mistake to breathe a sigh of relief and ignore the potential threat of determinism. For one thing, interpretations of quantum mechanics are extremely controversial, and deterministic interpretations might prove most successful. And for another, indeterminacy at the micro-level of quantum mechanics tends to fade into irrelevance at the macro-level of ordinary physical objects, which means human decision-making might still be a deterministic process. In any case, hard determinists and soft

[5] Again, in symbolic modal logic, there is a valid argument from (1) $\Box p$ and (2) $\Box(p \rightarrow q)$ to (3) $\Box q$. Or, again, from (1) [IMP]$\sim p$ and (2) [IMP]$(p \,\&\, \sim q)$ to (3) [IMP]$\sim q$.

[6] This is sometimes called "necessity *per accidens*". The past may not be strictly necessary, since other pasts seem to be possible. But it is still necessary and fixed for us.

[7] See Boethius's *Consolation of Philosophy*. See also Aquinas, *Summa theologiae* Ia.q14.a13.

[8] This solution is associated with Ockham. See e.g. Alvin Plantinga's "On Ockham's Way Out." *Faith and Philosophy*. 3(3): 235–69 (1986).

determinists aren't too worried: they usually treat determinism as at least *approximately* true, and set aside quantum mechanics as a minor and unimportant exception.

But libertarians insist that human activity is a major exception: when we make decisions, we have the power to *rise above* the natural world and *defy* the (quasi-)deterministic processes that govern it. Libertarian free will is standardly supposed to be *indeterministic*, *contracausal*, and **incompatibilist**, marking out human beings as endowed with a special metaphysical power that no other animal can possess and no science can understand. Critics accuse libertarianism of wallowing in mysticism and mystery, but libertarians reply that it is the most familiar thing in the world—a matter of basic common sense—to be able to make our own choices and be held responsible for them. Perhaps scientific imperialists would deny us this ability, insisting that human decision-making is nothing more than a deterministic psychological process. But libertarians would say there is no good reason to surrender common sense and first-person experience to the speculative hypothesis of determinism.

To soft determinists, this looks like overkill. There's nothing deeply mysterious about free will, and there's no reason to go into some otherworldly metaphysical realm lying beyond nature. Instead, we can understand free will with a **compatibilist** account: ordinary cases of decision-making are free, not because I can somehow transcend nature, but simply because I'm not being forced into anything by external coercion or internal compulsion. According to compatibilists, the real threat to freedom is not *determinism*. The real threat is *force*, and it comes in a variety of forms: e.g., physical constraint, weapons, blackmail, hypnosis, brainwashing, intoxication, addiction, mental illnesses, mental disabilities. In many of my decisions, all of those factors are absent and I'm making a decision on my own, guided by my own thoughts and desires, by my own judgments about what's worth doing. And that's really all it takes for me to have free will and to be morally responsible for my decisions—it doesn't matter much whether or not my decision-making process is deterministic.

But to hard determinists, this looks like an evasion, like refusing to stare reality in the face. What determinism tells us is that no decision is completely your own: every thought and desire in your mind is the product of genetic and environmental factors that have been operating on you since before you were born. Even if you feel as though a decision is completely up to you, this is only because you are unaware of all the complicated hidden factors that are really driving your decision. Even if you try to outsmart nature by making an arbitrary decision at complete random, the whole process will have been as deterministic as clockwork. Our sense of human dignity and deep moral responsibility is an illusion, and we might as well face the fact that we are nothing more than biological machines that have been programmed by our genes, clever animals that have been trained by our environment, to operate this way or that.

In examining these three views, we'll start by sketching a common rationale for accepting soft determinism's *compatibilist* accounts of free will and the biggest problem facing libertarianism's *incompatibilist* accounts of free will. Then we will examine the strongest arguments *against* compatibilism and ask whether it is feasible for us to live life without believing in free will.

### *Why Compatibilism?*

Since the birth of modern science, compatibilism has been associated with the naturalist project of understanding humans as sophisticated animals belonging to the natural world. But how can free will be a mere animal capacity (however sophisticated the animal)? A classic case for compatibilist soft determinism comes from Hume. Observation of humans from a third-person perspective, Hume argues, suggests that our behavior is both deterministic and free. (1) Human behavior is *deterministic* because it is fairly *regular* and *predictable*: just as we conclude that mindless natural phenomena (e.g., astronomy, animal behavior, weather) are deterministic because they fall into regular patterns suitable for making predictions, for the exact same reasons we can conclude that human behavior is deterministic. Of course, we do not have a precise science of human behavior—things are too messy and complicated to make perfect predictions. But the same is true of other natural processes we still deem deterministic (e.g., weather), which means we should treat them alike and deem both deterministic. (2) Human behavior is *free* because we typically act according to our own decision-making, in a way that reflects our own character and personality. Of course, sometimes we are not free—e.g., when we are imprisoned—and therefore unable to put our decisions into action. But if nothing is hindering our ability to act one way or another, depending on which way we decide to go, then there is a perfectly good sense in which we are free. And this holds true even if everything about us—from our decisions to our character—is the result of deterministic processes.

We have seen this simple compatibilist account of free will before. It is sometimes supported with an appeal to common practice. Imagine a courtroom where the jurors are examining a case of homicide, trying to determine whether the killer acted of his own free will. The defense might argue that the killer was sleep-deprived, on drugs, brainwashed by a religious cult, or coerced into the killing by someone else. The prosecution might argue that the killer was clear-headed and deliberate, acting in accordance with his own decisions and his own settled character. In short, then, the question is whether there were significant distorting factors interfering with the killer's ability to do what he wanted. On the contrary, it is a rare defense attorney who argues that his client is not at fault because of the deterministic laws of nature, and it is a rare prosecuting attorney who argues that the defendant is able to defy the laws of nature and act with lofty incompatibilist free will. Common practice, then, seems to support compatibilism.[9]

Hume finishes his case by pressing a serious problem against the incompatibilist accounts of free will embraced by libertarians. According to these accounts, human behavior is *not* regulated by deterministic laws. But then, Hume says, the process must come down to *sheer random chance*: i.e., our behavior no longer results from our character, but from something indeterministic and unrelated to who we are as a person. And this is unacceptable: not only would it involve something happening without a cause, but it would shield us from moral responsibility for our actions—how can I be held responsible for an action that randomly happened to me? This can be called **the problem of randomness**, and it afflicts all accounts of free will that would deny determinism.[10]

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[9] See the Model Penal Code (MPC) Section 2.01: "(1) A person is not guilty of an offense unless his liability is based on conduct that includes a voluntary act or the omission to perform an act of which he is physically capable. (2) The following are not voluntary acts within the meaning of this Section: (a) a reflex or convulsion; (b) a bodily movement during unconsciousness or sleep; (c) conduct during hypnosis or resulting from hypnotic suggestion; (d) a bodily movement that otherwise is not a product of the effort or determination of the actor, either conscious or habitual."

[10] The argument against libertarianism drawn from the problem of randomness is often called the 'luck argument' or the '*Mind*

*Libertarianism and the Problem of Randomness*

This problem might make for a knockout blow if libertarians were forced to say that free decision-making has no cause whatsoever. But they have other options: free decision-making might involve (1) causes that are not events but instead *agents*; (2) causes that *are* events, but that do not *deterministically cause* their effects. We'll now examine these other libertarian accounts, to see if they can help libertarians overcome the problem of randomness.

The first form of libertarianism involves so-called **agent-causation**, and it was most famously defended by Thomas Reid. To understand the view, note that common philosophical accounts of cause and effect focus on *events*: one event is the cause of another, so that something happens due to something else that happened. And Reid would agree that it is impossible for an event to happen with no cause whatsoever. But he maintains that the cause of a free decision is not some earlier event, but instead an *agent*: i.e., a special kind of being who has the two-way power to act or refrain from acting. Thus if I freely decide to call my mom, my decision does not lack a cause (i.e., it is not random), and does not have an event for a cause (e.g., events in my mind), but instead has an *agent* for a cause: namely, *me*, a being with the two-way power to decide to call my mom or not. On Reid's view, my decision was not caused by anything that happened *to* me, or *in* me, like certain thoughts or desires. It was caused by me, the agent, acting on my own.

The most obvious challenge to such a view is the question "So if the free decision is caused by the agent, then what is it that caused the agent to act?" For if something else causes the agent to act, then the threat of determinism resurfaces. And if there isn't anything causing the agent to act, then the problem of randomness resurfaces. So Reid's answer is understandable, if somewhat unilluminating: "*The agent* is what caused the agent to act". And this is where most critics of agent-causation attack: Isn't this answer utterly mysterious? How can something cause itself to act, completely on its own? Why haven't scientists discovered physical events that don't come from earlier physical events? If the agent-cause has been there all day, then why did the decision happen only now? And if nothing about the agent determines whether the decision will be made or not, then isn't it still a matter of sheer random chance? Contemporary agent-causation theorists are faced with the challenge of answering these questions plausibly.[11]

The second form of libertarianism involves **indeterministic event-causation**, and its most prominent contemporary defender is Robert Kane.[12] This view focuses on the same kind of mental events that compatibilists might point to, the thoughts and desires going through our mind, but replaces a deterministic model with an indeterministic one. Certain choices, Kane argues, involve two conflicting (and roughly equally strong) sets of desires, each sending interference to the other, as if the individual is willfully trying to do the one thing and also trying to do the other. Thus a woman might struggle with the decision of whether to help someone in need or hurry to an important meeting. And which of the two efforts wins, and therefore which decision is made, is not determined by what goes on within the individual: i.e., given the exact same situation up until the point of decision, either effort might possibly come out on top. So whichever decision is made results from whichever effort wins in this indeterministic process.

But how can Kane solve the problem of randomness? First, to the objection that indeterminism takes away *voluntariness* or doing something *for a reason*, Kane notes that the decision still results from the individual's own desires, and made for reasons recognized by the individual. Thus if the woman decides to stop and help, this decision results from her own kind-hearted desires and motives. Second, to the objection that indeterminism takes away *control* or *moral responsibility*, Kane notes that we are still responsible in cases where we manage to successfully overcome random uncontrollable interference from outside us (e.g., assassinating someone despite windy conditions). This suggests that e.g. if the woman decides to go to the meeting, she is still responsible despite the interference coming from the desires she has to stop and help. But not everyone is convinced by Kane's defense. After all, as one critic puts it, "[i]f nothing about [the individual] can settle whether the decision occurs, then she will not have the control required for moral responsibility for it".[13] The lingering problem is that the decision does not seem to have its source in the individual.

*Arguments against Compatibilism*

We have seen that libertarianism has trouble overcoming the problem of randomness. But compatibilist soft determinism has problems of its own. Consider the following argument:

1. To have free will, I must have more than one possible action.
2. If determinism is true, then in every decision I make I am restricted to only one possible action.
3. Therefore, if determinism is true, then I do not have free will for any decision I make [from 1 and 2].

The conclusion follows from the two premises, premise 1 is highly plausible, and premise 2 seems hard to deny. After all, if determinism is true, then every action I perform follows with necessity from previous states of the universe and the laws of nature. And so if I am deciding between *x* and *y*, one of the two has already been settled on, and the other has been rendered impossible for me, given the previous states of the universe and the laws of nature. Since determinism eliminates alternatives, then determinism eliminates free will.

Now, compatibilists can respond by finessing premise 2. They could maintain, in the spirit of Augustine and Hume, that there is a sense in which I still have alternatives. After all, assuming that nothing was keeping my decisions from resulting in actions, then my deciding for *x* would have resulted in my doing *x* and my deciding for *y* would have resulted in my doing *y*. And so even if I was determined to do *x*, I still *could have done otherwise* if I had decided to. This is a **conditional analysis** of 'could have done otherwise', which points out that even if determinism took away my alternatives in a strict sense, I might still have had alternatives in a hypothetical sense. And maybe hypothetical alternatives are enough to give me free will.[14]

But this move runs into a serious problem: even a victim of brainwashing could have hypothetical alternatives. Suppose

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argument' (because of several papers in the philosophy journal *Mind*).

[11] Perhaps the most prominent contemporary defender of agent-causation theories is Timothy O'Connor. See his *Persons and Causes: The Metaphysics of Free Will*. New York: Oxford University Press (2000).

[12] See his *The Significance of Free Will*. New York: Oxford University Press (1996).

[13] In Pereboom, Derk. "Why We Have No Free Will and Can Live Without It." In Feinberg, J. and Shafer-Landau, R. (eds.) *Reason and Responsibility: Readings in Some Basic Problems of Philosophy*. 456—70, see 460 (2011).

[14] This move can be found in the work of such classic compatibilists as Hobbes, Anthony Collins, and Hume.

you have brainwashed me into wanting to do *x* above all else, but then left me alone so I could act 'freely'. No doubt I will decide for *x* instead of *y*, but it remains true that (since nothing is stopping me) I would have done *y* had I (somehow) decided to do *y*. This shows that hypothetical alternatives are not enough for free will. Clearly I am not acting freely, despite my hypothetical alternatives, despite the fact that nothing is keeping my decisions from resulting in action. Such cases—so-called **manipulation cases**—show that being able to *act* otherwise doesn't count for much if you're not able to *decide* otherwise.

Manipulation cases don't just undermine conditional analyses of 'could have done otherwise'. They are a perennial thorn in the side of compatibilism. This is because they force compatibilists to explain why it is okay for *an ordinary deterministic chain of cause and effect* to determine your decision, but bad news when *brainwashing* or some other form of manipulation is what determines your decision. Either way you're unable to decide otherwise, so why wouldn't both equally well take away your free will?

Another way to escape the argument is to deny premise 1: some compatibilists maintain that free will does not require the having of alternatives. This may sound ridiculous, but a certain kind of example has convinced many to take it quite seriously. What kind of example? A case where someone decides and acts freely, completely on their own, even though some external factor has eliminated their alternative possibilities.[15] A classic case involves someone who freely decides to stay in a room, not knowing that the door was locked the whole time: their action was free even though they had no alternative. A more sophisticated contemporary case involves someone who freely decides to vote for Nixon, not knowing that a mad scientist has put a machine in their brain that (i) would have forced them to decide for Nixon had they not decided for Nixon on their own, but (ii) remained completely inactive because they *did* do it on their own. Such cases (known as **Frankfurt cases**) are supposed to teach us the following overall lesson: what matters for free will is the *actual process* of deciding and acting, not whether or not you had *alternative possibilities*.[16]

But the debate is by no means settled. Incompatibilists commonly respond that Frankfurt cases fail to refute premise 1, because a closer look reveals subtle alternative possibilities underwriting the individual's free will. Thus suppose that the machine in my brain remains inactive, merely monitoring my thoughts, unless it detects that I am starting to decide against Nixon, at which point it activates and forces me to decide for Nixon. That's why I cannot decide against Nixon: that alternative has been eliminated. But it seems I can still *start to decide* against Nixon: after all, that's how the machine knows when to activate. Perhaps having these subtle alternatives—being able to at least *start to decide* either way—is enough to serve as the basis for my free will, saving premise 1 from counterexample. Compatibilists would need to show that these subtle alternatives (the so-called **flicker of freedom**) do not actually matter for free will, or else come up with an airtight no-alternatives-whatsoever Frankfurt case.[17]

A second argument against compatibilism reinforces premise 2 above, and mirrors the earlier discussion of divine foreknowledge and the fixity of the past:

1. I have no power over the previous states of the universe.
2. I have no power over the laws of nature.
3. I have no power over the truth of determinism.
4. If I have no power over $p$, and if I have no power over the fact that $p \rightarrow q$, then I have no power over $q$.
5. If determinism is true, then the previous states of the universe and the laws of nature necessitate my actions.
6. Therefore, if determinism is true, then I have no power over my actions [from 1–5].

Premises 1–3 list several factors beyond my control, premise 4 states a plausible principle about how factors beyond my control relate to each other, and premise 5 gives an uncontroversial statement of determinism. The conclusion follows from the premises, and if you think the conclusion is no big deal (perhaps because of Frankfurt cases), then we can replace 'I have no power over' with 'I am not morally responsible for' and the conclusion is a very big deal indeed.[18]

One objection to this argument looks quite drastic, but has been defended by the brilliant metaphysician David Lewis. Perhaps, Lewis argues, premise 2 is false, and there is a perfectly good sense in which ordinary creatures like us might have power over the laws of nature. He acknowledges that, if I am predetermined to do *x*, then it would take a miracle for me to do something else. In other words, if I were to do *y* instead, then the laws of nature would have been broken. But that does not mean that I would have broken the laws of nature myself, as if by some amazing powers. All it means is that some departure from the laws of nature would have occurred shortly before my doing *y*. So suppose that I was predetermined to do *x* and indeed I did *x*. There is still a very similar possible world in which I was predetermined to do *x* but shortly beforehand a wild anomaly occurred and so I did *y* instead. And so even though I did *x* deterministically, perhaps I still could have done *y* instead, laws of nature notwithstanding. But to many this seems like a high price to pay to maintain compatibilism.[19]

### *What if we have no free will?*

So far we see that compatibilists and libertarians are both in trouble. If determinism is true, this threatens to take away all our alternatives and subject us to factors beyond our control. But if determinism is false, then the problem of randomness threatens our control over and responsibility for our own behavior. This generates what William James has called **the dilemma of determinism**: whether determinism is true or false, either way we have no free will.

To reinforce this dilemma, consider two final arguments. One argument is against compatibilism, the other is against libertarianism, but the two have a similar structure. First, consider Derk Pereboom's **four-case manipulation argument** against compatibilism. He starts with an artificial person whose decision-making is manipulated by neuroscientists immediately beforehand, but still ends up satisfying lots of criteria compatibilists favor (fitting the person's general character, responding to available reasons, especially to moral reasons, de-

[15] This external factor is sometimes called a "counterfactual intervener" because it never actually intervenes.

[16] Frankfurt, Harry G. "Alternate Possibilities and Moral Responsibility." *Journal of Philosophy*. 66: 828–39. (1969)

[17] The term 'flicker of freedom' comes from a well-known discussion in John Martin Fischer's *The Metaphysics of Free Will*. Oxford: Blackwell. (1994)

[18] The so-called 'consequence argument' focuses on *what we have no power over*, whereas the 'direct argument' focuses directly on *moral responsibility*. See van Inwagen, Peter. *An Essay on Free Will*. Oxford: Clarendon Press. (1983)

[19] See Lewis, David. "Are We Free to Break the Laws?" *Theoria*. 47: 113–21. (1981)

sires being resistible). Clearly this person does not have free will. But what if the same manipulation took place with an ordinary human being at the beginning of his life? Could that help matters? Wouldn't causal determination by factors beyond the person's control still eliminate free will? Or what if neuroscientific manipulation were replaced with extremely strict training and discipline? Pereboom argues that these three cases cannot be easily distinguished from the fourth case, in which the person is in a deterministic universe: if the persons in the other cases lack free will, then an person in a deterministic universe also lacks free will.[20]

Next, consider a similar argument against libertarianism. Clearly nobody has any free choice about a particle that indeterministically swerves one way or another. And if scientists rig up a device that determines a person's decision one way or the other, depending on what the particle does, the person is clearly not making a free decision. And surely it makes no difference whether the device is big and remote, or tiny and inside one's brain. Finally, it's unclear whether it makes a difference if the device charges a particle in the person's own neural pathway, or if the device is replaced with the ordinary indeterministic workings of the person's brain. Again, if the person in the first cases lacks free will, then arguably a person in the last case also lacks free will.[21]

But if we have no free will, what then? Do we abandon morality? Do we abandon punishment?[22] Start with morality. If we have no free will, then presumably nobody can be held morally responsible for their actions: neither praise, nor blame, nor self-esteem, nor guilt are appropriate. But perhaps there are still some dimensions of morality that don't require responsibility. There might still be a way of evaluating people, their actions, and events as morally better or worse, without anyone being responsible for anything. For example, death and suffering might still be bad things, so that violent people are morally worse than peaceful people, even if neither kind of person deserves credit or blame for who they are. Similarly, just as we may feel pleased or displeased about our natural talents (or lack thereof) in music or athletics, we may feel pleased or displeased about being kind-hearted or cold-hearted people, even if pride or guilt is inappropriate.

Now, what about punishment? There are a few different possible justifications for punishing offenders. *Deterrence theories* justify punishment as a way of discouraging certain behavior. *Restitution theories* justify it as a way of compensating victims for their losses. *Rehabilitation theories* justify it as a way of reforming offenders. *Incapacitation theories* justify it as a way of keeping society safe from offenders. Finally, *retributivist theories* justify it as a way of giving offenders what they deserve. It is this last kind of justification that most clearly presupposes free will and moral responsibility: if nobody deserves anything, then murderers do not deserve to be killed. But other theories arguably rest on shaky foundations: for example, prison does not seem to reform offenders, and deterrence theories fumble when it comes to punishing the innocent. Thus Pereboom focuses on incapacitation, arguing that punishment through incarceration is much like the quarantining of plague victims, with neither practice requiring any attribution of blame.[23]

But there is the lingering worry that this is somewhat *dehumanizing*. Treating human beings as nothing more than potential sources of positive or negative behavior, not to be held responsible for anything they do, having no real choice in who they are, seems to reduce us to the status of animals. After all, dogs can be evaluated as sweet-natured and friendly or vile-natured and unfriendly, and they can be 'punished' for their bad behavior by being locked away or put to death. Cruelty to animals is obviously morally shocking, but we have no moral problem with training dogs to be useful to society. In contrast, there seems to be something vaguely creepy—beneath our dignity—about training grown human beings to be this or that, and training them not only to perform socially useful tasks, but to *like* the role they've been assigned. But if we truly have no free will, it is hard to see what's wrong with a society that manipulates everyone into a state of conditioned happiness.[24]

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[20] See Pereboom's *Living Without Free Will*. Cambridge: Cambridge University Press. (2001), pp. 110–17

[21] This argument is more-or-less taken from Seth Shabo's article, "Free will and mystery: looking past the *Mind* Argument." *Philosophical Studies*. Published online: 17 June 2011.

[22] Pereboom, *op cit.*, ch. 5–6.

[23] Pereboom, *op cit.*, 174ff.

[24] Compare B. F. Skinner's utopian *Walden Two* with Aldous Huxley's dystopian *Brave New World*.