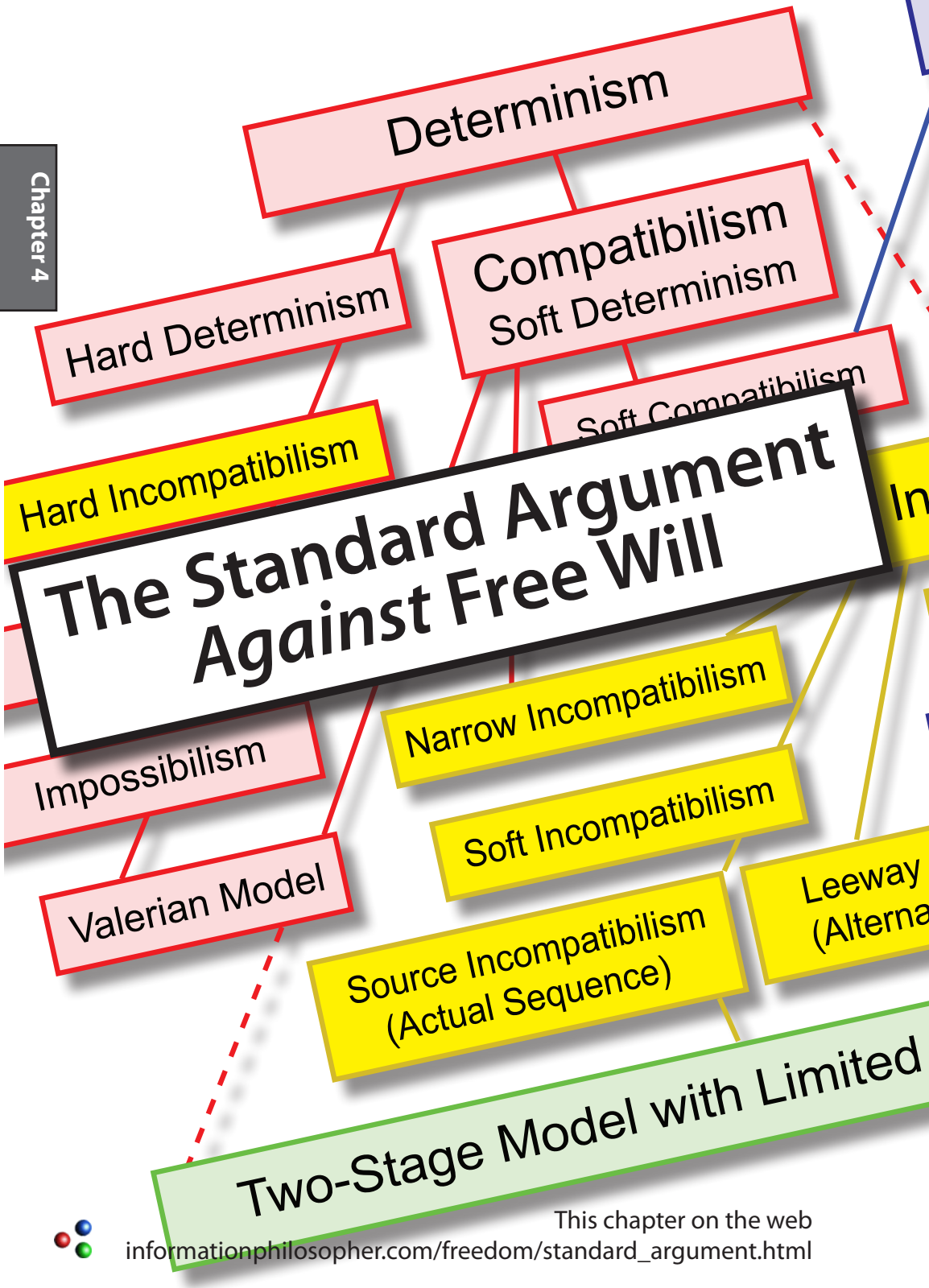
Determinism
Compatibilism
Soft Determinism
Hard Determinism
Hard Incompatibilism
The Standard Argument
Against Free Will
Narrow Incompatibilism
Impossibilism
Soft Incompatibilism
Valerian Model
Source Incompatibilism
(Actual Sequence)
Two-Stage Model with Limited

The Standard Argument *Against* Free Will

The **standard argument** has two parts.

1) If determinism is the case, the will is not free.
We call this the **Determinism Objection**.

2) If indeterminism and real chance exist, our will would not be in our control. We could not be responsible for our actions if they are random.
We call this the **Randomness Objection**.

Together, these objections can be combined as a single **Responsibility Objection**, namely that no Free Will model has yet provided us an intelligible account of the agent control needed for **moral responsibility**.

Both parts are logically and practically flawed, partly from abuse of language that led some 20th-century philosophers to call free will a "pseudo-problem," and partly from claims to knowledge that are based on faulty evidence (Kant's Scandal). We shall consider the evidence for each part and try to expose errors in the reasoning.

If you would like to examine the arguments of over thirty philosophers from ancient times to the present before reading my critical comments, skip to the examples starting on page 30. Later you can return to compare your conclusions to mine on the next two pages.

Part One - The Determinism Objection

Determinism is true. All events are caused by the fixed past and the laws of nature. All our actions are therefore pre-determined. There is no free will or moral responsibility.

Let's consider the evidence and the possible errors...

- Determinism is not "true." If one physical thing is "true," it is indeterminism.
- Physical determinism is not "true" because physics is empirical, not logical. And the empirical evidence has never justified the assumption of strict determinism.
- Quantum mechanical indeterminism is extremely well established. While also not logically "true," the evidence for quantum mechanics is better established than any other physical theory, including classical mechanics and determinism.
- Just because some events, like the motions of the planets, are adequately determined does not justify the widespread belief in an absolute universal determinism.
- Some events are unpredictable from prior events. They are ***causa sui***, starting new causal chains.
- The "chain" of events behind a particular cause may go back to inherited characteristics before we were born, others may go back to environmental and educational factors, but some may go back to uncaused events in our minds during our deliberations. Decisions have many contributing causes.
- We say correctly that our actions are "determined" by our (adequately determined) will. This **determination** does not imply universal strict determinism (as R. E. Hobart and Philippa Foot have shown).
- Our will chooses among free alternative possibilities, at least some of which are creative and unpredictable.
- The will itself is indeed not "free" (in the sense of uncaused), but we are free.

Part Two - The Randomness Objection

Chance exists. If our actions are caused by chance, we lack control. We can not call that free will, because we could not be held morally responsible for random actions.

Errors and evidence...

- Randomness in some microscopic quantum events is indeed chance.
- But microscopic chance does little to affect adequate macroscopic determinism.
- Just because some events are undetermined and involve chance does not justify the widespread fear that all events are undetermined and random.
- Chance only generates alternative possibilities for thought and action. It is not the direct cause of actions.
- We are free, in control, and morally responsible for our choices and actions, when they are adequately determined, in the normal cases of a two-stage decision process.
- But there are some cases where the two-stage model does not result in a self-determined decision. The alternative possibilities do not narrow down to a single possibility.
- In this case, if the remaining possibilities are simple everyday practical decisions with no moral or prudential significance, the agent can essentially "flip a coin" and still take responsibility for the choice.
- However, when the decision has important moral or prudential implications, and the agent must put effort into resolving the decision process, it is not appropriate to describe such choices as "flipping a coin." Robert Kane notes that the effort that goes into making these "torn" decisions is what deserves the credit for the decision. The underlying indeterminism may tip the scales away from some possible actions, making them fail, but the main cause of the action that succeeds should be seen as a result of the agent's effort.

Examples of the Standard Argument

Collected here are a few dozen examples of the standard argument from antiquity to the present day. You are invited to examine them for the appearance of the two objections.

Cicero's Version

> "Epicurus saw that if the atoms travelled downwards by their own weight; we should have no freedom of the will [*nihil fore in nostra potestate*], since the motion of the atoms would be determined by necessity. He therefore invented a device to escape from determinism (the point had apparently escaped the notice of Democritus): he said that the atom while travelling vertically downward by the force of gravity makes a very slight swerve to one side. (70) This defence discredits him more than if he had had to abandon his original position." [1]

Notice that Cicero's argument already appears in the form of a logical proposition, one or the other of determinism or randomness must be true. He claims that Epicurus must be denying such logical disjunctions. He and Aristotle did, for future events.

> (70) XXV. "He does the same in his battle with the logicians. Their accepted doctrine is that in every disjunctive proposition of the form' so-and-so either is or is not,' one of the two alternatives must be true. Epicurus took alarm; if such a proposition as 'Epicurus either will or will not be alive to-morrow' were granted, one or other alternative would be necessary. Accordingly he denied the necessity of a disjunctive proposition altogether. Now what could be stupider than that?" [2]

John Fiske's Version

> "Volitions are either caused or they are not. If they are not caused, an inexorable logic brings us to the absurdities just mentioned. If they are caused, the free-will doctrine is annihilated." [3]

1 Cicero (1951) Book I, sect. XXV, ¶¶ 69-70, Loeb Classical Library, v. 40, p. 67
2 *ibid*.
3 Outline of Cosmic Philosophy, part. H. Chap.xvii, cited in James (2007) p. 577

Max Planck's Version

"Let us ask for a moment whether the human will is free or whether it is determined in a strictly causal way. These two alternatives seem definitely to exclude one another. And as the former has obviously to be answered in the affirmative, so the assumption of a law of strict causality operating in the universe seems to be reduced to an absurdity in at least this one instance. In other words, if we assume the law of strict dynamic causality as existing throughout the universe, how can we logically exclude the human will from its operation?... "Recent developments in physical science [viz., quantum indeterminacy] have come into play here, and the freedom of the human will has been put forward as offering logical grounds for the acceptance of only a statistical causality operative in the physical universe. As I have already stated on other occasions, I do not at all agree with this attitude. If we should accept it, then the logical result would be to reduce the human will to an organ which would be subject to the sway of mere blind chance." [4]

Arthur Stanley Eddington's Version

"There is no half-way house between random and correlated behavior. Either the behavior is wholly a matter of chance, in which case the precise behavior within the Heisenberg limits of uncertainty depends on chance and not volition. Or it is not wholly a matter of chance, in which case the Heisenberg limits... are irrelevant." [5]

L. Susan Stebbing's Version

"If previous physical events completely determine all the movements of my body, then the movements of my pen are also completely determined by previous physical events....But if the movements of my pen are completely determined by previous physical events, how can it be held that my mental processes have anything to do with the movements made by my

4 Planck (1981) p. 101-105
5 Eddington (1939) p. 182.

> pen....I do not think that it can reasonably be maintained that physical indeterminism is capable of affording any help in this problem." [6]

Norbert Wiener's Version

Wiener sees no advantage in quantum mechanical indeterminism.

> "Tyche [chance] is as relentless a mistress as Ananke [necessity]." [7]

A. J. Ayer's Version

Ayer is extremely clear that the "truth" of determinism cannot be proved. He says that the determinist's

> "belief that all human actions are subservient to causal laws still remains to be justified. If, indeed, it is necessary that every event should have a cause, then the rule must apply to human behaviour as much as to anything else. But why should it be supposed that every event must have a cause? The contrary is not unthinkable. Nor is the law of universal causation a necessary presupposition of scientific thought. But nevertheless he states the standard argument succinctly: But now we must ask how it is that I come to make my choice. Either it is an accident that I choose to act as I do or it is not. If it is an accident, then it is merely a matter of chance that I did not choose otherwise; and if it is merely a matter of chance that I did not choose otherwise, it is surely irrational to hold me morally responsible for choosing as I did. But if it is not an accident that I choose to do one thing rather than another, then presumably there is some causal explanation of my choice: and in that case we are led back to determinism." [8]

J. J. C. Smart's Version

Smart states two definitions - one for determinism and one for randomness and declares them to be exhaustive of all possibilities.

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6 Stebbing (1958) pp. 216-7
7 Wiener (1965) p. 49.
8 Ayer (1954) p. 275.

"Dl. I shall state the view that there is 'unbroken causal continuity' in the universe as follows. It is in principle possible to make a sufficiently precise determination of the state of a sufficiently wide region of the universe at time to, and sufficient laws of nature are in principle ascertainable to enable a superhuman calculator to be able to predict any event occurring within that region at an already given time t.

"D2. I shall define the view that 'pure chance' reigns to some extent within the universe as follows. There are some events that even a superhuman calculator could not predict, however precise his knowledge of however wide a region of the universe at some previous time.

"For the believer in free will holds that no theory of a deterministic sort or of a pure chance sort will apply to everything in the universe: he must therefore envisage a theory of a type which is neither deterministic nor indeterministic in the senses of these words which I have specified by the two definitions D1 and D2; and I shall argue that no such theory is possible." [9]

P. F. Strawson's Version

"...the notions of moral guilt, of blame, of moral responsibility are inherently confused and that we can see this to be so if we consider the consequences either of the truth of determinism or of its falsity. The holders of this opinion agree with the pessimists that these notions lack application if determinism is true, and add simply that they also lack it if determinism is false." [10]

Roderick Chisholm's Version

"The metaphysical problem of human freedom might be summarized in the following way: "Human beings are responsible agents; but this fact appears to conflict with a deterministic view of human action (the view that every event that is involved in an act is caused by some other event); and it also appears to conflict with an indeterministic view of human action (the

9 Smart (1961) p. 294.
10 Strawson (1962) p. 1.

> view that the act, or some event that is essential to the act, is not caused at all)." To solve the problem, I believe, we must make somewhat far-reaching assumptions about the self of the agent — about the man who performs the act." [11]

Richard Taylor's Version

Here Taylor clearly states what his student Peter van Inwagen made famous as the Consequence Argument.

> "If determinism is true, as the theory of soft determinism holds it to be, all those inner states which cause my body to behave in what ever ways it behaves must arise from circumstances that existed before I was born; for the chain of causes and effects is infinite, and none could have been the least different, given those that preceded. Both determinism and simple indeterminism are loaded with difficulties, and no one who has thought much on them can affirm either of them without some embarrassment. Simple indeterminism has nothing whatever to be said for it, except that it appears to remove the grossest difficulties of determinism, only, however, to imply perfect absurdities of its own."

Taylor sees the asymmetry in favor of determinism over indeterminism as a popular belief.

> "Determinism, on the other hand, is at least initially plausible. Men seem to have a natural inclination to believe in it; it is, indeed, almost required for the very exercise of practical intelligence. And beyond this, our experience appears always to confirm it, so long as we are dealing with everyday facts of common experience, as distinguished from the esoteric researches of theoretical physics. But determinism, as applied to human behavior, has implications which few men can casually accept, and they appear to be implications which no modification of the theory can efface." [12]

David Wiggins' Version

> "If it were false that every event and every action were causally determined then the causally undetermined events and actions would surely, to that extent, be simply random. So the argument

11 Chisholm (1964), in Lehrer (1966) p. 11.
12 Taylor (1963) p. 46.

goes. That a man could have done x would mean no more than it might have turned out that way - at random."

Wiggins also prefers determinism to indeterminism, to ensure that actions are caused by character.

"It will be asked if it makes any better sense to hold the man responsible for actions which happen at random that for ones which arise from his character. Surely then, if it doesn't, we ought to prefer that our actions be caused?" [13]

Thomas Nagel's Version

"Once we see an aspect of what we or someone else does as something that happens, we lose our grip on the idea that it has been done and that we can judge the doer and not just the happening. This explains why the absence of determinism is no more hospitable to the concept of agency than is its presence — a point that has been noticed often. Either way the act is viewed externally, as part of the course of events." [14]

Robert Nozick's Version

"Without free will, we seem diminished, merely the playthings of external forces. How, then, can we maintain an exalted view of ourselves? Determinism seems to undercut human dignity, it seems to undermine our value. Some would deny what this question accepts as given, and save free will by denying determinism of (some) actions. Yet if an uncaused action is a random happening, then this no more comports with human value than does determinism. Random acts and caused acts alike seem to leave us not as the valuable originators of action but as an arena, a place where things happen, whether through earlier causes or spontaneously." [15]

Peter van Inwagen's Version

"Here is an argument that I think is obvious (I don't mean it's obviously right; I mean it's one that should occur pretty quickly

13 Wiggins (1973) p. 50.
14 Nagel (1979) p. 37.
15 Nozick (1981) pp. 291-2

to any philosopher who asked himself what arguments could be found to support incompatibilism):

> "If determinism is true, then our acts are the consequences of the laws of nature and events in the remote past. But it is not up to us what went on before we were born, and neither is it up to us what the laws of nature are. Therefore, the consequences of these things (including our present acts) are not up to us.

"I shall call this argument the Consequence Argument." [16]

Note that van Inwagen's Consequence Argument includes only the Determinist Objection, just one part of the standard argument. He also presented the Randomness Objection, and called it the Mind Argument. (Not referring to the human mind, but to the journal *Mind*, where many arguments of this type can be found, notably the 1934 article of R. E. Hobart.)

> "[It] proceeds by identifying indeterminism with chance and by arguing that an act that occurs by chance, if an event that occurs by chance can be called an act, cannot be under the control of its alleged agent and hence cannot have been performed freely. Proponents of [this argument] conclude, therefore, that free will is not only compatible with determinism but entails determinism." [17]

Van Inwagen dramatized his understanding of the indeterministic brain events needed for agent causation by imagining God "replaying" a situation to create exactly the same circumstances and then arguing that decisions would reflect the indeterministic probabilities.

> "If God caused Marie's decision to be replayed a very large number of times, sometimes (in thirty percent of the replays, let us say) Marie would have agent-caused the crucial brain event and sometimes (in seventy percent of the replays, let us say) she would not have... I conclude that even if an episode of agent causation is among the causal antecedents of every voluntary human action, these episodes do nothing to undermine the prima facie impossibility of an undetermined free act." [18]

16 Van Inwagen (1983) p. 16.
17 *ibid.*
18 Van Inwagen (2004) p. 227.

John Searle's Version

Searle argues that individual particles have statistically predictable paths.

> "As far as human freedom is concerned, it doesn't matter whether physics is deterministic, as Newtonian physics was, or whether it allows for an indeterminacy at the level of particle physics, as contemporary quantum mechanics does. Indeterminism at the level of particles in physics is really no support at all to any doctrine of the freedom of the will; because first, the statistical indeterminacy at the level of particles does not show any indeterminacy at the level of the objects that matter to us – human bodies, for example. And secondly, even if there is an element of indeterminacy in the behaviour of physical particles – even if they are only statistically predictable – still, that by itself gives no scope for human freedom of the will; because it doesn't follow from the fact that particles are only statistically determined that the human mind can force the statistically-determined particles to swerve from their paths. Indeterminism is no evidence that there is or could be some mental energy of human freedom that can move molecules in directions that they were not otherwise going to move. So it really does look as if everything we know about physics forces us to some form of denial of human freedom." [19]

Galen Strawson's Version

Strawson notes the argument is familiar and cites Henry Sidgwick's 1874 *Methods of Ethics*. Actually Sidgwick, who held the 19th-century view that freedom is metaphysical, was a firm determinist and only cites the Determinist Objection to free will.

> "It is a compelling objection. Surely we cannot be free agents, in the ordinary, strong, true-responsibility-entailing sense, if determinism is true and we and our actions are ultimately wholly determined by "causes anterior to [our] personal existence"* And surely we can no more be free if determinism is false and it is, ultimately, either wholly or partly a matter of chance or random outcome that we and our actions are as they are?

19 Searle (1984) pp. 86-7

* H. Sidgwick, *The Methods of Ethics*, p. 66. This familiar objection to the claim that we can be truly responsible agents is of course disputed (and indeed scorned) by compatibilists, but it is entirely sufficient for establishing the structure of the present discussion. Cf. also An Essay on Free Will, by P. van Inwagen." [20]

Colin McGinn's Version

"The argument is exceedingly familiar, and runs as follows. Either determinism is true or it is not. If it is true, then all our chosen actions are uniquely necessitated by prior states of the world, just like every other event. But then it cannot be the case that we could have acted otherwise, since this would require a possibility determinism rules out. Once the initial conditions are set and the laws fixed, causality excludes genuine freedom. On the other hand, if indeterminism is true, then, though things could have happened otherwise, it is not the case that we could have chosen otherwise, since a merely random event is no kind of free choice. That some events occur causelessly, or are not subject to law, or only to probabilistic law, is not sufficient for those events to be free choices. Thus one horn of the dilemma represents choices as predetermined happenings in a predictable causal sequence, while the other construes them as inexplicable lurches to which the universe is randomly prone. Neither alternative supplies what the notion of free will requires, and no other alternative suggests itself. Therefore freedom is not possible in any kind of possible world. The concept contains the seeds of its own destruction." [21]

Paul Russell's Version

"...the well-known dilemma of determinism. One horn of this dilemma is the argument that if an action was caused or necessitated, then it could not have been done freely, and hence the agent is not responsible for it. The other horn is the argument that if the action was not caused, then it is inexplicable and random, and thus it cannot be attributed to the agent, and

20 Strawson, G. (1986) p. 25
21 McGinn (1995) p. 80.

hence, again, the agent cannot be responsible for it. In other words, if our actions are caused, then we cannot he responsible for them; if they are not caused, we cannot be responsible for them. Whether we affirm or deny necessity and determinism, it is impossible to make any coherent sense of moral freedom and responsibility." [22]

Derk Pereboom's Version

Pereboom focuses on the Randomness and Responsibility Objections

> "Let us now consider the libertarians, who claim that we have a capacity for indeterministically free action, and that we are thereby morally responsible. According to one libertarian view, what makes actions free is just their being constituted (partially) of indeterministic natural events. Lucretius, for example, maintains that actions are free just in virtue of being made up partially of random swerves in the downward paths of atoms. These swerves, and the actions they underlie, are random (at least) in the sense that they are not determined by any prior state of the universe. If quantum theory is true, the position and momentum of micro-particles exhibit randomness in this same sense, and natural indeterminacy of this sort might also be conceived as the metaphysical foundation of indeterministically free action. But natural indeterminacies of these types cannot, by themselves, account for freedom of the sort required for moral responsibility. As has often been pointed out, such random physical events are no more within our control than are causally determined physical events, and thus, we can no more be morally responsible for them than, in the indeterminist opinion, we can be for events that are causally determined." [23]

Steven Pinker's One-sentence Version

> "a random event does not fit the concept of free will any more than a lawful one does, and could not serve as the long-sought locus of moral responsibility." [24]

22 Russell, P (1995) p. 14.
23 Pereboom (1997) p. 252.
24 Pinker (1997) p. 54.

Ishtiyaque Haji's Version

"Among the grandest of philosophical puzzles is a riddle about moral responsibility. Almost all of us believe that each one of us is, has been, or will be responsible for at least some of our behavior. But how can this be so if determinism is true and all our thoughts, decisions, choices, and actions are simply droplets in a river of deterministic events that began its flow long, long before we were ever born? The specter of determinism, as it were, devours agents, for if determinism is true, then arguably we never initiate or control our actions; there is no driver in the driver's seat; we are simply one transitional link in an extended deterministic chain originating long before our time. The puzzle is tantalizingly gripping and ever so perplexing — because even if determinism is false, responsibility seems impossible: how can we be morally accountable for behavior that issues from an "actional pathway" in which there is an indeterministic break? Such a break might free us from domination or regulation by the past, but how can it possibly help to ensure that the reins of control are now in our hands?" [25]

Bernard Berofsky's Version

"Basically, the compatibilists charged the opposition with two confusions. Causation, which is not freedom undermining even in its deterministic forms, is confused with compulsion or coercion, which, of course, is freedom-undermining. A physical barrier or even an internal compulsion or addiction can be an impediment to action; but when one acts simply because one wants to, one is not being impeded from acting otherwise. Hence, one is expressing one's freedom by doing what one wants. Second, although determinism entails that all human behavior is subsumable under universal law, freedom is not thereby threatened, for the sorts of laws involved are merely descriptive (natural, scientific), not prescriptive, like the laws of a legislative body. They just describe the way in which people behave; they do not force or constrain adherence. Finally, the compatibilists argued that indeterminism would not be more desirable

25 Haji (1998) p. vii.

since, under indeterminism, behavior is random and not under the control of the agent, a situation actually antithetical to freedom." [26]

Owen Flanagan's Version

"Free actions, if there are any, are not deterministically caused nor are they caused by random processes of the sort countenanced by quantum physicists or complexity theorists. Free actions need to be caused by me, in a nondetermined and nonrandom manner." [27]

Randolph Clarke's Version

"Accounts of free will purport to tell us what is required if we are to be free agents, individuals who, at least sometimes when we act, act freely. Libertarian accounts, of course, include a requirement of indeterminism of one sort or another somewhere in the processes leading to free actions. But while proponents of such views take determinism to preclude free will, indeterminism is widely held to be no more hospitable. An undetermined action, It is said would be random or arbitrary. It could not be rational or rationally explicable. The agent would lack control over her behavior. At best, indeterminism in the processes leading to our actions would be superfluous, adding nothing of value even if it did not detract from what we want." [28]

"If the truth of determinism would preclude free will, it is far from obvious how indeterminism would help." [29]

Mark Balaguer's Version

"Any event that's undetermined is uncaused and, hence, accidental. That is, it just happens; i.e., happens randomly. Thus, if our decisions are undetermined, then they are random, and so they couldn't possibly be "appropriately non-random". Or to put the point the other way around, if our decisions are

26 Berofsky, "Ifs, Cans, and Free Will," in Kane (2002) p. 182.
27 Flanagan (2003) p.135
28 Clarke (2003) p. xiii.
29 Clarke, Incompatibilist (Nondeterministic) Theories of Free Will. Stanford Encyclopedia of Philosophy, retrieved September 2008

> appropriately non-random, then they are authored and controlled by us; that is, we determine what we choose and what we don't choose, presumably for rational reasons. Thus, if our decisions are appropriately non-random, then they couldn't possibly be undetermined. Therefore, libertarianism is simply incoherent: it is not possible for a decision to be undetermined and appropriately non-random at the same time." [30]

Later, Balaguer reduces his argument to J.J.C.Smart's exhaustive determinism or indeterminism. He calls it "D-or-R-ism."

> "Determined-or-Randomism (D-or-R-ism): None of our decisions is both undetermined and appropriately nonrandom; that is, all of our decisions are either (i) causally determined by prior events or (ii) random in the sense that they're not appropriately nonrandom." [31]

Thomas Pink's Version

> "There are but these two alternatives. Either an action is causally determined. Or, to the extent that it is causally undetermined, its occurrence depends on chance. But chance alone does not constitute freedom. On its own, chance comes to nothing more than randomness. And one thing does seem to be clear. Randomness, the operation of mere chance, clearly excludes control." [32]

Peter Lipton's Version

> "First, everything that happens in the world is either determined or not. Second, if everything is determined, there is no free will. For then every action would be fixed by earlier events, indeed events that took place before the actor was born. Third, if on the other hand not everything is determined, then there is no free will either. For in this case any given action is either determined, which is no good, or undetermined. But if what you do is undetermined then you are not controlling it, so it is not an exercise of free will. Finally, we have the conclusion: there is no free will." [33]

30 Balaguer (2004) p. 380.
31 Balaguer (2009) p. 8.
32 Pink (2004) p. 16.
33 Lipton (2004) p. 89.

John Martin Fischer's Version

Fischer mistakenly attributes this dilemma to William James's *Dilemma of Determinism*, which was actually a dilemma about regret in a deterministic world.

> "Either causal determinism is true, or it is not. If it is true, then we would lack freedom (in the alternative-possibilities and source senses). If it is false, then we would lack freedom in that we would not select the path into the future — we would not be the source of our behavior. Indeterminism appears to entail that it is not the agent who is the locus of control." [34]

Joshua Greene and Jonathan Cohen's Version

> "There are three standard responses to the problem of free will. The first, known as 'hard determinism', accepts the incompatibility of free will and determinism ('incompatibilism'), and asserts determinism, thus rejecting free will. The second response is libertarianism (again, no relation to the political philosophy), which accepts incompatibilism, but denies that determinism is true. This may seem like a promising approach. After all, has not modern physics shown us that the universe is indeterministic? The problem here is that the sort of indeterminism afforded by modern physics is not the sort the libertarian needs or desires. If it turns out that your ordering soup is completely determined by the laws of physics, the state of the universe 10,000 years ago, and the outcomes of myriad subatomic coin flips, your appetizer is no more freely chosen than before. Indeed, it is randomly chosen, which is no help to the libertarian." [35]

Kadri Vihvelin's Version

> "Either determinism is true or it's not. If determinism is true, then my choices are ultimately caused by events and conditions outside my control, so I am not their first cause and therefore...I am neither free nor responsible. If determinism is false, then something that happens inside me (something that I call "my choice" or "my decision") might be the first event in a causal chain leading to a sequence of body movements that I call "my

34 Fischer (2005) p. xxix.

35 Greene and Cohen (2004) p. 1776.

> action". But since this event is not causally determined, whether or not it happens is a matter of chance or luck. Whether or not it happens has nothing to do with me; it is not under my control any more than an involuntary knee jerk is under my control. Therefore, if determinism is false, I am not the first cause or ultimate source of my choices and...I am neither free nor responsible." [36]

Robert Kane's Ascent and Descent Version

Kane offers what may be the most attractive version of the standard argument against free will, with a memorable diagram. He describes the usual determinism and randomness objections (the two horns of the Libertarian Dilemma) as the ascent and descent of what he calls "Incompatibilism Mountain."

Figure 4-1. Kane's Incompatibilist Mountain.

The ascent problem is to show free will is incompatible with determinism. The descent problem is to show that free will is compatible with indeterminism.

Kane says that if free will is not compatible with **determinism**, it does not seem to be compatible with **indeterminism** either.

> "Let us call this the 'Libertarian Dilemma.' Events that are undetermined, such as quantum jumps in atoms, happen merely by chance. So if free actions must be undetermined, as libertarians claim, it seems that they too would happen by chance. But how can chance events be free and responsible actions? To solve the Libertarian Dilemma, libertarians must not only show that free will is incompatible with determinism, they must also show how free will can be compatible with indeterminism." [37]

36 Vihvelin (2007) Arguments for Incompatibilism. Stanford Encyclopedia of Philosophy, retrieved March 2011.

37 Kane (2005) p. 34.

An Important Asymmetry

Note that the compatibilism of free will with determinism has always been a great deal easier to accept than compatibilism with indeterminism.[38]

"Agnostics" on the truth of determinism and indeterminism implicitly equate the two difficulties, whereas there is a great asymmetry between the two parts of the standard argument.

Indeterminism (non-rational chance) is much more difficult to reconcile with freedom than is (causal and rational) determinism.

Most philosophers are comfortable with the idea that their actions are determined by their reasons and motives, their character and values, and their feelings and desires. As they should be.

Thus it was relatively easy for David Hume to reconcile freedom with determinism by defining freedom as "freedom from" coercions, primarily external forces but also internal constraints.

But this **freedom of action** is not what libertarians think is the essential freedom from **pre-determinism** needed to make us the authors of our own lives.

Two-stage models for free will (see Chapter 12) accomplish the more difficult reconciliation of free will with indeterminism.

Thus where Hume's freedom of action is sometimes called "compatibilist free will," we can say that a two-stage model gives us a more **comprehensive compatibilism**, a free will that is compatible both with some (limited) determinism and with some (limited) indeterminism. See Chapter 28.

38 As Richard Taylor indicated, p. 34 above.

What's Wrong with the Standard Argument?

The most straightforward way to attack the standard argument is to see that the three objections - determinism, randomness, and responsibility - really need to become three requirements for free will. I will discuss these requirements in the next chapter. But to conclude our examples of the standard argument, let's consider some of the ways that philosophers have gone wrong in their uses of the standard argument against free will

How Determinists and Compatibilists Go Wrong

Determinists and Compatibilists go wrong when they mistakenly assume that any chance or indeterminism will lead directly to random actions for which we cannot be morally responsible.

Although they are often metaphysical determinists, they lack confidence in the personal determination of the will, which we see is provided by the adequate physical determinism of our macroscopic minds. And as William James said, they have an "antipathy to chance."

Our **adequately determined** will gives us adequate control of microscopic chaos and chance. Just as Chrysippus thought the universe would fall apart if a single uncaused event were to occur,[39] some modern philosophers are equally frightened by the idea of objective chance, especially quantum indeterminacy.

Some of the compatibilists' fears of randomness are quite funny.

> "Indeterminism does not confer freedom on us: I would feel that my freedom was impaired if I thought that a quantum mechanical trigger in my brain might cause me to leap into the garden and eat a slug." (J. J. C. Smart) [40]

> "For the simplest actions could not be performed in an indeterministic universe. If I decide, say, to eat a piece of fish, I cannot do so if the fish is liable to turn into a stone or to disintegrate in mid-air or to behave in any other utterly unpredictable manner." (P.H.Nowell-Smith) [41]

39 See p. 7.
40 Smart (2003) p. 63.
41 Nowell-Smith (1948) p. 47.

How Libertarians Go Wrong

Libertarians go wrong when they fear that "determination" of the will by an agent's character, values, motives, and desires is somehow equivalent to "**determinism**," in the sense of **pre-determined** before the agent began deliberations, perhaps even back before the agent was born, as Richard Taylor and Peter van Inwagen have speculated.

Some critics of libertarianism suspect that libertarians also go wrong when they try to keep some "freedom" (i.e., indeterminism) "centered" in the moment of the will's determination. Critics say that this is at best an **undetermined liberty**, where the choice is made at random from two or more equally valued possibilities that are themselves **adequately determined**.

Libertarians say that an agent must be able to do something different in exactly the **same circumstances**. Agents could not **do otherwise**, they say, if they are determined by any preceding events, including the results of their immediately prior "free" deliberations.

Robert Kane calls this "The Indeterminist Condition:"

> "the agent should be able to act and act otherwise (choose different possible futures), given the same past circumstances and laws of nature." [42]

Although **self-determination** is not pre-determination by a strict causal chain of metaphysical determinism going back to the big bang, some extreme libertarians over-react. They have what William James might have called an "antipathy to determinism."

Despite advice from Daniel Dennett and Alfred Mele to keep indeterminism in the early pre-deliberation stages, libertarians like Kane, Peter van Inwagen, Laura Waddell Ekstrom, and Mark Balaguer want indeterminism in the decision itself.

Self-determination of the will only means that one is acting consistently, in character, and according to values expressed in one's habits and customs, when one does the same thing in the same circumstances.

42 Kane (2005) p. 38.

And since truly identical circumstances are essentially impossible, given the information of the past stored in the world and in the agent's memory, this worry of the libertarians is not too serious a problem.

But let's grant the possibility that an agent might be in exactly the same circumstances in order to understand what the libertarian is worried about. Here is how Laura Waddell Ekstrom describes her concern,

> "Consider an agent whose act is, in such a sense, "libertarian free." Now a duplicate agent in exactly similar circumstances governed by the same natural laws and subject to the same occurrence of considerations at the same points in the deliberative process will form exactly the same judgment concerning the best thing to do and will act accordingly. But then, given the consideration pattern that occurs (but might not have), there is no "wiggle room" for the agent in forming an evaluative judgment — it simply falls out, of necessity, from the consideration pattern. Hence such an account does not leave sufficient room for free agency." [43]

And Robert Kane thinks that the early-stage chance offered by Dennett and Mele does not provide the agent with all of the control over actions that the libertarian is looking for.

> "Mike does not have complete control over what chance images and other thoughts enter his mind or influence his deliberation. They simply come as they please. Mike does have some control after the chance considerations have occurred. But then there is no more chance involved. What happens from then on, how he reacts, is determined by desires and beliefs he already has. So it appears that he does not have control in the libertarian sense of what happens after the chance considerations occur as well. Libertarians require more than this for full responsibility and free will. What they would need for free will is for the agent to be able to control which of the chance events occur rather than merely reacting to them in a determined way once they have occurred." [44]

43 Ekstrom (2000) p. 121
44 Kane (2005) p. 65.

Finally, let's look at how the libertarian Peter van Inwagen deals with randomness. He says that "libertarianism is the conjunction of incompatibilism and the thesis that we have free will." [45] But all this means is that determinism is not true, that indeterminism is the case, that randomness and chance exist.

Given all the objections to randomness that we have just seen, including van Inwagen's own "Mind Objection" (page 36), it is clearly not enough to simply say that randomness exists. The hard problem for free will is to understand what work it is that indeterminism does for freedom.

We need to see where the indeterminism fits into a plausible model for free will, that is to say, exactly when and where indeterminism can enter and help the problem, while doing minimal or no harm to agent control, as Kane says.

In the coming chapters we shall see that there are plenty of sources of randomness in the world, for example, in the process that drives chance variations in the gene pool and the subsequent new species that result from natural selection.

Randomness shows up in our best computers and communications systems. It introduces errors, misunderstandings, and mistakes in our everyday lives all the time. These errors are occasionally the source of new creative ideas.

Libertarians go wrong when they fear that their idea of freedom will be equated with randomness and chance. Chance is only the enabling factor that breaks the causal chain of determinism.

Libertarians need to embrace chance in the world, in the actions of other persons, and most importantly, in their minds.

We shall see that this indeterminism can be either in the early stages of deliberation where new **alternative possibilities** for action are generated, or even at the moment of choice itself where multiple **undetermined liberties** are possible, as Robert Kane has long maintained for his Self-Forming Actions.

45 Van Inwagen (1983) p. 13.

The Standard Argument in Antiquity

In view of the basic conflict between human freedom and physical causal determinism, it is hard to believe that one of the inventors of determinism, Democritus (c. 5th century BCE), intended it to liberate humans from the arbitrary interventions of the gods in human affairs.

But Democritus apparently saw divine intervention and foreknowledge as a grave threat to moral responsibility.

On his view, his reduction of mind to atoms and a void, working by natural laws, was such a gain over the traditional view of arbitrary fate and capricious gods determining our actions, that he simply insisted that determinism provided humans more control for moral responsibility.

The First Determinist

Democritus was the first **determinist**.

This means that the **determinist objection**, the first part of the standard argument against free will, was recognized at the creation of determinism, but the creator (Democritus) simply did not appreciate its importance.

The First Libertarians

The first indeterminist was Aristotle. In his Physics and Metaphysics he said there were "accidents" caused by "chance (τυχῆ)." In his *Physics*, he clearly reckoned chance among the causes. Aristotle might have added chance as a fifth cause - an uncaused or self-caused cause - one that happens when two causal chains come together by accident (συμβεβεκός). He noted that the early physicists found no place for chance among the causes.

Aristotle's solution to the problem of free will (though he very likely did not see any problem, since Democritus' determinism was for material things and Aristotle thought living things were different) was likely to have been metaphysical. He probably assumed that the human mind was somehow exempt from the materialist

laws of nature, whether causally determined or accidental chance, so that our actions can depend on us (ἐφ ἡμῖν). In this respect, we can call Aristotle the first **agent-causal** free-will **libertarian**.

One generation after Aristotle, Epicurus (c. 4th century BCE), proposed a physical explanation for free choice as a better basis for moral responsibility. His solution was a random "swerve" of the atoms to break the causal chain of determinism, giving us more control than was possible in Democritus' strict determinism.

Summarizing Aristotle's position, Epicurus saw three possibilities for causes - necessity, chance, and autonomous human agency (a "*tertium quid*").

> "...some things happen of necessity, others by chance, others through our own agency. For he sees that necessity destroys responsibility and that chance is inconstant; whereas our own actions are autonomous, and it is to them that praise and blame naturally attach. It were better, indeed, to accept the legends of the gods than to bow beneath that yoke of destiny which the natural philosophers have imposed. The one holds out some faint hope that we may escape if we honor the gods, while the necessity of the naturalists is deaf to all entreaties." [46]

Epicurus wanted a purely materialist solution to the conflict with determinism. He proposed that his random swerves could happen at any time and place. As long as there were some uncaused events in the past, there would no longer be a chain of causes back before our births limiting human agency.

Many subsequent philosophers argued mistakenly that Epicurus wanted a swerve to happen at the moment of decision - one swerve for each decision. But this is implausible. That would make our actions random. Epicurus could not explain when and where randomness could occur in his idea of free will to explain moral responsibility.

Although Epicurus' physical model for chance is ingenious and anticipated twentieth-century quantum mechanics, it provides

46 Epicurus, Letter to Menoeceus

little of deep significance for free will and moral responsibility that is not already implicit in Aristotle.

Nevertheless, we can say that Epicurus was the first event-causal libertarian.

We can also say that the **randomness objection**, the second part of the standard argument against free will, was recognized at the creation of indeterminism. His Stoic critics, and Epicurus himself provide us no specific idea of how his free will model might have met the objection.

The First Compatibilist

The first **compatibilist** was the Stoic Chryssipus (c. 3rd century BCE). He strongly objected to Epicurus' suggestion of randomness, arguing that it would only undermine moral responsibility if chance was the direct cause of action. Chryssipus was also aware of the charge that physical determinism had been equated with a necessitarianism that denied any human freedom. He sought a solution to both these objections to free will and moral responsibility.

So we can also say that the **responsibility objection**, implicit in both parts of the standard argument against free will, was recognized at the creation of compatibilism, with its creator Chryssipus rejecting Epicurean randomness but also claiming that there is no Leucippean necessity for our human decisions.

Chryssipus agreed with Aristotle that our decisions depend on us (πάρ' ἡμᾶς). They need our assent or choice (ἁιρήσις) to act or not act, even if our actions are fated.

Chryssipus felt that his compatibilism handled both objections, and it continues to this day as the most common model for free will among professional philosophers.

A generation later, Carneades, the head of the Platonic Academy in the 2nd century BCE, chastised Epicurus for suggesting the swerve of the atoms as a physical solution to the free will problem. It would be better, he said, for Epicurus to have given a special power to the mind than giving it to the atoms. In this

regard, Carneades was favoring the metaphysical agent causalism that Aristotle very likely preferred.

But as we will see below, today we know far more about the atoms than we know about the mind. And the power that Epicurus imagined in the atoms provides the mind with all the randomness, and independence from any deterministic physical laws of nature, that it needs to be creative and free.

Summary

The vast majority of philosophers and scientists who have thought deeply about free will have been unable to confront and overcome the **standard argument** against it.

Compatibilists and determinists have simply accepted the implications of the **determinist objection** and chosen to describe the resulting degree of freedom as good enough for them. I believe this is because their motives and desires, shaped by their character and values, at least play a part in their "determined" decisions.

When they consider indeterminism - the only apparent alternative in an "exhaustive" logical argument - they find that totally unacceptable.

Surprisingly, even the libertarians, who nominally accept the need for indeterminism somewhere to break the causal chain back to the beginning of the universe, cannot find an intelligible location for chance in the mind/brain.

In the next chapter, I turn the two component objections of the standard argument into two explicit requirements that any coherent and intelligible model of free will must satisfy.