

Ending The Scandal

Determinism

Hard Determinism

Compatibilism
Soft Determinism

Hard Incompatibilism

Soft Compatibilism

Illus

Semicompatibilism

In

Impossibilism

Narrow Incompatibilism

Chapter 29

Valerian Model

Soft Incompatibilism

Source Incompatibilism
(Actual Sequence)

Leeway
(Alterna

Two-Stage Model with Limited



Ending The Scandal

The main goal of the INFORMATION PHILOSOPHER website has been to provide students everywhere with the resources they need to be more knowledgeable than their professors on some classical problems of philosophy that remain unsolved today. Free will is the most important of these problems.

I hope also that professors can find some new information they need to improve on things they learned from their teachers.

Our goal is to break the great causal chain of sophisticated but unproductive arguments, sophisticated and paradoxical dialogues, logical puzzles and language games that are still worth teaching *as history of philosophy*, but are hopelessly inadequate as philosophical principles for the free and creative young minds we are preparing for an open future in which they author their own lives.

We cannot solve the problem of free will with logical paradoxes, despite centuries of clever determinisms designed to limit the freedom of our “finite” minds by comparison with the “infinite” power of the laws of Nature and of Nature’s God.

And we cannot *dis*-solve the pseudo-problem of free will with language games that dress old concepts in new jargon, that change the subject from free will to **moral responsibility**, that change the debate from **determinism** to the impossibility of **alternative possibilities**, and that change the momentous contest between free will and determinism to juggling words like **compatibilism** and **incompatibilism**.

Compatibilism is a “quagmire of evasion,” said WILLIAM JAMES. PETER VAN INWAGEN’S reframing the problem as “incompatibilism” is a “tarpit of confusion,” I say, because it puts libertarians and hard determinists in the same category.

One way to look at the moral scandal that concerns me is to focus on the **actualism** of compatibilist and determinist philosophers. They believe that there is but one possible actual future.

This is not the message that academic philosophers should be delivering to students, especially because determinism cannot be proved, and current scientific evidence is to the contrary.



ARISTOTLE made clear the essential difference between the actual and the possible. Something was actual for Aristotle when it happened, when it realized its end or purpose. Otherwise it had the power or potential to be **otherwise**.¹

The last thing we want to tell young people is that they have no potential, that their future is already determined. It's not only poor philosophy and bad psychology, it's terrible science.

Men are not machines, and minds are not computers.

AS MARTIN HEISENBERG has shown us, even the lowest organisms are autonomous and have the behavioral freedom to realize their goals, to go from the possible to the actual.

“A hallmark of biological organisms is their autonomy. In evolutionary terms, their autonomy allowed them to invent active locomotion (automobility = locomotion not caused from the outside) and to explore space. For going multicellular, cells had to give up behavioral autonomy and those new creatures had to reinvent automobility via the nervous system and eventually the brain. Self-ness turned animals with brains into subjects. In my view the Self is a decisive feature in the evolution of freedom. This allows for strong ownership. Behavior has to be our own to be well adaptive.”²

How can determinist and compatibilist philosophers convince themselves that the causal laws of nature imply just one actual future, when causality is not provable and the laws only statistical? We must go back to DAVID HUME to understand this.

Our Natural Belief in Free Will

DAVID HUME's skepticism showed the inability of logic to “prove” facts in the physical world. No number of regular successions of event A followed by event B can prove that A *causes* B.

Hume the Skeptic thus denied causality. But Hume the Naturalist said that we have a *natural belief* in causality. Similarly, we have a natural belief in the uniformity of nature. The sun will rise tomorrow. The laws of nature are not changing, so the past is a reliable guide to the future. None of these beliefs is *logically* true. But they all are plausible and have significant practical value.

1 actual = entelechy (έν + τέλος + ἔχειν), possible = dynamis (δύναμις)

2 Personal communication (2011).



Hume was an empiricist. He based his ideas on observed experience. But he had a theoretical model for human nature. He based it on ISAAC NEWTON's equations of motion that describe the physical world. At that time, it appeared that Newton's laws were so perfect at explaining phenomena that they must be *necessary*. Hume equated physical necessity with logical necessity, and even with moral necessity, in which human volitions are *caused* by motives, and motives are caused by prior events.

The debates today as between free will and determinism were then debates between "liberty" and "necessity." Liberty was thought to involve chance events or mental events (the "will") not caused by prior events. Hume denied the existence of chance and any other uncaused events. Following Hobbes, he defined freedom as *freedom from* external coercion, e.g., being in chains or in jail.

Hume's model of the mind as governed by physical laws "reduced" the mind, and indeed all living things, to material physical systems. But as ARISTOTLE first noted, biological systems are different. They have a purpose or goal. Aristotle called it *telos*.

The simplest molecules that were precursors of life "learned" to replicate themselves, at which point their elemental goal was to maintain themselves (preserve their information, using negative entropy from the sun) and replicate themselves. Chance errors in the replication created different molecules, some of which were better replicators, and the rest is biological history.

Even very young children intuitively know ARISTOTLE's essential difference between inanimate physical objects, which follow natural laws, and living things, which can originate actions, can behave differently in the same circumstances, and which can make choices.

To choose is to decide between **alternative possibilities**. That these are real and not apparent is because **chance**, which Hume and his contemporaries denied as absurd and atheistical, is the source of novelty, creativity, and new information in the universe.

Hume's dream of a classical mechanical Newtonian Mind as his explanation for human nature, following the same deterministic



causal physical laws as freely falling apples and the orbiting planets, is a philosophical failure. It fails for the same reason that Einstein's dream of a deterministic and causal explanation for the merely statistical laws of quantum mechanics has failed. Nature does play dice.

And until the die is cast, until the mind decides, until the information about the decision is recorded, our choices are free.

Remember that the causal explanations that Hume and Einstein wanted are not provable logically or by sophisticated language claims. Causality is a natural belief, beyond logic and language.

But there is a competing and more vital natural belief, also unprovable, namely that we have free will and can take responsibility for our choices.

Without chances and possibilities, choices are not real. Without an initial chance stage, the choice stage would be **pre-determined**.

My two-stage model is not a monolithic "free will." It is a process, first chance, then choice, first "free," then "will."

Our thoughts are free. Our actions are willed.

Most actions are "determined" by the "de-liberations" that we call **self-determination**. But these were not **pre-determined** from the "fixed past" just before our deliberations began.

Others of our actions are **undetermined liberties**. When our deliberations do not produce a single possible action, we can choose any of the equally attractive options remaining, and take full responsibility for whichever one we finally choose. Closely related to the ancient *liberum arbitrium*, these undetermined liberties only become self-determined in the moment of choice.

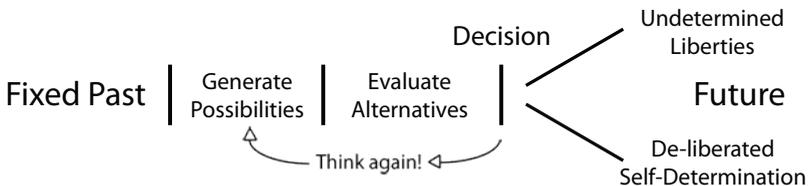


Figure 29-1. The Two-Stage Cogito Model of Free Will.



Two-Step Processes

Why two steps, two-stages, two parts? You will need to know a bit more about information philosophy than there was room for in the introduction to this book on free will. I hope those of you with a serious interest in philosophy will *become* information philosophers and help me with I-PHI.

For now, it's enough to know three important two-step processes.

1) The cosmic creation process requires two steps.³ The first is a microscopic quantum (hence **indeterministic**) event that forms an information structure. The second is a macroscopic thermodynamic event, in which the entropy and energy that would destroy a new information structure, if it stayed around, is carried away to a dark corner of the universe.

2) Biological evolution is a two-step process. The first is a microscopic change in the genetic code of an organism, its central information structure. The change is usually the result of a quantum event, like a cosmic-ray collision with the DNA. The second step is the natural selection of some changes because they are reproductively successful and propagate.

3) The third two-step process to create information is free will.

The Two-Stage Cogito Model of Free Will

The first step is random thoughts about **alternative possibilities** for action that are generated in the mind, generated in part because of quantum-level noise in the brain's information structure as it recalls past experiences to help with its deliberations.

The second step is normally an **adequately determined** decision following an adequately determined evaluation of the options. It includes the ability to "think again," to go back and generate more options as needed. And we can always "flip a coin" when there is no clear best option.

In such cases, the final decision itself can be undetermined. The brain has access to quantum level events. It can see a single photon and smell a single molecule. So when it makes an undetermined

3 See the next chapter.



decision, it may access quantum level indeterminacy. But a random decision does not necessarily imply lack of responsibility.⁴

The two-stage model for free will explains how we “can **do otherwise** in exactly the **same circumstances**.”⁵ And it shows how our decisions are not **pre-determined**, not even **determined** by the **fixed past** and the **laws of nature** at the moment the generation of **alternative possibilities** begins.

If you agree that this two-stage model deserves to be considered in philosophy classes today, I believe we need to formulate some brief ways for you to frame the problem historically in the context of past proposed solutions. And then some very simple explanations of the proposed new solution.

How You Can Make the Best Case for Free Will

If you have read a significant part of this book, then you are well-equipped to discuss the two-stage model in depth. But can you explain it in a few lines to your friends and even to scholars like philosophy professors who may have fixed views on the subject?

I suggest that one way to start is to situate the problem and the solution historically as follows, in three parts.

Part 1 - Reconciling Free Will with Adequate Determinism

DAVID HUME, in his “Of Liberty and Necessity,” section VII of the 1748 *Enquiries concerning Human Understanding*, famously *reconciled* freedom with determinism.

“For what is meant by liberty, when applied to voluntary actions? We cannot surely mean that actions have so little connexion with motives, inclinations, and circumstances, that one does not follow with a certain degree of uniformity from the other”

“By liberty, then, we can only mean a power of acting or not acting, according to the determinations of the will”⁶

R. E. HOBART in 1934 clarified the fact that a free will involves **determination** of the will by reasons and motives. It requires neither logical necessity nor strict physical determinism.

4 Dennett and Kane have shown this. See p. 356-357

5 See p. 199 for details.

6 Hume (1975) p. 95.



Hume, as moderated by Hobart, provided the second, **adequately determined** stage of the **Cogito** model, which we now give the traditional name of de-liberated **self-determination**.

Part 2 - Reconciling Free Will with Indeterminism

WILLIAM JAMES, in 1884, provided the critical first stage, by *reconciling* free will with objective **chance**.

My own work has refined James' explanation, to make it consistent with quantum indeterminism.

So you can say that Hume and Hobart provided half the answer to the problem of free will. Their adequate determination *reconciled* a compatibilist free will with the laws of classical physics.

James and the others in Chapter 12 who proposed two-stage models found the second half of the answer. In particular, I hope to be remembered as the INFORMATION PHILOSOPHER who *reconciled* libertarian free will with the probabilistic laws of quantum physics.

Part 3 - Will Compatibilists Accept This Improvement and Call Themselves *Comprehensive* Compatibilists?

Compatibilists were right all these centuries to reject the radical idea that freedom means an **extreme libertarianism** that denies reasonable causes for human actions. Can we convince them that our two-stage model simply adds creative and free elements to their current thinking on **self-determination**?

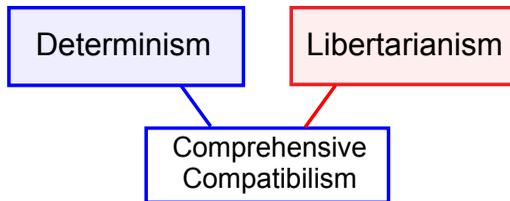


Figure 29-2. A comprehensive compatibilist taxonomy.

Since most modern compatibilists are agnostics on the truth of determinism (or indeterminism), we hope they will accept a free will model that is *triply* compatible - with Hume's definition, with James' definition, and with MARTIN HEISENBERG's evolution of human free will from the behavioral freedom of lower animals.

