



353

sal

sm

bertari

Chapter 27

S

What If?

com

Broa

Wo

Incom

tive So

Dete

Indeterminism

What if Libertarians Had Accepted What Dan Dennett Gave To Them In 1978?

Over thirty years ago, DANIEL DENNETT proposed a decisionmaking model that he thought would appeal to libertarians. Unfortunately, libertarians largely ignored Dennett's proposal.

The history of the free-will problem would have been quite different if libertarians had accepted and credited what I might call "Dennett's Dangerous Idea." I imagine the difference below.

In chapter 15 of his 1978 book *Brainstorms*, entitled "On Giving Libertarians What They Say They Want," Dennett articulated the case for a two-stage model of free will better than most libertarians had done before.¹

Dennett concluded his essay optimistically, but he sounds very much like TED HONDERICH in the concern that his determinism inspires despair (Honderich calls it dismay. See Chapter 23).

"Even if one embraces the sort of view I have outlined, the deterministic view of the unbranching and inexorable history of the universe can inspire terror or despair, and perhaps the libertarian is right that there is no way to allay these feelings short of a brute denial of determinism. Perhaps such a denial, and only such a denial, would permit us to make sense of the notion that our actual lives are created by us over time out of possibilities that exist in virtue of our earlier decisions; that we trace a path through a branching maze that both defines who we are, and why, to some extent (if we are fortunate enough to maintain against all vicissitudes the integrity of our deliberational machinery) we are responsible for being who we are. That prospect deserves an investigation of its own. All I hope to have shown here is that it is a prospect we can and should take seriously."²

¹ Dennett (1978), p. 293. See Chapter 25 for more on Dennett's Valerian model.

² Dennett (1978), p. 299

I, for one, took Dennett very seriously. When I read this passage, my immediate reaction was that Dennett had invented the two-stage model that was my **Cogito** model³ from the early 1970's, with the exception of my basing the random generation of alternative possibilities on true quantum randomness.

I was convinced that other scientists and philosophers would add quantum randomness to Dennett's model and soon publish the equivalent of my **Cogito** model. I set my philosophy aside and continued to entrepreneur and develop productivity tools.

At the Barcelona "Experts Meeting" on Free Will in October 2010, Robert Kane says that he also had independently thought of Dennett's two-stage model but did not publish it. He says he wanted "something more," because once the alternatives are spelled out in the first stage, the second-stage decision is "determined" by the agent's character and values.

I agree with Kane that decisions are **adequately determined**, given the agent's character, values, etc., but that they are not **pre-determined** from before the first considerations are generated and deliberations began.

The "something more" that Kane wants is some randomness in the decision itself, something he calls "plural rationality." This allows the agent to flip a coin as long as she has good reasons for whatever she chooses randomly. Kane gives an example of a businesswoman on the way to a meeting who witnesses an assault and must decide between aiding the victim and continuing to her work. Note that Dennett had already described a similar case in *Brainstorms* - a new Ph.D. who could choose randomly between assistant professorships at Chicago and Swarthmore. She could have an "intelligible rationale" and feel responsible whichever way she decided, because both ways had good reasons. ⁴

And note that Kane, like me, specifically is trying to use quantum randomness as the basis for a free-will model, where Dennett thinks some computer pseudo-randomness might be enough to

³ See Chapter 13

⁴ Dennett (1978), p. 294

generate alternatives. Neither of them could see where such randomness would be located in the brain, without making everything random. Kane and I differ primarily in the timing of the quantum randomness, I put it in the first stage, he in the second.

Neither Kane nor Dennett see the randomness located throughout the brain, like my model.

It takes two - Cogito and Intelligo

In chapter 5 of Brainstorms, Dennett described the work of the poet Paul Valéry, who took part in a 1936 Synthése conference in Paris with JACQUES HADAMARD. The conference focused on HENRI POINCARE's two-stage approach to problem solving, in which the unconscious generates random combinations. In his book, *The Psychology of Invention in the Mathematical Mind*, Hadamard quoted Valéry (as did Dennett later), summarizing the conference opinion,

"It takes two to invent anything. The one makes up combinations; the other one chooses, recognizes what is important to him in the mass of things which the former has imparted to him." 5

The Valéry reference has led to Dennett's model (and similar ones from ALFRED MELE, for example) being called "Valerian." At the end of chapter 5, Dennett finds names for the generator and tester phases in St. Augustine's note that the Latin *cogito* means to "shake together" and *intelligo* means to "select among."

"The Romans, it seems, knew what they were talking about," Dennett comments.

Actually, most Romans were Stoics. And they violently opposed Epicureans like LUCRETIUS, who argued for some chance (the swerve) to break the chain of determinism. For the Stoics, and for modern determinists who crave strong natural causal laws, **chance** is anathema and atheistic. For them, Nature was synonymous with God and Reason.

⁵ Hadamard (1949), p.30, cited by Dennett (1978), p.293.

What If Kane and Dennett Had Done Otherwise?

Dan Dennett's phone rings a short time after publication of his 1978 book, *Brainstorms*.

Kane: Hi, Dan. This is Bob Kane. I've just been reading your essay "On Giving Libertarians What They Say They Want" and see a lot to like in it. You know that WILFRID SELLARS challenged me some years ago to reconcile his Manifest Image, in which we all feel we have free will, with his Scientific Image, in which physics either makes everything determined, in which case we are not free, or if modern quantum mechanics is right, everything is undetermined and we can't have responsibility for our actions.

Dennett: Good to hear from you, Bob. You know, I am a naturalist and think the will is a natural product of physical laws and biological evolution, so Sellars' Scientific Image should be good enough. And Sellars is a Compatibilist, like me.

Kane: I know, but I feel we need something more than your decision-making model with its intelligent selection from what may be a partially arbitrary or chaotic or random production of options. Don't you see that the agent would be determined to select the best option from those which were randomly generated, consistent with the agent's reasons, motives, feelings, etc.? Liber-tarians want something more, some freedom in the decision itself.

Dennett: What's wrong with our actions being determined by our reasons and motives? R. E. Hobart said in 1934 that free will requires some determination, otherwise, our actions would be random and we wouldn't be responsible.

Kane: Right, but I think I can show that randomness does not always eliminate responsibility. I have this idea that a businesswoman could be torn between helping a victim and going on to her business meeting. She has good reasons for doing either one and she could feel responsible even if she acted indeterministically. What do you think?

Dennett: I agree. I showed the same thing, with my example of a new Ph.D. choosing between the University of Chicago and

357

Swarthmore. Her choice would depend on what considerations happened to come to her before her decision. But luck is real. I think we need to keep randomness out of the decision and limit it to generating options, what you libertarians call the alternative possibilities.

Kane: Well, having alternative possibilities (I call them AP) is not enough. I want what I call Ultimate Responsibility (or UR). That needs what I call a self-forming action (an SFA) in which the choice is a torn decision like that of the businesswoman.

Dennett: But if that torn decision is ultimately based on a coin flip, or a quantum event in your brain amplified to the neuron level, as Compton suggested, it would be random actions that form your self. Is that intelligible?

Kane: I'm not happy with it. I concede that indeterminism, wherever it occurs, diminishes control over what we try to do.

Dennett: I think that my model installs indeterminism in the right place for a libertarian, if there is a right place at all.

Kane: I haven't figured out the location and the mechanism of amplification, but something like quantum randomness must be going on in our brains if we are free.

Dennett: Isn't it the case that my proposed model for human deliberation can do as well with a random-but-deterministic generation process as with a causally undetermined process?

Kane: Don't pseudo-random number generators always have an algorithm that determines them? Wouldn't the author of that algorithm determine your life, like Laplace's demon? And aren't computer algorithms quintessentially artificial and not natural?

Dennett: You have a point. Quantum randomness is no doubt more natural than the pseudo-random number generators we cognitive scientists are using in artificial intelligence and computational models of the mind.

Kane: I could perhaps agree that randomness should be limited to generating ideas for your intelligent selection process, if you would agree that the randomness could be quantum randomness.

Dennett: I never denied the existence of quantum randomness. I'm just not convinced it is necessary for free will.

Kane: It seems to be necessary, if we want to break the causal chain that pre-determines every event since the beginning of the universe. The cosmic-rays that cause genetic variations are irreducibly random quantum events. Otherwise, every new biological species would have been pre-determined at the universe creation. That would satisfy the intelligent design crowd. Do we want to do that?

Dennett: Absolutely not. Did you see that KARL POPPER recently gave a lecture at Darwin College, Cambridge, and he likened free will to genetic evolution? He said that the selection of a kind of behavior out of a randomly offered repertoire may be an act of free will.

I can quote him. He said

"I am an indeterminist; and in discussing indeterminism I have often regretfully pointed out that quantum indeterminacy does not seem to help us; for the amplification of something like, say, radioactive disintegration processes would not lead to human action or even animal action, but only to random movements.

"I have changed my mind on this issue. A choice process may be a selection process, and the selection may be from some repertoire of random events, without being random in its turn. This seems to me to offer a promising solution to one of our most vexing problems, and one by downward causation."

Popper says he changed his mind! Not usual for a philosopher. He compared free will to natural selection. Again I quote him:

"New ideas have a striking similarity to genetic mutations. Now, let us look for a moment at genetic mutations. Mutations are, it seems, brought about by quantum theoretical indeterminacy (including radiation effects). Accordingly, they are also probabilistic and not in themselves originally selected or adequate, but on them there subsequently operates natural selection which eliminates inappropriate mutations. Now we could conceive of a similar process with respect to new ideas and to free-will decisions, and similar things."

359

Dennett: What do you think, Bob? Could libertarians accept this as the most plausible and practical model for free will? It has your quantum randomness but also my limiting randomness to the consideration-generator in my decision-making model.

Kane: Perhaps I should accept your point (and Hobart's) that our willed decisions need to be determinations. Ever since Hume, you Compatibilists have insisted that free will can be reconciled with some determinism. I guess I should go along.

Dennett: And I can accept quantum indeterminism as a natural part of the free-will process. If Hume reconciled free will with determinism, perhaps we can say that we reconciled it with indeterminism?

Kane: Sounds good to me. My Libertarian friends, most of whom had little appetite for my idea that genuine quantum randomness helps with the free will problem, might be pleased with your two-part Valerian idea, if quantum indeterminism in the right place does no harm to the will.

Dennett: Compatibilists, and most of my friends are compatibilists, will be delighted that they were right all along insisting on compatibility with some determinism, to make their actions reasons responsive. What should we call our compromises?

Kane: Maybe a "corrected" or more comprehensive compatibilism? Since you compatibilists are in the majority, I think you should keep the naming rights. And "Libertarian" is too easily confused with the politicians anyway.

Dennett: That sounds good to me. Comprehensive compatibilism makes free will compatible with *both* some determinism and some indeterminism, both in the right places at last. ⁶

••

⁶ If Dennett and Kane could have seen this compromise, today I would just be writing the history of philosophy, instead of helping to make the history of philosophy with the two-stage model for comprehensive compatibilism. See the next chapter.