How To Get Free From Causal Chains

Does determinism keep you awake at night? At last there is a way to relieve anxiety about determinism and ensure that your future really is open. Modern physics, and its derivative technology have made it possible to choose an alternative, contingent future by simply "amplifying" the indeterminacy which has been discovered to exist at the sub-atomic level. The device is particularly effective for those who, like William James, are bothered by the predictions of a Laplacian Demon, predictions of a future which is as unalterable as the past, where there is not the slightest room for deviation from what has been laid out "from all eternity."

The behavior I shall describe is such that it is

- (1) Rational in the sense that it is purposeful, oriented toward an end which one has selected.
- (2) Random in the sense that there are no causal conditions sufficient to bring it about. (Here I rely on a particular interpretation of microphysical indeterminacy which I shall not defend. Suffice it to say that it is not some deviant interpretation, but the most widely held view.)
- (3) Contingent both in the sense that it could have been otherwise given the laws and previous states of the universe and in the hypothetical sense that the agent would have acted differently if she had desired and chosen otherwise.
- (4) Unpredictable in the sense which follows from its random origin; but not such that it is surprising or out of character.

Simply develop a list of options, things which you could do (since they are within your means) and which you would enjoy doing. These could be alternative places to go on a vacation in which you will be able to visit several places. The alternatives could be something as mundane as a list of books to read in your spare time; they could be momentous (given certain obvious conditions) as the alternatives of having or not having a child. Next, list these options and number them. Finally, use a randomizing device as a means of selecting among the numbered options. In order to ensure that the randomizer itself is not ultimately predictable it will be necessary to use an expensive one that has its number circuit activated by the emission of a particle from a radioactive material; the number selected will depend upon the time at which the particle is emitted. For a sequence of choices, it may be necessary to invent rules to deal with such problems as repeated numbers. (Do I reread *Great Expectations*, return (or stay in) Athens if a number repeats?) This could in fact be done in a way that incorporated another dimension of randomness, e.g., one invents a number of rules ("when a number repeats, press again" etc.) then one numbers the rules, etc. . . .

This is all there is to it. But there are several features of the results which are worth brief comment. (1) It has often been said that the indeterminacy which exists at the level of micro-physics has no relevance to the traditional problem of free will. This example shows that one is in a position to make this claim false. Actually, of course, this depends on what the traditional problem is taken to be. One can ensure that there is no completely determinate explanation of one's action. One can also ensure that one's action will not be predictable. (There is an objection to these claims which I will consider below.)

- (2) It has been argued by soft-determinists that causal determination is a condition of responsibility. This also appears to be false. There is no reason why the actions which comprise the entries on the list cannot be scrutinized for moral acceptability. Indeed, they might each be things which I believe I ought to do, but are such that I cannot do them all, or all at once. There is nothing absurd in the thought that some responsibilities might be discharged at random. Moreover, there will be situations in which I am under a moral obligation to make random selections, e.g., where I am engaged in certain kinds of games.
- (3) There will be no set of conditions sufficient to bring about one of the actions rather than the others; there is an element of randomness; nonetheless the action will be one for which the agent can be deemed responsible. Now, obviously it is not because of the disconnectedness of the outcome that the agent can be deemed responsible; this soft-determinist point is sound enough. Nonetheless the point remains that the truth of causal determinism is not a condition of this responsibility. Determinate connectedness is not necessary for responsibility. A merely probabilistic connection is enough.
- (4) There may, of course be a deterministic story to be told about the process through which the options were generated. Since we are talking about the options of a rational agent, a part of this account would

have to be a causal interpretation of reasons for actions. But the procedure suggested above for selecting among *rules* pertaining to the options indicates that here, too, an element of randomness *can* be inserted to ensure that there is no deterministic account of reasoning process which frame the options.

- (5) It has been said (e.g., by B.F. Skinner) that it is impossible to *initiate* any causal series. But the procedure that we have described seems at least capable of detaching the agent from any prior set of conditions sufficient to produce the action that is done. One might say that the *agent* doesn't initiate this casual sequence; the randomizer does. But, the agent (i) has brought it about that a causally detached action is done, (ii) has devised the option which becomes his action, (iii) actually performs the selected action, and (iv) could choose to do otherwise in the counterfactual sense that he would if he desired to. Until the agent acts no series of consequences has been initiated.
- (6) Like the behavior of sub-atomic particles, the behavior of a person following this selection scheme will be predictable within certain limits. Thus, it might be quite predictable on the basis of a person's character that she would decide to go through the encyclopedia in this way, but not the *Kama Sutra*, or that a person would never include "kill the dog tonight" in a set of live options. It will remain true that a full prediction of behavior will be impossible. There is no answer at four in the afternoon to the question "Will she be reading 'Sartre, J.P.' tonight?"—though there may be an answer to the question "Will she be reading the encyclopedia?"
- (7) It must be conceded, however, that there is no reason to suppose that a person who makes decisions in this way is, in the ordinary sense, more free than one who doesn't. Of course, a person may want to be free from the possibility of having his next move predicted by some brooding scientist; one *could* desire this metaphysical freedom. Having the means of attaining this is having an additional freedom for a person with this goal. But it is equally true that the person who decides what to do in this way is not free from the randomness of the selector. Like any form of gambling this one could become addictive and hence involve the loss of other opportunities.

It might be objected that neither causal indeterminateness nor unpredictability have in fact been preserved by this device. I shall consider one form this objection might take.

To the extent that the resulting actions are the acts of a rational agent they remain subject to reassessment. The machine having selected Glasgow as the destination of my next trip, I may regret its inclusion in the list and head for Paris instead. Now, nothing I have said removes the possibility that there is a determinist's story to tell

regarding my fidelity to the randomizer. The numbers it produces can be thought of roughly as if they were stimuli in an environment to which I respond in causally determined ways.

We have already seen that one can introduce further dimensions of randomness. This could be applied here in such a way that the question of whether I stick to "Glasgow" is itself put to the randomizer. But for every move of this sort there is a corresponding reply regarding one's adherence to the selection that is made. It should be obvious, however, that neither indeterminateness nor unpredictability of the outcomes would be removed by a determinist account of responses to the selections which are made. Reconceived as mere stimuli the numbers which are the basis of selection are still generated in such a way that they preclude accurate prediction. Even the decision to ignore "Glasgow" and go to Paris, if it is partly a result of a stimulus that is randomly produced, is not something that Laplace's Demon will be able to predict.

One might wonder if the very possibility of making choices in the way described is itself sufficient to entail that one's future is (even now) contingent and unpredictable. This possibility, however, represents merely what I could do if I chose to put the scheme into effect. There is nothing in this discussion which rules out a fully deterministic answer to the question of whether I could so choose. That is, nothing rules out the counterfactual interpretation, that "I could" is equivalent to "I would have if causal conditions had been different." Had I been a child whose existence had been randomly selected, however, I could rest assured that there was indeterminacy in this set of conditions as well.