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**Genetic and Generic Determinism: A New Threat to Free**

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**Introduction**

We are discovering more and more about the human genotypes and about the connections between genotype and behaviour. Do these advances in genetic information threaten our free will? This paper offers a philosopher's perspective on the question.

Whether or not genetic discoveries do really threaten free will, many feel threatened, and it is not difficult to see why. If genetic advances enable us to predict with increasing accuracy and reliability what people will do, this seems to undermine the pretensions of individual autonomy and agency. In what sense do I choose for myself what I do, if you can say reliably in advance what that choice will be?

At the same time, a philosopher may wonder how the new knowledge could by itself make a difference. Given the classic philosophical difficulties in seeing how free will is possible even under the best of conditions, it is unclear how new knowledge could make things any worse. Moreover, if free will is possible at all, it is unclear how the new knowledge differs in kind from the familiar threats to free will already posed by old knowledge. These two questions will focus the discussion to follow. My conclusion will be broadly deflationary: genetic information might enable us to anticipate that certain individuals are likely to suffer from exceptional conditions that threaten their autonomy, but it is the nature of these conditions or effects that count, not their source or how we come to know about them. Moreover, we have no particular reason to suppose that the conditions thus revealed will be different in kind from the already familiar ways in which a person's free will may be compromised. As for the majority of us who are not afflicted by these conditions, whatever free will we now enjoy will survive dramatic advances in genetic understanding.

### **The Sceptical Dilemma and Diminished Responsibility**

To see why a philosopher might suspect that genetic information could not possibly make the problems of free will any worse than it already is, we need to consider the classic free will dilemma, an argument with three very plausible premises and a depressing conclusion. 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. The argument has the form: heads or tails, if heads you lose, if tails you lose, therefore you just lose. Either determinism holds or it doesn't, if determinism holds there is no free will, if it does not hold there is not free will, therefore there just is no free will.

This dilemma is remarkably simple, and it packs an immediate punch. Let me nevertheless add a few comments on its structure and elements. The dilemma is clearly valid, in virtue of its form. To say that an argument is valid is not to say that its conclusion is true, but just that *if* the premises are all true, then the conclusion must be true as well, or equivalently that it is impossible for all the premises to be true yet the conclusion false. So anyone who wishes to reject the conclusion must also reject at least one of the premises. It is also worth remarking that the conclusion is extremely general. The moral of the argument is not that we are unlucky enough to find ourselves in a world without free will, where if only things had been a bit different, free will would have existed. For the argument does not assume any particular facts about our world, which suggests that the problem lies not in our world, but in our concept. If the free will dilemma is sound – that is valid *and* with true premises – it seems to show that the very concept of free will is incoherent, something that could not possibly exist, a round square.

The first premise the dilemma is indisputable, since it has the tautologous form P or not-P – everything is determined or not everything is determined. (Note that this is not the same as the disputable claim that either everything is determined or nothing is.) Just what determinism entails is a much more difficult question, and there

are several different versions of the concept that could be deployed, though the first premise remains a tautology whichever one is chosen. The two most common versions of determinism appeal to causation or to the laws of nature. Thus determinism may be taken to be the view that everything that happens has a cause, or the view that everything that happens follows necessarily from the laws of nature in conjunction with the full state of the universe at any single moment. In fact this yields more than two conceptions of determinism, since the concepts of cause and law have themselves been given diverse philosophical treatment. Thus, some suppose that a cause is a condition sufficient for its effect, while others claim rather that it is necessary, something without which the effect would not have occurred. And while some philosophers have supposed that laws are simple *de facto* regularities, others have claimed that laws describe what happens by necessity, what could not have been otherwise.

The second premise of the dilemma, which asserts the incompatibility of free will and determinism, lacks the iron-clad security of a tautology, but there are powerful considerations in its favour. Free will seems to entail that the actor 'could have done otherwise', while determinism rules this out. The incompatibility of determinism with 'could have done otherwise' is particularly clear when determinism is defined in terms of the laws of nature (van Inwagen 1975). If determinism is true, then what I did is entailed by laws of nature along with some particular facts about the state of the world before I was born. To have the power to have done otherwise, I would either have to have the power to change the laws or to change those pre-natal facts. Clearly neither is possible.

Those who have tried to show that determinism and free will are nevertheless compatible have typically observed that the claim that my action was determined is compatible with my desires being among its causes and so that I would have acted differently, had my desires been different (Ayer 1954). But defenders of the second premise reply that this is not enough to show that I could have done otherwise, if my desires are themselves just intermediate links in a long deterministic chain stretching back before my birth. In such a case, that people would have acted differently had their desires been different seems no more to show that they could have done otherwise than would saying that they would have acted differently, had the weather been different. Neither circumstance shows they have the power to change what they would do.

Another way of resisting the second premise is to question the connection between free will and could have done otherwise. The desire being a cause of the action – which determinism allows – is clearly insufficient for free will. The miserable addict is a model of someone whose free will has been compromised; though the addict desires the drug and that desire affects behaviour. But it has been suggested that what rules out free will in such cases is not that everything is determined, or that the agent could not have done otherwise, but rather that the addict does not have a coherent hierarchy of desires, where the desire for drug is itself desired and perhaps also where that ‘second-order’ desire is a cause of the desire for the drug (Frankfurt 1971). Ultimately, we all have desires we do not choose, but on this view what enables us to enjoy free will is that many of our desires are maintained because they are themselves desired. It does not matter that in a sense we could not have done otherwise, so long as our desires are in harmony. This emphasis on the hierarchy of desires and the ways they may mesh or clash is important, but the defender of the second premise will insist that no appeal to the harmony within our mental economy is enough to make room for the possibility of free will if that entire economy and the actions it generates were determined by things that occurred before we were born.

I will be brief with the third premise of the dilemma, since it does not figure prominently in the discussion to follow. It asserts that free will is not compatible with indeterminism. Supposing that some of my actions or their causes are themselves uncaused or ungoverned by deterministic law may allow that my actions could have been otherwise, but it does not seem to allow that *I* could have done otherwise. Indeterminism does not seem to allow the agent to control her actions in the way free will requires. I do not exercise free will if my arm spontaneously rises, not does the situation appear any more promising if we construe an indeterministic process as one that is irreducibly probabilistic, rather than one that is entirely random. Loosening the link between desire and action does not create room for free will; nor does the supposition that desires themselves are uncaused or only probabilistically determined.

The free will dilemma is a hardy philosophical perennial. After thousands of years of work there is still no generally accepted solution, no clear demonstration that free will really is possible.

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