

Firstly, this piece may be a little more than you quite bargained for, and a bit technical in places, but don't let that put you off. I can always clarify in the meeting where necessary. Overall though you have to bear in mind that "the pool of philosophy has no shallow end", so the best way is to dive in and hold your breath! And secondly, yes, this is about Free Will. But I work up to it with some preamble, beginning with

Substance

In 1686 Gottfried Wilhelm von Leibniz published his *Discourse on Metaphysics* in which, among other things, he explains his "notion of an individual substance".

Now you might consider the word "substance" to refer to the activities of misguided youth, but not in philosophy. Metaphysics, according to Aristotle, is "the science of Being *qua* being" – but what is a being? Aristotle's answer is that a being is a substance (literally "standing under"), distinguished by a defining essence, upon which other things depend and of which they are spoken of. *Substance*, *essence*, and *being* are all translations of the same Greek word (*ousia*) deriving from the verb "to be". A substance refers to that which something ultimately is, defined by its essence, without which it would not be what it is. Pavlov the dog is a substance, of which many things can be said – perhaps, for example, "Pavlov is excitable" – but which could not be said of anything else. Many things can be said to be excitable, but nothing can be said to be Pavlov except Pavlov.

Essence and Accident

There is something which makes me human. What is it? It's not such things as my name, weight or interest in philosophy - those are *accidental* qualities, attributes which could be different without disqualifying me as human. When I sunbathe on the beach and become suntanned I do not change in essence, I do not cease to exist or cease to be human. On the contrary, there is something which persists through such change and on which that change depends. That something, according to Aristotle, is my essence. And I am prior to my suntan, the suntan is not prior to me. I am a primary substance, the bearer of accidental qualities, like being of a particular weight and state of suntan.

Necessary and Contingent

Now it may be that neither I nor Aristotle can say what the essence of being human is, but there is one thing which can be said: whatever it is is *necessary* in order to qualify. You might object that while it is not necessary for me to be the weight that I am, it is nevertheless necessary for me to be of some weight. However, my weight may vary (which it does!) without me ceasing to qualify as human. My particular weight is *contingent*. My interest in philosophy more so since it is true that I must be of some weight but not that I must have some interest in philosophy, or even that I must have some interest or other at all. These are contingent facts that can be said of me but which are not necessary to my status as a human being.

Enter Leibniz

Which brings us back to our friend Gottfried Wilhelm von Leibniz, an extraordinary polymath, mathematician, inventor, diplomat and philosopher of the first rank. His philosophy is highly distinctive and his "notion of an individual substance" is no exception. It won't do, he says, to relegate contingent qualities to a secondary status of accidental. After all, my interest in philosophy is important in defining who I uniquely am. It may be contingent, but it remains a pertinent feature of what defines me as me. For that matter, my whole history is similarly defining to my individuality. I may be a human being, but I am this particular human being, and in order to sufficiently define me everything that can be said about me and of me - past, present and even future - is relevant. Take, he says, the notion of Alexander the Great:-

"Thus the subject term [ie Alexander the Great] must always contain the predicate terms [ie. things said of him – eg. that he vanquished the Persians], so that one who understands perfectly the notion of the subject would also know that the predicate belongs to it. Since this is so, we can say that the nature of an individual substance or of a complete being is to have a notion so complete that it is sufficient to contain and to allow us to deduce from it all the predicates of the subject to which this notion is attributed. Thus when we consider carefully the connection of things, we can say that from all time in Alexander's soul there are vestiges of everything that has happened to him and marks of everything that will happen to him and even traces of everything that happens in the universe, even though God alone could recognize them all."

God's Divine Foreknowledge

Leibniz does not hold back. 300 years before the revered Douglas Adams he asserts the "interconnectedness of all things". But there is a problem, which he is quick to recognise: it may be that only God can have such complete knowledge, revealing as it does the entire future destiny of the universe - but since he can, then Determinism must surely hold and Free Will fails. Here is what Leibniz has to say:-

"But before going further, we must attempt to resolve a great difficulty that can arise from the foundations we have set forth above. We have said that the notion of an individual substance includes once and for all everything that can ever happen to it and that, by considering this notion, one can see there everything that can truly be said of it, just as we can see in the nature of a circle all the properties that can be deduced from it. But it seems that this would eliminate the difference between contingent and necessary truths, that there would be no place for human freedom, and that an absolute fatalism would rule all our actions as well as all the other events of the world."

Fatalism Rules, but that's not OK!

So it would seem that God's divine foreknowledge wraps it up for Free Will. But without Free Will what does the Christian church do about the problem of evil? Tricky. However, Leibniz is not stumped. He does have an answer. But first let's just consider the claims of Fatalism.

Que sera, sera

It is undoubtedly true that if I should eat and drink an excess of plum duff and Xmas spirit at Christmas, then it was always going to be the case that I would sin in that manner to the detriment of my waistline. No, it really isn't my fault, nothing I could ever have done to prevent it, written in the stars.

Does that mean that I am forever doomed, my fate sealed, free will a sad illusion but at least freed from guilt? The Stoics thought so – the history of the universe for them was an unbroken chain of cause and effect ending in a cosmic fiery conflagration before repeating the cycle precisely as before to the last detail over again, and again The Stoics invented the idea of Fate, and perhaps it is just as well that they were stoical about it.

Dickens disagrees and writes a Christmas Carol to make his point. Eloquently. Hauntingly. And, to mix my references, "thereby hangs a tale", one we will come back to.

Thumbnail of the case for Determinism

Science, and our own experience of the world, teaches us that events are a matter of cause and effect. There are no uncaused actions or events, except perhaps the very first event in the universe, supposing there to have been a beginning at all. Even David Hume does not deny cause and effect, just (he asserts) that we cannot prove it to be true. Since everything is caused, by causes which are themselves caused, then the universe is in the grip of an inescapable chain of consequence and us along with it. Therefore Determinism holds (but hopefully the fiery conflagration can be avoided).

But, on the other hand

..... if Determinism holds then what of moral responsibility? What is the point of a system of justice? And what do we think we are doing when we plan, aspire and encourage? We do perceive ourselves as able to make a difference in the world, to act as principals rather than mere agents of fate, driftwood moved by the tides of time. Free Will is the ability to do otherwise, which surely is a power we do possess? A Determinist may object that even though we make choices, there are always reasons for them. But reason is not cause.

Truth

What makes a statement true? Well, it depends what kind of statement it is. David Hume finds that there are two kinds – relations of ideas and matters of fact (Hume's Fork). The first are *analytic*, that is, true by virtue of their definition; the second by virtue of their correspondence to what is actually the case. The vast majority of truths relate to matters of fact: is the cat on the mat? – well, go and look. However, are all bachelors unmarried males? – well yes, that's what the word means, no need to look.

Schrodinger's cat – is it or isn't it on the mat?

But what if your question is about future matters of fact? After all, Determinism is about future events and asserts that their truth is already fixed. We do not ourselves yet have that knowledge, although Leibniz's God does. We cannot go and look because it hasn't happened yet, but as Determinists we can deduce that its truth

is already fixed because of the consequence of cause and effect. In effect, Determinists deny Hume's Fork – all truths for them are analytic. And maybe there is another way we can prove the case.

If, when I go and look, I find that the cat is in fact on the mat, then not only is it true to say so but it would always have been true to have said so. Inescapably, if the cat is in fact on the mat, then it was always going to be the case that the cat would be in fact on the mat. Therefore, if I had said yesterday that the cat would be on the mat, then that would have been a true statement and the cat would in fact be constrained to now be on the mat. After all, what makes a statement true is correspondence to fact. It's looking good for Determinism. Is there more to be made of this? Aristotle investigates, and muses about the prospect of a sea battle.

Tomorrow's Sea Battle

Will there or won't there be a sea battle tomorrow? Is there anything we can say on the matter?

Well, yes. Since the outcomes are contradictory, we can say that necessarily, either there will be a sea battle tomorrow or there will not be a sea battle tomorrow. And since these two terms exhaust the possible outcomes then we can say that this statement is true. And we can say that now without waiting to find out.

But hang on, what if I now say there will be a sea battle tomorrow, and in actual fact there will prove to be a sea battle tomorrow? That will also be a true statement. But if it is true that there will be a sea battle tomorrow then inescapably it will be the case that there will be a sea battle tomorrow. And if I had said it ten thousand years before it will still have been true. So, Determinism holds. QED.

But, you may say, what if it is not true that there will be a sea battle tomorrow? Well, then it was not true to say so – but in actual fact there will not be a sea battle tomorrow in which case it was always the case that my assertion would be false, even if I made it ten thousand years before, and so equally inescapably there would not be a sea battle tomorrow. So, Determinism still holds. QED.

Aristotle retires to think about it a bit more. We'll hear from him later.

Fatalism

If you are for Determinism, then you subscribe to Fatalism. Maybe not quite as extremely as the Stoics – armageddons of fiery conflagration in endless cycles of "eternal recurrence" need not be involved – but nevertheless you are signing up to inescapable Destiny. Is that what we accept, that we are puppets of Fate and no more, helpless cogs in the relentless machinery of an uncaring universe? Is there no way such a conclusion can be refuted and resisted? I think there is.

Firstly, there is a matter glossed over by those who point to cause and effect. It is accepted that everything has a cause. However, that does not prevent human agency from being the cause. So, if I, wishing to skim pebbles on the beach, pick up and then throw a pebble into the sea, then the pebble has no say in the matter: its actions are caused and its progress through history is deterministic. The pebble's actions, given the external forces applied to it, are not a matter of choice: they are necessary actions. My actions however are directed by my wish to skim pebbles, a wish internal to me, part of me. Nothing obliges me to enact the skimming of pebbles: I am free to resist the skimming of pebbles. No doubt I have my reasons for skimming pebbles, but reasons are not causes. Even if there are explanations and influences piled high making it likely that I would wish to skim pebbles, I could still do otherwise. The opposite is possible, conceivable – and so it fails to be a necessary action. But Determinism requires necessity, which my part in the scene does not supply. People, and other rational agents, are not inanimate objects. Determinism, on the grounds of cause and effect, holds for the inanimate, a population that does not include us.

But what about that cat on the mat? Surely I must agree that if the cat is actually on the mat then it was always going to be the case that it would be and therefore that it must be? Well, no, I don't agree. I agree that the cat is actually on the mat, and that since it is now on the mat then as it happens it was always going to be – but not that therefore it necessarily had to be. Why should it be?

Let's see what our man Leibniz had to say about his similar conundrum of God's divine foreknowledge in the "notion of an individual substance". So, God deduces everything about Alexander the Great from his perfect notion, and from that deduces everything about the complete history of the universe – surely, then, Determinism holds? This is what Leibniz goes on to say:

“To this I reply that we must distinguish between what is certain and what is necessary. Everyone grants that future contingents are certain, since God foresees them, but we do not concede that they are necessary on that account. But (someone will say) if a conclusion can be deduced infallibly from a definition or notion, it is necessary. And it is true that we are maintaining that everything that must happen to a person is already contained virtually in his nature or notion, just as the properties of a circle are contained in its definition; thus the difficulty still remains. To address it firmly, I assert that connection or following is of two kinds. The one whose contrary implies a contradiction is absolutely necessary; this deduction occurs in the eternal truths, for example, the truths of geometry. The other is necessary only *ex hypothesi* and, so to speak, accidentally, but it is contingent in itself, since its contrary does not imply a contradiction.”

Future contingents – Aristotle’s reply

But what about that sea battle – how is that to be resolved? If I say there will be a sea battle tomorrow and there will in fact be a sea battle, then my statement is true and so surely it must come to pass?

But think about it for a moment. The clue is in the quote from Leibniz. It is true that (1) there either will be a sea battle tomorrow (P) or there will not be a sea battle tomorrow (not-P). Furthermore, (1) is necessarily true, by virtue of Aristotle’s law of non-contradiction, since there are two, and only two, contradictory possibilities.

But this is not the claim being made. The Determinist argument on offer invites us to accept, on the grounds that in actual fact, for example, there will be a sea battle tomorrow, that this not only confers truth on my statement today that there will be but also forces it to be the case that there will be – a claim which does not even rely on the fact of my prediction but actually relies on the fact that it does indeed occur: given that the sea battle does indeed occur, they say, that fact fixes not only the truth of any prior statement but also confers necessity on the event. But it doesn’t – the sea battle remains one of two possibilities which the fixity of fact does not remove. This sea battle is contingent, and remains so whether past, present or future. Truth does not confer necessity. But Determinism requires necessity. Therefore Free Will holds.

The logic here isn’t necessarily obvious at first reading, so here it is again. The true statement (1) does not imply that (2) either necessarily there will be a sea battle tomorrow or necessarily there will not be a sea battle tomorrow. (2) is an invalid step which does not follow from (1).

Or, in symbolic form:

1. necessarily (P or not-P)

does not equate to

2. necessarily P or necessarily not-P.

The allure of fatalism is the thought that whatever in fact is the case was for all time going to be the case, but the conclusion that it was therefore always predetermined (ie. necessary as opposed to merely contingent) is not valid. There is an important point being made here - truth does not entail necessity. P does not entail necessarily-P. This is the case for all contingent statements, not simply future contingents. It is the case that my name is Peter, but not necessarily so. Hypothetical necessity (necessarily, if you are unmarried, then you are a bachelor) is not categorical necessity (necessarily, you are a bachelor).

The fatalist argument founders on two logical errors. The first is that bivalence does not confer particular necessity, and the second is that the fixity of fact does not preclude contingency.

The necessity entailed in cause and effect (*pace* Hume) does not preclude the contingency of the cause. We may well be disposed to assert, on empirical grounds, that since every effect has a cause there must therefore have been an unbroken chain of cause and effect and that therefore, given that each event entails a local internal necessity, then determinism is an inescapable consequence. However, are we to allow that this and only this particular historic series of cause and effect was necessary as opposed to contingent until becoming fixed by history? Does the necessity of cause and effect entail the necessity of this particular series of causes and effects?

Both fatalism and determinism suffer from very similar, if not identical, logical difficulties. Luckily, the analysis of the logic supports what we would wish to be the case. We do consider ourselves able to navigate through life making choices and acting on decisions, influencing our own lives and the lives of others. While I cannot dispel the possibility that free will may be a group illusion that we all share, neither do I see adequate grounds for giving it any credence.