

Leibniz on mind-body causation and Pre-Established Harmony.¹

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Causation was an important topic of philosophical reflection during the 17th Century. This reflection centred around certain particular problems about causation, one of which was the problem of causation between mind and body. The doctrine of the Pre-Established Harmony is Leibniz's response to the problem of causation between mind and body.

In this chapter I shall: (a) explain the mind-body problem, (b) explain Leibniz's Pre-Established Harmony and (c) assess Leibniz's case for Pre-Established Harmony.

1. The problem of mind-body causation and the Pre-Established Harmony.

There is a regular correlation between what happens in the mind and what happens in the body. This correlation is manifested in two groups of cases, one concerning perception and sensation, and the other concerning action. For instance, if my body were to be cut then, normally, I would feel a sensation of pain. Or if something with certain characteristics, say brown and round, were placed within my visual field in certain circumstances, say under optimal conditions of illumination etc., then I would have a visual perception of something brown and round. Similarly, if in certain circumstances, for instance that my arm were untied, I had the desire of moving my arm, then my arm would move.

The correlation between mind and body, or between states thereof, constitute the data of the problem. And the problem consists in explaining these data. Initially this looks like an easy problem: what explains the correlation between mind and body is causation between mind and body. When I perceive or feel a sensation, the state of a part of my body, my brain, causes my mind to be in a certain state, a perceptual state or the state of having a certain sensation. And when I act, a state of my mind, the state of desiring to move my arm, causes the state of being in movement in my arm, a part of my body.

¹ I am grateful to Paul Lodge for discussion of the topics of this chapter and for allowing me to use his invaluable (unpublished) review of the literature on the Pre-Established Harmony.

This solution was deeply problematic in the context of 17th Century Metaphysics. Descartes was inclined towards such a solution, but it caused him and his followers quite a problem. For Descartes maintained the following two propositions:

- (1) Cause and effect must be similar.
- (2) Mind and body are dissimilar.

The sense in which mind and body are dissimilar is that they have different natures or essences. That is the sense in which, at least when both cause and effect are finite beings, they must be similar. Now, those two propositions are clearly inconsistent with this one, to which anyone adopting the causal explanation of the correlation between the states of mind and body is committed:

- (3) Mind and body causally interact.

Some have argued that it was precisely this inconsistency that led to the downfall of Cartesianism as a school of thought in the late 17th century (Watson 1966. That Descartes was committed to (1), or to a version of (1) that creates philosophical trouble, is controversial; see Loeb 1981 and Schmaltz 2006 for discussion and criticism of this view).

To solve this problem it is sufficient to reject one of those three propositions – for any two of those three propositions are mutually consistent. Let us ignore propositions (1) and (2) and concentrate on proposition (3). Leibniz rejected (3): for him the mind does not act upon the body and the body does not act upon the mind. This is not a doctrine that Leibniz restricts to the case of mind and body. For him only God can act upon a created or finite substance. But for Leibniz no finite, created substance acts upon another. So Leibniz denies any sort of causation among finite or created substances. As Leibniz says:

There is also no way of explaining how a monad can be altered or changed internally by some other creature (...) The monads have no windows through which something can enter or leave. Accidents cannot be detached, nor can they go about outside of substances, as the sensible

species of the Scholastics once did. Thus, neither substance nor accident can enter a monad from without. (*Monadology* §7).

‘Monad’ is Leibniz’s technical term for individual substances. Leibniz is, in the passage just quoted, putting forward an important metaphysical thesis: the denial of intersubstantial causation between created or finite substances. For Leibniz the world is composed of infinitely many finite substances which are completely causally isolated from one another, since they cannot act upon each other. This is what led Leibniz to say that every substance is like a world-apart, independent of any other thing save God (*Discourse on Metaphysics* §14).

But if Leibniz denies intersubstantial causation, what is his solution to the problem of mind-body causation? How does he explain the correlations between the states of the mind and the states of the body? This is the function of his doctrine of the Pre-Established Harmony. Leibniz states it in the following passage:

(...) the soul does not disturb the laws of the body, nor the body those of the soul; and (...) the soul and the body (...) only agree together; the one acting freely, according to the rules of final causes; and the other acting mechanically, according to the laws of efficient causes. (...) God, foreseeing what the free cause would do, did from the beginning regulate the machine in such manner, that it cannot fail to agree with that free cause (Fifth letter to Clarke, paragraph 92)

According to this doctrine although the mind and the body do not causally interact, God has made them coordinate perfectly, so that both act as they would act *if* they causally interacted. Thus the harmony that obtains between mind and body has been previously established by God.

But in what sense do the states of the mind and the body harmonise or correspond? They correspond in the way in which they would correspond if they causally interacted with each other. For instance, God made the mind and the body such that when the mind is in a state of willing to move a certain arm in a certain way at time t_1 , the arm in question moves in that way at t_1 ; and when the body is cut with a knife, the mind has, at that very same time or shortly thereafter, a sensation of pain. So although there is no intersubstantial causation, substances act as if there were:

(...) bodies act as if there were no souls (though this is impossible); and souls act as if there were no bodies; and both act as if each influenced the other. (*Monadology* §81).

Although for Leibniz no created substance acts upon another, there are passages where Leibniz speaks of a substance acting upon another. This does not mean that Leibniz contradicts himself: in such passages he is speaking with the vulgar while thinking with the learned. In *Discourse on Metaphysics* §15 Leibniz explicitly says that we must reconcile the language of metaphysics with practice. Basically he says that we say that a substance A acts upon a substance B when A expresses what happens in B more clearly than B expresses what happens in A. Here expression is a non-causal relation of correspondence or correlation.

Thus Leibniz can solve the problem of mind-body causation. He does not deny the data to be explained, but instead of explaining the correspondence in terms of causation between the mind and the body, he explains it in terms of a divinely pre-established harmony between them.

But this doesn't mean that the Leibnizian world is wholly devoid of causation. There are two kinds of causation for Leibniz:

- (1) Causation by God: God creates and sustains finite substances in existence.
- (2) Intrasubstantial causation: the states of a finite substance are caused by the active force inherent to the substance.

The doctrine of the Pre-Established Harmony can be taken to consist of the following elements:

- (a) No finite substance acts upon any other finite substance.
- (b) Every non-miraculous state of a finite substance is a causal effect of its inherent active force.

(c) God has set up the mind and the body so that there is a correspondence between their states.

Component (b) is Leibniz's doctrine of the spontaneity of substances, according to which substances have their principle of action within themselves, and so each non-miraculous state of a substance is caused by something internal to the substance (As stated (b) is the view attributed to Leibniz by Bobro and Clatterbaugh (1996: 409). Other authors, like Sleigh (1990) and Kulstad (1993) attribute to Leibniz a position, for which there is also textual basis, according to which every non-miraculous non-initial state of a substance is a causal effect of the preceding state. Bobro and Clatterbaugh (1996) discuss this other view).

Note that the thesis of spontaneity is not equivalent to the thesis that no finite substance acts upon any other finite substance. Indeed the French philosopher Nicolas Malebranche (1638–1715) denied intersubstantial causation without maintaining intrasubstantial causation and therefore without maintaining the thesis of spontaneity for finite substances. For Malebranche no finite substance is causally efficacious and so no finite substance acts upon any other finite substance, but he thought that every state of every substance is an effect not of its own active force but of the action of God.

It is important to note that the three components of the Pre-Established Harmony are logically independent. For instance God could have set up the mind and body so that there is a correspondence between their states by making it the case that each state of one is an effect of the other, and never of its own inherent active force. Thus (c) is logically independent of (a) and (b). Similarly (b) could be true even if God did not exist and some states of finite substances (or indeed all of them) were also an effect of other finite substances – so some states of substances would be causally overdetermined in this situation. Thus (b) is logically independent from (a) and (c). Finally, (a) could be true even if there were no correspondence between the states of the mind and body and each state of every substance were uncaused. Thus (a) is logically independent from (b) and (c). If so, that Leibniz has arguments for some of the components of the Pre-Established Harmony is no guarantee that he has arguments for the others.

Note that the doctrine of the Pre-Established Harmony is contingent, since it is not true in every possible world. It might be that Leibniz thought that components (a)

and (b) of the Pre-Established Harmony are necessary. But even if that is the case, the whole doctrine is contingent because component (c) is contingent, since there are possible worlds where minds and bodies don't harmonise with each other.

2. The arguments for the Pre-Established Harmony.

How does Leibniz argue for the Pre-Established Harmony? One of Leibniz's characteristic theses on substance was that each substance has an individual concept so complete that it contains all the predicates of the substance, in the sense that it is possible to deduce from its concept everything that happens to the substance in question. Thus if one had perfect knowledge of the concept of Caesar one would be able to deduce that he crossed the Rubicon and that he wrote *De Bello Gallico*. Some texts suggest that Leibniz attempted to derive component (a) of the Pre-Established Harmony from this doctrine about the individual concepts or notions of substances. The following passage provides textual basis for this interpretation:

The complete or perfect notion of an individual substance contains all its predicates, past, present and future. For certainly it is now true that a future predicate will be, and so it is contained in the notion of a thing (...) Strictly speaking, one can say that no created substance exerts a metaphysical action or influx on any other thing. For (...) we have already shown that from the notion of each and every thing follow all of its future states. (*Primary Truths*)

The idea seems to be that since all the predicates of a substance are contained in its concept, the having of any states corresponding to such predicates does not result from the action of another finite or created substance. As pointed out by C. D. Broad (1975: 46—7), this idea is fallacious. From the fact that all predicates are contained in the concept of a substance it does not follow that nothing external acts upon a substance. After all, the concept of a substance could contain a predicate like 'is caused to be F by substance x'.

It might be replied that the concepts of substances do not contain such causal predicates. But for Leibniz *every* predicate of a substance is contained in its concept.

Thus one needs another argument to deny that that such causal predicates are true of substances.

Since Leibniz's argument doesn't establish even (a), it doesn't establish the whole doctrine of the Pre-Established Harmony. Another argument against intersubstantial causation appears in the *Monadology* (§7), where Leibniz says:

There is also no way of explaining how a monad can be altered or changed internally by some other creature, since one cannot transpose anything in it, nor can one conceive of any internal motion that can be excited, directed, augmented, or diminished within it, as can be done in composites, where there can be change among the parts.

A problem with this argument is that it assumes that the only way in which a monad could be affected would be by affecting its parts. But this assumption is unwarranted since Leibniz admits intramonadic causation, and such causation cannot be effected by affecting the monad's parts, since monads have no parts. And Leibniz does not say why while intrasubstantial causation does not work by affecting parts, intersubstantial causation would (see Broad 1975: 48 and Loeb 1981: 271—2).

In other texts Leibniz attempts to establish the Pre-Established Harmony as a whole, rather than parts of it. From 1695 onwards Leibniz usually uses an argument from elimination to support the Pre-Established Harmony. Typically Leibniz thinks that there are three theories that can explain the correspondence between mind and body, and that Pre-Established Harmony is the best. These are:

- (a) Interactionism, or 'the way of influence'.
- (b) Occasionalism, or 'the way of occasional causes'.
- (c) Pre-Established Harmony.

This argument succeeds only if the list of solutions is exhaustive. But it is not, since Spinoza's solution has been left out. But in many writings Leibniz makes clear why he rejects Spinozism. Nevertheless it is not clear that Spinozism is the only omission.

But let us ignore the inexhaustiveness of the list and proceed to examine Leibniz's reasons to discard Interactionism and Occasionalism.

What Leibniz calls 'the way of influence' is the theory that there is causal interaction between the mind and the body. But Leibniz finds this inexplicable, because he thinks that if there were causal interaction between mind and body there would be transmission of properties from one to the other and that properties cannot be detached from one substance and pass into another (*Third Explanation of the New System* §5, *Monadology* §7). But these reasons are weak. It is not a very plausible model of causation one that pictures it as a literal transmission of properties from one thing to another. Furthermore, this seems to undermine even cases of intrasubstantial causation. For sometimes a mental state can cause another which is completely different from it and which has virtually no properties in common with it. For instance, sometimes a state of guilt can be caused by considering doing something wrong, but it is difficult to see how this causal fact could consist in the transmission of any properties.

The case against the way of influence is thus weak. Nevertheless it may have carried more weight in Leibniz' time than today since in the 17th Century it didn't seem so implausible as it seems today to demand some sort of similarity between causes and effects, a similarity that can be accounted for if one requires that causes transmit properties to their effects.

But discarding the way of influence is not enough to ensure the victory of Pre-Established Harmony, for Leibniz still has to defeat Occasionalism. What is Occasionalism and what are Leibniz's objections to it?

Occasionalism, developed in the 17th Century by Malebranche and others, says that the only efficient cause is God. Like Leibniz, Malebranche denied that the pain I feel when my body is damaged is produced by the wound in the body. But for Malebranche, God intervenes and produces my pain when my body is damaged. Here the wound in the body is simply an occasion for God to produce the pain in the mind. Similarly, Malebranche denied that my desire to move my arm may cause my arm to move. According to him, when I have a desire to move my arm, God intervenes and makes my arm move. The desire to move the arm is simply an occasion for God to move my arm.

Since events in the mind and the body function as occasions for God to intervene one may call those events *occasional causes*. But here the word 'cause' is deflated.

The events in the mind and the body are not causes in the sense of efficient and productive causes. The events in the mind and body have, of themselves, no power to produce anything anywhere. They just give God an opportunity to intervene and change the mind according to what happens in the body and vice versa. The only thing that has causal powers is God.

Leibniz liked to explain the differences between his theory and Occasionalism by means of an analogy. Suppose there are two clocks that are perfectly co-ordinated and give exactly the same time. There are different ways of obtaining this perfect co-ordination. One way would be to have a man who constantly looks after them and who adjust them from moment to moment so as to maintain the clocks giving the same time. This corresponds to Occasionalism. Another way would be to construct the clocks, from the beginning, with such a skill and accuracy that we could be sure they will always keep the time together without needing to readjust them. This corresponds to Pre-Established Harmony (*Third Explanation of the New System*, §§2-4).

So Occasionalism is like Pre-Established Harmony in that it denies real causation between created substances. But the difference between Occasionalism and Pre-Established Harmony is that in Occasionalism God is acting whenever a change occurs in the world. When I move my arm on occasion of my desire of doing so, God is acting then – he is making my arm move; when I feel pain on occasion of my body's being damaged, God is acting then – he is making me feel pain. In the doctrine of the Pre-Established Harmony God is not acting permanently in the world. He acts only once, at the very beginning when he creates the world and then, if he acts later, this is only to perform a miracle. But normally he does not intervene in world affairs. When my body is damaged I do not feel pain because God intervenes and produces it. I feel pain because the active force inherent in me produces pain in those circumstances.

What are Leibniz's argument against Occasionalism? Leibniz did not think Occasionalism was unintelligible, but he thought it had many problems:

(1) Occasionalism explains phenomena in terms of miracles.

(2) Even if Occasionalism does not posit miracles, a pre-established harmony is more worthy of God.

(3) Occasionalism rules out intrasubstantial causation.

(4) Occasionalism leads to monism.

The objection on which Leibniz put most weight was (1). Why did he think Occasionalism explains phenomena in terms of miracles? Because Occasionalism explains them in terms of God intervening in the world and acting directly upon the mind and the body at any time the mind and the body change. The defender of Occasionalism will reply that when God acts upon the mind on occasion of the body and vice versa he is not performing miracles. For God acts according to general laws. That is, it is not that at time t_1 and under circumstances C God makes a body have property F on occasion of mental state G and at time t_2 and under the same circumstances God makes a body have property H on occasion of mental state G. Unless performing a miracle, God always makes, under circumstances C, a body have property F on occasion of mental state G. So, according to Occasionalists, Occasionalism does not make the world full of miracles because although God is permanently intervening in the world, he intervenes in a regular way.

Leibniz's response to this is to distinguish two senses of the word 'miracle': the popular sense and the strict and philosophical sense. According to the popular sense a miracle is something rare and infrequent. But according to Leibniz this understanding of miracles is wrong. It makes, for instance, every unique or merely rare event a miracle. Leibniz points out that, on this understanding of the word, the existence of a monster should count as a miracle (4th letter to Clarke, paragraph 43). For Leibniz a miracle, in the strict sense, is something that exceeds the powers and forces of any finite or created being and so it is something that cannot be explained in terms of the powers and forces of created entities. And so Occasionalism leads to a perpetual miracle. For on Occasionalism created substances have no efficient or productive powers; they are incapable of causing anything. Which is why Occasionalists postulate permanent divine intervention to account for changes. So, on Leibniz's understanding of miracles, Occasionalism requires a perpetual miracle.

But why is this an objection? Why is it bad to explain phenomena in terms of God and miracles? After all, Leibniz also believed that God exists and he did not deny God's *power* to intervene in the world and do what Malebranche thought God actually

did. The answer is that Leibniz had a clear view about what sound philosophical methodology was. He thought that we must try to explain things by reference to the notion of the subject we are dealing with:

In philosophy we must try to show the way in which things are carried out by the divine wisdom by explaining them in accordance with the notion of the subject we are dealing with (*New System*, §13)

Of course, if we cannot explain things by reference to the notion of the subject we are dealing with, then we should find a different explanation, for instance one in terms of God's performing a miracle. But Leibniz's point is that *other things being equal* one should prefer an explanation that proceeds in terms of the powers and forces included in the notion of the subject. Occasionalism explains the states of a substance by appealing to God's intervention. Pre-Established Harmony, on the contrary, explains them by reference to the powers and forces included in the notion of the substance in question.

Both Occasionalism and the Pre-Established Harmony rule out intersubstantial causation. But the Pre-Established Harmony admits intrasubstantial causation and so it can do without God and miracles. But when Leibniz presses objection (3) he is not normally thinking along these lines. What he has in mind, in general, is that by denying intrasubstantial causation Occasionalism makes God responsible for our actions and so takes away our responsibility and makes God responsible for the evil in the world (*On Nature itself*, §10). But this is not a good objection, for if accepted then Leibniz should accept that on his theory one is not responsible for what happens to other things as a result of one's actions. Perhaps God is not responsible for the suffering that an evil person inflicts, but if Leibniz's third objection to Occasionalism goes through, then on Leibniz's view the evil person is not responsible either; instead the person responsible would be the recipient of evil.

Another problem Leibniz points out is that Occasionalism contradicts our consciousness of intrasubstantial causation (*On Nature Itself* §10), but this is not a good point either, for the Pre-Established Harmony also contradicts our consciousness of our influence on the body.

Objection (2) is a minor point. Leibniz says that even if Occasionalism does not lead to miracles, a pre-established harmony is more worthy of God. For it is better to

make a machine that keeps working by itself than having to intervene again and again to fix it. But this is more rethorical than philosophical.

Objection (4) is better, but it assumes Leibniz's own ideas about substances. For Leibniz thought that everything that is a substance acts, and so on Occasionalism there is only one substance, namely God. This makes Occasionalism close to Spinoza's system (*On Nature itself*, §15). Why is a Monism in which the only substance is God bad? One reason why such a position is bad might be that since there are modifications those will be God's and so this position makes God modified, i.e. limited (I owe this point to Paul Lodge. I know of no passages where Leibniz says explicitly that this is the problem).

So perhaps the best objection here is (1), if we understand it as based on methodological considerations. But the case against the way of influence was rather weak, although we saw as well that it might have been considered stronger in the context of 17th Century assumptions about causation. And we saw his case for component (a) of the Pre-Established Harmony on the basis of the doctrine of the complete concept of a substance is also weak. Thus, it seems that, overall, Leibniz's case for his doctrine of the Pre-Established Harmony is weak.

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