

THE LEIBNIZ CLARKE DEBATES

Background:

His health

The Dispute with Newton

Newton's veiled and Cotes' open attacks on the plenists

The first letter to his friend Wilhelmine Caroline , Princess of Wales:

He complains about the weakening of religion and the spread of materialism in England.

He claims that Locke doubted the immateriality and immortality of the soul.

He accuses Newton of low and unworthy ideas about the power and wisdom of God. Specifically,

Newton claims that space is an organ of God.

Newton claims that God has to wind up the universe.

Clarke's First Response:

He admits that some in England have become materialists, but suggests that this is best fought against by the mathematical philosophy.

He denies that Newton said that space is an organ of God. Rather, God, being everywhere, perceives them by his immediate presence.

By means of his constant vigilant action he manifests his presence in the world.

Leibniz's God, in contrast, is merely a nominal king, and such a God hardly deserves the title of king or governor.

Leibniz likely saw this last criticism as especially offensive. Remember how we approached his philosophy. We started with some points about his logic and then "proved" the existence of God. Only after that were we in a position to begin examining his physics.

Leibniz's Second Letter:

Leibniz protests that the “mathematical” principles are not opposed to, but rather, identical with materialism. The problem is not a mathematical one but a metaphysical one. It should be based on the Principle of Sufficient Reason.

He denies ever having suggested that the created world didn't need God's continuous concurrence, or that he ever excluded God from the world. “God continually preserves everything and nothing can subsist without him. His kingdom is therefore not a nominal one.” He had only claimed that the world is a clock that does not need mending.

It's easy to see why Leibniz would feel this way. His physics is grounded in his metaphysics, which absolutely requires God.

He objects to the existence of a void on the grounds that “... the more matter there is the more God has occasion to exercise his wisdom and power.”

He points out that in the *Opticks* Newton had said that space is the sensorium of God, “But the word ‘sensorium’ has always signified the organ of sensation.”

Clarke's Second Response:

To the objection that Newton's mathematical conception of the world reduces to materialism, Clarke responds that this is not true precisely because God is needed to keep it going.

And in response to the charge that the explanation of things should ultimately depend on the Principle of Sufficient Reason, Clarke suggests that the reason God created the world the way he did is because he felt like it. To suggest otherwise, he claimed, and to forbid God from creating a limited quantity of matter if he so chose, would be to provide God with no liberty of choice. Moreover, "...by the same argument one could prove that the number of men or of any kind of creatures whatsoever should be infinite...."

This must have infuriated Leibniz. It is, of course, a complete bastardization of his beloved principle. But also the suggestion that Leibniz's God lacks freedom must have upset him, and required a rebuttal.

There is a theological problem about whether or not the claim that God can't make a contradiction true limits his power. (It is similar to the issue of whether or not God could do evil if he so chose, and whether or not his being unable to do evil limits his power.) The usual answer to this is that it does not. (God can't do things that are impossible to do.) But PSR seems different from these cases because it doesn't seem contradictory to suppose that God might not have chosen PSR.

It is clear that the two have radically different views of God's freedom. For Clarke, God's freedom resides in his ability to do what he feels like doing, while for Leibniz, it resides in his doing what is necessary.

In response to the charge that Newton makes the world an organ of God's sensation, Clarke responds that "The Word Sensory does not signify the Organ, but the Place of Sensation. The Eye, the Ear, etc. are Organs, but not Sensoria."

Moreover, forbidding God from acting in the world by miraculous means amounts to excluding him from being Governor of the universe.

Leibniz's Third Letter:

Leibniz now initiates an attack on Newton's concept of space. If space is absolute, as Newton suggests, it would consist in parts, but parts are not things that can belong to God. Moreover, he could have spun things around in such a way that east became west and vice versa. In this case, however, he would not have had any reasoning for placing them where he placed them.

In contrast Leibniz points out that his own conception of space and time is that they are merely relations between objects.

“But if space is nothing else but this order or relation, and is nothing at all without bodies but the possibility of placing them, then those two states, the one such as it is now, the other supposed to be the quite contrary way, would not at all differ from one another. Their difference therefore is only to be found in our chimerical supposition of the reality of space in itself.”

In response to the criticism that if his principle of sufficient reason were true God would have created an infinity of men, Leibniz points out that this would entail the exclusion of other things. (Variety, remember, is one of the criteria God employed.)

In claiming that the soul is diffuse over the entire body Newton makes it divisible, which it isn't.

Moreover, Newton's concept of gravitational force is unintelligible.

The problem here is that Newton has to explain everything in the material world in terms of the size, shape, and position of atoms. But how, then, can objects have a gravitational effect on one another, especially given that there is empty space between them? In short, Newton can't explain—and never attempted to explain—gravity. In contrast, Leibniz's monads have a living force which gets reflected in the material world.

Clarke's Third Response:

Contrary to Leibniz, for Newton space is not a being but an attribute. It is infinite but absolutely indivisible.

If space were merely relative, as Leibniz suggested, then a mere displacement of the system of bodies from one place to another would be no change at all and so, the two places would be the same place. Moreover, on Leibniz view, "... if God should move the whole world in a straight line, then, whatever the speed of this motion, the world would remain in the same place, and nothing would happen if that motion were suddenly stopped."

The first part of this last objection is easy for Leibniz to respond to, but the quoted part is more difficult. On Newton's view, acceleration is observable. But it is hard to see how Leibniz could agree with this.

Finally, it is absurd to deprive God of an arbitrary choice between two identical cases.

Leibniz's Fourth Letter:

In response to the suggestion that God could arbitrarily choose between two identical cases, Leibniz, appealing to the Identity of Indiscernibles, claims that it is impossible for two such cases to exist.

Space is a function of bodies. Where there are no bodies there is no space.

If space is an attribute, it must be an attribute of some substance.

“If space is an absolute reality, far from being a property or an accident opposed to substance, it will have a greater reality than substances themselves. God cannot destroy it, nor even change it in any respect. It will be not only immense in the whole but also immutable and eternal in every part. There will be an infinite number of eternal things besides God.”

Note: The Newtonians deny that space is something “besides” God.

In reply to Clarke's objection to Leibniz's concept of space he responds that:

“If space and time were anything absolute, that is, if they were any thing else, besides certain orders of things; then indeed my assertion would be a contradiction. But since it is not so, the hypothesis [that space and time are anything absolute] is contradictory, that it is an impossible fiction.” While, on his view, “... to imagine God moving the world in a straight line is to compel him to do something wholly meaningless.”

He also complains about the unintelligibility of Newton's notion that bodies can attract one another without any intermediate between them.

“It is also a supernatural thing that bodies should attract one another at a distance without any intermediate means, and that a body should move around without receding in the tangent, though nothing hinders it from so receding. For these effects cannot be explained by the nature of things.”

Clarke's Fourth Reply:

The Principle of Sufficient Reason, as expounded by Leibniz, leads to fatalism.

“This notion leads to universal necessity and fate, by supposing that motives have the same relation to the will of an intelligent agent, as weights have to a balance....”

Moreover, if Leibniz were right about the plurality of identical objects, no creation would ever have been possible since all particles of matter have identical natures.

Furthermore, Leibniz's concept of void space is based on a misunderstanding of its nature.

“Space void of body, is a property of an incorporeal substance. Space is not bounded by bodies, but exists equally within and without bodies. Space is not enclosed between bodies; but bodies existing in unbounded space are, themselves only, terminated by their own dimensions.”

And with respect to the charge that Newton's concept of attraction is unintelligible, he answers:

“That one body should attract another without any intermediate means, is indeed not a miracle, but a contradiction: For it is supposing something to act where it is not. But the means by which two bodies attract each other, may be invisible and intangible, and of a different nature from mechanism; and yet, acting regularly and constantly, may well be called natural; being much less wonderful than animal-motion, which yet is never called a miracle.”

Leibniz's Fifth Paper:

“I objected, that an attraction, properly so called, or in the scholastic sense, would be an operation at a distance, without any means intervening. The author answers here, that an attraction without any means intervening would be indeed a contradiction. Very well! But then what does he mean, when he will have the sun to attract the globe of the earth through an empty space? It is God himself that performs it? But this would be a miracle, if ever there was any. This would surely exceed the powers of creatures.... That means of communication (says he) is invisible, intangible, not mechanical. He might as well have Added, inexplicable, unintelligible, precarious, groundless, and unexampled.”

His response to the charge that his views lead to universal necessity and fatalism is lengthy. Among other things, he claims that,

”The author objects, that this notion leads to necessity and fatalism. But he says so without proving it and without taking notice of the explanations I have formerly given in order to remove the difficulties that may be raised upon that head.... We must ... distinguish between a necessity which takes place because the opposite implies a contradiction (which necessity is called *logical, metaphysical, or mathematical*); and a necessity which is moral, whereby a wise being chooses the best, and every mind follows the strongest inclination.... As for moral necessity, this also does not derogate from liberty. For when a wise being, and especially God, who has supreme wisdom, chooses what is best, he is not the less free upon that account: on the contrary, it is the most perfect liberty, not to be hindered from acting in the best manner.”

Clarke's Fifth Response:

“It is affirmed, that motion necessarily implies a relative change of situation in one body, with regard to other bodies; and yet no way is shown to avoid this absurd consequence, that then the motibility of one body depends on the existence of other bodies; and that any single body existing alone, would be incapable of motion; or that the parts of a circulating body (suppose the sun) would lose the vis centrifuga arising from their circular motion, if all the extrinsic matter around them was annihilated, it is affirmed that the infinity of matter is an effect of the will of God.”

This rests on a mental hypothesis that Newton proposed. Suppose the universe contained nothing but a bucket of water, hanging by a rope. When the bucket is wound up and then released the water will climb up the edge of the bucket. But if there is no absolute space this phenomenon appears to be inexplicable. Unfortunately, Leibniz died before he was able to answer the charge.

A Brief Comment by a Recent Author on the Absolute/Relative Controversy:

THE position of modern physics is that absolute space and time are meaningless concepts. This is based on the wholehearted acceptance by the physics community of an empirical, operationalist approach. However, the philosophy community is not as absolutely certain as are the physicists, and they feel that there is still ample room for speculative thought on the ultimate nature of space and time. This difference in viewpoint reflects a general intellectual situation in which each discipline largely goes its own way independently of other disciplines. Awareness of this problem has resulted in attempts at interdisciplinary approaches and, in particular, in physics has led to heightened interest in the philosophy and history of physics.