(Prompt 1)

Leibniz defines the PSR as the claim that there must be a reason why everything must be so rather than otherwise. He thinks that this principle can be used to prove the existence of God, and forms the basis for many of his metaphysical claims. In contrast to Clarke, he believes that even God is in the scope of the PSR— God cannot do something without a sufficient reason

Du Châtelet agrees with Leibniz's conception of the PSR and affirms its validity. She states that if we tried to "deny this great principle", it would result in a "strange contradiction". (Du Châtelet, 129). Du Châtelet distinguishes between two kinds of truths: *necessary truths*, and *contingent truths*. *Necessary truths* are those that follow from the principle of contradiction—it would be a contradiction to deny these truths. She further says that the principle of contradiction is sufficient for all necessary truths (Du Châtelet, 128). *Contingent truths*, on the other hand, follow from the PSR and are not logically necessary.

In section IV of the Enquiry, Hume also distinguishes between necessary truths, which he calls Relations of Ideas, and contingent truths, which he calls Matters of Fact. He claims that all reasoning concerning Matters of Facts, are founded on the idea of cause and effect. For example, if Person A asked Person B a question such as "Why is the book on the table?", person B would point to another fact, such as "The librarian put it there" in response. In other words, we naturally look for a cause to explain or reason about Matters of Fact. Hume thinks that other philosophers have made the further claim or assumption that there is a necessary connection between the cause and the effect in Matters of Fact. However, Hume takes issue with this view of causation. He thinks that we do not have an idea of a necessary connection. Here is why:

In Chapter II of the Enquiry, Hume argues that it is impossible for ideas to arise independent of *impressions* we have from the world around us. He posits that all our ideas are copies of our *impressions* or a combination of *impressions* (Hume, 11). He concludes that any philosophical term, like *necessary connection*, does not have empiricist credentials if it is impossible to assign an *impression* that it is derived from. In other words, we cannot have an *idea* of *necessary connection* if we do not have an *impression* from which it is derived. Hume argues that it is not possible for us to have an *impression* that leads to the idea of *necessary connection* in the following way:

Suppose we could have an *impression* of the *necessary connection* between events A and B. Hume argues that if this were true, we would be able to predict the consequence of A (i.e. event B) when we perceive event A, even if it was the first time we've ever perceived event A. In other words, we would be able to, without prior experience, deduce B just by perceiving A. Hume thinks that this is not possible. He concludes that there is no *impression* that could yield the *idea* of *necessary connection*. By his previous argument, this suggests that we cannot have an *idea* of *necessary connection*. In his view, words like *necessary connection* are "absolutely without meaning in philosophical reasoning" (Hume, 49).

Instead, Hume claims that we can have the idea of *perfect correlations*. For example, we can have the following idea: whenever event A has occurred, B has also occurred. From this, Hume would say that we can predict or expect that B will occur whenever A will occur in the future, but it would not be a contradiction for B not to occur. In other words, it is not *necessary* for B to occur when A does. In accordance with this experience of correlations, Hume redefines causation to be predicated on *perfect correlation* rather than *necessary connection*. He defines causation to be that of *type-level correlations*: whenever events similar (i.e. have the same type) to A occur, events similar to B occur.

The statement of the PSR, as Leibniz and Du Châtelet understand it, does not directly make a claim on the nature of causation. In particular, it does not postulate a *necessary connection* between the event and its cause, nor does it deny it. However, Leibniz and Du Châtelet use the PSR in many arguments, and the assumptions implicit in those arguments reveal assumptions about causation tied to their understanding of the PSR.

Consider Du Châtelet's proof of God's existence. She argues in the following way:

- 1. Something exists, since I exist. Let A be a contingent being that exists.
- 2. Everything that exists must have a cause (from PSR). Thus, A has a cause. Call the cause A'
- 3. A' also has a cause (say, A'') from the same principle.
- 4. If we continue like this, we either arrive at an infinite chain of beings {A} where the cause of each being is external to it, or posit the existence of a being that caused its own existence-- a being that *necessarily* exists.
- 5. If there is a being that caused its own existence, that being is God.
- 6. If there is an infinite chain of beings, then each being in the chain depends on another, but the chain as a whole lacks a grounding cause or ultimate explanation. This violates the PSR, which suggests the chain as a whole must have a cause.
- 7. Thus, following the fork in 4, we conclude that 5 is true: God exists.

In this argument, particularly steps 4 and 5, she talks about a being that causes itself and calls this being God. Suppose that her notion of causation corresponded with Hume's redefinition, where causation is conceived of as *perfect correlation*. Then this would mean that 'God caused its own existence' would be interpreted as 'God is perfectly correlated with itself'. Well, this is true. In fact, every being is perfectly correlated with itself and so we could say that every being caused its own existence. This is not what Du Châtelet intended because she makes a distinction between contingent beings, whose cause is external, and God, which is a necessary being.

More generally, whenever Leibniz and Du Châtelet employ the PSR in arguments where one being causes another being, their view of causation appears stronger than that of *perfect correlation*. Consider Leibniz's argument for why absolute space cannot exist:

1) Suppose space is uniform: one point in space does not differ from another point in space

- 2) There could be no reason why God would place the first body in one place in uniform space rather than another.
- 3) This violates the PSR since God cannot act without reason.

Consider what the *cause* of the first body is. In (2), Leibniz assumes that God is the *cause* of the body existing. This would appear confusing if what Leibniz meant by *cause* was nothing but *perfect correlation*. Under this view, it would be *possible* (i.e. not a contradiction) for God not to create/place the first body, for example, even under Leibniz's conception of space.

However, in response to Clarke's claim that God's reason for choosing one point in space to another might be "mere will", he says that it would be "absolutely chimerical and contrary to the wisdom of God" to operate without reason (Leibniz, 16). Similarly, he would likely argue that it would be contrary to the wisdom of God for him not to cause the first body. While he doesn't explicitly say that it would be a *contradiction* for that to happen, it does seem to imply a view of *causation* that's stronger than *correlation*.

In view of these arguments and the assumptions they appear to make about *causation*, it follows that Hume's redefinition would undermine the ways Leibniz and Du Châtelet use the PSR.

There is a further tension that arises with Hume's redefinition. According to it, it would be reasonable to say that an event can cause itself, since an event is always *perfectly correlated* with itself. If Leibniz and Du Châtelet interpret *sufficient reason* as a *cause* (i.e. 'A is a sufficient reason for B' is equivalent to 'A caused B'), as they often do in their arguments as we've seen, then it is trivial that every event has a *cause* (because every event *causes* itself) under Hume's redefinition. However, it is clear that Leibniz and Du Chatelet view the PSR as more than that.

On the other hand, the arguments we've seen never claim that it would be a *contradiction* if the causal relation between A and B broke down. That is, they don't explicitly postulate a *necessary connection* between A and B. It appears as though their notion of *causation* does not fall neatly into the two notions of *causation* that Hume addresses: *causation* as *necessity* and *causation* as *correlation*. The PSR requires more than the empirical sufficiency that Hume's definition seems to suggest, but doesn't correspond to the *necessity* in the *Relations of Ideas*. In other words, they employ a notion of *causation* that is stronger than *correlation* but does not fall into the realm of *necessity* and *contradiction*.

Another way to understand why the implicit notion of causation derived from the PSR is not grounded in *necessity* or *correlation* is to suggest that the PSR uses a different conceptual framework to formulate its claims. The "sufficient reason" they reference seems to correspond to the logical coherence and explanatory power of the world as a whole, rather than events preceding other events. In this view, causation is not merely about what happens in time or what *necessarily* happens, but about why it makes sense for an event to take place in light of the overall structure of the universe.

Stavan Jain

References

- 1. Hume, David 1641. *Meditations on First Philosophy*. Translated by John Cottingham. Cambridge University Press
- 2. Du Châtelet, Émilie 1740. *Foundations of Physics*. Translated by Katherine Brading et al. https://www.kbrading.org/translations
- 3. Leibniz, Gottfried Wilhelm, and Samuel Clarke. *Leibniz and Clarke: Correspondence*. Edited and with an introduction by Roger Ariew, Hackett Publishing Company, 2000.