## Leibniz and Kant on Metaphysics & Truth

Leibniz distinguished between truths of reason and truths of fact. One cannot deny a truth of reason without violating the Principle of Contradiction: one cannot deny that the equilateral triangle is a triangle without contradicting oneself. Truths of fact, on the other hand, can be denied without contradiction: we know that John Smith exists **a posteriori** (from experience). At the same time, we know that there must be a sufficient reason for John Smith to exist.

Using Kant's terminology, it might seem that we can merely associate Leibniz's 'truths of reason' with the 'analytic judgments' of Kant, but that's not quite right. What Leibniz calls the 'truths of reason' can be shown to be analytic, since we can show that the predicate is contained in the subject, whereas in the case of truths of fact, we cannot perform such a demonstration. Among the truths of reason are primitive truths which are identities: A is A; the equilateral triangle is a triangle; all bachelors are unmarried. But in order to move from mathematics to physics, Leibniz claimed that we need the Principle of Sufficient Reason: nothing happens without a reason why it should be so rather than otherwise.

Even truths of fact are regarded as analytic by Leibniz: for every truth, the notion of the predicate is always contained, explicitly or implicitly, in the notion of its subject. Caesar's resolve to cross the Rubicon was necessary -- this predicate, 'crossing the Rubicon' is contained in the notion of the subject, Caesar. However, humans, having finite intelligences, cannot know this in advance, for that requires knowing the whole system of infinite complexity of which Caesar plays a part. Individuality, it turns out, includes infinity, and only he who is capable of comprehending the infinite can know the principle of individuation of this particular thing. Only God can carry out the infinite analysis required to know the reason for the square root of 2. Thus, only God can possess that complete and perfect conceptualization behind the individuality of Caesar that would be necessary to know **a priori** all that will ever be predicated of him.

However, in our moving from the realm of logical or mathematical possibility to the realm of physical or empirical possibility, there are some restrictions. One is that not all logically possible things are compossible. Not all possible species in nature are compossible in the universe; there are species which never have existed and never will exist because they are not compatible with this series of creatures that God has chosen.

From the PSR, Leibniz tries to deduce the conclusion that there cannot be two indiscernible substances. Each substance must differ internally from every other substance. Given the total system of substances, God could have no sufficient reason for placing two indiscernible substances in two different positions in space and time. If two substances are indistinguishable from each other, they must be the same substance. For Leibniz, it is possible to conceive two indiscernible substances but it is contrary to PSR to suppose that two such substances actually exist.

Accordingly, we can summarize Leibniz's metaphysical doctrines in the following way:

- 1) Truth is truth in the eyes of God (notice a commitment to <u>theocentrism</u> in Leibniz; Kant by contrast is <u>anthropocentric</u> in his theory of knowledge).
- 2) Truth in the eyes of God is purely a matter of conceptual relations (definitions, identities, concepts, propositions, and their entailments).
- All truth is analytic truth. The Principle of Contradiction is the foundation of conceptual truth; and concepts alone are used to distinguish between varied parts of reality. The idea of the predicate is already contained in the idea of the subject.

- 4) All substances have complete concepts, although given the finitude and limitations of human knowledge, only God would know the complete concepts of each individual substance. [Also, there is a complete concept of this world, or any other possible world, but only God has such an understanding, since only he knows that maximally consistent set of concepts that constitute such worlds.]
- 5) If truth is a matter of conceptual relations (Pr. 2), and all substances have complete concepts (Pr. 4), then the Principle of the Identity of Indiscernibles must be true.

6) Thus, the Principle of the Identity of Indiscernibles (if two substances are indiscernible from one another, then they are the same substance) is true. In logical form, the Principle (II) is stated thus:

## (F) (x) (y) ( (Fx $\leftrightarrow$ Fy) $\rightarrow$ (x = y) )

The modern rationalists, Descartes, Spinoza, and Leibniz, all claim to have a nonempirical, rational access to the truth about the way the world is. As we can see in the tenets of Leibniz outlined above, there is a strong tendency to privilege reason over the alleged knowledge derived from the senses. Although God knows things completely and perfectly, humans always have incomplete and imperfect knowledge. A corollary of this is the view that our conceptual knowledge is always confused or distorted by the sensible forms in which we often receive knowledge. Accordingly, it is no surprise to notice that rationalists tend to regard mathematics as the model for knowledge in general.

Kant was educated in the Leibniz-Wolffian tradition of dogmatic rationalism (taught at U. of Königsberg). Kant holds that Leibniz would be entirely right, if his version of metaphysical knowledge were true, that objects or reality are completely determined by concepts. However, Kant disagrees with this rationalist assumption; for him, concepts and intuitions are irreducible to one another; consequently, both are needed in order for us to have knowledge. If Hume awoke Kant from his dogmatic slumbers by making him focus on the problem of causality, then geography, we might say, awoke Kant from his empiricist slumbers in focusing on the problem of spatial orientation. This earlier awakening occurred in 1768 in Kant's essay on distinguishing regions of space. Here is Kant's Argument from Incongruous Counterparts:

- Modern rationalists have assumed that things-in-themselves (Dingen an sich = the nature of things) are objects or events that can be completely <u>determined</u> (provided with general descriptions under which objects can be thought) by concepts alone, just as a pure understanding, such as God, might conceive them.
- 2) A standard formula for expressing such rationalist confidence in determination by concepts is the Principle of the Identity of Indiscernibles.
- 3) However, the phenomenon of incongruent counterparts implies that the Principle of the Identity of Indiscernibles is false.
  - a. Consider two hands, a right and a left. If II is correct, then a complete description of one hand must also hold of the other hand in every respect.
  - b. However, though the shape and proportions and positions of the parts of one hand is perfectly equal and similar to the other, yet one hand cannot be superimposed on the other.

- c. Thus, the one hand is an incongruent counterpart of the other, and so despite the similarity in almost every respect, their different spatial location distinguishes between the two.
- d. Consequently, in the constitution of bodies, there exist <u>real</u> differences (not merely logical or conceptual differences, as the dogmatists claimed) that make possible the relations between bodily things.
- 4) Thus, concepts alone cannot be used to distinguish between real phenomena such as incongruent counterparts.
- 5) Accordingly, intuition and concept are necessary but irreducible components of human cognition; the conjunction of intuition and concept are needed for humans to obtain genuine knowledge (**scientia**).

6) So, instead of our trying to determine space on the basis of spatial positions of parts of matter in relation to one another, those spatial positions rely on a prior determination of space. However, this prior spatial determination is not an object or substance of outer sensation (as Newton thought), but is a 'fundamental concept' [**Grundbegriff**] or pure intuition which first makes possible all such sensations.

7) Thus, contrary to both Leibnizian and Newtonian transcendental realist theories, objects in space are not things-in-themselves (*transcendental realism*: time and space, and the objects in them, are regarded as existing by themselves; outer appearances are taken for things-in-themselves, existing independently of human sensibility).

8) Hence, outer perception cannot be construed as merely obscure, distorted, or confused conceptualization (as Leibniz and Wolff hold).