Immanuel Kant: Combining Empiricism and Rationalism
By Kenneth Shouler, Ph.D.

Kant goes down in the history of thought as a giant. Kant declared himself neither empiricist nor rationalist but achieved a synthesis of the two in his greatest work The Critique of Pure Reason (1781), which marked the end of the period of the Enlightenment and began a new period of philosophy, German idealism. Kant claimed that knowledge was impossible without accepting truths from both rationalist and empiricist schools of thought. He based his ethics on reason and said that moral duties could be deduced by all rational beings.

Kant’s Copernican Revolution

Kant noticed a problem with the empiricist manner of coming to knowledge. If all you come to know and collect are particular sensations or particular impressions, as the empiricists said, how can you arrive at necessary and universal knowledge? Put another way, how can you explain the possibility of scientific knowledge, or, more precisely, the relationship between causes and effect, which enables the mind to grasp scientific truths? Kant had an answer to the question that bridges the gap between two schools of thought — rationalism and empiricism.

Kant's own theory of knowledge reconfigures the way humans know things. Rather than saying that people are all passive perceivers observing the world, Kant believed that humans are active in knowing the world. In agreeing with his empiricist predecessors he says, "There can be no doubt that all our knowledge begins with experience. But though all our knowledge begins with experience, it does not follow that it all arises out of experience."

Instead of an outside-in approach to knowledge of the empiricists, in which objects cause passive perceivers to have "sensations" (Locke) or "impressions" (Hume), Kant said that the categories of space and time — which he called "forms of intuition" — were imposed on experiences by the human mind in order to make sense of it. This Kant proudly called his "Copernican Revolution." Just as Copernicus rejected the idea that the sun revolved around the earth, Kant had solved the problem of how the mind acquires knowledge from experience by arguing that the mind imposes principles upon experience to generate knowledge.

Kant is saying that in order to have any knowledge, the mind needs to have a set of further organizing principles. These principles are found in the faculty of the understanding. Just as a cookie is the product of a certain content (the dough) being processed by a form (the cookie press), so knowledge is the product of content (what you sense) and understanding (space and time as forms of intuition) working together.
In other words, both a priori and a posteriori elements are essential. Without sensation, no object would be perceptible. Without understanding, no object could be conceived. As Kant said in his Critique of Pure Reason, “Thoughts without contents are empty, perceptions without conceptions are blind…. Understanding can perceive nothing, the senses can think nothing. Knowledge arises only from their united action.”

Kant proposed that the mind has “categories of understanding,” which catalogue, codify, and make sense of the world. The mind cannot experience anything that is not filtered through the mind’s eye. Therefore, you can never know the true nature of reality. In this sense, Kant claims that indeed “perception is reality.”

Hume vs. Kant on the Possibilities of Knowledge

Despite Kant’s “Copernican Revolution,” the issue between Kant and empiricism comes down to what kinds of things are known. Kant confessed that the skeptical challenge set forth by Hume “awakened me from my dogmatic slumbers.” One way of capturing the issue between them is to ask what kinds of propositions or judgments can be known.

Hume had said that all knowledge fit one of two categories. True propositions were either matters of fact or relations of ideas. The first kind includes contingent statements, such as “Cadillacs are long-lasting cars.” These statements are truths of observation or fact, but are contingently true only. The second kind includes statements such as “Triangles have three angles.” These are necessarily true, but empty, since they tell you nothing about the world. Statements that fall into neither category — like metaphysical statements — are pure “sophistry and illusion,” Hume claimed.

But Kant thought that Hume’s two categories were inadequate. For one, statements like ”Every effect had a cause” would be unjustified on Hume’s system, since he reduced causality to the “habit” of expectation that the future will always resemble the past. So Kant’s remedy was to introduce a third class of propositions — what he called synthetic a priori propositions.

Kant spoke succinctly about the limits of knowledge. For Kant, the only world that one can know is the world of objects that appear within experience. He refers to the things in the world as they appear to you as phenomena. What one cannot have knowledge of are things-in-themselves, i.e., noumena.

Types of Judgments

Hume and Kant agree on the existence of these first three types of statements.

- **Analytic a priori**: In analytic judgments the subject of the sentence implies the predicate. “Squares have four sides” is an example. The subject “square” implies the predicate “four sides.” We also know this a priori — or before experience — not after experience.

- **Analytic a posteriori**: There are none, since any analytic judgment is known prior to any experience.

- **Synthetic a posteriori**: In a sentence like “Japanese cars are more reliable than French cars” the subject “Japanese cars” does not imply the truth of the predicate “more reliable than French cars.” It is called a synthetic proposition, since it brings together two different ideas. It can be established as true, but true empirically.

However, a disagreement would arise over a fourth category, synthetic a priori.

**Synthetic a priori**
Hume, who was skeptical about any claims that go beyond a person's experience as a perceiver, claims that there are no synthetic statements known a priori. Metaphysical statements about Gods, souls, substance, and causality are included. Kant disagreed, arguing that "Every event has a cause" is one example of a synthetic a priori statement. It is synthetic, since it cannot be established by an analysis of its terms, and it is a priori and necessary because the concept of causality is a pure concept of understanding — like space and time — and is part of the intellectual structure. It is an a priori and necessary condition of the manner in which people experience the world.

What Appears and What Is: Phenomena and Noumena
Contrary to Hume, Kant argued that synthetic a priori judgments are possible in mathematics and physics. But are they possible in metaphysics? Kant was pessimistic about the ability of human reason to acquire theoretical knowledge of any reality lying beyond the boundaries of human experience. According to Kant, one cannot know things-in-themselves. Kant maintained that one could have knowledge of causality in the realm of appearances. In fact, the rationalist and empiricist traditions begun by both René Descartes and John Locke had both assumed there was a dichotomy between ideas about reality and the real world itself. How could one be sure that the ideas in one's mind correspond to the real world? One cannot. Locke adopts the "representative realist" position, since he thinks ideas represent primary qualities.

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Epistemology: Kant and Theories of Truth
By Stephen H. Daniel, PhD

I. The debate between empiricists and rationalists prompts Immanuel Kant (1724-1804) to highlight differences between the kinds of statements, judgments, or propositions that guide the discussion.

For Kant, the distinctions between analytic and synthetic and a priori and a posteriori judgments must be kept separate, because it is possible for some judgments to be synthetic and a priori at the same time. What Kant proposes is this: Surely all a posteriori judgments are synthetic judgments, since any judgment based solely on experience cannot be derived merely by understanding the meaning of the subject. But this does not mean that all synthetic judgments are a posteriori judgments, since in mathematical and geometrical judgments, the predicate is not contained in the subject (e.g., the concept 12 is not contained either in 7, 5, +, =, or even in their combination; nor does the concept "shortest distance between two points" contain the idea of a straight line). Such propositions are universal and necessary (and thus a priori) even though they could not have been known from experience; and they would be synthetic a priori judgments.

If there are such judgments, then how are they possible? Kant's answer: the rationalists are right in saying that we can know about things in the world with certainty; and the empiricists are right in saying that such knowledge cannot be limited merely to truths by definition nor can it be provided by experience. Instead, we know about the world insofar as we experience it according to the unchanging and universally shared structure of mind. All rational beings think the world in terms of space, time, and
categories such as cause and effect, substance, unity, plurality, necessity, possibility, and reality. That is, whenever we think about anything, we have to think about it in certain ways (for example, as having causes, as existing or not existing, as being one thing or many things, as being real or imaginary, as being something that has to exist or doesn't have to exist), not because that is the way the world is, but rather because that is the way that our minds order experience. There can be no knowledge without sensation, but sense data cannot alone provide knowledge either.

We can be said to know things about the world, then, not because we somehow step outside of our minds to compare what we experience with some reality outside of it, but rather because the world we know is always already organized according to a certain fixed (innate) pattern that is the mind. Knowledge is possible because it is about how things appear to us, not about how things are in themselves. Reason provides the structure or form of what we know, the senses provide the content.

Objections to Kant:

- We can never know anything about things we do not experience and organize in terms of the mind's structure—such as God, soul, and other metaphysical topics; and that seems a shame.
- Kant's solution means that we will never know if our ideas about the world are true; or it means that we have to redefine reality as that which we experience rather than that which experience represents. In short, if we are limited to phenomena (things as they appear), either we will never know if our ideas are true or we have to redefine what truth is.
- If Kant is right, then why do cultures seem to differ on the categories of understanding? One possible is that even though the categories seem to vary, such differences are due only to differences in the "surface grammar" of language, the ways in which things are understood as meaningful. When asked why languages are structured in certain ways, some theorists claim that the brain and our neural networks form the "deep grammar" of what things mean.

II. Maybe the search for indubitable foundations (innate ideas, sense data) is itself flawed. Perhaps there is nothing about knowledge that is ultimate, but rather a web of interlocking beliefs. According to Rorty, knowing is not like seeing: justification does not relate a belief to some object, but rather it relates a belief to arguments supporting it. Justification is thus a social, historical phenomenon. The fault of epistemology is that it has tried to eternalize normal discourse (i.e., discourse with agreed-upon criteria for reaching consensus). Abnormal discourse lacks such criteria. Periods of social change are characterized by struggles between normal and abnormal discourse.

III. The second objection above to Kant raises the question: What does it mean to say that a proposition is true? There are three main theories of truth:

   1. **Correspondence theory of truth**: a statement or belief is true if it corresponds to the facts. Truth is thus a property of a statement. The facts exist independently of our knowledge of them. Accurate observations can report actual states of affairs and cannot result in reasonable disagreement. Einstein and other "scientific realists" (proponents of the view that theories are
true if they describe reality) endorse this idea and claim that our task is to find out the truth about nature, even if that means changing the basic presuppositions of our theories.

Problems:

- How can we know whether our perceptions are correct? What justification/reasons do we have for a belief? This changes the notion of truth away from a property of a statement to the reasons we provide for beliefs. But then, how can we know whether our beliefs about the facts are justified? We cannot know the world apart from our knowledge.
- Besides, what about truths that correspond to no particular "facts" (e.g., philosophic principles, scientific theories like evolution, love, justice)?
- And how do we tell whether generalizations are adequate?

2. Coherence theory of truth: Since the only way to know something is by appealing to beliefs, that which is true is that which is consistent with our overall network of beliefs. A claim is true if it meets the requirements of science (simplicity, comprehensiveness, predictive). This position is supported by philosophers of science Karl Popper and Thomas Kuhn, who support this view because, they argue, there is no one truth because there is nothing "really out there."

Problems:

- Beginning assumptions cannot be proved, so what if the whole network is wrong?
- Why can't equally coherent and seemingly acceptable systems be reconciled?

3. Pragmatic theory of truth: A statement is true IFF (if and only if) it would satisfy our expectations were we to act upon it. That is, the consequences of being able to integrate knowledge, predict events, achieve goals determine whether a belief is true. Truth is thus a function of human endeavor, not some existence apart from us. This theory of truth supports a view of science called instrumentalism, which argues that theories are instruments that are useful for calculating and predicting. According the physicist Niels Bohr, this is especially applicable in quantum theory.

Problems:

- If what is effective can change, so can the truth. But truth should be constant.
- Just because something works (for us) doesn't make it true. For example, if we tell a small child that if she goes into the street the boogeyman will get her (in order to prevent her from being hurt), the success of our lie in protecting her does not make what we said true. Besides, the reason something works is that it is true, not the other way around.
IV. Perhaps the problem is with the idea of truth itself. Perhaps we should give up the pursuit of Truth (with a capital T) and begin thinking that truth is really a way we have of speaking of what we agree on and what we find persuasive. In this way we should focus on truths (with a small t).