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David Hume's Epistemology and Immanuel Kant's Rationalist Synthetic Knowledge

The history of physics from ancient times to the modern day, focusing on our understanding of the mind. In the 1700s, British philosopher David Hume argued that all useful knowledge comes from experience, though it may not be true. German philosopher Immanuel Kant claimed that the mind is needed in order to make sense of the continuous stream of information that we perceive.

Last updated on 5th August 2017 by Dr Helen Klus

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1. David Hume and epistemology ↑

British philosopher David Hume agreed with Irish philosopher George Berkeley's claim (Locke-and-Berkeley.html#2) that we do not directly experience any properties of the external world, but this did not lead him to accept idealism, the view that physical objects do not exist. Instead, he remained just as sceptical about the existence of the mind.

In 1748, Hume combined French natural philosopher Rene Descartes' rationalism (Descartes.html#1) with English philosopher John Locke's empiricism (Locke-and-Berkeley.html#1), and argued that we gain knowledge from both impressions, which arise

from external stimulus, and ideas, which are innate.

In *An Enquiry Concerning Human Understanding* Hume argued that innate ideas, like those found in mathematics, do not tell us anything *useful* about the external world. All useful knowledge comes from the qualia we experience (Descartes.html#1-1), but these do not tell us anything that is necessarily *true*.

Hume stated that qualia make little sense to us until our minds have learned to interpret them, and that interpretations occur by custom, instinct, and habit; if we experience two events in succession enough times, then we will come to expect one event after witnessing the other.

Hume applied this reasoning to science and argued that we only assume the future will resemble the past, and that the laws of physics will not suddenly change, because this is how the world has always appeared to us^[1a].

British mathematician Bertrand Russell (Material-mind-vs-Descartes.html#1) elaborated on this idea in *The Problems of Philosophy*, published in 1912:

“ Experience has shown us that, hitherto, the frequent repetition of some uniform succession or coexistence has been a cause of our expecting the same succession or coexistence on the next occasion.

...Domestic animals expect food when they see the person who feeds them. We know that all these rather crude expectations of uniformity are liable to be misleading. The [person] who has fed the chicken every day throughout its life at last wrings its neck instead, showing that more refined views as to the uniformity of nature would have been useful to the chicken.

...The mere fact that something has happened a certain number of times causes animals and [people] to expect that it will happen again. Thus our instincts certainly cause us to believe the sun will rise to-morrow, but we may be in no better a position than the chicken which unexpectedly has its neck wrung^[2].

”

Hume claimed that knowledge of the self is also formed by custom and habit. He could not see any evidence that the mind is made of a non-physical substance, or that it persists through time separately from the body.

Hume described the mind as a 'bundle' of qualia, and did not think there was any evidence of something that takes ownership of these sensations, a self. Although Hume accepted that there are thoughts, he did not accept Descartes' claim that this means there must be a thinker.

In a similar fashion, Hume did not think that there was any evidence of God. Like English philosopher Thomas Hobbes (Descartes.html#1), he did not think that the mind could conceive of such an entity^{[1b][3]}.

2. Immanuel Kant and rationalist synthetic knowledge ↑

German philosopher Immanuel Kant (Stars.html#1) began as a rationalist but was inspired by the work of Hume and, in 1781, he also developed a theory that combined rationalism with empiricism^[4a].

Kant argued that true knowledge can only be acquired by combining rationalist ideas with empirical knowledge. This is because he believed that rationalism becomes flawed when it tries to consider anything beyond our sensory experiences, including the existence of God, souls, and freewill.

Before Kant, both empiricists and rationalists had accepted that rationalism could only explain analytic knowledge. Analytic knowledge derives from statements that are true by definition.

In *Critique of Pure Reason*, Kant stated that 'all bodies are extended' is an example of an analytic statement because being 'extended' in space is part of the definition of being a body. Other examples are 'all daisies are flowers' and 'all triangles have three sides'. This is because being a flower is part of the definition of being a daisy, and having three sides is part of the definition of being a triangle.

These are contrasted with synthetic statements, statements that provide information about the world. Examples of synthetic statements include 'all daises are pretty' and 'all triangles are green'.

It was believed that synthetic knowledge could only be known from experience; however, Kant argued that that this is false. Kant believed that mathematics is a kind of rationalist synthetic knowledge because, despite the fact that $7 + 5 = 12$, for example, there is nothing within the + sign, or the numbers 7 or 5, which give the definition of 12. This means that our knowledge of mathematics comes from an innate knowledge of the external world.

Kant extended this idea to the foundations of physical science and stated that another example of a rationalist synthetic statement is 'the shortest distance between two points is a straight line'. This is because the concept of a straight line is not part of the definition of 'the shortest distance between two points'.

Kant argued that aside from rationalist synthetic knowledge, the only way to gain information is through analytic statements, which are entirely empirical. But because we can only perceive of qualia, Kant accepted Hume's conclusion, that our capacity for thought is too limited to conceive of objects as they really are, and purely empirical knowledge is formed only by custom, instinct, and habit.

Kant claimed that the mind is needed in order to make sense of the continuous stream of qualia that we perceive. He claimed that external objects exist outside of time and space, and that the mind is needed to organise qualia into separate spatial and temporal locations. This means that the concepts of space and time are rationalist in nature (Socrates-Plato-and-Aristotle.html#1). They are not learned from experience. The mind is also needed to join associated qualia into the objects we recognise.

In order to do this, Kant agreed with Descartes when he stated that the mind must necessarily be a unified whole. Kant did not accept mind-body dualism however, because the idea of the soul is also formed by custom, instinct, and habit.

Kant stated that the mind is really just a complex set of abilities, or functions, without a subject: "the permanence of the soul, therefore, as an object of the internal sense, remains undemonstrated, nay, even indemonstrable". We cannot "affirm, from mere conceptions" the souls "permanence beyond life"^[4b].

3. References ↑

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(Locke-and-Berkeley.html) (Materialism.html)



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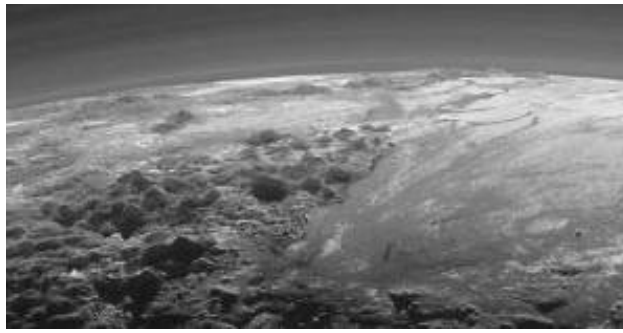
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