

Empiricism

The most obvious candidate for the main source of human knowledge is experience, and it would be very unusual to deny that we gain knowledge from experience. The doctrine of empiricism goes further, and maintains that virtually all knowledge derives from experience, and can therefore be traced back to the original experiences that produced it. The word 'virtually' allows for the possibility that a little knowledge might be built into the human mind, but that is open to discussion. If you know a cat is in front of you because you can see it, that is an easy case for empiricists. The tricky cases are those that seem furthest from experience. How can mere experience explain the whole body of mathematics, the rules and concepts of logic, claims about unobservable objects, truths about the remote past, universal generalisations about nature and abstract ideas, and necessary truths? The two main strategies are reduction, or elimination. That is, we either show that knowledge which seems a very long way from experience can be reduced to it, once we understand the subtle pathways that get there, or we say that this remote and abstract knowledge is either an illusion, or some much simpler phenomenon in disguise. It may be possible to 'paraphrase' abstract knowledge in much more empirical language.

An obvious starting point is to identify the nature of what we call '**experience**', but that turns out to be difficult and controversial. We have five obvious senses which receive external information, but also various senses of bodily awareness, and the private emotions and processes of reasoning are also experiences. We also have memories of experiences, and testimony from other people (some from long ago) of their experiences, and we might even infer the experiences of animals from their behaviour.

Philosophers have very divergent views on how fine-grained we should take experience to be, some building up from minimal atoms of experience, and others inferring the finest ingredients from a holistic view of the pool of experience. At the minimal end, experience may be made up of 'sense-data' (such as tiny patches of colour, or dots and lines), or of a mosaic of 'qualities'. The first view emphasise the world of the mind, and the second emphasises reality. At the holistic end the role of language is taken to be crucial, where the basic units of meaning may be much larger than individual words, such sentences, or large areas of discourse, or even entire languages. If experience is steeped in a conceptual or linguistic scheme, it can only be understood in the broadest terms. The fine-grained response to this is to talk of 'logical atoms' in language or concepts, and focus on the 'compositional' nature of language, where meaning is built up from minimal components.

Empiricism combines a theory about the source of knowledge with a theory about the **concepts** used in knowledge. An objective description of the contents of consciousness distinguishes the vivid experiences of immediate reality from the vaguer and weaker experiences of memories, ideas and imagination. Empiricists propose that concepts of the weaker ones are all composed from concepts or impressions of the vivid ones – that is, that everything we think about or imagine tracks back to the vividness of immediate experience. This empirical view of concepts provides the mechanism needed to show how abstract thought derives from and is reducible to experience. It also implies that some of our concepts (and words) may be empty and misleading, if they do not have roots in experience. Rationalist critics reply that concepts can derive from innate ideas and rational intuition, as well as from experience.

Traditional rationalist philosophers said that much of our knowledge, such as logic or geometry is 'innate' – that is, built into the mind, and known by careful introspection. **Innate ideas** and knowledge are denied by empiricists, because that would undermine their claim that only experience (either directly or indirectly) leads to knowledge. However, if all of our concepts or ideas derive from experience, then in a state where we had not yet had any experiences our minds would be empty. This notion of the mind as a *tabula rasa* (or 'blank slate') is unsatisfactory for many thinkers (even empiricists), because an entirely empty mind could do nothing with the incoming experiences. *How* does the mind formulate concepts from its experiences?

One notable proposal is that the mind contains innate principles of '**association**'. These do not count as knowledge or concepts, but are just inbuilt ways in which experiences form instant links. Examples are feeling a resemblance between two faces, or connecting two events which happened on the same day or in the same room, or two things which seem to be cause and effect. Modern gestalt psychology has offered further principles of automatic connection between experiences. A modern version of associationism is the 'connectionist' approach to artificial intelligence, which builds thoughts and theories merely by connecting basic ingredients together. We might now see the principles of association in evolutionary terms, as reliable ways to pick out important patterns in the world. Critics of empiricism say that associationism doesn't leave much room for truth or meaning. It is also not clear why one link would be a similarity and another link a causation, if they are merely associations, with no further content.

One criticism of empiricism is that it presents the building of knowledge from experience as a very passive process, whereas our lives are entirely consumed with activity. **Pragmatists** start from the assumption of empiricism, but say that our beliefs and knowledge are focused and channelled by practical needs. Where traditional empiricism is interested in the causes of our beliefs (in processes such as association, or logical construction), pragmatism focuses on the effects of belief and knowledge, with the feedback from what is useful driving the development of further beliefs. Critics of pragmatism worry about the place of truth, given that a false belief may occasionally be beneficial.

Opponents of empiricism mainly dislike its narrow and restricted account of knowledge. One modern empirical account of science, for example, asks only that a theory be 'empirically adequate' (matching all available experiences), but many theories might achieve that, and perhaps we should dig deeper. Induction goes beyond what is observed, and explanations draw general inferences, and postulate unobservable features which may give rise to what we experience. Truths about what is possible or necessary go beyond experience, and the basic principles of rational thought are hard to explain by mere sense experiences. Truths about the non-existence of things seem to have no experiential support at all. To explain all of this is the challenge which empiricist philosophers must meet.