REASON AND EXPERIENCE  
(UNIT 1 TOPIC 1)

Introduction

This topic is about our knowledge and understanding of the world. Specifically, it asks how much of our knowledge and understanding is based on the sensations and experiences that we have and how much depends on our own reasoning or what we know in advance of experience.

Mind as a tabula rasa

The seventeenth-century philosopher John Locke thought that the human mind was a 'blank slate' or 'tabula rasa' onto which the outside world imprints sensations. According to Locke, all our knowledge about the world is gained in this way—there is no role for concepts or principles not originally derived from experience. This is a particularly pure form of empiricism. (The term 'empiricism' can be used to refer to any theory that stresses the importance of experience in knowledge, understanding and/or justification—see the section below about terminology for further information.)

The tabula rasa view really has two aspects:

1. A claim about the origin of our ideas or concepts—that they all derive from sense experience.
2. A claim about our knowledge of what exists or occurs—that this can only be justified by reference to sense experience.

We will look at each of these in turn.

Origin of ideas

The eighteenth-century philosopher David Hume gave a particularly clear development of the tabula rasa theory in relation to our ideas. Hume argued that every idea in our minds must originate from a sense-impression that we once had, which it resembles. Hume recognises, of course, that our imagination can mould new ideas from the raw material of experience. But when it does this, the ideas involved must either be combinations of simpler ideas that are copies of things we have experienced (e.g. the idea of a golden mountain) or they must involve augmenting or diminishing such ideas in some way (as when we conceive of the idea of a God, or a perfect being, by augmenting the ideas of various human qualities--knowledge, wisdom, goodness etc.--without limit). His point is that no-one can form ideas that are fundamentally different in character from all the impressions that she has experienced. As evidence for his claim, Hume pointed out that a person blind from birth, who has never had a visual sense-impression, cannot form any sort of visual mental image.

However, Hume does admit one apparent exception to his rule 'No idea without a preceding impression'. He allows that if a person was presented with a graduated series of shades of blue from which one particular shade was missing, he could probably fill the gap 'from his own imagination'. He would then have an idea that did not match any of his prior impressions. But having noted this apparent exception, Hume dismisses it as being of minor importance and not providing sufficient reason to reject the general rule. Arguably he is right to do so, as the process of conjuring up the
missing shade in one's mind could be regarded as a case of augmenting or diminishing qualities that have already been experienced, since it seems to involve nothing more than imagining a shade that is slightly 'more blue' than some shades and slightly 'less blue' than others. In this sense, it hardly seems like an exception at all.

However, when we look at Hume's view more carefully, it becomes harder to defend, although this does depend on exactly what is meant by the word 'idea'. If we mean 'mental image' (and eighteenth-century writers like Hume often used the word in this way), the claim is very plausible, as the example of the blind person shows. The trouble is that Hume also uses the word in something more like its modern usage to mean a concept e.g. the idea of goodness or the idea of wisdom. These are not mental images, but this is a distinction that Hume is generally not very concerned to make. Since they are not mental images, Hume's evidence for his thesis does not apply to them. To have an idea of wisdom is not to have a mental image of wisdom that is a copy of a sense-impression of wisdom. (Would that even make sense?) More recent writers have suggested that to have 'the idea of wisdom' in the relevant sense—i.e. to have a concept of wisdom—is more like having a skill, the skill of being able to distinguish the wise from the unwise. Of course, if this is so, the tabula rasa view might still be true in a broad sense, if the skill was not innate (in-born) but could only be learnt by seeing examples of wise and unwise people and thus acquiring the ability to distinguish between the two. But if so, Hume's suggestion that such an idea is a copy of a prior sense-impression could not be sustained —how could a skill be a copy of a sense impression?

**Strengths and weaknesses of the view that all our ideas derive from sense experience**

**Strengths**

- This view is very plausible in relation to the origins of our mental imagery, as the example of the blind person shows.
- The view is plausible based on our knowledge of how children learn: young children deprived of the necessary stimuli do not develop properly—they do not develop the necessary mental equipment/concepts.

**Weakness**

The contemporary linguistic theorist Noam Chomsky has argued that when children learn their first language they cannot be just relying on the scraps of speech that they hear from their parents and other competent users of the language, for these are too meagre to enable them to work out the grammatical rules that they need to know. (They are also frequently wrong, as their elders will often speak carelessly, without regard for grammatical niceties.) Therefore, Chomsky reasons, children must come into the world already equipped with 'knowledge' of some general linguistic principles (although they cannot of course articulate them: this is 'knowing how' rather than 'knowing that').
Strengths and weaknesses of the view that our knowledge of what exists or occurs can only be justified by reference to sense experience.

**Strengths**

- The view is plausible based on our knowledge of how children learn: young children deprived of the necessary information do not develop properly—they do not develop the necessary understanding of their world.
- The view fits well with modern science, which depends on experimental evidence to confirm its theories.

**Weaknesses**

- It is not easy to account for certain kinds of knowledge on this view, such as:
  
  Knowledge of mathematics. We do not seem to know, for example, that $2 + 3$ equals 5 as a result of observing what happens when we combine groups of two with groups of three. We know what will happen in advance of any observation.
  
  Knowledge of logical truths. For example, our knowledge that nothing can be both red all over and not red all over (i.e. that true contradictions are impossible) cannot be based on experience, as it is true in 'every logically possible world'. (Our experiential knowledge is limited to the actual world.)
  
  Ethical knowledge. Arguably we do not know the difference between right and wrong through observation, but through some kind of 'moral sense' (conscience?).
  
  Theological knowledge (if we have any). Although some theologians and philosophers have claimed that there is empirical evidence for God's existence, others have argued that we know this through reason or some kind of intuitive insight.

**Innate knowledge**

Because of the apparent problems in supposing that all our ideas and knowledge come from sense experience, a number of philosophers (going back at least as far as Plato) have suggested that some of them must be innate i.e. human beings possess them even before they have any sensory contact with the world around them. Descartes believed that innate ideas were planted in the mind by God at its creation. They include ideas of geometrical figures such as triangles and the idea of God himself. There is no way, according to Descartes, that such ideas could have come to us via the senses. It is true that we observe in the sensory world shapes that approximate to triangles, but we do not observe any perfect triangles with absolutely straight lines lacking all thickness etc. (As far as the idea of God is concerned, Descartes thought that the impossibility of our getting this idea from the senses was a good argument for the claim that God is real--how else are we to account for the fact that we have this idea?)

Innate ideas may not be the only source of non-sensory, non-experiential knowledge. It seems that there are some truths that, although unknown to us at birth, we can nevertheless acquire as we reflect on their subject-matter. For example, we can come to realise that the interior angles of a triangle always add up to 180 degrees by means of a mathematical proof, rather than by observation of the world revealed by the senses. (This is known as demonstration.) Of course proofs have to start somewhere. The ancient Greek geometer Euclid gave a list of axioms that he regarded as so
simple and basic that we can simply assent to them without proof (e.g. that all right angles are equal to one another). We know these things by what might be called a priori intuition, the term 'a priori' meaning that they are known in advance, or independently, of experience.

It is when we encounter the idea of a priori intuition that innate ideas may be thought important. Descartes would probably have said that the reason we are able to know that all right angles are equal to one another is that we understand the content of the innate ideas of a right angle and of equality. But there are other possible explanations. A popular one with empiricists is that statements like 'All right angles are equal to one another' are analytic. An analytic statement is one that is true purely in virtue of the meanings of the words within it. A simple example of an analytic statement would be 'All bachelors are unmarried'. The dictionary definition of 'bachelor' makes this true—you don't have to have any experience of the world to know that it holds. Although it is less obviously the case, it can be argued that 'All right angles are equal to one another' is likewise analytic: knowing the meanings of the words is sufficient to know that it must be true. The idea of analytic truth is useful to empiricists, as they can argue with some plausibility that all of mathematics and logic is analytic. And knowledge of analytic truth is not substantive knowledge, that is to say, it is not knowledge of the way the world is. (Knowing that all right angles are equal to one another is not knowing anything substantive about the world on this view, as we can see from the fact that it leaves it open whether there are any right angles in the real world—it only says that if they exist, then they are equal.) As far as ethical and theological knowledge is concerned, the empiricist line might be to simply dismiss them as unfounded or even meaningless. They may say that we cannot have ethical knowledge because ethics is about attitudes and feelings and not about what is or is not the case. And they might say that alleged theological knowledge is either based (plausibly or not) on experience (as when one argues for the existence of God by appeal to the apparent evidence of design in nature), or else, in attempting to establish substantive truths lying beyond experience, it goes beyond what can be considered meaningful. Empiricists who take this sort of line would claim that they are quite able to do without innate ideas. Of course, such an austere view has many detractors.

Another important issue that arises in this area is that of certainty. Can we ever acquire certain knowledge of anything? It seems that at least we can know our own mental states with certainty by carefully observing them (a process known as introspection). Also, we are certain of tautologies (analytic statements) such as 'Ravens are ravens' and 'Bachelors are unmarried', though that is hardly the most riveting knowledge! Does mathematics give us certainty? It seems better equipped than empirical science to do so, at least as far as knowledge of general laws is concerned, since an empirically verified law is always vulnerable to a possible future counter-example, which we can never rule out, whereas a mathematical demonstration establishes a result that is true for all time and in all places. On the other hand, how can we be sure that we have not made an error in the proof? This is not a trivial consideration and it does seem to rule out the possibility of complete certainty being derivable even within mathematics.

**Conceptual schemes**

Some philosophers argue that it is not possible for the human mind to understand sensations unless they are organised in some way and that the mode of organisation must come from the mind itself. In other words, when we think about our experience, it must have already been organised by our minds (at a subconscious level perhaps). The system of organisation is known as a conceptual scheme. Normally, it is assumed that the conceptual scheme is not something we have to learn—we are already equipped with it, before we experience anything. If this is right, the conceptual scheme view is incompatible with pure empiricism.
The eighteenth-century philosopher Immanuel Kant was an advocate of this view. He thought that in order to be known by us at all the world had to be organised according to such fundamental notions as space, time and causality. We simply can't represent reality in any other way, according to Kant. Experiences organised in this way are called 'phenomena'. The things as they are in themselves—what Kant called 'noumena'—lack such organised characteristics. Though we can know that they exist, we cannot have any idea what they are like, because any way of representing them would necessarily involve the very organising categories of space, time, causality and so on that they lack by definition.

There are rough echoes of this view in modern psychology, as scientists have discovered that we depend for our representation of the world not only on the stimuli received by our senses, but also on a great deal of 'filling in' undertaken subconsciously by our brains.

Another example of the idea of conceptual schemes is the notion of linguistic relativism. This is the thesis that our language radically affects our view of the world, so that speakers of different languages literally conceive of the world in different ways. The idea was developed by two anthropological linguists, Edward Sapir and Benjamin Lee Whorf, in the 1920s and 1930s. Sapir and Whorf pointed to cases where different languages 'carve up' the world in different ways e.g. German has one word ('stuhl') corresponding to the English 'chair' and 'stool'. A more sophisticated example was Whorf's claim that in the native American Hopi language, time is always thought of as one continuous flow, with no units such as days or weeks.

The idea of linguistic relativism has been severely criticised by later linguists and philosophers. If it is taken in its strongest form, as saying that a speaker of one language can only think about the world in the way determined by her language and not in any other, then it would seem to imply that speakers of different languages are unable to understand one another through translation, which seems absurd. Of course, it may still be true that our language influences the way in which we think about the world, as opposed to 'imprisoning' it within rigid bounds.

**Terminology**

There are a number of technical terms that crop up in discussion of the issues in this unit. Here are some of the main ones, with definitions:

**Rationalism and empiricism**

*Empiricism* is a rather broad term for any theory of knowledge that emphasises the importance of *experience* in the acquisition of knowledge, ideas or justified belief. The most extreme empiricist view is that all these things derive exclusively from experience—this is the 'tabula rasa' view. A more moderate view concerning knowledge in particular is the theory that all *substantive* knowledge of the world is derived from experience.

*Rationalism* means a theory of knowledge that emphasises non-experiential origins of beliefs and ideas such as reason and innate knowledge. To be a rationalist (in this sense) you have to think that key portions of our substantive knowledge about the world derives from innate ideas and/or the operation of reason.
Note that the term 'rationalist' is often used in a more general sense to mean anyone who elevates reason above irrational tendencies such as superstition. As the reasoned arguments involved may actually be empirical (e.g. scientific studies), this way of using the word has little to do with the above sense of 'rationalism'.

**Propositions**

The term 'proposition' has a special meaning in philosophy. It means roughly what we would call in ordinary language a 'statement'. A proposition could be defined as what is common to all sentences that 'say the same thing'. For example, 'Snow is white' and its French translation 'La neige est blanche' say the same thing in different languages and so they are said to express the same proposition.

**Necessary and contingent truths**

A *necessary* truth is one that could not have been otherwise or, as philosophers often put it, it is a proposition that is true in every possible world. An example would be the proposition that nothing can be both red and not red all over. A *contingent* truth is one that could have been otherwise, something that is true in some, but not all, possible worlds. An example of this would be the proposition that William the Conqueror invaded England in 1066 or that most swans are white. (We can imagine possible worlds in which these things are not true.)

**Analytic and synthetic propositions**

An *analytic* proposition is one that is true purely in virtue of the meanings of the words or concepts in it e.g. 'All bachelors are unmarried'. In contrast with this, a *synthetic* proposition is one that is true, not just in virtue of the meanings of the words in it, but also on 'the way the world is' e.g. 'Some bachelors are lonely'.

**Deductive and inductive arguments**

A *deductive* (or, more fully, a *deductively valid* argument) is one whose conclusion *must* be true if its premises are true. An example would be 'All bachelors are unmarried; all unmarried people are lonely; therefore, all bachelors are lonely'. Of course you might disagree with the premises, but you have to accept that if the premises are true then the conclusion must be too.

An *inductive* argument is one whose conclusion is likely, but not certain, to be true if its premises are true. An example would be 'All the swans we have ever seen are white, therefore all swans are white.' Clearly, if all the swans you have ever observed have been white, it is a fair bet that whiteness is a universal characteristic of swans. The conclusion is highly probable, given the truth of the premises. But it is not certain. And indeed, it happens to be false—Australian swans are black. But note that the fact that we know the conclusion to be false does not alter the reasonableness of the argument. Inductive arguments are essential to our everyday lives and to science. If we are to find out genuinely new information about the world, we must sometimes take risks by going beyond the safety guaranteed by deduction.
A priori and a posteriori knowledge

A priori knowledge is knowledge that we acquire prior to and therefore independently of experience. A posteriori knowledge is knowledge that requires experience.

We can have a priori knowledge of tautologies like 'Foxes are foxes' or statements like 'All bachelors are unmarried', which are true by definition. Nearly everyone accepts that our knowledge of mathematical truths is also a priori.

We have a posteriori knowledge of our internal mental states and our sense experiences. Our factual knowledge about the world, dependent as it is on our sense experiences (at least to some extent), is also a posteriori.

Why so many distinctions?

You might wonder whether it is really necessary to have quite so many distinctions in this area. Don't some of them coincide? In particular you may suspect that:

Analytic = necessary = a priori

and:

Synthetic = contingent = a posteriori

If this is right, we need only distinguish between, say, the analytic and the synthetic and take it for granted that all analytic knowledge is necessary and a priori (and vice versa) and all synthetic knowledge is contingent and a posteriori (and vice-versa).

This was certainly the view adopted by the logical positivists in the first half of the twentieth century. By adopting the position that the only necessary a priori knowledge we have is analytic—and therefore not substantive knowledge—they were able to maintain a theory that was essentially empiricist in character and that fitted in well with their agenda of portraying scientific knowledge as supreme and banishing metaphysics (i.e. 'speculative' philosophy concerned with more than just analysing concepts). But this conflation of the three distinctions doesn't meet with everyone's approval. Kant believed that there was such a thing as the 'synthetic a priori' i.e. propositions that were not true purely in virtue of the meanings of their terms, but could be known a priori. (He thought that mathematical truths such as '2 + 3 = 5' came into this category.)