Knowledge empiricism

The syllabus defines knowledge empiricism as the claim that all synthetic knowledge is a posteriori, while all a priori knowledge is (merely) analytic. This definition involves two technical distinctions that we need to understand.

TWO IMPORTANT DISTINCTIONS

Analytic/synthetic
The contrast between analytic and synthetic propositions is a contrast between types of proposition. A proposition is analytic if it is true or false just in virtue of the meanings of the words. Many analytic truths, such as ‘squares have four sides’, are obvious, but some are not, e.g. ‘In five days time, it will have been a week since the day which was tomorrow three days ago’ (think about it!). A proposition is synthetic if it is not analytic, i.e. it is true or false not just in virtue of the meanings of the words, but in virtue of the way the world is, e.g. ‘ripe tomatoes are red’.

A priori/a posteriori
This contrast is, in the first instance, between types of knowledge. It concerns how we know whether a proposition is true. You have a priori knowledge of a proposition if you do not require (sense) experience to know it to be true. An example is ‘Bachelors are unmarried’. If you understand what the proposition means, then you can see straight away that it must be true. You don’t need to find bachelors and ask them if they are married or not. Propositions that can only be established through experience are a posteriori. An example is ‘Snow is white’.

When applied to propositions, the a priori/a posteriori distinction is about how to check or establish knowledge. It is not a claim about how we come to understand the proposition. To learn what a proposition means, to acquire the concepts or words involved, we may well need sense experience. But that is a different issue from how, once we understand it, we check if it is true.

We can also apply the a priori/a posteriori distinction to concepts. An a posteriori concept is one that is derived from experience. An a priori concept is one that cannot be derived from experience.

EMPIRICISM V. RATIONALISM

On first reflection, it might seem that the two distinctions line up neatly: only an analytic proposition is also known a priori; and all synthetic propositions are known a posteriori. ‘Bachelors are unmarried’ is not only known a priori, but is also analytic. ‘You are reading this handout’ is synthetic and can only be known through sense experience. But is this alignment correct?
All analytic propositions are known a priori. Because they are true (or false) just in virtue of the meanings of the words, we don’t need to check them against sense experience to know whether or not they are true. But are all propositions known a priori analytic? Could there be a priori knowledge of some synthetic propositions? The debate over whether there is a priori knowledge of any synthetic propositions is a debate between empiricism about knowledge and rationalism. (The terms ‘rationalism’ and ‘empiricism’ have been used in different ways at different times, and sometimes quite misleadingly. However, the common definition is the one given in the syllabus.)

Empiricism claims that all knowledge of synthetic propositions is a posteriori, while all a priori knowledge is of analytic propositions. Anything we know that is not true by definition or logic alone, we must learn and test through our senses.

Rationalists deny this, claiming that there is some a priori knowledge of synthetic propositions, either because this knowledge is innate or because we can gain such knowledge using reason rather than sense experience. Many rationalists add that the synthetic a priori knowledge we gain through reason or innately cannot be arrived at in any other way. They may also argue that is superior, for example by being more certain, to the knowledge or beliefs we gain through the senses.

We should refine this a little: empiricists deny, and rationalists assert, that we can gain a priori knowledge of synthetic propositions that are about things other than one’s own mind. Many propositions about my mental states are synthetic, e.g. ‘I feel sad’ or ‘I am thinking about unicorns’. But they don’t require sense experience to be known; in fact, does knowing my own thoughts involve experiencing them at all? We don’t need to worry about this. Rationalists and empiricists alike accept that we just do know that we have certain thoughts and feelings. The argument is about knowledge of things other than our own minds.

Hume, An Enquiry Concerning Human Understanding, §4, Part 1

Hume’s ‘fork’

Hume defends knowledge empiricism, arguing that we can have knowledge of just two sorts of claim: the relations between ideas and matters of fact. He uses two related criteria to make the distinction, though it is easier to grasp what he means by taking them in a different order:

Relations of ideas ‘can be discovered purely by thinking, with no need to attend to anything that actually exists anywhere in the universe.’ (p. 11). Matters of fact, by contrast, are ‘propositions about what exists and what is the case’ (p. 12). Relations of ideas are statements that are ‘either intuitively or demonstratively certain’ (p. 11). Hume gives the example of $3 \times 5 = 30/2$ - a statement about the relations of numbers. Relations of ideas that are demonstratively certain are known by deduction. Matters of fact, by contrast, are not known by deduction, because they are statements that can be denied without contradiction. But any claim that can be shown to be false by deduction implies a contradiction.

The second point needs explanation. A contradiction both asserts and denies something. A true analytic proposition cannot be denied with contradiction. To say
that vixens are not foxes is a contradiction in terms; it is to say that female foxes are not foxes. In a deductive argument, if you assert the premises, but deny the conclusion, then again, you contradict yourself, e.g. ‘$3 \times 5 = 15$ and $30/2 = 15$, but $3 \times 5 \neq 30/2$’. Hume is claiming that we gain knowledge of relations of ideas through merely understanding concepts and through deductive inference from such understanding. To deny any of claims we know this way would involve a contradiction.

(We can also use deduction to infer matters of fact from other matters of fact, e.g. Socrates is a man and all men are mortal, so Socrates is mortal. But ‘Socrates is mortal’ isn’t known by deduction in Hume’s sense, since the premises rely on sense experience.)

We can now connect the two criteria. What we know that is intuitively or demonstratively certain is also what can be discovered purely by thinking - relations of ideas. On the other hand, propositions about what exists we can know only from experience - matters of fact.

On Hume’s description of relations of ideas, the history of philosophy is full of debate about what qualifies. Rationalists, such as Plato and Descartes, argue that a great deal can be known through (rational) intuition and demonstration, including the existence of God. We need to interpret Hume as saying that a priori knowledge (relations of ideas) is analytic (and what can be deduced from analytic truths), while all knowledge of synthetic propositions (matters of fact) is a posteriori.

**Matters of fact**
The foundation of knowledge of matters of fact, Hume argues, is what we experience here and now, or can remember (p. 12). We gain it by using observation and employing induction and reasoning about probability. All knowledge that goes beyond what is present to our senses or memory rests on causal inference. We take our experience to be an effect of whatever fact we infer. If I receive a letter from a friend with a French postmark on it, I’ll believe that my friend is in France - because I infer from the postmark to a place. I do this because I think that where something is posted causes it to have the postmark of that place; and if the letter was posted by my friend, then I believe that he is in France.

And how do I know all this? How do I know what causes what? Not by a priori reasoning or deduction. If you encounter some object that you’ve never experienced before, you cannot work out what effects it will have just by examining it. Just by examining a magnet - having never experienced one before - could you deduce what effect it will have on metal? Just by examining bread, could you work out that it doesn’t nourish tigers (p. 13)? Just by seeing a billiard ball roll towards to another billiard ball, could you conclude that the second one will move away? Even if you imagine that this is what will happen, that’s arbitrary, groundless.

It is only our experience of what causes what that enables us to make causal inferences in particular cases. It is only our experience that enables us to infer
from the existence of some cause to its effect, or from some effect to its cause. I have experienced letters being posted, I have seen different postmarks, I have found that postmarks relate to where you post something, and so on. Reason can impose some order on the particular causal relations we discover through experience, but that’s all (p. 14). Reason can simplify our causal principles, e.g. by identifying different instances (the movements of billiard balls and the vibrations of molecules, say) as examples of the same kind of thing (kinetic energy). But we can’t, for example, discover ‘ultimate’ causes - the causes of why causes have the effects they do - through reasoning.

ARGUMENTS AGAINST KNOWLEDGE EMPIRICISM: THE LIMITS OF EMPIRICAL KNOWLEDGE

Empiricists deny that there is any a priori knowledge of synthetic propositions. The only knowledge we have is either

1. a priori knowledge of analytic propositions and what can be deduced from them; or
2. a posteriori knowledge of synthetic propositions.

Any claim that is neither analytic nor known a posteriori, we do not know. We may object that this rules out many claims that we think we know. For instance,

1. (According to empiricism) All knowledge of synthetic propositions is a posteriori.
2. ‘Physical objects exist’ is a synthetic proposition.
3. But we cannot know, through sense experience, that physical objects exist.
4. Therefore, (according to empiricism) we cannot know that physical objects exist.
5. Therefore, either we cannot know that physical objects exist or empiricism is wrong.
6. But we can know that physical objects exist.
7. Therefore, empiricism is wrong.

If this argument is right, then empiricists face scepticism about the existence of the external world. The key premise here is (3). Why believe this?

Descartes, Meditation I

Descartes provides us with an argument. He notes that he has, in the past, been deceived by his senses - things have looked a way that they are not (p. 1). Things in the distance look small, for instance. Or picking up our previous example, a stick half-submerged in water looks crooked. But, Descartes remarks, such examples from unusual perceptual conditions give us no reason to doubt all perceptions, such as that I am looking at a piece of paper with writing on it. More generally, we might say that perceptual illusions are special cases (and ones we can frequently explain). Otherwise we wouldn’t be able to talk about them as illusions. So they don’t undermine perception generally.

Descartes then doubts whether he knows he is awake (p. 1). I could be dreaming that I’m looking at a piece of paper. I could even have the thought, while I’m
dreaming, that I’m not dreaming! There is no reliable way to tell whether I’m awake or asleep. This argument attacks all sense-perception, even the most mundane and most certain. I cannot know that I see a piece of paper because I cannot know that I am not dreaming of seeing a piece of paper.

We can object that there are reliable ways of distinguishing waking perception from dreaming, such as the far greater coherence of perception. But what Descartes means is that I cannot know, of my perception now, whether I am awake or asleep. The objection assumes that I can rely on my memory of what I have experienced to compare it with my dream. But what if I’m dreaming that I remember this?

Descartes then claims that even if he were dreaming, and may be imagining particular physical objects, dreams are constructed out of basic ideas and these must correspond to something real – ideas of body, extension, shape, quantity, size, motion, and time. He also reaffirms the truths of mathematics.

But he then casts doubt on even these claims by questioning whether God may have deceived him (p. 2). Is it possible that he could go wrong in adding two and three? To the objection that God is good and wouldn’t deceive Descartes like this (a point Descartes returns to later in the *Meditations*), Descartes introduces a further doubt. Suppose that God does not exist. Suppose, worse, that all my experiences are produced in me by an evil demon who wants to deceive me (p. 3). If this were true, I wouldn’t know. So I cannot know that this is not true. Descartes uses the evil demon supposition to make sure that he doesn’t believe anything he can’t know. And it throws into doubt all beliefs about the external world, as they are based on my experience, which I am supposing the evil demon controls. So, (3) above: we cannot know, through sense experience, that physical objects exist. (Descartes doesn’t here repeat that his beliefs about mathematics are also thrown into doubt. When he comes to consider them again, he defends them.)

The argument (1-7) that opens this section can be adapted to generate objections to empiricism in other areas of knowledge. For example, can we know that God exists? If ‘God exists’ is a synthetic claim, according to empiricism, we could only know that God exists from sense experience. But can we? Hume argued that we can’t - the reasoning involves claims that sense experience cannot establish. So we can’t know whether God exists. Another example is morality. Moral claims, such as ‘Murder is wrong’, don’t appear to be analytic. But could we know them through sense experience? Which of our senses pick up on ‘wrongness’, and how?? If empiricists can’t show that moral claims are either analytic or a posteriori, then they will be forced to conclude that there is no moral knowledge either.