

## Defining knowledge<sup>1</sup>

Knowledge is central to life. Without any knowledge at all, we would die, very quickly. At the most basic level, as physical creatures, we want to know where to find food and shelter. We develop technology to help meet these needs and others, so we need to understand how things happen in the world and how we can affect it. As social creatures, we want to live with other people and make arrangements with them. We want to know what people expect, how they feel, or just where to meet on Saturday night. We need to communicate, so we need to know a language. As curious creatures, we simply want to know - how did I come to exist, what am I, how did the universe begin, what is right and wrong, does God exist? In these and countless other ways, knowledge matters to us.

But what is knowledge? Can it be defined, and how could a definition be useful? To approach this issue, we will first distinguish between different types of knowledge.

### TYPES OF KNOWLEDGE

To understand what 'knowledge' is, we first need to think about what kind of knowledge we are trying to understand. Importantly, we can distinguish the kind of knowledge involved in skills and abilities from knowledge about the world. The first kind, 'ability knowledge', is knowing how to do something. For example, I know how to ride a bike. The second kind of knowledge involves being 'in cognitive contact with reality', as Zagzebski puts it in her article 'What is knowledge?'

We can sub-divide this second kind of knowledge into two further kinds. The first is 'acquaintance knowledge'. This is knowledge that involves direct contact with something in experience, e.g. a person, a place, or one's own thoughts and feelings. For example, I know Oxford, I know my wife, and I know what I'm thinking. In acquaintance knowledge, the word 'know' is (normally) followed by a noun (or pronoun) - 'Oxford', 'my wife', 'what I'm thinking'.

The second kind of 'cognitive contact with reality' is 'propositional knowledge'. Propositional knowledge is knowledge about some part of reality, which I may or may not have experienced myself. It is knowledge that some claim - a proposition - is true or false. A proposition is a declarative statement, or more accurately, what is expressed by a declarative statement, e.g. 'eagles are birds'. Propositions can go after the phrases 'I believe that . . .' and 'I know that . ..'. I know that eagles are birds, that  $2 + 2 = 4$ , and that Oxford is a city in England.

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<sup>1</sup> This handout is based on material from Lacewing, M. (2017) *Philosophy for AS and A Level: Epistemology and Moral Philosophy* (London: Routledge), Ch. 2, pp. 30-7

### Propositional knowledge

While ability knowledge or acquaintance knowledge are interesting and important, we will focus on just with propositional knowledge. One reason that philosophers have written more about propositional knowledge is that it is the form of knowledge that we can pass on to each other. To know a person, you need to 'get to know' them by meeting them, talking with them, and so on. You can't know them just from other people's reports. Indeed, it's hard for us to say (to each other) just what we 'know' when we know someone. From now on, our question is 'What is propositional knowledge?'. When I talk of 'knowledge', I mean 'propositional knowledge'.

Propositions can be true or false. But only true propositions describe how reality is. Knowledge is a relation between a subject and some part of reality. So to be in contact with reality, what we know must be a true proposition, not a false one. But what more can we say about knowledge?

### **THE DEFINITION OF KNOWLEDGE**

Is the question 'What is knowledge?' one that we can answer? If so, is the answer be a definition of knowledge? And what kind of definition?

#### The purpose and nature of definition

Zagzebski comments that in everyday life, we have different purposes for enquiring into what something is. For example, we might seek to define knowledge in order to recognise instances of knowledge and learn more about how to get knowledge. This is a practical purpose. We might be satisfied by some rough and ready guidance, such as 'to know something, you can't just believe it - you have to have a reason to believe it'. Alternatively, we may want to understand the concept KNOWLEDGE and how it relates to other, related concepts, such as TRUTH, EVIDENCE and so on. This is a theoretical purpose. The aim in this case is to find a more precise definition that tells us exactly what knowledge is, rather than help us achieve it.

We also offer each other different sorts of definition. In one kind, we concentrate on breaking down the concept defined into other concepts, e.g. 'a bachelor is an unmarried man'. In another kind, we try to say something about the nature of what we are defining, e.g. 'water is H<sub>2</sub>O'. For this second kind of definition - called 'real definition' - to be possible, the thing we are defining has to have a 'nature', something that makes it what it is independently of how we think about it. Water is like this, but many of our concepts don't pick out things with a 'nature'. They refer instead to something that we have created, e.g. CUP HOLDER, or unified with language, e.g. TREE. Does knowledge have a 'nature', something we need to discover about what knowledge really is to reach the correct answer?

#### *Necessary and sufficient conditions*

Ever since Plato, many philosophers have tried to provide definitions of some concept, C, by identifying 'necessary and sufficient conditions' for C. Conditions are related to conditional statements, which take the form 'if x, then y'. Conditional statements relate the truth of two propositions, e.g. 'it is raining' and 'I am getting wet', e.g. 'If it is raining, then I am getting wet'. The conditional

asserts that if the first statement (known as the antecedent) is true, then the second statement (the consequent) is also true. Suppose I am standing outside with no protection against the weather. Then the conditional is true: if it is raining, then I am getting wet. It follows that if the antecedent is true (it is raining), then the consequent is true (I'm getting wet). It also follows that if the consequent is false (I am not getting wet), then the antecedent is false (it is not raining).

How do conditional statements help with definition? Suppose our antecedent is 'Mr A is a bachelor'. What consequent in 'If Mr A is a bachelor, then ...' will make this conditional always true (whoever Mr A is)? Well, 'If Mr A is a bachelor, then Mr A is unmarried' is always true. Being unmarried is a necessary condition on being a bachelor; if Mr A were married, then it is impossible for Mr A to be a bachelor. But is being unmarried enough for being a bachelor? No: Ms B is unmarried, but she isn't a bachelor. So being unmarried isn't a sufficient condition for being a bachelor. There is another necessary condition for being bachelor: being a man. So 'If Mr A is a bachelor, then Mr A is unmarried and Mr A is a man' is always true. Each of these two conditions is necessary. But are these two conditions, taken together, sufficient, or are we missing something else? To test for sufficient conditions, swap the conditional around and see if it remains true: 'If Mr A is unmarried and Mr A is a man, then Mr A is a bachelor'. That's always true, so our two necessary conditions are, taken together, sufficient.

This has an important consequence: whenever the statement 'Mr A is a bachelor' is true, the statement 'Mr A is an unmarried man' is true, and vice-versa. This allows us to provide a definition of 'bachelor' in terms of 'unmarried man'.

We find the same result with water, where we are seeking a real definition not a conceptual definition. 'If some stuff x is water, then x is H<sub>2</sub>O' and 'If some stuff x is H<sub>2</sub>O, then x is water' are both true (if we take 'water' to cover ice and steam as well).

So finding necessary and sufficient conditions is a method for providing a definition. We can apply this to knowledge. Suppose our antecedent is that someone, S, knows some proposition, p. If S knows that p, what follows? What can we say that will always be true of someone who has propositional knowledge? We said above that knowledge involves 'cognitive contact with reality' so that we can only know what is true. So we can say, 'If S knows that p, then p is true'. If I know that eagles are birds, then 'eagles are birds' is true. This can become part of our definition of what knowledge is: knowledge is always knowledge of true propositions.

'p is true' is one condition for knowledge of p. It is a necessary condition - we can't have knowledge of p if p is false. But is that all we need for knowledge? Is it a sufficient condition for knowledge? Certainly not. There are many true propositions that I do not know. For example, there is some true proposition that states how many people there are alive in Europe in 2017. But I don't know that proposition. What other conditions are necessary for knowledge?

If we can find the necessary and sufficient conditions for knowledge, then we can offer a definition of knowledge in these terms.

### *Testing definitions*

Suppose someone claims 'If A is unmarried, then A is a bachelor'. This is a general claim, made without exceptions or qualifications (such as 'except when...', 'unless...', 'on the whole...', 'normally,...'). We could show that such a general claim is false by finding a counterexample, an instance that it rules out. In this case, we can offer the example of a spinster - an unmarried woman.

Not every definition aspires to be a general claim, true without exception. For instance, those definitions that are offered for some practical purpose aren't concerned with counterexamples. In such cases, we are only seeking to understand the concept roughly or how it applies 'normally' or something similar. However, if a theory or a definition offers necessary and sufficient conditions, it makes a general claim. We can therefore test the claim by looking for counterexamples, trying to show either that one of the conditions is not necessary or that all the conditions taken together are still not sufficient.

A definition, whether it offers a general claim or not, can be better or worse. For example, 'A bachelor is a bachelor' - while true - is hopeless. A good definition will not be circular, using the concept that is being defined in the definition. 'A bachelor is not a swan' is also unhelpful. A good definition will not be negative if it can be positive. A good definition will be informative - it will tell us something we don't know. It will help explain the concept defined by using concepts that we understand more easily in the definition. And there are other marks of a good definition. Whenever faced with a proposed definition of knowledge, it is worth thinking about whether the definition is good as a definition.

## **CAN PROPOSITIONAL KNOWLEDGE BE DEFINED?**

Can knowledge be defined in terms of necessary and sufficient conditions? If so, will we have a real definition that tells us the true nature of knowledge? Philosophers have aimed at such a definition. But we might doubt its success in advance. For example, different societies have meant different things by KNOWLEDGE. Or again, sometimes we are quite generous with the word, e.g. I know that Descartes wrote the *Meditations*, but other times, we make more stringent demands, e.g. do I really know that my experience isn't illusory, that I'm not in *The Matrix* or *The Truman Show* (and if I don't know that, do I really know that Descartes wrote the *Meditations*)? Or again, the kind of knowledge we gain by, say, seeing something in front of us may be quite different from the kind of knowledge we gain by abstract reasoning, e.g. a young child can have the first kind of knowledge but not the second. And so on. Could there really be an abstract characterization of what knowledge is that holds true in all these cases?

Zagzebski suggests that we should adopt the aim of providing a real definition of knowledge at least until we can show that we have failed to find one. The only way we will know that we cannot give necessary and sufficient conditions for knowledge is by trying and failing to succeed.