



University of St Andrews
School of Psychology and
Neuroscience, and Department
of Philosophy

What Kind of Mind?

Lesson 1: Teacher Notes



Lesson 1	Activity Instructions	Purpose
1.	<p>Introducing the Study of Animal Minds Resources: PowerPoint Slides 2 – 6 Whole Group Discussion This is meant to be a general class discussion, just to stimulate interest in the topic. You can use slides 2 and 3 to kick off the discussion. Some pupils may have heard of SETI -- the Search for Extra-Terrestrial Intelligence. SETI analyses data from powerful radio telescopes for signs of intelligent life on other planets. This is a very interesting project!</p> <p>But there is intelligent life much closer to home. We can search for, and try to understand, <i>Terrestrial</i> intelligence: the minds of animals right here on Earth. Animals engage in many of the kinds of activities that have traditionally been thought of as distinctive of human intelligence, including using tools and sophisticated social interactions, including communication that shares many features with human languages.</p> <p>The photos depict a dolphin (carrying a sponge that it will use as a tool to protect its snout during feeding), orangutans (socialising with each other - pupils may want to discuss their social intelligence, or their emotional lives), and a New Caledonian crow (carrying a tool that it will use to retrieve food).</p> <p>Animal Minds research, Psychology and Philosophy Slides 4, 5 and 6 introduce the work of the research team and give background on their disciplines. This information is intended to set the scene for the activities which follow.</p>	To introduce the topic of Animal Minds research, psychology and philosophy and show why this is an interesting area of study.
2.	<p>Philosophy: Which things think? Which are intelligent? Resources: PowerPoint Slides 7 - 9, posters, cards with pictures of animals and objects. Slide 7 – Prompt for activity Slide 8 – Image of activity Slide 9 – Questions for rounding off the activity Small Group Activity with shared reporting to whole class In small groups, ask the children to place the pictures of animals and objects onto the poster, thinking about which are intelligent and which are maybe not intelligent. The children should be encouraged to give a reason for their choices. There is no right or wrong arrangement of the cards for this task.</p>	To stimulate thinking and discussion about intelligence.



	<p>The crucial questions to be asking are: why do we think that some are cleverer than others? What is our evidence? What do these things do that tells us how clever they are? Some possible considerations that pupils might invoke include: the ability to learn (as opposed to responding automatically), reacting to the world, brain size, having a goal, maybe other things like emotion, creativity, biological similarity to humans. In the end, there is no one right answer; there may be many interesting notions of intelligence or ways things might be intelligent. Some students may also raise considerations that might make us sceptical that a creature is intelligent: perhaps its behaviour is just a reflex or instinct, something automatic and not intelligent. These considerations should also be encouraged: in many cases, it is very difficult to tell whether a particular behaviour is intelligent or not, and even experts may disagree. There are different ways of thinking about what intelligence is because there may be different notions of intelligence. One animal might be more intelligent than another in one way, but less intelligent in a different way. This all suggests that we should be thinking carefully about the question of intelligence.</p>	
3.	<p>Philosophy – What is a Mind? Resources: PowerPoint slides 10 - 13 Whole Class discussion – Using the slides as prompts, children are encouraged to think about differences between the mind and the brain and how different philosophers have looked at this.</p> <p>There is a long history of philosophical debate about the relationship between the mind and the body. The PowerPoint slides are designed to introduce some key ideas in a simple way. See ‘A Brief Guide to Philosophy of Mind for Teachers’ for more information.</p>	<p>To introduce some philosophical ideas about the mind that might inform future discussions.</p>
4.	<p>Psychology: Animal Behaviour Resources: PowerPoint slides 14 – 20 Whole Group Discussion – The following slides show that scientists must be careful when observing animal behaviour. They must not assume animals feel a certain way, just because their behaviour looks similar to human behaviour.</p> <p>The slides ask children to consider how the wolf is feeling or what it may be thinking in this picture. The slides demonstrate that it is difficult to know this for certain. They are self-explanatory and show that the wolf may look angry, when it is in fact merely hungry.</p>	<p>To raise awareness of possible bias in human thinking about animals.</p>



	Scientists must not assume animals feel a certain way, just because their behaviour looks similar to human behaviour. Avoiding presumptions like this is important when designing experiments about animal behaviour.	
5.	<p>Philosophy: Introduction to Scientific and Philosophical Inquiry – Bats</p> <p>Resources: PowerPoint slides 21 – 24 Film embedded in PP slide 21 or here: https://www.youtube.com/watch?time_continue=197&v=9FVoTMOorXA</p> <p>Whole group discussion – Film of bats in action. Show the film of bats in action then use slide 22 to ask the children what they remember or like about the bats.</p> <p>Whole group discussion: Slide 23: How could we understand what it is like to <u>be</u> a bat? How could a bat understand what it is like to <u>be</u> a human? Bat Scientist Worksheet</p> <p>This activity encourages children to think creatively about animals: specifically, the human animal. They are asked to pretend to be bats, in particular to be ‘bat scientists’ and think about how bats would go about studying humans.</p> <p>Read the short story of bats working out what it means to be a human below (Cave, 2012, p.319) and have a human subjective experience. Ask the kids to think about how the bat scientists would work out how humans think about the world. What would these bat scientists want to know about humans? Which questions would they ask? How would they find out about how we make friends or play games, for example?</p> <p>Individual Written Activity – Using the Bat Scientist Worksheet, as the children to write down two questions a bat scientist might want to know the answers to about human behaviour.</p> <p>Instructions: Read out short passage from philosopher Peter Cave: Bat Scientists: How to think like a bat...or how far science may go From high in the chapel’s rafters, we look down on you humans and wonder, ‘What is it like to be a human being?’ We can try walking on two legs. We may attempt to sleep on beds – oh for a lovely rafter – but that would only tell us what it is like to be a bat pretending to be a human. You humans lack our echolocation faculty. Your experiences must be most limited and utterly bizarre. We could investigate your brains and see how you respond, but we should still miss out on how you humans experience the world.</p>	To begin thinking about how to ask scientific questions. To think about what it might be like to be a bat. To begin thinking differently about what it is to be a human animal.



	<p>Reference: Cave, P. (2012) <i>How to Outwit Aristotle: and 34 Other Really Interesting Uses of Philosophy</i>, London, Quercus.</p> <p>The question “What it is like to be a bat?” was famously discussed by the philosopher Thomas Nagel. Nagel wanted to draw attention to the bat’s subjective experience. When a bat flies through the air using echolocation, it is in a particular kind of sensory or perceptual state. It must feel a certain way to the bat to use echolocation; but it is very hard (arguably impossible) for us to imagine it. (A similar point can be raised by thinking about a person blind since birth trying to imagine what it is like to see.)</p> <p>Is there any way we could know what it is like to <u>be</u> a bat? We can learn about the bat’s brain; but it isn’t clear that this will help. We could try to act like a bat, but arguably that won’t help either; that might tell us what it is like for a human to do the things a bat does, but it doesn’t seem to tell us what it is like for the bat.</p> <p>In 1790 an Italian scientist, Lazzaro Spallanzani, determined that bats were using their ears to navigate in the darkness, by setting up experiments that isolated the bat’s ability to see, smell, and hear. But Nagel suggested that science may not be able to answer questions like “what is it like to <u>be</u> a bat?” Pupils may want to discuss whether this is correct.</p> <p>Whole Class / Group Activity: Slide 24: How do bats fly in the dark?</p> <p>Resources: Blindfold, space in the room</p> <p>This activity allows children to think about what it may be like to be a bat, using sound to negotiate movement in the room. Bat in centre – circle of pupils – one person to make ‘beep’ noises and the ‘bat’ goes towards the noise.</p> <p>What did it feel like to use sound (instructions) to navigate? Did it feel like seeing? What might it feel like to be a bat?</p> <p>References</p> <p>Cave, P. (2012) <i>How to Outwit Aristotle: and 34 Other Really Interesting Uses of Philosophy</i>, London, Quercus.</p>	
6.	<p>Plenary</p> <p>Resources: PP final slide</p>	To recap the lesson.



	<p>Instructions: Recap the main points of the lesson as follows:</p> <p>Scientists search for sign of intelligence on other planets. However, there are also many different intelligent minds on Earth: namely animals. Researchers from psychology and philosophy study animal minds. They look at intelligence and we tried to work out which animals and objects are intelligent. We then thought about what the mind might be and saw different explanations from René Descartes and Charles Darwin.</p> <p>We the noted that scientists must be careful when observing animal behaviour. They must not assume animals feel a certain way, just because their behaviour looks similar to human behaviour.</p> <p>We thought about bats and how they experience the world through echolocation. We thought about how asking novel and exciting questions helps scientists to study animals. We thought about how bats might think about studying humans.</p>	
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A Brief Guide to Philosophy of Mind

Philosophers have discussed an extremely broad range of issues about the nature of mind. Here are a few important themes that are particularly relevant to the issues discussed in the lesson plans.

Consciousness and Intentionality

What is going on in your mind as you read this page? You are having certain *experiences* – visual experiences of the piece of paper or the computer screen, and other experiences as well (perhaps you have a headache, or can feel your stomach rumbling) – and as a result of these experiences, you form certain beliefs – for example, you might come to have various beliefs about the ideas of certain philosophers of mind.

No doubt there is much more going on than this! But even this very brief list puts us in a position to introduce some concepts that philosophers have found important for thinking about the mind.

Some mental states, such as pains and visual experiences, are *conscious*. There are various ways that the word “conscious” can be used, but when philosophers talk about consciousness they are usually interested in mental states that *there is something it is like* to experience. To get an idea of what is at issue here, think about the differences between the visual experiences of a person who can see colour and the visual experiences of a person who is completely colour-blind. There is a difference in what it is like for each of these people to see a rose, and this is a difference in their conscious experiences. Thomas Nagel’s question ‘What is it like to be a bat?’, discussed in the first lesson, is another good way to start thinking about consciousness.

Some mental states, such as beliefs, are representational – they are *about* something. For example, you might believe that René Descartes was a philosopher. Your belief is about Descartes. Mental states that are *about* something are called *intentional* states. Often, intentional states can be evaluated as true or false, or accurate or inaccurate. For example, your belief about Descartes is true.

Consciousness and intentionality are two aspects of the mind that philosophers have found extremely puzzling. How could it be that the brain – a physical object – is conscious? Could physics or neuroscience ever really explain what it is like to feel pain or to see red? How can one thing come to represent another? These are some of the deepest questions in philosophy of mind.



What is a Mind?

In attempting to answer these questions, philosophers have developed a variety of views about what kind of thing the mind is. Here are a few of the most important debates:

Many people have found it natural to think that the mind is something distinct from the body – not a physical thing, but a soul or spirit – that is somehow connected to the body and controls it. The idea that the mind is distinct from the body and brain is called *dualism*. The French philosopher René Descartes was one of the most famous dualists. One main line of objection to dualism is that it makes it very hard to understand the connection between the mind and the body: exactly how could a non-physical thing be connected to or control a physical thing?

As psychology, neuroscience, and biology became more sophisticated, the idea that the mind is just the brain became very plausible. The idea that the mind is a physical thing, and hence that thinking and feeling are physical processes, is called *physicalism* or *materialism*. But even if we accept this idea, there are multiple features of the brain that we might look at. The brain is made of certain kinds of cells. Some philosophers have maintained that certain mental states – thinking, or perhaps feeling pain – require particular kinds of cells. For example, it might be that the feeling of pain just is the stimulation of a certain kind of nerve cell. On this view, nothing that lacks that kind of nerve cell could feel pain. (For example, a robot could never feel pain, no matter how sophisticated it was.). This kind of view is called *the identity theory* because it claims that psychological states are identical to particular neurobiological states.

On the other hand, many philosophers have felt that it doesn't matter much what brains are made of; the crucial thing is how they work in processing information and influencing what we do. An analogy here is the computer: in principle, a computer can be made out of a wide variety of materials. The important thing isn't what it's made out of; it's what it does (how it processes information and makes certain things appear on the screen). Many philosophers have felt that at least some mental states are like that; they don't have to be made out of a particular kind of cell, as long as they work in the right way. (If this view is right, robots could in principle think or feel pain.) This view is called *functionalism*.

If this is confusing, don't worry about the details! Just remember that there are different kinds of consideration that we might look to in trying to evaluate whether something thinks, or is intelligent, or has a particular concept: we might look at facts about its brain (what is it made of?), or facts about what it does in particular situations (how does it process incoming information, and how does it behave in response?)