

# What Kind of Mind?

## Glossary

**Ape (vs. monkey):** Apes are an evolutionarily related group of *primates*. Apes are divided into two subgroups: great apes (including chimpanzees, orangutans, gorillas, and humans), and lesser apes (including gibbons). Monkeys are also primates, but are more distantly related to apes. One distinguishing feature: monkeys have tails, apes don't!

**Capuchin monkey:** The capuchin monkey is native to Central and South America. Capuchins are omnivores, eating fruits and leaves as well as other animals including frogs and shellfish. They live in large social groups of 10-35. They are widely regarded as intelligent, in part because of their use of tools.

**Control condition:** In an experiment, we are usually trying to understand how some change we make affects a situation. In order to do this, we need a basis for comparison: we need to compare situations in which we don't make the change (the *control condition*) to situations in which we do make the change (the *experimental condition*). For example, if we are trying to find out whether a certain drug cures a disease, we need to see what happens to patients who don't take the drug (perhaps they get better anyway). In this case, not taking the drug is the control condition.

**Dualism:** The idea that the mind is something completely distinct from the body and brain (like a soul or spirit). Compare *materialism*.

**Empirical:** Based on observation and experience, rather than pure reasoning or assumption. For example, biology involves a lot of empirical work, but mathematics is mostly not empirical.

**Evolution:** The idea that the characteristics of living things change over successive generations. If we look at the parents of the parents of the parents of today's living things, going back thousands of generations, they might look very different! These changes are caused at least in part because some creatures are more likely to survive and reproduce given the conditions in their environment; this is what Darwin called *the survival of the fittest*.

**Experiment:** An *experiment* is a situation that is designed to test a particular claim (a *hypothesis*). The hypothesis is used to make a specific prediction about the experimental situation, and is confirmed to the extent that the prediction turns out to be true.

**Fallacy:** A *fallacy* is a problematic pattern of reasoning. In a fallacious argument, the premises do not give us much (if any) reason to accept the conclusion.

**Functionalism:** *Functionalism* is the idea that a mind is like a computer: to be in a particular mental state is just to process information, and so to control behaviour based on environmental conditions, in a certain way. Thus, according to functionalism, a mind doesn't have to be made out of neurons; a robot made out of silicon chips could think and feel, as long as it processed information in the right way. (Compare *the identity theory*.)

**Hypothesis:** The *hypothesis* is the claim to be tested by an experiment.

**The identity theory:** The identity theory says that particular mental states just are particular kinds of biological or neural states. For example, the identity theory might say that to be in pain just is to have a certain kind of neural activity. (The identity theory therefore seems to rule out the possibility that a robot or computer could have a mind.) Compare *functionalism*.

**Instinct:** A pattern of behaviour that an animal is born with (it is *innate*) and cannot change.

**Intelligence:** *Intelligence* is linked to the ability to solve problems by thought and reasoning, creativity, the ability to learn new skills. It is a very difficult term to define precisely; there may be many notions of intelligence that are worth studying!

**Manipulation:** To be *manipulative* is to try to get someone to do something in an abusive or deceptive way. (If I point out that doing what I want will get you something you want too, that is not manipulative; but if I pretend to cry when I don't get my way, that is manipulative.)

**Materialism (or physicalism):** The idea that the mind just is the brain (and possibly other parts of the body or physical environment), so that thinking and feeling are physical activities or processes. *The identity theory* and *functionalism* are materialist views.

**Philosophy:** Philosophers traditionally ask "big" or "deep" questions, like "What is a person?", "Do we have free will?", "What is a language?", "What is a mind?" Philosophy includes the study of logic and reasoning, ethics (the study of right and wrong), epistemology (the study of knowledge and rationality), metaphysics (which addresses fundamental questions about the nature of reality, such as "What is time?" and "What is causation?"), among much else.

**Practical reasoning:** Reasoning about what to do. (Compare *theoretical reasoning*.)

**Premise:** A claim that we appeal to in arguing for a conclusion.

**Primate:** The evolutionarily related group of mammals that includes monkeys and apes.

**Psychology:** *Psychology* is the scientific study of the mind and behaviour. Psychologists typically use *empirical* means (for example, experiments) to try to learn about the mind.

**Theoretical reasoning:** Reasoning about the facts. (Compare *practical reasoning*.)