

Capacities of Minds

For us, every aspect of existence has a mental dimension, but certain capacities of the mind seem to be basic to all thinking. Philosophy meets psychology and neuroscience here, but philosophers have a particular interest in how knowledge and metaphysics derive from our capacities. It is common to talk of mental **faculties**, but this concept is rather discredited amongst psychologists, and it implies a specific mechanism behind what we do, so the neutral 'capacity' is a safer label. Discussion of capacities at first focused on specific abilities, such as logic, or a priori thought, but it is our very general capacities that reveal more about how we understand the world.

Apart from the ability to perceive, our most immediately striking capacity is the **imagination**. Because we daydream, we may dismiss this as trivial, but it is one of our most basic capacities. We imagine real things, as well as fictions, when we remember, or close our eyes and picture what we have just seen. We can run the clock forwards or backwards from a starting point, consider different viewpoints, vary the properties and structures of things, move their location, separate or combine parts, and consider possibilities and limits. Hence, all assessments needed for understanding and decision-making rely on imagination. Imagination spots unseen connections in reality, and thus points towards explanations. It is said that imagination must always be of some particular instance (such as a single triangle), but it need not be visual. If we imagine Plato, we blur together his youthful and older selves. Empiricists explain imagination as combinations of past experiences, but there may be some more creative element in it, filling in gaps in our experience (such as an unseen colour).

Empiricists are struck by the automatic links that form between experiences – such as resemblances, or linking events occurring at a single time or place, or presuming causation – and try to account for knowledge entirely in this manner. We obviously see **resemblance** links between colours, shapes, whole objects, and even abstract concepts. We also, though, see differences and contrasts, so it is not just a matter of forming inner links. Resemblance is a vague notion if we don't specify the 'respect' of the resemblance. Once we see respects of resemblance, this points to abstract concepts such as 'properties', and leads us to generalise (leading us also to the problems of induction, and of universals). Without the ability to spot resemblances we couldn't function, because we wouldn't recognise anything.

Causation is a tricky puzzle when we study the basis of nature, but we have an inbuilt capacity to link events by their causes and effects. We may be merely spotting regularities in the events – seeing what follows what – but we feel a sense of necessity in the experience, and a strong sense of hidden causes (in tastes and smells, for example). It is sometimes claimed that we experience causation directly, if we decide to move a limb. This capacity, too, seems to be indispensable, since we wouldn't last long if we didn't understand the causes of danger.

An ability to focus our attention is a notable capacity of the mind, and when we form a concept of the aspect of reality on which we focus, this is called psychological '**abstraction**'. It is sometimes called abstraction 'by ignoring', as when we form a concept of the shape of a leaf, but ignore its colour, size or weight. This is the traditional account of how our abstract ideas come into existence, though a modern view says we create and apply concepts, rather than deriving them from experience. The capacity that abstracts leaf-shape is less obvious when abstracting 'big' from a large wasp, or 'to my left' from the wasp's location. As with many of our capacities, it is uncertain whether it is voluntary or mechanical. Of course, if an aspect of reality is abstracted by the mind, it must first be recognised as distinct, so the order of events here is also controversial. If we abstract the same shape from several different leaves, our capacity for spotting resemblance then leads us to generalities, and the concept of a kind or property. We may also abstract patterns and structures from experience, leading to more theoretical concepts.

Another tendency of the mind, which may amount to a capacity, is to treat clusters of things, and even abstract concepts, as if they were single objects. We might call this '**objectification**', at its grandest when we think of the whole universe as one object. When a process like acceleration, or a group of listeners at a concert, are expressed as nouns, then properties and descriptions can be attributed to them ('the acceleration is poor', or 'the audience is large'). This 'nominalisation' can even be applied to abstracted concepts, as when we treat 'redness' or 'circularity' as entities in their own right. It seems that we can think more efficiently when we give these things object form.

If we pull a string tight it becomes straighter, and approaches (but never reaches) a state of perfect straightness. If we arrange stones at equal distance from some point, there is a similar ideal to which their shape approaches. These ideas of straightness and circularity are **idealisations**, and imply a capacity in all of us to conceive of a pure and simplified version of an activity or situation. When we remember, cook, make a roof, plan a route or sharpen a knife, we have a simple end in view, which is usually too perfect to be attainable. It seems that our minds need to simplify purposeful activities, but not any old simplification will do, since the ideal is also the point of the activity. Simple ideals give us beacons to aim at, and social ideals can lead to huge political successes and failures.

Many of the capacities mentioned here contribute to a single capacity for **generalisation**, which may be the most important feature of minds. Excessive generalisation can be a danger, taking our focus away from vital particulars, but almost every word we speak (apart from proper names) has a general character, allowing it to be reused in multiple sentences and situations. Variables play a similar role in mathematics. Without generalisation it is inconceivable that we could learn much about the world, as we would drown in a mass of individual details, with thinking trapped in a single time and place. Spotting resemblances, patterns, features, and kinds of object, and thereby formulating general truths about them, is what makes understanding of the world possible, permitting both survival and flourishing to occur.

How these capacities are implemented is largely unknown (though the brain may be composed of specialised 'modules'), and their replication in artificial intelligence is a daunting challenge. Something like them, though, forms the foundation of human thinking, and their activities are right at the heart of philosophical understanding.