

Perception

Our most immediate and trusted source of knowledge is sense perception. For empiricists it may even be our only source of knowledge of external reality. Rationalists believe that some of that knowledge comes from pure thought. Some theorists defend a fairly pure sort of experience, which directly produces knowledge, while others say perception only produces knowledge because it is laden with concepts. Optimists invoke the reliability of experience, but sceptics usually see the uncertainties of perception as a major source of trouble. Modern neuroscience has contributed many revelations to our study of perception, but philosophers are seeking an account which assesses and explains the reliability or limitations of our general grasp of reality.

We have five familiar 'modalities' of perception (sight, hearing, touch, smell, taste), but there are other less obvious ones, such as our sense of balance, and awareness of our own bodies. Some of them are closely linked, such as smell and taste, and some 'synaesthetic' people can even taste sounds, or see them as colours. Smell and taste are sometimes seen as minor (or even 'lower') senses, because we rely on them less.

We can all introspect the way our senses work, and observe their basic features (though psychologists and neuroscientists delve deeper, and sometimes contradict common sense). If we are visually taken by surprise by something, we can experience colours and shapes but be briefly unable to make any sense of it. We then add a clearer grasp of the 3-D structure, and then we may add concepts and classifications, before finally formulating propositions about the object. Normally this happens in a single act, but we sometimes see the stages when they are slowed down. We also see things in peripheral vision which at first give us no information, and we may even not fully register something bang in front of us, if the mind is focused elsewhere. We can talk of the simpler experience as 'sensation', and the fuller sensory grasping of something as 'perception'. The even fuller conceptual grasp of a perception is called 'apperception'. In English we also distinguish between plain 'seeing' and 'seeing as', when we instantly categorise a thing when we see it. We don't need to consciously classify things, since this is implicit in normal experience, as when we recognise the many objects in our own kitchen.

Theories of perception vary according to their closeness to reality, from direct realism in which nothing mediates between perception and world, to idealism and solipsism, where 'reality' is too remote to get a mention. The processes of perception are arranged according to the extent to which the inner workings of the mind play a role in the perception. At one extreme philosophers talk of The Given, the raw awareness of minimal colours and shapes which constantly fills our minds. At the other extreme is the idea that experience is not even possible without concepts and classifications. Three main approaches say firstly that the colours and shapes are primitive and without content, awaiting the stages of interpretation, or secondly that there are representations or 'sense-data' which reach the mind in a formulated mode which still requires some construction and assessment, or thirdly that perception is a rational and cultural activity, which is steeped in thought and prior knowledge.

Perceptive qualities may fall into two groups, one accurately depicting reality (the '**primary**' qualities), while the other is less informative and depends more on the observer (the '**secondary**' qualities). For example, shape seems to be the way it looks (and is confirmed by the other senses), but smell depends on the observer, is not detected by other senses, and bears little relation to the chemicals being smelt (though it conveys information, and is not entirely in the mind). We want to know which parts of perception reveal the world, and which parts reveal the perceiver, and the primary/secondary distinction is helpful, especially since science bases its objectivity on primary qualities, and has little interest in secondary qualities. Critics say that the distinction of the two is not at all clear, and the claim that primary qualities match reality relies on further perceptions, since we can't get directly at reality. The distinction asserts that tomatoes are not intrinsically red, which some people find counterintuitive.

When we see a star we experience light that left its object long ago. This kind of fact encouraged the idea of '**sense-data**', as a neutral name for the light when it arrives in a mind. We can then assess how the sense-data relate to their source, and what information a mind can extract from such data. We might decide that some sense-data are illusions, while others accurately model external facts. This helps to explain problem cases, but sense-data seem to be vague new objects, which the mind then has to observe (just as the star has to be observed), which implies an infinite regress, with more data about the data. It seems to us that we experience the world, not sense-data about it.

Sense-data offer one way to characterise a **representative** (or 'indirect') theory of perception. The general idea is that we neither directly connect to the world, nor are cut off from it, but we fairly successfully represent what is out there. This might involve mental models, or a series of processes, rather than separate 'data'. The incoming chemicals and waves are transformed in our heads, ending as uniform electrical signals, and these somehow contain the 'information' we need. During the process they are classified, named, located, associated, trigger emotions, and may even invoke values. Optical illusions show how our minds impose interpretations on whatever is 'given' as input. The theory explains illusions as representations that have gone wrong, perhaps by being triggered internally.

Representations invite scepticism about both their success, and our ability to know when they are successful. **Direct** theories adhere to our strong intuition that we directly perceive reality, while trying to account for our varied experiences of the same thing, such as colour blindness. One strategy is the '**adverbial**' theory, which says that we perceive colours, but in individual modes, just as we are fast or slow when we walk. Most of us see a tomato 'redly', while a few of us may see it 'purplely', but we are nevertheless directly seeing the colour qualities of the tomato. Critics like this account of colours, but say the theory works less well for shapes (seen 'squarely'), or very complex features such as being 'interwoven'. Attempts to establish a more direct link with the world also emphasise the **causal** nature of the required link. If I hallucinate a cat while standing in front of a cat, I am not seeing a cat, because the causal link is missing. However, if the light from the real cat triggered a hallucination of a dog that wouldn't do either, so the caused mental image must still either directly or indirectly map the appearance of the cat.