## **Existence** of Objects

A basic issue for our metaphysics (our conceptual scheme) is whether or not reality is primarily constituted by 'objects'. If you look out of a city window that may seem obvious, but if your view is rural it may be less obvious, and if we think about the centre of the Sun it is not obvious at all. It is tempting to leave this problem to physicists, who wrestle with the concepts of fundamental particles, fields, forces and probability distributions. However, most of physics and other sciences could not function without talk and calculations based on objects like electrons, atoms, molecules, cells, creatures, and so on. If the fundamental level of nature contains no objects, that does not refute the existence of objects on larger scales.

Early thought on the matter wondered whether everything was processes, mixtures and cohesions of basic matter, which essentially contained no objects. Objects became the focus when serious attention was paid to our knowledge and our language. Sentences tend to have 'subjects' and 'predicates', reflecting a view of reality as containing objects with properties. Scientific generalisations (and modern equations) refer to types of object, each type exhibiting typical behaviour. In daily life we continually collect and make objects. We also collect and make 'stuff', but separate objects seem inescapable. The belief in objects has been reinforced by standard modern logic, which starts with some logical connectives, a domain of objects, and a list of predicates. Thus metaphysicians seek the criteria for an object's existence, and asks questions about their universal nature, general structure and ways we identify them.

Modern philosophy has widened the concept of an object, but traditional discussion focused on physical objects. The main dilemma is whether to treat an object as a bundle of properties, or as a unified substance. If an object is a bundle of properties are of – what they attach to. If we assume a unified substance, then the properties are of the substance, giving a satisfying picture, but the substance itself is rather mysterious, because it is not the same as any of the properties. The two different accounts will also give rise to differing borderline cases. If an object is a bundle of properties, then a shoal of fish has properties such as mass and speed, but doesn't exhibit proper unity. If an object is a unified substance then a geometrical point might qualify, despite having (it seems) no properties at all. If a substance just has to possess properties, a circular square seems to have two properties, despite being inconceivable. Hence some further aspect of an object would be helpful to ensure its objecthood, such as an essential form, a behavioural role, a unique individualising property, or potential classification.

An early proposal was that an object is made of matter, and must also possess a 'form', a guiding principle, which gives it an essential nature, and usually qualifies it for a classification. The form of the object unifies it, and not only supports the properties but gives rise to them. A form, however, remains almost as mysterious as the substance it is said to explain. If we focus on the role of objects, we observe their continuity through space and time (however brief), their stable structure while undergoing movement, and their participation in causal relation. However, some rather unufied objects, such as ocean currents or the leaves on a tree, seem to qualify by those standards.

The problem of objects is complicated by the invention of a new logic, mainly for use in mathematics, which wanted to treat abstract entities as possessing unity, continuity, and properties – to treat them, in fact, as 'objects'. Logic is much more powerful if it can reason about things with properties, saying that one implies another, so objects are treated as primitive components of the system, held in a 'domain', over which we can 'quantify' (picking some of them out). Nowadays philosophers are likely to be referring to 'abstracta' (such as a number, a square, a set, or the equator) when they talk of 'objects', rather than physical objects. Language is a focus for such discussions, and a common idea is that an object is anything referred to by a singular term (a phrase picking out a single thing) in a true sentence. Abstract objects are said to objectively exist (or 'subsist'), but to lack causal powers or a spatio-temporal location. Sceptics are inevitably cautious about this casual purloining of an old word, since it seems to bestow existence equally on trees and on square roots, so the ontology implied by abstract objects is keenly debated. For example, how can we know about them, if they lack causal powers?

Abstract objects seem to be intrinsically unified, and their essential natures are often obvious. By comparison, physical objects look even more dubious, and 'nihilists' about this argue that the category of 'physical object' is quite ungrounded, so that (in philosophy, though not in daily life) we should entirely reject it. The strategy is to say that objects are just 'arrangements' in the material world, and are only defined for human convenience. The strongest version says that an object is just any chunk of space-time that you care to pick out. Some versions of nihilism are neutral about what gets 'arranged' to make objects, though other propose that there are entities labelled 'simples', which are the smallest components of our physics, such as atoms, or the basic particles of physics. If something were intrinsically unified, it might form an exception to nihilism, and lives and persons have been proposed.

Another approach is to ask how we 'individuate' objects, which is picking them out (for counting, perhaps). We may simply individuate whenever we separate an entity out from other entities around it, perhaps by seeing its boundaries, or by handling it, or by following its movements. We usually agree that one object can't be in two places, and two objects cannot occupy one place. However, we can count a few mountains without knowing their exact boundaries, and happily talk of objects which are too small to experience, such as quarks. If we individuate a hurricane, we want criteria for when it finishes, and whether if it resumed it might be the same hurricane. Normally we individuate by properties, or by location. A drastic proposal is that each object has a 'haecceity', which is either a featureless individuator, or just satisfying a predicate like 'being that tree'. A more popular view is that individuation is falling under a 'sortal', which is a concept specifying what sort of thing it is. Thus objecthood is bestowed by having a place in our classificatory scheme, which is a role, rather than some intrinsic features. This view happily embraces abstract as well as physical objects. A further quest might be the individuation of one particular instance of a kind, rather than the family, and this is the 'identity criterion', enabling you to know that object on another occasion.