Definition

We are all familiar with the type of definition offered by a dictionary, which helps us to use a word in the commonly accepted way, but philosophers have slightly different interests in the matter. The original aim of defining a word or phrase was to achieve a full understanding of it, which makes a definition more like an encyclopaedia entry. The idea is to take a concept at the heart of some philosophical dispute, such as 'knowledge' or 'justice' or 'being', and home in on an agreed and exact account of what it is.

The most common ancient strategy for achieving this revealing type of definition was by dividing the target concept (the '*definiendum*' – that which is to be defined) into its component parts, show the principles that unite them, and thus assemble an account which tells you what it is (the '*definiens*' – what does the defining). Standardly, you start by categorising the thing, firstly into the largest category to which it belongs (the 'genus'), and then gradually narrow down, until you start to name features that only belong to the thing you are defining. The aim is to get right to the bottom of the divisions, but words have to be used, and they are all general in character, so some things (such as large black cats) may end up with the same definition. The ideal is to arrive at the unique definition for each thing, and it is assumed that there is indeed only one possible perfect definition of each thing. The method is known as definition by 'genus and differentiae'. The ultimate dream was a hierarchy of definitions which precisely described reality.

The method was worked out quite thoroughly, but not many definitions were fully successful. Some, like pure 'goodness', were so elusive it was hard to know where to start. Others, like attempts to define 'knowledge', seemed to go round in a circle, or take too much for granted. The struggle to define things was a major part of early philosophy, and was wonderfully illuminating about the complexity of philosophical concepts, but the target of a successful definition looked rather elusive. One notable problem was that if your divisions revealed all the ingredients of *definiendum*, the much harder task remained of showing why the ingredients were unified.

When early modern philosophers revived discussion of definition, they had largely lost confidence in the process. It certainly seemed unlikely that each major concept could have a unique perfect definition, and the rise of science meant that pinning down concepts no longer seemed to be the most important aim of enquiry. The interest in definition shifted from philosophy to science, where the nature of a thing was to be found by investigation, rather than by dividing concepts. Ancient Greeks had little interest in non-Greeks, but now an awareness grew that concepts vary across languages and cultures, and are not easily pinned down. In the new rationalist philosophy there was a group of primitive concepts which are directly known, and are indefinable. For the empiricist the concepts eventually break down into experiences, rather than into other concepts.

It was a new interest in the foundations of mathematics which renewed the focus on definitions. Each ingredient of a secure mathematics needed to be precise, and there were problem cases such as 'infinitesimals', which no one was quite able to define. If an agreed procedure for definition could emerge, then mathematics might be built on definitions, rather as the ancients had hoped to build their metaphysics. The topic of definition now becomes rather technical, and a large new vocabulary is introduced, but we can pick out some interesting features of the discussion.

A key distinction is whether a definition is simply making clearer something we already know, or whether it is introducing a new concept. If a new concept is introduced it can be done by a 'stipulation' (a description of how a word will in future be used), or by 'ostension' (pointing to 'that' and saying what it will be called), or by 'enumeration' (listing the items that will fall under the new term). If we want a fully reliable system, such as mathematics, we might think that every element of it should be introduced by a definition in this way, thus tying the system to some sort of foundation which we feel is secure.

If we define what we already know, the simplest form is in the style of the dictionary, where we give the meaning of the term using simpler familiar terms, offering a phrase which can always be used to completely replace the *definiendum*. Thus a 'brother' is a 'male sibling', and we could eliminate 'brother' from English (should we wish to). This reveals that the *definiendum* was actually an abbreviation of some more complex concept. A less precise mode of definition is the 'contextual' definition (or 'paraphrase'), which does not offer a neat phrase to replace the target concept, but reformulates sentences containing the phrase so that we no longer need to use it.

A particular difficulty was met when it often seemed rather hard to define a word without using the word itself in the *definiens*. Is a definition of the word 'and' allowed to use 'and' in the definition? Can we precisely define 'number' without employing the word 'number' at all? Can we define any basic part of logic if we are not allowed to use logic in the defining process? This threatened hopeless circularity, but it was realised that definitions can be illuminating and useful even when they defy such rigid restrictions. Such definitions might add some information to the target term, or the definition might be part of nested definitions that work back to something primitive (a 'recursive' definition).

There is no one theory of definitions, because we can always ask what a definition is *for*, and that has a variety of answers. For example, some definitions are meant to be 'persuasive', or even 'satirical'. Do we define 'democracy' as 'rule by equality and respect', or as 'rule by the rabble'? A minimum requirement for a definition is that it must be understandable, so we can't define slightly obscure terms using even more obscure terms. But a competing requirement is that we want precise and secure definitions, so the *definiens* can't be full of words which are familiar but rather woolly, and security seeks words rooted in what is experienced or self-evident, rather than just widely used.

The Greeks struggled to achieve successful definitions, but learned a huge amount from their struggles, and this is still true in modern philosophy. A short definition of 'knowledge' seemed reasonably satisfactory to most people, but when someone challenged it all hell broke loose, and the desperate attempts to achieve more and more precise definitions gradually pointed to revealing new aspects of epistemology, which would still be hidden from us if we hadn't aspired to produce a good definition. An attempt to define 'God', for example, can reveal a great deal about religious beliefs.