

## Rationalism vs. Empiricism

Although this is an overly simple generalisation, there are essentially two major schools of thought or theories about how we know things. If you study Philosophy at university or read around the subject in TOK then you are likely to come across these terms at some point or other. They can also be excellent technical terms or ideas to use in TOK essays. These two schools of thought are:

- Rationalism
- Empiricism

Each different theory or school of thought attempts to explain how we acquire our knowledge, i.e. how we know anything at all, in a different way.

### Before we start!

Both rationalism and empiricism was made possible by the increasing importance that the **Renaissance** (14<sup>th</sup>-16<sup>th</sup> Century) placed on finding reasonable explanations about how the world works. Important thinkers of this time include the scientists Copernicus (1473-1543), Galileo (1564-1642), Johannes Kepler (1571-1630) and Sir Isaac Newton (1643-1727) who were pioneering the scientific approach to learning about the world. It is important to realise that, before this time, many people didn't believe that science and reason were valid ways of finding things out about the world and instead the people of the Middle Ages tended to rely on religion, mysticism, superstition and tradition as valid sources of knowledge.

### Rationalism

Rationalism is a school of thought that began with Descartes (1596-1650) whose work began the '**Age of Reason**' a period that loosely covers the whole of the 17<sup>th</sup> Century. Other important thinkers of the time include Leibniz (1646-1716) and Spinoza (1632-1677). Essentially, rationalists believe that (some) knowledge can be acquired through reason alone or, to put it another way, you can come to know about the world by thinking about it. Thinking about the world logically allows you to construct a complete system or entire set of rules that explain everything.

Rationalists tended to believe that knowledge is a bit like maths and that, by thinking clearly enough about things, you can come to know everything without ever having to actually look at the world. As a result rationalists believed in **a priori** knowledge, knowledge that comes before experience. Take the example of  $2+2 = 4$ . Once you know what the terms mean you can figure out that  $2+2 = 4$  without actually having to do experiments on 2s and 4s and +s ... you just know because 2 '*means*' the thing that, when you add it to another 2, gives you 4. And you will just know that  $4-2 = 2$ , in exactly the same way.

The '**Age of Enlightenment**' followed after the '**Age of Reason**' and lasted, more or less, for the whole of the 18<sup>th</sup> Century. During this period of time the thinking of Descartes influenced other European philosophers including Voltaire, Rousseau and Paine. These philosophers and thinkers (although the term is very broad because Voltaire was a playwright) challenged the idea of religion and faith as a way of knowing about things and believed that truth could only be reached through the exercise of reason - divine revelation and the teachings of the Church, they said, were not valid sources of knowledge. Many Enlightenment thinkers also attacked the power of the State and the Monarchy's claim to have supreme authority over what was true or right. As such the Enlightenment is often linked to the revolutionary movements that overthrew the monarchies of Europe such as the Glorious Revolution of England in 1688 and the French Revolution in 1789, although obviously the English later reinstated their king.

### Empiricism

Broadly speaking, empiricism is not actually that much different to rationalism. Both groups believe in the importance of reason and both groups contain scientists but empiricists believe that reason alone is not enough and that you need to provide your reason with material to work on ... which you can only acquire

through your senses. As such, for the empiricists, perception is the source of all knowledge and reason just works on the evidence or perception that perception provides.

Therefore, while rationalists tended to think that all knowledge was like Maths and that it could be known *a priori* (before experience), empiricists to believe that all knowledge was more like science and that things could only be know *a posteriori*, i.e. after or through experience. As such, in order to find out about the world you have to conduct a series of experiments on it and then use reason to work out what those results mean. John Locke (1632-1704), the first British empiricist, argued that nothing could be known before experience and that a baby was like a 'blank slate' that had to be filled up with information by experience.

Other important empiricists were Berkeley (1685-1753) and Hume (1711-1776). Berkeley in particular took Locke's idea further and argued that if all knowledge comes from perceptions which in turn create ideas then the only thing that we can really be sure about existing are the sensations or ideas themselves. So, for example, imagine perceiving an apple. Usually we believe that the idea in our head of an apple matches a real apple out there in the world but Berkeley said you that you have no reason to conjure up this mysterious apple 'out there in the world'. The real apple is the idea, the one in your head and that's all we can ever really mean by an apple. This position is called **idealism** (sometimes **phenomenalism**) because at the end of the day everything is basically just an idea (or collection of phenomena) in our heads. Needless to say there are huge problems with this and many subsequent philosophers have disagreed with Berkeley's position here.

## Romanticism

The story doesn't stop there, however, because the **Romantics** of the 19<sup>th</sup> Century subsequently revolted against this high status that had been given to reason and poets such as Wordsworth, Byron, Shelley, Keats and Coleridge argued against the reduction of nature to purely scientific, rational and logical elements. They believed that thinking about the world in purely scientific and factual terms meant that you were missing something and instead they believed that using the emotions was a better way to gain truth and knowledge.

As such the Romantics stressed feelings such as the awe experienced when you witness the power and beauty of nature and they believed that these could provide you with deeper and more profound truths than the truths of science.

In a sense, they advocated a return to some of the spiritualism of the Middle Ages and thus these three hundred years of history are a clear example of how philosophical thinking tends to move in cycles, starting with one set of beliefs and then moving to another as that first set is challenged only to move back to a version of the original beliefs later when the second set of beliefs is in turn found inadequate.

This continual swinging back and forth between different ideas is called a **dialectic** and a philosopher called Hegel believed that this is how we eventually 'home in on' the truth. The important thing is not that one side proves the other wrong but by swinging back and forth between the two sides you eventually get rid of the things that are wrong with both sides and are left with the truth, a synthesis of the best ideas from each side. In a sense it is a bit like iteration in maths: you get closer and closer to the truth each time.