

# Why Science Will Never Have the Answers to Life's Biggest Questions

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## HANDOUT

The title revolves around two questions:

### Q1. What do we mean by science?

- Old meaning in European medieval universities: Latin *scientia*, one great body of learning; those engaged in *scientia* were known as natural philosophers.
- Word 'scientist' invented by the Revd. William Whewell, Master of Trinity College, Cambridge, in 1834.
- 'Science' in English now usually refers to the natural sciences. Not so in other languages where the word used for science is more like *scientia*, e.g. the German *wissenschaft*.
- In English 'Science is an organised endeavour to explain the properties of the physical world by means of empirically testable theories constructed by a research community trained in specialised techniques'.
- Seven characteristic of modern science:
  1. Science in its methodologies excludes questions of ultimate purpose, value and significance.
  2. Science looks for testable hypotheses which can in principle be falsified.
  3. Science aims at formulating generalisations about the properties of things whenever possible; the highest levels of generalisation we call 'laws'.
  4. Science values mathematics highly.
  5. Science expects reproducibility of results.
  6. Science aims at objectivity and down-plays the role of the scientific observer, deliberately excluding the personal.
  7. Scientific knowledge aims to be publicly observable and repeatable, needs to be published following peer-review.
- The knowledge gained by science is complementary to other forms of human knowledge, such as legal, historical, aesthetic, ethical or personal knowledge. There are many ways of knowing.

- Lord Martin Rees, until recently President of the Royal Society: “The pre-eminent mystery is why anything exists at all. What breathes life into the equations, and actualised them in a real cosmos? Such questions lie beyond science..they are the province of philosophers and theologians”.
- When a scientist claims that the scientific level of knowledge is the only one that counts, this is known as ‘nothing buttery’, based on the claim of ‘nothing but...’ More formally this is known as ontological reductionism, a philosophy parasitic upon science.

## **Q2. What are life’s ‘biggest questions’?**

Many! But four are taken here as examples of ‘big questions’ which science will never answer in principle:

**Example 1:** ‘Who does someone want their life partner to be?’ (a personal question involving love).

**Example 2:** ‘Should we use genetic engineering to enhance human abilities?’ (an ethical question involving what ‘ought’ we to do).

**Example 3:** ‘Why is science possible?’ (a religious/philosophical question about existence because science can only begin once things exist). In practice the history of science tells us the answer to this question.

**Example 4:** ‘Does life have some ultimate meaning?’ The philosophers known as logical positivists in the 1920s maintained that claims only have meaning if they can, in principle, be answered by science. But this claim cannot be answered by science, so logical positivism died. But its ghost lives on in ‘scientism’, the idea that only scientific knowledge is reliable, still a popular philosophy in the scientific community, so scientists often claim that the question of the meaning of life is itself meaningless. But in practice everyone is interested in that question!

\* It’s not a question of science advancing and then filling up these kinds of gaps in our knowledge until such questions are answered – it’s just that however much science advances and however much we discover, science is just not the right kind of tool to answer these kinds of question.