

Philosophy, science and skepticism



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What would life be like...



What would life be like...



...without cell phones?

Question everything?

"The unexamined life is not worth living."



Socrates
470-399 BCE

- One of the founders of Western philosophy, Socrates spent his life encouraging others to critically examine their fundamental values and assumptions.
- He was executed on charges of "corrupting the youth."
- But really others just found his relentless questioning annoying and threatening.

Philosophy and skepticism

Philo-sophia: "the love of wisdom"

- Philosophy seeks understanding of the nature of reality and the significance of our lives by critically questioning our **deepest and most general beliefs**.
- It draws out basic assumptions, asking questions with **the wonder of a child**.
- It subjects all ideas and claims to careful analysis with **the precision of a lawyer**.

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*If everything is open to question how can we know anything at all?
Is **wisdom** just knowing how little you know?*

What do we know and how do we know it?

Have smart phones destroyed a generation?

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How can we even tell?

Should we be skeptical of the claim that they have or not?

What is the difference between philosophical and scientific skepticism?

What do we know and how do we know it?

Science as organized skepticism:

- **Reject global doubts:** don't have such an open mind that your brains fall out.
- **Rely only on public evidence:** many eyes make all problems easy.
- **Trust strength in numbers:** if it can't be repeated it can't be trusted.
- **Test and test again:** make risky predictions and be willing to admit failure.
- **Resist theory:** let the the big picture emerge on its own.

The role of philosophy

Philosophical questions

What is reality like?

- Metaphysics or Ontology

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What can I know?

- Epistemology or Theory of Knowledge

What should I do?

- Axiology or Value Theory

What is reality like?

"Do we have free will or are we just cogs in a vast machine?"



Baron D'Holbach
1723-1789

- Philosophical questions are often much more general than questions we normally encounter.
- Science seeks answers to particular questions about the regularities in the world of our experience and shrinks away from such general questions as this.
- This is a question in the sub-field of philosophy called metaphysics or ontology which seeks an account of the basic nature of reality.

What can I know?

"What can I know with any degree of certainty, when my senses so often mislead me?"



Rene Descartes
1596-1650

- Descartes asked this question at the beginning of the Scientific Revolution when old "certainties" were revealed to be based on false assumptions.
- Answering it requires clarifying the nature and limitations of knowledge.
- This is a question in the sub-field of philosophy called epistemology or theory of knowledge.

What should I do?

"How should I live my life? In pursuit of power and money or in pursuit of wisdom?"



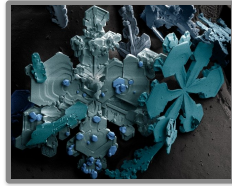
Socrates
470-399 BCE

- This is not a question about how we do in fact live but of how we *should* live.
- Such *normative* questions challenge us to give an account of ourselves, our values and our assumptions.
- Socrates' question is a question in the sub-field of philosophy called value theory or axiology.

More metaphysical questions...

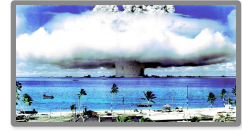
- What sorts of things exist -- only matter, or minds/souls/disembodied spirits as well?
- What is the relationship between minds and brains, and can we build an artificial brain that actually has a mind?
- How does order arise in the universe and what is the role of chance in the way things are?
- Are purposes built-in to things or imposed on them by us?

More epistemological questions...



- How can we distinguish between appearances and reality?
- What counts as evidence, proof, or disproof and how does logical reasoning work?
- What is science and how do we distinguish it from pretenders to science?
- What is truth and is it singular or plural?

More value theory questions...



- Is it ever wrong to pursue knowledge and is it sometimes just best *not* to know?
- Is science value neutral, with moral questions only relevant to the application of scientific findings?
- Is scientific knowledge public or private, and who should profit from new discoveries?
- What role should scientific findings play in social policy?

The philosopher's toolkit



Since philosophy asks us to examine all of our assumptions, there can be no fixed method for doing philosophy - historically speaking there have been many different approaches.

Over time, however, certain useful principles have been developed.

- Explicitly state our assumptions – this can be a challenge since they *are* assumptions after all.
- Draw out their logical implications – do these assumptions fit well with each other and do they clash with other ideas we have?
- Make lots of distinctions. (Philosophers have a bad reputation for "splitting hairs," but we think it is important to be precise in our use of language.)