# 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

- 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 heliefs
- $\circ~$  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.

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?

How can we even tell?

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

What is the difference between philosophical and scientific skepticism?

1

#### 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.
- o 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
- o Resist theory: let the the big picture emerge on its own.

### The role of philosophy

Philosophical questions

#### What is reality like?

o Metaphysics or Ontology

7

What can I know?

Epistemology or Theory of Knowledge

What should I do?

o 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 Descart

- 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

- 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.

- $\circ\,$  Explicitly state our assumptions this can be a challenge since they are assumptions after all.
- $\circ\,$  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.)