V71LAR: Locke, Appearance and Reality

TOPIC 3: PRIMARY AND SECONDARY QUALITIES
Recap

What is it that all instances of knowledge have in common that makes them knowledge? (Justified true belief?)

How do we know mathematical truths?

Can pure reason provide us with knowledge?

How do we know moral truths?

Is knowledge possible? (The Sceptical Question)

Is there any innate knowledge?

How, if at all, does memory provide us with knowledge?

What makes a belief justified (i.e. reasonable to believe)?
Recap

Does time flow? What is change?

What is causation? What is free will?

Is everything that exists physical? Mental?

Is the world determined?

What are minds?

How are minds related to bodies?

Do souls exist?

Do numbers exist?

Are there moral properties?

What is truth?

What is the difference between a particular object (such as *my cat*) and its properties (such as *grey, fluffy*)?

What is the differences between primary properties (such as *shape*) and secondary properties (such as *red*)?

What is a person?
A puzzle

A related puzzle: No one ever asks “If a tree falls in the forest and there’s no one around, is it still solid/straight/cylindrical?”

Assumption here: there is some distinction between properties such as shape/solidity and properties such as sound/colour. But what?
1. Naïve and Scientific Realism

- Which of the properties (or ‘qualities’) that we perceive material objects as having do they possess when unperceived?

- Some properties of material objects: Shape, size, motion, colour, sound, smell, taste.

- **Naive realism**: Objects possess, when unperceived, all of the properties we perceive them as having.

- **Scientific realism**: Objects possess, when unperceived, only some of the properties we perceive them as having, namely those that feature in a scientific description of the object.
  - I.e. they have shape, size, motion.
  - But they do not possess colours-as-perceived, sounds-as-perceived, smells-as-perceived, tastes-as-perceived.
1. Naïve and Scientific Realism, ctd.

- Scientific realists therefore need to make a distinction between two types of property. This is typically done in terms of the primary/secondary distinction:
  - Typical primary properties (or qualities) **Shape, size, motion.**
  - Typical secondary properties (or qualities) **colours, sounds, tastes, smells.**

- **The Mechanical Philosophy:** All the fundamental explanations of what exists (and what we observe) are in terms of movements and interactions of corpuscles: tiny particles that possess only geometric and mechanical properties.
  - E.g. Galileo, Descartes, Boyle, Newton (see handout for references).
  - E.g. Locke (see handout for references).
Clear?
2. Motivating the distinction

- Colours-as-we-perceive them are surface properties of objects. But nothing resembling our perceptions exists in the scientific description of objects.

- Same applies for tastes, sounds, smells.

- **Problem**: does this mean that post-boxes aren’t *really* red, that grass is not *really* green?
Clear?
3. Locke’s account of secondary qualities

- Secondary qualities: “…in truth are nothing in the objects but powers to produce sensations in us by their primary qualities, i.e. by the bulk, figure, texture and motion of their insensible parts.” II.viii.10

  - A dispositional property of an object is a property of being disposed to undergo some change (or produce some change in something else) in some set of conditions. E.g. Fragility.
    - I.e. “If such-and-such conditions were to obtain, then such-and-such would occur”

  - A categorical property is one that can be understood without reference to some disposition to behave in a certain way in certain conditions. E.g. Shape.

- For Locke, secondary qualities are dispositional properties
  - E.g. X is red = X possesses the power (disposition) in virtue of the primary qualities of its microphysical parts, to produce in normal observers in normal conditions the idea or sensation of red.
  - See Lowe pp.50-1.

- In this sense, post-boxes are red, insofar as they have this power (or disposition).
4. Locke’s account of primary qualities

- Primary qualities are the *grounds* of secondary qualities – II.viii.10.
  
  - “the ideas of primary qualities of bodies, are *resemblances* of them, and their patterns really do exist in the bodies themselves” II.viii.15
  
  - By comparison: “There is *nothing like* our ideas [of secondary qualities] existing in the bodies themselves” II.viii.15
5. Summary of Locke’s view of primary and secondary qualities

Material Objects in the world

Size, shape, motion.

= PRIMARY QUALITIES

Hence also:

(i) Powers to produce ideas that resemble categorical properties of object

(ii) Powers to produce ideas that do not resemble categorical properties of object

= SECONDARY QUALITIES

(iii) Power to produce changes in other objects

= TERTIARY QUALITIES

Idea in the mind
5. Summary of Locke’s view of primary and secondary qualities, ctd.

<table>
<thead>
<tr>
<th>Categorical grounds of disposition</th>
<th>Disposition thus grounded</th>
<th>Sensation produced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shape, size, bulk etc. of microphysical parts</td>
<td>Dispositions (power) to produce ideas of shape, size, bulk etc.</td>
<td>Idea of shape, size, bulk etc. (does resemble ground of the disposition)</td>
</tr>
<tr>
<td>Shape, size, bulk etc. of microphysical parts</td>
<td>Disposition (power) to produce ideas of colour, taste, sound etc</td>
<td>Idea of colour, taste, sound etc. (doesn’t resemble ground of the disposition)</td>
</tr>
<tr>
<td>= SECONDARY QUALITIES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shape, size, bulk etc. of microphysical parts</td>
<td>Disposition (power) to produce changes in inanimate objects (e.g. melting wax)</td>
<td>None</td>
</tr>
<tr>
<td>= TERTIARY QUALITIES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Clear?
6. So are post-boxes red?

- Colours-as-we-perceive-them *are never* properties of objects. In this sense, post-boxes are not red (or any other colour).

- Colours-as-powers-to-produce-colour-perceptions *are* properties of objects. Objects even possess these powers when unperceived. In this sense, post-boxes are red (even when unperceived).

- NB. As Lowe (pp.52-3) points out, Locke is far from consistent in tracing the consequences of his own views!

- One consequence of this view: An **error theory** about colours-as-we-perceive them. We perceive objects as having colours, but they never do. All our colour perceptions are illusions! (They are inaccurate representations).

- Locke appears to adopt this view: “What I have said concerning colours and smells, may be understood also of tastes and sounds and other the like sensible qualities; which, whatever reality we, by mistake, attribute to them...”. II.viii.14

- **Problem with this view:** Are claims like ‘Post-boxes are red’ systematically ambiguous?
The puzzle resolved

- “Does the tree make a sound?”
- ‘Sound’ is ambiguous between:
  - (a) Auditory experience (something in the mind).
  - (b) That which causes an auditory experience (something in the world).
- The power involved in (b) is a secondary quality (roughly: the power to cause auditory experience). This is a real property that the falling tree possesses.
- But there is there is no resemblance between the properties that ground the power, and the auditory experience. I.e. There is nothing in the tree that resembles our auditory experience.
Key points for this lecture

- For Locke the distinction between primary/secondary qualities is as follows:
  - Primary qualities categorical (non-dispositional) properties.
  - Secondary qualities are powers to produce sensations that don’t resemble any categorical properties of the object.

- If ‘red’ means ‘power to produce red-sensations’ then some objects are red.

- If ‘red’ means ‘property in objects that resembles our red-sensations’ then no object is ever red (or coloured in any way).
Clear?
Reading

Compulsory reading for third seminar


- For additional reading, see module guide.
Questions?

- neil.sinclair@nottingham.ac.uk
- Tel: 0115 95 13428
- **Office hours:** Thursdays and Fridays 12-1 (room C8a, top floor, Trent building).
- Use the WebCT Discussion Board!