§1. Locke’s thesis

Two groups of properties…

Group 1: ‘Solidity, Extension, Figure, Motion, or Rest, and Number’ (2.8.9 N 135). Also ‘Bulk... Texture’ (2.8.10, N 135).


Two kinds of property…

T1 ‘Qualities… such as are utterly inseparable from the Body, in what estate soever it be… and such as Sense constantly finds in every particle of Matter, which has bulk enough to be perceived… These I call original or primary Qualities of Body…’ (2.8.9, N 134)

T2 ‘Such Qualities, which in truth are nothing in the objects themselves, but Powers to produce various Sensations in us by their primary Qualities… These I call secondary Qualities.’ (2.8.10, N 135)

T3 ‘From whence I think it is ease to draw this Observation, That the Ideas of primary Qualities of Bodies, are Resemblances of them, and their Patterns do really exist in the Bodies themselves… but the Ideas, produced in us by these Secondary Qualities, have no resemblance of them at all. There is nothing like our Ideas, existing in the Bodies themselves.’ (2.8.15, N 137)

Three ways of drawing the distinction…

1. Unlike PQs, SQs are nothing but powers that bodies have to produce sensations in us.

2. Unlike SQs, PQs are inseparable from the bodies that possess them.

3. Whereas our ideas of the PQs of bodies resemble those PQs, our ideas of the SQs of bodies do not resemble those SQs.

Locke’s thesis…

Whereas properties in Group 1 – e.g. solidity, extension, figure, motion – are primary qualities, properties in Group 2 – e.g. colour, taste, smell – are secondary qualities.
‘...heat, colour, sound, odour... are commonly imagined to proceed from certain... peculiar qualities in the external object which have some resemblance to the ideas their action upon the senses excites in the mind: though indeed all these sensible qualities... are but the effects... of the... primary affections of matter.’ (Robert Boyle, *Origin of Forms and Qualities*)

‘... when we say we perceive colours in objects, this is really just the same as saying that we perceive something in the objects whose nature we do not know, but which produces in us a certain very clear and vivid sensation which we call sensation of colour.’ (René Descartes, *Principles of Philosophy*)

The scientific argument...

To explain our experience of Group 2 properties, we do not need to ascribe to bodies properties resembling our experience of Group 2 properties.

We should not ascribe to bodies properties resembling our experience of Group 2 properties.

§2. Two Common Mistakes

'Some there are who make a distinction betwixt primary and secondary qualities: by the former, they mean extension, figure, motion... by the latter they denote... colours, sounds, tastes... (Berkeley, *Principles of Human Knowledge*, §9)

For Berkeley, PQs *just means* properties in Group 1, and SQs *just means* properties in Group 2.

<table>
<thead>
<tr>
<th></th>
<th>Locke</th>
<th>Berkeley</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group 2 properties are SQs.</td>
<td>Substantive and true</td>
<td>Definition of SQ.</td>
</tr>
<tr>
<td>Group 1 properties are PQs.</td>
<td>Substantive and true</td>
<td>Definition of PQ</td>
</tr>
<tr>
<td>PQs are inseparable from the bodies that possess them.</td>
<td>Definition of PQ</td>
<td>Substantive and true</td>
</tr>
<tr>
<td>SQs are separable from the bodies that possess them.</td>
<td>Definition of SQ</td>
<td>Substantive and false</td>
</tr>
</tbody>
</table>

The notorious comma...

'[Colours, tastes, smells] are in truth nothing in the Objects themselves, but Powers to produce various sensations in us...’ (2.8.14, N137).
Interpretation 1...

Locke is saying that Group 2 properties are nothing in the objects themselves and also that they are powers to produce various sensations in us.

T8  ‘The particular Bulk, Number, Figure, and Motion of the parts of Fire, or Snow, are really in them, whether any ones [sic] Senses perceive them or no: and therefore they may be called real Qualities, because they really exist in those Bodies. But Light, Heat, Whiteness, or Coldness, are no more really in them, than Sickness or Pain in Manna.’ (2.8.17, N 137-138)

Interpretation 2...

Locke is saying that Group 2 properties are nothing in the objects themselves apart from powers to produce various sensations in us.

Eliminativism about Group 2 properties...

Group 2 properties aren’t properties of objects, but rather properties of experiences.

T9  ‘…sounds, colours, heat and cold… according to modern philosophy, are not qualities in objects, but perceptions in the mind.’ (David Hume, Treatise of Human Nature, p.469)

§3. Berkeley's Objections

T10  ‘…it is said that heat and cold are affections only of the mind, and not at all patterns of real beings, existing in the corporeal substances which excite them, for that the same body which appears cold to one hand, seems warm to the other… Now why may we not as well argue that figure and extension are not patterns or resemblances of qualities existing in matter, because to the same eye at different stations, or eyes of a different texture at the same station, they appear various…?’ (Berkeley, Principles of Human Knowledge, §14)

The Argument from Perceptual Relativity

P1  If it is possible for the same object to appear/look/feel both F and not-F, F is a SQ.
P2  It is possible for the same water to feel both warm and not warm.
C  Warmth is a SQ.
P1  If it is possible for the same object to appear/look/feel both F and not-F, F is a SQ.
P2  It is possible for the same tower to look both square and not square.
C  Square-ness is a SQ.
T11 ‘Ideas being thus distinguished and understood, we may be able to give an
Account, how the same Water, at the same time, may produce the Idea of Cold
by one Hand, and of Heat by the other… Whereas it is impossible, that the
same Water, if those Ideas were really in it, should at the same time be both
Hot and Cold…” (E 2.8.21, N 139)

P1 If it is possible for the same object to be both F and not-F, F is a SQ.
P2 It is possible for the same water to be both warm and not warm.
C Warmth is a SQ.

T12 ‘…if it be certain, that [extension, figure, motion] are inseparably united with
the other sensible qualities [i.e. colour, taste], and not, even in thought, capable
of being abstracted from them, it plainly follows that they exist only in the
mind… For my own part, I see evidently that it is not in my power to frame an
idea of a body extended and moved, but I must withal give it some colour or
sensible quality which is acknowledged to exist only in the mind.’ (Berkeley,
Principles of Human Knowledge)

The Separability Argument

According to Locke…

P1 If a given type of property is separable from body, this type of property is a SQ.
P2 Colour is separable from body.
C1 Colour is a SQ.

Berkeley adds…

P3 Colour is inseparable from shape.
C2 Shape is separable from body.
C3 Shape is a SQ.

T13 ‘Let us consider the red and white colours in Porphyre: Hinder light but from
striking on it, and its Colours Vanish; it no longer produces any such Ideas in
us… Upon the return of Light, it produces these appearances on us again. Can
any one think any real alterations are made in the Porphyre, by the presence or
absence of Light… when ’tis plain it has no colour in the dark?’ (2.8.19, N139)

§4. Subjectivism and dispositionalism

Group 2 properties are causes of experiences with particular properties.

Group 2 properties are dispositions to cause experiences with particular properties.
Which properties?

An object is red if and only if it causes/is disposed to cause an experience of a red object.

An object is really red if and only if it causes/is disposed to cause an experience of a phenomenally red object.

An object is red if and only if it would cause experiences with a particular property if certain conditions were satisfied…

Which conditions?

References