General Philosophy

Dr Peter Millican, Hertford College

Lecture 6: Perception and the Primary/ Secondary Quality distinction

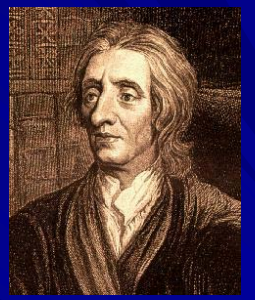
The Mechanisms of Perception

- The “mechanical philosophy” of Descartes and others had to explain perception in terms of particles (or waves) affected by the objects and in turn impacting on our sense organs.
- Most discussion focused on *sight* and *touch*, the two senses that seem to come closest to presenting external objects as a whole.
- Locke’s account was particularly influential, emphasising the primary/secondary distinction which had been implicit in Descartes.

What are Objects Like?

- Mechanical explanations of perception imply that our impressions of objects are conveyed by mechanisms whose stages (e.g. impact of particles on our sense organs) bear no resemblance to the objects themselves.
- The mechanical paradigm also suggests that objects' fundamental properties will be those involved in mechanical interaction – i.e. geometrical and dynamic properties.

Locke and Corpuscularianism



- Locke takes Boyle's "corpuscularian hypothesis" (IV iii 16) as plausible:
  - Properties of substances arise from their particular micro-structure: composed of "corpuscles" of "universal matter" (Boyle) or "pure substance in general" (Locke).
  - Underlying substance has *primary qualities*: shape, size, movement etc., texture, and "impenetrability" (Boyle) or "solidity" (Locke).
  - *Secondary qualities* (e.g. colour, smell, taste) are *powers* to cause ideas in us.

Pains, Colours, and Shapes

- Suppose a circular hotplate on an oven is glowing red hot. I bring my hand close to it and feel warmth, then pain …
  - The sensations of felt warmth and pain are clearly “in the mind”.
  - The circular shape of the hotplate is, we are inclined to say, “really in the object”.
  - So is the red colour of the hotplate “in the mind” or “in the object”?

A Problematic Text

- Locke's *Essay,* II viii 10:

  "Such *Qualities*, which in truth are nothing in the Objects themselves, but Powers to produce various Sensations in us by their *primary Qualities*, *i.e.* by the Bulk, Figure, Texture, and Motion of their insensible parts, as Colours, Sounds, Tasts, *etc.* These I call *secondary Qualities*.

- The comma before "but" is unfortunate. Locke means "nothing … but powers".

In Objects, or Just In the Mind?

- Locke sees *both* PQs and SQs as genuine properties of objects, but the SQs are nothing but *powers due to their PQs*.
- Berkeley read Locke as saying that SQs are only "in the mind" and *not* really properties of objects.
- But Locke is clear that our simple perceptions of objects' colour etc. are "adequate": they *faithfully* represent their "archetypes" (II xxxi 1, 12):

  "*Simple* Ideas … are … certainly *adequate*. Because being intended to express nothing but the power in Things to produce in the Mind such a Sensation …"

Why Resemblance?

- Hence Locke's emphasis on *resemblance*, rather than *real existence in objects*, as the key distinction between PQs and SQs:

  "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." (*Essay* II viii 15)

Can an Idea Resemble an Object?

- Berkeley (*Principles* I 8) is emphatic that:

  "an idea can be like nothing but an idea; a colour or figure can be like nothing but another colour or figure."

- His attack on Locke's resemblance thesis seems to be based on the principle that ideas are *intrinsically* "perceivable".
- This is very plausible for SQs – nothing can be like a *sensed* smell, or colour, unless it is *mental* (as with a *felt* pain).

Structural Resemblance?

- But ideas of PQs seem to lack this intimate connexion with mentality – they are more *abstract* and *structural*, as illustrated by their use in geometrical mechanics.
- We can use these "mathematical" properties to calculate predictions about objects' behaviour, and find that these "work".
- So it's plausible that ideas of PQs *can* resemble non-mental reality in a *structural* way (cf. Lowe on Locke, pp. 57, 63-4).

Solidity

- However *solidity* seems to be an odd man out – our idea of solidity seems clearly to be the idea of a *power* (or rather, perhaps, the unknown *ground* of a power), and without any resemblance to a property of objects.
- Solidity is a power – or a *disposition* – to exclude other bodies. But what *is* a body?
- Body is distinguished from empty space by its solidity, so the whole thing is circular!

Hume's Criticism (*Treatise* I iv 4)

"Two non-entities cannot exclude each other from their places … Now I ask, what idea do we form of these bodies or objects, to which we suppose solidity to belong? To say, that we conceive them merely as solid, is to run on *in infinitum*. … Extension must necessarily be consider'd either as colour'd, which is a false idea [because it's a SQ, supposed not to be "in" objects]; or as solid, which brings us back to the first question. … [Hence] after the exclusion of colours (etc.) from the rank of external existences, there remains nothing, which can afford us a just and consistent idea of body."

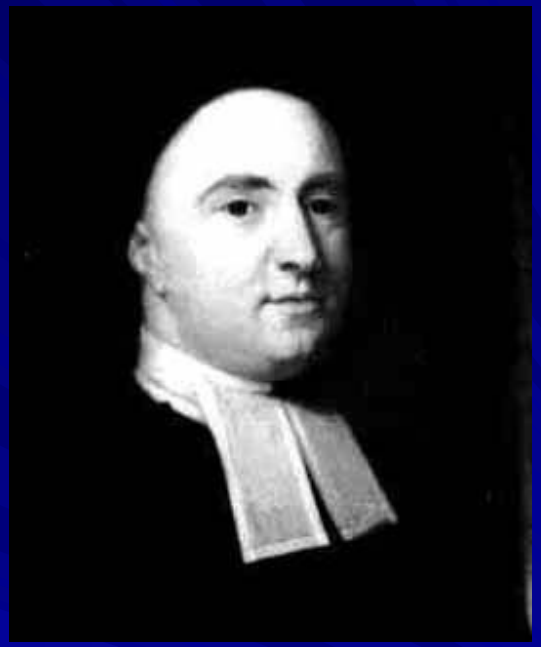
Empiricism and Understanding

- The attack on resemblance thus leads naturally to an attack based on our lack of understanding of the qualities concerned.
- If all our ideas are derived from experience (as Locke had insisted), then our ideas of PQs (e.g. shape) will naturally be infused with those of the SQs by which we perceive them (e.g. a colour that fills the space).
- And if these SQs cannot be understood as existing outside a mind …

The Attack on Abstraction

- So Berkeley and Hume attack Locke on the grounds that we can't form a coherent idea of matter without using ideas of SQs.
- They see Locke as illegitimately trying to "abstract" a purely PQ idea of body away from our actual idea which is inextricably bound up with perceptual notions.
- Hence their focus on abstraction (see the Introduction to Berkeley's *Principles*).

The Case for Idealism

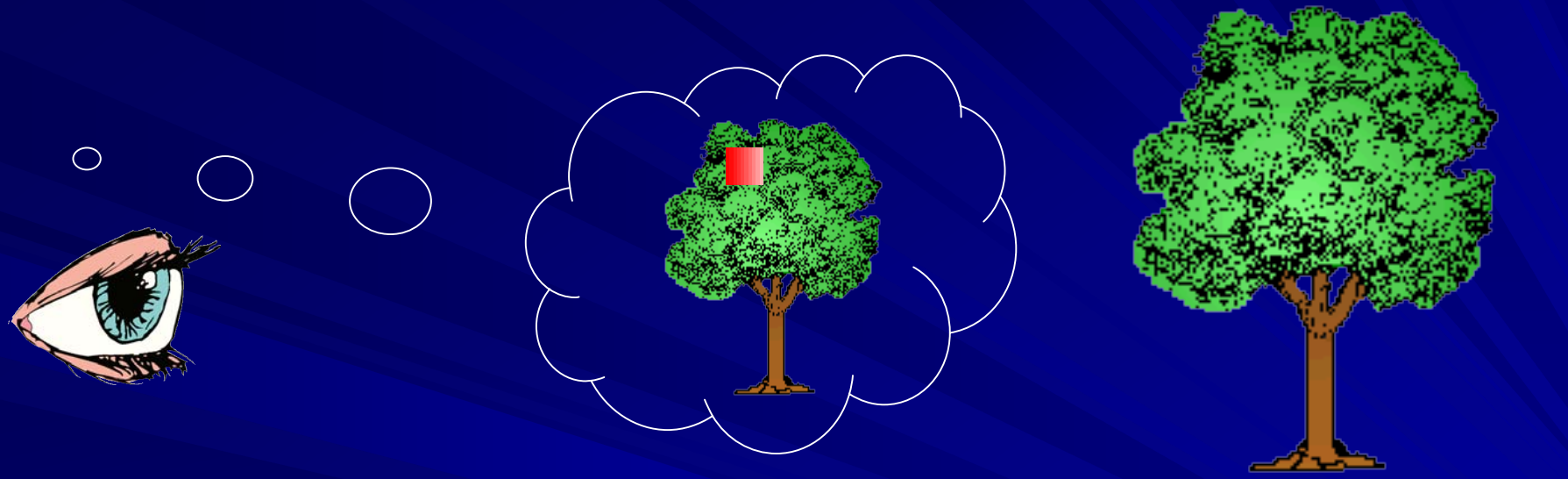


- Berkeley concludes from this argument that bodies independent of mind are literally inconceivable.
- If this works, it seems to show that the only way we can make sense of the world is as fundamentally consisting of *mental* entities (i.e. “spirits” and “ideas”.

“Something I Know Not What”

- To defend realism we should accept that our idea of body is “inadequate” – we can’t conceive of what it is that fills space except in terms of “what it does” (cf. *Essay* II xxiii 2).
- More modern concepts such as *mass* and *electric charge* make this clearer: we are under no illusion that the basic properties employed in our scientific theories have to be directly perceivable, or understandable in non-dispositional terms.

Locke's Indirect Realism



Idea in the mind
(directly perceived)

Material object
(cause of the idea)

- The "Veil of perception" problem: how can we know whether there *is* a real material object?

An Unacceptable Interpretation

- Indirect realism is sometimes parodied as the view that in order to perceive a tree, I must perceive an image-of-a-tree (as though some sort of “homunculus” is sitting in my head viewing a little projector screen).
- However this clearly doesn’t *explain* perception, because it presupposes that the image-of-a-tree is itself perceived. If it can be “directly” perceived, why can’t the tree?

Sense Data

- Twentieth-century philosophers such as Ayer prefer the term “sense-data” to Locke’s “idea”, but this rather lends itself to the unacceptable interpretation.
- It’s better to say that awareness of a “sense-datum” *counts as* perception of an external object if it was caused appropriately by such an object.
- But how can I know that it was so caused? Again we face the “veil of perception”.

How To Prove the Causal Link?

"It is a question of fact, whether the perceptions of the senses be produced by external objects, resembling them: How shall this question be determined? By experience surely … But here experience is, and must be entirely silent. The mind has never any thing present to it but the perceptions, and cannot possibly reach any experience of their connexion with objects. The supposition of such a connexion is, therefore, without any foundation in reasoning."

(Hume, *Enquiry* 12.12)

Phenomenalism

- Phenomenalism is the view that physical objects are *logical constructions* out of sense-data. So statements about such objects are interpreted as stating *what would be perceived* in certain circumstances.
  - This aims to evade the Berkeleian argument that one cannot make sense of physical objects in abstraction from perceptions;
  - It also aims to answer the Humean argument of the veil of perception.

Direct Realism

- Rather than resort to phenomenalism, a more popular recent view (since J. L. Austin and P. F. Strawson) has been to insist that we perceive objects *directly*.
  - This seems right, in so far as it is intended to counter the Unacceptable Interpretation.
  - However it doesn't solve the sceptical problems, and can seem merely verbal: it is accepted that our perception is *mediated physically* (by light rays etc.); the point is just that *we do perceive objects (and see them as objects)* by that means.

Is a Lockean View Defensible?

- A live Lockean option is to see an "idea" as an *intentional object* – *the object as it appears* (cf. Mackie on Locke, pp. 47-51).
- This is purely mental, not any sort of image on a screen (or a retina). Indeed it is not really any sort of *object* at all. Nor is it an attempt to *explain* perception. The point is to insist that our visual experience (though only *describable* in terms of apparent objects) is in principle distinguishable from the *existence* of those objects. In that sense it is still a "representative" theory of perception.

Explanatory Realism

- Then Lockean "indirect" realism can be defended as *scientifically explanatory* (in line with its original motivation).
  - How things appear to us is explicable in terms of mechanisms involving external objects, physical intermediaries etc.
  - These explanations appeal to objects' "real" qualities (which need not *resemble* our ideas) …
  - … and explain illusions, *both* of SQs and PQs (to answer Berkeley's argument from illusion).