<u>Week Two: Locke on Qualities and Perception</u>

1. <u>Recap</u>

Last week we laid out various contrasts between **modern** and **pre-modern** world views. For the pre-moderns the world is, broadly speaking, Aristotelian – the world is full of objects with real qualities. These objects have goals they are trying to meet.

This view starts to look untenable given the successful **reductive**, **mechanical** explanations of natural phenomena given by the new scientific method.

The modern philosophers are in the business of constructing a new philosophical foundation for these scientific discoveries. **Rationalists** stress the mathematical/geometrical elements of the new sciences. The **empiricists** we are interested in are moved by the observational elements. We saw this conflict play out in the case of **innate knowledge**.

2. <u>Primary and Secondary Qualities</u>

Qualities: features that objects possess (we would call these **properties**).

In the new corpuscularian physics objects are characterised in terms of **quantifiable** features (e.g. shape, size, motion). But when we look around the world we seem to see objects with qualities that aren't so easily measured – smell, taste, colour, texture.

How do we get from the austere metaphysics of the new science to the rich world of human perception?

Locke, like many other natural philosophers of the time wants to distinguish between two types of property: **primary** and **secondary**.

Lots of ways of making the distinction:

(i) **Modal** – primary qualities are those which are essential to an object if it is to be an object at all; secondary qualities are inessential, and in some sense **mental** (Newton, Locke 2.8.9).
(ii) **Intrinsic/relational** – primary qualities are intrinsic to an object (shared by duplicates); secondary qualities are relational (arise due to relations with observing minds). (Boyle).
(iii) **Materiality** – primary qualities are those an object has in virtue of being material. (Descartes).

All these characterisations are circling around the idea that primary qualities are *objective* and *scientific* whereas secondary qualities are *subjective* in some sense.

Locke's second way of making the distinction (**genuine resemblance**):

> "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)."

Our ideas of primary qualities (e.g. length) really resemble features of physical objects. We represent objects as having lengths because they really do have such lengths. In the case of secondary qualities our ideas of them do not resemble real features of objects.

So Locke has two ways of making the distinction: the **modal**, and **genuine resemblance**.

3. <u>What are the Primary and Secondary Qualities?</u>

Primary: '**Solidity**, **Extension, Figure, Motion, or Rest, and Number**' together with '**Bulk**' and '**Texture**' (2.8.9).

To make this fit with his characterisation of the distinction we need to clarify the **modal** test. They also fit with the **genuine resemblance** test.

Secondary:

> 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, Tastes, etc. These I call *secondary Qualities* (2.8.10).

To understand this fully we need to understand the view Locke is opposing.

According to **naive realism** colours *as we experience them* are real features of objects in the world. Redness, for example, is simply a surface feature of objects.

Locke does not deny that there is redness in the world. It's just very different from our experience of redness. Redness is a power that objects have to *cause us to have red experiences*. This power is one the object has *in virtue of its primary qualities*.

Physical objects have the power to cause us to have red experiences. Our experience does not resemble the feature of the objects that causes that experience. So, unlike our ideas of primary qualities, our idea of redness does not resemble a real feature of objects. It is just triggered by a real feature of objects.

We can formalise this into a **dispositional analysis** of colour:

> x is red = x possesses the power (disposition), by virtue of the primary qualities of its microstructural parts, to produce in us (or, more properly, to produce in a normal human percipient in standard conditions of vision) an idea or sensation of red. (Lowe, 1997).

This view is a sort of **realism** about colours: objects do have colours. It's just not a **naive realism**: colours *as-we-experience-them* are not real features of objects. This **dispositional analysis** has been an influential view in debates about all sorts of properties (colours, smells, moral qualities). (Although consider Mark Johnston's **shy chameleon**).

Dispositional analyses typically suffer from a problem called the **conditional fallacy**: this is where getting into the right conditions to observe the property in question can interfere with the instantiation of that property.

E.g. dispositional analyses of the good and Michael Smith's (1993) **angry squash player**.

4. Locke's Argument for the Distinction

Why not be a **naive realist**? Suppose we embrace the principle that effects resemble their causes. Well a red object causes a red experience in me, so the object itself must have a quality that resembles redness as I experience it.

Locke points out that this causal principle is not always true (e.g. the **sword example**). We can explain where we get our ideas of secondary qualities without having to say they resemble real features of objects.

The fire example: we experience the fire as **warm** and then **painful** as we draw closer to it. The **pain** is an internal feature of an experiencer. So the **warmth** must be too.

The relativity of the senses (2.8.21):

1. If a quality as we perceive it actually resided in an object, then our experience of this quality couldn't vary under different conditions.
2. Our experience of a secondary quality can vary under different conditions.
3. Therefore, secondary qualities as we perceive them cannot reside in objects themselves.

Although note that Berkeley argues that (1) is false and uses that as part of his argument for idealism.

The Lockean distinction between primary and secondary qualities has proved hugely influential: any time we are faced with a phenomenon of our experience that doesn't seem to fit neatly into our scientific world view we can try to make a place for it as a secondary quality (see for example John McDowell on 'Values as Secondary Qualities').

5. Perception for Empiricists

According to an **empiricist** like Locke we get *all substantial knowledge* through sense perception. So it's important for us to understand how sense perception works.

Naïve direct realism: the world itself, and the objects within it, are genuine constituents of my experiences of the world.

Realism: physical objects exist and continue to exist even if no-one is perceiving them (contrasted with **idealism**).

Naïve realism: *all* the properties (primary and secondary) we perceive an object as having are real features of that object.

Direct: P directly perceives an object O if P perceives O without perceiving any intermediary I. (Dancy, 1984, 144).

This is in contrast to indirect perception: think of looking in a mirror or watching a TV show. In those cases you perceive an object by perceiving some intermediary.

The **indirect realist** thinks that perception is a lot like watching a TV show – there is an intermediary representation between you and the world. Think of this as a sort of picture that you have in your mind. When this picture resembles the world you perceive rightly.

The **direct realist** thinks there is no intervening picture: what you experience is the world itself.

Naive direct realism seems to fit nicely with the Aristotelian metaphysical picture – a world enriched with real qualities. **Indirect realism** seems to fit more nicely with the new physics.

6. The Argument from Hallucination

We can also construct an argument for **indirect realism** using hallucinations:

1. All experiences have an object.
2. Hallucinatory experiences do not have objects that are external to the mind.
3. Hallucinatory experiences have objects which are internal to the mind (from 1 and 2).
4. The objects of experience are the same in the case of hallucinatory and veridical experiences.
5. Therefore, the objects of all experiences, whether hallucinatory or veridical, are internal to the mind (from 3 and 4).

The thought is this: you can have a hallucination where things seem exactly as they do when you are perceiving correctly. This experience is exactly like the experience you have when you are seeing things properly. In the hallucination case there really isn't an external object. So external objects can't be parts of your experience generally.

Disjunctivists reject premise 4 (the 'highest common factor' assumption). They argue that a veridical perception and an indistinguishable hallucination are *different types of experience*.

Absent this position, it looks like the argument forces us to abandon **direct realism** and embrace **indirect realism** aka **representationalism.**

7. The Representational Theory of Perception

Representationalism is still a form of **realism** (objects **exist** and are **independent** of perceivers). It's just that we experience these real objects indirectly. Representationalists make three claims:

1. The mind does not directly perceive objects.
2. Objects cause ideas in the mind.
3. What the mind directly perceives are representations of objects (ideas).

A representation is something like a picture in your mind that you use to navigate the world. You can do this because the picture **resembles** the world in the relevant respects. As Lowe puts it:

> On this view, we literally see our visual ideas, and see them to possess various visible properties of colour and shape. Moreover, these visible properties (or some of them, anyway) *resemble*, to a greater or lesser degree, the visible properties of the 'external' objects which we see by the aid of the ideas they produce in us, enabling these ideas to represent the objects in much the same way as patches of paint on canvas represent the objects depicted by the artist. On this interpretation, then, Locke is committed to a fully fledged version of the so-called 'representative theory of perception', or 'indirect realism' (p. 38).

So we don't directly perceive objects. What do we directly perceive? Ideas. What are these things? One modern construal is **sense data**.

8. Problems with Representationalism

Regress: according to the indirect realist you don't perceive objects directly. Instead you perceive mental images directly. How does perceive a mental image work? We have to avoid positing a **homunculus**.

Veil of Perception: indirect realism puts an intermediary mental image in between us and the world. This raises two questions – how do we know what the external world is really like (Descartes); and why posit external objects at all (Berkeley)?

Interaction: given our ideas are not the same sorts of things, how do they causally interact? In addition, how do they resemble each other?

9. Was Locke a Representationalist?

Now we have an idea of how **representationalist indirect realism** works, and its possible pitfalls, we can ask ourselves whether Locke was a representationalist. Representationalism certainly looks like it fits neatly into his project of giving a new philosophical foundation for the modern worldview. But what other evidence do we have?

The painting analogy (2.9.8): Locke notes that when you perceive a globe what you perceive is a certain shape with a certain amount of shading. Because of your prior experience of globes you judge that you are seeing a 3-d shape. This inference is easy and natural for you. So much so that you can sometimes be fooled by optical illusions.

He analogises this process of forming a visual judgement on the basis of what you see to interpreting a painting. If we take this analogy seriously it looks like he is saying we reach perceptual judgements by interpreting mental images.

The discovery of retinal images: a much discussed discovery of Locke's time was that an eye's lens projects an upside down image on to the back of the retina. How they do we see things the right way up? One answer would be to cite mental images.

Locke's language: "'Tis evident, the Mind knows not Things immediately, but only by the intervention of the *Ideas* it has of them" (4.4.3)
"Whatsoever the mind perceives in itself, or is the immediate object of perception, thought, or understanding, that I will call idea (2.8.8)."
"Ideas of primary qualities of bodies are resemblances of them (2.8.15)."
"Diagrams drawn on paper are copies of the ideas in the mind (4.3.19)."
"Ideas of substances are copies and we think of them as 'pictures and representations in the mind of things that do exist' (2.21.6)."

However,

Principle of charity: Anthony D. Woozley (1960, 27):
"It would be hard to understand why anybody should want to rate Locke as an important philosopher if his whole theory rests on errors so elementary that a first-year student in philosophy has no difficulty in spotting them".

But, this illustrates how tricky it can be applying the principle of charity to historical figures: sometimes mistakes are only obvious in retrospect.

Locke's reply to Malebranche:

> How can I know that the picture is anything like that thing, when I never see that which it represents? … thus the idea of a horse, and the idea of centaur, will, as often they recur in my mind, be unchangeably the same; which is no more than this, the same idea will always be the same idea; but whether the one, or the other, be the true representation of any thing that exists, that, upon his principles, neither our author, or anybody else can know (Examination of Malebranche, Section 51).

But, arguably Locke didn't think this problem applied to his *causal* version of representationalism.

Lack of textual support: Locke nowhere says, for example, that seeing a cat is identical with being caused by a cat to have a picture of it in your mind.

Although we should balance this fact against the suggestive turns of phrase recorded above. Overall it looks like we can make a good case that Locke was an indirect realist.

The influence of Locke's indirect realism has been huge: he is grappling with a significant problem we still haven't fully solved. How do we reconcile our scientific understanding of the world with our everyday, manifest, experience of it? How do we make sense of the reasonableness of our beliefs answering to the external world? These are significant questions that Berkeley, Hume and Kant will be interested in.