

# Locke UNLOCKED

A Look at John Locke's *An Essay Concerning Human Understanding*

MOLYNEUX'S  
PROBLEM



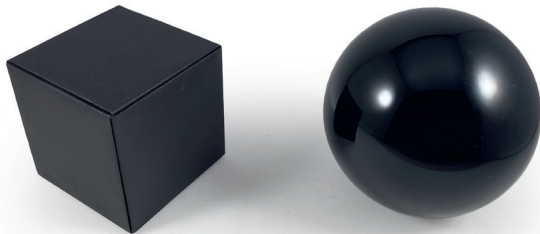
## Modelling The Idea A Cube / A Sphere

### The Philosophical Idea

**“Suppose a man born blind, and now adult, and taught by his touch to distinguish between a cube and a sphere... Suppose then the cube and sphere placed on a table, and the blind man to be made to see: quare, whether by his sight, before he touched them, he could now distinguish and tell which is the globe, which the cube?”**

Bk II, Ch IX, 8

Photo: Cliff Landesman



After the first appearance of *An Essay Concerning Human Understanding*, William Molyneux, an Irish scientist and politician, wrote Locke a letter. In the letter, Molyneux proposed an ingenious thought experiment. Suppose a person born blind is able to use his sense of touch to distinguish a cube and a sphere. A cube and a sphere are placed on a table beyond his reach. The person's sight is then suddenly restored. Would the person be able to say which object was the cube and which the sphere? Locke was so taken with this question that he wrote about Molyneux's letter and directly quoted from it in the second edition of the *Essay*.

Soon after, philosophers started debating Molyneux's problem. Gottfried Leibniz, a contemporary of Locke's, argued that (given certain assumptions) the blind person would be able to identify each object. After all, a cube has edges, while a sphere is uniform. A newly sighted person would be able to see edges and uniformity, allowing a thoughtful person to say which object was the cube and which the sphere. Locke and Molyneux were not convinced. Molyneux's question remains alive today, over 300 years later, even though scientific research has greatly improved our understanding of the development of human sensory systems. The problem has been called, "one the most fruitful thought-experiments ever proposed in the history of philosophy".

## Explore the idea



Listen to the podcast

<https://visit.bodleian.ox.ac.uk/event/locke-unlocked#collapse3386551>



Try a sensory experiment. Organise the students into small groups. Each group has a bag with the same four objects in (try to select less obvious objects which have different textures). Give the students a set time to feel the objects inside the bag without looking and write down words to describe the objects.

The aim of the activity is for the students to rely on other senses to describe the objects.

When the time is up, tell the students to look away. Take the objects out of the bags and set them out so students can look at them without touching.

**Can the students match their descriptions to the objects and identify by sight alone what items they have touched?**

Repeat the experiment using sets of objects that vary along just one dimension but each set varies along a different dimension. For example, use all round coins but of different sizes. Or use metal rods of the same size (length and thickness), but bent into different shapes or not bent at all. **Are these objects easier or harder to identify?**



Look at the resource 'How our senses work together'

<https://explore.org/question-detail/do-we-all-see-colour-in-the-same-way#1768>



## Discuss these questions:

- 1 Can you relate Charles Spence's modern research with Molyneux's Problem? Do we learn to integrate input from different senses from experience or is there an innate connection?
- 2 Thinking about the sensory experiment, were any descriptive words more helpful in identifying the objects? Would a person born blind, but made to see, have an easier time with any of the second set of objects than with a cube and a sphere?

## Take it further



Students design their own sensory experiment – for example do things taste differently when you listen to different music? They test their experiment and write it up for homework. Students report back in the next lesson.

Scientists have found that babies as young as 12 hours old can consistently match the shape of a dummy in their mouth to an image on a screen (Kaye, K.L. and Bower, T.G.R (1994) "Learning and Intermodal Transfer of Information in Newborns". *Psychological Science*, 5 (5), 286-288.)

**Is this finding consistent with Locke's views? How might he have responded?**



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