

The Kelvin Lecture

Vision Impossible!

Professor Colin Blakemore



7.30 p.m.

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Biography

Colin Blakemore, FMedSci HonFRCP HonFSB FRS is Professor of Neuroscience & Philosophy at the School of Advanced Study in London and Emeritus Professor of Neuroscience at Oxford. He studied Medical Sciences at Cambridge, did a PhD at Berkeley and taught in the medical school at Cambridge before moving to Oxford in 1979. From 2003-7 he was Chief Executive of the Medical Research Council. His research has been concerned with vision, plasticity of the brain, and neurodegenerative disease. He broadcasts and writes about science and science policy.

Abstract

We experience the world subjectively like a detailed, seamless, real-time video stream. The conventional goal of both scientists and philosophers is to understand how our continuous, apparently veridical experience of the world is generated from the retinal image. In reality, visual experience is discretely and sparsely informed by data from our eyes. Shifts of gaze, occurring about 3 times each second, deliver data-dumps to the brain, with most of the informational content concerned with the portion of the image falling on the central fovea of the eye. During each snapshot, the brain gathers, encodes and stores only a tiny amount of information, probably corresponding to the content of visual attention. The task of scientists and philosophers is to account for the miraculous transformation of that converts so little into so much. And if conscious awareness is largely invented, why do we need to be conscious of anything?