

The Emergence of Representation and Consciousness: Natural and Artificial

Lecture by

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Abstract

Representation and consciousness have emerged naturally in evolution and may do so (at least partially) in robotics. I argue that **representation emerged** in the service of the selection and guidance of **interaction with the environment**, a problem shared by artificial agents. Consciousness is of two forms: 1) a primary consciousness that emerges as an aspect of interaction selection and guidance, and 2) a reflective **consciousness** that is a much **later evolutionary development**. These representation and consciousness models together dissolve the purportedly **“hard” problems of consciousness**. I begin the talk by addressing some conceptual problems of ancient provenance that have created some of the aporia we find ourselves caught in today with respect to the **nature of intentional phenomena**.