The Emergence of Artificial Culture in Robot Societies

The Research Question

"How can culture emerge and evolve as a novel property in groups of social animals..?"

The project aims to illuminate the *processes* and *mechanisms* of the transition from social to cultural in a radical new way, by building an artificial society of robots: the *Artificial Culture Lab*

The Team

Computer Science
Prof Alistair Sutcliffe, Manchester
RA: Dr Steven Phelps

Social Science
Dr Frances Griffiths, Dr Donna Chung, Warwick
Student: Sajida Bhamjee

Philosophy
Dr Robin Durie, Exeter
Student: Carissa Hoareau

Theoretical Biology
Prof John Crawford, Abertay Dundee
Student: Andy Guest

Art history and cultural theory
Dr Jenny Tennant Jackson, Leeds Met

Robotics
Prof Alan Winfield, Prof Larry Bull, Dr Susan Blackmore, Bristol Robotics Lab, UWE, Bristol
Student: Davide Laneri

This project resulted from the Emergence sandpit: 16-20 October 2006, integrates with 3 other projects and is part of the network **EmergeNET**.

The Robots

e-pucks

The Challenges

1. The project poses huge technical as well as philosophical difficulties, for instance "what are the initial conditions - the pre-requisites for culture?".

2. Once we have these "can we program a group of robots with these pre-requisites, and what environment do the robots need to 'live' in?".

3. Assuming something interesting does happen, "how can we make sense of what we observe, bearing in mind that it will be robot- rather than human-culture?".

4. Then, perhaps the biggest question, if we believe we do see evidence of the emergence of a robot proto-culture "is what we have learned about how that proto-culture has emerged, generalisable from robots to humans (or indeed any social species)?".

**The Method:
Open Science**

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"Will Big Brother be Cultural Watershed for Robots?"