Friday 23rd February 2007

Venue: SMART lab: MAGIC Research Group, University of East London.

Overview of the Emergent Objects D21C Cluster
Professor Mick Wallis

Introductions

Introducing representatives Derek Hales (Huddersfield University), Sophia Lycouris (Nottingham Trent University) and Sita Popat (University of Leeds) from the Emergent Objects research project, Principal Investigator Mick Wallis said he was on a fishing trip and in a gang. They were fishing – thanks to Alec Robertson's invitation - since they had not previously conceived of their project in terms of complexity. Yet it had quickly become apparent that complexity was at the heart of their practice. On the one hand, there was the phenomenology of the human/technology interface - both in its synchronic determinations, and in terms of historical sedimentations and iterations of acculturated bodies sensing, feeling, thinking and acting in a human-crafted environment. And on the other was the pragmatics of dealing with complexity – finding ways at least half-adequately but perhaps ultimately optimally to map and negotiate this complex terrain.

If the three beasts – a snake, a spider-crab and a hoverfly – described below are indeed complex (say in the manner of a locomotive), this is beside the main point and purpose of Emergent Objects. And if all three happen to be somehow to do with aesthetic performance (dance, interactive installations) or communal play (clubbing, playgrounds), this is, again, beside the main point. The main point of Emergent Objects is to use performance knowledge and practice as a tool to increase understanding of the design process in general. And that's a complex matter.

The notes that follow both track our presentations on the day, and borrow from internal and public texts associated with the project:

Research Questions

Emergent Objects: designing the technological interface through performance is a portfolio research project funded by Phase 2 of the EPSRC/AHRC Designing for the 21st Century (D4C21). Led by the University of Leeds, it emerged from the Leeds-led Emergent Objects Cluster funded by Phase 1 of D4C21, which brought together a range of people in and out of HE, including digital media entrepreneurs, urban planners, specialists in participatory arts work with people with severe access needs, video games designers, computer artists, specialists in urban development through cultural policy, choreographers, animateurs in dance club spaces, theatre designers and performance theorists. The work of the Cluster was to brainstorm and scope how performance theory and practice might illuminate design processes.

Emergent Objects develops some of these perspectives through three design projects that foreground specific fundamental concerns pertinent to design process and product in general:
the performative and embodied relationship between designer, design task and design environment;

- the emergent nature of the interface between technological and human agents – conceiving of the designed object as a Deleuzian 'objectile';
- the question, what are desirable relationships between users and designed artefacts, systems or environments?

Methodology

Cross-sector and interdisciplinary, Emergent Objects 2 involves artists, designers, choreographers, performance academics, computer specialists and roboticists from the academy and the professional sphere. The project - funded at £301k and running January-December 2007 - comprises three sub-projects which address notions of emergence and interface in separate but interpenetrative ways; and one meta-level project, which investigates and articulates overarching questions of the performance/design interface by drawing on the three sub-projects. Each sub-project involves a cross-sector, interdisciplinary team. Each concerns the design of a patently technological objectile. But in order to address the whole design process, each is at a separate stage of development.

Snake, developed at Nottingham Trent University, investigates the extent of interactivity and responsivity between a designed object (an interactive sculpture) and a human agent. It is at its final prototype stage, for launch in December 2007.

SpiderCrab, developed at Leeds University with Shadow Robots, is a robotic agent conceived as a cross between architectural environment and dancing partner. Multi-sensory, moody, having redundant movement and equipped with seeming aesthetic choice, it offers ground for experiment into performative merging between robotic and human agents. Work on the first prototype began in January 2007.

Hoverflies, developed at Leeds and Huddersfield Universities, is conceived of as an interactive object which entices performative interaction and play. This project is at the earliest stage of the design process, in its most fluid state of emergence. It might start out as a swing.
In Emergent Objects, the notion of a singular designer is displaced by the notion of a collaborative design process, whereby any participant is an active design agent, partaking in design functions. Even where one person may be ultimately responsible for the design outcome of a particular aspect of a project, the permeability of their own design activity will be an important principle and indeed object of research. Wherever possible and appropriate, active collaboration on the setting and conduct of design tasks is sought. Each interdisciplinary team will track, reflect on and document their design behaviours, both individual and interactive, according to four basic protocols:

- categories and frames of play
- modes of embodiment
- dialectics of creativity and composition
- the smooth and the striated

The invitation is for individuals and teams actively to deploy a simple adaptation of Schön's (1983) categorisation of modes of professional practice: 'reflection-in-action'; 'tacit understanding' and 'post hoc reflection', in a 5-phase cycle. For instance:

(1) post hoc reflection on existing practice	- have I been playing; and how?
(2) conscious framing	- I am consciously using a frame of play to guide or inform my design process
(3) reflection-in-action	- I am aware that I am playing, and how, but my principal focus is the process
(4) tacit understanding	- I am fully immersed in the process; I am playing but am unconscious of this
(5) post hoc reflection on developed practice	- have I been playing; and how? is there a qualitative difference from (1)?

The meta-data, collected by communal blogs and file depositories, will form the basis of the principal findings on performance and the design process.

Project rationale

Notions of design are shifting from a linear product/user-oriented perspective towards a more open-ended and participatory practice. The concept of emergence identifies approaches that acknowledge the complex and shifting context of design practice. Design thinking and performance knowledge intersect particularly where we consider the potential for an expressive and affective interaction between the designed object and the human subject. In this project, we consider the designed object as an 'objectile', where the temporal modulation of the object implies the beginning of a continuous variation of matter and a continuous development of form: the object becomes an event, always in the process of becoming (Deleuze 1993). We are investigating fluid, malleable, emerging or invisible interfaces through focussing on direct kinaesthetic engagement and playful, embodied experiences in different stages of the design process. The aim is to avoid submission to technology, whether through fetish or by disconnection, and to investigate interfaces which are responsive, which facilitate communication and expression and which consider the users as participant-performers. The research seeks to unsettle the dominant binary relationships designer/user, user/product, designer/performer.

Project Objectives

To influence design thinking and practice through exploration and articulation of the emergent and performative nature of the interface between technological object and human.

To investigate how performance knowledge can help us to understand and facilitate emergence in the context of design processes and how performance practice and theory facilitate interdisciplinary communication, knowledge exchange and collaboration in a design context.

To establish how engaging with embodied experience and kinaesthetic understanding can inform the design of invisible interfaces between humans and technological objects, leading to interfaces which are fluid, malleable and emerging and offering expressive and creative engagement between the user and the designed object or system.

To apply practice-based methods used in performance research to three different design contexts at different stages of emergence.

To develop a parallel dialogue between three sub-projects within the frame of a meta-level investigation in order that local knowledge generated in each of the sub-projects can be disseminated to a wider design audience of academics and practitioners.

To use performative events as the principal means of disseminating the research.

	Information, personnel and links: W: http://www.emergentobjects.co.uk/ E: (Mick Wallis) pcumw@leeds.ac.uk