

Roderick Bamford

Crafting the Void: trans dimensionality in digital and analogue craft practice

This paper explores aspects of conception, methodology, and meaning associated with digitally articulated craft. It examines the emergence of an 'abstracted' practice from the void established by the Arts & Crafts movement's dismissal of the 'machine' as a tool of 'non-visceral' predictability, and develops a case for a convergent, trans-dimensional design / craft.

Dialogue centres around two case studies which outline the adaptive use of digital technologies to enable the ideation and crafting of ceramic objects considered impossible to achieve by other means. Analysis of the case studies is followed by discussion of an emergent research trajectory seeking a purely digital ceramics practice, the outcome of which signals a trans-dimensional conceptual framework as the foundation of digitally informed contemporary craft.

The first case study outlines the development of a unique, non destructive process originated in 2002 at Cone Nine Studios in Australia to translate imagery from one three dimensional polychrome glazed porcelain form to another via a combination of Computer Aided Design, 3D printing, photogrammetry, computer mediated pattern generation, slip casting and screen printed water slide decals. Case study two recounts a 'digital bricolage' methodology developed in 2007 to visualise and generate novel ceramic forms from captured sonic data and it's intersection with the 'craft' practices of industrial bone china. Further development and potential of the discoveries are discussed, including the disruption of orthodox making systems, the re-adaption of resulting 'crafted' (hacked) technologies for the ceramics manufacturing industry, and the convergence of craft and design strategies to describe a bespoke, hybridised ceramics practice.

A discussion of questions raised through the projects links commercial and aesthetic concerns with technical, legal and ethical issues associated with devolved technologies and practices, particularly those concerned with the democratisation of ideas, technology and making through 'open source' internet networks. The central discourse emphasises a need for reconsidering the evaluation of meaning arising from an expanded characterisation of 'craft' under such project conditions, in particular a phenomenological evaluation of hand and machine languages. The paper concludes with a discussion of the character of thinking and problem solving associated with digitally mediated craft practice and points of convergence between craft, design and manufacturing, framed by Malcolm McCullough's idea of an 'abstracted' craft practice operating within the computational medium and the working context of image culture.

Suggested themes/workshop

Materials & Processes of Making – from Traditional Approaches to the Crafts of Advanced Technological Manufactures

Craft in an Expanded Field

Workshop 2: Crafting with Digital Technologies

<http://www.rodbamford.com>, <http://www.redobjects.unsw.edu.au/people/roderick-bamford/>