

CASE STUDIES IN THE USE OF DESIGN PRACTICE BY PHD RESEARCHERS



DE^Q A TRIPTYCH OF DESIGNED OBJECTS WHICH EXPLORE THE RELATIONSHIP BETWEEN TEXT AND ARTIFACT, THEORY AND PRACTICE

CREATIVE DISCIPLINE: Industrial design

RESEARCH METHODS:

- Literature review
- Case Study

NUMBER OF DESIGN CASE STUDIES UNDERTAKEN BY THE RESEARCHER: 3

LENGTH OF THESIS: 45000 words

EXAMINATION FORMAT: Thesis

DURATION OF STUDY: 7 years part-time

EXPERIENCE OF DESIGN PRACTICE BEFORE START OF PHD:

- B.Design Industrial Design, University of Technology, Sydney, Australia.
- Masters of Design Research, University of New South Wales, Australia.
- Designer of experimental equipment for PhD research and turn key equipment for sale through Unisearch at the Center for Photovoltaic Devices and Systems (4 years)
- Designer contracts with Stuchberries, Grundies, Channel Nine and other TV/Film Industry companies (5 years)

PERSONAL MOTIVATION FOR UNDERTAKING PRACTICE DURING PHD:

- Desire to creatively explore what design practice research could be
- Having undertaken research that adhered to traditional science/engineering models, wanted to explore alternative approaches
- To use design practice in a discourse on the relationship between theory and practice

AIM OF THE RESEARCH:

To engage in design practice through the parameters of a period of focused study. The significance of the research is in the intellectual battle between intuitive and systemised design thinking. The research implications extend into fundamental belief and worldview positions for the individuals who practice design and for those who theorise about design. The research aims to bridge the gap, to add to the body of enquiry/knowledge that will move the discipline forward, as the artefacts designed by designers address a world of increasing complexity.

RESEARCH QUESTIONS:

- If research is located in design practice, then what relationship might exist between text and artefact, such that they support each other?
- How can artefacts be used in design research?
- To what extent does the role of asking questions impact the design process?

OBJECTIVES:

- To experience the change of thinking, with reference to Dorst's model "moving up the levels of understanding was not a case of more learning but a case of changes in thinking patterns"
- To encounter, embrace and conform to the academic rules and objectives of postgraduate study
- To remain in love with design, design practice and the domain of artefacts



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 Mr Roger Dunstan
EXAMINER(S): Professor Graeme Sullivan
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Subtle (cheeky) detail of Umm and the Logo which framed the research



Views of Umm and Ury, which are 55 cm high and 57 cm long respectively



The role of judgement and the shadow cast were integral to the design of Ury

SUMMARY:

$D=E^Q$ can be thought of as a logo for the research. It is not meant to be directly interpreted as an equation, rather as a thought provoking visual statement "Design = Energy to the power of Q the question asked".

$D=E^Q$ is an artefact. A symbolic representation of the research but how does it communicate? How does any artefact communicate? This research undertakes a process, which aims to reveal the 'silent language' of design through a systemised analysis of the three artefacts designed for the study. Each design had at least the nominal functionality of a source of lighting but they (both individually and as a set) were more. Their real purpose was to reveal the 'logos' of the logo. To facilitate a discourse on the relationship between theory and practice. The artefacts of design practice probed the relationship between text and artefact, and they are examples of artefacts designed *from*, *for* and *of* questions.

This practice-led investigation presents three case studies formulated to address the 'heart of darkness' at the core of the relationship between theory and practice identified in the literature review.

RATIONALE FOR THE INCLUSION OF DESIGN PRACTICE UNDERTAKEN BY THE RESEARCHER:

Design practice is fundamental to the framing of the research. As a result of the literature review, a research plan was formulated which utilized practice in a combination of practice-led and case study methodologies to further the exploration of the relationship between the text and artefact through the imposition of an experimental context to the undertaking of three designs for domestic lighting. The experimental parameters developed as the study progressed were: artefact before text - text before artefact - text and artefact in unison. That the designs were lights was not an arbitrary decision. The intrinsic nature of the function of lighting complements the study and is highly symbolic of the research intent. To illuminate that which cannot be seen, that which was not known. Structurally the light parameter provided the intellectual focus and the constraints required to allow the act of design practice to take place.

HOW THE PHD DESIGN PRACTICE DIFFERED FROM THAT OF COMMERCIAL PRACTICE:

The differences are both insignificant and substantial. In terms of design/commercial practice, the establishing of a brief, the prototyping, and the development of a design outcome, the difference can be non-existent. The activity of design practice remains the same. However, the lens through which one observes, records and contemplates engagement 'in practice' is shifted. The benefit is the change in perspective, in thinking, which a PhD design practice can achieve. The degree to which one chooses to deviate from commercial practice is not a condition of research but an opportunity. In the same way that PhD's in Math, Chemistry or Engineering can vary in degree between commercial and speculative orientation, without changing 'practice' within their fields. Likewise this opportunity exists within a PhD design practice and therein is the substantial difference. The opportunity, a choice, to explore beyond the boundaries of commercial practice is available.

To use my research as an example; the idea that a commercial industrial design consultancy, would receive a brief, to research and design the relationship between theory and practice, between text and artefact, seems improbable. The field of science has grown through pursuing commercial imperatives and also through advancing non-commercial questions. The body of knowledge advances in tandem.

Commercial practice is a space where the exploration of ideas is directed towards commercial ends. It is the act of undertaking design, within the academic context of answering research questions that allows the researcher to view design and design practice from a different perspective. I would also say that I have not lost any commercial skills, actually my abilities have only been enhanced. I can still work to a deadline, amortise costs and deliver client/user satisfaction. The PhD design practice allows the enquiring mind to expand into unexplored areas of design not typically engaged by commercial practice.

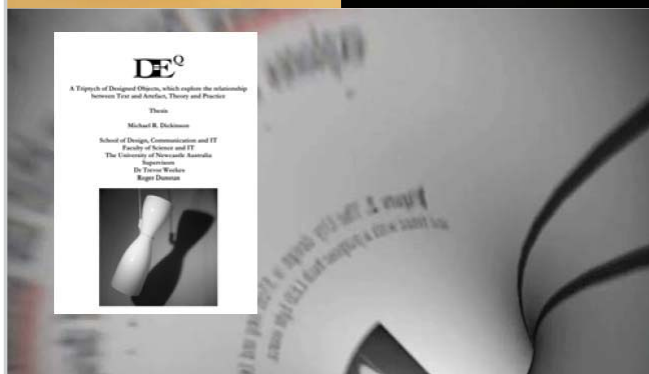
THESIS AVAILABLE AT:

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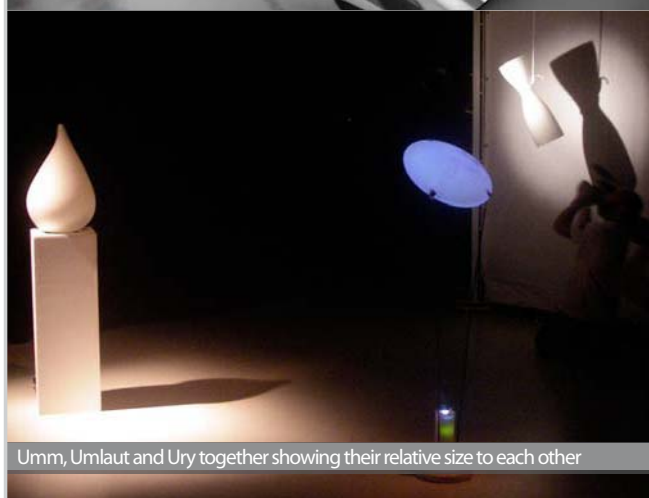
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Three views of Umlaut side, eye height and top with light external lights off



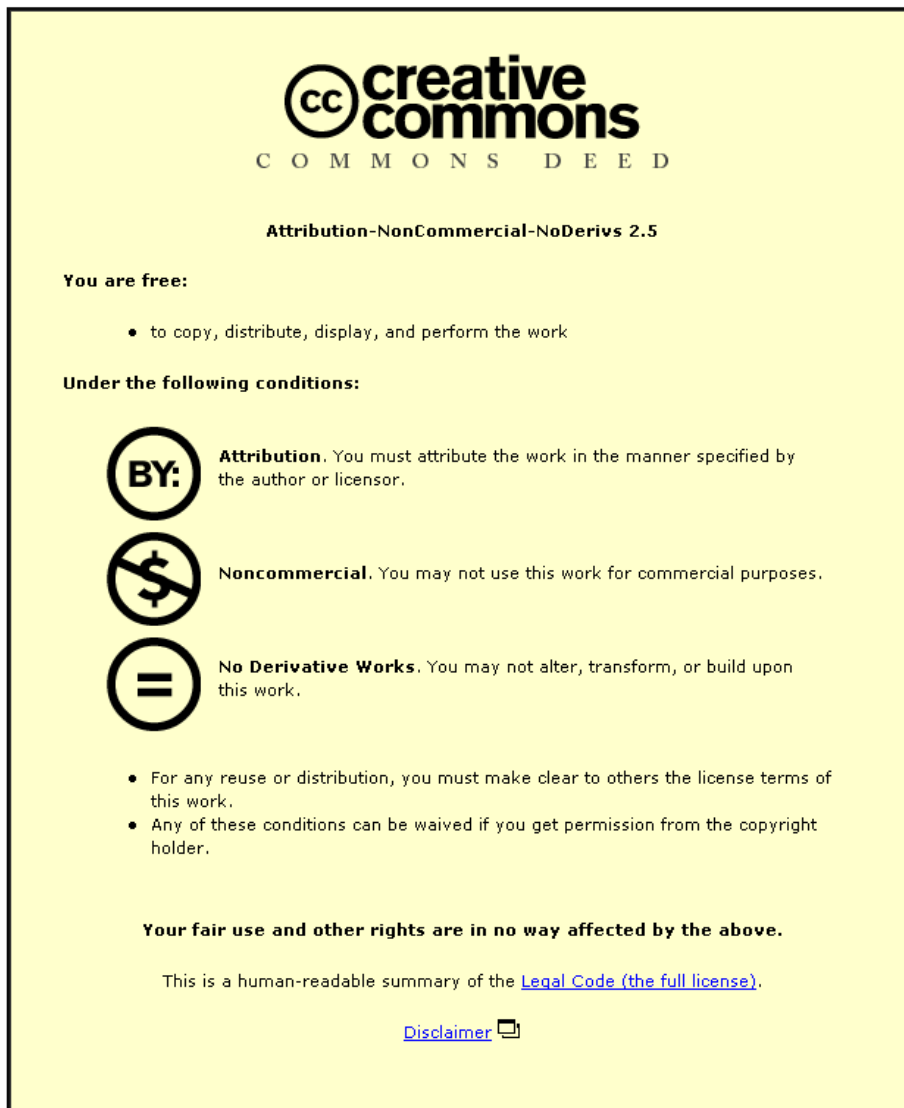
Text and artefact in unison. The thesis projected through the Umlaut's



Umm, Umlaut and Ury together showing their relative size to each other

Design Practice Research Case Studies have been compiled by the Design Practice Research Group at Loughborough Design School. If you would like to work with us or contribute a case study, please contact the Design Practice Research Group Leader, Dr Mark Evans (M.A.Evans@lboro.ac.uk).

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