

**DESIGNING
(RESEARCHING)
LIVED EXPERIENCE**

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PHD - PHILOSOPHY OF DESIGN - 2007
UNIVERSITY OF WESTERN SYDNEY &
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DESIGNING (RESEARCHING) LIVED EXPERIENCE

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B.Ind.Des.(Hons)Class 1, B.Mkt.

as a requisite component for fulfilment of the requirements of the degree;

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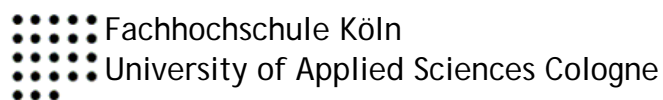


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Dedication

At the very end of a long road I look back and see what is really just a short journey made longer by all the trials, obstacles and pain of growth. Through this I have been impossible to live with; I am changed, and will never be the same again. No one has suffered this journey more than my best friend, my wife, Ann-Marie. During this time she has been on her own journey of self discovery (graduating in 2007 as a registered nurse) of which I am immensely proud.

I am pleased beyond words to be able to say we have arrived at the end of my PhD and the beginning of our new journeys together, love intact, improbably deepened. We are both richer for the difficulties we have faced and come through together. Weaker relationships would most surely have failed. She made sure ours did not. This monograph is dedicated to her dedication to 'us'.

Acknowledgements

"We shall not cease from exploration. And the end of all our exploring will be to arrive where we started and know the place for the first time" T. S. Eliot, (Little Gidding)

Ranulph Glanville (who also suggested the quote above) said to me when I was about two thirds through this project, "if you haven't had at least one nervous breakdown or attempted suicide, then you haven't done a PhD". Below are some of the many wonderful people who have saved me from the former and enabled me to accomplish the latter.

My supervisors

Associate professor Hart Cohen
(University of Western Sydney - Principal supervisor and Chair of the supervisory panel)

Thank you, for bravely taking me on; providing the support I needed throughout the project; and having the faith to see it through.

Professor Craig Bremner (University of Canberra, Australia)

Thank you for being so unselfishly generous with your time and patience. I am privileged to have had your guidance and insight, without which, I would not have had such a rewarding journey and would not have achieved the results I now value so much.

Professor Dr. Michael Erlhoff (University of Applied Sciences, Cologne, Germany)

Thank you for the many wonderful opportunities you provided that made such a difference to the scale of my work. Thank you also for inspiring me by example, in both your academic and philosophical engagement with life.

Professor Dr. Ranulph Glanville (*Honorary supervisor*)

Thank you, your words of wisdom, exhortation and inspiration were pivotal at the most appropriate moments. The results of this project would have been much less without your contribution.

KISD academic support(UAS Cologne)

Professor Philipp Heidkamp

Professor Paolo Tuminelli

Professor Dr. Uta Brandes

Professor Boerjn Batholdy

Very significant others

Kara-Lyn Flood - for being there at the beginning when I needed her most

Pat Bazeley - for her generosity with her time, research skills and knowledge

Joy Higgs - for inspiring me exactly when I needed it

Rene Geanellos - for her generosity with her immense knowledge and humanity

Earle Taylor, my oldest and dearest friend, for selflessly sharing his broad knowledge, wisdom and patience in the face of my ignorant stubbornness.

Statement of originality

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Ethics statement

The research contained in this thesis has been approved by the University of Western Sydney, Ethics Committee (UWS approval No. HEC 03/104, Dated 09/07/03) and found to be in compliance with the Commonwealth Privacy Act 1988 and the NSW Privacy and Personal Information Protection Act 1998.

In accordance with these laws and out of respect for participants, every effort has been taken to protect the anonymity, welfare and individual rights of all those who generously took part in the research. It is because of their valuable contributions that the goals of this research have been realised.

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Abstract

After many years of research focusing on different aspects of human experience conducted both within design research and outside of it, no clear understanding of experience or ways it might be researched have yet been developed. Many conferences, academic papers, and design studies have described partial structures, formulas and hypotheses that have so far provided inadequate understandings of what constitutes experience and how it might be understood (especially in design){Engage, 2005 #263, p.68}. The first difficulty is that there are no suitable design research methods available to enable design researchers to study experience. Secondly, the nature of what is being studied (what constitutes experience) is unclear and thirdly (due to the absence of the first two) no well reasoned way has yet been found to make this type of information useful to designers.

This research project set out to find a way to understand everyday human experience from the point of view of design, but first the tools and methods to do this kind of research had themselves to be researched. The personal experiences of a niche group of transport users were chosen as the research vehicle for an explorative research project. Using hermeneutical phenomenology to guide the philosophical orientation as well as many aspects of the methodological approach, field research was conducted in Australia and Europe. From this approach, a taxonomy of the vehicle experience (*ToE*) was developed. A process of deeply (hermeneutically) exploring the information contained in this taxonomy produced a second set of methods (The *SEEing* process) that causes a deep understanding of the experience to emerge in the design researcher. Both these methods were successfully trialed in Australia and Germany and an analysis of the results is presented.

The *ToE-SEEing* methodology described in this paper provides firstly, a structured approach to understanding a specific experiential situation. Secondly, the methods enable a fundamental and clear understanding of the deeper essences of the experience to be seen with a degree of clarity, such that informed design can take place. This methodology will be helpful to those for whom it is important to have a deep understanding of the experience they wish to design for, and it will be especially helpful for informing those responsible for decisions (design or otherwise) effecting the quality of others experience with goods or services. *ToE-SEEing* has been shown to be teachable, learnable and useful as a design methodology.

Executive summary

This project while it did not begin with the same 'question' as it has ended, has essentially been an exploration of the concept and meaning of everyday human experience. The 'journey' that is described in this thesis and woven into its structure can be summarised as follows,

I started out looking at sustainable transport and thinking that the project was a transport issue. I found out that it wasn't and that it was more about individual people and the personal experience they were having with their transport choice.

I started to look into the concept of experience and while I was doing that I used a scooter to investigate my own concepts of experience. It was at this time that I came into contact with phenomenology and the approaches of Van Manen, Heidegger, Gadamer and others. Their perspectives on lived experience seemed to gel with where I felt the investigation was heading. This led me to develop an initial methodological framework with a theoretical system of research methods and techniques.

I conducted field research in Europe which changed the way I thought about the research methods and led me to change my structured approach to more randomly capture elements of the experiences of both the participants and myself. I transcribed and analysed the data which again changed the way I thought about the methods and data; leading to a more open hermeneutic relationship with the data and the meaning it was giving me.

The analysis and initial findings led to methodological tools which were briefly trialed in a series of tests with students at UTS (Sydney Australia) and in a more extensive evaluation at KISD (Cologne, Germany). Feedback and evaluation from these trials is contained in the Testing and Validation Chapter Eight.

Summary of the findings

While the research has been explorative it has achieved a sound result. Throughout the development of what has been a phenomenological quest, information has been gathered and analysed in such a manner as to illuminate, in the final stages, the questions that are answered by the research. That is, what is experience and how can we as designers know it? These questions are answered by two new ways of understanding experience.

The first is a method by which information about *an* experience can be methodically collected and presented in a structured way, so that the experience can be seen for what it is. This takes the form of a Taxonomy of Experience (*ToE*).

The second involves the designer/researcher firstly in a process of submersion in the experience and secondly in an iterative, close interaction with data captured about the experience and contained within the *ToE*. This interaction over nine sequential steps, brings the designer to an intimate understanding of the deeper (Third level) meanings within the experience. At this point the designer/researcher has a broad familiarity with the whole experience and more importantly, a new understanding of the '*Superordinary*' essences within the experience, that together enable the designer to confidently design *for* the experience.

These methods have been shown to be communicable and learnable. The structure of the methods as they currently stand, were developed in such a way as to enable them to be taught to design students. This was achieved. The learning evidenced (particularly in the German trials) showed that the methods could be learned and significantly enhance design thinking.

Further research is required to develop a more fluid 'designerly' interface with the methods described above.

The efficacy and finesse of the two methods were tested and refined in the trials, and both methods offer the potential for further improvement as experience with them, and different disciplinary perspectives, are brought to bear on them.

Deeper exploration of the information gathered about design practice in transport design could yield interesting material for further study.

Also as the focus of the study shifted to developing methods for understanding experience itself, the understanding developed of the *NMV*¹ experience was not utilised and consequently could be further developed or used in transport design.

At the beginning of the project I set out to answer the question, why do these vehicles fail? However, instead of answering that question I have answered another and that is, 'how can we understand human experience for design?' and the answer is through reasserting a role for human values in design particularly those of the individual. This requires a greater understanding of human experience, it requires a commitment to value it and this further requires a commitment from designers to participate in that understanding. The methods developed in this project encapsulate all three of these goals.

¹ *NMV* (New Mobility Vehicles) The experiences of people using these small vehicles was the research setting for this study. A more detailed description is provided in the following Terms section and in the beginning of Chapter 2.

Key terms and concepts

The title

Designing (researching): Lived experience : The title of this thesis represents a number of ways in which the multiple goals of this project (finding ways to understand everyday lived experience) can be seen. In one sense it refers to designing a way in which to do this kind of research. In another way it is about researching methods through designing a way to research. These two views demonstrate how the interrelationship between design and research can become so close that these terms verge on being interchangeable².

In a deeper sense the project is about finding ways to design *for* the lived experience of others by researching ways to understand my and their lived experiences.

Transport terms

Transport: In this thesis, the term transport is interchangeable with the term transportation; in most cases it refers to personal, individual, powered mobility options offered by common forms of modern automobiles or cars. It does not address the wider concepts of air, rail or shipping, public transport or commercial vehicles. It also does not address human powered transport such as walking, bicycling or various forms of skates. Transport as an industry sector and as a field of research does not generally recognise that the subjects of this research, NMV's (see below), have a role to play.

² Refers to comments by Peter Downton (20003a & 20003b), about how we gain experience in designing or research through the process of designing and researching.

New mobility Vehicles (NMV's): This term is used to describe a relatively new vehicle concept that has been designed especially to respond to the mobility needs of people living in modern urban spaces; that is, principally inner-city environments, involving higher density housing, high levels of traffic congestion and pollution {Holbrook, 1982 #86}.

Technically, these vehicles are smaller (< 3metres) with 2, 3 or 4 wheels, lighter (< 1000kg) less powerful (0.2-20 kW) more nimble, manoeuvrable and with substantially less environmental impact than standard (6cyl.) automobiles {Delucchi, 2002 #159}. They are designed to carry 1-2 passengers and can include current technology such as is used in power-assisted bicycles, mopeds, motor scooters and other powered mobility machines. In this review the term *NMV* is also used to describe or refer to future mobility design concepts, which might fit a similar description. (See Chapter Five, Figure 5.01 European '*NMV*' manufacturers and their vehicles)

Infrastructure: This term refers to the infrastructure systems involved in maintaining and supporting the automobile's place in the transport world. Transport infrastructure includes component parts such as manufacture and supply of automobiles and their consumables in the form of fuel, land use, parts and service, as well as the ancillary infrastructures of health, economics, politics and environment.

Philosophy and methodology terms

Phenomenology and Hermeneutics: In the context of this study phenomenology is taken as both a philosophy and a methodology. My use of phenomenology draws extensively on the human science philosophy of Martin Heidegger and the hermeneutical branch of phenomenology dominated by Hans-Georg Gadamer. I have used hermeneutical phenomenology methodologically to guide the design of the field research and, extensively in the subsequent processing of data. For example, phenomenological principles were used to guide the writing of narrative descriptions of the life-world (experiences) of participants. These narratives are the 'data' which were analysed using hermeneutic techniques and further developed into design research methods. (see Chapter Three for more detailed discussion of how Phenomenology and Hermeneutics have been used in this project)

Experience: As the focus of the study, it is understandable that the term experience is used a great deal. In almost all cases it refers to *an* experience; that is, a discrete, single event which is generally fleeting and personal. In using a generalised version of the term experience, I am referring to a single event or a representational event, and in each case, the experience being described is always individual. (see Chapter Three, Section 3.3.1 *Defining 'experience'*)

This meaning of experience does not include life experience or professional experience or other references to longitudinal collections of individual experiences.

Heuristic /Heuristics / Heuristically: Reber (1985) describes a heuristic thesis as one that is conducive to understanding, explanation or discovery, a heuristic investigation conducted by trial and error. In this thesis, Heuristic is used in the sense of a flexible method of learning by discovering things for myself; this involved working out strategies for solving problems as they arose and learning lessons from previous 'mistakes'. Heuristics are individually those things which bring about this learning.

Forestructures: Used in this instance to describe preconceptions and prejudices researchers carry with them which may influence the way in which s/he approaches a project and the level of influence these prejudices have on the way the project is conducted. Heidegger described three main types of forestructures; those that the researcher brings to the project (forehaving); those that effect the decisions or researchers perspective in the project (Foresight); and those that might cause him to assume outcomes or predict future direction {Heidegger, 1962 #97} (see Chapter Three, Section 3.4.2.2 *Dealing with 'fore-structures'*)

The 'Language' of experience: This term describes the type of knowledge gained using close participation techniques in the research for understanding the deeper meanings of an experience (see submersion below) by which the researcher 'submerges' in the experience to the point of understanding the 'language' of the experience as if s/he was a fluent converser with it (an experienced experiencer). This means being able to fluently 'read' and understand all the spoken and unspoken clues that convey meaning within an experience. In chapter seven I refer to this as 'human-speak', an unspoken language that is difficult or often impossible to describe but carries with it the way people deeply 'relate' to one thing and sometimes not to another. (see Chapter Seven, Section 7.5, Introduction)

Submersion/submersive: Throughout this project rather than refer to standard ‘immersive research’ approaches, I have used the term ‘submersive research’ to describe the deeper levels I went to, to understand the *NMV* experience. In fully ‘submerging’ myself in the experience and the context of the experience, I reached a point where I was no longer an outsider to the experience, but knew it from the inside.

Taxonomy of Experience (*ToE*): With all due respect to the biological origins of the word, Taxonomy³ is used in this project to describe the hierarchical nodal structure of *NMV* experience, which became evident during the NVivo analysis of field data. Labelling this structure in this way interprets the field data model as a general structural model of experience, whereby information about any other experience might be collected, categorised and contained in a similar way within such a taxonomy. During trials, students testing this model, referred to the process as ‘doing a *ToE*’

Superordinary Essence of Experience (*SEEing*): This term collectively describes the set of methods developed in the second phase of interaction with *NMV* experiential field data in the *ToE*. It refers to the nine sequential steps in which information contained in the *ToE* is repeatedly reduced in a process designed to ‘extract’ and so make visible (seen) the *Superordinary* or non-physical essence⁴ of the experience. That is, the deepest layers of meaning within the experience, which uniquely define the experience for

³ Taxonomy: Any systematic set of principles for classification or arrangement. (Reber 1985) In biology, the classification of organisms into a hierarchy of groupings, from the general to the particular, that reflect evolutionary and usually morphological relationships: kingdom, phylum, class, order, family, genus, species. (Britannica 2007)

⁴ "Phenomenology is the study of essences" {Merleau-Ponty, 1962 #124, p. vii}; "the essence of a phenomenon is a universal which can be described through a study of the structure that governs the instances of particular manifestations of the essence of that phenomenon [in this case a *ToE*] ...The aim of phenomenology is to transform lived experience into a textual expression of its essence" (Van Manen 1997, pp. 10, 36)

what it is. The term Superordinary refers to the Urphenomenon⁵; the intangible, Super-ordinary aspects of the experience; sometimes novel, exceptional, unexpected elements of an event, which can produce in an individual a broad range of generally positive emotional, cognitive or even physical sensations.

Design theory terms

Design, Designing, Designerly: The term Design and its many variants are used in many fields of design discourse in loose and diverse ways. In this project I admit to being equally ‘loose’ in my use of the word design, this is unintentional but I feel unavoidable. It is a testimony to the versatility of the word that its meaning can be construed in so many ways. In a collective sense I use design frequently to describe the broad occupational field, i.e. in the field of ‘*design*’, or *design’s* use of something. In a general sense, I have used the noun design as in contributing to *design* or doing *design* (the industry sense) also in regard to the general act of *designing* and the broader description of *designerly* actions.

Then there are the verb versions such as, to *design* something, or being involved in *designing* something. (see Chapter Four, Section 4.2.2 *Defining what design means*)

Glossary of terms in Appendix

For a full glossary of English, Latin and German terms useful to or used in this project (See [Appendix 0-01a and 0.01b](#)).

⁵ “There is a difference between the mere crude description of a phenomenon as it may first present itself, where it is complicated still and untransparent, and the description which emerges when one has sifted it, so that the simple essentials and they alone stand out. This then, the *Urphenomenon* is what Goethe takes to be fundamental, in place of the unknown entities or the conceptually defined “Laws” of customary Science” {Steiner, 1919 #343; Findeli, 2006 #336}

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