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Exploring a Design-led Methodology**

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Designing a Travel Guide to the Un-Natural World: Exploring a Design-led Methodology

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Abstract:

The analogy of designer as tourist in the un-natural world is used as an aid for thinking my way into the nature of design research. An exploration of how the design researcher, like a tourist, travels widely through the un-natural world of thought, theory and concept. If we are to design a travel guide for the un-natural world then what would this guide book look like, why do we need it and how could it work? The paper will propose that a 'travel guide to the un-natural world' in the form of a design-led methodology is needed for research into sustainable development and is useful not only for the design discipline but for the research community at large. These premises have been derived from the aptitude of the design process and the creative methods it employs to deal with the complex messiness of issues such as sustainability. Such a design-led methodology would be useful for the wider research community due to the integrative abilities of the design process and the trans-disciplinary scope of the tour through the un-natural world. Design-led methodology will be explored using examples from field work in Tumut (rural New South Wales, Australia)

Keywords

Design Research, Design-Led Methods, Metadesign, Sustainability.

The Un-Natural world is formed out of our patterns of understanding, they coagulate into a landscape that could be thought of in similar terms as our natural world; where disciplines could be seen as nations with defined borders, their own language and culture. Following this analogy the landscape of each nation could be seen as the theories, thoughts and processes that give each discipline form. The tourist in the un-natural world travels widely, adding a wide variety of different disciplines to their path. The design researcher's route through the un-natural world could be likened to the tourist. The tourist as traveler can be accused of engaging in a superficial tour through the un-natural world, however this is not always the case, there is great potential for the tourist to weave routes throughout the un-natural world in a meaningful way that aids in the development of a global conversation; trans-disciplinary paths to form pan-disciplinary discourse. The tourist is in need of a travel guide in which to avoid getting lost and in order to make the most out of their travels.

If the 'Un-Natural World' is an analogy for the spherical landscape of thought, theory and concept then the 'Travel Guide' is the methodology through which to explore that theoretical landscape. This analogy is employed to aid the conception of 'design as research' (Frayling, 1993, Glanville, 1999 and

Downton, 2004) by considering the design researcher as 'a tourist in the un-natural world' (Hocking, 2007) and as defining a path for discovering the nature of design research. This paper will ask the question - if we are to design a 'travel guide' for the design researcher as 'tourist' travelling through the 'un-natural world' then what would this guide book look like, why do we need it and how could it work?

Many methodologies as guide books for travellers outline only local travel. Where disciplines are countries in the un-natural world these guide books chart travel within the borders of their discipline. Often other disciplines use these guide books and translate them for travel within their own discipline; like design has done with anthropology, appropriating ethnographic methodology for use within the discipline of design. What a design-led travel guide would attempt to do is create a guide book that would enable travel throughout the un-natural world, across all the disciplines and knowledge groups; from individual, to local, to specialist, to strategic, to holistic knowledges (Brown, 2007).

There are many instances of design-led methods. Such instances include 'cultural probes' such as those explored by Gaver et al.(1999), 'game format' such as those utilised by Mazé et al from the Swedish Interactive Institute (2003) and 'scenario building' such as those employed by Manzini et al (2003). However, what would a design-led methodology, as 'travel guide', look like with all of these methods imbedded within it. The paper will explore this question by considering what the contents of such a travel guide might be; like the itinerary, getting started, places to go, things to do, sources of travel information, orientation, getting there and away, potential hazards, a glossary and maps. In this paper I will reflect on what form is needed to create an effective 'travel guide to the un-natural world'.

In designing such a travel guide the identity of the author is a central part of the guide's construction. The author not only uses other people's information on the best way to travel but also has explored the travel routes themselves in the process of designing the guide; a designerly act of 'thinking by doing'. In this way I will use examples from my Tumut fieldwork project (Tumut is a town in southern New South Wales, Australia). The Tumut project aims firstly to explore design-led methods as imbedded in the design process towards developing sustainability and secondly for the purpose of constructing a guide for design-led methodology. The self exploration in the process of designing the guide is able to give a personal view on the best way to design your own trip. Identity is central to the design-led itinerary and the transparency of the guide's identity allows the user to develop their itinerary in accordance with their own identity and circumstances. This means the travel guide is not prescriptive or deterministic but allows the user to make informed decisions when setting out on their own trip (in a similar way I believe including a first person view in this paper is key to the centrality of identity in the process of design which is fundamental to our methodology and thus needs to be imbedded in the articulation of our ideas). This paper will also reflect on the users of design-led methods (including creative methods generally) and the potential users of this travel guide.

Metadesign

Design is a complicated word. It can mean an activity, a field, discipline, practice or an artefact. I will be using design to mean an activity as 'design' and the field, discipline and practice as 'Design' (I will not refer to design as an artefact). Design as a profession emerged out of the industrial revolution to acculturate technology. The Design field stretches a wide spectrum bordering engineering on one side and fine arts on the other including; graphics, industrial, architecture, interior, landscape and so on. However, the word 'design' has been around much longer and describes an activity that we all do and have done for some time. In this way there is universality to this activity of design and hence the Design field has a role to play in offering our capacity for designing.

To explore a design-led methodology in order to design a design method is a metadesign project. Metadesign as in the designing of design takes an overarching look at design as a whole in order to look at its innate qualities and articulate them in an accessible way. Through this exploration I ask: if design facilitates our everyday practices can we re-design design to facilitate a more positive sustainable everyday practice that will not jeopardise but increase our sense of wellbeing into the future?

Design often serves to accelerate unsustainable processes through its preoccupation with 'stuff'. Like an 'object fetish' of beautiful photogenic artefacts placed on a pedestal against a white background, as apparitions without any socio-environmental context. A reorientation of design towards a sustainable practice was documented in the Munich Design Charter of 1991 which initiated this shift through the notion of 'the ecology of the artificial'. This caused the re-orienting of design away from the object and towards a systems approach of everyday practices which the artefacts of design facilitate. A section of Design is working with this systems approach in order to create visions of a sustainable future.

This systems approach to design has focused on bottom-up initiatives that explore the idea of open-source design through co-creation approaches to participation (Maase & Dorst, 2006). Methods for such an approach have been developed from the creative process of design and are considered as design-led research methods. Examples of design-led research methods include; cultural probes (examples include projects by Gaver et.al., 1999, Ivey et.al, 2007 and Hielsher et.al, 2007), game format (such as the Interactive Institute project *Underdogs & Superheroes*, see Mazé and Jacobs, 2003) and scenario building (such as the *Sustainable Everyday: Scenarios of Urban Life* project, (see Manzini and Jégou, 2003). Cultural probes are creative stimuli (kits of maps, postcards, digital camera, mp3 recorder and other highly visual prompts asking you to respond in a creative way), aiming to disorientate participants into looking at their everyday practices from a different perspective when responding to the visual prompts. Game formats use game play to explore hopes, dreams and aspirations from a creative context participants are familiar with (for example in *underdogs and superheroes* participants engaged in the game play through the context of the superhero character). Scenario building uses visualisations of more sustainable everyday practices in order to allow people to imagine possible futures (the project *sustainable everyday: scenarios of urban life* used general principles such as

promoting variety, use what already exists, bring people and things together and share tools and equipment, to develop visualisations of possible sustainable everyday practices such as travel or food preparation). Such design approaches have the potential not only for developing innovative methods for the field of design but also for generating methods that give a unique perspective to sustainability research.

Theorists such as Glanville and Downton propose design as a methodology and the design process as a method of research; they frame this sentiment 'design as research'. Design-led methods have the potential to offer new perspectives on sustainable research due to the nature of design thinking. Design thinking (both within the discipline and the activity) focuses on a process concerned primarily with generating 'what could be' rather than 'what is'. For the Design field, knowledge is enacted through a process characterised by identity, praxis, playfulness, constructivism, a fluidity of meaning and dynamic variability. The practice of design could be described as an iterative process flowing through phases that can be loosely defined as brief, background research, concept, concept development, design outcome and presentation. The creative process of translating one phase into the next is unique to each designer (Downton, 2004). The identity of the designer is embedded in the design process hence repetition of the process by a different designer yields variability. For the Designer the process of thinking through a design is enacted, 'thinking by doing'. I believe this is an important element shared by many creative practices where the thinking happens in the process of construction. It is about submersing oneself in the process, not pre-empting the outcome and a 'conversation' between knowledge and practice known as praxis. This process can be described as 'playfulness' because there are many things tried, not out of an expectation of their success but to see if it brings something unexpectedly fruitful. Design can be considered a 'quintessentially constructive activity' (Glanville, 2006, p.62). If, in simple terms, constructivism is about constructing meaning in the world then Design is more interested in the construction than the meaning generated and hence Design generates 'knowledge for acting' rather than 'knowledge of what is' (Glanville, 2006, p.66). The aim of design is not to uncover 'the truth' but to propose 'what next'.

Design Research

If design is a kind of research (as Frayling, 1993, Glanville, 1999, & Downton, 2004 suggest) then how can we articulate this? I have used the tourist analogy as an aid for thinking my way into the nature of design research. An exploration of how the design researcher, like a tourist, travels widely through the un-natural world of thought, theory and concept

The designer as tourist travels widely through the un-natural world transversing diverse landscapes from science to philosophy to fine arts and on. The designer as tourist analogy develops its understanding from its wide ranging travels through other disciplines. Perhaps this characteristic makes design not so much a discipline as undisciplined; not about staying at home and developing our own local knowledge but a way of travelling widely through the un-natural world and developing a global knowledge. Being undisciplined is not unruly, uncouth or unhelpful; on the contrary it has a vital role. Just like

the tourist aids in making our world a global place, uniting the fragmented countries into a global conversation on the nature of our being in the world so too design unites the disciplines into a conversation about how we should act in the world; formulating 'what next?'. Creative practices, of which Design is an example, are knowledge systems which have been somewhat forgotten or undervalued in the age of Science¹, now we are entering into a new era we need to start re-valuing design as a valid methodological paradigm with a vital role to play. Science is not able to do everything, this is not a remarkable idea however we have neglected the alternatives for quite some time and now we often see the scientific method as synonymous with the only way to research. We know the scientific method is not the only way to research and there are other ways like design-led methods, which are routes giving us something completely different no less or more valid. The value of establishing other methodological routes through the research landscape is that in difference we gain diversity (like for ecosystems) allows our knowledge systems, "ecology of mind" (Bateson, 1972), to thrive.

Ecology of the Un-Natural World

We construct patterns of understanding out of the complex messiness of the natural world in which we live. Pattern formations are simplifications of our world so we may recognize objects and behaviours, make predictions and act in the world. These patterns form the basis for our ideas, thoughts, knowledge, understanding and theory.

"Humans look for patterns.... Pattern finding, the making of one concept from many distinct perceptions, is an intensely human activity. Theories are patterns given widespread credence and accepted as accounting for a part of our experience". (Glanville, 1999, p.85)

To construct patterns of understanding is to create an artificial order out of the natural world, transforming the world out of the natural to form an Un-Natural World. It is a vast system, a complex of interconnecting landscapes.

Our knowledge systems have become fragmented into discrete disciplines and roles. Even knowledge systems within individuals are fragmented, requiring people to use only a part of themselves in any one situation; the business part at work, the community part in their local area and their individualistic part at home.

"When Mr. Smith enters the board room of his company, he is expected to limit his thinking narrowly to the specific purposes of the company or to those of that part of the company which he represents. Ideally, Mr. Smith is expected to act as a pure, uncorrected consciousness - a dehumanized creature. Mercifully it is not entirely possible, and some company decisions are influenced by considerations which spring from wider and wiser parts of the mind". (Bateson, 1972, p. 446, in Manzini, 1992, p.15)

¹ Here, I am using the English meaning of 'science' as those fields using the scientific method such as physics, chemistry etc however in languages such as French the word 'science' has a more general meaning as research of any kind. Hence I have used a capital 'S' to highlight that I am naming a set of disciplines.

In recent times there has been much talk about how we can reconnect our systems of understanding; integration, cross-disciplinary, interdisciplinary, trans-disciplinary, etc. Issues such as sustainability have made the necessity of reconnecting our intellectual world even more evident, requiring strategies that combine all our efforts. The analogy of the un-natural world suggests that our thoughts, theories and concepts are interconnected in a global geography, however have been divided into the nation states with the construction of borders to differentiate disciplines and knowledge systems. These sometimes heavily guarded borders have fragmented the un-natural world. Then perhaps what is needed is to find a global outlook for the un-natural world, initiated through a global conversation (We have already started to initiate these conversations through trans-disciplinary projects). To initiate the conversation may require a 'worldly' perspective, obtained by travelling widely through the un-natural world. It is not necessary to have a complete understanding of the un-natural world to start travelling through it. Like the tourist you can set out on a path and see where it takes you. The designer as tourist sets off on our travels to see what we will find, without necessarily having any prior knowledge of the locations we travel through. This can lead to at its worst a superficial interpretation of each location or at its best an open mindedness allowing for possibilities to immerge that you may never have thought of looking for. In this way the tourist is aided by a guide and the designer as tourist is in need of a guide book to avoid getting lost and to articulate a way of travelling that can be used by all.

Contemplations from a Tourist

I have set out as a tourist in the un-natural world in order to write a travel guide, otherwise known as a thesis. I have been using field work in Tumut in the process of trying to design methods that form a guide to a designerly tourist route through the un-natural world. In doing this the analogy of the tourist has come to acquire even more meaning, I really have felt like a tourist.

I started out on this journey in a conversation with my design colleagues (particularly in conjunction with Andrew MacKenzie a fellow PhD student and landscape architect). Through those conversations we developed a diagram (see Fig. 1) of what we saw as the usual paradigm for design. The Designer as expert is called in to design something that will change current practice for the better. The designer designs an innovation which is then implemented. This innovation will initially create disorder in the system of practice. The disorder may successfully move straight to a changed practice or may cause the innovation to be rejected thus returning the system of practice back to the current practice or may need the innovation to be altered before moving through to creating a changed practice.

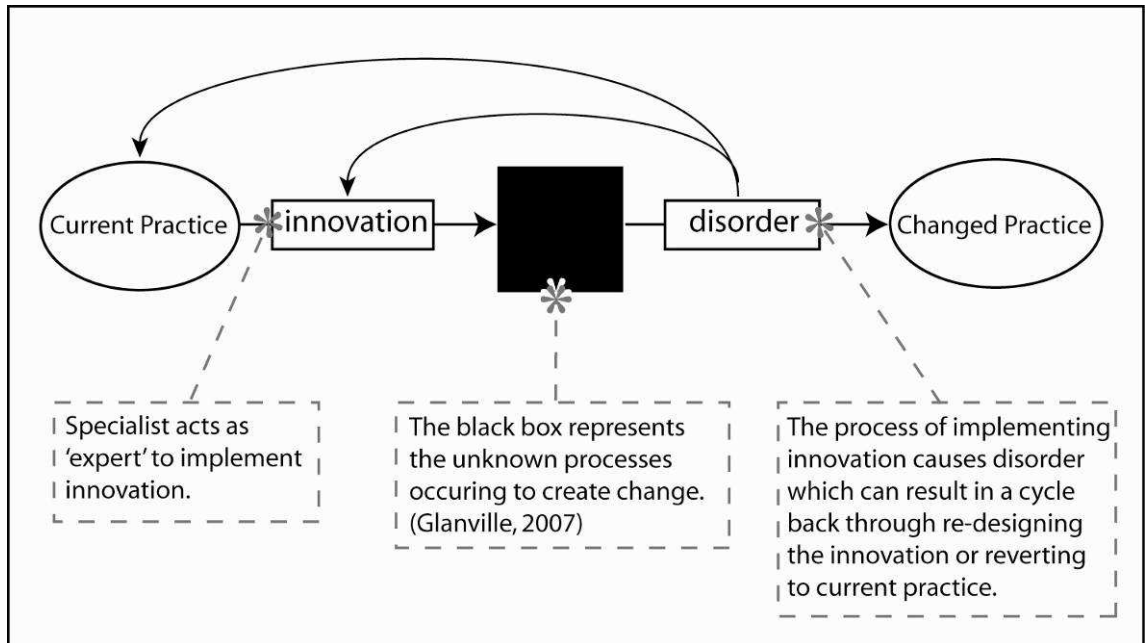


Figure 1. The 'expert' model: In this model the specialist acts as expert to design for innovation towards change. This model has not been effective in creating the momentum needed for fundamental changes towards a sustainable 'culture of life'.

In discussing the disordering nature of the design-led method of Gaver's idea of 'cultural probes', we considered what would happen if we swapped the positions of 'innovation' and 'disorder' on the diagram (see Fig. 2). What would this do to the design scenario? Perhaps a design-led disorder could aid in breaking with current practice in order to allow people to see their everyday systems in a new way and thus enable the design of innovation towards changed practice. This changes the role of the designer from expert to facilitator of the design process. We then considered the conversation like interactions involved in the process of design. The Designer's interaction with design is seen as a given, however this is not the only interaction going on in the designing process. It is also widely understood that the Designer interacts with the Client (that may be an individual person, a group of people, a community or an organization). What is less acknowledged is the interaction between the client and design, where the client is also designing. In fact there is a three way interaction between the client, the designer and the process of design. To enable design is to open up the process such that the design can be innovated from within the system of practice it is being designed for. Perhaps this 'co-design' model may have more success in changing practice.

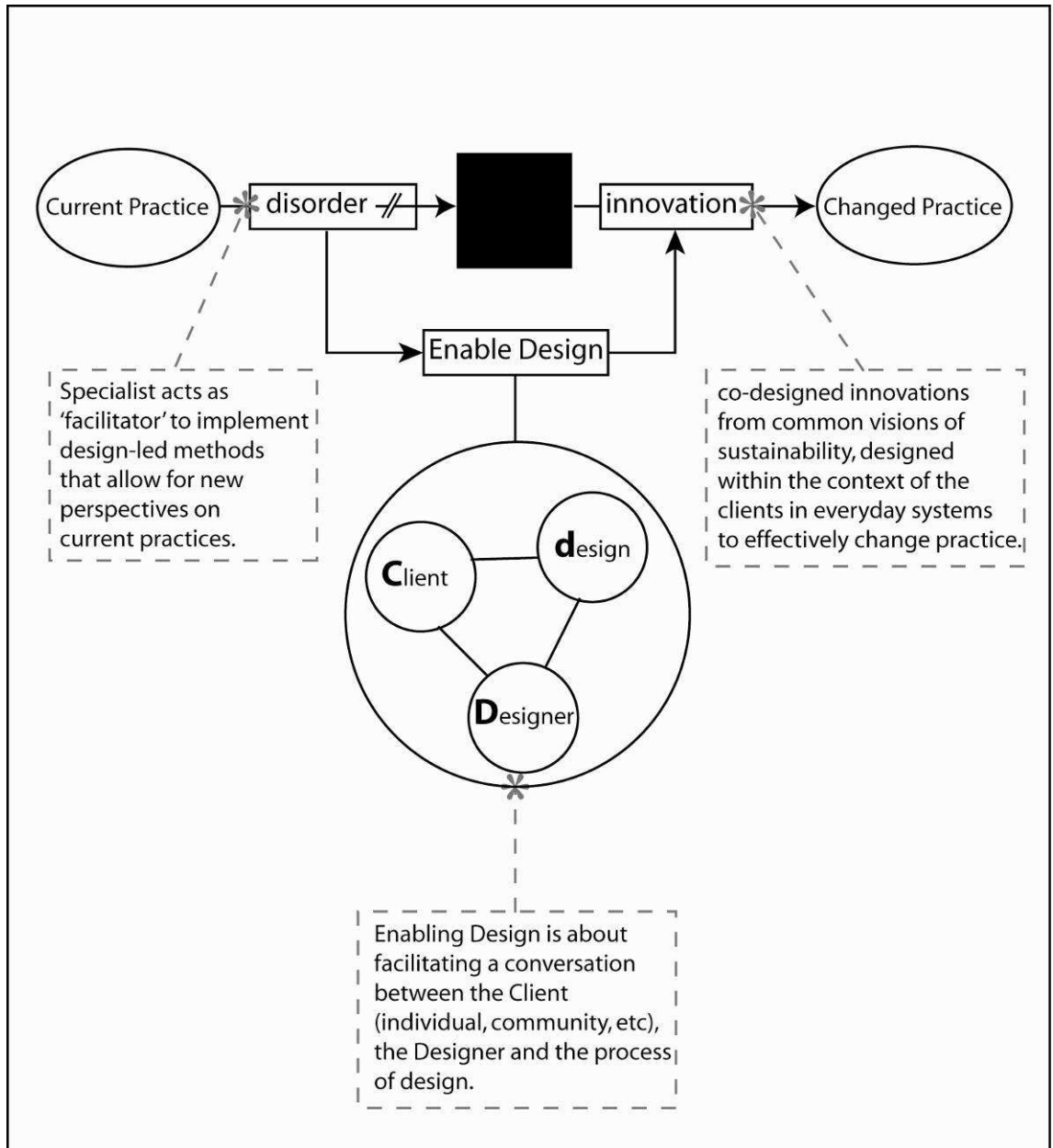


Figure 2. Co-Design Model: For enabling design towards sustainable change. This is an example of a model that may have potential for engaging all in the design of changes in everyday practice towards a sustainable 'culture of life'. These innovations as designed by the system and thus can be implemented to move the system to changed practice. This model is an initial prototype in the process of developing a more effective model of design for changing our everyday practices.

From this premise (see fig. 2) the question emerged - how do you immerse the client and the designer alike in the design process and there by enabling everyone in the system to design the innovation that can lead to changed practice? Design-led methods have already been developed to immerse participants in the design process; such as Gaver's use of cultural probes, the Interactive Institute's use of game formats and Manzini's use of scenario building. It would seem that these design-led methods are fragments of the design path (defining isolated parts in the design methodology). If we think of

the design journey as a series of phases along a design route then we might describe these as;

Brief-> Background-research-> Concept-> Concept-development-> Design-outcome-> Presentation

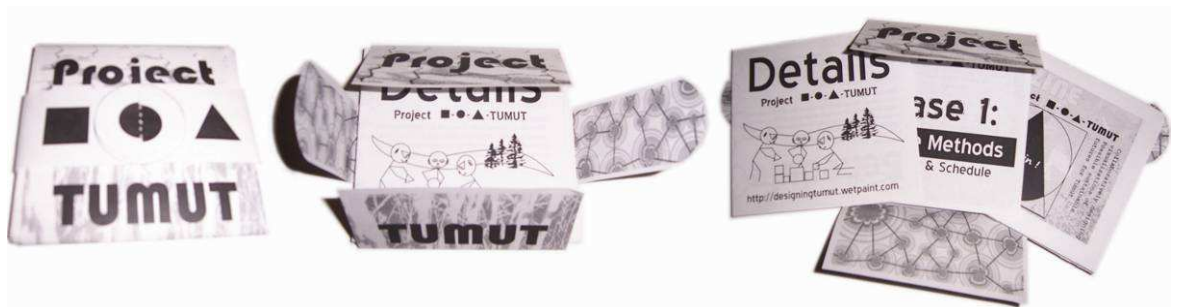
These are the list of steps in the design process we were taught as undergraduate design students. Perhaps an over simplification but one I have always found useful in guiding me through the messiness of designing. They keep us from getting lost on our design route. Hence perhaps the design-led methods as fragments could be put together to articulate the design path. Cultural probes could be the initial step of generating a concept, then game format could be the next step of further developing that concept, and finally scenario building could be a way of formulating the design outcomes for presentation. To engage in this metadesign project of designing a 'co-design' method I needed to embark as a tourist on the journey; start out and see where it took me. I choose to join in on the field studies project 'Engaging Visions' run by the ANU school of art. They were going to Tumut (a town in rural New South Wales) to engage with the social and environmental issues of the community to make art. I would use the field work to initiate my designing of the method.

As a tourist I started out in ignorance not knowing much at all about my destination, not knowing what kinds of knowledge landscapes I would travel through in Tumut. Ignorance may have a negative connotation however for the tourist it can be good, bad or ugly; leading to only seeing the familiar or only getting a very superficial impression, however it can also be an advantage. The tourist is not expected to know anything so can approach things with an open mind and discover things that they could never think of looking for. I made a decision to arrive in ignorance and let the people of Tumut brief me through the methods I was implementing. I purposely dropped any pretence of being an expert and engaged with the community from the position of wanting to be informed by them. I asked people to participate in my project so I could design up their vision of sustainable wellbeing for Tumut's future.

I planned to implement 5 phases in 'Project Designing Tumut':

Phase 1: Creative Methods

A gift pack is designed to give to Tumut community members with information about the project and a creative questionnaire using cultural probe like techniques. This phase is intended to get to know community members. To get their feedback on the different kinds of creative methods so that I can design the next phase tailor made for the community of Tumut.



Phase 2: Cultivating a Concept

A project pack is designed to give to Tumut community members with information on the project and cultural probe like activities. This phase is intended to harness community members' creative energy in working towards a concept of sustainable wellbeing for Tumut. A project package of creative activities will be given out which will ask participants to look at their everyday happenings in a new way. The activities in the Project Pack are designed to extract ideas in a creative way such that participants engaging in the activities can contribute to the process of cultivating a concept for the next phase of the project. From these concepts playful interactive designs will be produced for phase 3.



Phase 3: All Fun and Games

This phase is about engaging in game play. It is about playing with the ideas that have come out of phase 2 and developing them into possible sustainable scenarios. This phase aims to developing the concepts uncovered in phase 2 into visualisations of sustainable wellbeing for Tumut. To do this, playful interactive designs will be produced in the form of 3D installations around Tumut. These playful designs will engage people in the creative process of developing up the concepts from phase 2 into visualisations for the exhibition in phase 4.

Phase 4: Visualising Futures

This phase will show the visions from the communities input of sustainable wellbeing for Tumuts future. The different ideas on possible sustainable futures from phase 3 will be worked up into visualisations to be displayed in the exhibition. Community members will be asked to give feedback on these visualisations. From these visualisations one plausible vision will be developed up into a final work.

Phase 5: Our Future Vision

This phase presents the one plausible vision worked up from phase 4. Key representatives from the community of Tumut will be asked to assess the viability of this sustainable visualisation for the future of Tumut.

Each phase helps to design the next phase and in this way is part of a dynamic iterative process of design. In implementing this design project also initiates the larger metadesign project. Design-led research and research-led design, i.e. the Tumut trip through the un-natural world aids the designing of the travel guide to the un-natural world. In starting out on my tourist travels I am starting to explore the kinds of paths that can be taken, which ones take you somewhere interesting, which ones lead to a deeper understanding and

which ones are easy to get lost along, in so doing I am starting to formulate how to articulate a travel guide.

Tourist Guide: 'Lost in Thesis, a traveller's survival kit'

'Project Designing Tumut' initiates the design of a travel guide to the un-natural world, ie. a thesis developing a design-led method. This field work is starting to highlight what still needs to be done in terms of articulating a comprehensive and accessible method. Thinking by doing is starting to uncover what form is needed to create an effective 'travel guide to the un-natural world'

What should the guide look like?

The guide should:

- Getting Started: Outline how to get started; how to initiate a design-led project.
- Getting There and Away: Suggest ways of getting there and away, what paths to follow to a particular knowledge systems and how to find your way around when you get there.
- Getting Around: Describe the mode of travel; the conversation like pattern of motion the design path takes through the un-natural world.
- Where to Go: Outline how to make the most out of your travels; the role of the designer as facilitator not expert and the need to be open to possibilities yet unthought-of.
- Things to See and Do: Designate an itinerary imbedded within the design process; from brief, return brief, background research, concept, concept development, design outcome to presentation.
- Travelling Hints: Highlight the tourist perspective; the 'holistic knowledge' systems of the designer as bringing the whole of the designers identity to the project and pulling together different knowledges in a global way.
- Maps: Aid in global travel through the un-natural world by not only mapping a path through 'local knowledge' systems but also integrate into that path the 'specialist' and 'strategic knowledge' systems.
- Travel Information: Review sources of travel information as design papers which describe different design-led methods and their orientation in the un-natural world
- Orientation: Articulated in such a way as to be accessible by not only Design practitioners but also the research community in general

- Dangers and Annoyances: Point out potential hazards, what to look out for when using these methods for travel.
- Language Glossary: Define a glossary of terms, key phrases from other disciplines that aid in finding your way more easily through that discipline.

Each iteration of the metadesign project, design-led research and research-led design, will further clarify the form and content of this travel guide to the un-natural world.

How could the guide work?

This thesis as 'travel guide' could be used as a method of engaging in a global disciplinary conversation, mapping routes throughout the network of knowledge systems. The guide could help the designer as tourist to develop their itinerary and avoid getting lost along the way. This guide would also help to open up design as tourism to those outside the tourist culture, aiding the new tourist to travel widely on a playful and conversational path through the un-natural world. The guide could help to make travel fun not just for the seasoned tourist but for anyone who wants to get away. The guide could be used to help us determine what next; how we want to design our future.

Why do we need such a travel guide?

As designers we are inducted into the creative processes of design mostly through doing; the process is not articulated in words, it is understood more in a tacit sense. Although there have been books and papers written on the design process it is still rather elusive, especially to those outside the design culture. Much of what we do and know is unspoken and often we find it hard to articulate. However our designerly processes engage in a very 'holistic knowledge' system because of our aptitude for 'travelling widely through the un-natural world' in bringing together a wide variety of knowledge systems. Creative practitioners (as Brown suggests) do not tend to divide themselves up. We tend to bring the hole of our identity to a project and pull together all the knowledge systems in working our way through a project.

Growing global acceptance of the need to change towards more sustainable development means a fundamental change in how we design our future. This requires a global conversation on what to do, a conversation which brings together all the different knowledge systems of the un-natural world. A designerly travel guide to the un-natural world can articulate one kind of path for global travel through the un-natural world, not just for the design researcher but the research community at large. Such a travel guide can help unite the un-natural world in a global conversation on 'what next'.

Conclusion

A 'travel guide to the un-natural world' would articulate design-led methodology as a kind of research, offering an accessible guide of use not only to design researchers but all wanting to use creative methods in their

research. A design-led kind of research has great potential for aiding research into sustainable development. Issues such as sustainability require the combining of many different knowledge systems into devising what we ought to do - which is precisely what design pathways can offer. Design-led research is of use to the research community at large, since the process of design is not solely practiced by professional designers but by all who manage choice towards change. Design-led methodology give the research community an alternate research paradigm which gives the researcher a completely different perspective aimed at not uncovering 'what is' but in devising 'what next'. Design-led pathways have the potential to aid the researcher in developing a more holistic project by providing ways of opening up the process to combine many different knowledge systems. A clearly articulated and accessible design methodology as 'travel guide' can aid researchers to gain the full potential of the design process. The designer as tourist does not always follow the most effective route and can end up with a superficial trip through the un-natural world but with a travel guide as an aid the tourist has the potential to develop more global conversations in the un-natural world, following paths that unite the research community and knowledge systems in designing for a positive, reconnected future.

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