

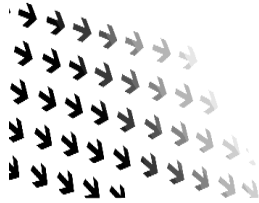
Is change as good as a holiday?

Using metaphysical bonds to design enduring change



Changing^{the} **change**

DESIGN VISIONS PROPOSALS AND TOOLS



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Abstract

Two things are necessary to recognise in a condition of everyday change. The first is to become aware of what it is about the everydayness that by contrast allows us to recognise that change has occurred. The second is the ability to determine what it is about the change that brings about a positive reaction to the perceived differential (the change).

This paper describes a new Taxonomy of Experience (*ToE*) useful for structuring and bringing to consciousness, aspects of everyday experiences which are commonly overlooked. It also presents a *SEEing* process for distilling and making visible the deepest (metaphysical) layers of meaning within these experiences. This metaphysical understanding is useful to designers as a primary change agent and for promoting stronger bonds to change. The design research methods (tools) presented in this paper are immediately useful in sustainable design activities such as design for longevity, design for social equity, universal design and many decisions affecting various stages of the product/service lifecycle.

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Prologue

Why use 'metaphysical' bonds and why refer to change as good as a holiday? My reference to metaphysicality is strong throughout this paper mostly due to a chance encounter with Singanapalli Balarams (1989) thought provoking paper about the power that Gandhian metaphors had in effecting change. Change being the key word in this context, not the metaphors or their metaphysicality. The metaphors Gandhi employed were not particularly striking in their physical form (his home spun white cloth, sandals, spinning wheel) but they contained powerful mythological and metaphysical qualities which the ordinary Indian people related to very strongly². This has a similar resonance to the many things we are attracted to that have no great material value but which we treasure for their metaphysical value anyway (Grandmas teapot, my high school year book, a Stark lemon squeezer)

The holiday analogy is only important in establishing a different contextual perspective on how we react to change. It is as good as any other in so far as it is one which most of us are familiar with. In my holiday analogy for instance, I work and go about my everyday life then suddenly find myself (on holidays) in a different, strange and sometimes exotic place inhabited by strangers with strange habits; possibly a companion or two who I have hardly spoken to in months and now must spend every waking moment with. This mind-space is suddenly very different to my 'every-day' or normal life.

Over the following week or so (of the holiday) I slowly sink into 'holiday mode' and before I know it I am again wrenched away from my wildly exotic poolside lethargy and must return to what now appears strangely and disappointingly familiar – the grind of normal life. Is this why so many people experience depression and anxiety on return from holidays? What is it about this time away from our everyday life that fosters a positive condition, the cessation of which causes such negative withdrawals?

*What is it about the holiday that offers a lesson about change?
and what does this have to do with metaphysicality?*

If change (like a holiday) is to be considered a good thing, then what is it about a holiday that is good and by association³, makes change a good thing? A holiday takes us away from the ordinary and everyday. It is the degree of difference (change) between our everyday experiences and those experienced on the holiday that make the change so recognisable and usually, pleasurable. A weekend away in the mountains or at a friends house in the country is nice but doesn't shake our world (read perspective on life) half as much as two weeks in the snow fields or rafting down the Amazon.

Two things are necessary to recognise in this condition of change. The first is to become aware of what it is about our everydayness that by contrast allows us to recognise the change. The second is the ability to determine what it is about the holiday experience (aka. change) that brings about such a positive reaction to the perceived differential to the everyday. It is this positive experiential component that I keep referring to in this paper as the metaphysical⁴ aspects of change.

² Gandhi came from a privileged background and did not initially understand these metaphysical qualities. He intentionally went out amongst the people he wished to help in order to study them closely and come to understand what was meaningful to them. This same process of developing understanding through immersion and using this understanding to effect change is a fundamental premise in this paper. (Balaram, 1989)

³ A reference to the saying 'A change is as good as a holiday'

⁴ In this paper, the terms Metaphysical and meta-physicality are used in their broadest sense without ascribing any particular disciplinary or philosophical connotations. They are used to convey spirituality (without the religious component), ephemerality, intensely emotional and cerebral responses beyond the everyday physical plane.

1. Introduction

What is the meta-question, this paper addresses?

If the degree of change in sustainability required in the foreseeable future is so great that the concept of design itself is redefined, where do we start? The broader design community⁵ has been aware for a considerable time that greater acceptance and commitment to sustainable products, patterns of behaviour and modes of thinking are needed to achieve the level and direction of change required for a sustainable future. (Fuad-Luke, 2006; Heiskanen & Pantzar, 1997; Manzini, 1992; Shove & Ward, 1997). In this paper I propose that a starting point for the required degree of change lies in re-valuing the role that a fundamentally more human-focused perspective has in the design (read sustainable design) task. This proposition goes far beyond the current trend of 'greenwashing' and further than the partial amelioration offered by popular user-centred and anthropologically focused studies. A revaluing of the human perspective is beginning to gain momentum with relatively recent interest in human-centred design (AIGA, 2006; Norman, 2004). This is a turn in the right direction however, the practical reality is that in order to understand humans better especially for design purposes, we need a lot more methods and knowledge about ways of going about it.

In this paper I am proposing two new ways to help to begin this process of valuing the human dimension as a starting point (not endpoint) for designing. I contend that by understanding the complexity of an everyday experience and the strongest metaphysical (spiritual) layers within it, that designers and decision makers will understand the bonds that create the strongest attachments to the experience. This is the first step in achieving the dual holy grails of sustainable design. To provide more satisfying (sustaining) customer experiences whilst delivering this in a more sustainable manner.

How is this question answered in this paper?

Quite enough has been written that defines our current situation in terms of sustainability and design's role in leading us to this point (Fuad-Luke, 2006). And socio-technical discourse abounds with reasoning for why we are in the position that we are in (Wiebe E Bijker & Hughes, 1990; Haraway, 1991; Latour, 1994; Michael, 2000). It appears that we know what we have to do. We know we have to do it now. We are just not sure of how to go about it. The tools presented in this paper can help in real and tangible ways to achieve these goals. This paper offers two new methods⁶ that enable designers (and decision makers) to understand deeper layers of everyday human experience. The first will help designers to more clearly structure and see what is there to be seen within a given experience or event (the data). The second probes more deeply into the hidden layers of meaning contained within the available 'data'; teasing out the deepest, intrinsically motivating forces within the experience. These are the, beyond-the-form-and-function, 'metaphysical' forces, which if understood and applied back into the sustainable design process (assuming the materials and energy intensity questions have been addressed), help to create stronger bonds and commitment to the kind of change intended in the design (either product, service or product-service system).

⁵ Alludes to a broad range of sustainability and 'design' related perspectives presented by engineers, architects, sociologists, anthropologists; disciplines from both sides of the natural / human sciences spectrum. (McDonough & Braungart, 2002; Sofoulis, 2002; Stegall, 2006).

⁶ These methods while they are specific, structured and have defined outcomes are not limited to a *techné* interpretation. They should be taken as a methodological representation of a human centred philosophy suggesting ways to explore how we (as designers) can better understand what is important to all of us as human beings and so design more humanly-satisfying things (read sustainable attachment and ownership). Approaching these methods in this way opens them up to adaptation, extension and exploration – strangely, all laudable human traits.

2. In what ways can sustainable design begin to change?

Earlier I proposed that a starting point for change could be based on re-valuing the role of more human perspectives in design. Understanding a human-oriented perspective requires an understanding of what humans find meaningful and of course this raises the obvious question 'what do we mean by meaning?' This seemingly circular logic goes beyond the linguistic argument⁷ so that we can address what is meaningful in the metaphysical sense. I contend that this human metaphysics is a missing ingredient in the intentionality presented in all things designed (Margolin, 2000). The meta-physicality of human experiences involving designed products/services is not the same thing as the cyborgised, socio-technically normalised relationship outcomes that are essentially unintentional by-products of design (Buchanan, 1989; Shove, 2007). Axiomatic suggestions that 'material objects configure their users' coupled with socio-technical theory (Wiebe, E. Bijker, Hughes, & Pinch, 1987) suggesting that this is a two-way relationship confuses the efficacy of current design practices wherein little is contributed from the user side other than from research after the fact. This imbalance might be addressed by designing objects that incorporate at a foundational level the metaphysical qualities valued by real-life, everyday, ordinary people.

The environmental imperative to design more for the metaphysical 'reality' of experience than the physical unreality of consumerism is well understood. (Heiskanen & Pantzar, 1997; Manzini, 2003; Shove, 2007). And the superficial and transitory un-gratification of unsustainable consumerism is at least partially due to a lack of metaphysical fulfillment (Hamilton, 2003, 2005).

I propose that this condition comes from a lack of understanding about and an undervaluing of the metaphysical aspects of experience. Until recently these aspects of experience have largely been inaccessible for lack of knowledge about how to study them and subsequently under-pursued in user-research (Green, 2001). For this reason it is important for designers to know how to understand the metaphysical so as to intentionally design stronger more satisfying, meaningful and lasting relationships (bonds) between customers and their purchases.

Stegall (2006) in recognising a lack of this type of understanding, proposes a set of four, ecologically oriented design philosophies which support 'intentional design'. The first two philosophies are very familiar and relate to Resources (materials and energy intensity) along with Form-and-Function (a 'post industrial' design approach). Further to these he advocates two design philosophies referred to as philosophies of 'purpose' and 'spirit'. One of *Purpose* promoting "a set of values, attitudes, and characteristics that designers wish to promote" and one of *Spirit* supporting a "feeling of kinship – spiritual [metaphysical] connection and sense of stewardship with the natural world" (Stegall, 2006,59-60). In order to successfully employ these philosophies in sustainable designing, a designer must develop what Orr refers to as 'ecological literacy'. The methods described and presented in the next section of this paper satisfy Orr's call for methods that help to achieve this form of literacy; but they also take us beyond Orr's observational limitations, to a metaphysical level of understanding of the people we wish to design for.

"Overcoming this obstacle requires designers who can enter a local environment, observe and understand how its people relate to each other and to the natural world, and develop methods for improving those interactions... the fundamental skill of designing for sustainability is ecological literacy" (Stegall, 2006,63)

⁷ Refers to linguistic explorations of meaning such as I.A. Richards *The meaning of meaning* - (Griffen, 1997)

3. Tools for understanding the metaphysical aspects of events

The tools described in this section (the *ToE* and *SEEing* methods) relate to understandings of the kind described by Orr (1992) when referring to ecological literacy. They are intended for a designer to become immersed in the experience to be understood and with that perspective to analyse the data collected in such a way as to develop deep personal understandings of the metaphysical essence of the experience.

3.1 Taxonomy of Experience (ToE) : A model of experience

This hierarchical model is useful to researchers and decision makers as a general method or tool for guiding the collection, processing and categorisation of field data about an everyday experience. During trials, participants using this model, referred to the process as 'doing a ToE'

The *ToE* is a tool or model for understanding the ordinary, inauthentic⁸, un-real, unconscious aspects of an everyday event. This method is useful for building a picture of the everyday and its fundamental 'everyday-ness' that by contrast allows us to recognise when something special (change) occurs. It is a method for structuring and bringing to consciousness those aspects of the everyday which are easily and commonly overlooked. In the two pronged approach to understanding the metaphysical aspects of an experience presented in this paper, the purpose of the *ToE* phase is to establish a clear understanding of the foundations on which any change might be based.

Both of these methods have been developed out of primary field research and analysis which explored phenomenological and hermeneutical methodologies to gather material and explore ways in which everyday lived experience might be probed for the deeper layers of meaning it contained (Coxon, 2007)

Findings from the initial data analysis in this research were compared to existing knowledge streams on the structure of experience from design theory as well as with disciplines outside design in psychology, neuro-physiology, sociology and marketing. These comparisons suggested that information gathered about an experience might be usefully explored if structured in the form of a taxonomy. The structure or 'Taxonomy of Experience' (*ToE*) that we have used with considerable success in university trials is shown below in its simplest (skeletal) form.

Insert figure 1 here

⁸ Refers to Heideggers term for the everyday aspects of life experience "Modal undifferentiatedness, or indifference, between authenticity and inauthenticity is what Heidegger calls Dasein's 'average everydayness'" (Carmen, 2003,2; Heidegger, 1962)

1. THE GUT - Somatic experience

- Sensorial
- Sight
- Touch
- Smell
- Taste
- Sound
- Ergonomic
- Aesthetic

2. THE HEART - Affective experience

- Positively valenced affect 1 - 7
- Negatively valenced affect 7 - 1

3. THE HEAD - Cognitive experience

- Connotation – reflective experience
- Cognition – reflexive experience

4. OUT THERE - Contextual factors

- Environmental factors
- Regulatory factors
- Social factors
- Existential factors
- Corporate, Economic, Political
- Other – as determined by the situation

I will briefly explain how each of these sections is intended to be understood.

Somatic experience

Somatic aspects of an experience stimulate or directly impact on the physical body including sensorial stimuli, comfort (ergonomics) and appearance (aesthetics). These are what Donald Norman (2004) refers to as the 'visceral' level but whose descriptors often contain more complexity than simple physical references are able to convey; such as richness of colour, tactile appeal, comforting sounds.

Affective experience

In the *ToE*, Affect is treated as principally focusing on 'emotions' that is the mostly short duration, intense affective responses to experiential situations. Affective experience is sub-themed in terms of its positive and negative valence⁹.

Cognitive experience

The cognitive section of the *ToE*, refers to the way in which a person 'thinks' about both internal (reflexive) and external (reflective) aspects of experiences. Cognition or 'Internal' aspects describe the way in which a person thinks about themselves (self talk), for example, "I am an industrial designer ...where am I going with this paragraph" Externalised cognitive thinking (Conation), relates to the way in which a person thinks about things that lie outside themselves, that may or may not lead to action or behavior, for example, "I must remember to email Larry the specs for that...what is that clown doing in that car? ... that shirt should go nicely with that tie..."

⁹ Valence - psychological value of the experience denoted in a positive Vs negative way (Reber, 1985).

The context of the experience

The somatic, affective and cognitive meta-themes described above, are all integrally situated with a contextual space (See Figure 1 above). This part of the *ToE* describes aspects of the context (the everyday life-world) in which the experiential event takes place, but only aspects that are considered immediately relevant to the people directly experiencing the event.

Summarising the Taxonomy of Experience (ToE)

The Taxonomy described above constitutes a framework for gathering and compiling data about an event in such a way that it provides the researcher with a preliminary picture of the experience through familiarity with its parts (constituted by small fragments of the experience which are essentially individual cause and effect stimuli). Through the experience of compiling and formatting data into the *ToE*, the designer (researcher) gains an initial understanding of the experience as a whole (*ToE*). This stage is similar to the data coding / analysis methods employed in ethnography but utilises the *ToE* as a flexible nodal structure instead of using predefined or *in vivo* methods (Creswell, 2007). Setting up a *ToE* of an event is a valuable establishing process in itself, which generates in the researcher a useful, be it broad grasp of the experience. This is the stage at which most ethnographic and phenomenological analysis tends to conclude. The *SEEing* method that follows, describes an entirely new approach to deeper analysis of the data contained in the *ToE*. This method takes phenomenological and ethnographic data analysis to a deeper level where the metaphysical side of an individual or group experience can be understood.

3.2 *SEEing: Exploring the metaphysical essences of an experience*

SEEing is a qualitative data analysis method which employs nine sequential steps through which information about an experience being studied, is gathered and reduced in a process that allows a researcher to see the metaphysical or spiritual 'essence' of the experience. The *SEEing* processes distil and make visible the deepest layers of meaning that uniquely define¹⁰ the experience for what it is. The goal of the *SEEing* method is therefore to understand the metaphysical, the differential, the primary change agent, the authentic and the real.

*What it is about the holiday experience (aka. change) that brings about
such a positive reaction to the perceived differential to the everyday?*

The moments when we are most in touch with ourselves and events in our lives are the moments when we become truly aware of being alive (Heidegger, 1962). It is this kind of aliveness, this awareness of our being that we are confronted with in moments when we are confronted with change. On my holiday, change takes the shape of something requiring me to cope with something new, a situation that is unfamiliar or that forces me to reconsider my ability to adapt. It is in a way, mildly threatening, but it is precisely this difference to the normalness of the everyday that tells me that I am not at home, I am on holiday. Indeed, I would argue that it is the degree of differentiated-ness that I experience that defines the attachment I develop or the value I ascribe to the experience. Thus my visit to the local beach does not hold the same metaphysical value as my holiday in the Bahamas. This type of argument drives the kind of thinking that follows.

...and back to the ToE

¹⁰ The use of the term 'define' is not to suggest any form of formula, codification, categorisation or fixed notion of the essences derived. They are and always remain fluid and metaphorically indicative of the understanding that these metaphysical essences generate in the designer-researcher

In the first (*ToE*) phase described above, the researcher establishes a basis for understanding an everyday experience (using the *ToE*) and develops a deep familiarity with the complexity of its everyday-ness through the gathering and coding of data into the *ToE*. The next, *SEEing* phase, begins to explore within the experience for the extra-ordinary, the aspects that are differentiated from the everyday base level of the experience, the ones that begin to emerge from the deeper metaphysical layers. This is the process which leads to understanding the aspects of the event which create the richest, most positive and lasting relationships to it.

The *SEEing* process like most qualitative analysis methods can not be done in five minutes. It takes considerable time to sit with the data, shifting and sifting in an iterative conversational process where data is interrogated and interpreted repeatedly. For space reasons it is presented here not as a detailed how-to, but as a summary of each of the steps in a quite simplified form so that a general sense of the process can be gained.

Step 1: The researcher learns the language of the experience through immersion in the experience. This step sets up the knowledge base which the researcher will later rely on to interrogate and interpret experiential data.

Step 2: The data captured about the experience is turned into rich text. Detailed experiential descriptions of the field data (interviews, observations, context studies) are written and used as a normalised data source.

Step 3: The text is thematically separated into its multiple general meanings by interpreting alternative (causes or effect) meanings out of the text using the researchers understanding of the language of the experience. It is placed (stored) in the *ToE* framework at this stage.

Step 4: Multiple hidden meanings are explicated out of these cause and effect meanings. Each fragment of data is further interrogated for the multiple alternate meanings that they contain. These become 'see-able' using the researchers' earlier auto-ethnographic experience as an experienter.

Step 5: The most essential (experience defining) meanings are filtered off. Meaning data that is essential or that 'make the experience what it is' are separated out from that which is ancillary or superfluous to the experience.

Step 6: The *extra-ordinary* metaphysical meanings within the experience are filtered off. Meanings describing basic, everyday, form and functional aspects of the experience are filtered out leaving the spiritual, metaphysical meanings.

Step 7: The researcher ranks the most intense meanings. The metaphysical meanings are not all as intense as each other. A ranking is applied so as to determine which are most important in defining the experience.

Step 8: Metaphysical meanings are grouped into themes and ranked by intensity. The most intense of the metaphysical meanings are interrogated and grouped into like themes. This clusters the more powerful metaphysics together into 4-5 key themes.

Step 9: The most intense metaphysical themes are re-expanded by describing them in terms of the essential meanings from which they came. These themes were derived out of the most essential elements of the experience and it is helpful for further communication¹¹ of the metaphysical essence of the experience to be able to describe them in some detail.

Student experiences and outcomes from using the two tools ...so far

¹¹ Methods for communicating the metaphysical essence of experience have included the use of abstract manifestations, personas, storyboards and scenarios. Future research might explore the communication of this essence with virtual persona avatars acting out design interactions in 2nd life scenarios.

University trials with students in Australia and Germany have provided interesting and encouraging results using this type of development of everyday and metaphysical meaning. The Australian students' overall reaction to the trial was positive with a significant number experiencing very positive outcomes. The project succeeded in providing an experiential learning vehicle from which most gained a rewarding learning experience. The *ToE - SEEing* methods succeeded in being teachable, testable and provided a deeper understanding of the experience in most instances where due diligence was applied. The German trials of the *ToE* and *SEEing* design research methods were also very successful. Students achieved varying degrees of public recognition for their exhibited thinking, but overall there was agreement from academic staff and the greater student body who attended the final exhibition that the results were positive, unexpected and rich. While many students laboured under the existing interface and the volume of data-processing required, there was universal agreement that the process yielded surprising information from which to base their designs.

4.0 Conclusion

How do these methods help designers to make the desired change?

The methods briefly described above help designers to deeply understand the metaphysical layers within an experience so as to better match with human expectations of what is being designed to fulfill these expectations. They will help designers to design from more human-centred, (metaphysical) perspectives; enabling them to give primacy to these perspectives in the artifacts they are designing. It can be seen in my holiday analogy that metaphysical layers of meaning create stronger more lasting relationships (bonds) to exceptional as well as everyday experiences. Metaphysical bonds are stronger than the physical bonds offered in designs based on form, function and fashion. These types of physical (read superficial) bonds are easily broken by the 'next big thing' (the fundamental flaw in consumerism), while metaphysical bonds are longer lasting, more satisfying and culturally sustainable.

...and this can be useful to sustainability how?

It is largely our bond with the metaphysical that underwrites our attachment to things, events and even to change itself. It is the nature and strength of this bond that will help determine the direction and strength of our commitment to any changes proposed. If design is to provide the seeds for sustainable change in terms of new products, services, service systems or lifestyle changes then it must understand the metaphysical bonding agents that people will respond to and also the new bonds these new socio-technical systems are likely create within their recipients. Designers need to design experiences (incorporating the everyday and the metaphysical) which consumers want to own and value. This requires a deeper level of understanding of the conditions underpinning the change being induced and whether they are likely to create an effective and lasting bond with their recipients.

Where to from here – how can these tools be improved and more widely applied?

This paper is a first step in the process of dissemination and use of these methods. With continued use I expect they will be refined and evolve into more useful tools for advancing sustainable design. More interesting and productive ways will be found to reify the metaphysical. New media such as virtual avatars and 2nd world scenarios might be employed in future efforts to give voice to the metaphysical. The designing of products and services containing the full richness of metaphysical meaning have yet to be fully explored.

With all of these possible developments, the core purpose of these methods will remain the same – to aid the process of valuing, understanding and applying human metaphysical values to strengthen the bond between designed objects and services in the lives of people. Of course these methods are immediately useful in sustainable design activities such as design for longevity, social equity, lifestyle change, shared use and universal design however, the

understanding generated in designers using these methods is also useful in design decisions affecting many stages of the product/service lifecycle.

There is now a need for industry exemplars to show the way. Commercial industrial trials are required to showcase the benefits to sustainable innovation that these kinds of methods bring to a diversity of industries so that a general platform for change can be established. Without bridging the gap between design pedagogy and design practice these types of methods remain impotent. This will be a difficult process in a manufacturing world committed to sales volume and an economic model based on growth, but industrial early adopters and trend leaders, must be found and fostered. The concept of using metaphysical values to create stronger bonds and longer lasting relationships will not engage the imaginations or esoteric values of shareholders intent on higher economic return. However with the burgeoning shift away from monetary based fiscal accounting to triple bottom line reporting and carbon-based economic modeling, these values will very soon have a important role to play in changing the change.

*It is time to discover the meaningfulness of man rather than searching for meaning in things.
If we must have things, then let them mean what is meaningful to man and not the meaningless shallowness evoked in him by things, without his knowing. Anon*

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Fig. 1: Framework of experience

