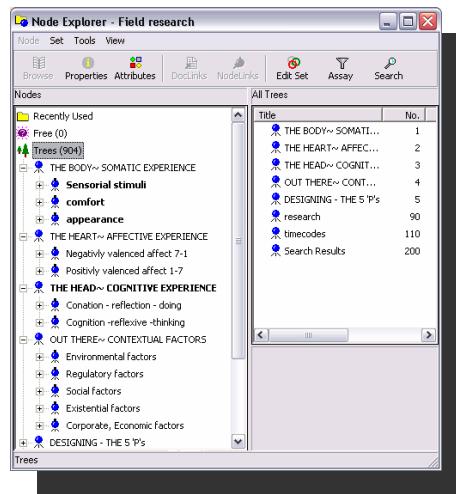


A

Taxonomy of Experience (ToE)



85500

Design futures: Creative technologies

Lecture August 18th, 2006

University of Technology, Sydney

Slide 1 ...experience

I 'm going to take a leaf out of Camerons lecturing style to start today with a snippet from a movie....see if you can work out what the underlying theme is in these few scenes from the movie

Slide 2 Matrix - birthing scene – 3 mins

No talking

Slide 3 The Matrix (system)

OkI want you to just for a moment imagine if you can what it would be like in one of those tanks no senses of touch smell etc, no sound, no visual input.Imagine its been like that since you were born, you don't know any language,..... how to talk, how to think (because we think in language)

Slide 4 BLACK

you would emotionally feel nothing

because you couldn't think anything, that would make you feel anything

.....and you would never have had any thoughts that you could remember

...that would make you feel anything. So youd have no memoryYou would be a complete blank ... a vegetable in the dark!

Thats what a lack of experiencewould be like.

So the reverse of thatis that you need all of those things...you need experiences

We are allthe sum total of our experiences what we experience everyday in the world is how we know the world and very importantly how we see the world or believe the world is.

So experience is at the very core of our existence

Slide 5 Hendrix experience sounds

Slide 6 Whats on - Weeks 3 and 4

Today I am going to talk to you about this concept of experience and how we can begin to understand it. Next week I will take this concept a little further and talk about some different aspects of experience and how they might be useful in designing.

Slide 7 The genesis question - NMV's

Now all of what follows came out of my PhD research which started with a particular question.

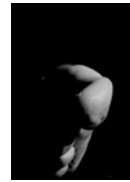
Transport strategists around the world have been saying for years, that in future high density cities, small vehicles such as these will be essential. Motor companies around the world have been designing and building them for yearsand they have all failed. WHY!!

I'm telling you thisso you will understand why I keep referring to vehicles in my research which has really become about experience. It is the experience of these vehicles that I studied in this research

Slide 8

But what's this 'experience' concept got to do with transport?

... well nothing and everything.



The transport question is not really what's important here.... What is important is that its the way I arrived at my understanding of that experience ...and if you can understand and relate to the way I did it...Im hoping you'll understand how you might use it as a designer.

It is really important that you understand that this is not some airy fairy theory but it is a real, and fundamental way that you as a designer need to be able to thinkand the method I will be talking about..... is just a tool that will help you to do that.

Slide 9

- **Design and Emotion Society**
- **Pine and Gilmore**
- **Ken Friedman**



Now theres a lot of people looking fairly intensely at this area of research at the moment, it is new and it seems pretty important. I'll mention just a few people to make the point ...that it is considered an important direction for future designing

The design and emotion society

These people operate out of the Netherlands and lead strongly by the University of Delft. A well respected outfit but a little formulaic for my tastes. They are typical of the school of thought that wants to measure experience and be the first to label it.

Pine and Gilmore

Their website tells us ...to make no mistake... goods and services are no longer enough. Experiences are the foundation for future economic growth, and The Experience Economy is the playbook from which managers can begin to direct new performances.

Pine and Gilmore are very good at telling us what an experience is, and describing what it is good for and how we should be using it in our marketing etc., but they don't tell us how we can understand it or use this understanding as designers.

Ken Friedman

Ken Friedman is a very high profile design research commentator... he said recently about this experience economy...."I don't mean that we won't have things, but they will be things that come out of ... or are designed around, the experience.

A good example of this is the Phillip Starke - Dr. Skud flyswatter, here you've got five cents worth of plastic, selling for twelve bucks US. Now that's a good profit by any standardsand this is based on the experience of ownership not its ability to kill flies.

Slide 10



This concept links in with the later part of the subject where V and Vicki will be talking about future technologies. The way in which we will be designing these future technologies, or any thing for that matter, will more and more require us to understand and design for the experience of users.

But how do I know if your experience is the same as mine? Is my idea of the experience the right one or the only one?

What if I base my designing on my own experience of the world and its all wrongor out of sync with everyone else?How would you know?

This section of the course is about a way to deal with this lack of understanding and about a way in which you can start to build a way to understand it.

But first... I'd better get a move on a tell you about some background to this.

Slide 11 Defining experience

First of all there is a difference between AN experience and experience or being experienced.

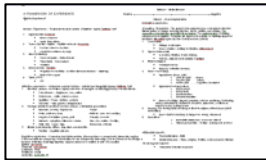
Experience is what you gain collectively over many years and leads to knowledge etcwe are not dealing with that here.

What we want to know about is the individual experiences that go into making up this collective experience.How do we understand AN experience?

Slide 12 Defining experience

When I began this process three and a half years ago I searched in many directions trying to piece together what others thought this idea of experience was all about. One of the best definitions I came across (and I have many) was from Bruce Hanington of Carnegie Mellon university he said "the positive experience of use is more than a sum of useable parts; it is an integrated whole that seeks to make a connection to the person as user, personally, emotionally, socially, culturally." In other words it's a fairly complex thing

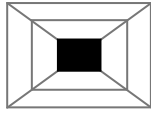
Slide 13



But what IS it? What is experience? I read books on the Psychology of experience, the Physiology of experience and the ways these two interconnect in the neuro-physiology of experience.....cobbling these together I slowly built up a picture of what was being said about experience ...and it looked something like this..... I know it is unclear and I don't expect you to read it or anything only to realise that it was complex and fragmented and didn't really tell me anythingall that clearly

I had to go out and find out for myselfbut how?

Slide 14



.....One of the first things they tell you about doing research is that before you startyou should have a clear idea of your 'theoretical framework'that is the philosophy and methodologies that you will use to do your research.

I knew I wanted to find out about experience,I knew the experience I wanted to know about was the experience of using one of these weird little vehicles....so I was drawn to two important philosophies and methodologies.

Phenomenology – the study of individual lived experience and in particular Martin Heideggers writings on it.and Hermeneuticswhich come from very old tradition of textual interpretation ...particularly studies of meaning in religious texts.

The man who put these together best was Hans-Gorge Gadamer. So these people were the people who philosophically and methodologically guided my research from then on ... and still do

Slide 15



Now to begin with I didn't really know anything about this experience so I set out to find out for myself....the closest thing I could find in Australia to an NMV was a Benelli Adiva. So I arranged a sponsorship and road this weird thing around for 18 months until I realised an important thing ... there was a lot more to understand about this experience than just what I was experiencing.So I put together some very special research equipment and went where there were more weird little vehicle people ...just like me....

Slide 16



I went to Europe. I found them in Germany, in Switzerland in Italy in France and in the Netherlands.

I sought out and interviewed their designers at BMW, Renault, Chrysler – Daimler, Italjet etc.

I also tracked down as many owners as I could and talked them into letting me drive their vehicles while I talked to them about their experience,

I interviewed them while they were driving, and I recorded as much as possible, the contexts in which they operated, including sounds and samples of things. I did all of thisnot knowing exactly what I was going to do with it or evenreally why I was doing it. ...I just believed it was important and that it would reveal itself in time....and that is also the nature of phenomenological research

Slide 17



Just to help keep you awake I will show you a few samples of the data captured
The first one is Professor Johan Tomforde who designed the Smart car. I interviewed him at his office in Stuttgart and I had just asked him how you could design for ...FUN

This one is where I am wearing the helmet-cam and driving a small electric car called a Twike which is made in Switzerland there are many thousands of these in Europe

The last one shows the owner of a dutch car called a Carver 300. It has three wheels and drives like a motorbike. It leans over when you turn
You can hear him refer to 'da leaning'

And just to give you a taste of the context these vehicle operate in... here is a few scenes from Florence, notice the sound qualities the small spaces and textures of the buildings.

Slide 18



OK I got back to Australia and the real work began.

I transcribed each of the 30 hours of tapes, photos and sound recording . I did this using the videos while I typed so that I could recall all the sensory aspects of the experience,... the way I was feeling at the time, what I was thinking and saying. This is what's called in phenomenology a 'descriptive narrative'...It describes the eventsphenomenologicallyas lived.

Slide 19



This scene is at around 8.30am on a Monday morning in the city of Florence in Italy.

I chose this time and place as it is peak hour in one of the most congested cities in Europe and I wanted to capture the experience of riding a scooter in peak hour traffic.

In this scene I've entered a large round-about and all I have to do is travel around it ...and exit to the right.

I'm going to read this transcription, but ask you, if you will, to listen to the pace of the description, the changing tempo and urgency, the rising and ebbing levels of tension, and the emotional language used in the narrative.

CLICK ON PICTURE TO START VIDEO ... TALK OVER VIDEO

As I enter the round-about...I am confronted with luxury cars ... a number of loaded trucks ... large motorcycles, scooters, small cars and buses.

The traffic starts to move forward with smaller vehicles bobbing and weaving around the larger ones patiently inching forward, and all positioning themselves to move into the changing gaps and breaks in the traffic flow.

I see gaps opening and closing quickly and realise that within the next 50 metres, I need to get from the inside lane to the outside lane across six lanes of packed traffic.

I have to be very bold and dive into every gap, however small.

I have the feeling that I don't really know what I'm doing but must push on boldly as this is what is expected in this environment.

There is no place here for the weak or timid. There is no giving way or rules of the road, it is simply accepted that if you can go, you do.

I dart in and out of seemingly impossible ... small gaps and navigate around motorcycles and scooters who are like mebut crossing the lanes in opposite directions.

The scene is a chaotic mess of trafficbut not one horn, nor one angry shout is thrown. It seems amazing but all of a suddenI am where I wanted to be, leaving the roundabout, heading in the other direction and the traffic is flowing calmly again.

I have a slightly dazed feeling of... what just happened?

Slide 20

Now Gadamer's hermeneutics tells us that in interpreting texts (remember hermeneutics is the interpretation of texts)interpreting texts is done in a circular, conversation with the text.This means you ask the text something like "what are you saying" ... and it replies "the sky is blue" which tells you something you didn't know before but which changes the view you have of the skyso then you ask "if the sky is bluewhat does this mean"and it says "it means it's a nice day and it's not raining"so then you can ask "if it is not rainingis that a good thing? It says "Yes that makes me feel good" and so on and so on.. so you are having this conversation with a text that you wrote or transcribed...and arriving at a different understanding of it ...weird huh?

Slide 21

This is what I did with my descriptive narratives. I conversed with them over and overasking questions and sorting out the answers. ...all the time trying to figure outwhat does all this data MEAN?

I would like to emphasise that the degree of success of the analysis is fundamentally determined by the work you put into the narratives at the beginning of the process

It is quite a difficult thing to be involved in the conversation, even to participate in developing the material content,while at the same time letting the experience speak for itself.

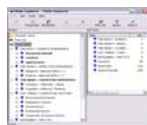
What this actually does each time you question the data and get an answer ...is changes YOU. This is the hermeneutic circle. You change your perspective a little bit, each time you learn something newuntil you stop working with the data. ...at this point ...you are a different, changed person.

Slide 22



When I did this, I used a program called NVivo, because it is very good for sorting large amounts of data into themes. But a little complicated to learn. After many months of coding and sorting ... and coding and sorting ... I had some 1500 fragments of information in around 200 themes. I was getting so close to itI couldnt see the wood for the trees any more.

Slide 23



So I went to see one of the people who wrote the program NVivo and who runs a research farm near Bowral. She is a mixed-methods research specialist and I spent three days with her, sorting and resorting material under her guidance, until a pattern appeared which I was not really expecting. It looked something like this ... in NVivo.effectively it was a taxonomy of the NMV experience. Taxonomy just means a hierarchical classification system. ...but it was a taxonomy that the data had told me was there. I was just listening to it ...hermeneutically. And this is what it had said!

WOW

Slide 24



This was feeling a little like déjà vu because remember I told you about the readings I had done about experience a year earlier that looked like this.

The taxonomy of NMV experience was shaping up the same way.

I was worried that somehow I had made this happen like this ...manipulated the data in this way. But the researcher I was working with is a very senior academic and verified that we had not biased the analysis and that this was genuinely what it wanted to say. What we had done was verify what all the psychology, physiology and neuron-physiology people had been saying but here it was verified out of the real lived experience of NMV usersand in a way that made sense. This was a picture of the experience that made it understandable.

Slide 25

This how the Taxonomy looks outside NVivo. This is what I sent you the other day and what I call a 'little ToE'

Slide 26

so in a little while you will be going into a workshop to work with a spreadsheet that is based on this whole saga of research into experience. You will be using the ToE worksheets in Excel not NVivo like I did, but you will be following almost precisely the same process of interpretation of your data as I did.

Slide 27

So just to wrap up..

The taxonomy of Experience was derived out of a study of a bunch of weird little vehicles.

Will it work in any other study of life experience?

Why not? The ToE was developed out of lived experience

We also now know...

- that it reflects and is supported by accepted knowledge in Psychology, Physiology and Neuro-physiology

- it is solidly underpinned by and operates within the widely accepted philosophy and methodology of hermeneutical phenomenology

- The ToE helps you to Understand an experience not simple measure it or report on it.

- It is also difficult for someone to criticize your understanding of an experience if you were a designer who had done a ToE on that experience. ...you would be changed by a deeper understanding of the experience and anyone else looking at it can only understand it from their externalized singular and shallow perspective.

This is why a ToE cannot be done by someone else and given to you.

The understanding is generated within you.

Slide 4FINIS

I hope you have enjoyed this lecture today and Ill see you in the workshops later