

Grounding Experience:

Relating Theory and Method to Evaluate
the User Experience of Smartphones

David Swallow, Mark Blythe & Peter Wright

University of York

Theories of User Experience

Pine and Gilmore 1999 – The Experience Economy

Ford and Forlizzi 2000 – Early Framework

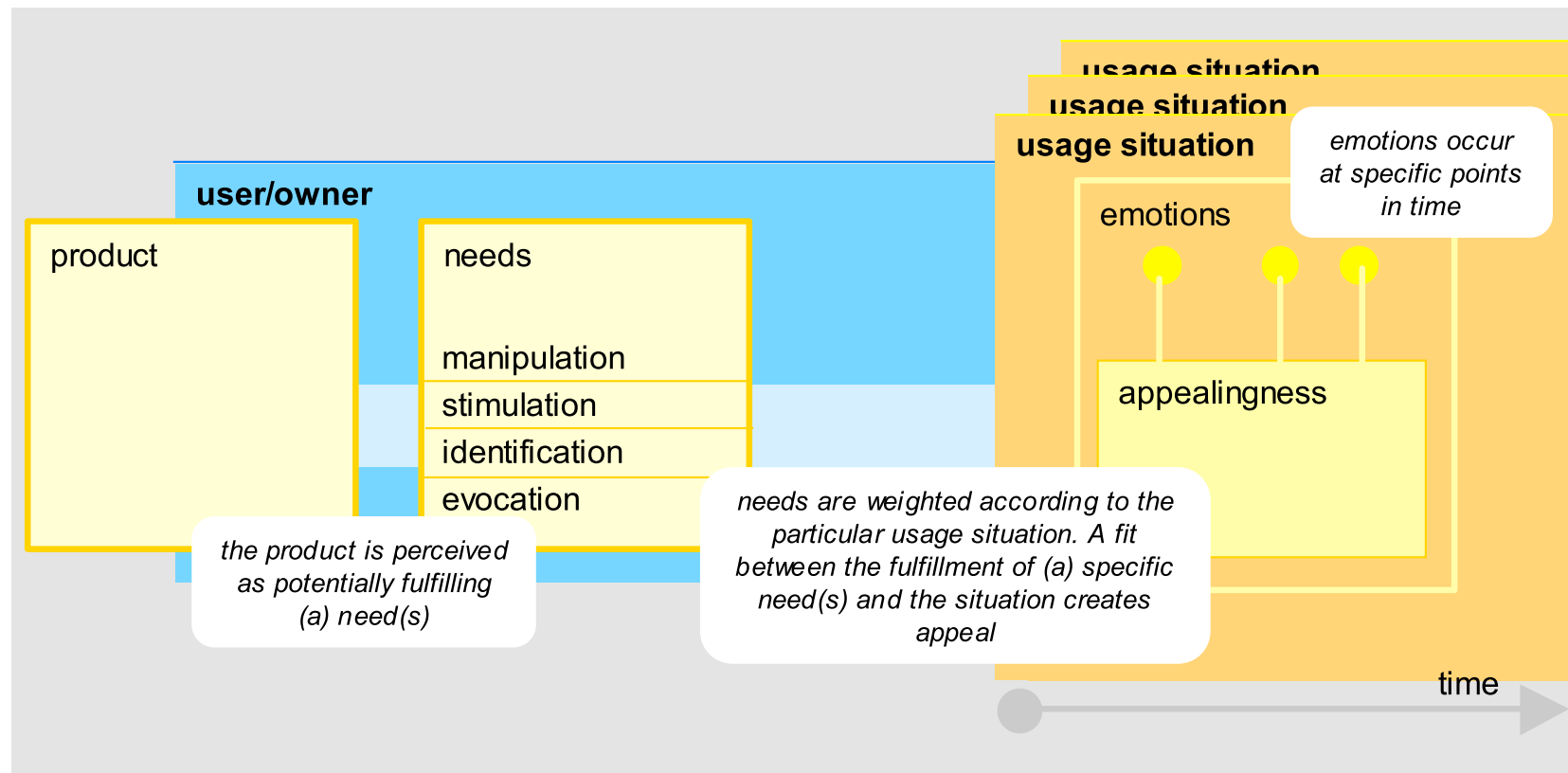
Hassenzahl 2003 – Hedonic Design

Wright and McCarthy 2004 – Technology as Experience

Norman 2004 – Emotional Design

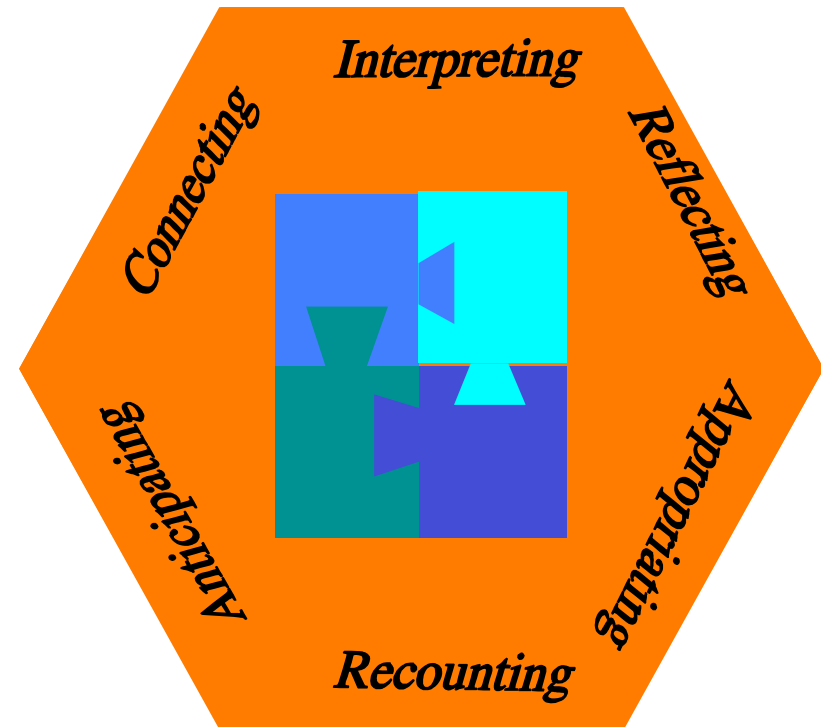
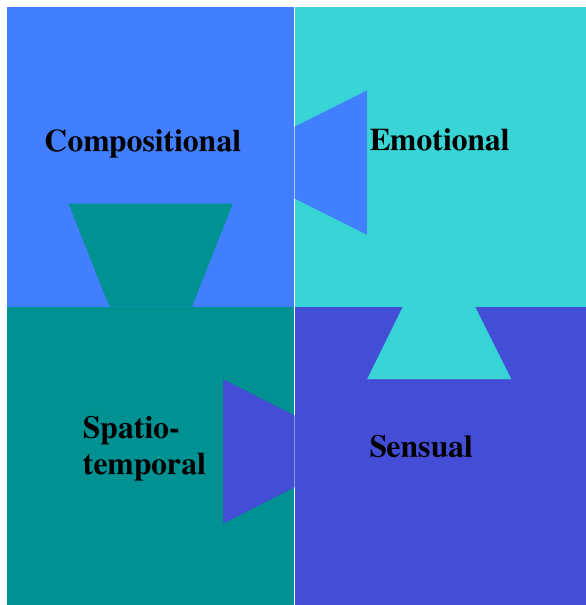
Davis 2004 – Theoretical Foundations for Experiential Design

Cognitive Models



E.g Hassenzhal 2004 – Method? Lab based experimentation

Holistic Relational Models



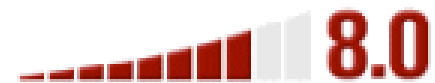
Wright & McCarthy 2003 Method? Case Study

Orange SPV E200



Orange SPV E200

Editors' Rating



Readers' Rating  90%  10%

[Rate this product](#)

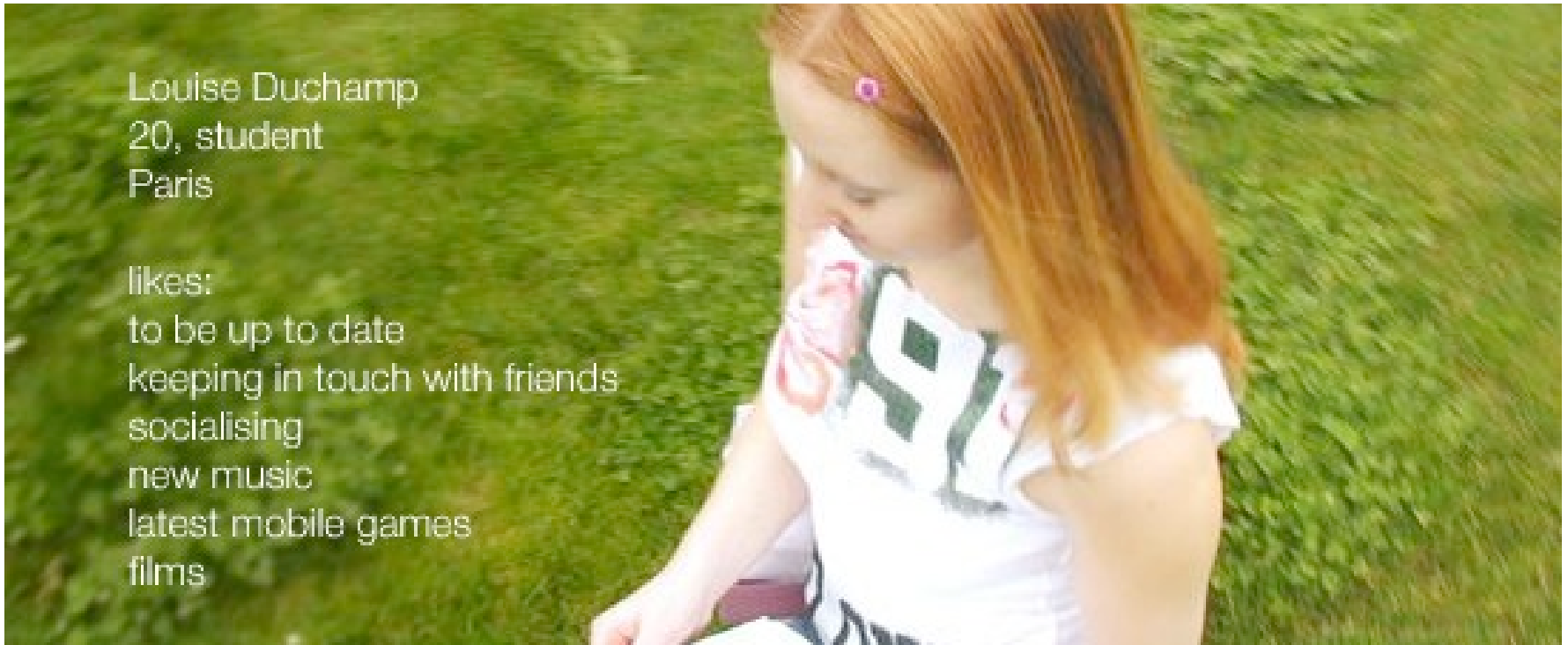
<http://reviews.zdnet.co.uk/>

Orange Website Advertising

“What can the SPV E200 do for me?”

Louise Duchamp
20, student
Paris

likes:
to be up to date
keeping in touch with friends
socialising
new music
latest mobile games
films



Persona Matching

“What can the SPV E200 do for me?”



Participants recruited with demographic characteristics which matched the personae as closely as possible




Persona Matching

“What can the SPV E200 do for me?”



"Miguel updates his contacts and calendar from his PC. On the way to the meeting, Miguel checks his client's share price, connecting to the internet with Internet Explorer. Leaving the taxi, Miguel updates his calendar reminding him to sign the contracts in the morning Miguel Instant Messages everyone in the office inviting them for drinks to celebrate "

Case Study Task Allocation

Persona Characteristics	Persona Matched Task	Task Completed?	Task Enjoyed?
Louise, 20, Student 	Download film trailer		
	Use MSN Messenger		
	Personalise SPV E200		
	Download game		
	Show to a friend		
	Download MP3		
	Take a picture and e-mail it		
Jill, 42, Mother of two 	Use Task List		
	Send an SMS text message		
	Use integrated camera		
	Organise gallery		
	Send a picture via MMS		
	Send a Voice Note via MMS		
Miguel, 28, Exchange Broker 	Synchronise phone with PC		
	Use Internet Explorer		
	Send an e-mail		
	Use the speaker phone		
	Use the calendar		
	Use MSN Messenger		
	Back up the phone to the PC		

Do Something ... Challenges

...fun	...scary	...exciting	...kind
...comforting	...new	...rewarding	... brave
...risky	...surprising	...pleasing	...relaxing
...random	...for someone else	...funny	...mean
...daring	...frustrating	...you are proud of	...together
...loving	...intimate	...boastful	...alone
...hopeful	...cool	...bizarre	... silly
...boring	...creative	...inspiring	...annoying

With your mobile

Interviews, Voice Notes, Grounded Theory




Experience takes place between a remembered past and an anticipated future

- Anticipation (Technology Biography)
- Reflection (3 weeks after the study)
- In Situ (voice notes)
- Grounded Theory (theory emerges from the data – no precise hypothesis to test)

Case studies used to open up the design space



Task Completion and Enjoyment

Persona Characteristics	Persona Matched Task	Task Completed?	Task Enjoyed?
Louise, 20, Student 	Download film trailer	✗	✗
	Use MSN Messenger	✓	✓
	Personalise SPV E200	✓	✓
	Download game	✗	✗
	Show to a friend	✓	✓
	Download MP3	✗	✗
	Take a picture and e-mail it	✓	✓
Jill, 42, Mother of two 	Use Task List	✗	✗
	Send an SMS text message	✓	✓
	Use integrated camera	✓	✓
	Organise gallery	✓	✓
	Send a picture via MMS	✓	✗
	Send a Voice Note via MMS	✗	✗
Miguel, 28, Exchange Broker 	Synchronise phone with PC	✗	✗
	Use Internet Explorer	✓	✓
	Send an e-mail	✓	✗
	Use the speaker phone	✗	✗
	Use the calendar	✓	✓
	Use MSN Messenger	✗	✗
	Back up the phone to the PC	✗	✗

Grounded Theory Themes

- Identity
- Sociability
- Security
- Organisation
- Relevance

Identity

- *“didn’t fancy the Nokia look, with the multi-coloured console on it. I wanted something that looked business like so I bought this little grey thing with a fold down flap, a ‘Fox Mulder’ effort. It was probably a posing factor.”*



Identity Statement through Patterns of Use



“What really irritates me is when I’m serving a customer, and their phone goes off and they carry on talking. I think that is so rude. They’re talking and giving me change with the phone stuck to their ear. I don’t like that. It really annoys me.”

Sociability

“Proof” of arrangements

Awkward messages relayed through text

Contact lists to avoid people

Flirting / Dating



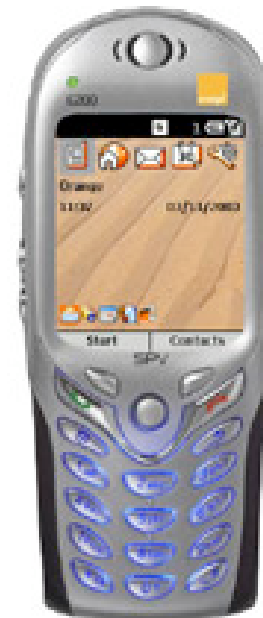
Exploit for New Contacts



Virtual Personal Ads and Introductions

Security

- Mobile phone theft, fastest growing UK crime
- *I had it hidden and not open to public gaze [...] I read about people getting mugged for their mobile phones, and for a while I was a bit conscious about using it in the street*



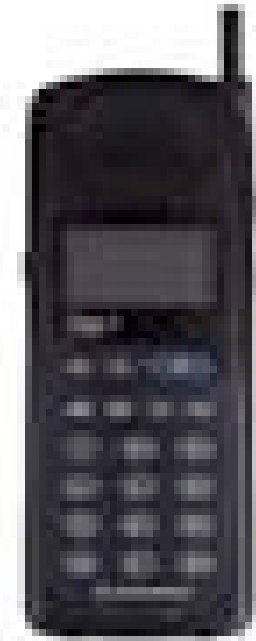
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Organisation

Jill – it's “more like a business person's phone”

Miguel – during a busy day at work, the ability for the phone to send out a call sign, perhaps fifteen or thirty minutes before an appointment or a meeting is very useful

Increased offloading of organisational work?
Calendars communicating to find mutually convenient dates?

Relevance

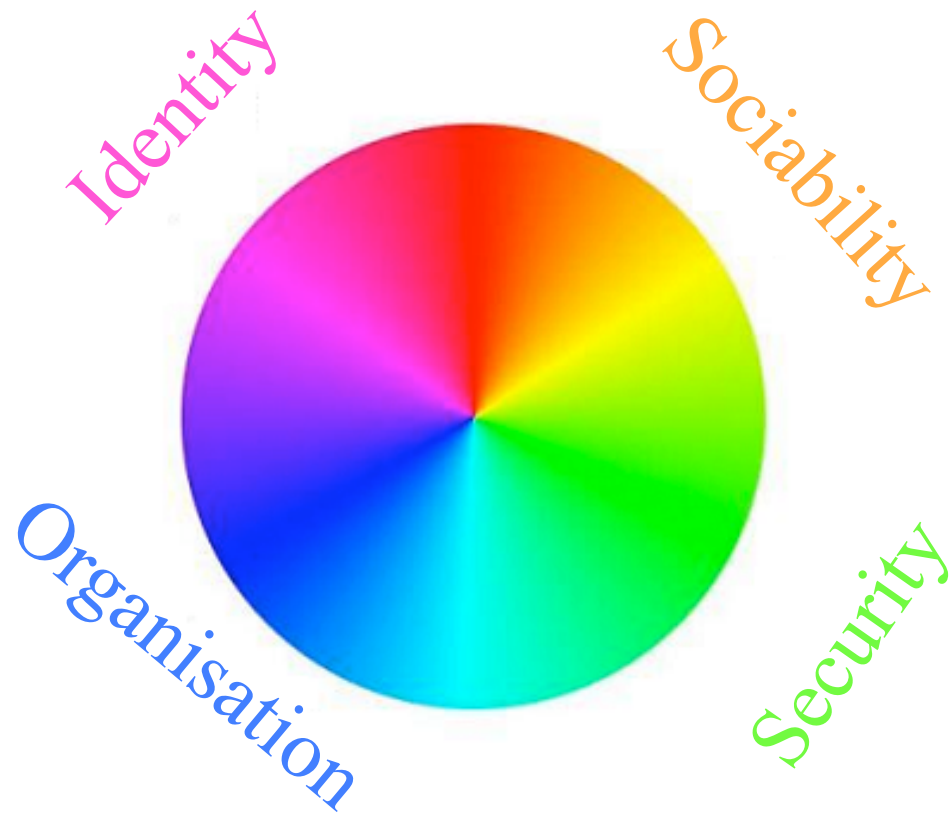
- Jill *“I feel the phone is suited for a businessman or a professional, but not for someone like me.”*
- Louise *“I don’t think this is really my sort of phone.”*
- Miguel - *I have soon found it has taken up residence next to my old phone in my bag and is used very rarely.”*

Jack of All Phones

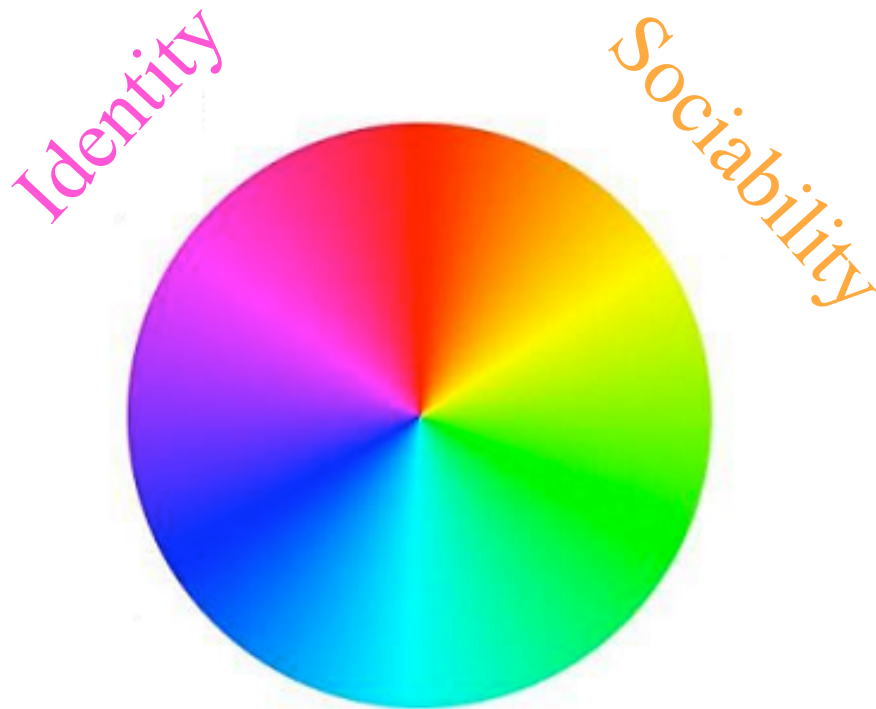


Andrew Monk's Two Button Phone

Relational Approach to User Experience: Design Space



Relational Approach to User Experience



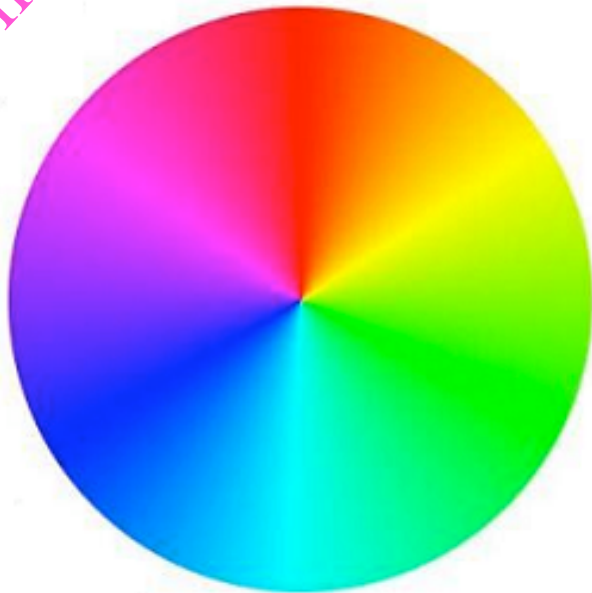
What does my
mobile say about me
... to whom

To friends,
colleagues, strangers

And when – at three
in the afternoon, at
three in the morning

Relational Approach to User Experience

Identity



Security

Phone theft, data theft

Security from thieves but also security from nearest and dearest

E.g text messages as evidence in divorce cases

Relational Approach to User Experience



Communicating calendars
and the meeting you don't
want

Pretending to be very, very
busy for the foreseeable
future.

Conclusion

Data collection requires a first person perspective since an individual's experience is in part concerned with what the individual themselves bring to it.

Technology expresses not just identity but identities

Reflection and recounting influences, whether individuals appropriate a particular technology



+ =



“SmartPhone Confused User”

Available online