

Using TAMA to Understand Online Lives

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Teasing Apart with Meta Analysis

Teasing Apart and Piecing Together: Towards Understanding Web-based Interaction

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ABSTRACT

It is difficult to deeply understand web-based interactions and people's use of information online. This makes it difficult to capture existing web experiences so they can be recreated in other systems (for example, to help with accessibility) and to move real-world situations to the web while maintaining the essential elements of the original situation (for example, creating digital equivalents of existing social environments). We describe TAPT, a tool for achieving this understanding, and we present a comparative evaluation of TAPT against using Scenarios or Group Discussion to capture user experience. We discuss the results of this evaluation, which suggests that while Scenarios can help capture specific experiences from certain types of user, and Group Discussion requires less effort, TAPT is superior at teasing out in a structured way the key elements that make an experience what it is. Our results show that TAPT could be a valuable tool for analysing and redesigning online experiences, and that the best approach to design may be to apply multiple methods in a complementary fashion.

Keywords

web-based interactions, physical to digital, understanding, analysis, design

1. INTRODUCTION

Web Science is based on the notion that "understanding the Web involves not only an analysis of its architecture and applications, but also insight into the people, organizations, policies, and economics that are affected by and subserved within it."¹ To this end we have developed TAPT (Teasing Apart, Piecing Together), a tool for understanding web-based interactions and modelling real-world interactions on the web.

The motivation for TAPT's development begins with social networking sites (SNS). These zones of social interaction can be a source of fun [9] and emotional support [27]. However, offline members of society are excluded from these facilities. This issue is increasingly important, especially given obstacles faced by the elderly in the uptake of technology [18], the trend for ageing populations, and the geographical dispersion faced by many families. Some members of offline groups (such as the elderly) can become vulnerable without regular social contact.

One approach to this issue is to afford broader access to social technologies by providing them in a more accessible fashion. One method is to re-provide online experiences in new contexts, familiar technologies such as televisions, or

Re-providing SNS functionality via pervasive task which we can tackle technologically more difficult to re-provide the subjective SNS use: these are experimental, and difficult.

The goal of supporting such re-provision is to develop TAPT, a method for understanding translating these into new contexts. TAPT is a process based on Dix's ideas of deconstruction was first discussed in the context of Web Science [13].

2. RELATED WORK

Much research has considered web-based interactions, for example, 25 years have passed since the first discussed principles of system design patterns were first appropriated by design [13].

Design has been discussed in terms of multi-modal, ubiquitous systems [16] and aspects such as user experience [16].

Although understanding user experience through traditional methods do not always clearly show the experiences grounded in specific contrast in results of traditional intended to elicit user experience evaluation, Facebook is certainly not hard to use, experience may help drive

The growing field of UX interest in user-focused as UX is inherently subjective for rigorous, to transcend systematic, evidence-based

Forlizzi [5] discusses approaches to understand hedonics and aesthetic have considered user-UX through prototyping

Using TAPT as an Analytical Method for Understanding Online Experiences

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ABSTRACT

There are various methods for understanding user experiences, but many of these focus on explicit and not implicit aspects. Teasing Apart, Piecing Together (TAPT) is a method that was developed to understand and redesign experiences, crossing web / non-web boundaries [9]. This paper presents a case study of its repurposing towards understanding online experiences more deeply, in this case considering playful location-based uses of the mobile web. The approach is to use TAPT to elicit key words from expert users, before conducting a meta-analysis of the results. This process is referred to as TAGMA, Teasing Apart with Groups and Meta-Analysis. This paper describes and reflects on the process used.

Categories and Subject Descriptors

H.5.3 [Information Interfaces and Presentation]: Group and Organization Interfaces – evaluation, methodology.

General Terms

Experimentation, Human Factors.

Keywords

Web-based interactions, online lives, analysis, TAPT, TAGMA.

1. INTRODUCTION

This paper describes and reflects on the repurposing of Teasing Apart, Piecing Together (TAPT) for more deeply understanding people's experiences online. TAPT is a method for understanding and redesigning experiences. This paper presents a case study on the combination of the first phase of TAPT, Teasing Apart, with focus Groups and Meta-Analysis: a process called TAGMA. TAGMA was used to examine people's experiences with playful geosocial services on smartphones.

The author supported the participant in running two focus groups with expert users of a geosocial network called Gowalla, and a second geographical collaborative system, geocaching.

In this paper the term 'participant' is used to refer to the researcher who administered the study on geosocial services,

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while the term 'subject' is used to denote the volunteers who took part in that study.

The participant asked her subjects to apply TAPT's analytical phase (Teasing Apart) to Gowalla and geocaching, resulting in two collaboratively produced analyses of experiences of using these systems. In conjunction with the author, she then conducted a three-stage meta-analysis of that output:

1. A simple comparison, finding keywords that were identical or related in both focus groups and those that were specific to one or the other.
2. Framing the artefacts in a hypertext space, identifying what appeared to function as links and nodes within the systems.
3. Considering the relevance of existing hypertext theory in the context of the results.

The author later conducted an additional analysis of the results, using current theory about playful experiences.

This paper reflects upon the use of TAGMA (Teasing Apart with focus Groups followed by Meta-Analysis) in order to better understand mobile web phenomena. After describing the approach, it comments on: how the method met the participant's hopes and expectations; properties of using Teasing Apart with focus groups; and the process itself. It also discusses how this approach would work in broader contexts.

2. GEOSOCIAL SERVICES

A full exposition of the study that was run within this case study is beyond the scope of this paper, which concerns the methodology used to investigate the geosocial services. However, this section briefly summarises the motivation for exploring the topic and the results gained.

2.1 Why Geosocial Services

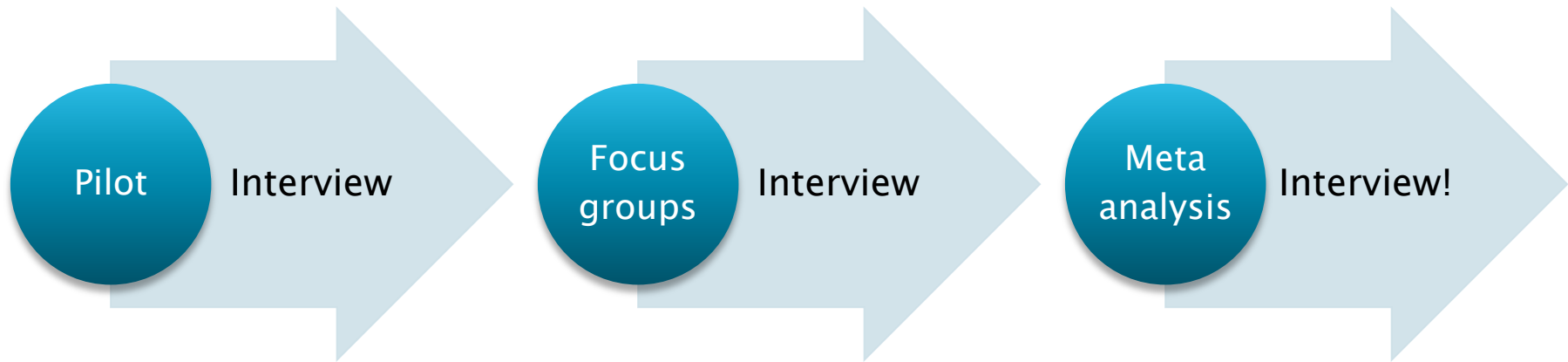
Geosocial services such as Gowalla¹ and geocaching² are clearly becoming popular. At the time of the study (October 2010), 7% of the Norwegian population owned an iPhone [2], and many more owned other smart phones [4]. This plethora of location-enabled technology means locational services are becoming mainstream.

However, users of such services can struggle to articulate their motivations for using them, and their experiences with them. Additionally, there has been much discussion of the privacy issues of such systems [3] [6], but less consideration of why "checking

¹ <http://gowalla.com/>

² <http://www.geocaching.com/>

The case study



(I shall not be talking about geosocial services today)

Teasing apart results


Teasing apart results		
Experience (1)	Surface elements (2)	Ex
		Lit
Make a comment viewable by others who can annotate it with their own responses	status friends phrase response chain identification brief simple informative humorous sharing	Bro Push Sh Inf
		Re

TAPT: SIGNPOST ?

1) EXPERIENCE

A NOTICE PROVIDING THE DIRECTION & DISTANCE FROM ITSELF TO ANOTHER LOC

2) SURFACE ELEMENTS

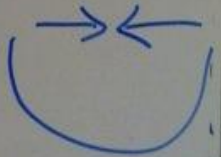
- ARROW 
- BOLD
- QUICK TO READ
- SIMPLE SHAPE/COLOUR

3.1) LITERAL EFFECTS

- BROADCAST VISUAL INFO
- DIRECTIONALITY/TYNESS
- RECURSIVENESS
- DISTANCE AWAYNESS - ABILITY

3.2) ABSTRACT EFFECTS

- DEPRESSED
OR
EXCITED
- INFORMED
- SAFE
OR
RELIEVED



- CONFUSION
- REMINISCENT

5)

A WAY TO BROADCAST INFO THAT INFORMS THE USER OF THEIR RELATIONSHIP BETWEEN WHERE THEY ARE AND WHERE THEY'RE GOING LEAVING THEM IN A WIDE RANGE OF EMOTIONAL STATES

Location

Search:

Find My Location

Map Types

<input checked="" type="radio"/> Road Map	MapQuest
<input type="radio"/> Terrain	MapQuest Aerial
<input type="radio"/> Satellite	My Topo
<input type="radio"/> Hybrid	Bing Maps
	OpenStreetMap
	OpenCycleMap



Zeche Zollverein

Essen / Historic Landmark

108 People | **194** Check-ins | **23** Photos | **2** Highlights



Der doppelachsige Turm ist zum Wahrzeichen des Ruhrgebiets geworden. Die Schachanlage gilt als technisches Meisterwerk und einzigartiges Zeugnis der Epoche der Montanindustrie. Eindrucksvoll sind die Gestaltungsprinzipien des Bauhaus in industriellem Kontext umgesetzt.

showing

competition

GEOCACHING

trade

documentatio
passport
log

Teasing

Teasing apart results

Experience (1)	Teasing apart		Detailed experience (5)
	Surface elements (2)	Experienced effects (3 & 4)	
	Literal (3.1)	Abstract (3.2)	
offline mission based on online map. World wide activity	<ul style="list-style-type: none"> low technical geocaching 100% Physical OS set no digital Share or alone 	<ul style="list-style-type: none"> relaxing challenging social learning travel bug new man 	<ul style="list-style-type: none"> GC is about finding Secrets and GC is about finding Secrets and GC is about finding Secrets and

NO END - NO CLOSURE
many small goals, no universal goals
self-chosen not externally imposed

Geocaching

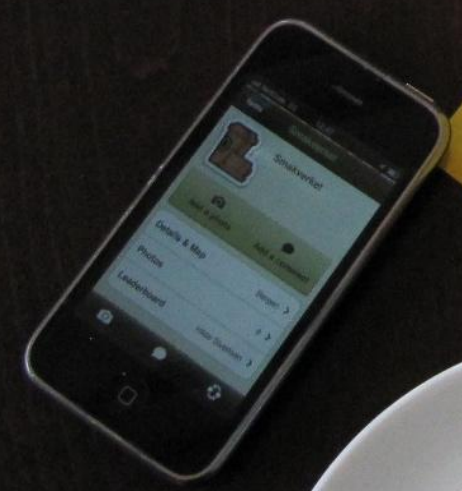
Patterns (with mark's paper)
Gomalla: home - work - home
Linn: life - exciting - travel etc
* pins for Norway encourages exploration
* leader board encourages habit

travelbugs - curiosity
get a few caches at once - journey distance?
cluster - learning
new place - exploration
happen to be passing by - learning, orienting yourself

hit hunters and gatherers (Cathy Marshall)

goals?
- for breaking the rules
- guide guard rules
- interactive fiction
- inventory!
- goals like if

geocaching hunt & puzzles etc
(Clare: choose your own del. where the planet (goal) is unlinked Jane-space)



Links: Sports
Gomalla
Social impact but based on proximity (time, place)
ed
Cathy Marshall
temporal
tip is Gomalla - positioned order of time in fiction
Newspaper to make

map to mark's
Cathy Marshall
TAY

Teasing Apart with Meta Analysis

- ▶ Flexibility
 - Teasing Apart: focus groups, researchers, anonymous participants...
 - Meta Analysis: seek patterns, or categorise effects, or...
- ▶ Users articulate experiences in technology-neutral terms
- ▶ A way to understand online lives!

