BRIAN DIXON, CSM
From You Are Here to I Could Be There
Urban Recreational Walkers.
GPS-enabled mapping.
Situation Awareness.
METHOD.

FINDINGS.

DIRECTION.
METHOD.

FINDINGS.

DIRECTION.
‘THE ROLE OF THE HYPOTHESIS IN CONSTRUCTIVE DESIGN RESEARCH’
(ADAPTED FROM ANNE LOUISE BANG ET AL. 2012)
Starting with a motivation.
MA MAPPING WORK
Interviewing 31 urban recreational walkers.

Reading design, human geography, anthropology, ecological psychology, human factors, philosophy.
METHOD.

FINDINGS.

DIRECTION.
Consulting the literature.
Questioning passive models of interaction.
Questioning of the classic cartographic model.
Recommended new approaches to re/presentation.
THE ECOLOGICAL APPROACH TO
VISUAL PERCEPTION
(JAMES GIBSON 1979)
TECHNOLOGY AND THE LIFEWORLD
(DON IHDE 1990)
A BASIC CONCEPTUAL FRAMEWORK

**The Situation**
(i.e. the user’s embodied involvement in the surrounding environment).

**Situation Awareness**
(i.e. the user’s alertness to the unfolding of space and time).

**The Activity of Urban Recreational Walking**
(i.e. exploring an urban environment on foot).

**The Process of Wayfinding**
(i.e. the user’s negotiation of their present embodied position).
Motivations.

Practice.

Resources used in wayfinding.

Use of technology.

Technological issues.
Q:6: What are the positives and negatives of mobile map use? (Negatives listed)

Yes

- To experience the
- To walk to a place.
- Dog walking.
- A feeling.
- No cost.
- Seeking inspiration.
- Interest in a place.
- Place learning.
- To feel the city.
- Enjoyable as a means
- To explore.
- To see.
- Exercise.
- Friends, Family, Social.
- The feeling afterwards.
- Fresh air.
- Acts thinking.
- Restlessness, escape.
- Investigation, Political critique.
- Getting sun.
- Chance.
- Serendipity.
- Addicted to walking.
- Reliable as a means of transport.

No

- Lack of tangibility.
- Destination is prioritised.
- Loading times.
- Battery life.
- Lack of detailed terrain.
- Battery dependent.
- No richness.
- No water content. Screen size.
- Unreliable connection. Unreliable.
- Missing things. Situation awareness.
- Inaccurate.
- Stop you getting lost. No serendipity.
- Checking becomes a habit.
- Selfish.
- Walking becomes formal.
- Walk becomes more planned.
- Makes you vulnerable.
- Lack of interactivity with route layout.
- Maps are distorted.
- You don't get a sense of place.
No cost.

Seeking inspiration.

Interest in a place.

Place learning.

To feel the city.

Enjoyablity.

Curiosity. Exploration. Discovery.

To see.

Excercise.

Friends. Family. Social.

The feeling afterwards.

Fresh air.

Aids thinking.

Restlessness. Escape.
Lack of detailed terrain.

Battery dependent.

No richness.

No wider context. Screen size.

Unreliable connection. Unreliable.

Missing things. Situation awareness.

Inaccurate.

Stop you getting lost. No serendipity.

Checking becomes a habit.

Fiddly.

Walking becomes formal.

Walk becomes more planned.

Makes you vulnerable.

Lack of interactivity with route layout.
METHOD.

FINDINGS.

DIRECTION.
‘THE ROLE OF THE HYPOTHESIS IN CONSTRUCTIVE DESIGN RESEARCH’
(ADAPTED FROM ANNE LOUISE BANG ET AL. 2012)
Hypothesis: An ideal GPS-enabled map for urban recreational walkers would present their ‘location’, offer minimal content and interactivity, and relate to the immediate environment.
MODEL OF THE PH.D.'S PRACTICAL ENQUIRY
SCENARIO CARD FOR A WALKER’S APP
OBSERVATION OF MOBILE MAP USE SKETCH

BODY TURNS

PHONE TURNS IN THE DIRECTION INDICATED

0.30

PAWNS IN + 200 MILES

0.37

0.40

His body is wholly entirely orientated towards the indicated direction.

0.27

TALKING ABOUT WHAT L SAYS.
EARLY VISUAL HYPOTHESIS
FIRST ROUND TESTING
RESULTS FROM EARLY TESTS

T2

T3

T4

T5

U2

U3

U4

U5

U6
A theory outlining how GPS-enabled wayfinding interfaces can be designed to support a walker’s situation awareness.
There we are.
Thanks.