



EmoMap – Considering Emotional Responses to Space for Enhancing LBS

Silvia Klettner, Haosheng Huang & Manuela Schmidt

The EmoMap Project

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- 2 partners:

salzburg|research



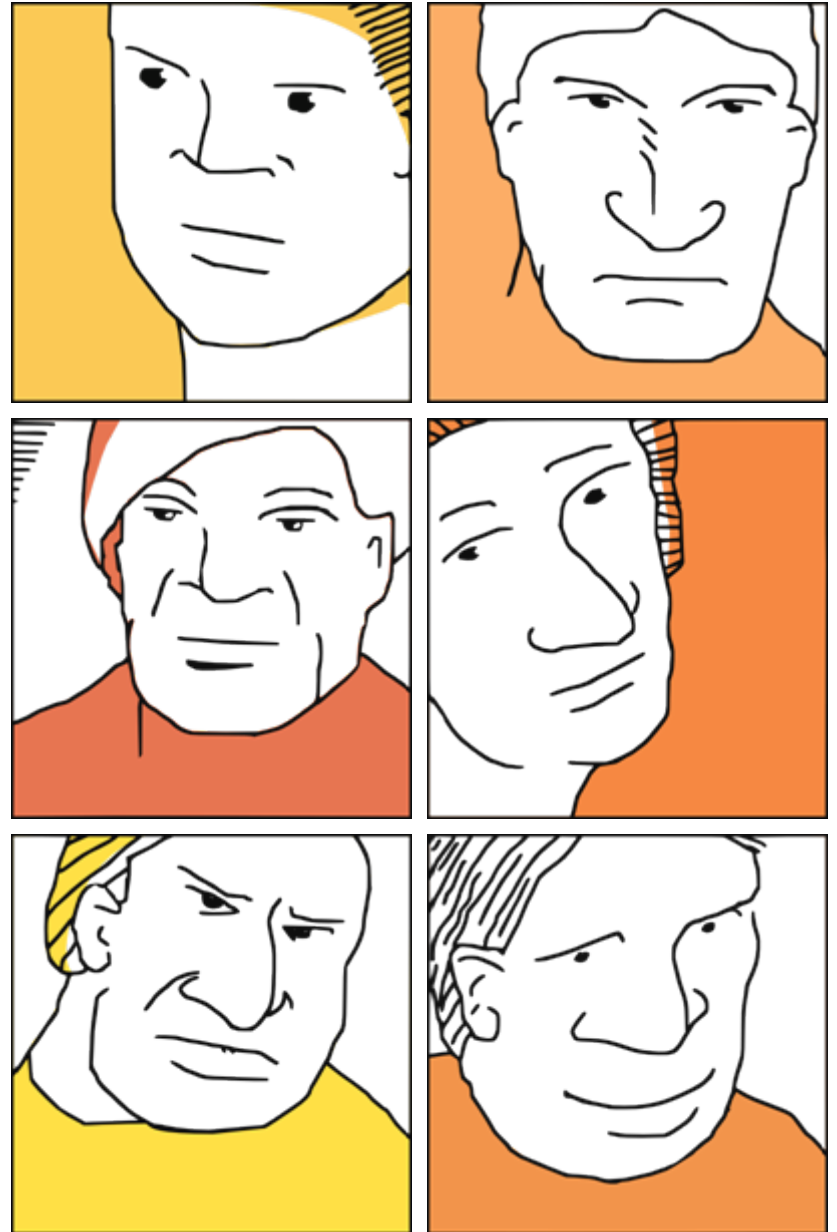
Navigation Systems Today

- Routing based on
 - Geometry
 - Facts
 - “Objective” Data



Human Wayfinding

- Isn't there more?
- Feelings?
- Emotions?
- "Subjective" data

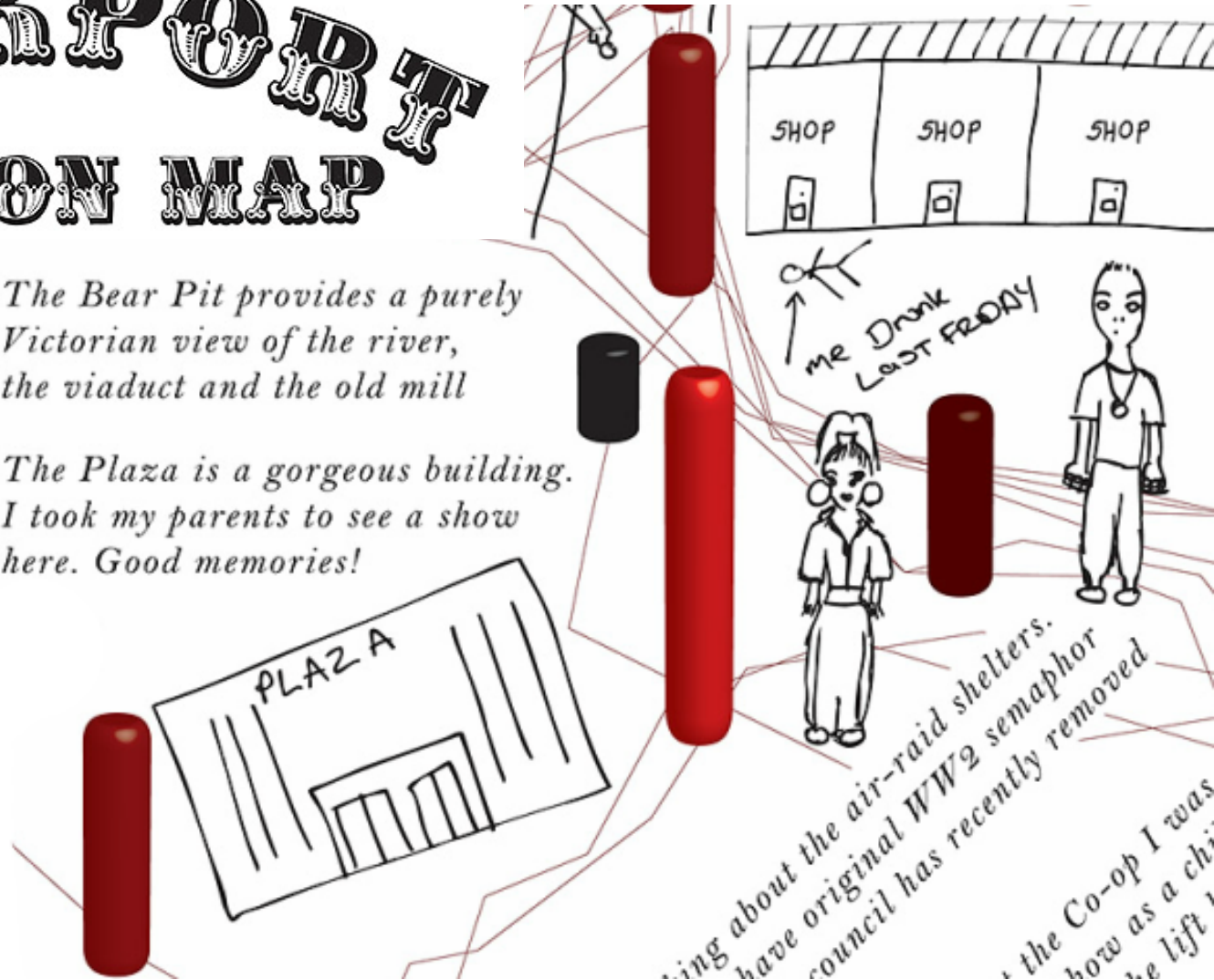


Emotion Mapping by Christian Nold

STOCKPORT EMOTION MAP

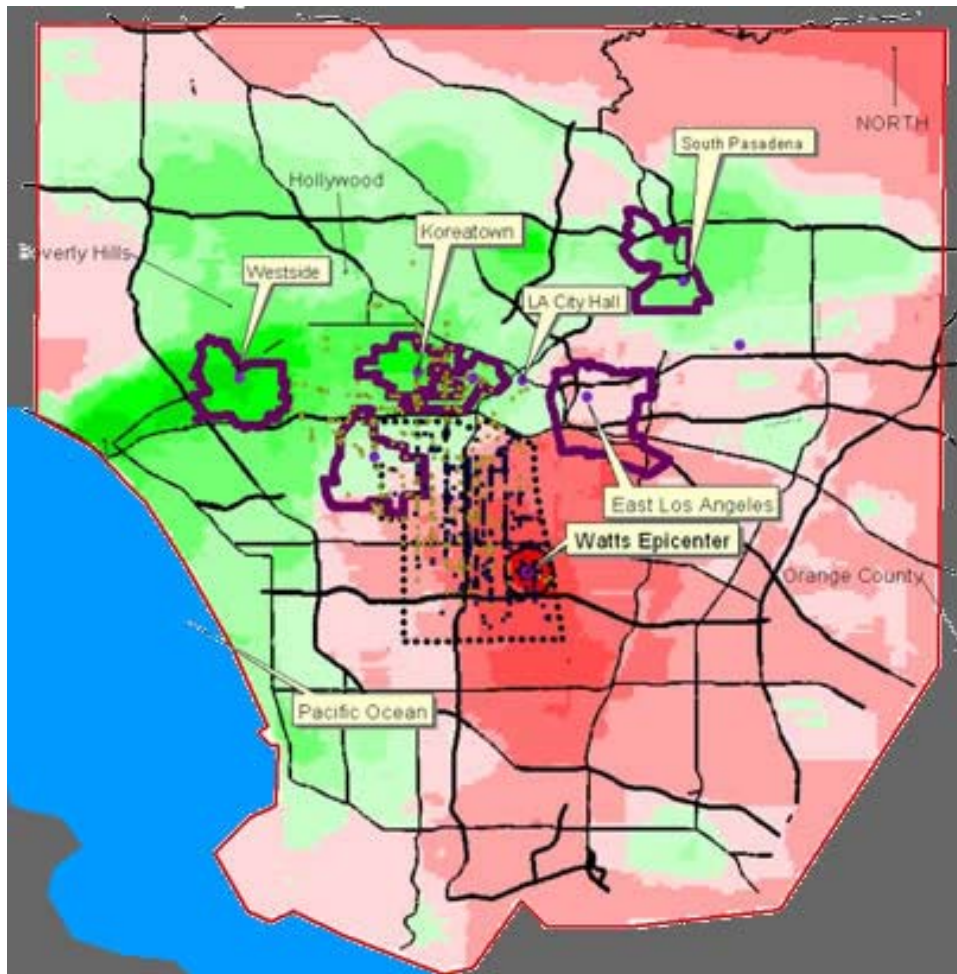
The Bear Pit provides a purely Victorian view of the river, the viaduct and the old mill

The Plaza is a gorgeous building. I took my parents to see a show here. Good memories!



[Nold 2007]

Emotion Mapping

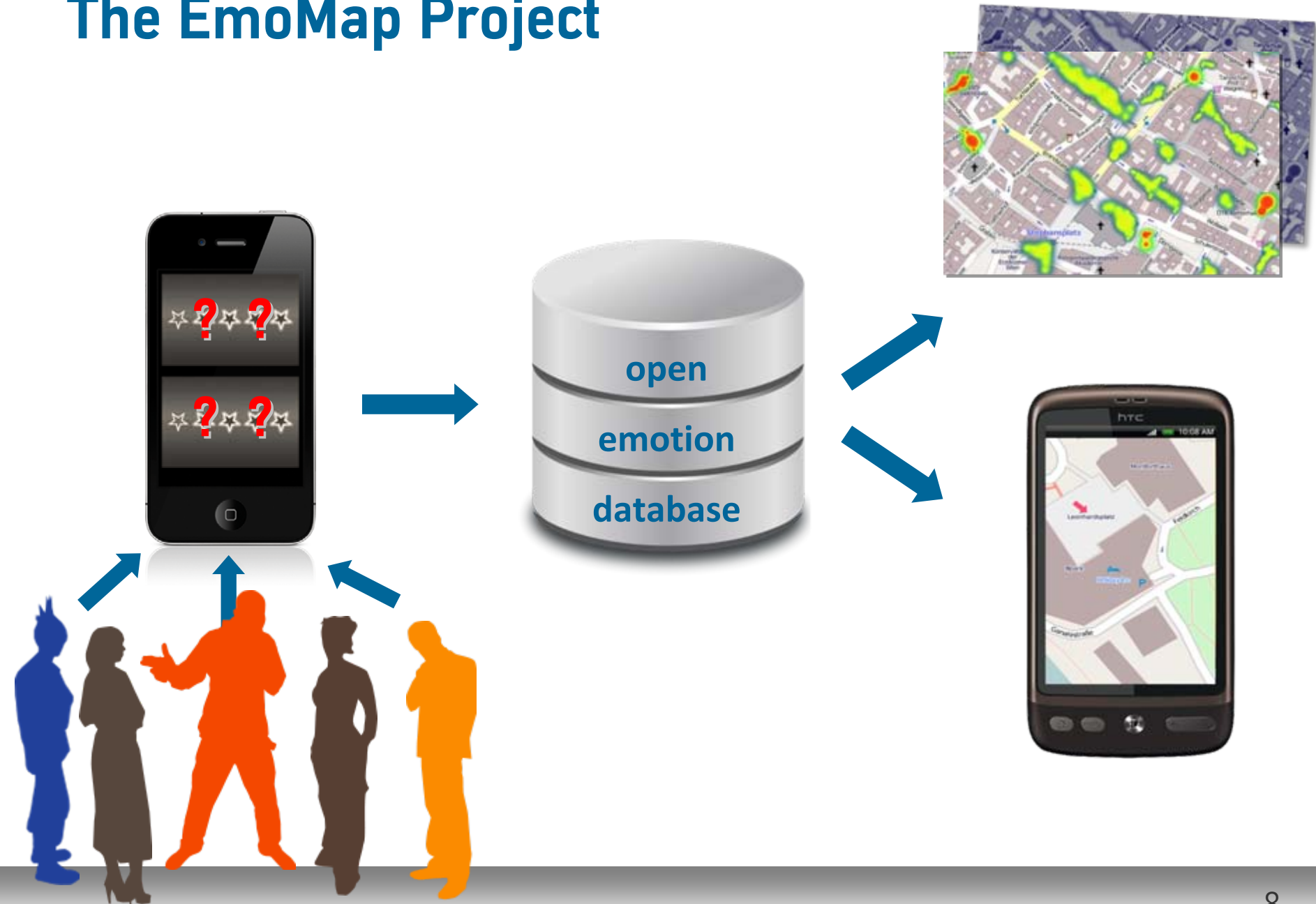


[Matei 2003]

The EmoMap Project

- We know:
 - „Subjective“ information influences people’s route choice (comfort, safety, attractiveness)
 - We want to add an emotional layer to the physical environment that represents people’s emotions *in* space
- Open Questions:
 - What kind of emotions are experienced in space?
 - How can we gather emotion data efficiently and on a large scale?

The EmoMap Project



Emotional experiences related to space

Emotions

Intense feelings about something
→ about space

"I feel stressed."

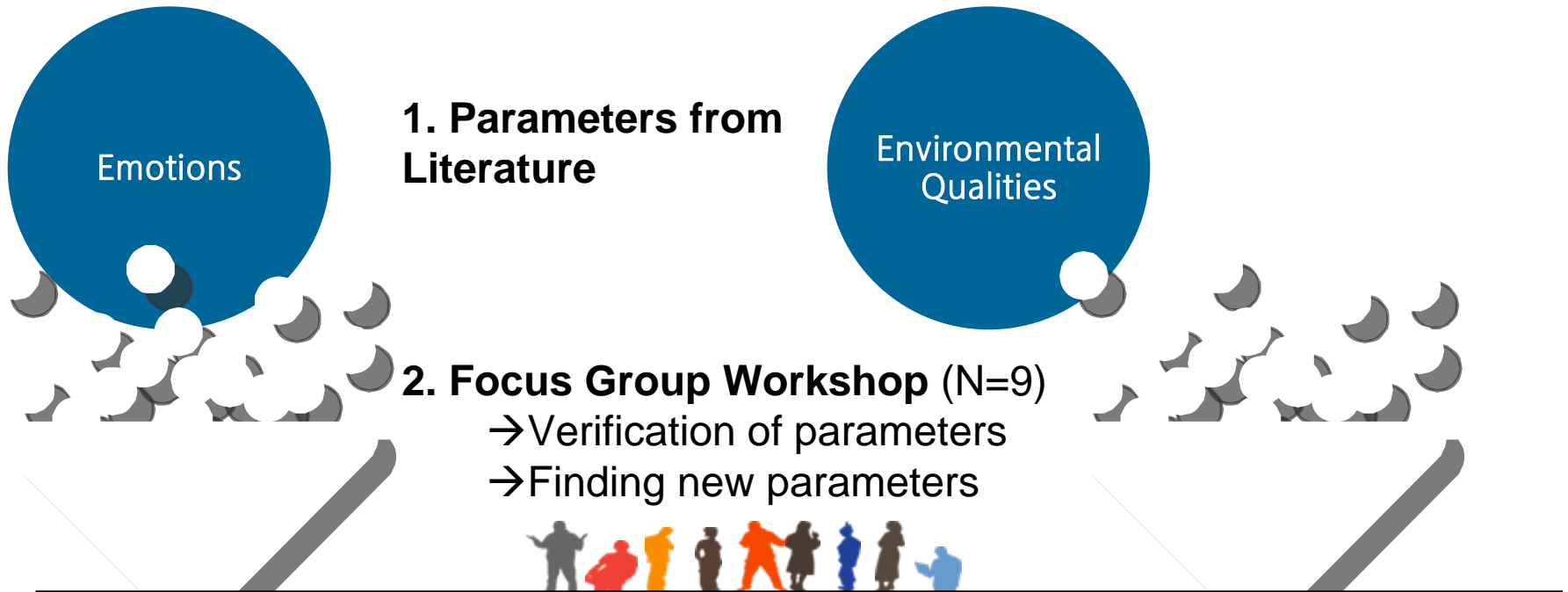
Environmental Qualities

Properties of environments with the ability to change one's affect

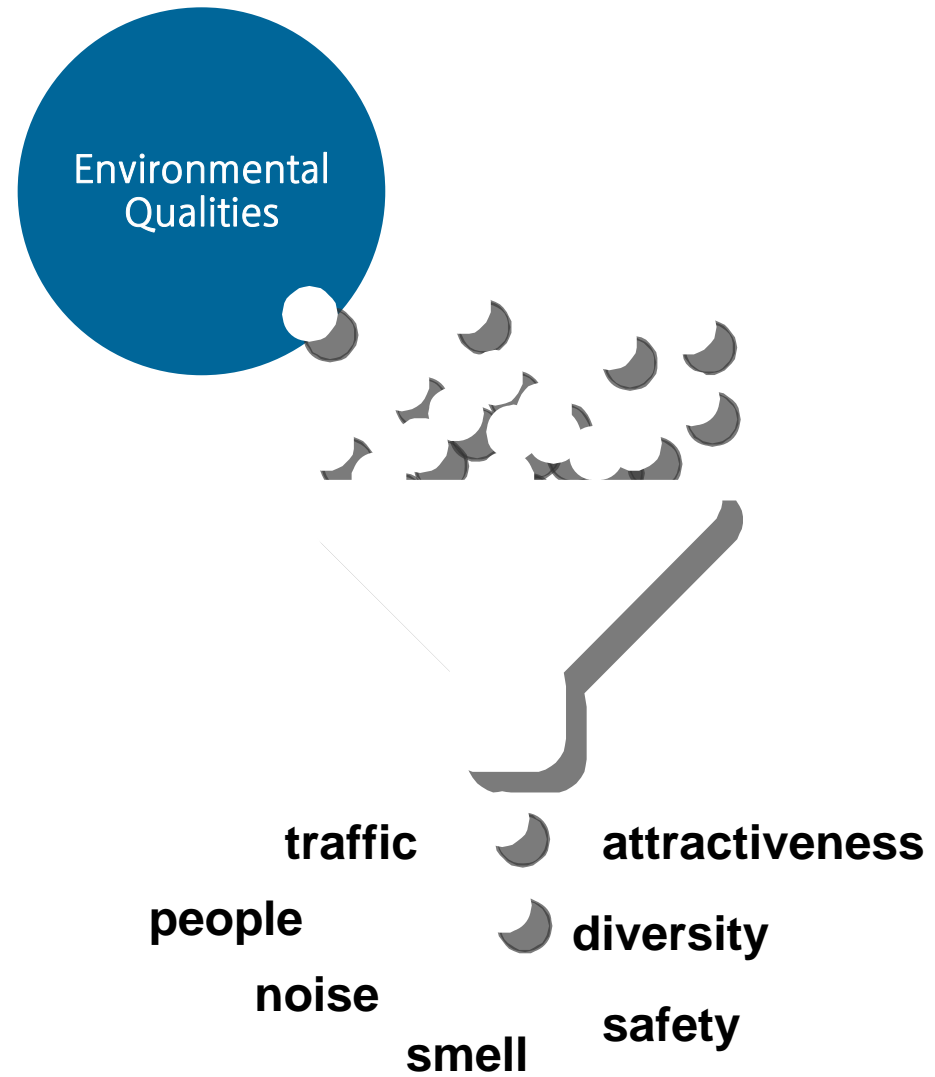
"It is noisy."

[Russell 2003]

Methodology

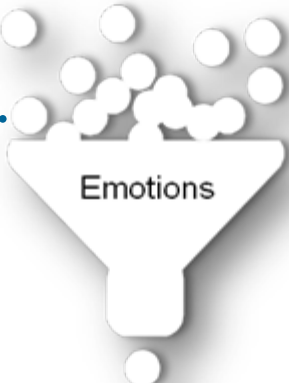



Results



Emotion model for mobile application

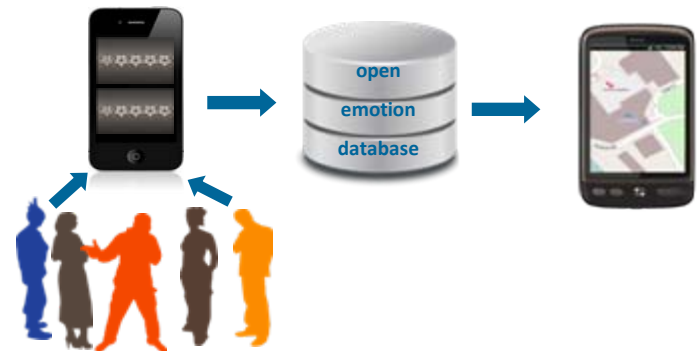
1. comfortable ————— uncomfortable

2.  relaxing ————— stressful
interesting ————— boring

3.  traffic, people, noise, smell, safety,
diversity, attractiveness
+ ————— -

Next Steps

- Design of data collection applications
- Design of OpenEmotionMap.org
- Collecting emotions in space
- Data use
 - Scenario: pedestrian navigation
 - Evaluation



We propose...

that emotional responses to space provide
more satisfying services

Thank You!

silvia.klettner@tuwien.ac.at

cartography.tuwien.ac.at

References

- S.A. Matei, 2003, Mental Maps, <http://www.mentalmaps.info/>
- C. Nold, 2008, Stockport Emotion Map, <http://stockport.emotionmap.net/map.htm>
- J.A. Russell, 2003. Core Affect and the Psychological Construction of Emotion. *Psychological Review*, 110(1): 145-172.
- J.H.D.M. Westerink, M. Ouwerkerk, T.J.M. Overbeek, W.F. Pasveer, B. de Ruyter, 2008, Introduction: probing experience, in: Westerink et al (eds.): *Probing Experience from Assessment of User Emotions and Behaviour to Development of Products*, Springer.