HCIN-722
MobileHCI

Dr. Daniel Ashbrook
daniel.ashbrook@rit.edu

Today

- Brief lecture
- Discussion
- Adminstrative
  - Questions?
  - Group progress?
  - Project ideas?

Article

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Can you connect with me now? How the presence of mobile communication technology influences face-to-face conversation quality

Andrew K. Przybylski
Netta Weinstein
University of Essex, UK

Question

Does the presence of a mobile phone present a barrier to human interactions, especially during meaningful conversations?

Experiment 1

- 74 participants
- Two people at a time in a room
  - (No personal belongings)
- Conversation topic: “Discuss an interesting event that occurred to you over the past month.”
  - Discuss for 10 minutes
- After conversation, questionnaire about relationship quality
  - E.g., “It is likely that my partner and I could become friends if we interacted a lot”

Setting & conditions

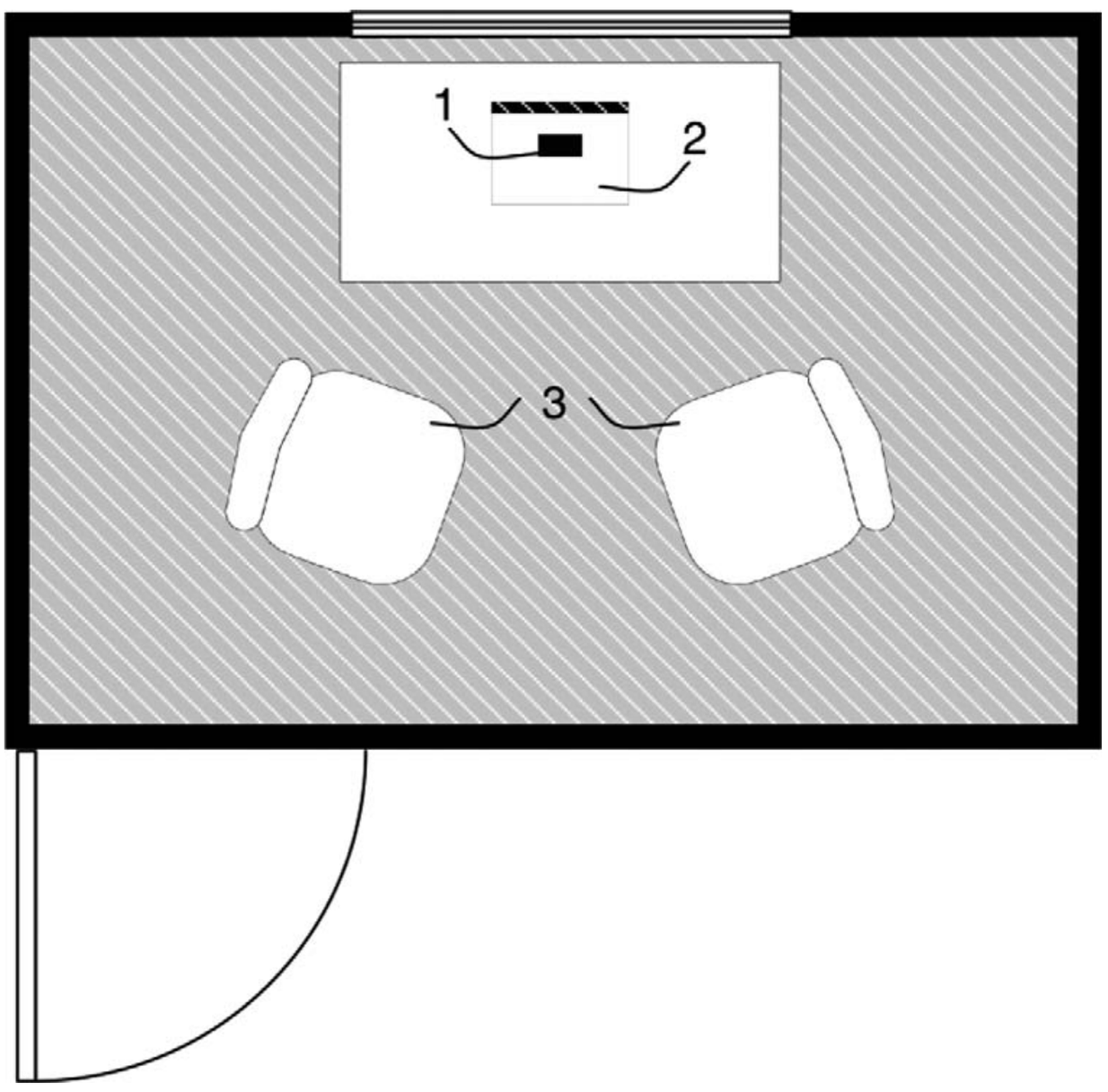


Figure 1. Overhead view of lab room. 1. Mobile phone or pocket notebook. 2. Book on desk. 3. Chairs used by participants.

- Two conditions
  - phone absent
  - phone present

Results

- "…individuals in the mobile phone condition reported lower relationship quality after the interaction"
- "…those in the mobile phone condition reported less closeness with their partners"

Experiment 2

- Same idea as experiment 1
- 68 people
- Conditions:
  - phone
    - present
    - absent
  - conversation
    - meaningful: discuss the most meaningful events of the past year
    - casual: discuss feelings about plastic Christmas trees

Results

- Analysis "…showed no effect of phone when the conversation was casual"; "On the other hand, the presence of the mobile phone predicted lower relationship quality when the conversation was meaningful."
- "…when the conversation was casual the presence of a mobile phone had no effect on partners' trust…" "…yet partners who attempted to share a meaningful conversation in the presence of a phone reported less trust than those who did so in its absence."
- "…when the conversation was meaningful the presence of a phone predicted less perceived empathy following the conversation."

Can you connect with me now?

- Do the results speak to you?
- Flaws in study/avenues for more exploration?
  - different devices? e.g. electronics with no social possibilites such as Kindle or iPod?
  - more people in conversation?
  - different settings
  - established couples vs new

When computers fade…

- Have computers disappeared into our everyday lives?
- Do today's mobile devices infer and act on our goals and contexts? How?
  - Is it a good idea?
- What's the right balance between explicit user action and automatic computer action?
- Adaptive UIs a good idea? Or should the user be responsible for adapting?

Chapter 1

- emotional responses to technology
    - *visceral:* your immediate response
    - *behavioral:* as you use it
    - *reflection:* how it makes you feel about yourself
- Scottish sitting room: do agree something has been lost?

Why do you take photos (with your phone)?

Touch screen dominance

New interaction paradigms

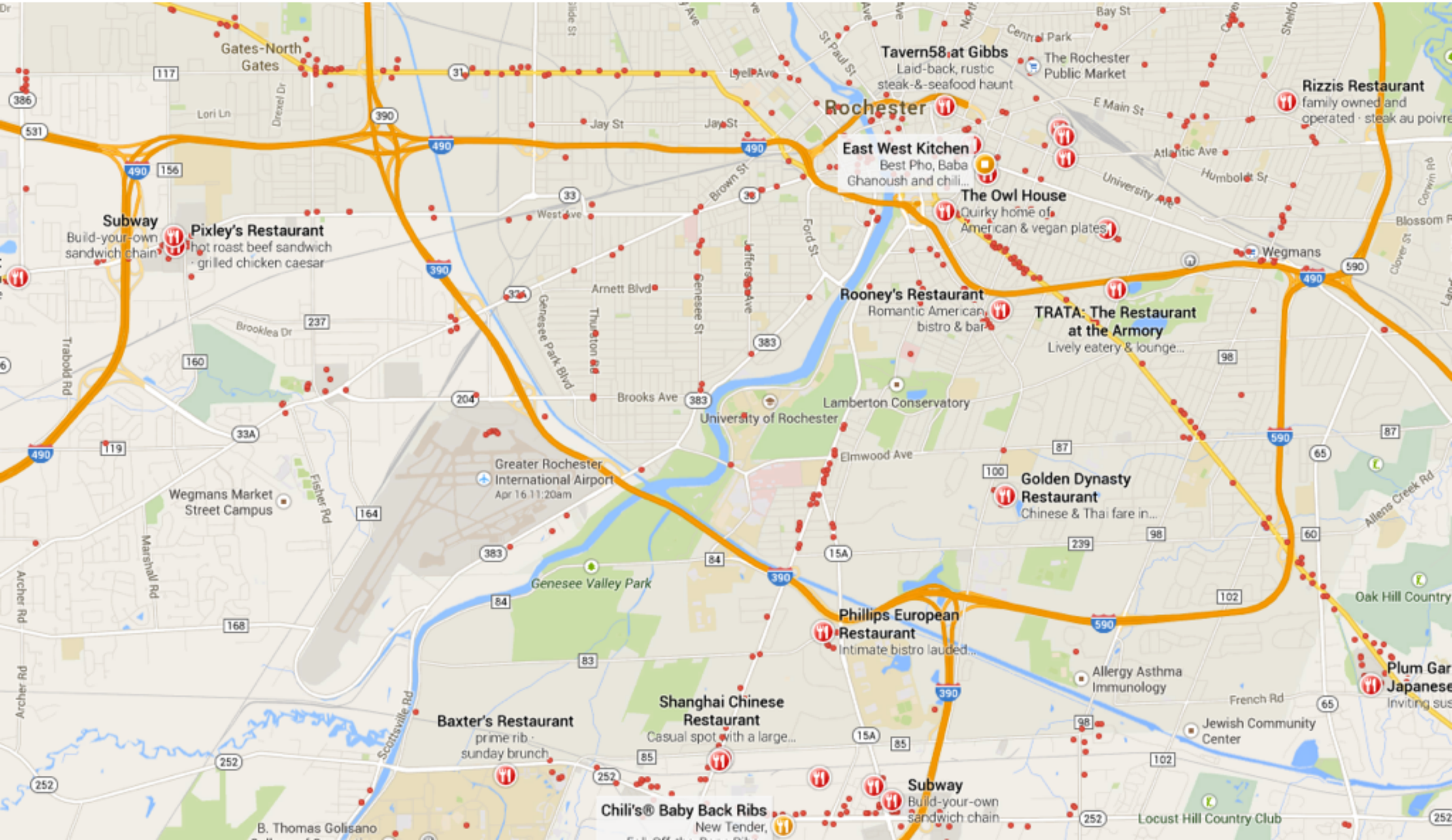
vs

Improving existing paradigms

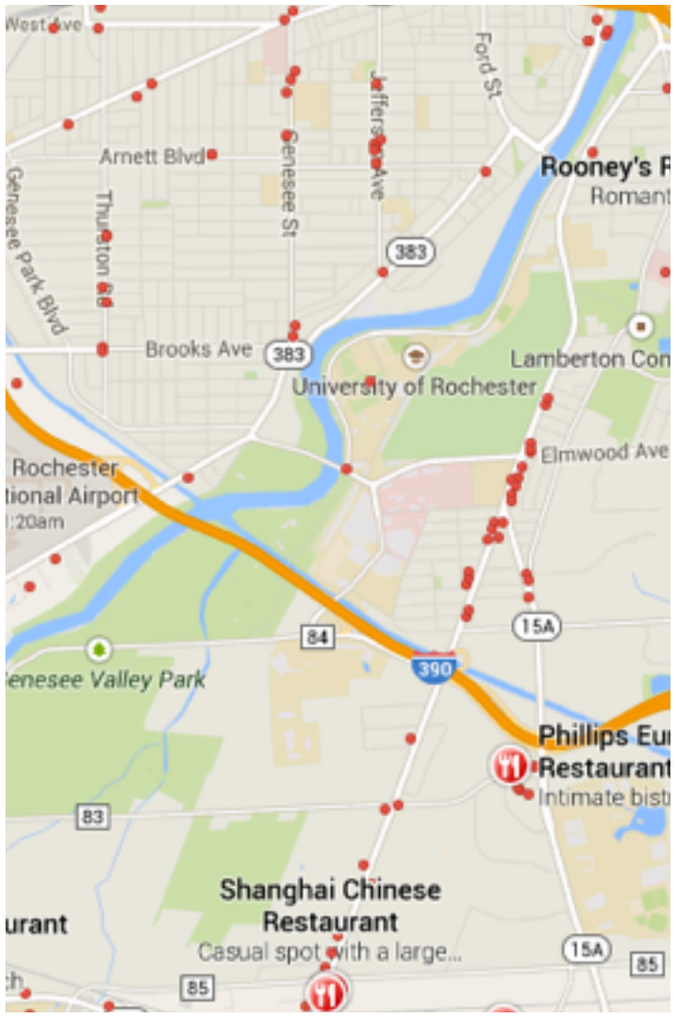
Limited I/O

- Problem: output area is too small
- Problem: input area is too small

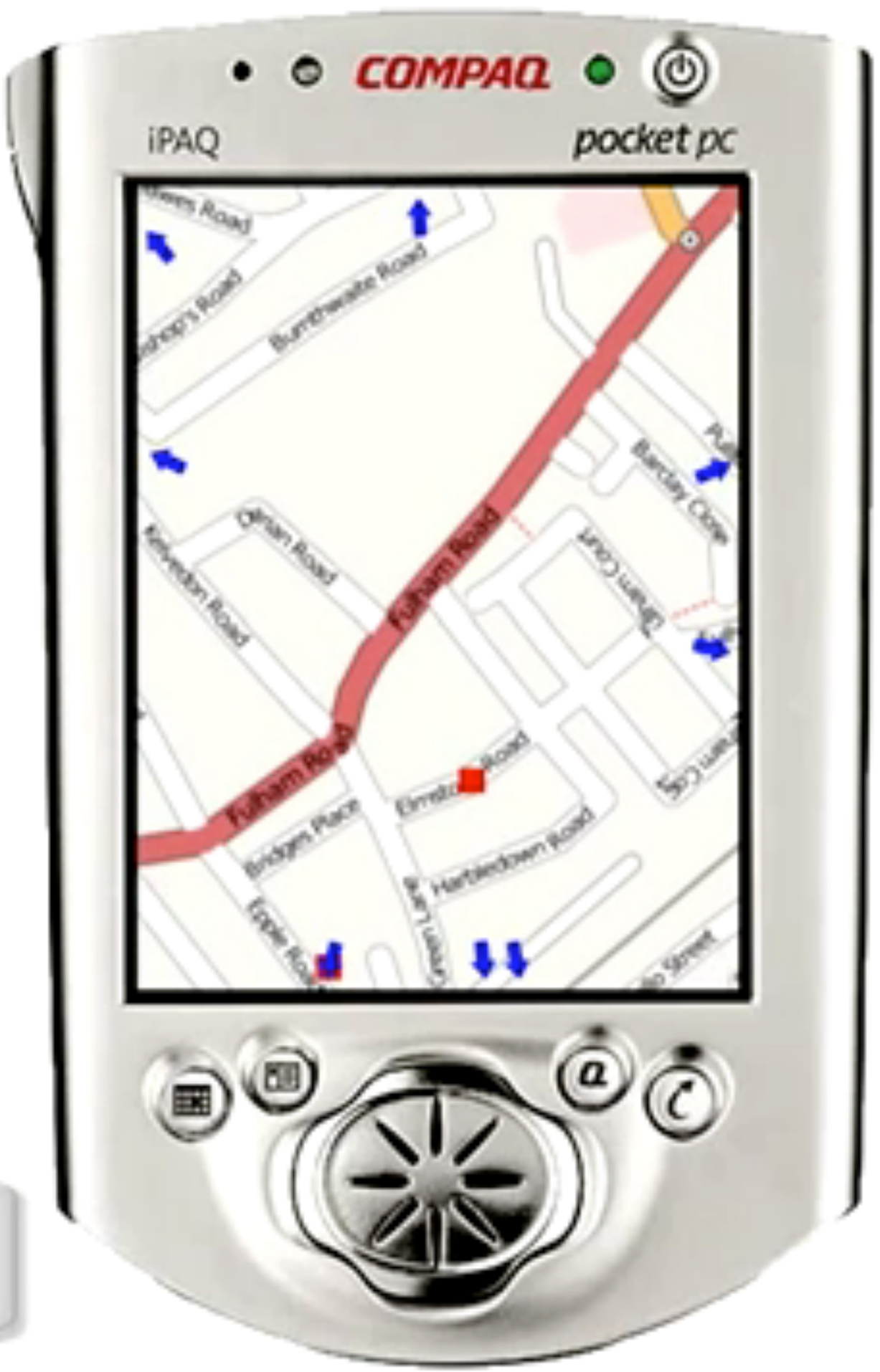
Finding things



Finding things



Related Work



Arrows

Related Work

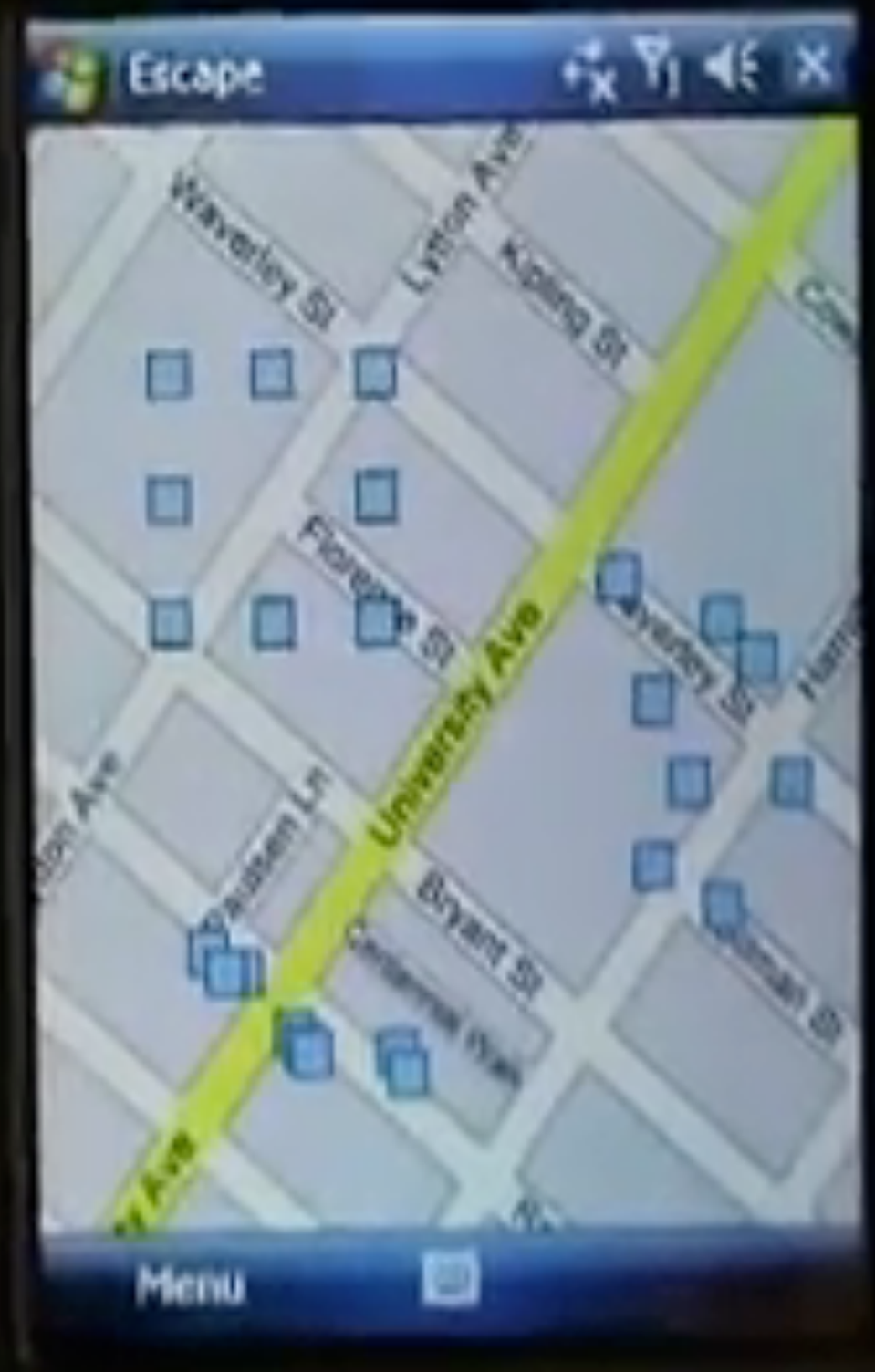
EdgeRadar

Related Work

Halo

Selecting things

Shift


Escape
Waverley St
Lytton Ave
Kipling St
University Ave
Bryant St
Menu

Escape Interaction

Break time!

3 minutes!

Projects

- Using Mechanical Turk
- Themes
  - gesture control
  - sign language
  - relationship study
  - augmented reality
  - brain-computer interaction