

ContextCues – Context data derived situation cues to support meaningful interactions

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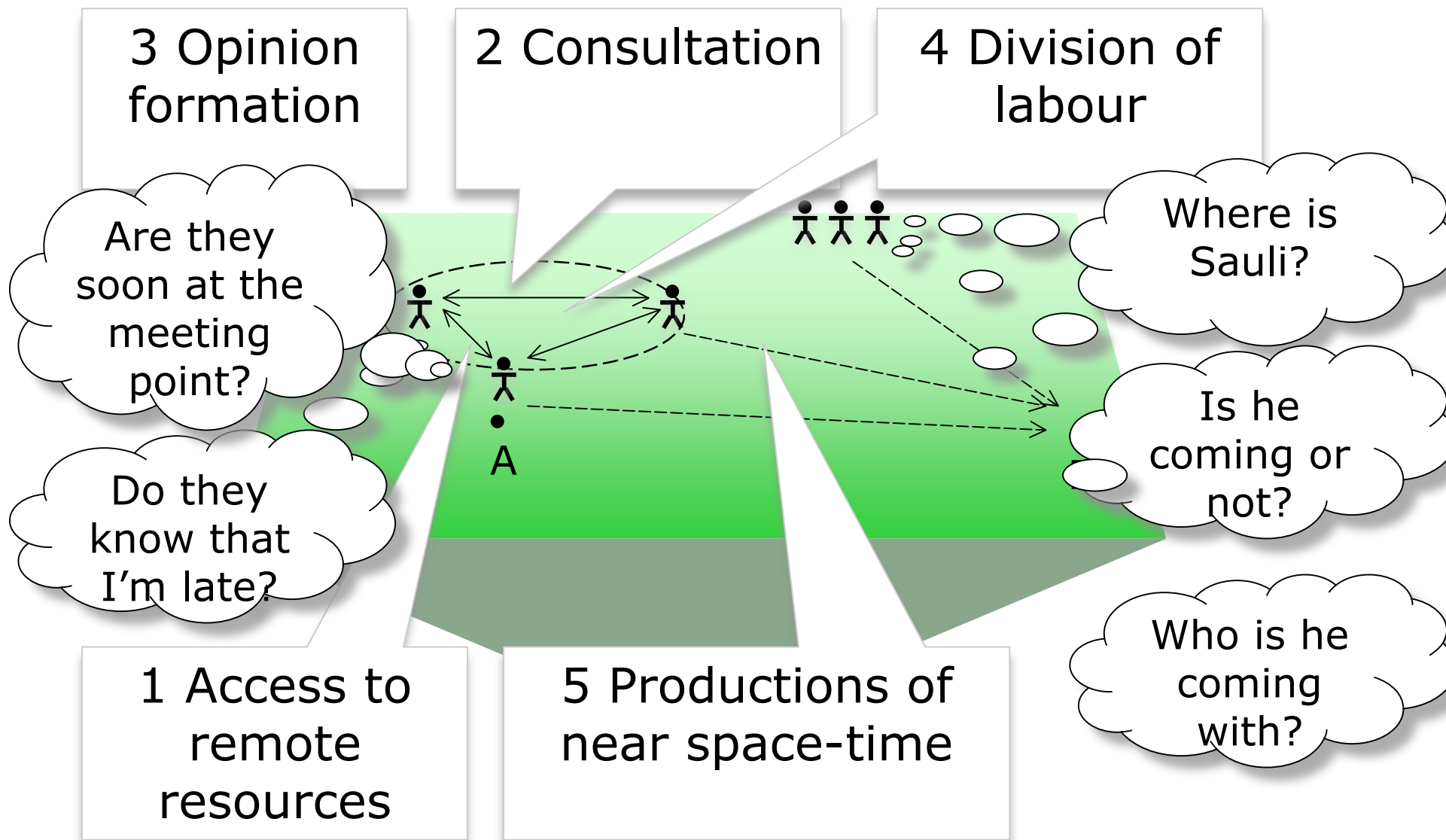
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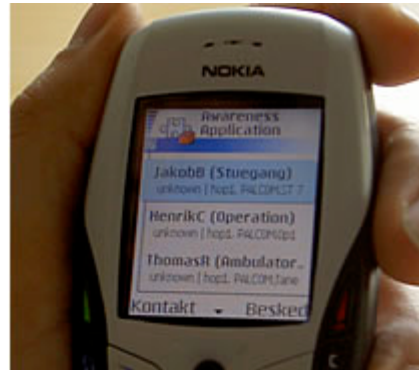
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Mobile coordinations



Mobile Awareness Systems

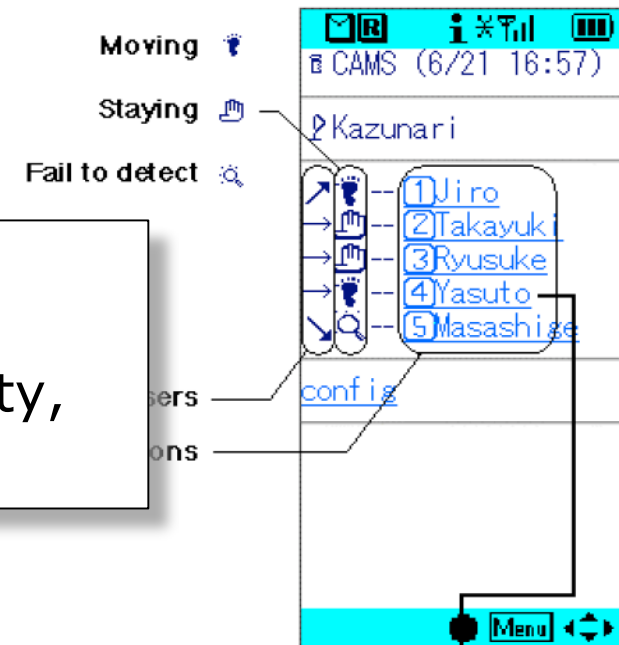


ConNexus

Situation cues:
Proximity of others, activity,
location, movement, ...



FriendZone



iCAMS

ContextContacts

DISTRICT

To hint of the place

OF FRIENDS CLOSE

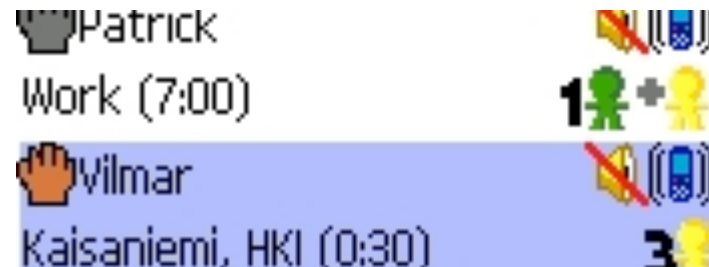
To hint of the social situation

OF BT PHONES CLOSE

As indicators of how many people present

DURATION OF STAY

To hint of activity (long stay) and movement (short stay)



ALARM PROFILE

Audio and vibra alarms, on/off

HAND

The phone has been used during the last few minutes

Research questions

1. How can situation cues inferred from sensor data in ubiquitous computing?
 - rule inference, outlier detection methods (data mining)
2. What situation cues to select for awareness applications?
 - Analysis of self-disclosure in mobile phone calls (social psychology)
3. How is meaning given to a situation cue?
 - “Thin slices” laboratory paradigm (social cognition)
4. How does the self-disclosure of cues affect social and collaborative practices?
 - Experience sampling method in the field (human-computer interaction)
5. What is the impact of situation cues on group coordination and coherence?
 - Prototype field studies, coherence scales (intervention study, psychological scales)

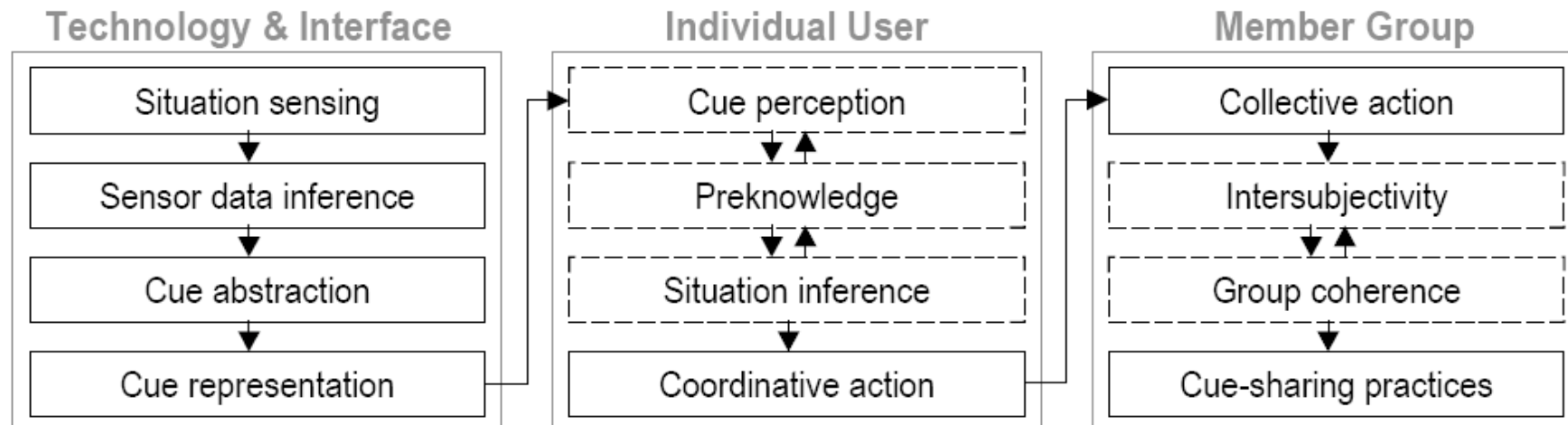
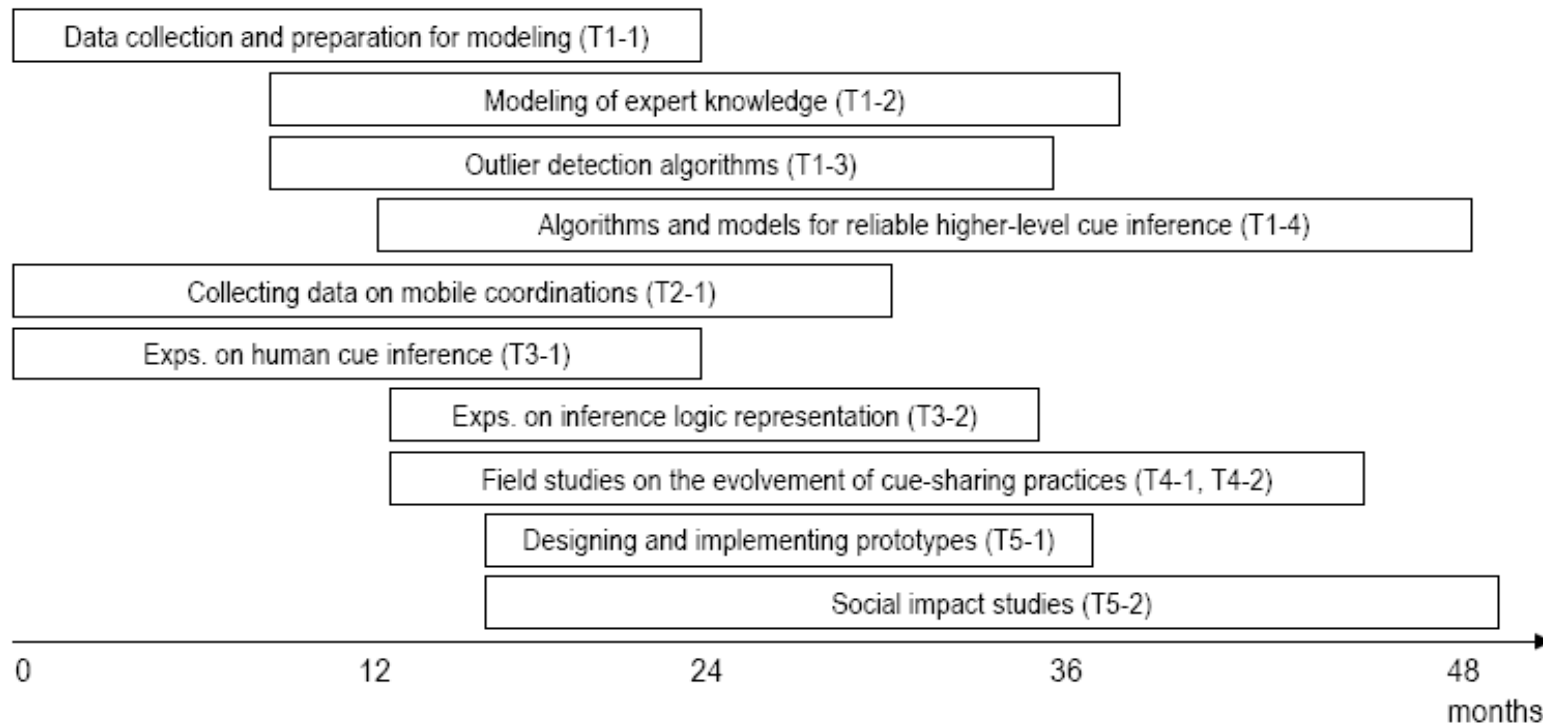


Figure 2. A process model of situation inference. Dashed boxes indicate latent processes (mental or social), not directly observable from behavior or code, but that are to be studied by the means of social psychology

Project outline

- 4 years
- 90 000 € / year
- If accepted, will start 1/2006



Deliverables

- **Understanding** related to key phenomena in situation cues and mobile awareness
 - how they are perceived and acted upon?
 - what is their impact to coordination and coherence in the group?
 - how to select, model, and represent them?
 - how to provide efficient user control over them?
- **Design and engineering** of prototypes in three fields of Mobile Awareness
- **Heuristics** for UI design