

# Contextual-Analysis for Infrastructure Awareness Systems

- Juan David Hincapie Ramos  
IT University of Copenhagen  
Software Development Group  
[jdhr@itu.dk](mailto:jdhr@itu.dk)
- Aurelien Tabard  
IT University of Copenhagen  
Software Development Group  
[auta@itu.dk](mailto:auta@itu.dk)
- Florian Alt  
University of Duisburg-Essen  
Pervasive Computing and User  
Interface Engineering  
[florian.alt@uni-due.de](mailto:florian.alt@uni-due.de)



# Contextual-Analysis for Infrastructure Awareness Systems

Infrastructure /'ɪnfɹəstrʌktʃəʳ/

Is a relational property of a system towards a user in the context of an established practice (Star '99).

Infrastructure Awareness /'ɪnfɹəstrʌktʃəʳ/ /ə'weənəs/

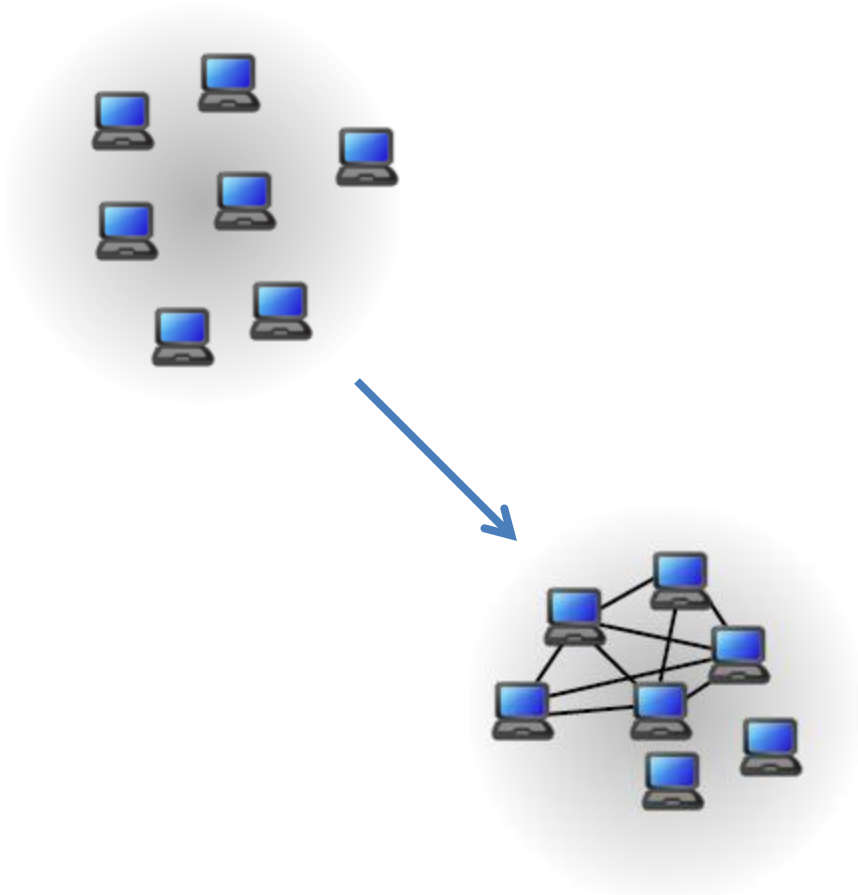
A user's state of consciousness of about one or more properties of a system of infrastructure.

Sustainability

Appropriation

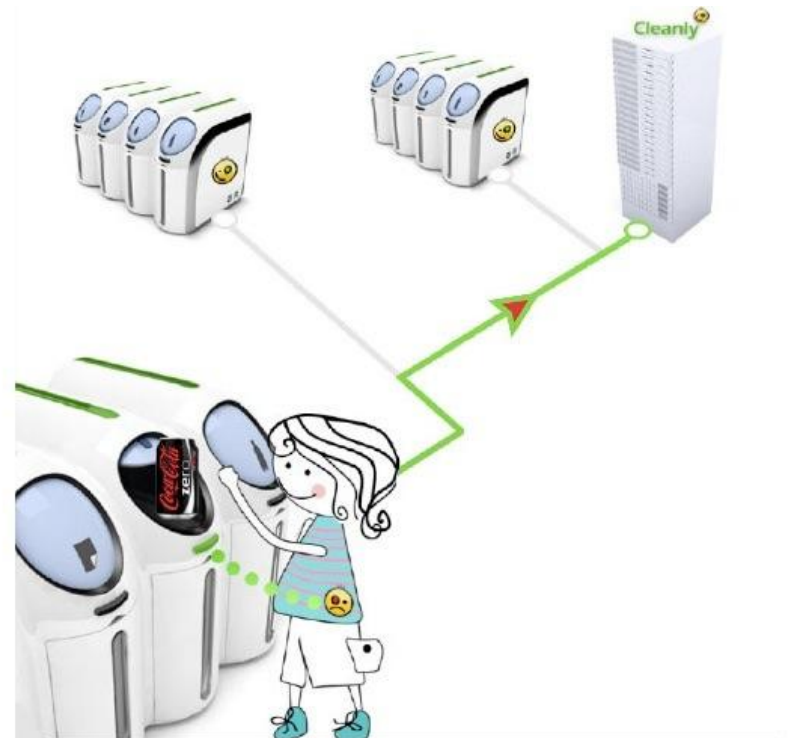
# Background

- P2P Computational Grid



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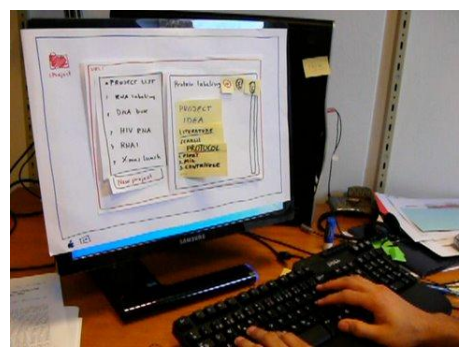
- Cleanly – trashducation urban system



# Methods

## P2P Computational Grid

- Molecular Biologists
- Observations (place+activities)
- Semi-Structured Interviews
- Mapping of activities and infrastructures
- Video prototypes – new technologies (how they conceive new technologies should support they work – activities+infrastructures)



# Methods



## Cleanly

- Open space observations
- Random interviews
- Online-surveys (people's conceptions on cleanness)

# Key Problems

- How to motivate biologists to join/stay the P2P grid?
- How to engage people with Cleanly?

From our fieldwork:

- Invisibility
- Voluntary Infrastructures

# Challenges Using Contextual Analysis

## Creating Awareness

- Nimbus and Focus
- Use contextual analysis to find the users focus, then build your system so that they provide effective awareness.

## The Usage of Metaphors

- When using visual metaphors to deliver information make sure your users get it. Make sure they understand, easily and intuitively, the source of visual elements and behaviors.

## Domain Models

- Do not base your domain models on the users' understanding of infrastructure, neither on the visual metaphor. Both of them are highly volatile.
- Base your domain model faithfully on the infrastructure.