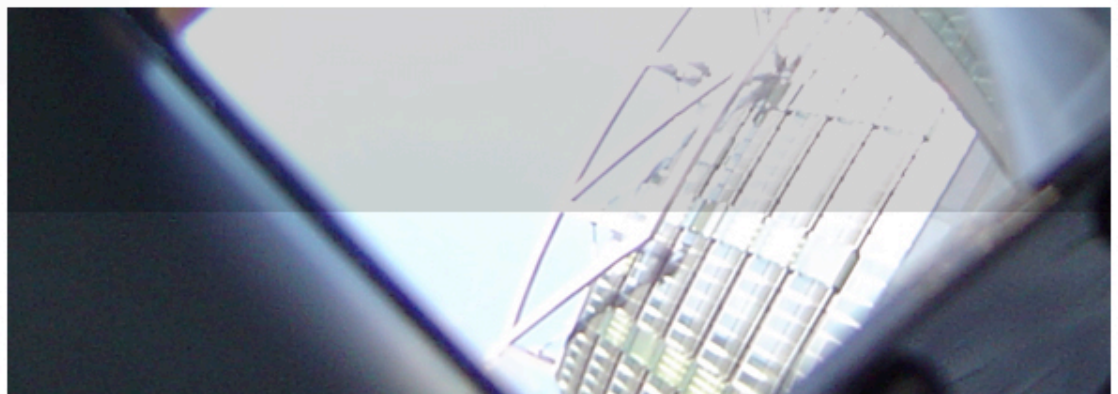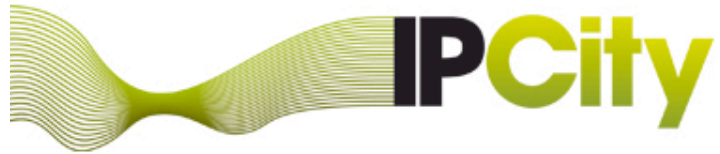# Map-based Web participation in urban planning: Pyhäjärvi experiment

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IPCity

Who are we?

INTERACT-research group at Department of Information Processing Science, University of Oulu

   1 professor, 4 postdocs, 10 doctoral students

   Human-Computer Interaction, Computer-Supported Cooperative Work

   One line of research is supporting design processes by technology

   Another research line is participatory design of technology

Together with Laboratory of Urban Planning, Uni Oulu we did conduct during Autumm 2007 an experiment to support citizens with a web-based participation tool in an urban planning situation

The experiment was part of the work of two research projects

   IPCity (EU IST)

   Studio'n'site (Academy of Finland)
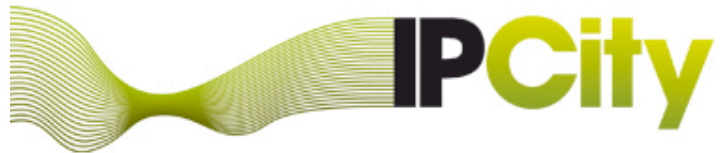
Background I

A change in Finnish legislation towards more participative and interactive planning

- Under the old law, the planning authority was held responsible for the quality of plans

    - "Hearing" of citizens was assumed and various forms of informing them were in use, but there was no official mechanism to actually participate - only real possibility to influence was to make a formal complaint

- Under the new law participation is made obligatory

    - Citizens must have in principle a possibility to influence the plans already in the preparation

    - Quality assurance of the plans is made dependent also from the acceptance of citizens

The problem is that this far no new forms of participation have been introduced

- Old forms of hearing are not really useful for new purposes
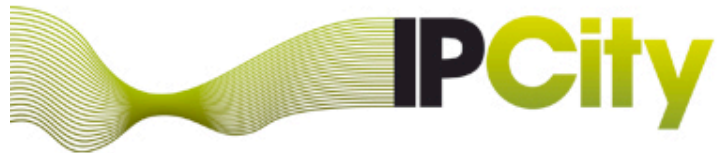
Background II

Laboratory of Urban planning, University of Oulu, has already a decade conducted research on participatory urban planning

Prof. Helka-Liisa Hentilä and Dr. Raine Mäntysalo

Using a course of urban planning as a laboratory

- 4th year half-year course of university students
- Conducted as real planning project for some town or municipality in nothern Finland, in cooperation with town authorities and local citizens
- Development of alternative suggestions for plans of a particular district in town
- Experimenting with different methods of cooperation and participation with citizens

Very close to a real urban planning stiation

The process of a typical planning course project

- 1) Start: a seminar with local city planners, a walking tour around, collection of initial data, public event to recruit local people into a support group

- 2) After 2 weeks: showing alternative initial ideas at general level (support group)

- 3) After 4 weeks: showing developed alternative plans on a more accurate level, support group, public event, plans will be exhibited locally (as posters)

- 4) After 8 weeks: Evaluation and synthesis seminar, showing the final suggestion, support group, public event, local authorities and decision-makers

Pyhäjärvi experiment

- The 2007 course took place in the village of Pyhäjärvi
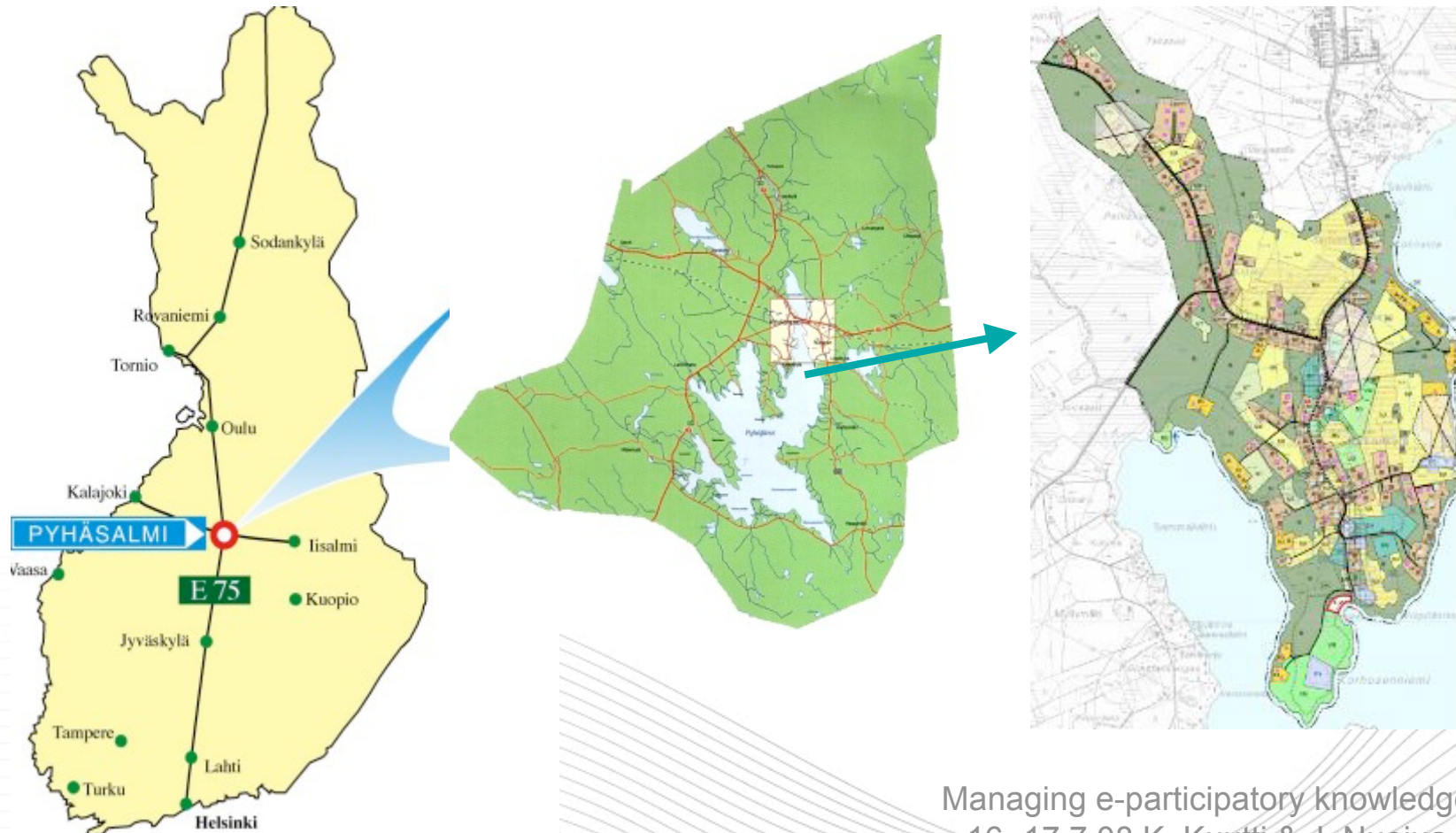
# Technology support: WebMapMedia (WMM)

- Relatively simple application for map-based discussion

- Based on Google Maps, WordPress, MySQL

- Possibility to leave markers on the map (good, bad, other) and text comment

- Possibility for others to continue commenting, blog-style

- A combination of two methods used in "conventional" participation: "photovoice" and "sticker-map"

- Photovoice (Wang & Burris 1997)

  – people can identify, represent and enhance their community through a specific photographic technique

  – often used to give voice to people whose views are overlooked or discounted

- Sticker-map (Talen 2000)

  – enables citizens to mark locations with personal significance by placing colored symbols on the map
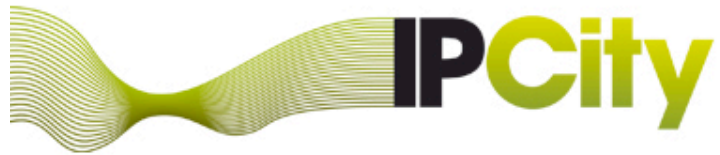
Interventions and data collection

- Web pages of the project were opened 3 months before
- Two stories in the local newsletter, and a mention in the announcement about the planning project
- Two public meetings and five meetings with the local support group
- Preliminary plans were put in the web (as pdf images) when they were ready (exhibited also in town hall)
  - Three areas were selected as points for development
  - Three different student groups did each their own version of the three areas
- Final plans of the three areas were put in the web
  - Selection and further development of preliminary plans
- Comments, images, logs and an optional questionnaire

What happened

- 27 markers on the map, 136 comments about them

- 1600 visits during the project

- WMM commentary map viewed about 4000 times, the actual plans and sketches about 400 times

- Half of the people answering the questionnaire were under 30 years old and one-fifth under 20

- Half of the people answering the questionnaire were female

- Part of the discussion about the experiment was diverted into another common general discussion forum (suomi24)

What was learned

- Externalisation of local knowledge was indeed supported to some extent, and it had some actual influence in design (skateboarding area)

- Map markers worked as openers of discussions
  - Every fifth of marked places was commented 6-11 times

- Use of web supported lightweight "lunch-time" participation during working days (in contrast to "heavy" participation in meetings in evenings)

- Use of web clearly broadened the participation with respect to age, sex, and location
  - The support group (age 50+) had only one female member
  - Some respondents were living elsewhere in Finland

Open issues

- Creation of local knowledge does not automatically mean that it will be used in design
  - Attitudes and skills of designers
- Discussion takes place in familiar forums -- not so easy to launch a new one in a novel forum
- Presentation of local knowledge to designers
  - We used WMM itself, which may not be optimal
- The difference and tension between GIS- and map-based participation support systems
  - GIS-based: aimed at planning professionals, complex and heavy, propietary software, direct connection with other planning tools, often need for training
  - map-based: aimed towards citizen interaction, simple and lightweight, often mashups from open systems, no connection with other planning systems, minimal training
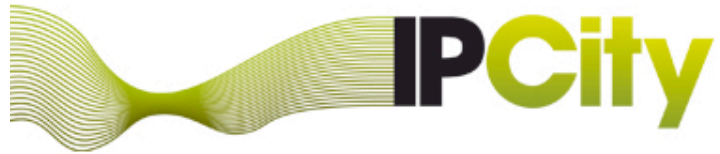
Publications

- Nuojua & Kuutti (2008) Communication Based Web Mapping: A New Approach for Acquisition of Local Knowledge. To be published in Proceedings of MindTrek 2008 conference

- Nujoua, Juustila, Räisänen, Kuutti & Soudunsaari (2008) Exploring Web-based Participation Methods for Urban Planning. To be published in the Proceedings of PDC'08

Case 2008: Sevettijärvi village

- Small rural village in farthest corner of Finland
  - home of a cultural minority (kolttasaami people)
  - aging population, people moving away
- More active approach to data collection
  - Cooperation with local school - tasks for childrens, involvement of their parents
  - Better activation of village people who live elsewhere
- Better classification of collected data
  - To help designers to connect data with their origins
- Combining plans with the comment map view
  - An attempt to address the "neglect" of plans