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Capturing and Representing Deliberation in Participatory Planning Practices

Anna De Liddo & Simon Buckingham Shum

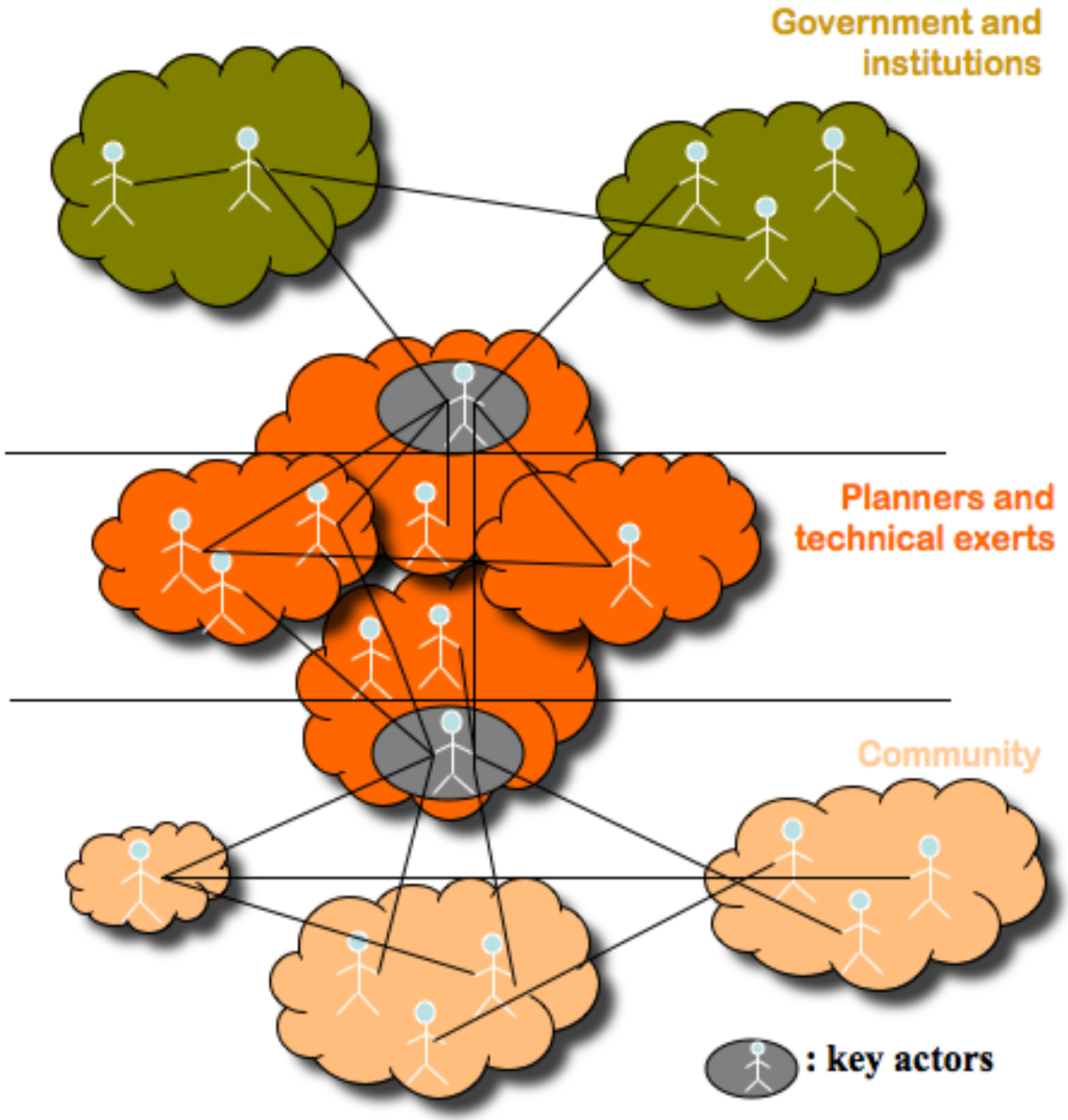
Knowledge Media Institute
Open University, UK

a.deliddo@open.ac.uk; S.Buckingham.Shum@open.ac.uk

Participatory Planning

is a collaborative governance practice involving institutional and non-institutional stakeholders in a collaborative process of deliberation in order to:

✓build multiple views of problems and resources
✓achieve better informed and shared decisions



The issue

We investigate the role of deliberation in participatory planning, exploring the differences and similarity from deliberation in urban planning and in policy formulation.

A specific emphasis on making participatory design decisions, therefore focusing non just on debating alternatives but also on making collaborative decisions (decisional power closer to the community).

The challenge for the planner is then to support deliberation by capturing and representing results of diverse planning conversations into a unique and coherent deliberation process, in which it is made clear what ‘voices’ have been listened to, in which social context, and how they affect the deliberation process toward planning decisions.

Where and How does deliberation happen?

Formal Planning Arenas

Vs

Informal Planning Arenas

Can the normally ephemeral deliberation process be made tangible as an object for critique and reflection?

The core of our work is to understand how this deliberation process can be captured and made available using digital tools in appropriate ways, and to understand the practices and skillsets that this requires.

Capturing deliberation

The first issue: Where does deliberation happen?

	Communication Modes		Communication Environments		Communication Time		Planning Tasks		
Deliberation types	Co-located	Dispersed	Real World Settings (Offline)	Virtual (Online)	Synchronous	Asynchronous	Consultation	Design	Problem and Strategy Setting

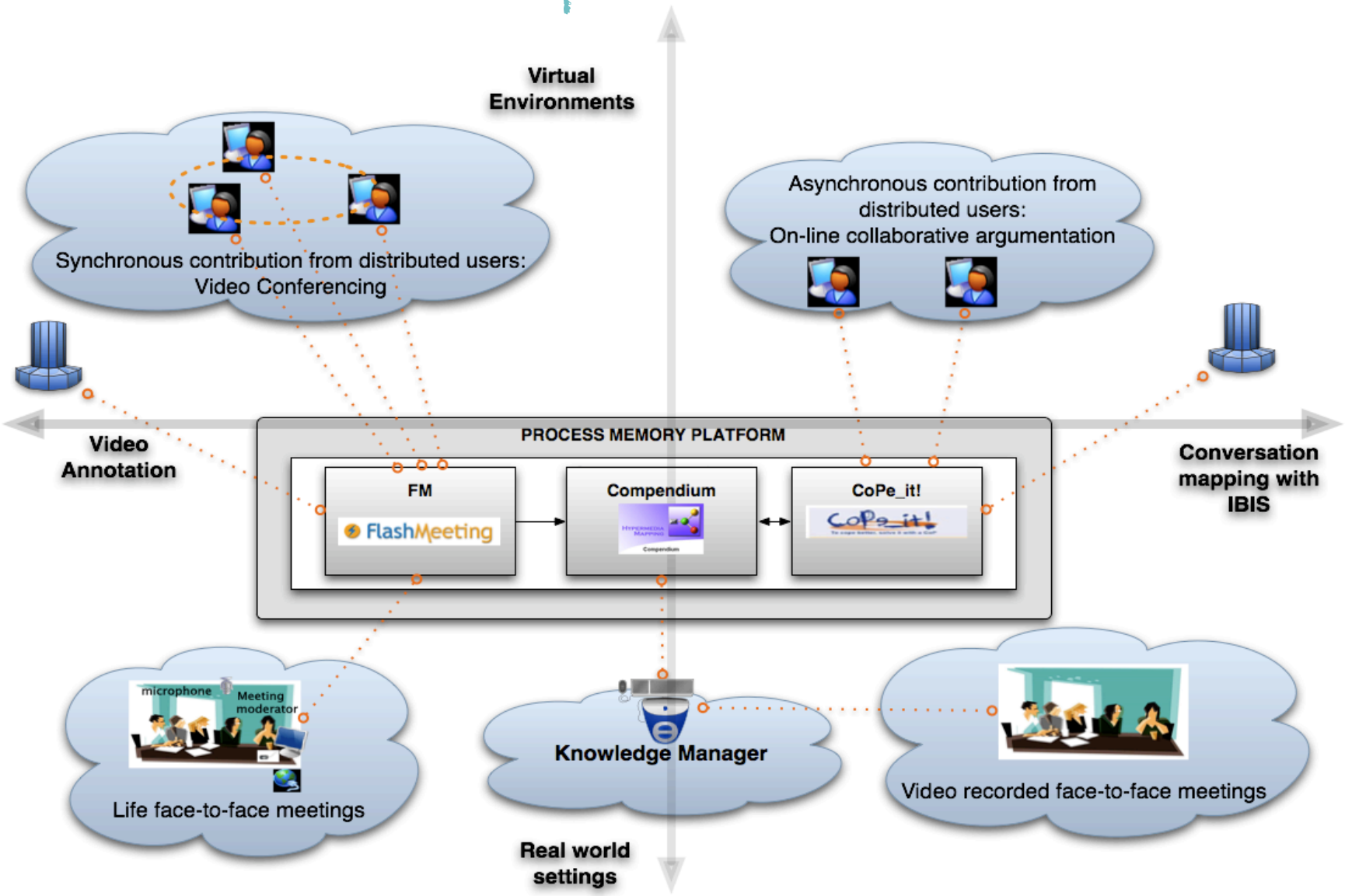
✓Deliberation across planning tasks: reusing the products of deliberation in one context, in other planning phases;

✓deliberation across communication time: enabling synchronous and asynchronous communication in the same deliberation process;

✓Deliberation across communication modes: enabling both co-located and dispersed stakeholders to be involved in planning discussion;

✓Deliberation across communication environments: enabling integration between online and offline deliberation spaces;

FM<->Compendium<->CoPe_it!



Eenable the the integration of the captured information in a whole and coherent information flow which shapes the history of the whole deliberation process.

San Pietro Piturno: A Participatory Planning Process carried out by Engineers Without Frontiers (I.S.F.) (association for social promotion of cooperation and development) within the community of San Pietro Piturno (Southern Italy)

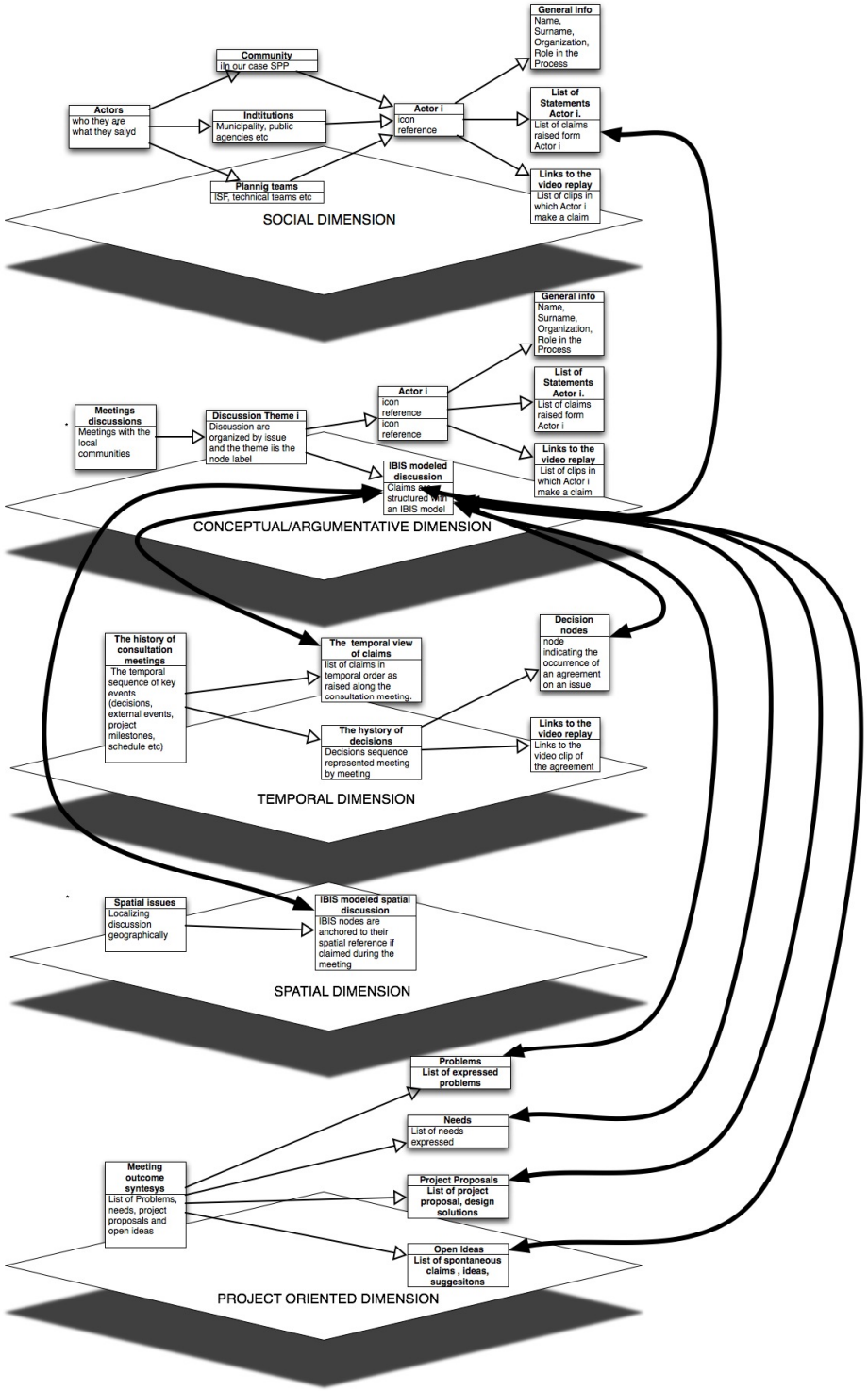
Compendium: a sensemaking tool to map and manage deliberation

Compendium is a hypermedia and sensemaking tool that we used as a Knowledge Management system to store, structure and represent deliberation contents, so as to capture, index, and visualize the issues, options and arguments generated.

An information architecture has been specifically designed to represent deliberation as hypermedia knowledge maps. In this architecture, information units are contributions by stakeholders during deliberation.

Each contribution is represented as a node in the hypermedia database, and is indexed according to 5 key descriptors of the deliberation process, which are organized coherently against five dimensions of participatory planning processes: social, argumentative, spatial, temporal and project oriented/causal.

The Information Architecture



Social Dimension

Argumentative Dimension

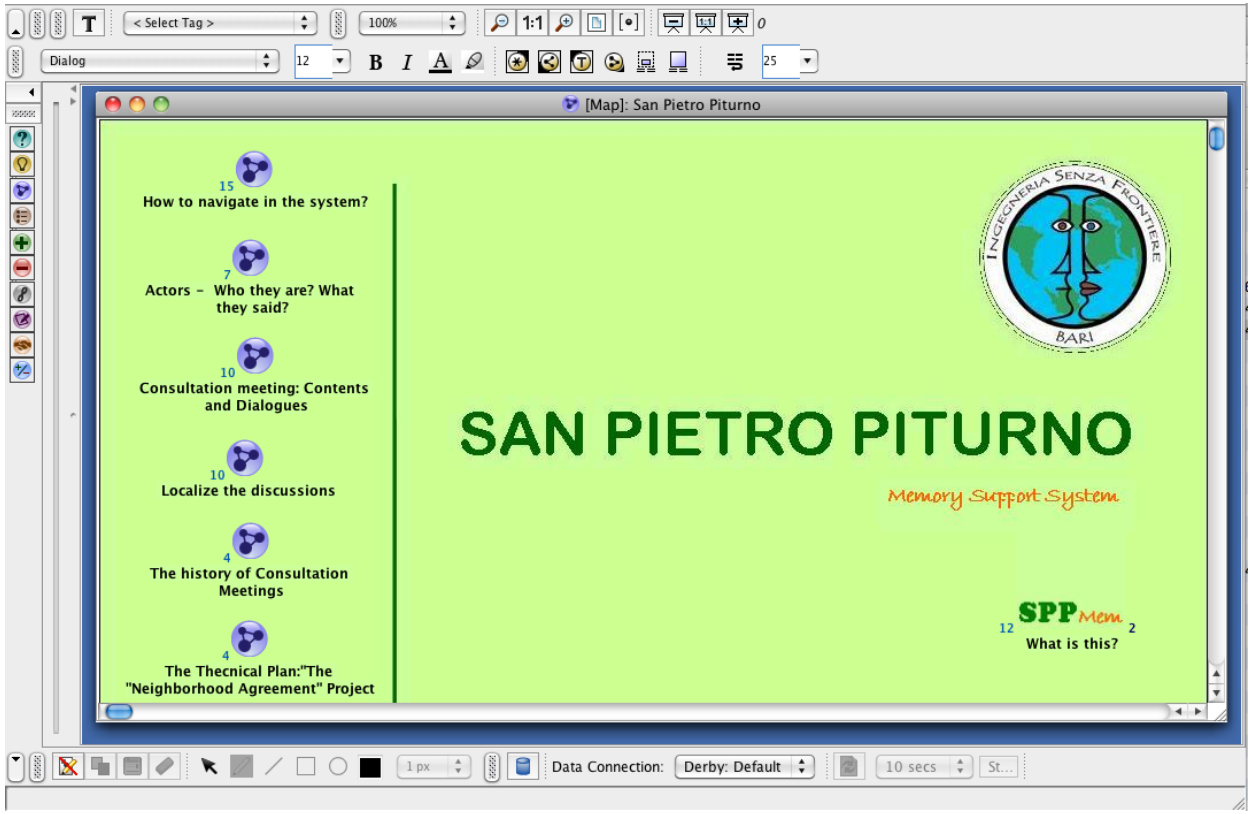
Temporal Dimension

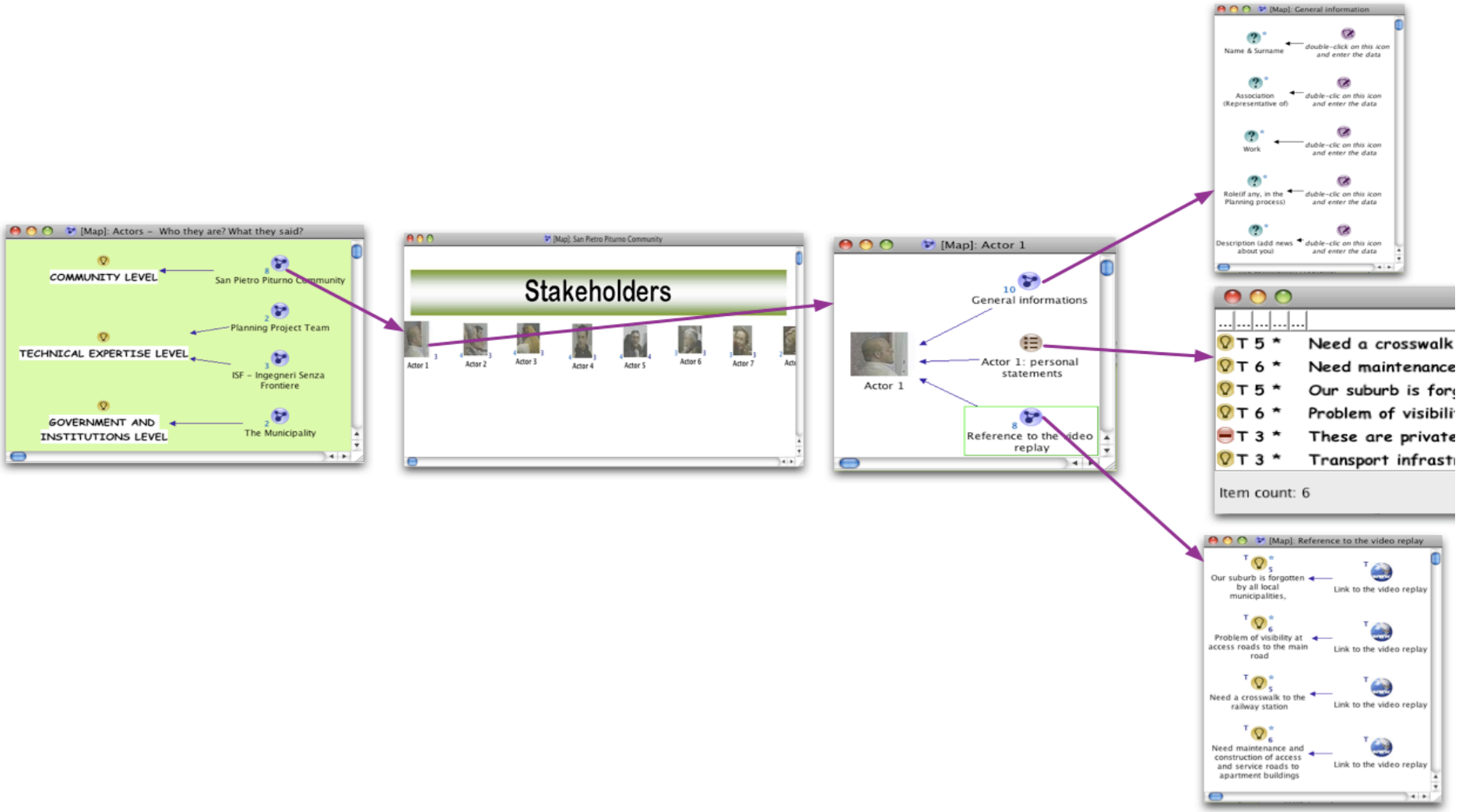
Spatial Dimension

Project Oriented Dimension

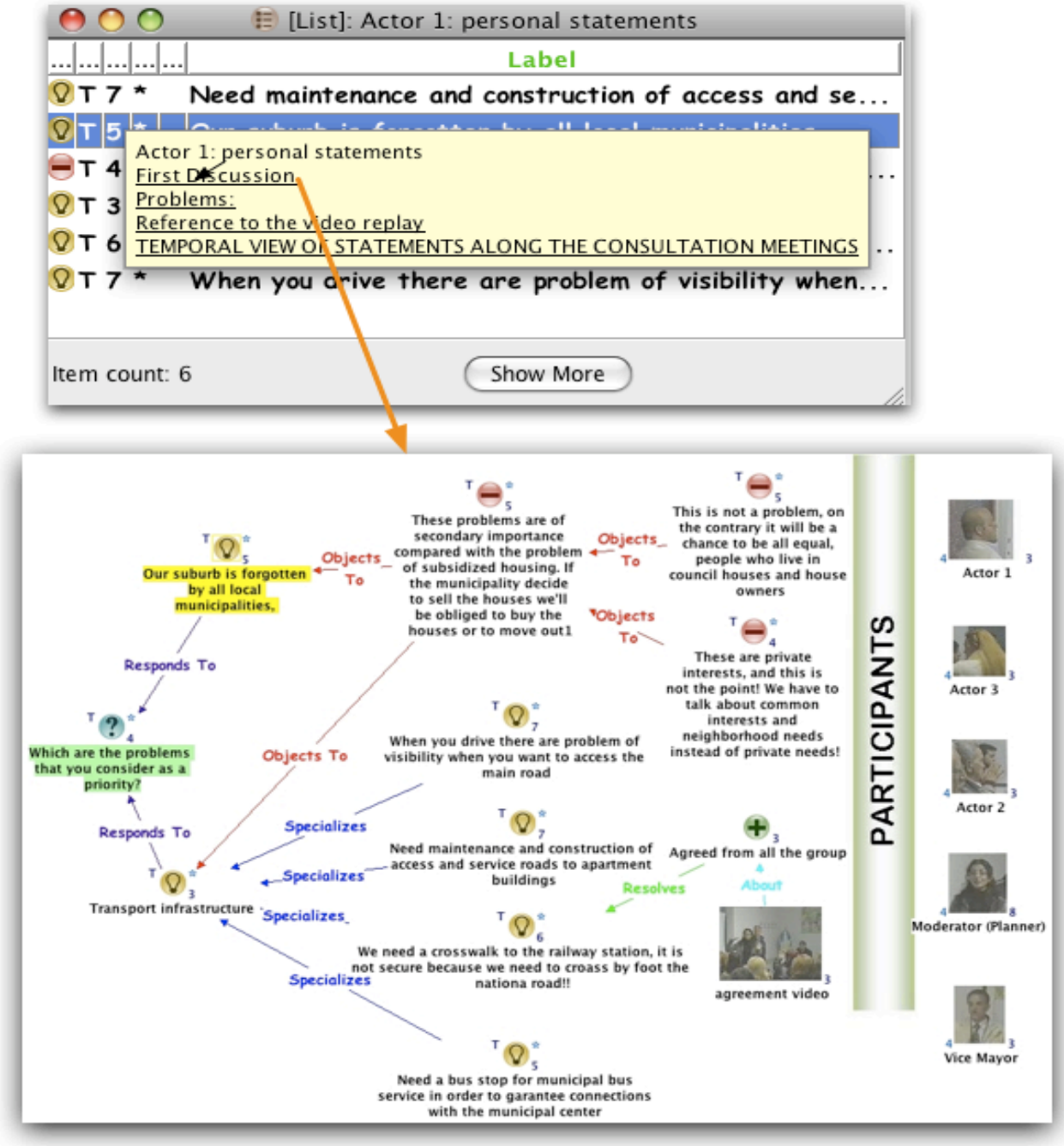
By modeling the five views of the deliberation process as a hypermedia space, Compendium provides a multidimensional repository for the deliberation process, organized in content and context sub-repositories, in which every actor's statement can be explored according with its social, dialogical, spatial, temporal and causal-argumentative context.

Compendium demo...

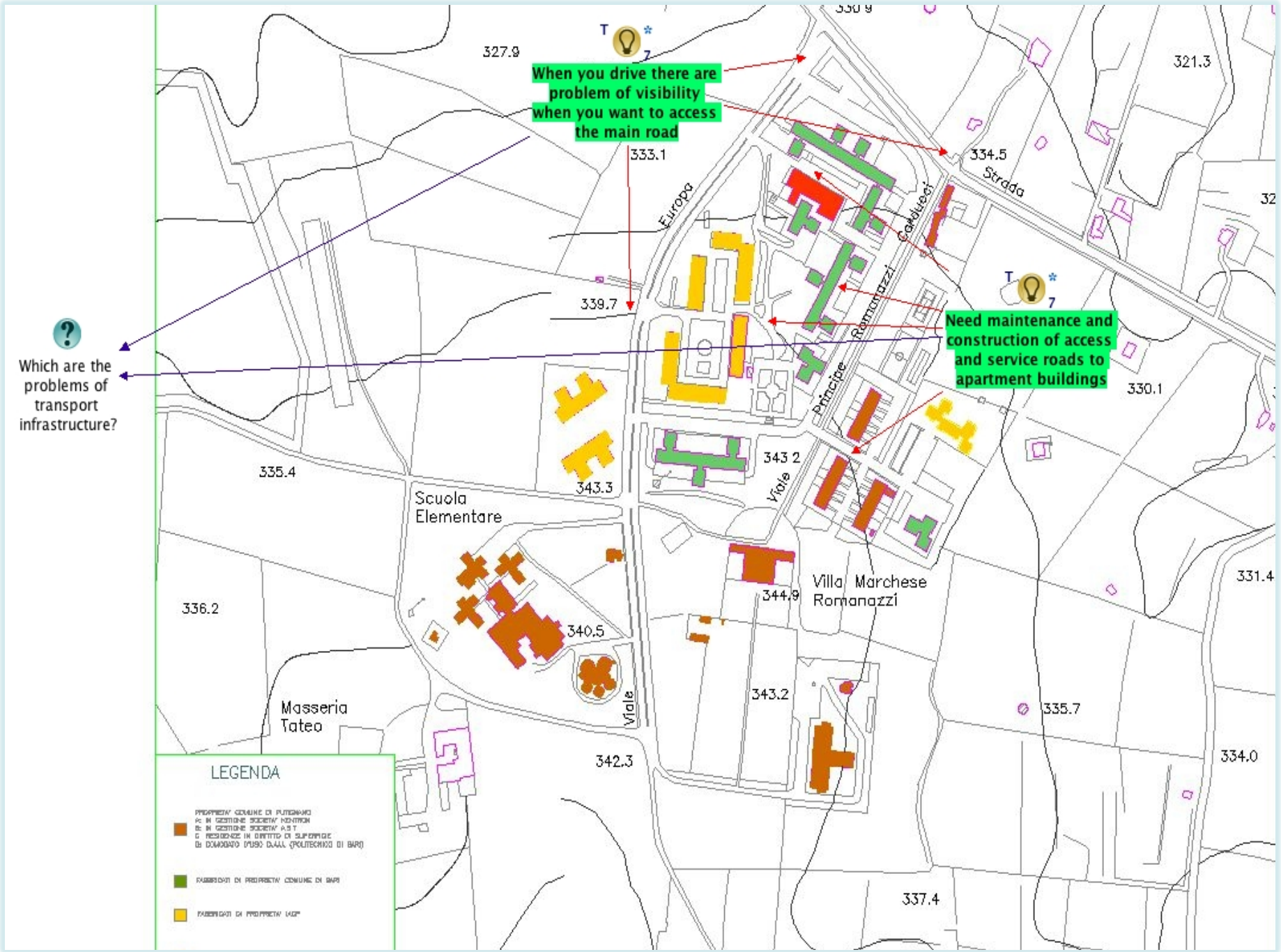




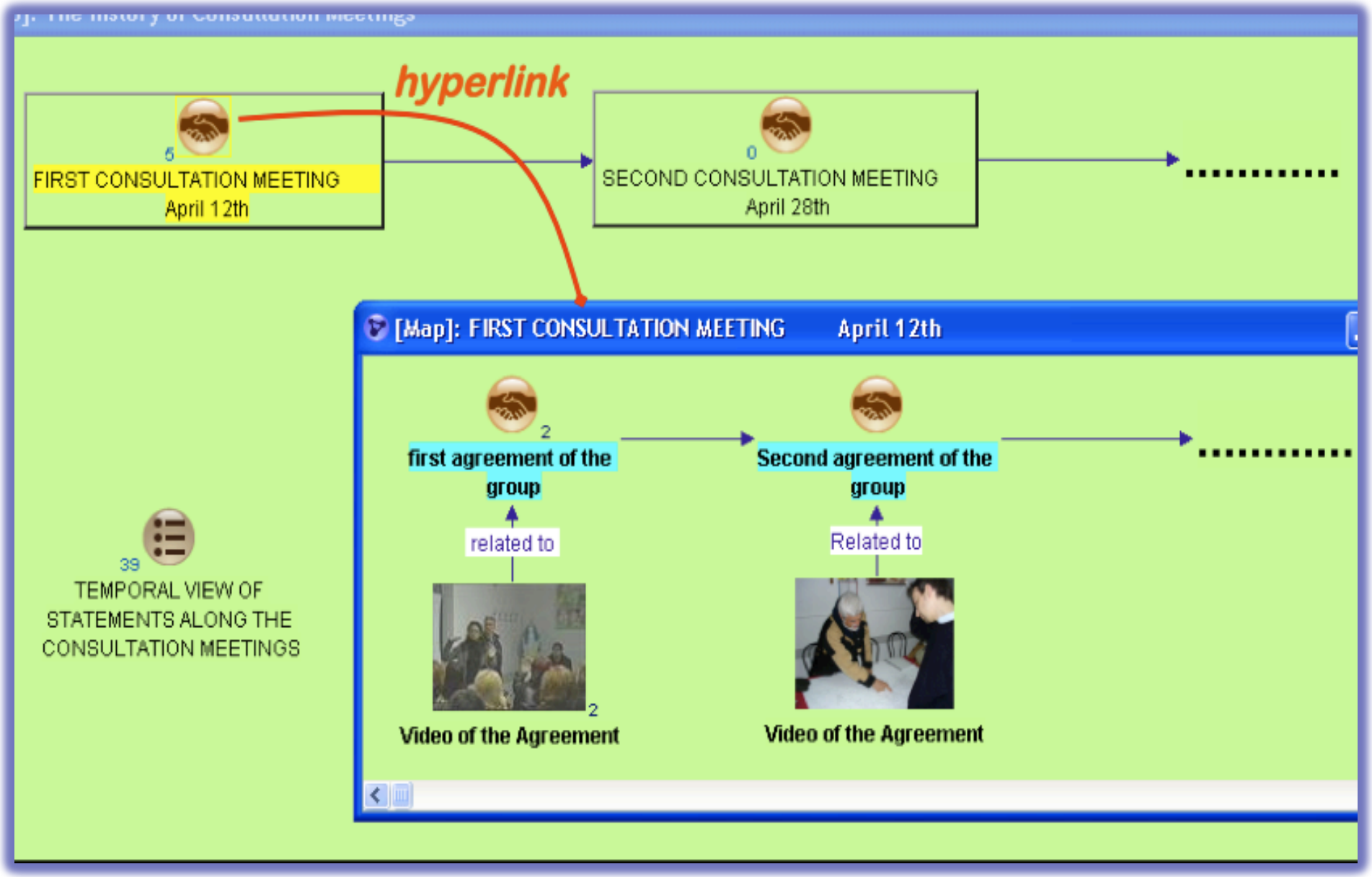
Social View Exploration Path



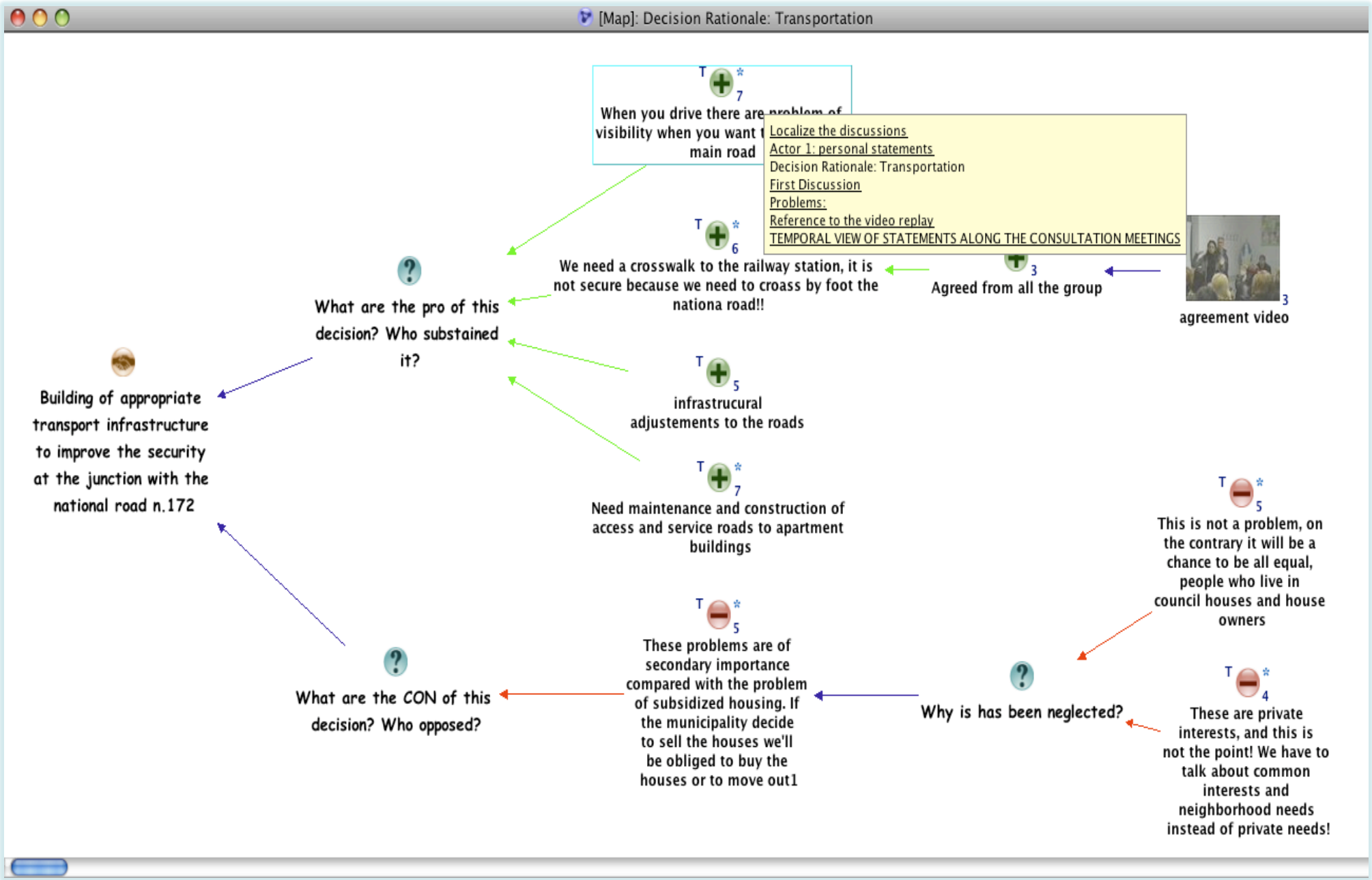
Dialogical/Argumentative View



Geographical View of Deliberation contents



Temporal View of Deliberation contents



Design Rational View backed on deliberation contents

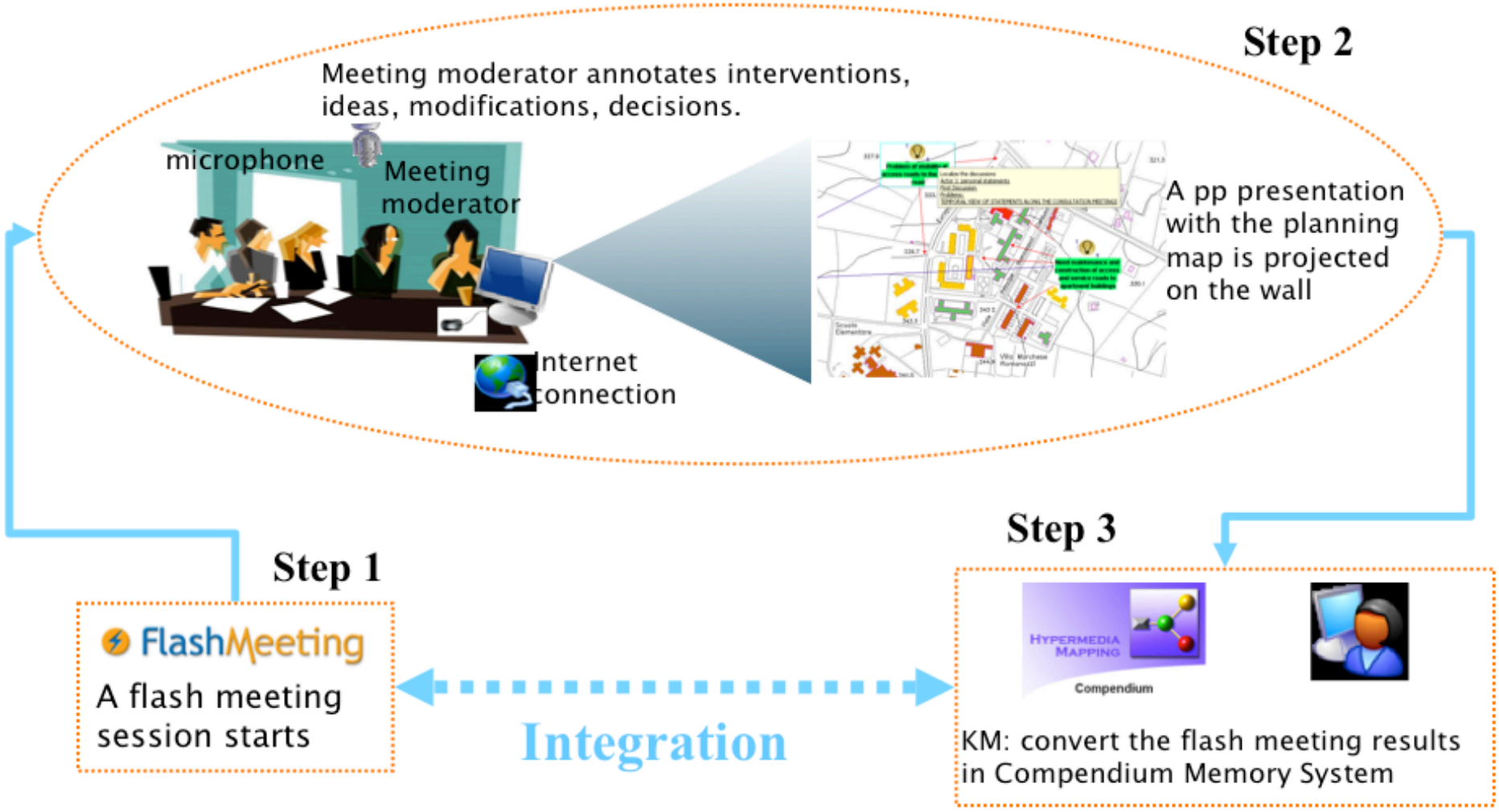
Improving transparency in deliberation capture and representation

We presented results of the post-hoc analysis of meetings' videos in which a knowledge engineer extracted images, information, and knowledge claims transcribing and editing the videos and then structured these data in the hypermedia database.

This operation introduces a relevant level of discretion.
The integration between Compendium and FM tries to solve this problem.

Video of meetings can be annotated on the fly during the meeting with FM and then annotations can be imported in Compendium hypermedia database.

FM for video recording and annotation in face-to-face meeting



Compendium-FM Demo

Preview File Edit View Go Tools Bookmarks Window Help (0:08) Thu 00:39

Compendium: Anna PhD

File Edit View Tools Bookmarks Workspaces Window Help

Home Window |

[Map]: Compendium-Flash Meeting integration- Milton Keynes MASTERPLAN

4
During the meeting
2007.04.19

http://flashmeeting.open.a
c.uk/fm/8f06bc-8201

4
Tue, 24 Apr 2007
11:20:00:
Compendium-Flashmeeting
integr

Compendium – FM integration

In Compendium environment, FM-videos annotations are converted in indexes to the video-replay and are used as references for the knowledge claims and concepts.

In this way, when navigating the meeting contents, users can replay the meeting pointing to the moment in which the specific claim has been done. This feature is a powerful enhancement to capturing deliberation because it makes the deliberation process fully transparent.

The integration enables:
✓to represent and reconstruct the deliberation process memory
✓to allow the planning team to navigate and reuse the contents of those meetings
✓to allow video annotation both for at distance an face-to face- meetings.

Asynchronous online deliberation: Compendium-CoPe_it! integration

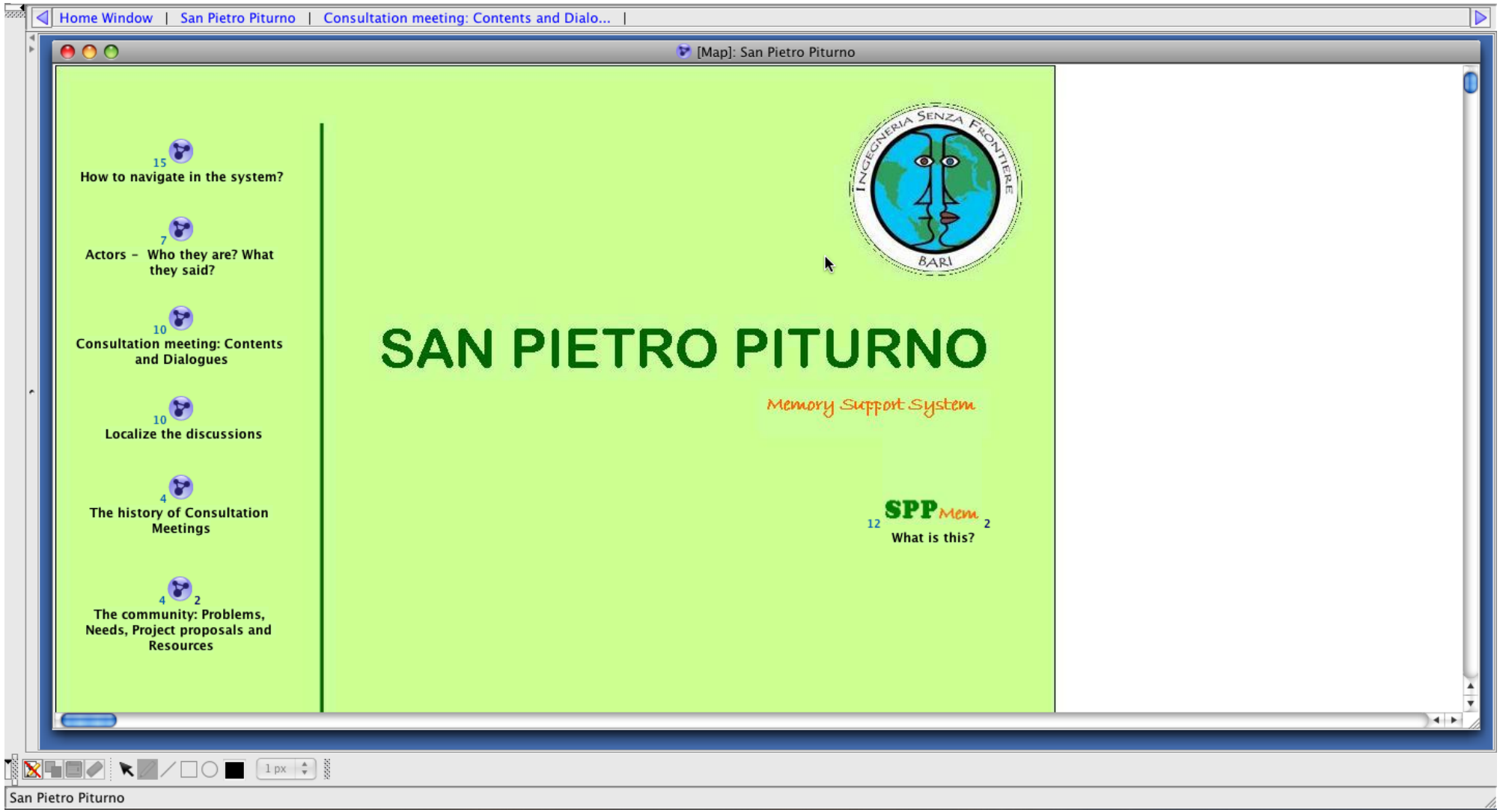
Traditional methods of deliberation and public participation normally require face-to-face, synchronous interaction between citizens, planners and decision makers.

Asynchronous online deliberation platforms may, at least for those comfortable with the internet, reduce the costs of participation while enlarging the participation base.

We therefore integrated the offline Compendium tool with CoPe_it!, a web-based tool supporting collaborative argumentation and decision-making in online communities of practice

(Karacapilidis and Tzagarakis 2007).

Compendium-CoPe_it! integration demo...



Evaluation

Three case studies have been briefly described in which Compendium, FM and CoPe_it! were proof tested to capture deliberation around different planning activities.

CASE STUDY	Phase of the Participatory Process	Time of Deliberation Capture	Meeting Environment	Information Resources
SPP – San Pietro Pituro	Consultation Meetings	Post hoc, through analysis of the video replay	Face-to-face meetings.	Videos and actors interviews
TG – Torre Guaceto case study	Community Groups Meetings	On going phase	Face-to-face meetings and virtual meetings	Life-meeting participation, meeting videos, audio records, and actors' interviews
MK – Milton Keynes Master Plan	Team group meeting	On going phase	Face-to-face meetings.	Live-meeting participation, meeting videos, screencast, note-keeping maps

Case Studies

The main aims of the case studies were:
✓to test the information structure and deliberation contents taxonomy and how effective it is to reconstruct and represent the deliberation process;
✓To test the usability of the three technologies
✓To test the effectiveness of the deliberation process memory system, that is to say: how easy is for users to extract relevant information from the hypermedia database to solve specific tasks.

Evaluation data was gathered from three sources:

✓Semi-structured interviews with representatives at different organizational levels (community, technical and political) including an NGO, Decision Makers, Institutions and Spatial Planners

✓Lab-based observations: Behavioral observations of two pairs, plus four individuals planning experts exploring the Compendium system,

✓Questionnaires: issued to planning students

Evaluation Results: potentials and challenges for participatory planning

✓Enthusiastic reaction from ISF: “We’d like to use the system as a memory system for our organization to remember best practices and mistakes”.

✓The knowledge structure was able to support multiple strategies of exploration. Users demonstrated that it was straightforward to discover and infer the role of tags and icons by simply exploring the system.

✓None of the encountered usability problems can be ascribed to the software (Compendium), but rather depend on:
- user’s capability and attitude toward the task, and
- knowledge manager’s skills in issue mapping

Evaluation Results: potentials

✓A system for reflection and understanding and not for getting answer: A tool to understand the wider social and spatial context of deliberation

✓A tool of inquiry and as such they suggest using it to discuss with the community about design alternatives and possible problems solutions; it offers a different way to give voice to people that would not have one otherwise

✓A tool for monitoring and evaluating planning performances in terms of degree of knowledge base used, fulfilment of community demand, identification of excluded voices

Evaluation Results: challenges

Discretional Classification:

✓a general concern that the classification of claims is discretional and entrusted to “the expert planner”. This opens the possibility of misinterpreting stakeholders’ intentions or meanings, or prematurely framing the problem setting by narrowing free concept interpretation.

✓Once the platform moves to the web, a ‘folksonomic’ social tagging approach could be provided to ensure that classification is open to all, or to appointed stakeholders, as negotiated within the project.

Evaluation Results: challenges

Disorientation: Too Many Paths to Reach the Same Information

✓The memory platform as it has been conceived, designed and implemented is not a tool to give answers, but a tool to enable reflection and understanding between highly problematic, questionable, uncertain, unresolved, and contestable questions. Multiple paths of exploration mirror multiple interpretations and understanding of concepts and arguments.

Evaluation Results: challenges

Growing of Information Complexity: How to Select Relevant Information and Knowledge

The risk is to reduce too much the grain of the information to trace and then to augment the amount of information and knowledge fragments to interpret and manage

This makes such a detailed remembering not only useless but also counterproductive

Future efforts needs to be devoted to explore methods to screen between relevant knowledge to trace and the “noise” which just need to be forget in order to focus our attention on what matter in the specific moment and for the specific people involved

Conclusion and Future Work

Future works aims at:

✓engage with the public: Since Participatory Planning aims to enlarge involvement of the community in the planning process, we now need to engage with the public.

✓Face issues of power and cultural resistance to innovation: the accountability that comes from such tools may not be welcomed by all stakeholders, since they redistribute power and control

✓Negotiate the "ideal" design for a deliberation platform: no supervision, but so cleverly designed that when opened up for mass participation, it still delivers coherent debates and summaries. What role played by expert "cartographers" in curating deliberation mapping?