

Spatial Hypermedia in Topos

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Work at an architects office



An Architects Office



Information Organisation

- Different ways in which architects organize heterogeneous materials.
- Spatio-temporal order: e.g., on a desk at a given time.
- Meta data: *date, owner, vendor, name,...*
- Content: *texture, color, form, text,...*
- Mimic real world organization.

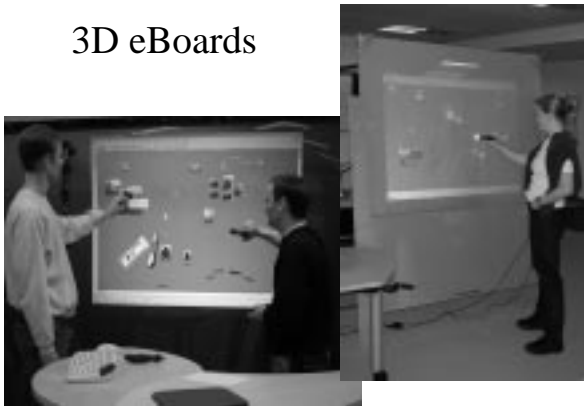
Workspaces

- 3D spaces.
- Live references to real documents, models, images.
- Things can be in more than one place at once.
- Experiments with different interaction techniques.

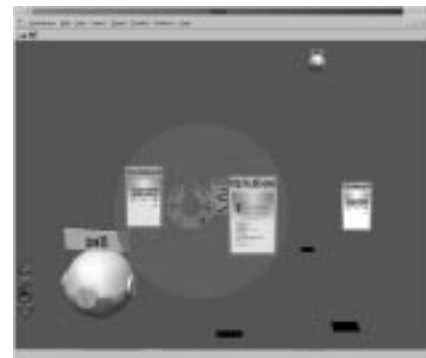
Halo & Magic lens



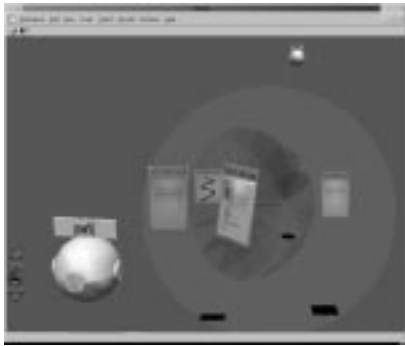
3D eBoards



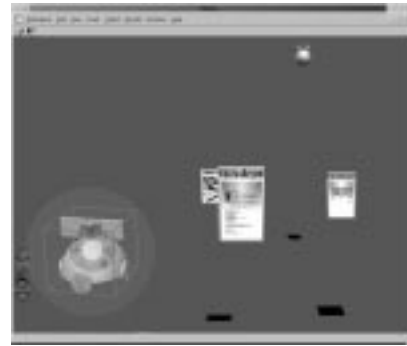
Pie Menu



3D Halo



Closing a proxy



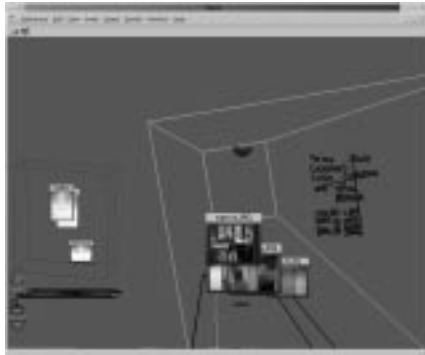
Workspaces and proxies

- Together workspaces and proxies form a DAG: forms the workspace hyperstructure.
- Proxies can be open or closed
- A proxy determines the position of the underlying workspace within the larger workspace.
- Moving a proxy, moves underlying workspace with it.

3D spatial parsing

- Aims to recognize the same visual structures as the human user.
- Can be used to form multi-selections.
- Supports pluggable structure experts: clusters, lists, tables,
- A component: Has been moved with ease from Manufaktur into Topos.

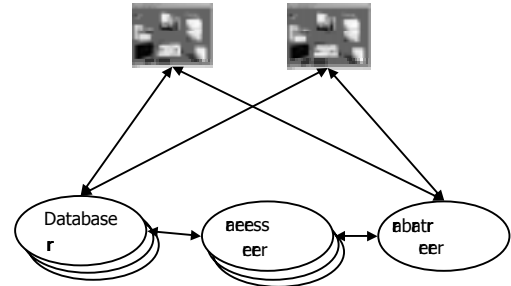
A spatial parse



Real time collaboration

Walls, tables, PC's

GPRS, 3G, (802.11)



Spatial parsing 2

- Parse scene from users view point: creates fewer surprises.
- Configurable how much depth information matters in the parse.
- Works in real-time: keeps proximity graph up to date at all times.

Location based support

- Integrates with GPS receiver.
- Facilitates location aware hypermedia.
- "Bump into" media while in the field: documents, maps, models,...
- See position of field workers in a model or on a map.

Location based support



Demo

- Come and see the demo on Thursday!
- Many more features: integrated mediaspace, PDA integration via IrDA,...

Current prototype



A larger workspace



Doodles



IR connection to PDA

- Can “pull” a workspace onto the PDA.
- Later “push” workspace onto other machine / eBoard.



Documents are live!



Overview

- How architects organize information.
- Workspaces and proxies.
- Interaction styles.
- Spatial parsing.
- Collaboration, location based hypermedia, using PDAs as workspace carriers.