

**WORKSHOP PERVASIVE ADVERTISING
AND SHOPPING 2010** | 17.05.2010

DESIGN SPACE FOR LARGE CYLINDRICAL SCREENS

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Agenda

- 1 Classical Columns
- 2 Digital Columns
- 3 Design Principles
- 4 User Study

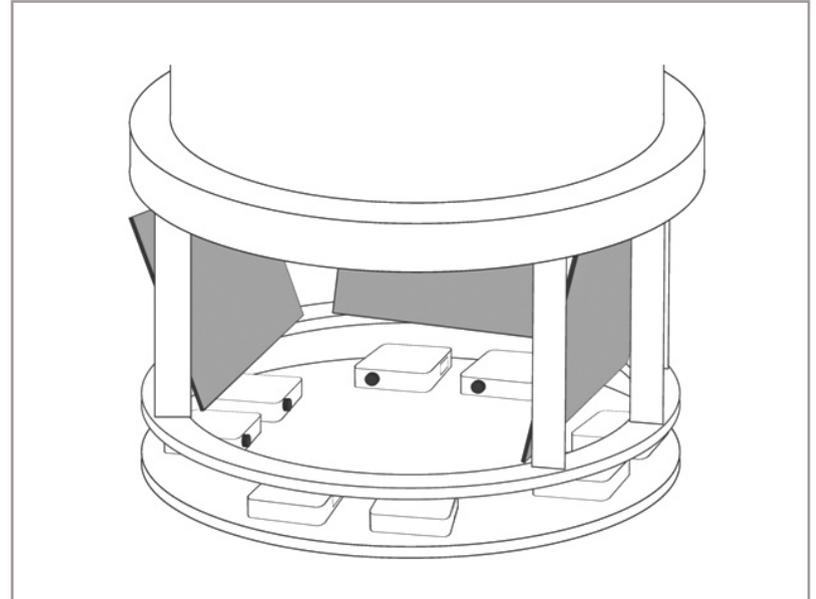
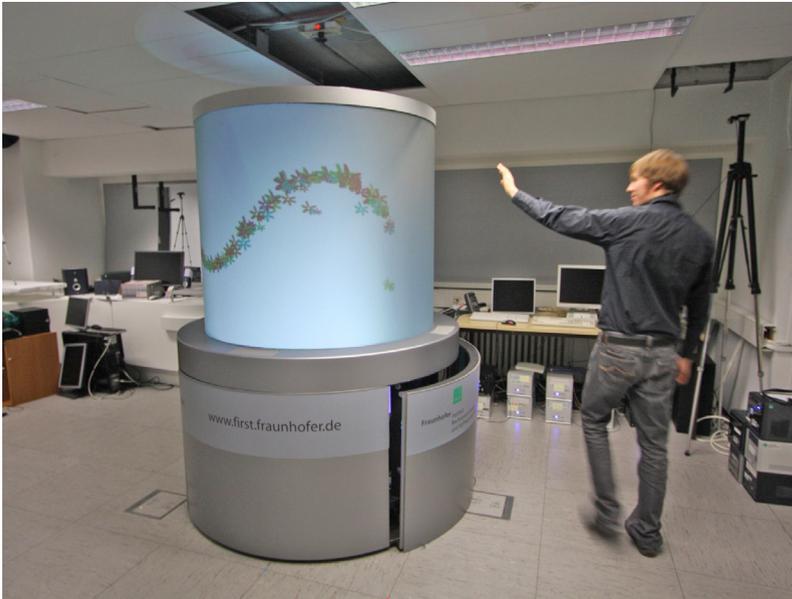
Digital Columns

Rotating LED (Dynascan, Kinoton)

Split-up LED tiles (Barco)

Rear-projection (Fraunhofer)

Research Prototype



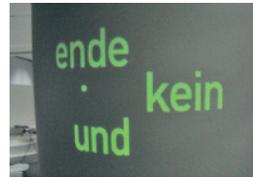
Sample Applications



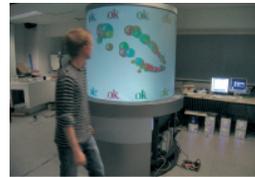
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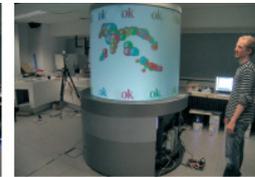
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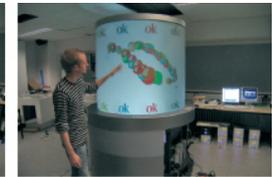
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00:12



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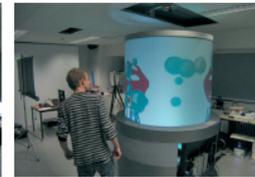
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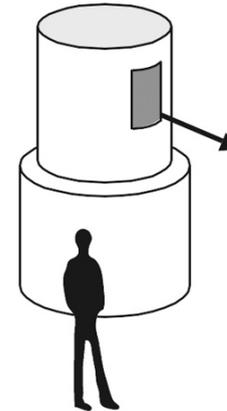
Relationship of Screen and Perception



convex shape



no left and
no right



effective towards
undefined direction

Deducing from Design Theory

Columns have no left and right.

Classical figure positions don't work.

Use the meaning of top and bottom.

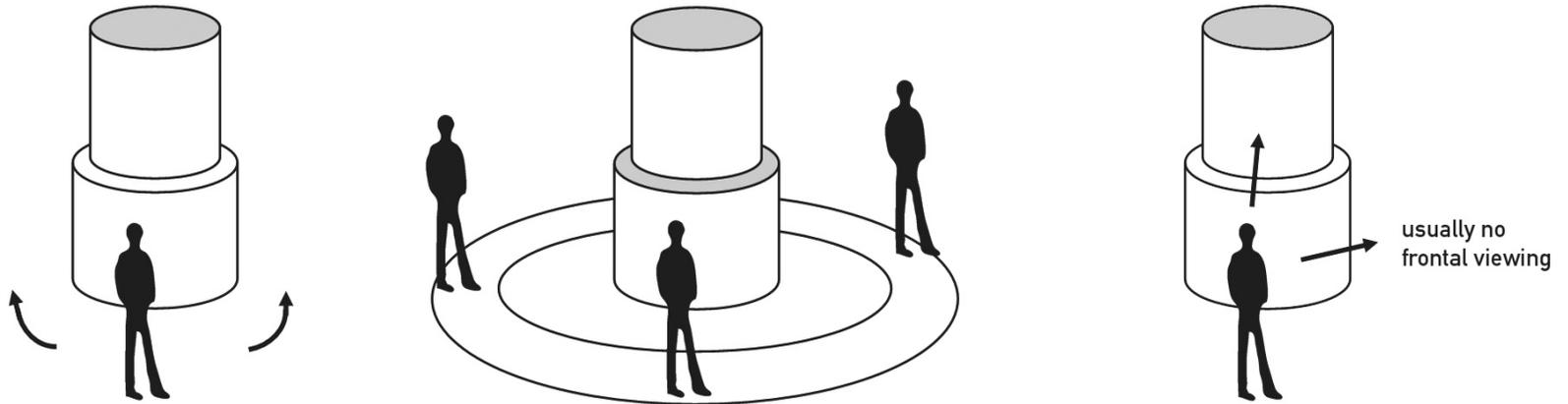
Deducing from Film Theory

Columns have a convex shape.

It does not cover the visual field at all.

Do not use immersive content.

Relationship of Screen and Body



Comparative User Study

Flat rectangular vs. cylindrical screens

Four exhibits, 15 participants

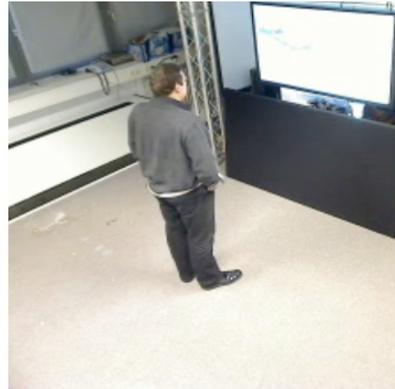
Synchronized camera observations

Semi-structured interviews

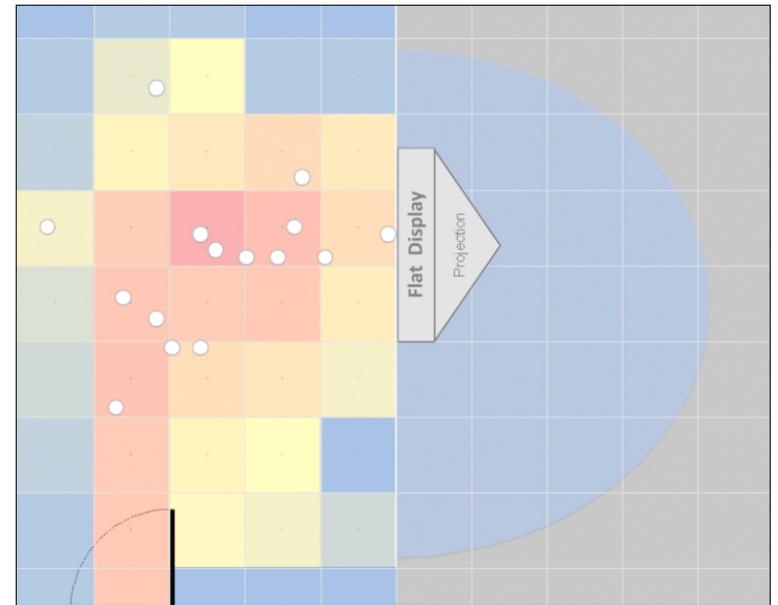
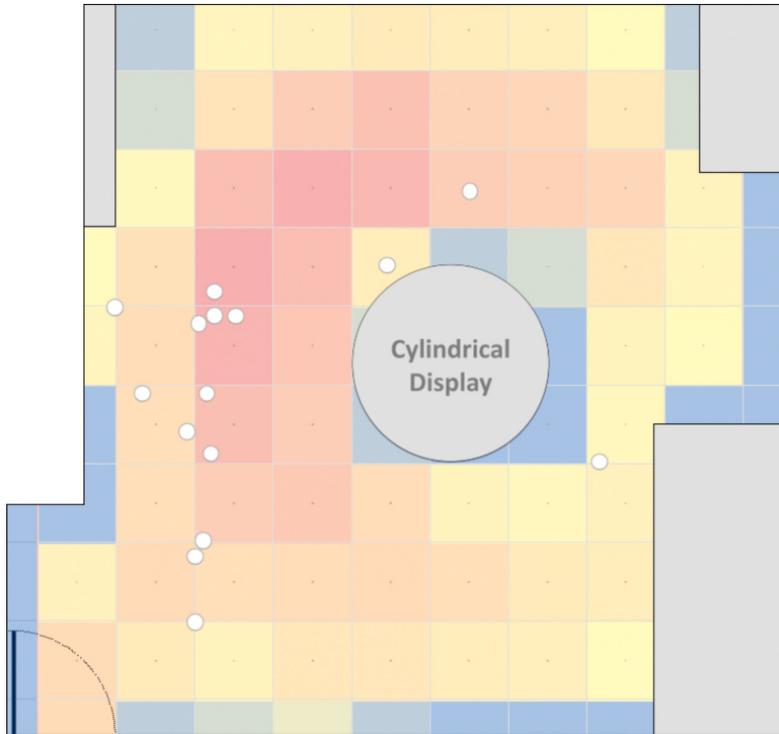
Comparative User Study



Angle of shoulders towards the display



Prison Effect and Walked Distance



Conclusions

Columns are encountered laterally.

Design for one-hand use.

Columns are for passers-by.

Design for walking.

Columns are frameless.

Design for undefined positions.

Discussion

How can a field study be designed?

What are benefits for viewers?

What are benefits for advertisers?

Ideas for advertisements?

Refinement of user interaction?