

# Idee der Blended Library

Neue Formen der Wissensvermittlung durch Vermischung der realen und digitalen Welt



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### Mensch-Computer Interaktion





















Rexhausen



Demarmels

















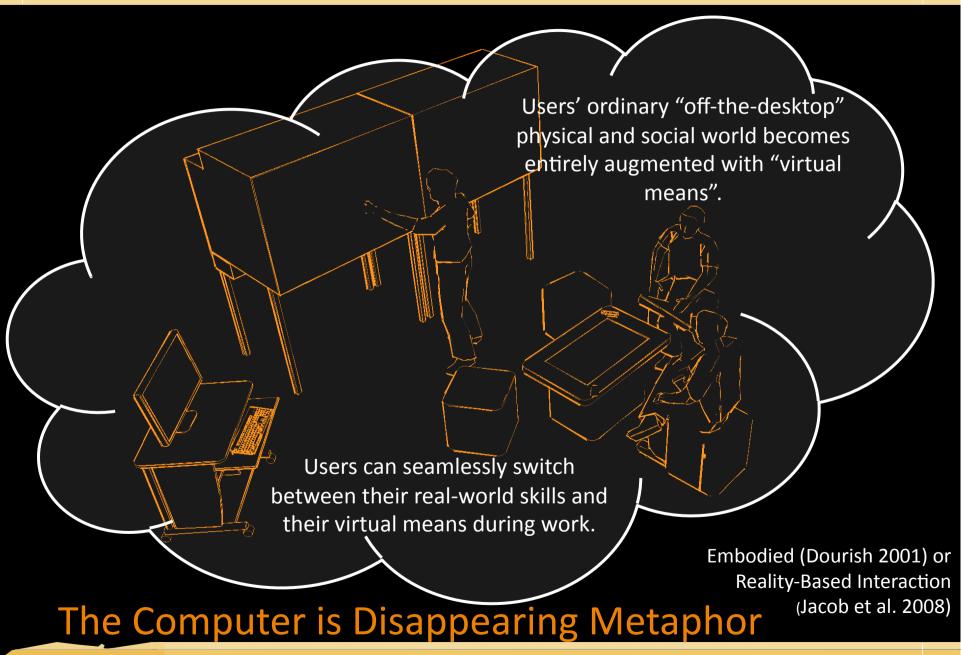




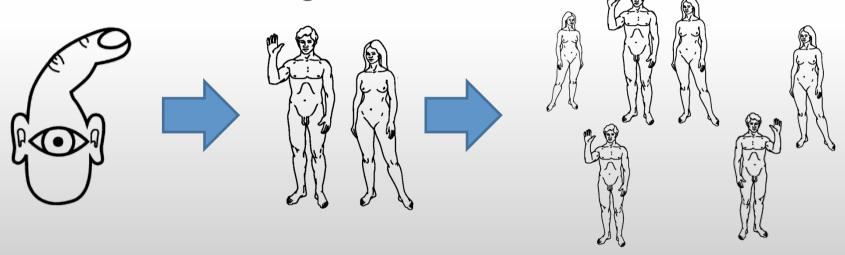




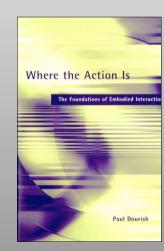
# Motivation Blended Library Interaction Devices & Techniques Conclusion



Recent findings (e.g. in cognitive science and psychology) lead to an "embodied" view of cognition:



- The body matters! → Tangible Computing: Make use of our motor & bodily skills and spatial awareness (bimanual multi-touch computing, tangible user interfaces, smart environments, ...)
- The social environment matters! → Social
   Computing: Make use of our social skills, design for social interaction and collaboration...



Dourish (2001)

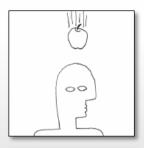
#### **Embodied Interaction**





Microsoft Surface as one example for tangible and social computing.

# "The goal is to make computer interaction more like interacting with the real, non-digital world."



 Naïve Physics (NP): Peoples common sense knowledge about the physical world.



Fast flick will keep contacts scrolling after finger has been removed, as if list has mass.



 Body Awareness & Skills (BAS): Familiarity and understanding that people have of their own bodies, independent of the environment.



When user puts phone close to her face, it shuts off the screen to prevent accidental button presses.



Environment Awareness & Skills (EAS): People have a physical presence in their spatial environment and develop many skills for navigating within and altering their environment.



User flicks screen to left or right to see next Album – all objects in the real word have spatial relationships.

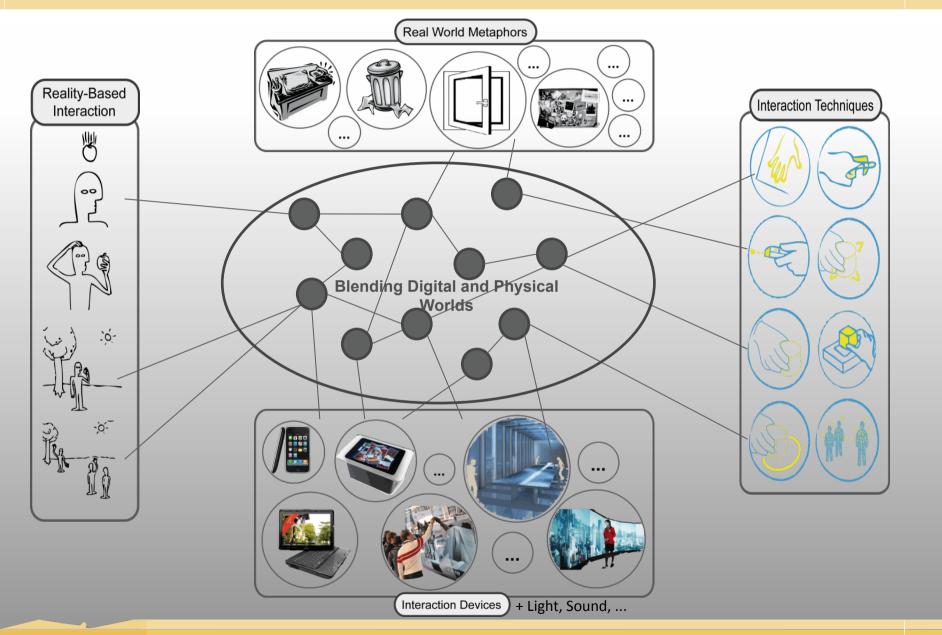


Social Awareness & Skills (SAS): People are generally aware of the presence of others and develop skills for social interaction.

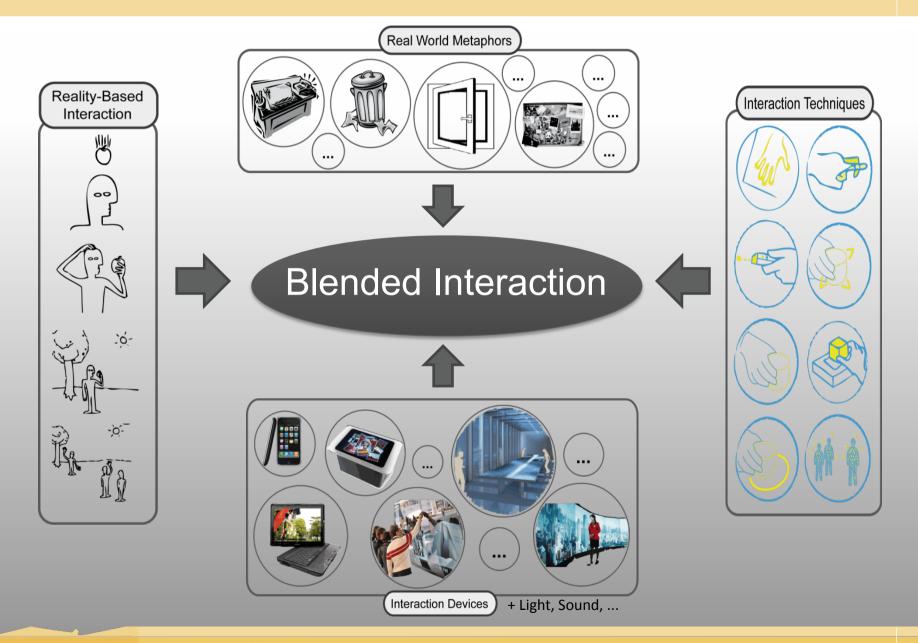


User do not share one single input device – Surface allows to draw more directly on existing social interaction skills

#### Designing wih Blends - BLENDED INTERACTION



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Blended Library

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# Blended Library & MedioVis 2.0

Deutsche Forschungsgemeinschaft

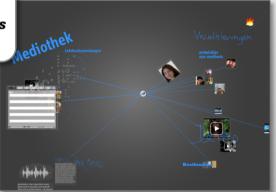
**DFG** 

"Wissenschaftliche Literaturversorgungsund Informationssysteme (LIS)"



Library of the University of Konstanz (Director Petra Hätscher)
Application Domain Mediothek









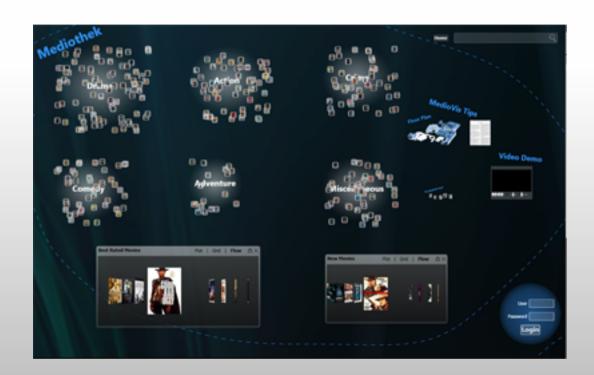


The project aims to design and evaluate a novel workbench for information workers, that assists a user not only in seeking, but also in other tasks of a higher-level activity.









Video: <a href="http://hci.uni-konstanz.de/index.php?a=research&b=projects&c=16314278&lang=en">http://hci.uni-konstanz.de/index.php?a=research&b=projects&c=16314278&lang=en</a>

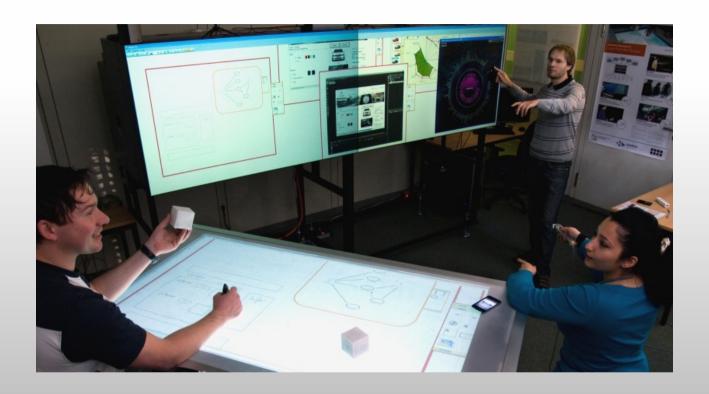
Motivation

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# Blended Interaction Devices & Techniques for the Blended Library



Video: <a href="http://hci.uni-konstanz.de/index.php?a=research&b=mediaroom&lang=en">http://hci.uni-konstanz.de/index.php?a=research&b=mediaroom&lang=en</a>

Motivation

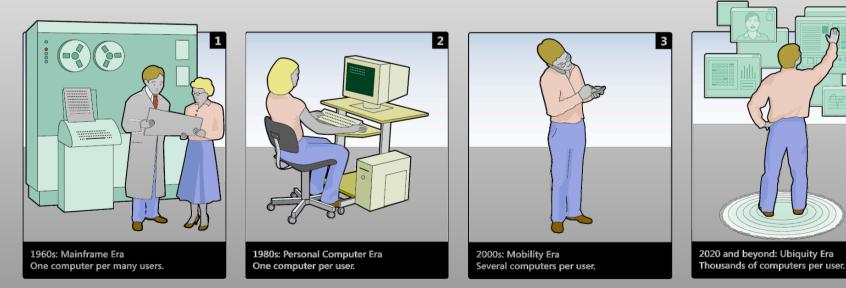
Blended Library

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#### Conclusions

- Blended Library draw strength by building on users' preexisting knowledge of the everyday, non-digital world.
- It employ experiences of reality such as users' understanding of naïve physics, their own bodies, the surrounding environment, and other people.
- It blends computer interaction with the interaction of the non-digital world to **make interaction more expressive**.



[Microsoft Research UK 2008, Being Human: Human-Computer Interaction in the Year 2020]