

Seminar Medientechnik

“New Interaction – Examples and Visions”

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Heidegger, Martin (1889-1976)

- being-in-the-world
- **the nature of human experience is based in engaged participation in the world**

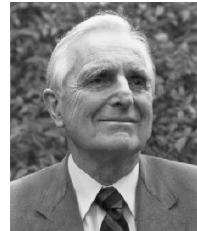


Douglas Engelbart



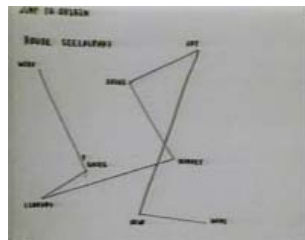
Inventing the Mouse

<http://www.superkids.com/aweb/pages/features/mouse/mouse.html>



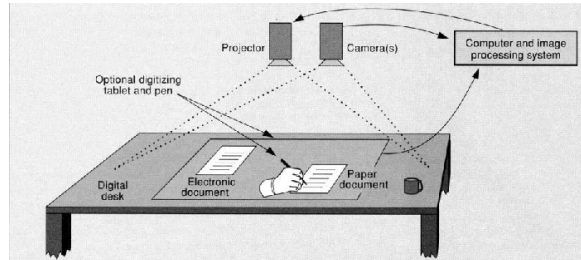
Douglas Engelbart (cont.)

<http://sloan.stanford.edu/mousesite/1968Demo.html>
(videos)



Wellner's Desk

- Desk with top-projected video
- Camera tracking from above
- Digitizing tablet



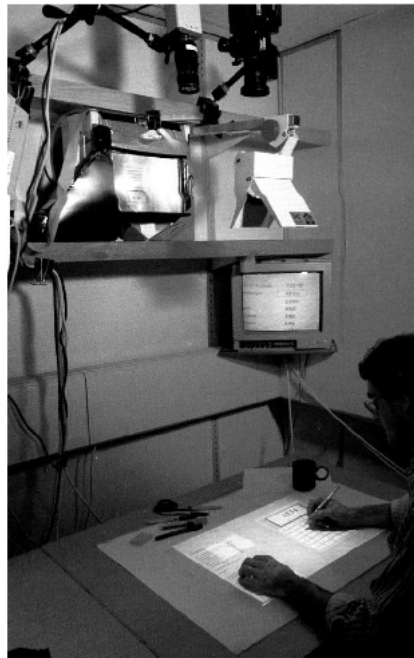
Wellner. The DigitalDesk Calculator: Tangible Manipulation on a Desk Top Display UIST'91.

<http://www.ics.uci.edu/~jpd/NonTradUI/p27-wellner.pdf>

Wellner's Desk (Cont.)

- Interact with real paper
 - Digitize with camera
 - recognize action & gestures
 - Overlay with video
- Video

<http://www.ics.uci.edu/~jpd/ddesk.mov>



Sentient Computing



The world as seen by users.

The world as seen by the sentient computing system.

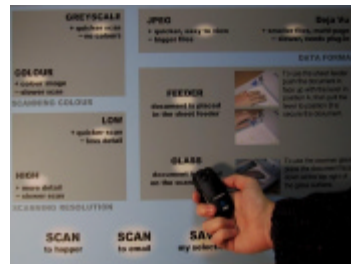
<http://www.uk.research.att.com/spirit/>

Videos:

<http://www.uk.research.att.com/labvid.html>

Papers:

<http://www.uk.research.att.com/abstracts.html>



Interactive Modelling (Merl)

<http://www.merl.com/papers/TR2000-13/>

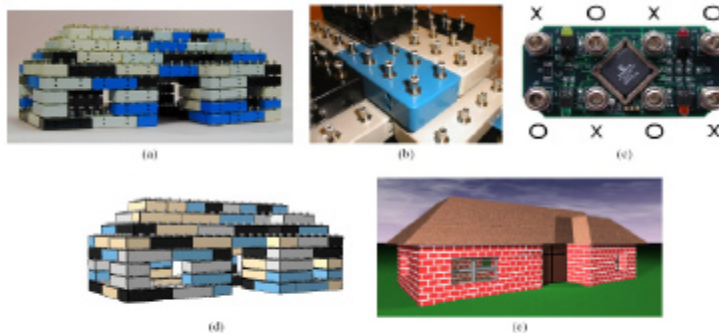


Figure 1: (a) a physical block structure comprising 98 blocks; (b) a close-up of the blocks; (c) a bottom view of the circuit board inside each block; and renderings of the virtual model recovered from the structure, one literal (d) and one interpreted (e). The literal rendering uses associated shapes and colors to render the blocks. The virtual model is augmented automatically for the interpreted rendering.

Interactive Modelling (Merl)

<http://www.merl.com/papers/TR2000-13/>

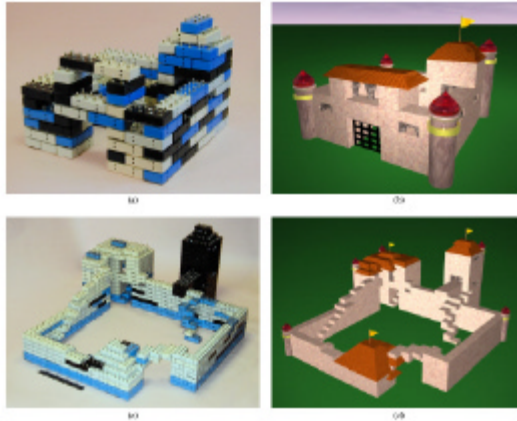
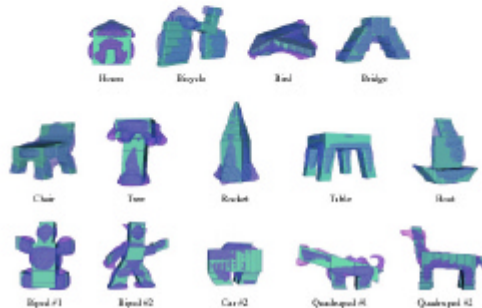
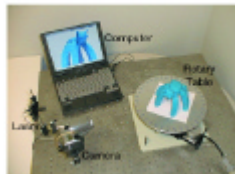


Figure 4: (a) a model of a castle consisting 118 blocks, and (b) an interpreted rendering of it. The automatic enhancement in this graphical representation include the addition of windows, roofs, windows, arches, a porch, and a flagpole in appropriate locations, as well as the selection of suitable surface properties and features for all the geometry. The 500 block model in (c) is a 11 inch cube is included to show scale—note built as a challenging visual constraint for Quidor II. The data format for which to another system (not in use today). Applying this same data to the model to get the rendering in (d) requires being able to use numerical parameter indicators of the block model: it specifies the number of blocks in the structure that can result in a distinct architectural feature.

Interactive Modelling Cont. (Merl)



Figure 5: Examples from the image sequences for the 18 of an models captured by the camera illustrated in Figure 3.



<http://www.merl.com/papers/TR2000-13/>

Tangible Media

- <http://tangible.media.mit.edu/>



- MediaBlock
Papers & Video:

<http://tangible.media.mit.edu/projects/mediaBlocks/mediaBlocks.htm>

Marble Answering Machine

- Concept and Design of a Tangible answering machine
 - Durrell Bishop, RCA
 - Marbles represent calls
 - Interact with marbles to
 - play message
 - to call back

