Tangible Play: constructing expressive experiences across the physical/digital worlds

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Overview

1. Two points of departure

   Interfacing the physical & digital worlds

   Design thinking & constructed experiences

2. Synlab approach and some examples

   Expressive control in virtual space

   Tabletop storytelling experiences

   Tabletop game play

3. Quick summary

Interfacing the physical & digital worlds

Less is more: merits of specialized tools

Bill Buxton
Input Research Group
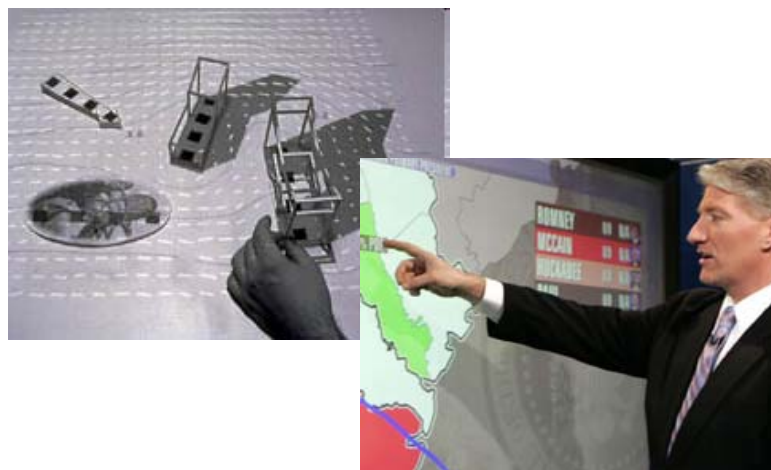
Tangible interaction and seamless integration of physical & digital worlds

Hiroshi Ishii
Tangible Media Group
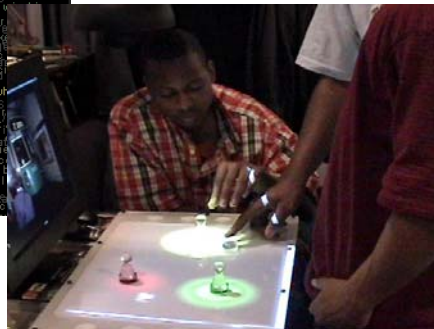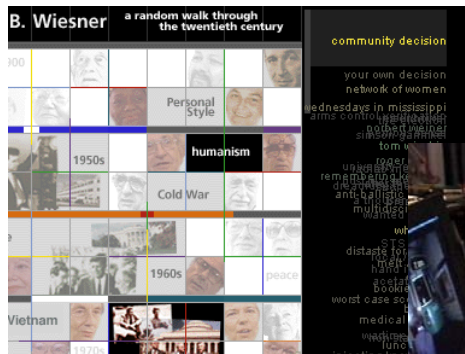
Design thinking & constructed experiences

Bottom-up vs. top-down thinking

Ron Baecker
Collaborative Multimedia Research Group

Co-constructed improvisational story experiences

Glorianna Davenport
Interactive Cinema and Media Fabrics Groups
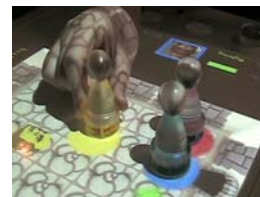
![synlab]

Expressive Media Applications

TUI3D   *TTRPG*

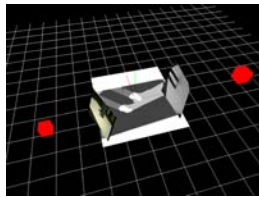*Moons Over You*   *gamewell*
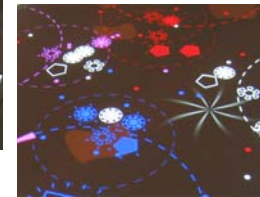
Tangible Comics   *KinoPuzzle*

Tangible Toolkits
(ROSS API)

Interactive Spaces:
ProteanSpace, TrackingSpace

Interactive Surfaces:
TTT, TViews Table

Interactive Objects:
RFID, Sensors

Physical Platforms & Technologies

Expressive control in virtual space
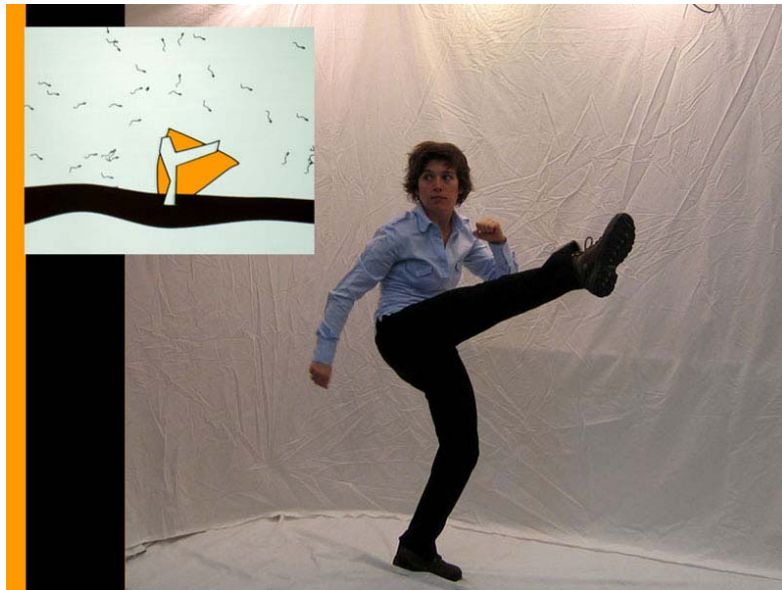
Embodied Comics: Full-body interaction for a playful narrative performace
DM Grads: Ozge Samanci, Yanfeng Chen

BDC: Unlocking body memories for digital creativity

With Michael Nitsche & Sanjay Chandrasekharan
DM Grad students: Paul Clifton, Tandav Sanka, Geoff Thomas

Tabletop storytelling experiences

Architales: Physical/digital co-design of an interactive story table

With Claudia Winegarden & Tristan Al-Haddad
Spring 2008 XMedia Class (DM, ID, Architecture)

KinoPuzzle: Exploring multi-viewpoint stories through tabletop collage

DM Grad students: Susan Robinson, Andy Wu

Tabletop game play

TTRPG: Bridging physical and digital social/improvisational storytelling game spaces

CM Undergrads: Dana Van Devender, Nigel O'Rear, Basil Mironer, Elijah O'Rear

Gamewell: Flexible manager for multi-touch & tangible tabletop games

CM Undergrads: Tatum Clanton, Dan Gibson, Andy Korzik, Elijah O'Rear, Ari Velazquez, Peter Watanabe, Steph Yang

Summing up...

"Space is a practiced place"
(de Certeau, The Practice of Everyday Life)

Improvised play and storied co-construction of experiences

> More complex, playful, personally meaningful shared media experiences

Appropriate interfaces through physical/digital co-design

> Extend beyond the screen into personal and social spaces

Designing applications/interfaces for extensibility and malleability

> Combining top-down and bottom-up design approaches
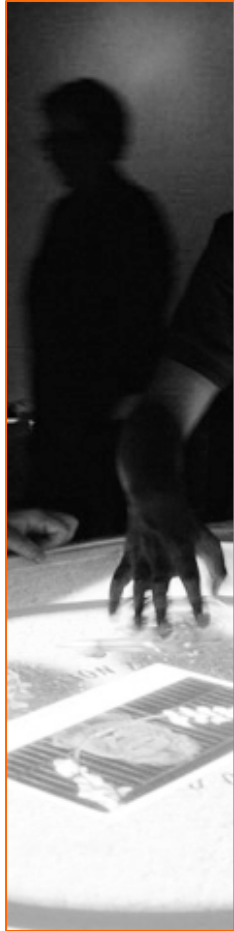
Thank you!

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Synlab Students:
[Grads] Meekal Bajaj, Ayoka Chenzira, Paul Clifton, Chih-Chieh Hsu, Hyun Jean Lee, Susan Robinson, Ozge Samanci, Yang Ting Shen, Geoffrey Thomas, Manvesh Vyas, Andy Wu
[Undergrads] Tatum Clanton, Dan Gibson, Andy Korzik, Elijah O'Rear, Ari Velazquez, Peter Watanabe, Steph Yang

Sponsors:
Steelcase, Turner, NSF

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