How Graphic Artists and Fine Artists Fit Into a Scientific Visualization Research Process

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Artist Luke Aleckson installing his current show at the Minneapolis Institute of Arts

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1. Linking the Virtual and the Physical
2. 3D Vision, Useful Illusion, and Multiple Scales
3. Engagement, Aesthetics, and Conveying Information
Roadmap

- Rethinking Visualization Environments: Creative use of physical space in a CAVE environment
- Deep Visual Investigations: 3D form, gesture, and “line”
- Ideation, Design, and Critique: “Renaissance teams” for visualization projects
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CAVE Virtual Reality Environments for Science

Example virtual reality environments at Brown University and the University of Minnesota
Using Advanced Visualization Environments for Creative Writing

Video thanks to:

*Writing with Digital Media* (http://writingdigitalmedia.org)
Robert Coover, John Cayley, Brown University

*Screen*, Noah Wardrip-Fruin, Andrew McClain, Shawn Greenlee, Joshua J. Carroll,

*This is Just a Place*, Poem by A. R. Ammons, interpreted in 3D by Vesper Stockwell, Bryant Choung, Dmitri Lemmerman, Edwin Chang, and Shawn Greenlee

Exhibited: Boston CyberArts Festival, Bell Gallery and Creative Arts Council at Brown University, Providence, RI, April 26 and May 3, 2003.
Hiding Spaces (Rubin & Keefe)

Combines 3D modeling in space with interactive layers of digital photography textured to the walls of the Cave.

Viewer’s path through the environment...

triggers shifts in imagery on the walls.
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CavePainting

Artist Harrison Love
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Renaissance Teams for Visualization

Collaborations with the Minneapolis College of Art and Design
How Graphic Artists and Fine Artists Fit Into a Scientific Visualization Research Process: 3 Specific Examples

- **Rethinking Visualization Environments** to create new modes of interacting with computers.

- **Deep Visual Investigations** to discover new visual strategies and encodings for data.

- **Ideation, Design, and Critique in “Renaissance Teams”** to address specific real-world data visualization challenges.
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