WHAT HAVE WE DONE?!? DESIGN MEDIA AND PROCESSES IN THE CREATION OF CYBRIDS

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Panelists:
Mark Farrelly (Scenarist) UW HIT Lab, USA; Susan Tanney (Interface Designer), UW HIT Lab, Carl Fally (Architect) NBBJ Architects, USA

Introduction
This panel will discuss the use of design media and processes in the generation of recent cybrid design projects. These projects, realized by teams of experts in various design and technical fields, represent the forefront of thought in the creation of hybrid physical-virtual solutions to design programs.

The panel members are experts in architecture, interface design, and dramatic scenarios. The panelists were asked to define their positions for the discussion by answering four questions. Below are excerpts from their replies to these questions, which will be expanded upon in the panel discussion.

1. Why are cybrids a valid or necessary solution to design problems of the 21st century? By what rationale do you decide what components are physical, virtual, or both?

Architect:
The evolution of cybrids is necessary to raise the cognitive consciousness of culture to the embedded impact virtual worlds currently have within the world view of the average participant of popular culture. The rationale for the cybrid is to define both elements of physical composition and virtual composition such that both are absolute and the average individual is convinced of the truth and necessity of their existence.

Interface Designer:
The rise of cybrids is necessary to raise the cognitive consciousness of culture to the embedded impact virtual worlds currently have within the world view of the average participant of popular culture. The rationale for the cybrid is to define both elements of physical composition and virtual composition such that both are absolute and the average individual is convinced of the truth and necessity of their existence.

Dramatic Scenarist:
Working in the theatre has always been about combining the real with the illusory—about choosing which components are real and which are virtual. In cybrid architecture, a virtual component can provide a level of flexibility and interactivity providing a virtual space within a physical structure where design components can change and introducing a world with tremendous narrative potential that can be populated by virtual “characters.”

2. What media do you use to design cybrids? How are they similar or different to media you use to develop physical solutions to design problems?
challenges, conflicts, and solutions have you encountered when working with specialists in disciplines different from your own?

Architect:  
Cybrids are in their infancy, their development is currently limited. For cybrids to take the evolutionary leap, the art and functionality defining the purpose of cybrids must be discovered and invoked. A design team comprised of many disciplines holds the greatest potential for turning the key to this defining moment.

Interface Designer:  
For cybrids, both traditional hand-craft and digital media are used. Scenarios and storyboards telling the story of the users and activity in the cybrid setting help to unify the vision for the experience as well as flush out technical and conceptual issues early in the process. Flipbooks with simple interactions are created using code such as html, java, and visual basic that enable user testing. Industrial design prototyping tools are used, such as blue foam models, to evaluate hardware choices within the environment. Digital models are used to illustrate the relationship between the physical and virtual aspects of the cybrid solution as well as testing interactions. Simulations of user activity can be run in the models to test design assumptions and acceptance criteria, such as usability.

Dramatic Scenarist:  
Though the theatre design and architecture have a shared history, theatre has been charged with a different mission than architecture—to provide an ephemeral experience for an audience. Those responsible for bringing a theatrical production to the stage are charged with combining lighting, physical design, costumes, sound, and acting skills to tell a story in a temporary and constantly changing environment.

3. Compared to physical design solutions, to what degree do design media/processes impact the construction of virtual components of cybrids?

Architect:  
The degree in which process is involved between virtual and physical design solutions is the same. Media however, is distinctly different. Media on the physical side attempts to emulate, project and synthesize the end product. The cybrids that are developed in the process generally have a very short half-life. Media for the virtual component to a much higher degree is an integral part of the process and the end product.

Interface Designer:  
For all designs the process, tool, and medium chosen will impact the final product. For example, different development software has different opportunities and limitations for integration with electronic documentation. The cybrid solution will vary depending on software infrastructure, supporting hardware devices, and physical setting.

Because the physical and the virtual are combined to form one experience it is imperative that the two be developed in tandem. This poses many more issues for cybrids than physical structures alone. It is important that the physical and virtual components be flexible to respond to mutual design changes.

4. Why are experts from multiple design and technical fields necessary in the creation of cybrids? What unique...