ACTORS, HAIRDOS & VIDEOTAPE - INFORMANCE DESIGN

Using performance techniques in multi-disciplinary, observation based design

Colin Burns*°, Eric Dishman*, William Verplank*, Bud Lassiter*

*Interval Research Corp., 1801 Page Mill Rd., Palo Alto, California 94304, USA E-mail; dishman@interval.com

° Computer Related Design, Royal College of Art, London, SW7 2EU, England E-mail; colin@interval.com

ABSTRACT

We have been developing a visualisation technique that we call *Informance Design*. We render scenarios as plays and interactive environments. Designer "actors" role-play as users with simple prototypes employed as "props". These performances open up informed dialogues between designers and an audience, to further explore the design issues raised. The use of performance techniques such as improvisation can promote multi-disciplinary, collaborative design work in ways that are as much visceral and experiential as intellectual and reflective. *Informances*, like user testing, are enactive and evaluative. Unlike user testing, they are intended to explore design ideas in ways that are generative rather than analytic.

KEYWORDS: collaborative design, iterative design, participatory design, user-centred design, user interface design, user observations, Wizard of Oz, role-play, scenarios, storyboards, rapid prototyping

INTRODUCTION

One of the key problems for user interface designers who employ a methodology based on user observations [2] is finding techniques that help them make the conceptual leap from what "is" to what "might be".

As well as *users*, an effective multi-disciplinary, collaborative design methodology should also engage;
- *self*, the designer using it
- *team*, the people they are working with
- *peers*, their colleagues and fellow designers
- *clients*, those who may commission and/or approve the design work.

Storyboarding is a commonly used technique [3] for developing and communicating new design concepts. Skilled storyboarders use simple drawings economically, to realise new design ideas as illustrated scenarios. However, this minimal visual language can make them more useful for *self* and *team* communication than to a wider audience-

readers must understand the particular visual shorthand being used. It can be difficult to express complexity in this format, often resulting in simplified, stereotypical portrayals of environments and users.

We are interested in exploring ways in which aspects of performance might help designers develop new techniques that supplement current techniques like storyboarding. In particular, we believe that;
- Performance could allow designers to *imagine* better. Enactive, experiential behaviour might spark imagination and creativity in ways that may not occur "at the drawing board".
- Performance could allow designers to *empathise* better with the people they are designing for. In a re-enactive situation they are faced with having to think through the implications of a new design idea "in someone else's shoes"
- Designers could *communicate* better with *peers*, *clients* and perhaps *users* through the higher bandwidth provided by performance. A shared perspective is offered to the audience members of any performance that can form a common platform for further discussion.
- Improvisation techniques and role-playing are commonly used in playing games. "Games" may allow for easier credential-independent collaboration. In this context, members of the design team are removed from their common views and might contribute less self-consciously.

AN INFORMANCE DESIGN PROJECT

This short paper reports on a project we have carried out to see if we could employ performance as part of our design methodology. The initial design team numbered three (a speech analyst/performer, an industrial designer/user interface designer and human factors engineer/user interface designer) The project stages are presented here as a linear process, in practice there was considerable overlap between each of them.

THE PROCESS USED

Observation

One of the team had previously carried out observations with a female hairdresser who owned a small salon. He conducted informal interviews which were video recorded.

During these, the hairdresser affirmed that a computer would not help her to run her business. This became our challenge, and we chose the design of a future "computer workstation" for a hairdresser as the vehicle for exploration of our ideas about methodology.

Review
Our observer debriefed the others on the visits, by sharing his on-site experience, while we viewed the video recordings. We also spent time individually viewing the video material. This process was carried out with the hope that what we saw might inspire our design ideas.

Brainstorming
We created a small project studio. We brainstormed using a whiteboard as a sketching-for-thinking tool [1]. We began to use informal improvisations to act out and explore alternative design proposals.

Scenarios & Storyboards
A short scenario, based loosely on the observations, was written. Storyboarding was used to develop an initial "bare-bones" performance script, which was finalised through writing. This script, for two "actors" playing a hairdresser and her customer, focused on event sequences rather than detailed dialogue and interactions.

Rapid Prototyping
A fourth team member was introduced at this point, (an audio/visual technologist). He was involved in designing technical facilities to best demonstrate the design ideas through the intended *Informance*.

Macromind Director™ was used to create a "Wizard of Oz" simulation of a graphical user interface (GUI) which was "controlled" by the customer "actor" playing a secondary role as "Wizard". The GUI simulation, was mixed with a video signal from a camera pointing back at the customers chair, to display a "mirror" for the hairdresser to work in front of. The hairdresser "actor" could "interact" with the computer by gesturing at icons displayed in the "mirror".

Improvisation
Improvisation sessions, using the simulation, were used to test both the prototype and the performance.

We used these to "flesh-out" the script that had been storyboarded, by building up the characters we were role-playing and the dialogue between them. We experimented with different production values. e.g. As both the primary characters were female, played by males, our first thought was to play them in "drag". Our initial improvs soon convinced us that this would be inappropriate.

We also began to imagine how the characters might react and interact with our designs. e.g. A videophone was designed to allow callers to appear on the mirror, in full view of the customer. We soon questioned whether the hairdresser would feel comfortable with this idea.

Performance
Using simple props (a foamboard salon counter, hairdressing supplies, magazines scattered on chairs and salon "musak") we re-created a salon environment in a meetings room at Interval. The *Informance* was performed in front of some 30 Interval designers, researchers and technologists, over a period of about 25 minutes.

Reflection
An informally structured discussion/brainstorming session, recorded on large wall boards, was carried out immediately after the *Informance*, over several hours, with some 20 audience members. This focussed on both the process used (the aims, methods and techniques employed) as well as the *Informance* content (the proposed design ideas).

CONCLUSIONS
By designing in an enactive way, we found that we were able to build an increased empathy for the people that we had identified as the *users* we were designing for.

The engagement of a wider audience of *peers* and *clients* was enabled through the shared experience offered to them by witnessing the *Informance*. This facilitated an increased level of informed dialogue within Interval about our particular design project.

CURRENT & FUTURE WORK
We have subsequently carried out a more detailed project, based on observations at a residential home for the elderly. We experimented with a more interactive performance style, putting the audience "on-stage" as part of the *Informance* environment. We used improv "games" to break down team members preconceptions about their roles in the design team.

We plan to use these techniques in a larger scale project, with several design iterations, developing prototypes for user testing. We are interested in comparing the results of user tests to our findings as designers role-playing as users.

We also see some possibilities for combining our work with Participatory Design techniques.

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