Speculation by Improvisation

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Abstract

I am a designer who uses improvisational techniques to explore the impact of emerging technologies in everyday lives. This paper outlines how I use improvisation in the production and development of speculative designs and how an audience can engage in their own improvisations with the resulting prototypes. This draws heavily from the tradition of improvisation in theatre. I illustrate this with my Runner Spotters project developed while studying at the Royal College of Art, London [1].

Author Keywords

Improvisation; Speculative Design; Prototype

ACM Classification Keywords

H.5.m. Information interfaces and presentation (e.g., HCI): Miscellaneous.

Introduction

Speculative Design is concerned with "how the world could be", rather than "how the world is" and with "social fiction" rather than "science fiction" [2]. As such my focus is on speculative social phenomena which examine alternatives for constructing of meaning around some technological intervention. I populate near-future fictitious worlds, where the rules are slightly altered.

Runner Spotters

Runner Spotters identify and record the runners they see. Much as people spot birds or trains. It is a critique of the insecurity of wireless data transmitted from commercial running pedometers [8].

In what circumstances might this behaviour be acceptable? What values would a device for performing this function embody? What likely social encounters emerge?

Working in collaboration with the two professional actors and using techniques described here scenarios were explored during a three-month engagement. See Figures 1 and 2.

A short film resulted in which we meet Sam, a young mother who is a regular spotter and Steve a spotted runner who has found a strange fame.

In parallel the JogLog was developed, a working device to tell and sharing stories about runners. See Figure 3.

I have found that working with professional actors through improvisational exercises is a productive method for creating speculative characters in rich scenarios that inform design from the earliest stages of the project. Improvisational props are an important element of this and their design needs to be carefully crafted.

Designer as Director
Where improvisational exercises with actors are used, as opposed to personae-based techniques, the traditional role of the designer is challenged. The character lives in another – fully embodied. There is a loosening of control. The designer becomes a director, responding, selecting and suggesting, rather than defining. They become a participant in the improv.

I have adapted a series of exercises from Johnstone's [6] tradition of theatresports for generating scenarios and probing speculative design. Typically these may last for just a few minutes. Actors are presented with Given Circumstances (by the Stanislavski method), usually environmental, situational and personal conditions; specificity is productive. The situation can then be played-out and directed by the designer. Exercises should be recorded for review, allowing interesting interpretations to be revisited, reexamined and developed later.

The skill of the actor is to accept and integrate the Given Circumstances to create a character with believable motivations. They accept and incorporate the "offers" made to them by the director and fellow actors, saying "yes, and" with further elaboration.

Some actors are more or less open to improvisation and good casting is essential.

When the actors engage with a speculative technology it is important that it has some physical presence in the performance, an Improvisational Prop. The form should be specific and yet create enough ambiguity for imaginative reinterpretation. Ambiguity and adhocism are resources for design [4, 5].

The Improvisational Props I design are frequently made of cardboard, a material that readily affords modification and communicates a prototypical nature [3]. Multiples allow factors such as scale to be explored. Ambiguous forms and ad hoc combinations, e.g. a cotton swab, create new offers to the actors.

Where the improvisational process can run over a number of sessions there is the possibility to review and refine scenarios. These should expand and contextualise the designer's thinking and optionally may be developed as a piece of scripted performance to create a reality embedding the speculation.

Improvisational Prototypes
I contend that the best speculative design engages its audience in a further stage of imaginative improvisation, going beyond the superficial and spectacle. As such the resulting prototypes and probes, should also be designed as improvisational props, retaining a prototypical aesthetic. Compare Kirkby's diegetic prototype [7]. The result need not be rough or crude, it can communicate a deliberacy while maintaining ambiguity through materials and form.

This is an ongoing exploration in speculation by improv.

Figure 1: An early improv session.

Figure 2: A cardboard prototype

Figure 3: The JogLog.

References

[1]   Chatting, D. *Running Lives with Data*. Show RCA, Royal College of Art, London, 2012.

[2]   Dunne, A. and Raby, F. *Speculative Everything: Design, Fiction, and Social Dreaming*. MIT Press, 2013.

[3]   Ehn, P. and Kyng, M. *Cardboard Computers: Mocking-it-up or Hands-on the Future*. In Greenbaum, J. and Kyng, M. (Eds.), *Design at work: Cooperative Design of Computer Systems*, LEA Press (1991), 169-195.

[4]   Gaver, W., Beaver, J. and Benford, S. *Ambiguity as a resource for design*. In *Proc. CHI 2003*, ACM Press (2003), 233-240.

[5]   Jencks, C. and Silver, N. *Adhocism: the case for improvisation*. MIT Press, 2013.

[6]   Johnstone, K. *Impro for storytellers*. Faber and Faber (1999).

[7]   Kirby, D. *The Future is Now Diegetic Prototypes and the Role of Popular Films in Generating Real-world Technological Development*. *Social Studies of Science 40*, 1 (2010), 41-70.

[8]   Saponas, T.S., Lester, J., Hartung, C., Agarwal, S. and Kohno, T. *Devices that tell on you: Privacy trends in consumer ubiquitous computing*. In *Proc. USENIX 2007*, USENIX Association (2007), 55-70.