ABSTRACT
Using role play at every stage of the design process has been a vital tool for IDEO in working with clients and users. With the dual properties of bringing participants into the moment and making shared activities physical rather than just mental, role playing techniques make the process more experiential and creatively generative. Role playing is complementary to traditional design techniques providing additional team dynamics and insights that bring the process and designs to another level. This paper describes how we have used role-playing in our design process and how it can be integrated into any HCI project.

Keywords
Bodystorming, participatory design, improv, role playing, rapid prototyping, scenarios, collaborative design.

INTRODUCTION
In today’s design projects, whiteboards, talking heads and PowerPoint slides are not enough. IDEO has developed experiential role-playing techniques that bring insights and communication to a new level.

IDEO’s design practice has grown from engineering and industrial design to include innovative service, environment, and organizational design. Projects often include new-to-the-world systemic and strategic brand issues as well as interactive systems that are highly nuanced and difficult to articulate verbally. Because such projects are close to client’s core goals, we often work shoulder-to-shoulder with multi-disciplinary stakeholders from all levels including executives. With strategic design briefs of “what could be” and participants with different backgrounds and goals, simply being in the room together and capturing ideas in written form often leaves participants with unresolved individual issues, differing mental conceptions, and unresolved details. Role playing can work to bring it all together.

Building on previously described work on experiential methods [2], participatory design work with children [1] and bodystorming [3] the role playing techniques described in this paper not only overcome many of the group issues but also make the process fun and exciting.

The Role Playing Difference
What is role playing? Role playing is the practice of group physical and spatial pretend where individuals deliberately assume a character role in a constructed scene with, or without, props. The key differentiating aspects of role playing are: 1) Being “in the moment” - an individual and group state that enables vivid and focused exploration of the situations and 2) Physicalization - using the entire body to explore generation of ideas that takes “brainstorming” to “bodystorming.” This sort of role playing is similar to the practice of improv theater [4]. These two factors can be seen as defining qualities and goals for the practice. Being in the moment and physicalization provide the basis for role playing’s greatest benefits:

- Maintaining group focus on the activities at hand;
- Bringing teams onto the "same page" through a shared vivid experience that involves participant’s muscle memory;
- Deferring judgment while building on other’s ideas;
- Building deeper understanding grounded in context;
- The ability to viscerally explore possibilities that may not be readily available in the world.

PHASED ROLE PLAYING
IDEO projects often proceed in phases. Different types of role play are relevant to these different phases. The phases occur in the sequence: Understand, Observe, Visualize, Evaluate, Refine and Implement. Throughout many techniques are employed such as observation, storytelling, user studies, prototyping, and workshops. While many of these techniques are powerful, few focus on inter-group communication and bringing about rapid group understanding. Role play can be used in all phases of the design process from Understand through to final concept Implementation and transfer to the client and customer. Role playing has unique and specific usefulness for each phase of the design process:

- Understand – “Where to look”
  Issue discovery and identification that grounds the team. Performing walk-throughs to uncover issues and nuances that inform early work and identify the questions to ask.
- Observation: “Re-creations”
  Sharing understandings from the field, recreating observed situations or creating extrapolations based on an understanding of the observations.
• Visualization: "Bodystorming"
  Doing generative work: exploring contexts to develop new ideas and uses. This work is often informed by the opportunity themes that emerge from observation.

• Evaluation & Refinement: “Debugging”
  Building scenarios of use, discovering hidden nuances and tuning. Working out, and working through, details of possible scenarios before delivery or implementation.

• Implementation: “Informance” (Informative Performance)
  The practice of creating physical performances to communicate developed ideas, issues, and scenarios to an audience. Informances might also be used in any design phase to convey current ideas and issues in a rich way.

**DOING IT**
These different aspects of role play can be used throughout the design process and become part of the way the team works. Two techniques are particularly well suited for use together: Bodystorming and Informance. We have found that these can be used in a half or full day structured workshop even with complete beginners. The output is a rich experience and a set of performed scenarios on video. Such a workshop might have 8-20 participants broken out into teams of 3-5 persons with the given sample agenda.

This workshop format has been used in both early and mid-stage projects. It is equally well suited to kick-off meetings and when exploring design details. We regularly use these techniques in both our design projects and in our IDEO U courses where we teach clients rapid design and innovation techniques. These clients have included product and service companies such as Fujitsu, American Express, Reuters, Lilly, P&G, United Media, DePaul Hospital as well as government entities such as the FBI, the IRS and the NIH.

**Role Playing Tips**
We find that videotaping not only provides documentation, but also sharpens the performances. Roles can be anything, persons, emotions, things; it can help to instruct that “each scenario will have at least one new role and one non-human role.” IDEO’s standard brainstorming rules are equally relevant to role playing: defer judgment, encourage wild ideas, build on the ideas of others, stay focused on the topic, and one conversation at a time. The notion of breakout teams introduces both deadlines and aspects of team competition that help to focus participants on the goals. In addition to reviewing basic workshop skills, facilitators may also wish to explore improvisation exercises and warm-ups [4]. An ample and diverse supply of costumes and props helps to set the stage for creative fun.

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**REFERENCES**