EXPLORING EXPERIENCES WITH TRANSPARENT NATURAL MATERIALS

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Transparent Natural Materials

*Material qualities of physical objects* are an integral part of the user experience design when physical products with tangible user interfaces are considered.

Systematic study comparing interaction experiences with natural materials.

Ice  Water  Air (Wind)
Related Work

www.aquascript.com

Pier, Using water as interface media in VR apps

Virolainen, “Ice wall”

Birdly, Zurich University of the Arts
User Study

Physical Probes:
• Water - in a small bowl
• Ice - tennis ball sized block
• Air - wind from a desk fan

Participants:
• 16 participants
• 5 female, 11 male

Methods:
• Think-aloud
• Product Reaction Card (Adjectives)
• Likert rating (Controllable, Calm, Inspiring and Overall preference)
Product Reaction Cards (Adjectives)

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User Comments

Ice:
• The majority of users mentioned the coldness of ice
• 2/16 users mentioned the transparent nature of ice e.g. “It is interesting to look through it, e.g. what lies under it.”
• 2/16 users referred to the reflective properties of the ice surface e.g. “…mirror…” and “…shiny looking…”

Water:
• 6/16 mentioned the cool temperature they associated with water e.g. “Feels transparent, quiet and cool”
• Many participants (7/16) referred to cleanliness together with transparency, e.g. “Transparent and clean”

Air:
• 2/16 users mentioned the see-through properties of air, “It is impossible to see it, you just have to sense, feel and hear it” and “Invisible and fantastic.”
Discussion

- Natural materials provoke users’ emotions.
- The material probes method with the physicality of the materials brought forth stronger associations and feedback. We believe we gained a richer and more authentic reaction than e.g. if we had used an online survey approach.
- Mostly the reactions to all the natural see-through materials were very positive. Interacting with the materials was perceived as fun.
- Liquid and gas type elements were described more as uncontrollable and approachable. The solid ice provoked associations that were calmer, such as the terms rigid, serious and restful.
- These first steps in the area of charting the user experiences may open the way for the use of natural transparent materials as design elements in interactive installations and applications.