Communicating the Interactivity of differently shaped displays

CHI 2013 Workshop on Displays Take New Shape
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Is a strategy to engage users when they don’t expect displays to be interactive.

Can be realized by providing feedback to the initial unaware movements of users.
encountering shaped or flat rectangular displays

Flat displays are indicating a direction and are ideally approached frontally.

Convex shapes can be approached from different sides and angles.
Contents designed for flat displays are often deformed on shaped displays. They create a different visual effect and are perceived differently.
challenge 02: partial visibility

With convex and complex shapes only a section of the screen is visible at a time.

Feedback to the unaware movements of users must be displayed within this part.
challenge 03: content to user mapping

On a convex screen the virtual space assignable to a user is smaller than the physical space around the display.

To mirror all people around the display, abstract representations may be used.
challenge 04: direction of effect

With curved shapes the optimal direction of the visual effect has to be determined.

Feedback should be within the FOV but not attributed by others to themselves.
challenge 05: seamless continuation

Discontinuities can make it difficult to understand feedback relates to oneself.

Shapes with bezels and edges should signal transitions visually.
2-level solution for a digital advertising column

Step 1: when approaching tangentially, eye-catching particles triggered by depth information are used.

Step 2: when approaching frontally, the skeleton representation is used to signal interactivity.
How can further shapes of displays communicate their interactivity ... by reacting to the unaware movements of users?

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<th>fluid-like</th>
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<th>... by reacting to the unaware movements of users</th>
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