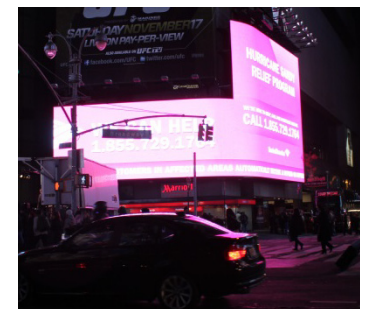




# Communicating the Interactivity of differently shaped displays

CHI 2013 Workshop on Displays Take New Shape  
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## Communicating Interactivity

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.





## challenge 01: deformation of content



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.

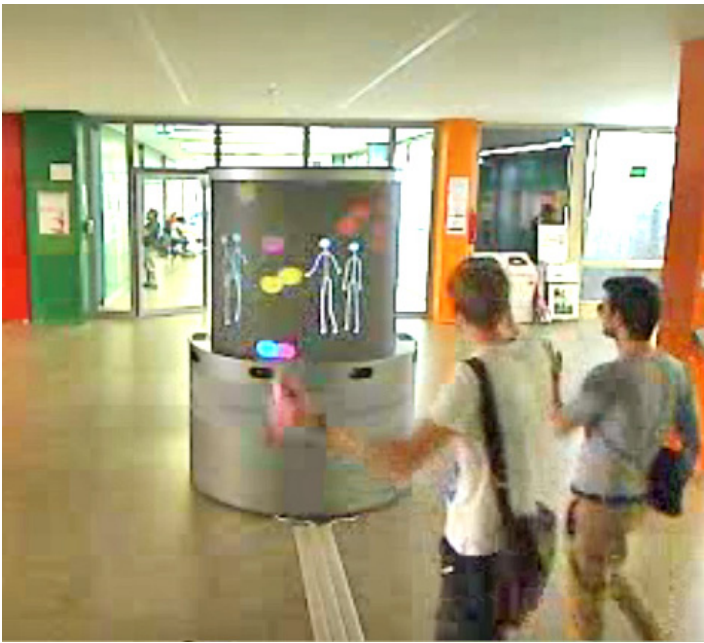
Feedback to the unaware movements of users must be displayed within this part.

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 ...

small

large

fluid-like

deformable

... by reacting to the  
unaware movements of  
users

convex

?

concave

complex

spheres

curves

columns

planes