Visualized Cues for Enhancing Spatial Ability Training in Virtual Reality

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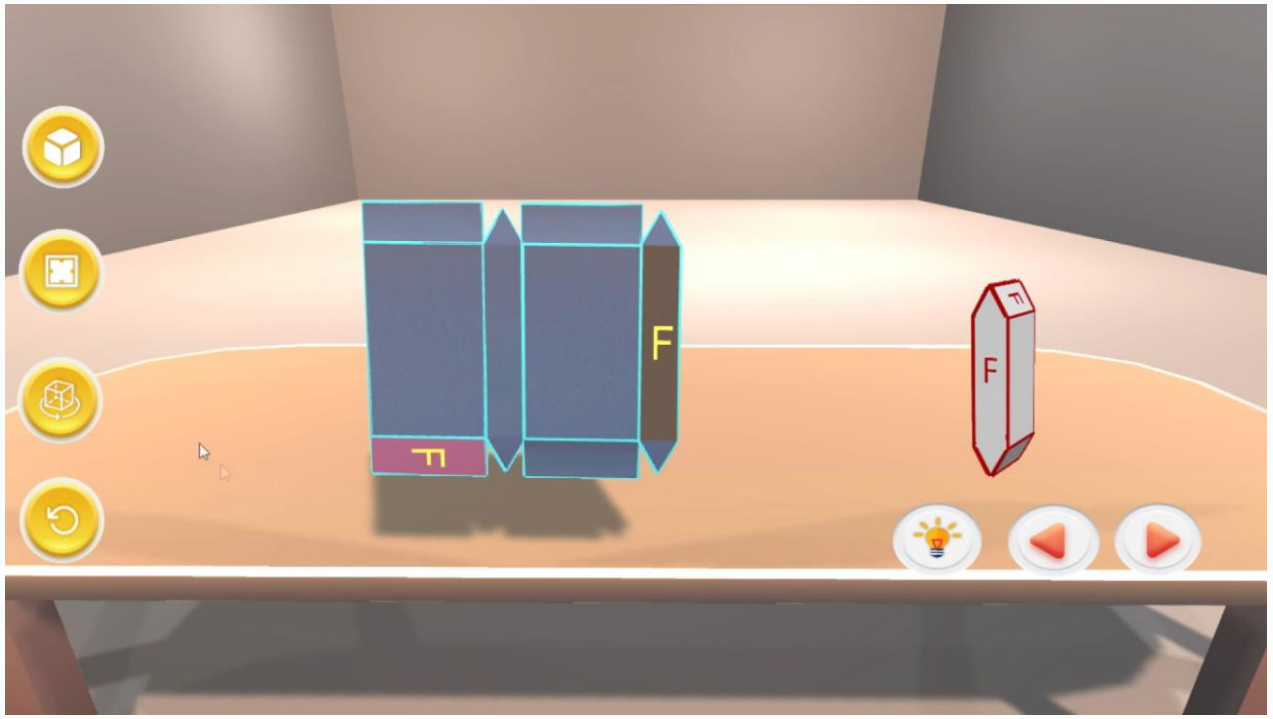
Introduction and Background

- Virtual reality is an ideal environment for spatial ability training.
- However, existing spatial ability virtual reality training systems lack cues to assist mental rotation and visualization.
- It has been proved that adding visual cues such as color or arrows to complex graphics or animation to direct attention is an effective way to improve learning.

Introduction and Background

FORSpatial provides 3D visualization, direct manipulation of virtual objects, and instant exercises with feedback.

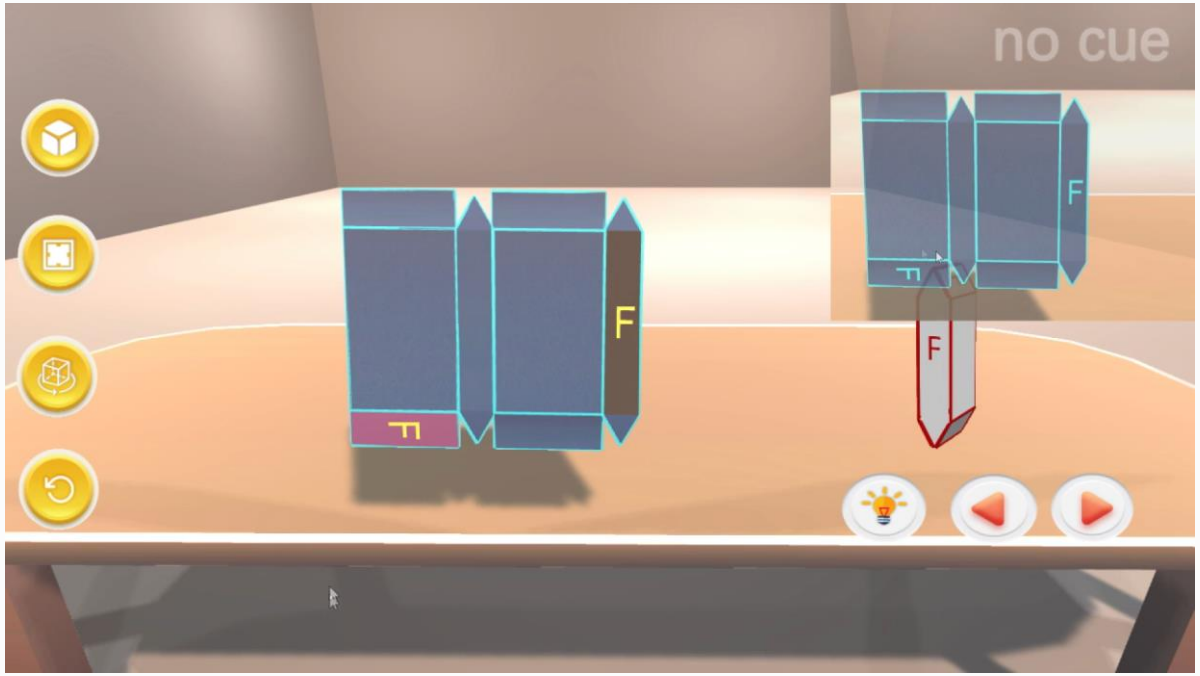


ForSpatial system interface

Visualized Cues

Color cue

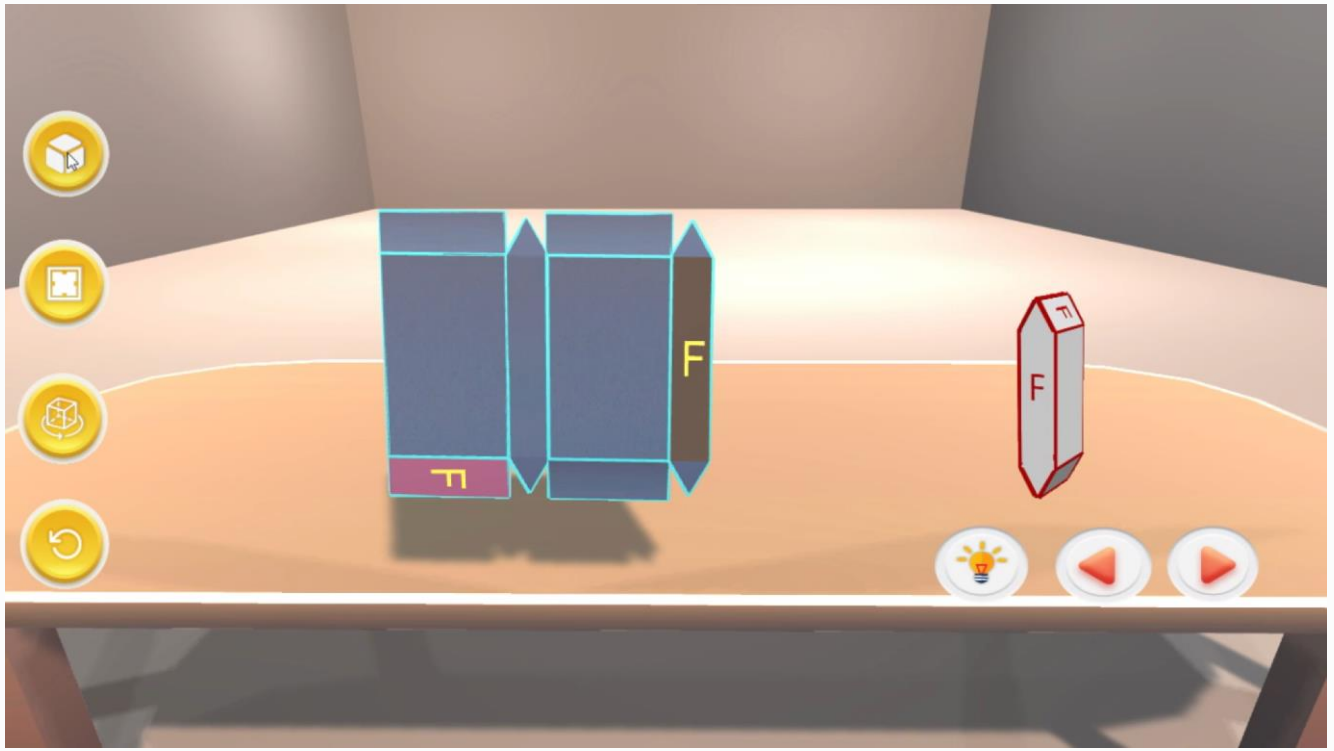
- refers to a cue that different colors are employed to distinguish the faces with and without letters and the facets with different letters.



Visualized Cues

Rotation path cue

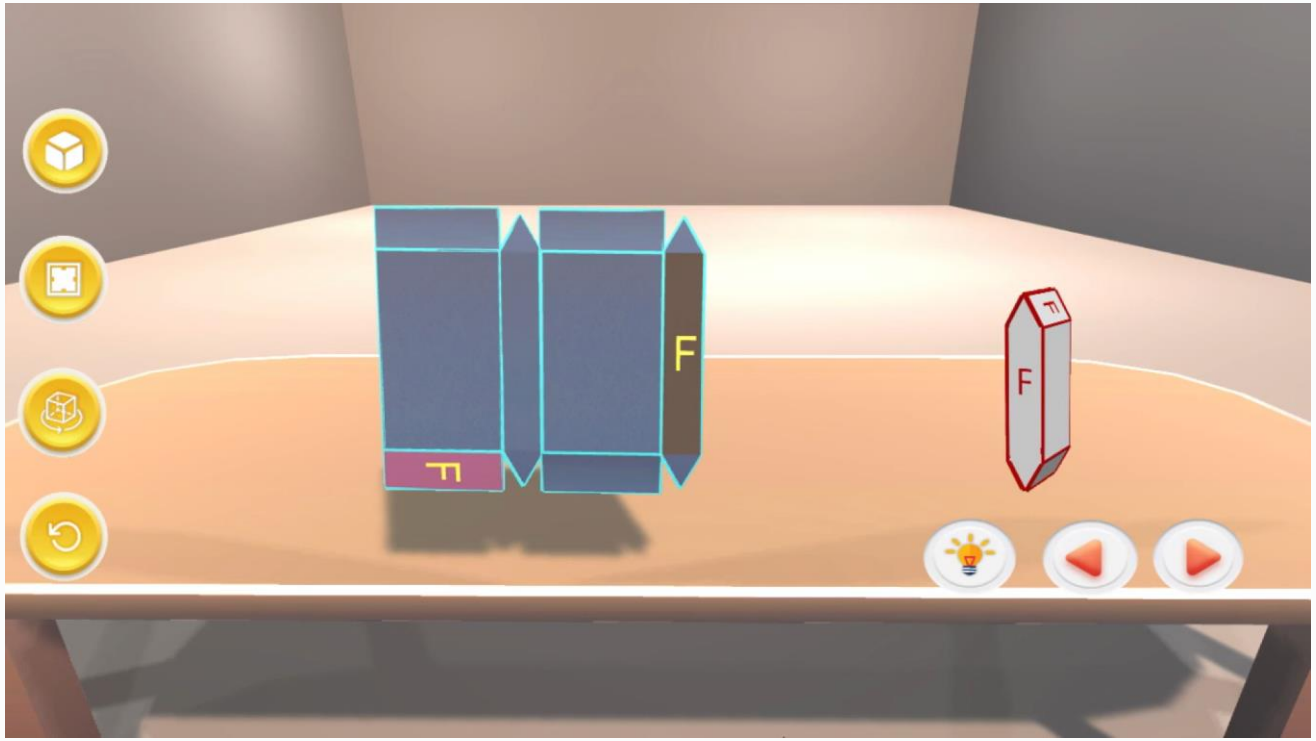
- refers to a cue for visualizing the direction of the rotation.



Visualized Cues

Circle cue

- refers to a cue to highlight the differences between the target solid and the distracted one.



Thank you for listening
Any questions?

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