Discuss a Visual Effect: Antichamber

Antichamber by Alexander Bruce is a first person puzzle game that features impossible geometry and has some rather interesting visual effects in many of its puzzles. I have included two screenshots of this visual effect involving cubes in a room with each cube face appearing to peer into the interior of the cube, but with each one of them having different objects inside. These objects are not 2D textures, but appear to be fully fledged objects. Every object that is inside each cube has its own lighting and is influenced by the player's viewing angle.

This visual effect gives each cube what feels like an extra dimension, with the solution path breaking euclidian space. I rather like how trippy the entire idea is with the extra dimension as the player observes each cube face and it feels like you can just walk right inside. Infact, the correct box appears just as any other box despite the fact that there is a path that the player can traverse.

I believe that this effect could be achieved through multiple cube interiors with objects rendered in an off-screen buffer and is fed the player's camera coordinates to update the lighting within that scene. Then, these buffers are applied as textures to each face of the cube, resulting in the appearance of multiple interiors for each cube.