

Immersive 3D Visualisation and Teaching Colour Use to Interior Designers

Marianne Patera & Steve W. Draper

Glasgow School of Art / Digital Design Studio

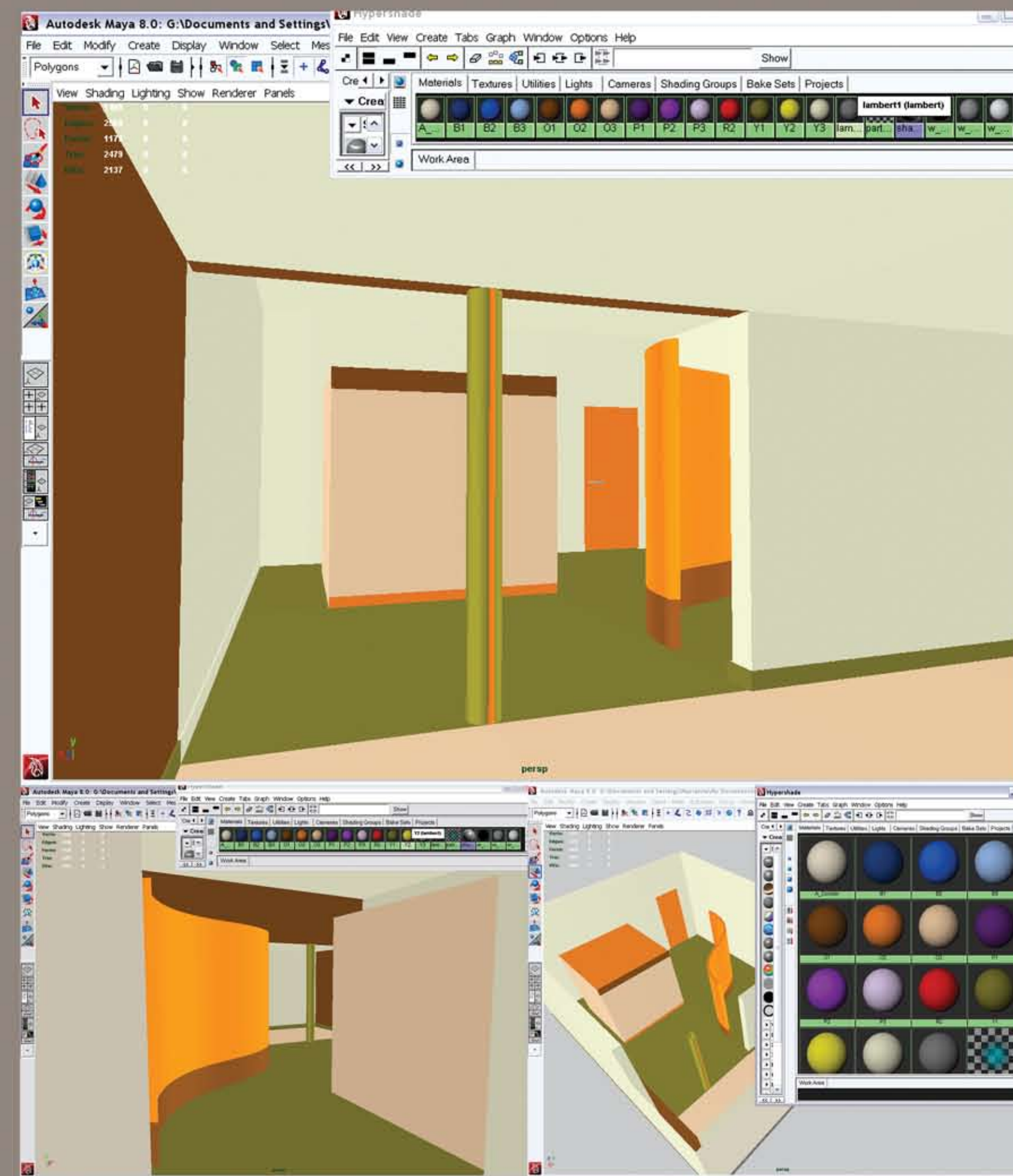
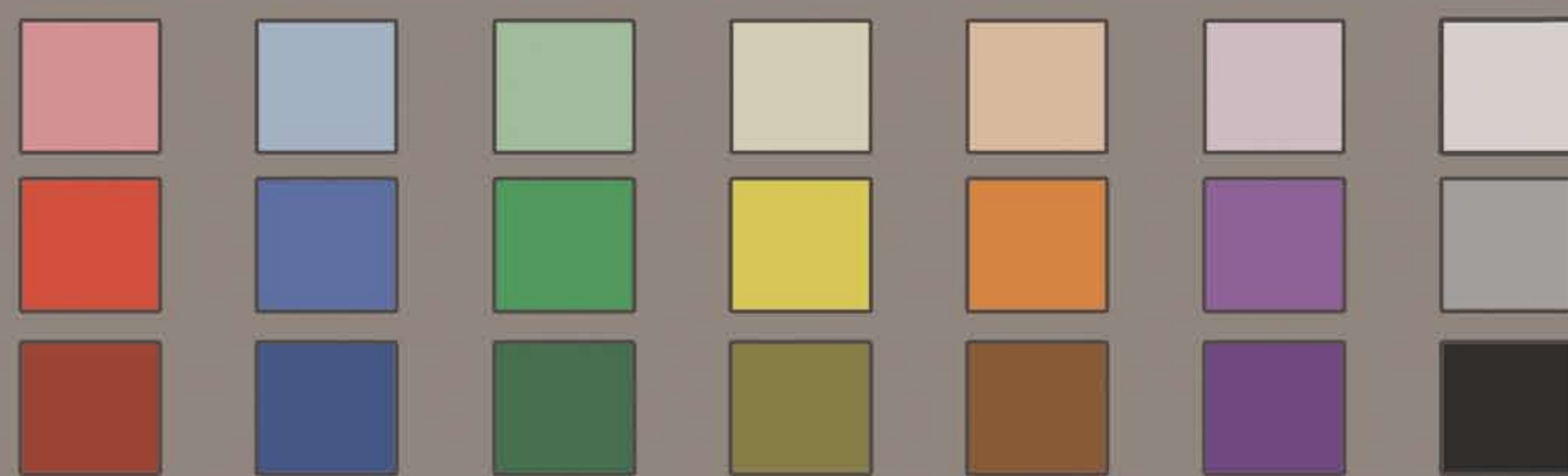
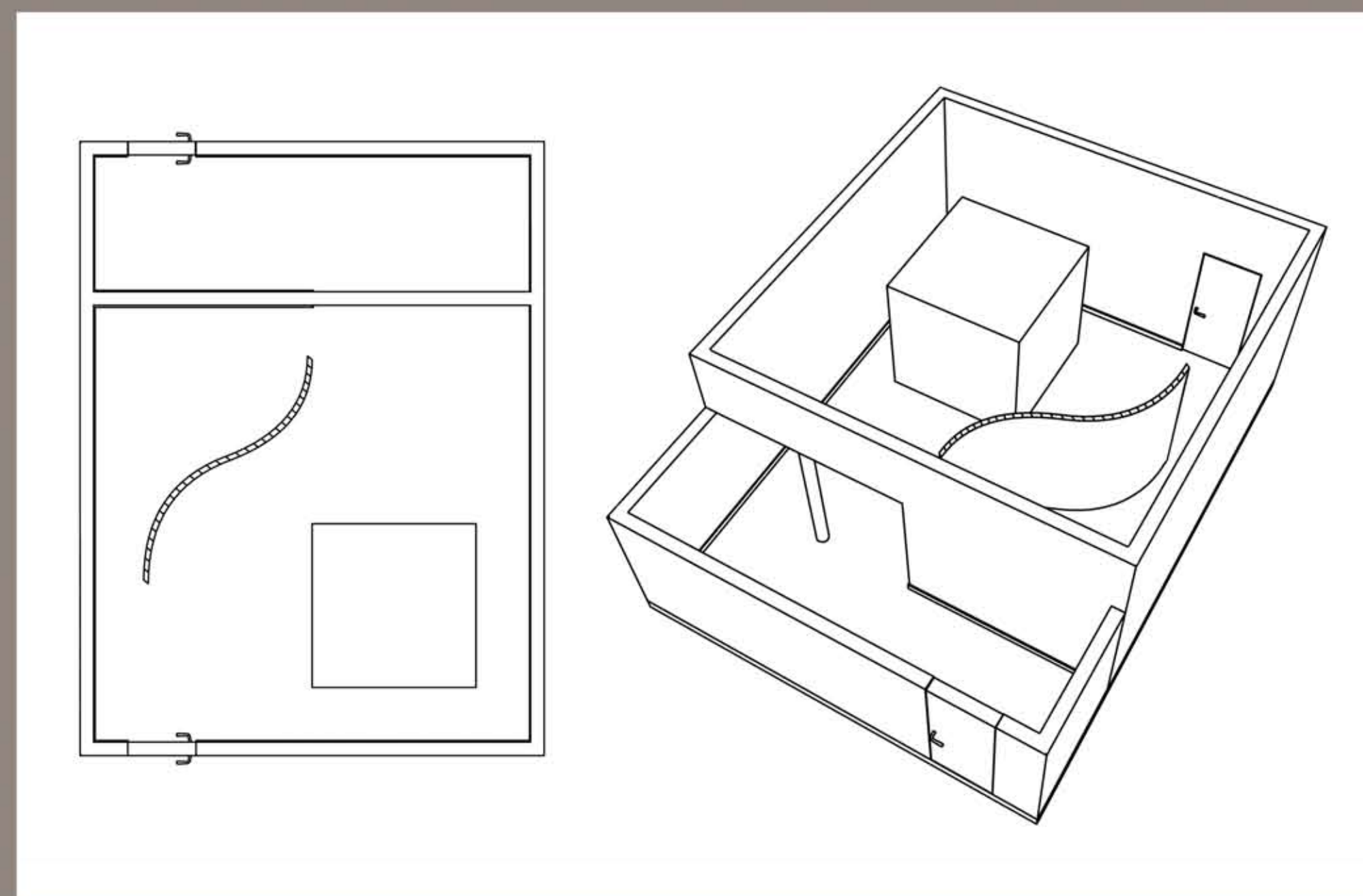
University of Glasgow / Dept. of Psychology

Immersion Changes the Perception of Colour

Paper

Computer Screen

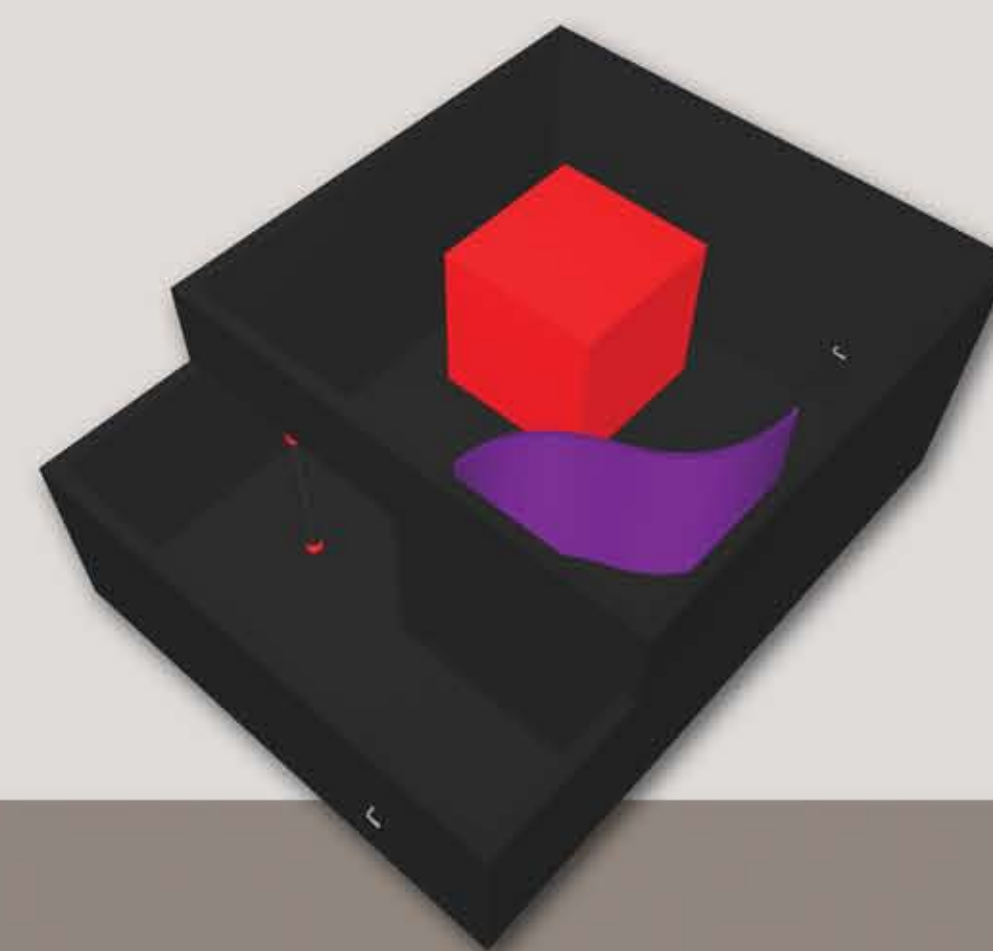
Immersive VR



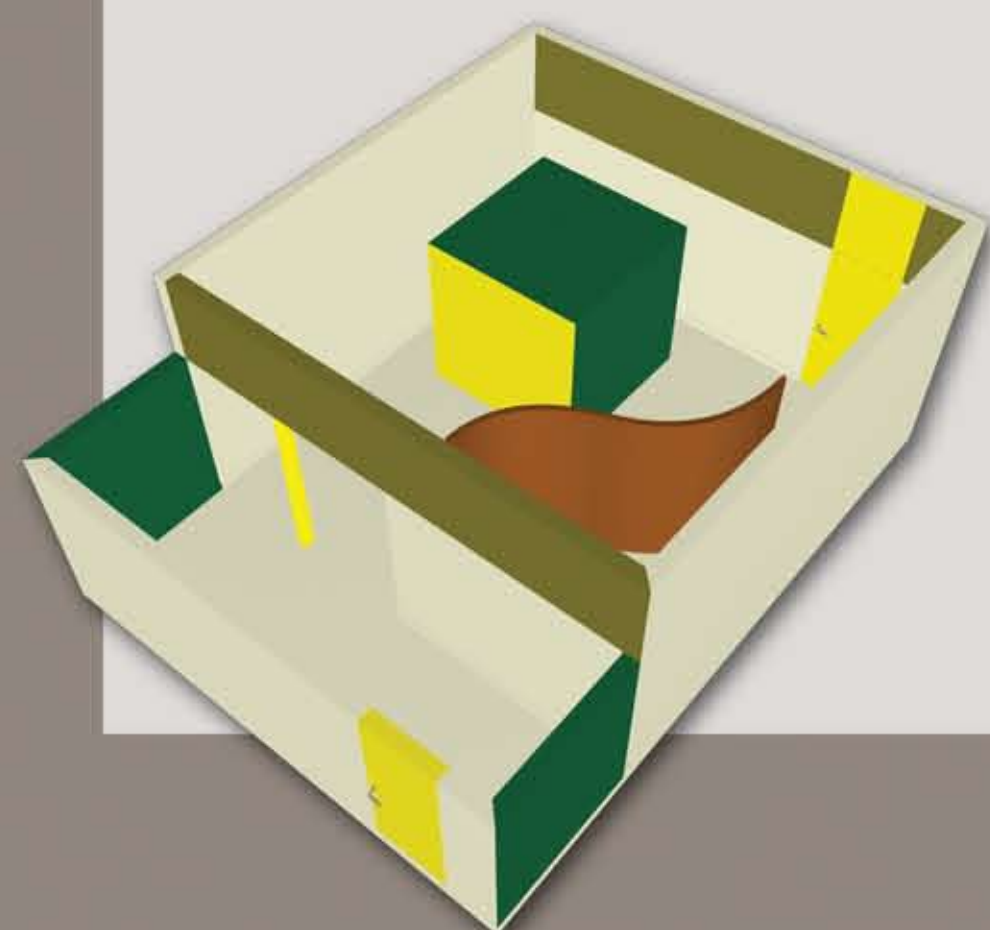
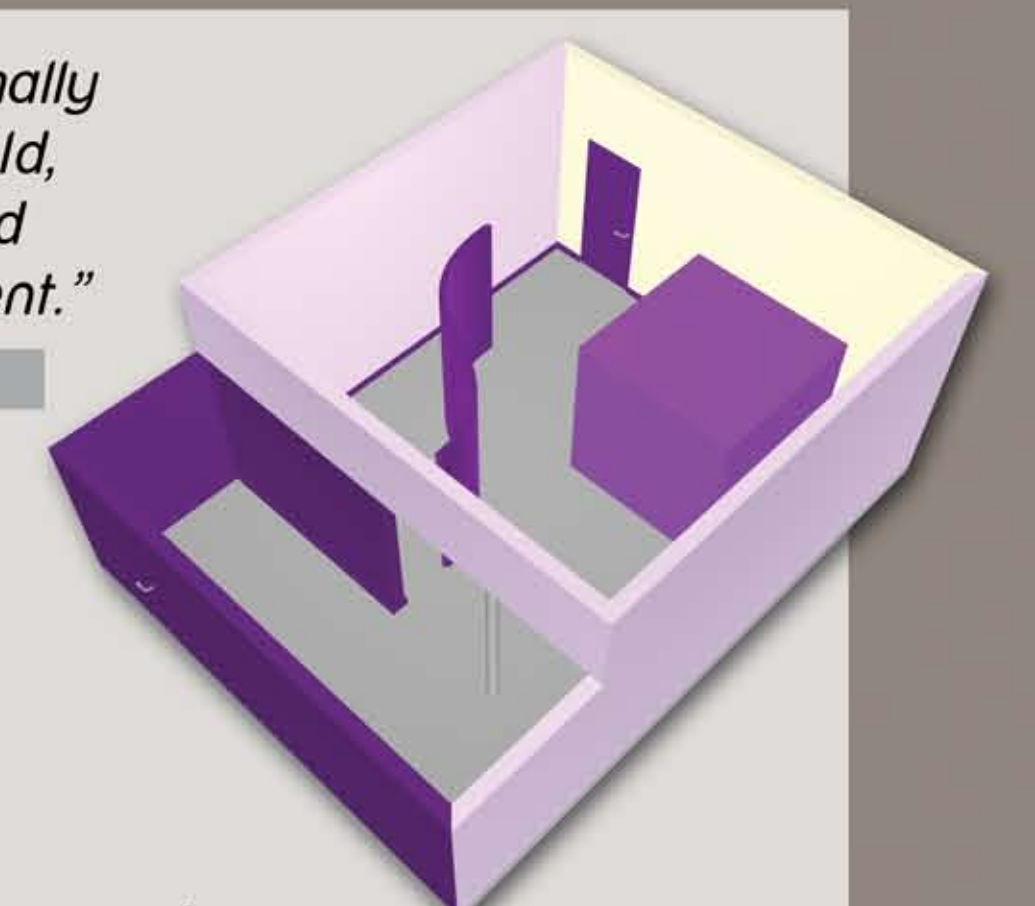
"I perhaps tried to think too much about the colours relating or not to each other on paper and not the feeling one might experience when in the room. Once inside the VR environment, the experience is completely different. In life sized scale the experience of seeing how the different colours relate to one another and how your mind reacts to those environments is fascinating."



"My room felt darker in the Virtual Reality environment. I wish I had made it a little less dark. The space felt a little smaller from what we had seen on paper or laptop."



"On paper they weren't colours I would normally choose to go together. They seemed very bold, however on the VR environment they seemed to work quite well to give a happy environment."

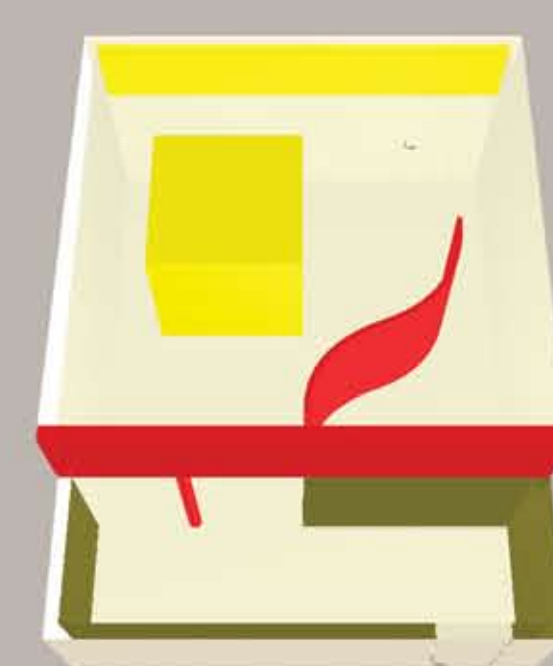


"... it was more dramatic in virtual reality. I thought that it would be dramatic but just in a way that made someone interested rather than intimidated. I did achieve the sense of surprise I wanted at the entrance though."

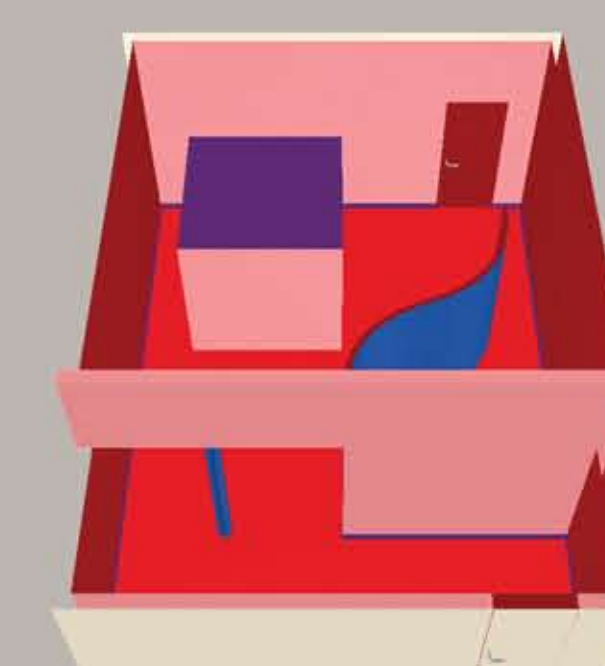
"Yes, the virtual reality environment gave a much clearer understanding of the space and brought out various emotions - this is something the laptop can only do to a certain extent and paper not at all."

Beliefs & Stereotypes

Red = Anger
and Green = fresh
Red = Love
and Green = envy
Purple = Royalty
Brown = ground
Orange = happy
White = purity
Blue = Calm
and Blue = Cold



How would you feel in this room?



"Uneasy"
"Curious"
"Surprised"
"Excited"



"Ordered"
"Warm"
"Relaxed"
"Annoyed"

How immersed participants actually felt.

The Study



Aim: To raise awareness that colour can be subjective and that perceptions commonly differ.

Motivation: It is too expensive in space, time and materials to construct real full-size rooms

Participants: Twenty 2nd year Interior Design Students

Technology: Semi-immersive Virtual Reality environment