

MICHAEL STUART, WILLIAM COOK, DANIEL JAMES, ANAS ASHRAF

CUES IN VIRTUAL REALITY

TEXT VERSUS AUDIO

Does the medium through which game directions are delivered to players have an impact on their ability to solve puzzles in virtual reality?

BACKGROUND

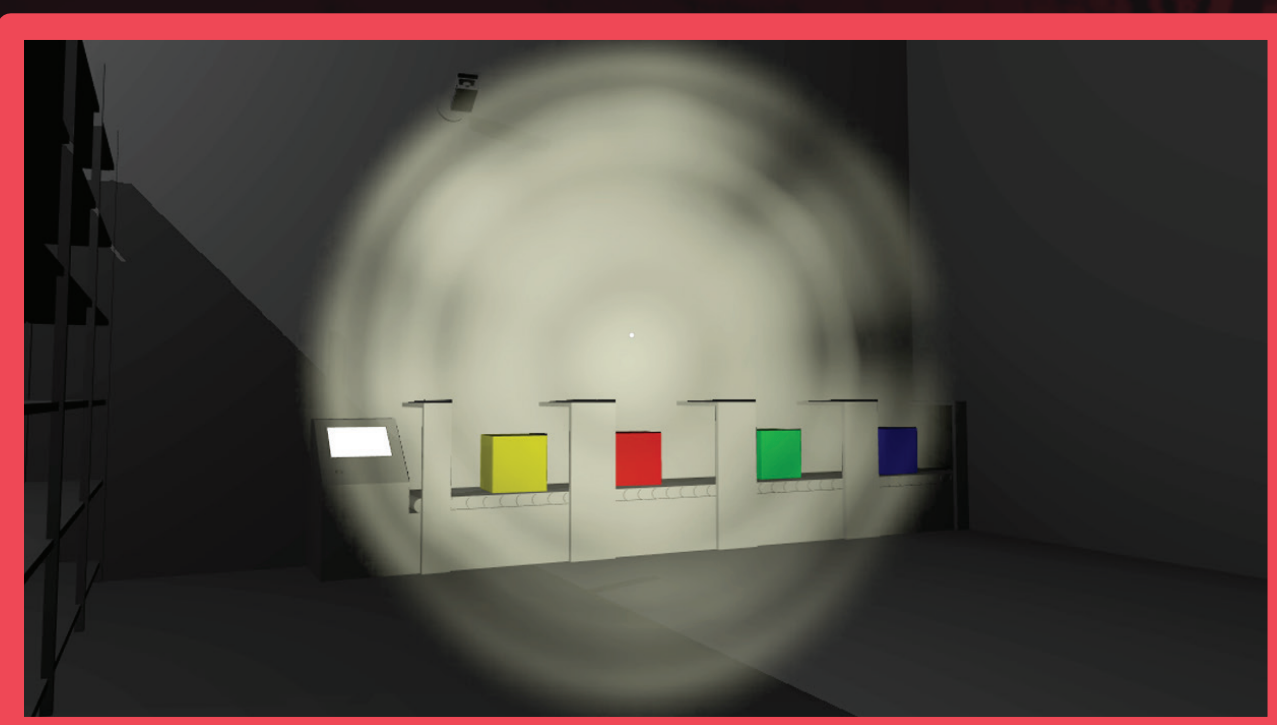
Virtual reality is a young technology, so virtual reality game developers are still experimenting with different ways to direct players through their games.

We set out to compare the two main methods employed in current (non-virtual reality) video games: text and audio.

HYPOTHESIS

We hypothesize that players will perform better with auditory cues than textual cues.

Since virtual reality is still relatively new to most people, players will likely not be accustomed to having text inside their field of view, so it could result in worse performance.



In this puzzle, players have to piece together clues from around the warehouse in order to place the boxes into the conveyor belt in the correct order.



In this puzzle, players have to place coloured boxes in the correct terminals.



In some puzzles, players are given directions on a virtual monitor. These instructions are sometimes direct, and sometimes require some deciphering.

METHODOLOGY

We created a virtual reality game with a variety of puzzles to solve.

At certain points throughout the game, players will be given a cue about what to do next. Half of the players will receive an auditory cue (voice through headphones), and the other half will receive a visual cue (text on screen).

Every player's solve times throughout the game will be recorded, and then the data collected from both groups will be analyzed and compared.