

Shadow Walker: The Umbra Project

TUM - COMPUTER GAMES LABORATORY SUMMER TERM 2018

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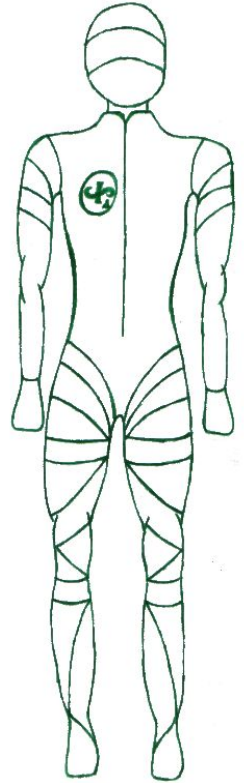
Brief Game Outline

Puzzle Solver Game

Switching between 2D Shadow-world and 3D Physical-world

Interactions between Light and Shadow

Changing Light to manipulate the Shadow-world



Necessary Changes to gameplay

Old Idea:

- Shadow-world on “Back Wall”
- Physically Incorrect shadow deformations
- Changing into Shadow through projection onto the back
- Existence of 3D Overworld + 2D Shadow-world
- Necessary to display a location of physical objects in shadow-world, shadow location is no indication for the physical location

Improved Idea:

- Shadow World on Ground
- Physically correct shadow deformations
- Changing to shadow through “folding down”
- Existence of 3D Overworld
- No necessary to display physical objects in 2D, outer-bounds of the shadow volume correspond to object location

Prototype Approach

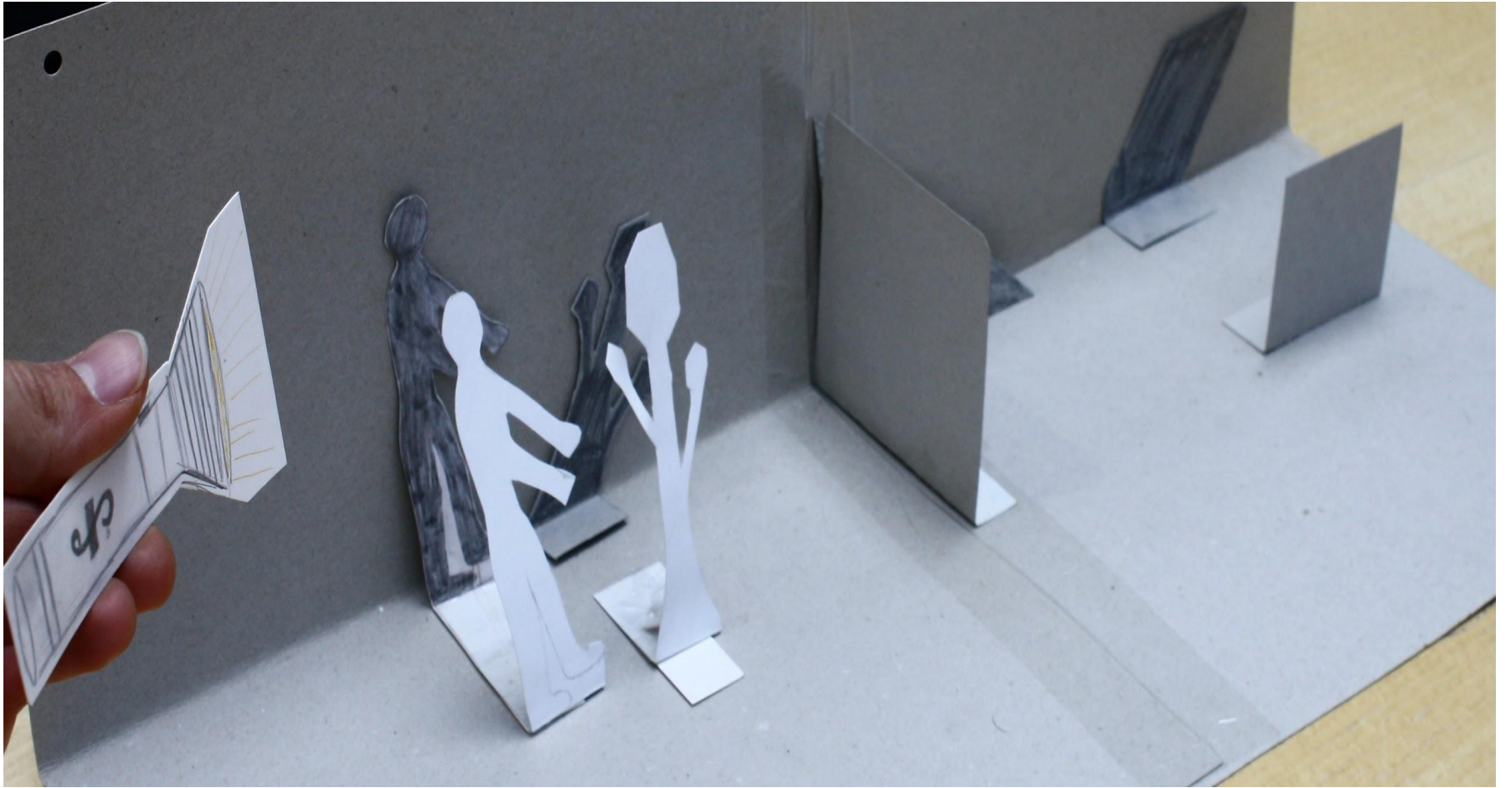
Creating a level with different obstacles and a movable light source

Player:

- Changes light position to unlock new path in the shadow world,
- Controls character to progress to next obstacle

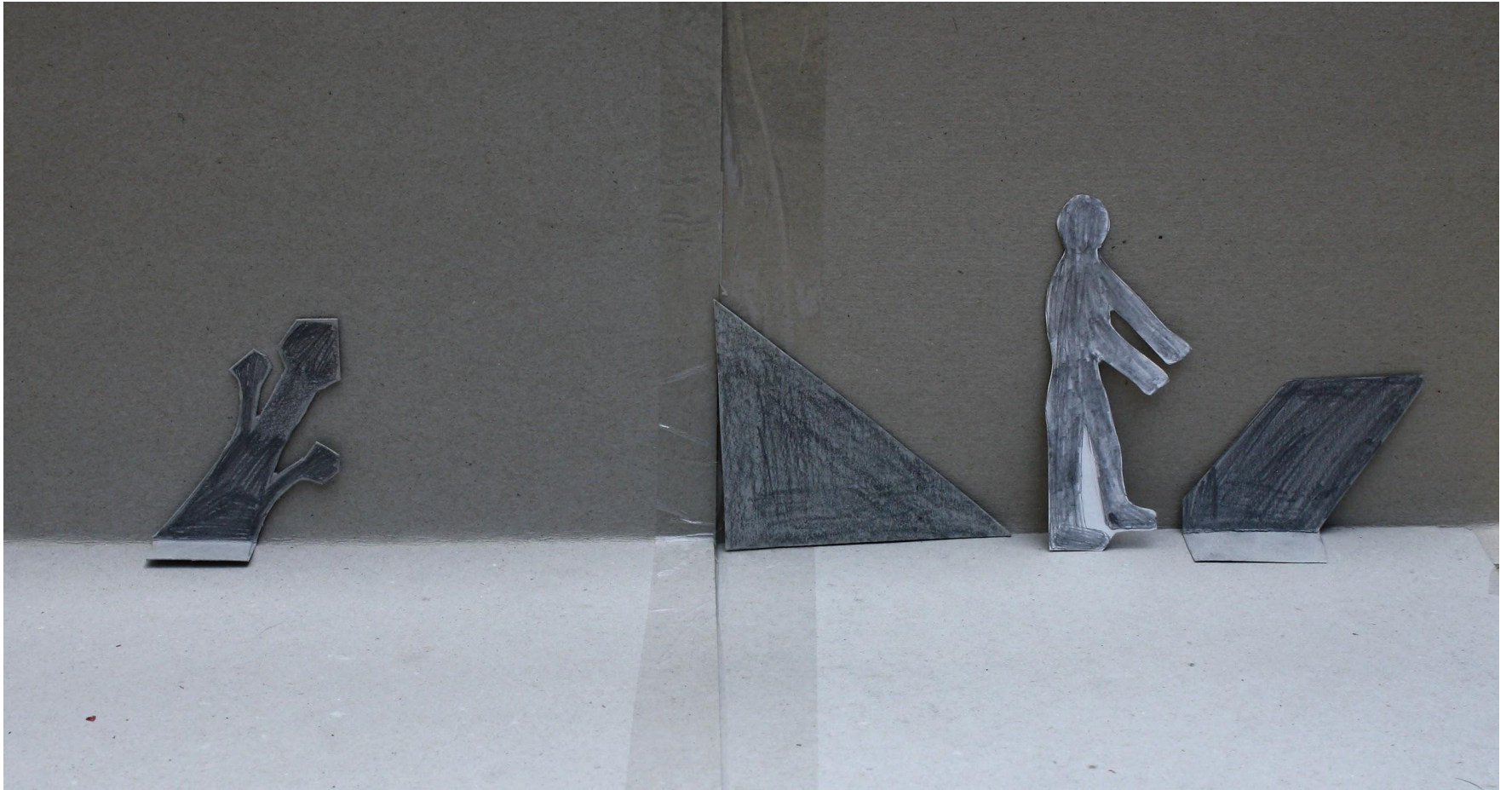
Computer:

- Changes shadow according to chosen light position,
- Changes world settings between Shadow and real world



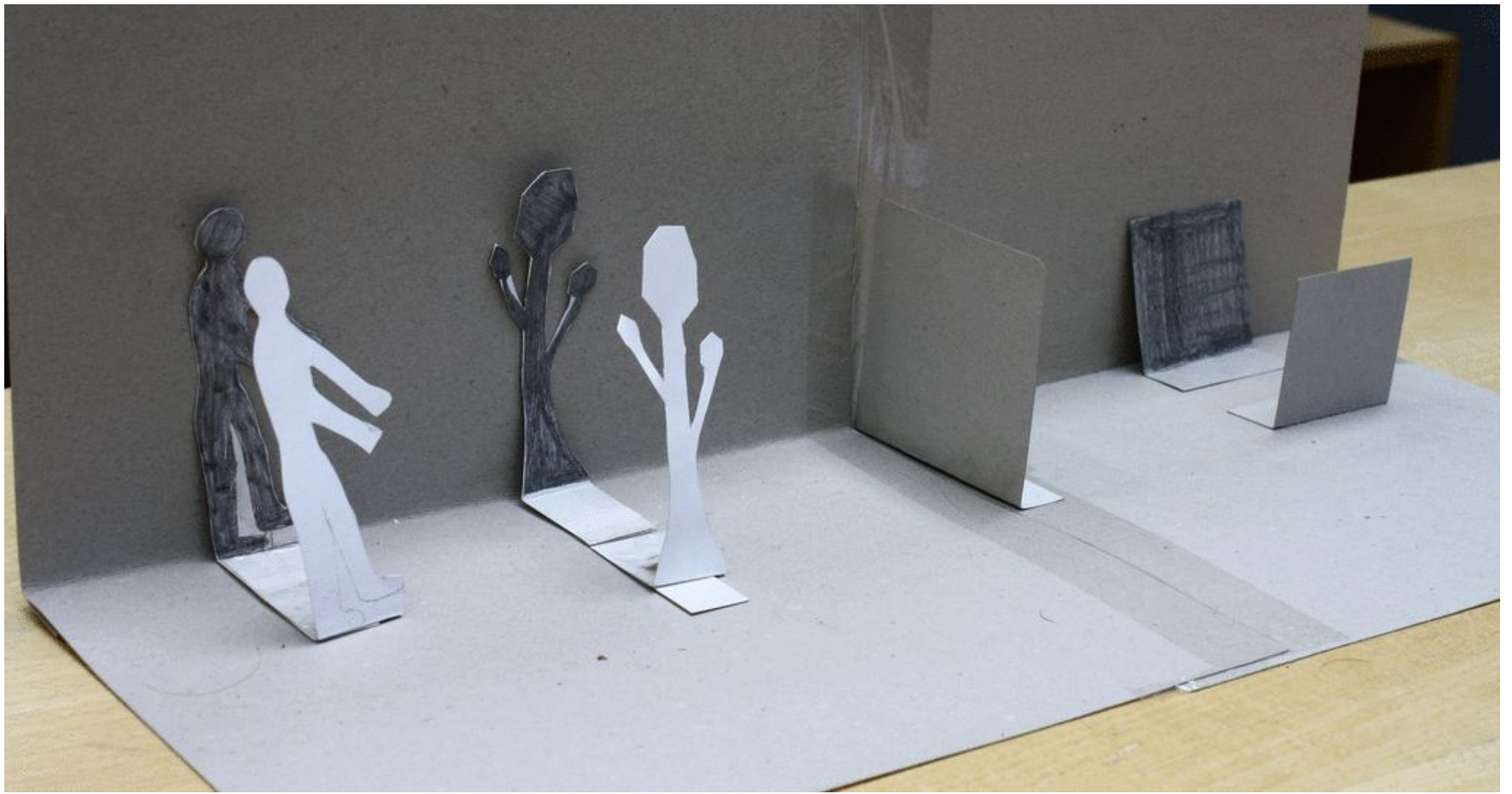
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Now let's play!