

About 2 Cubes

3D recreation of El Lissitzky's book 'About 2 Squares'

by Onur Oral

Project Definition _____

Adapting El Lissitzky's "About 2 Squares" book into a 3d environment.

Objectives & Goals _____

The project should increase the sense of wonder about Constructivism and the artist of the book, El Lissitzky. Users must get excited about the concept, wonder about the style of art, the story and how El Lissitzky told the story with basic visual shapes.

Like the original book, the project should present a radical thinking of what a book is, demonstrating a new way of organizing typography and relating it to visual images, and show the integration of typographical effects with visuals.

The illusion of transition between 2d and 3d should be well done, and the project must make people to play with an artwork.

Background Information _____

This short book, for children of all ages, is perhaps the best-known work of El Lissitzky (1890-1941). The book is Lissitzky's "scientific romance," an allegory of the fourth dimension and its effect on the three-dimensional world. El Lissitzky was one of the Russian artist, architect, designer, typographer, and photographer who was active in the avante garde movement that flourished in Soviet Russia and in Germany, until the dominance of Soviet Realism by 1930 put a stop to its revolutionary activity. He directly influenced the typographical and display advertising innovations of the Bauhaus and "de Stijl". This book entirely integrates modern typographical effects, as Lissitzky intended, with his illustrations in the Suprematist style.

The original book 'About Two Squares' was printed by letterpress, even the slanted text and illustrations. It was first produced ("constructed") in 1920 at the Soviet art institute UNOVIS in Vitebsk, and around April 1922 printed by Sycthian Press, Berlin, by Haberland Printers, Leipzig, in paperback, with 50 hardbound copies autographed and numbered, as the copyright page states.

The main reason why I come up with this idea for this project is my interest in Constructivism and enthusiasm at El Lissitzky's style of art. In addition to that I wanted to make this project interactive in order to increase the sense of wonder of people about Constructivism and El Lissitzky. Also, for my web site, which is about Russian Constructivists, this project leads me to learn more about Constructivism. For me, it is exciting to study on art movements, especially on Constructivism. The web site gets thousands of hits everyday, so this information proves that people are interested in and looking for more information about Constructivism.

The most challenging thing in this project is to integrate 2d into 3d environment, and also to create 3d models. I have no idea how to create a 3d model and to write a code for real-time floating and fps mouse look. I have to learn these skills from zero.

With this project I will be achieve to learn to create an interactive application and learn to integrate both 2d and 3d objects, but most importantly I will learn creating 3d models, coding for real-time rotation and fps commands as a designer. Also, I will be able to use my coding knowledge in this project.

Another challenge will be creating a good looking interface that leads users to understand what to do without any warning.

Target Audience / User _____

The main target audience is the people who are both interested in symbolic narrative and Constructivism.

Also the project has no age limitations, both children and adults can enjoy the project. While children enjoy the project's playability, adults can enjoy the style of art.

Detailed Project Description _____

People just stands in front of an artwork and just look at it. The activity of reading a book, looking at a magazine advertisement and any kind of visual representation becomes ordinary and common. Generally, in the world of books and articles, imagery is the keyword. But what if the book just tells the story with visuals, not the words. This project will let people to enter the world of visual books and its pages. To create this I prefer to adapt a 2d printed artwork (actually a book; About 2 Squares) into a 3d environment. The idea is that from a computer, users can choose one of the 12 pages of "About 2 Squares", that leads them to see a 3d room which represent the chosen page. After user chooses the page, in the screen, the original page appears as 2d page. Users can float in the chosen page by using keyboard (W, A, S, D) to forward, move left, backward and move right, and mouse to change the angle of the vision. In a page 3d objects are located not to far from each other in order to let users to be able to see and imagine the original places of the 3d objects even if the vision is from more than 20 degrees left/right, less than 90 degrees left/right. Whenever an user wants to quit the page to choose a different one, using the keyboard, 'Q' key, directs the user to the first interface, choosing one of the 12 pages screen. Also with the 'I' key, users can read the basic details of this project.

Scope of the Project _____

Even if the project tells the story by symbolic narrative, it does not intend to make people understand the original book's story.

This project will increase the sense of wonder about Constructivism and El Lissitzky, but it will not give any information about the movement or El Lissitzky. The sense of wonder will be increased by the work itself.

Users can just float in the 3d environment, the content cannot be changed by any user.

Required Know-how and Resources _____

First of all I have to know and understand how to work with Unity3d as the tool. I have to learn how to make 3d models by Adobe Illustrator and Adobe Photoshop, how to work in the environment of Unity3d and how to write necessary codes, like 'mouse look', in Javascript. As resources, I need a decent computer in order to present the project.

Difficulties & Risks _____

Because of not having any working experience with Unity3d, the most significant risk is creating real-time environment. Considering that risk, the solution is to create 'rotation buttons' instead of writing 'real-time code'. By creating 2 rotation buttons, one to rotate up and down and the other one to rotate left and right, the users will be available to rotate the 3d environment.

Phases of the Project _____

- Creating the interface.
- Designing the 3d rooms / environments and placing them.
- Designing the 3d models.
- Writing the code in Javascript for mouse look and keyboard movement. (Or, a code for the button rotation.

Criteria of Success _____

Writing the code in Javascript for mouse look and keyboard movement and experiencing Unity3d as a new tool should be done by this term.

The success, in my opinion, as a designer is to have a really good looking interface and to create a working illusion of the transition between 2d and 3d.