Generalitat de Catalunya Departament de Cultura

# **"TRANSIENCY"**

# 3D video mapping to be projected on the Casa

**Pastors building** (Palau de Justicia, Plaça de la Catedral 2) **in the city of Girona** 

By Visualia Group (Pula, Croatia)





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#### **1. INTRODUCTION**

The difference between video mapping and 3D video mapping is pretty big, but people usually can't tell it right, especially in a term itself.

Video mapping can be made with any available material, such as video material, film, etc. It's necessary to adjust this material to a projected surface, which is done with special computer software.

3D video mapping is much more complicated and takes more time for its production: first of all, a model of the object where a projection will be made should be created, afterwards all the animation should be made in a special software provided just for that. The greatest difference between video mapping and a 3D video mapping lies in the final outcome – with 3D video mapping you get a realistic space effect on an even surface, and with usual, "ordinary" mapping there's no such depth and realism.

Visualia Group specialized in 3D video mapping. One of Groups goals is to educate people about this rather "new art", to show its potential and to present its great effect as realistic as possible.

In this particular project the artists tried to tell a story about transiency of things, people and life itself, combining it with almost magical building transformation, so realistic and dreamy at the same time. Hereinafter all the details of their work is listed, it is written how the "Transiency" was created, from their first meeting, to the final video attached to this document.

### **2. THE IDEA AND CONCEPT**

After applying and successfully going through the tender, Visualia Group felt really honored and it immediately started to work.

First mitting was held on April 1<sup>st</sup> where 3 enthusiasts Marko Bolković, Jean Sambolec and Ania Ladavac started to exchange ideas for 3D video mapping to be projected on the Casa Pastors building.

First idea was to create video mapping with historical basis – the group wanted to show how the building was built and how it survived for 3 centuries. Unfortunately, due to a lack of material and information, the idea was dropped at the end. The group than decided to follow its free will and artistic spirit and to simply bring life to Casa del Pastors using 3D softwares. Due to Group's rich experience in 3D video mapping, they decided that the best way to create a really powerful and realistic effect for audience is to draw the whole building from the beginning. The front of the building (facade) was challenging enough: it is made out of bricks so it was a really one great creative challenge for the Group to model and revive the building. The Group also agreed that Casa del Pastors is a great place to "tell the story" about the transiency of time, things and life.. Everything passes and it is unreachable and unstoppable. It exists only in moments, which we're aware of only when they're already gone. "Transiency" became the name of Group's "story", which has to be told.

How to present transiency through images and video animations?

After discussing this, the artistic Visualia Group decided to start with creation process – clouds (air element) symbolize imagination from which emerges the water element (life), which is continued to a birth process (the tree) and it culminates with simpler form of life (caterpillar) becoming a higher, more complex form (butterfly) which is a symbol of a free art.

When the concept was done, the Group started to create.

From April 1<sup>st</sup> – April 15<sup>th</sup> animator Jean Sambolec finished the first step: making a realistic 3D model where the animations will be applied. Jean's done this using only a photograph of Casa del Pastors building and software Cinema 4D (**Photos 1**. and **2**.)



**Photo 1.** Plan of Casa del Pastors building's front side made after photograph in Cinema 4D



**Photo 2.** Isometric view of Casa del Pastors building's front side made after photograph in Cinema 4D

After the "base" was done, Jean joined with artist Ania Ladavac from the team, who is also working as a freelance illustrator. Since Jean makes all the animations, he thought that illustrations within 3D mapping would also leave great impact to mapping itself, so creativity started to bloom. Ania started with illustrations making – all of them are handmade and created specifically for this project in a way that they present creation process (creationism) and eternal metamorphosis of objects and motions (**Photo 3.**)



Photo 3. Handmade illustrations made by Ania Ladavac in progress From April 15<sup>th</sup> – April 20<sup>th</sup> all Anias illustrations were scanned, vectorized and imported in 3D software for 3D model making (Photo 4.)



Photo 4. Illustrations converted to 3D animations

# **3. THE 3D ANIMATION**

The 3D animation were made by Jean Sambolec and it took him two monthes to animate everything. He worked on it from May 1<sup>st</sup> – July 1<sup>st</sup>, and he divided this animation process in 4 different parts (every part was made for 15 days):

- Geometry fragmentation and deconstruction
- Contrast black and white matter with optical and hypnotic illusions
- Creation process air, water, LIFE
- Colors free art

### **3.1. Geometry – fragmentation and deconstruction**

Duration: May 1st - May 15th

First part is about geometry fragmentation, "play" of light and shadow and geometry deconstruction (**Photos 5, 6**. and **7**.)



Photo 5. Geometry – Fragmentation



Photo 6. Geometry - Light and Shadow



Photo 7. Geometry – Deconstruction

# <u>3.2. Contrast – black and white matter with optical and hypnotic illusions</u>

Duration: May 15<sup>th</sup> – June 1<sup>st</sup>

Second part is about contrast research through black and white matter, with elements of optical and hypnotic illusions (**Photos 8, 9, 10** and **11**.).



**Photo 8.** Contrast – black and white matter with optical and hypnotic illusions



**Photo 9.** Contrast – black and white matter with optical and hypnotic illusions



**Photo 10.** Contrast – black and white matter with optical and hypnotic illusions



**Photo 11.** Contrast – black and white matter with optical and hypnotic illusions

### 3.3. Creation process - air, water, LIFE

Duration: June 1<sup>st</sup> – June 15<sup>th</sup>

Third part includes handmade illustrations converted into 3D models. It's about creation process, which starts with an air element (clouds) and symbolize

imagination. From imagination emerges the water element (life), which is continued to a birth process (the tree) and it culminates with simpler form of life (caterpillar) becoming a higher, more complex form (butterfly) which is a symbol of a free art (**Photos 12, 13.** and **14**.).



Photo 12. Creation process – air, water, LIFE



Photo 13. Creation process – air, water, LIFE



Photo 14. Creation process – Butterfly

## <u>3.4. Colors – free art</u>

Duration: June 15<sup>th</sup> – July 1<sup>st</sup>

The fourth, last part of animation story is about the Casa del Pastors building becoming covered in butterfly's colors and textures, and it announces a free art manifestation by color overflow and reviving a monochrome building's facade into a new attire with all kinds of new various shapes (**Photo 15**).



Photo 15. Colors – free art

Ending is pretty spectacular: colors dance gets new meaning when it transfers into a recognizable Catalonian flag and it bounds this project to the region of the host (**Photo 16**)



Photo 16. Colors – Catalonian flag

# 3.5. Postproduction and editing

Duration: July 1<sup>st</sup> – July 13<sup>th</sup>

All the postproduction is made in software called "After Effect" where the rendered elements from "Cinema 4D" were edited and installed into a final video. All the colors and other technical details were processed one more time. When the video was finished, music (which was done separately) was added and synchronized with it.

### 4. MUSIC

Music is yet another, very important component of 3D video mapping. It is really discrete, but really powerful tool in such a project.

For this particular video mapping, it was done separately in the period of July 5<sup>th</sup> – July 10<sup>th</sup>, by two artists and musicians: Marko Bolković and Marko Jovanović.

After the consultation with animators and getting familiar with the story, musicians got a difficult task – to evoke the "right" feelings with instruments and sounds.

For this project they used two softwares: Ableton Live and Synth Omnisphere, and some of the sounds were personally recorded in a music studio in Pula (**Photo 17**).



Photo 17. Music – Ableton Live and Synth Omnisphere

When the music was completed, it was added and synchronized to animations and video was complete.

### **5. FUTURE POTENTIAL OF THE PROJECT**

Visualia Group was really honored to be included in such an amazing project. The artists truly hope they're going to reach their audience in Girona, and they'll manage to transfer their love to this new kind of art to everyone.

Since the 3D video mapping is very specific and it has to be adjusted to each surface individually, unfortunately it cannot be used at some other occasions, or on other buildings. Every building/surface needs its own 3D model where animations are added. Therefore, one 3D video mapping has a great present value, and more it "shocks" the audience, more it will be remembered in the future.

But, future potential of this and many similar projects depends primarily to the authors themselves. One of the Visualia Groups goals is to educate people about this "new art", to show all its potential and to present its realistic effect. So, this project, together with all the other 3D video mappings they've made, will find its purpose in educational use in Croatia.



# **7. LIST OF PHOTOS**

- **Photo 1.** Plan of Casa del Pastors building's front side made after photograph in Cinema 4D
- **Photo 2.** Isometric view of Casa del Pastors building's front side made after photograph in Cinema 4D
- Photo 3. Handmade illustrations made by Ania Ladavac in progress
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- **Photo 5**. Geometry Fragmentation
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- **Photo 8.** Contrast black and white matter with optical and hypnotic illusions
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- **Photo 11.** Contrast black and white matter with optical and hypnotic illusions
- **Photo 12.** Creation process air, water, LIFE
- Photo 13. Creation process air, water, LIFE
- Photo 14. Creation process Butterfly
- Photo 15. Colors free art
- Photo 16. Colors Catalonian flag
- Photo 17. Music Ableton Live and Synth Omnisphere