

Joint Development of Video Mapping Contents on the Industrial and Cultural Heritage of Zaragoza (Spain)

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Abstract. Within the framework of the joint-project MIE (Mediation, Innovation and Entrepreneurship) led by the Zaragoza City Council and the University of Zaragoza, it has been carried out during the year 2017 a project of joint development of videomapping contents at the industrial & cultural heritage of Zaragoza (Spain) in order to rediscover the paths to strengthen the production and dissemination of artistic work related to technology, engineering and innovative development. Formative pills of Adobe Premiere, Adobe After Effects, Adobe Photoshop, Madmapper and the TacTool interface system were made in the content workshop. With the sufficient number of hours to grant autonomy to the creators of contents that later would project on the facade of building of the neighborhood of Rabal de Zaragoza known as "Casa del Director", a house that was inside the industrial facilities of the Sugar Mill of Rabal. With this procedure it was possible to establish an exit route to disseminate digital content for videomapping, enhance local industrial heritage, generate means of production that maximize budgets and democratize an art and engineering environment normally reserved for those who can afford it.

Keywords: Open workshops · Social engineering · Collaborative contents design · Free engineering

1 Introduction

Public investment in art, technology and design usually imposes very restricted spending patterns, which negatively (and sometimes decisively) impact the work of artists and professionals [1], sealing a circle that hinders or even makes it impossible to achieve artistic works with a periodicity greater than a year as well as its subsequent output to international markets.

This is normally happening given the normal legal restrictions imposed by the public function, where the control of expenditure prevails [2] as well as the investment for the local use of such investments in the form of exhibitions in one of the city's galleries. It defines in practice how much the correct management of public spending matters, and also indicates the hamster wheel where most of the artists-living in the city of Zaragoza- are located [3].

Therefore, initiatives for progressively moving away the two most critical items of the artistic process (production and dissemination) from the administrative paradoxes are intended for multiplying the possibilities for local artists to be able to rise to sustained rhythms of work, in order to acquire market competences in a more agile way: works cv, logistics knowledge, contact agenda or continuous training among many others.

In recent times serious movements have been emerging from academic and institutional instances [4, 5] showing that the time to take certain distances and renew this contract of administrative use and enjoyment of the cultural and artistic has arrived, where both parties are conveniently treated, something that does not happen nor has it happened in the time we have of democracy. Video mapping is just one of the techniques used in this project to integrate the administrative, academic and artistic stakeholders. It is also technique interesting from the engineering [6, 7] as well as artistic [8, 9] and urbanistic [10, 11] point of view.

2 Program Where the Action Is Framed

The MIE [12] program (Mediation-Innovation-Entrepreneurship) consists of a public initiative promoted by the University of Zaragoza and Zaragoza Activa (institution belonging to the Zaragoza City Council), inspired by actions of participation, social entrepreneurship and public innovation of the

Nordic countries and the methodology of Medialab Prado in Madrid, which are a paradigm of public, private and social collaboration.

2.1 Mediation

Within the framework of mediation, each of the selected projects works on the creation of a community of Open Innovation for all citizens, which involves different agents of the entrepreneurial and innovative ecosystem of Zaragoza related to the theme of the projects, helping identify new problems, as well as propose, create and experiment with solutions from a shared, open and collaborative approach.

2.2 Innovation

All projects have an innovative perspective that consists in the development of their project in a framework of constant learning, generation of knowledge and documentation, sharing and opening the contents of the same to the community, through publications and various activities such as open workshops, events or work groups.

2.3 Entrepreneurship

Mediators seek, while developing their projects, to transform society from economic and social sustainability, becoming agents of change and social entrepreneurs.

3 Objectives

In this way, the "Rocketz" proposal is, as a MIE project [13], an innovative way of supporting local artistic creation, with a view to the global, and with the healthy intention of talking about funding. No more money, of course, but about the way in which public funds are enabled and used for local art, without forgetting that, by the way, Zaragoza has first-class facilities that could serve to increase them. In short, the question -we will see later how it is answered- of the Rocketz project is: Would we accept a redesign of the existing relationship between artists, curators and other art and culture professionals with local institutions, in this case with the Zaragoza City Council Rocketz, as a proactive project, designs an exchange of goods and services that attends to sustainable production over time and economically sustainable, as well as its dissemination and promotion in dynamic market niches.

For this reason, within the framework of the joint-project MIE led by the Zaragoza City Council and the University of Zaragoza, it has been carried out during the year 2017 a project of joint development of videomapping contents at the industrial & cultural heritage of Zaragoza (Spain) to rediscover paths that strengthen the production and dissemination of artistic work related to technology, engineering and innovative development.

The objectives have been:

- To carry out a mediation project among the agents involved in the dissemination of current art, with a view to the protection of the production and artistic promotion phases, which promotes the international projection of artists and their works.

- To carry out a mapping of local resources, as well as artists of international projection, which will lay the foundations for the project, as well as research on an artistic export methodology that culminates in a real prototype, as an example of good practices that can be replicated in the future.

4 Development of the Project

After a period of consultations and interviews with the cultural and design agents of the city (agents developing their activity in a professional manner with an income based on their artistic, design or engineering activity) a new plant activity was designed combining both the possibility of teaching the technique of videomapping to a wide range of individuals and, in addition and in a definite way, to draw attention to the industrial and cultural heritage of the Rabal district of Zaragoza.

To achieve the project, it was decided to hold a collaborative content workshop [14, 15] (including the necessary software and hardware) to subsequently project them in a disused industrial heritage building in the city of Zaragoza, and its subsequent repetition in another location outside of Spain in collaboration with another institution to minimize expenses and promote the dissemination of content realized by artists specializing in new media at the local level. Being in this case the City of Mexico, and the UNAM, through the C3 Institute, the collaborating entity.

Formative pills of Adobe Premiere [16], Adobe After Effects [17], Adobe Photo-shop [18], Madmapper [19], and the TagTool [20], interface system were made in the content workshop. With a number of hours to grant autonomy to the creators of contents that later would project on the facade of building of the neighborhood of Rabal de Zaragoza known as "Casa del Director", a house that was inside the industrial facilities of the Sugar Mill of Rabal, built in 1903, consists of 515 m² distributed on two floors and a small basement and is surrounded by a garden of 300 m² (Fig. 1). It is currently in process of rehabilitation.

With this procedure it was possible to establish an exit route to disseminate digital content for videomapping, enhance local industrial heritage, generate means of production that maximize budgets and democratize an art and engineering environment normally reserved for those who can afford it.

The results were highly satisfactory (Figs. 2, 3 and 4), opening the possibility of converting this way of working in a future festival of lights in Zaragoza, whose aims will be inter-institutional collaboration, training in art and engineering, the democratization of an expensive technological medium and the most important of everything: to encourage investment in production and diffusion in digital graphic artistic work.



Fig. 1. House of the Director in the District of Rabal in Zaragoza. Industrial heritage that survived the closing of the Sugar Factory closure back in the 80s



Fig. 2. RGB template of the main facade of the House of the Director in the District of Rabal



Fig. 3. Night in which the contents of the workshop were issued with a duration of 45 min. The works of Zaragoza artists Edu Cortina, Ferrnín Serrano, Yanguar Art and Flores were also shown



Fig. 4. Setting of the blue screen, previous step towards template adaptation to the real facade

5 Conclusions

This methodology of open production and shared diffusion -through international collaboration with other institutions- is not only an example of how to use public budgets in very important items of the life of the designer and the artist of new media, but also allow that many more people interested in knowing the videomapping technique can do it at zero cost. The number of people attending the Rocketz workshops was fifteen people.

In addition, knowing that it was a collaborative videomapping project, that is, where all the participants could pour their entire artistic projection into the screening, there were well-established artists from the city who wanted to participate.

References

1. El Diario. https://www.eldiario.es/cultura/arte/Arte-precario-artistas-cornisarios-jovenes_0_612438962.html. Last accessed 21 Mar 2018
2. Heraldo de Aragón. <https://www.heraldo.es/noticias/aragon/zaragoza-provincia/zaragoza/2016/04/08/edificios-publicos-vacios-contenido-espera-nuevos-usos-841516-301.html>. Last accessed 21 Mar 2018
3. Blog Zac. <http://blogzac.es/rocketz-del-arte-hacia-lo-publico/>. Last accessed 21 Mar 2018
4. Boletín oficial de cortes generales. http://www.congreso.es/public_oficiales/L12/CONG/BOCG/D/BOCG-12-D-37.PDF#page=38. Last accessed 21 Mar 2018
5. Boletín oficial de cortes generales. http://www.congreso.es/public_oficiales/L12/CONG/BOCG/D/BOCG-12-D-48.PDF#page=3. Last accessed 21 Mar 2018
6. Wechsler R, WeiB F, Dowling P (2004) EyeCon-A motion sensing tool for creating interactive dance, music, and video projections. In: Proceedings of the SSAISB convention
7. Wechsler R, Weiss F (2004) Motion sensing for interactive dance. In: IEEE-pervasive computing, mobile and ubiquitous systems. IEEE Computer Society Publications
8. Berna EKIM (2011) A video projection mapping conceptual design and application: Yekpare. Turk Online J Des Art Commun 1(1)
9. Quniz E, Lovell R (2002) "Digital performance" Anomalie digital_arts. ATI Press, Rome, pp 124-130

10. Struppek M (2006) Urban screens-The urbane potential of public screens for interaction. In: Intelligent agent, vol. 6, no 2, Special issue: papers presented at the ISEA2006 symposium
11. Pop S, Stalder U, Struppek M, Tscherteu G (eds) (2012) Urban media cultures. Avedition
12. <http://blogzac.es/prograrna-rnie-mediacion-innovacion-emprendiramiento/>. Last accessed 21 Mar 2018
13. <http://blogzac.es/rocketz-del-arte-hacia-lo-publico/>. Last accessed 21 Mar 2018
14. <https://www.zaragoza.es/zac/events/41863>. Last accessed 21 Mar 2018; 16 May 2018
15. http://www.unizar.es/actualidad/vemoticia_ng.php?id=37492. Last accessed 16 May 2018
16. Adobe Premiere <https://www.adobe.com/es/products/premiere.html>. Last accessed 16 May 2018
17. Adobe After Effects. <https://www.adobe.com/es/products/aftereffects.html>. Last accessed 16 May 2018
18. Adobe Photoshop. <https://www.adobe.com/es/products/photoshop.html>. Last accessed 16 May 2018
19. Madmapper. <https://madmapper.com/>. Last accessed 16 May 2018
20. Tagtool. <https://www.oma.at/tagtool/>. Last accessed 16 May 2018