

Daily Life in the Middle Ages - Parma in the Cathedral Age

Antonella Guidazzoli¹
CINECA

Francesca Delli Ponti²
CINECA

Tiziano Diamanti³
CINECA

Leonardo Sangiorgi⁴
Studio Azzurro

Fabio Cirifino
Studio Azzurro

1 Introduction

Aim of the exhibit “Daily Life in the Middle Ages. Parma in the Cathedral age”, which took place in Parma, from October 2006 8th to January 14th 2007, was to communicate the experience of the daily life of common people in Parma in the Middle Ages starting from historical sources. Technological and historical knowledge interactions have been performed by different disciplines experts including communication ones in order to create from philological models narrative spaces for the public.

2 CINECA's philological virtual reconstruction

The CINECA team reconstructed the 3D virtual models of the places related to peculiar events of the past, in particular two were chosen by the historical experts: the Cathedral and the council's square. All these models were created and developed by means of Open ViSMan framework (Open Virtual Scenarios Manager, based on the open source graphic library OSG), designed in order to navigate complex reconstructed cultural scenarios characterized by different LODs (Level of Details) and with a high degree of compatibility with the Virtual Set technology. Working together with Studio Azzurro a complete integration of the reconstructed models has been obtained within the multimedia emotional installations designed for the public.

The medieval Cathedral was very different from the current one, so starting from ancient books, remain parts and old drawings historical experts worked together to determine the guide line for the medieval structure. The same procedure has been applied for the medieval square Platea Maggiore.

The digital open framework ViSMan helped these experts to better understand their hypothesis. Moreover the 3D models can be used for new researches and can be easily updated.

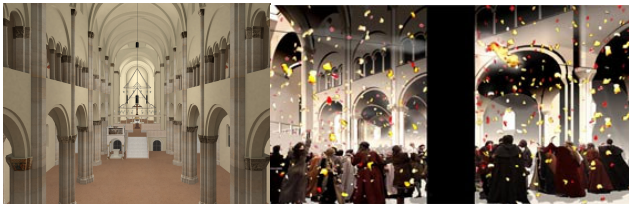


Figure 1: CINECA's model and Studio Azzurro's narrative space

3 Studio Azzurro's emotional work

Studio Azzurro was responsible for the creation of three exhibits: the interior of the Cathedral and an exterior represented by the antique Platea Maggiore, the main square of the town. Studio Azzurro team strove to insert “intangible objects”, the electronic images, alongside real objects, whose history had made their presence even more physical.

In order not to contrast with the museum project and its contents, the settings of the Cathedral and the Square were created by recalling architecturally such spaces, visitors are admitted to these

settings and invited to relive these places through the picture story, the narration of short stories, the participation in small day-to-day facts, not in big historical events, a transverse and more human look bringing visitors to have a “point of view” on the work surrounding them, not an external one.

It was very useful for carrying out our work to have 3D models of the spaces we wanted visitors to relive, and in which visitors would have been walking around. The 3D models allowed us to choose the most suggestive and human points of view for the shooting, and to study the peripheral positions of common citizens compared with the central, elevated positions of authorities. The software capability to manipulate light sources gave us a further possibility to insert suggestive narrative elements such as the characterisation of daily hours, and the study of the conditions of the night light at the glimmer of torches, or of the brightness of the moon.

Starting from the accurate 3D models, we created two-dimensional backdrops, on which we added various poetic and suggestive details, such as the roughness of surface finish, the discolouration of walls, humidity stains, the corrosion and smoothing of architectural details due to continuous daily use.

We took a little poetic licence, increasing and changing the speed and shape of clouds and the moon in the external scenery, which made even more suggestive the experience of life in the square, already characterised, besides a vertical screening, by two horizontal screenings on the floor, showing the happenings and gestures of the square. After creating the backdrops, as in every processing with special effects, we inserted the inhabitants through the take of real actors in a chromakey studio.

Owing to the references studied on the 3D models, the camera was positioned in such a way as to allow us to shoot the actors, who were moving and behaving in perfect synchrony with the virtual space on which the actions were supposed to take place.

In the editing room, we overlapped the shooting of the actors with the digital backdrops, the images have been finished with further visual details to render the narration more suggestive, and finally completed with the music and sound effects.

In the space of the Cathedral, made with two large vertical projections on screens supported by big circular pillars, which simulated the spaces between the vaults, and in the aisles, sensorial effect has been added, allowing visitors walking freely around the video installation to smell the scent of incense.

4 Conclusion

The interaction with the Virtual Environments allows the exhibit visitors to be immersed in a sort of *hic et nunc*, feeling a real involvement in a Parmesan medieval atmosphere and at the same time it allows them to understand and perceive better the context of the real objects such as manuscripts or artworks presented in the exhibit. In addition a reconstructed middle aged soundtrack creates a sort of perceptive glue among the installations and the objects.

¹ a.guidazzoli@cineca.it

² f.delliponti@cineca.it

³ t.diamanti@cineca.it

⁴ leonardo@studioazzurro.com