

Projeto Missões, Computação Gráfica Multimídia da Reconstituição Computadorizada da Redução de São Miguel Arcanjo no Rio Grande do Sul - Brasil

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Abstract

The Design Missions - Graphical Computation, recoups in a graphical and digital the pictures of the Church and the Reduction of *São Miguel Arcanjo, RS, Brasil*, allowing to the public a virtual stroll through the set at the time of its foundation in 1687. Initiate in 1990, the design refers the appropriation and implementation of the new computational technologies. The 3D model allows the dynamic visualization of the set, through aerial sights and walkthrough animations into the main streets and the inward of the central ship of the church.

For the generation of the model, it was followed the principles of the architectural composition to decompose the parts, to be shaped, defining the architectural and composition elements. This COMPACT DISC, is one of the some medias of the Design Missions - Graphical Computation. In this proposal, the music was developed especially for the COMPACT DISC, looks for to reflect the poetical aspect of the interaction between light, shadow, of the inwards and exteriors, attenuating the technology of a virtual environment. In the integration between the art and the technology its recovered virtually, the poetical way, the memory of one of the icons of the identity of the Rio Grande do Sul, with the objective to keep alive, for the new generations, a patrimony that practically in ruins would have the souvenir of its lost real picture in the time.

The Work

In 1990, a celebrated joint with Iphan¹, of Rio Grande do Sul aimed on making a computerized reconstruction of Reduction São Miguel Arcanjo in the state of Rio Grande do Sul, Brazil, guided us on a productive way, conducting us (until this moment) through computers technology applications and its interface with theory, concepts and way of thinking that arouses Architecture as knowledge subject.

This work, that was further widespread at that time for being unheard reappear now, once again, with another conceptual and creative structure: as a multimedia product. This CDROM, inserted in the Mission's book that has been edited by Universidade do Vale do Rio dos Sinos begin to assume the hole to spread the architectural Heritage, not only among academics or

¹ Instituto de Patrimonio Histórico e Artístico Nacional

specialists as it has been happening until now, but people in general.

The text below refers exclusively the peculiarities of the multimedia products conception, searching for a new way to express these ideas, potencializing new support possibilities.

Conceptual Premises

The conceptual base or line of thinking that prevailed intended to arise to other human sensibility levels through artistic, literary and musical resorts utilization, emphasizing its aesthetic effects of visual and hearing impacts.

Adopting as reference some concepts that come from an architectural reflection and making them implicit through images and animations production, we try to induce the observer to feel spaces not just as its geometrical, formal or constructive appropriation, but arousing him into a high and joy level of sensible perception, thereby using a context of effects and tricks. Though this context is underlying to the usual media, is part of the architectural critics and thoughts.[6] It means that, fundamentally, the CDROM works at the sensations and emotions plan. In order to achieve that, it resumes Giambattista Piranesi ideas from the “expressive fantasies”: “The habit of studying graphically the old architecture we have got, finds in Piranesi an interpretation itself. Its images never meant to be an objective view of the reality, however reinforced the huge view of the ruins with smaller figures than usual, insolit points of view and dramatic dark-bright.”(Rocha,1998) [1]



Figure 1 – Redução de São Miguel Arcanjo RS/Brasil –

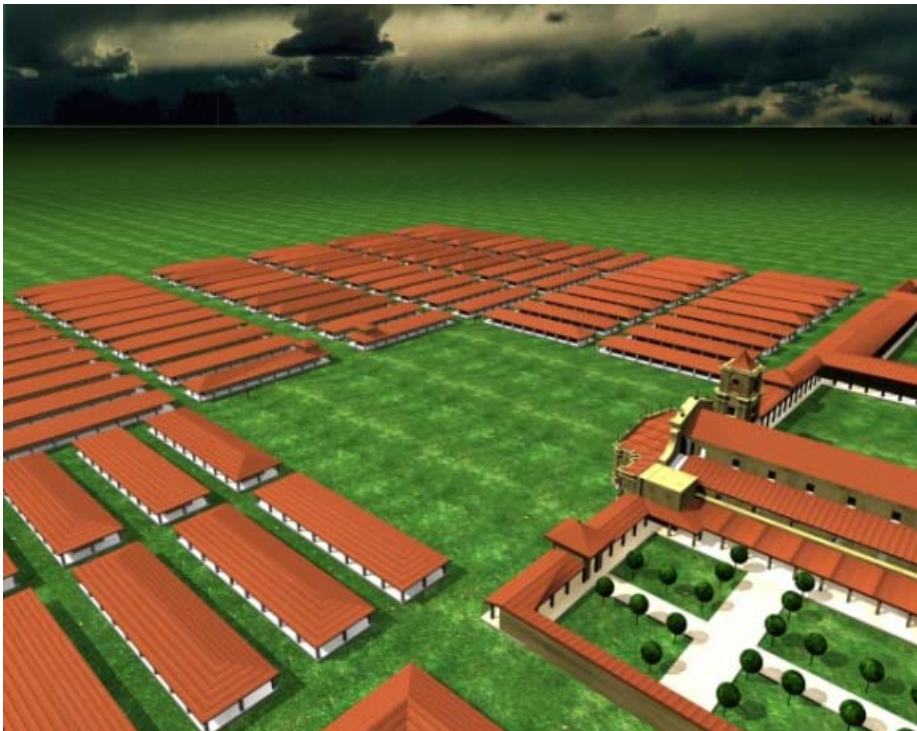
View of the church at sunrise.

Source: Núcleo de Computação Gráfica- Unisinos

Yet, reminds Boulee, whose book *Architerture: Essais sur l'art* declares himself the creator of the shadows and darkness architecture.(Rocha,1998)

The reflection of the architectural space conception was one of the important premises in order to elaborate the video and the progress. As the main dimension, the architectural space results from the composition of these spaces, organized one by one through the most important ways. Le Corbusier with him *promenade* architectural and the *beaux-arts* with la *marche* can be quote. In our case, building the way, the light, color, texture in a sequence and transforming it, introducing special effects is the main line to the CD conception established aim since the beginning of the process means to stimulate the observer

sensibility.(Rocha,1998)[2]



**Figure 2 -
Redução de São
Miguel Arcanjo -
RS/Brasil – View
of the cemetery
Source: Núcleo
de Computação
Gráfica- Unisinos**

Script

The product had a conception based on a contemporary technology link, using a narrative based on some elements of the aristotelic speech – sequential and linear – though in a hypertext and hypermedia context. The soundtrack conception, since the beginning, and its *prologue-episode-epilogue* structure, has joined contextualized musical elements.

The music was created especially for what has been being watched and has its aim based on a visual language sonorous punctuation. The main sense of all these different temporal insertions on the model, sends the speech to beyond on this same model, creating space and time appropriations that usually, don't content the pure and simple description of a virtual journey, searching for unusual journey that don't seem to follow an observer walking, but the points of view and his steering that are unsuitable with its reality.

The production of these additional elements to the model itself gives us the presence of a non-visual context that interferes on the observer comprehension.[6]

These extra-diagetical elements – the day, the night, the fields, the warmth, the cold, - though not visible, cover itself with a symmetrical importance to the diagetical objects-the model itself- with the intention of forcing the observer participation, recreating environment. It's not meant to create a realistic way, but a similar one. That is not real; though lead us to the truth. In this case the narrative doesn't have to seem real, it has to give us a real sensation.[3]



Figura 3 - Redução de São Miguel Arcanjo - RS/Brasil – The hole reduction view an unusual context of the fields
Source: Núcleo de Computação Gráfica- Unisinos

Dramatic Structures

The CD's poetics: Intently the script was Aristotelian and basically composed of a presentation of the theme in a time and space level. The narrative is sequential, inter-independent and evolutionary, based on some episodes that introduce the object in an evolution way, studying its physical, conceptual and tectonic structure.

The videos autonomous structure uses the hypermedia potential in a classical way of “beginning-middle-end” and induce us to a result that consists and observer appropriation of the architectural object in different levels of the human sensibility. The hypertextuality is an alternative for the user or viewer only after a presentation that intends to sensibly him by an introduction of a fictional literature.

The Introduction

The use of an Aristotelian classic poetics propose us an historic contextual hypertext reading, with a female voice telling a Jesuit priest thought a part of Erico Verissimo's novel “*O tempo e o vento*” such as the prologue.

After the video presented a starts to twinkle introducing the image of the church in a virtual space.

Main Menu

The user access the main menu that is composed of five modules through where the user can “surf” according him desire.

Project – That’s the project historical from 1990 until 2000, in its different steps.

History – Narrated and shows images of the social, political and economical context of the Mission until the destruction, emphasizing architectural and urban characteristics.

Images – Searching, through some effects, for the fantasy of the sunrise and sunset at the mission. The images show the note place, the symmetry, the landscape, the local environment, the horizon.[3]

Videos – In this link the user choose witch sort at video to see. The videos were elaborated in away that try to show, in some cases, the underlying perceptions than the architectural character.

Considering that this character is the feeling evocated for the observer from the object the architectural effects such as spaces, journey, church interior; the sacramental spaces emphasized by the music, the light, shadows, dark and bright, were the bases for the rendering and animations. As an example, the camera stands to show the monumentality of the architectural object the observer considering the hole and the parts.

On the option FLOOR: the observer walks around the village in a contemplative way with light music creating expectation in each new image. The spectator scale remains the same while he is getting in and at the houses, giving a sense of the Indians “everyday life” .[4]



observer can fly over the village, in a fantastic music grows slowly creating expectations and a sadness preparation for the “ gran finale” of the appear during the team.

The destruction, the Phoenix that was born by computer screen. The church INTERIOR, as an space allegory. The music – *Pater Noster* – contribute with the space to give the divine mod. The importance of the moment, try to give the ritualistic idea of the power of God. Emphasis on the bright-dark effects.[5]

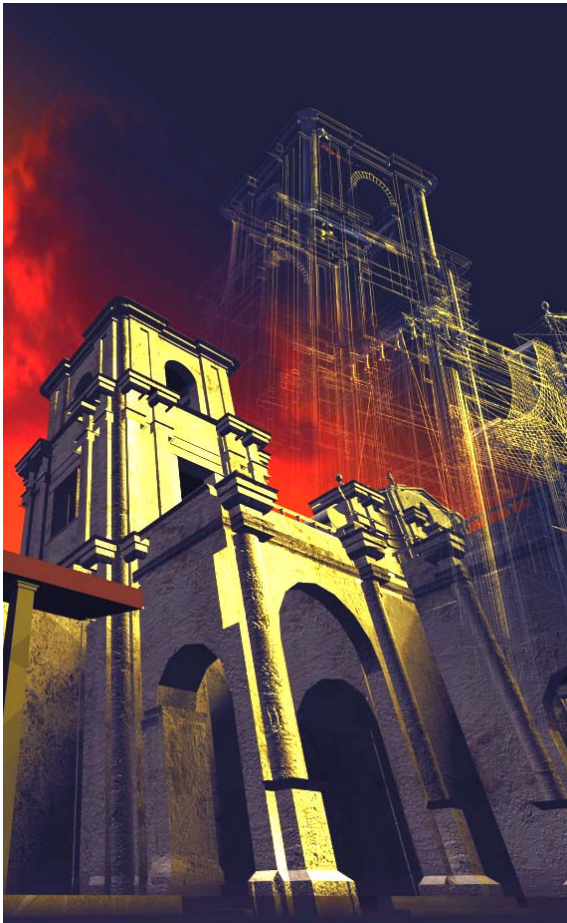
Figure 4 - Redução de São Miguel Arcanjo - RS/Brasil – Internal view of the priest house yards and the factory. Source: Núcleo de Computação Gráfica - Unisinos

On the option FLY the way – the sort of images that

the ash in the architectural



Figura 5 - Redução de São Miguel Arcanjo - RS/Brasil – Internal view of the church. Dark-bright and light shadows effects. Source: Núcleo de Computação Gráfica- Unisinos



The team

This module that represents the CD' epilogue continues with Pater Noster, and orchestra as the musical background meaning an idea of perennial and growing environment and addition to the images give the user an idea of continuity.[6]

As all the theatrical shows, in a meaning analogy, while the music goes on, the modules as the actors leave the scene, coming back for the applauses.

Figura 6 - Redução de São Miguel Arcanjo - RS/ Brasil As imagens procuram atingir o observador no plano das sensações e das emoções.

References:

Rocha, Isabel A. M.(1998) “Os Programas de Computador e o Processo de Projeto na Construção do Conhecimento Arquitetônico – Analogia entre operadores computacionais e projetuais-“(1998) Porto Alegre. Dissertação Mestrado em Arquitetura- Programa de Pesquisa e PósGraduação em Arquitetura.

Generative Art 2002

PROPAR - Universidade Federal do Rio Grande do Sul. Ítem 2.3.P.48 e 64. Ítem 3.4.5 p.127-135.