

THE COMPUTATIONAL TOOLS APPLIED AT THE MULTIMEDIA TRAPICHE (SERGIPE, BRAZIL)

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Abstract

The computational tools are evolving rapidly and continuously challenging the professionals involved with these technologies, which bring us to gain unmatched productivity and response, capable of reaching all strata of society. Today the challenge is to incorporate the human factor in this technological environment to achieve quickly results and low cost of deployment. This work presents an ongoing study on the potential of these technologies to integrate the systems of the documentation of historical and traditional build, with low implementation cost, a system for dissemination and preservation of the historic town of Laranjeiras (Sergipe – Brazil), forming specialized staff in use of digital technologies applicable to the historical documentation. In this dynamic medium for exchange of information specifically we propose to evaluate the infrastructure involved, and all participants in the process. For this we selected a representative set of architectural history of the Laranjeiras city (Sergipe – Brazil), called the Trapiche's Quadroon, which was set up as a case study from which we intend to formulate guidelines to systematize information concerning the heritage of the city.

Keywords: *multimedia; information; technology; historic city.*

1. Introduction

Contemporary culture steeped in digital technology allows us to call cyberspace was experiencing an acceleration in the production and dissemination of information, causing a radical change in the nature of men's relationships with technology and each other.

Traditionally the notion of heritage is guided by the logic of keeping a set of tangible and intangible cultural assets, but with the technological advances of contemporary culture, not only the concern for conservation forwards to spread knowledge of this heritage, but in the process of your scan, they are electronic documents transmitted via the web and accessibility ensures that we maintain the transmission of information.

Thus the larger the number of accesses to these virtual information and the greater the number of links associated with them, more consolidated and democratized information will remain unlike piles of documents in physical files in the public institutions whose access to documents is restricted for reasons of protection of these documents, in view of the durability of them.

The introduction of digital technologies for the conservation of heritage impacted the very notion of heritage preservation and dissemination.

This paper presents partial results of a survey of methodological procedures applicable to the cultural heritage of the Laranjeiras city (Sergipe, Brazil) to the documentation system adding new

technology and traditional forms part of a study that is underway at the Department of Architecture and Urbanism, Federal University of Sergipe - Brazil, in which we used as a case study the Trapiche's Quadroon, an architectural ensemble of the first half of the sixteenth century the town of Laranjeiras in Sergipe - Brazil, where is located the Laranjeiras *Campus* of the Federal University of Sergipe.

2. The historical context Trapiche in hypermedia

The Trapiche Quadroons (an old quarter of the piers) consists of a set of port warehouses, built along the river Cotinguiba, in the historic town of Laranjeiras, the territory of Great Aracaju, holder of an architectural heritage of inestimable historical value.

The Laranjeiras city started its process of structuring in the eighteenth century, having appeared on the Cotinguiba river bank where there was an orange tree, under which travelers rested protecting yourself from the sun and singing romantic songs until it was time to put on the road again. Guarding the poetic versions, and the certainty that the place became a major commercial city of Sergipe Del Rey, resulting in production of sugarcane their main source of income.

This fact led to his elevation to the status of town in 1832, although in 1824 the area was already the holder of over sixty sugar mills, factories of cigars and brandy and houses of European representations (Silva; Nogueira 2009:40). According to Dantas (1972:17), with the installation of Sergipe's Customs location and demographics have become important commercial emporium whose fair 'competing trains of almost all parts of the province' communicating directly with the capital of Bahia (Salvador), Rio de Janeiro (Rio de Janeiro) and Pernambuco (Recife). On May 4, 1848 became a city, and today has a strong presence in its baroque architecture of the fruit its rich past.

In the twentieth century, in 1940 were performed at Laranjeiras city conservation actions by the federal government who understood the Chapel of sugar mill Jose Maria Jesus, the house of the sugar mill Retiro, Church of Comandaroba and the Great Church of the Coração de Jesus, as parts of an architectural style characterized by the Jesuit presence in the colonial period. (Iphan 1994:194-195).

In 1976 was created the Cultural Meeting of Laranjeiras (SE) with the objective of studying, researching and disseminating folklore and various demonstrations. The first meeting occurred in May, the later being always held in January, during the festivities of Santos Reis, fulfilling its role and the study and dissemination of cultural traditions of the laranjeirense people (Bomfim 2009:113-130).

Thus the historical narrative to be implemented in walkthroughs, image resources, video and sound leads the visitor by the historicity of a playful than those present in crystallizations boring textbooks or encyclopedias.

Thus, the use of technological resources allows giving voice to forgotten silence, remembering past experiences in virtual as in the present form of hypermedia learning and meaningful to those who need to recover their roots in the construction of their identities.

3. Technology Resources

We used computer technology resources to rebuild virtually Trapiche's Quadroon linking to this reconstruction, digital multimedia material to compile a digital database of the cultural heritage of the Laranjeiras city, with a view to integrating traditional systems of historical documentation of the heritage existing city (Image.1).

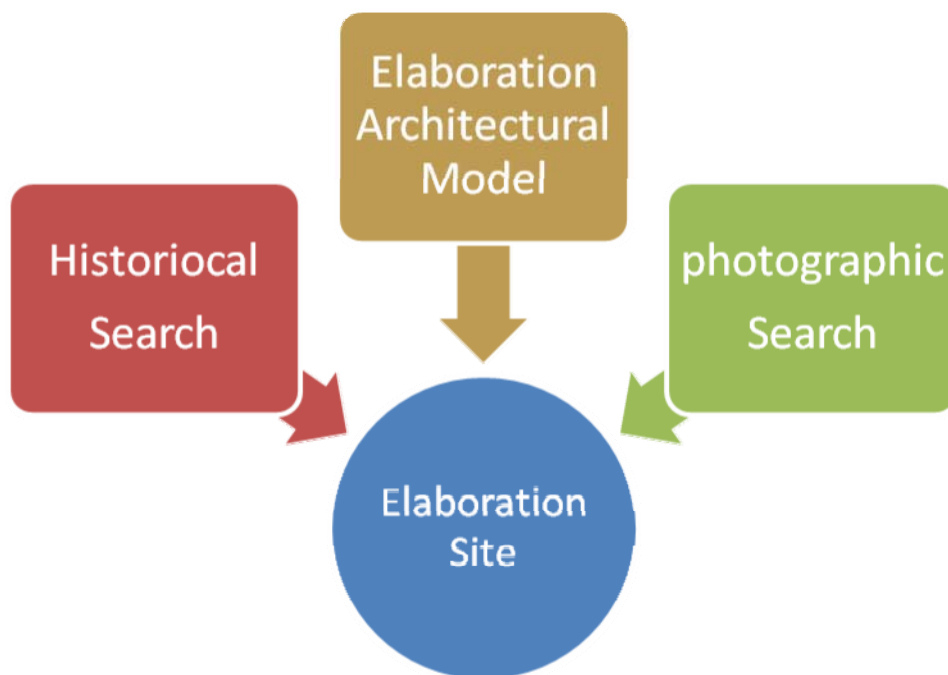


Image. 1

The reconstruction of the history of the Trapiche's Quadron, synthesized in three-dimensional modeling (Image. 2) of the building walkthroughs (Image.3) and their environments associated with imaging capabilities, video and sound, will be available on DVD and the Internet, allowing access to the knowledge of the heritage cultural Laranjeiras city in a clear and accessible to both professionals and the layman public, especially to the community of the Laranjeiras city.

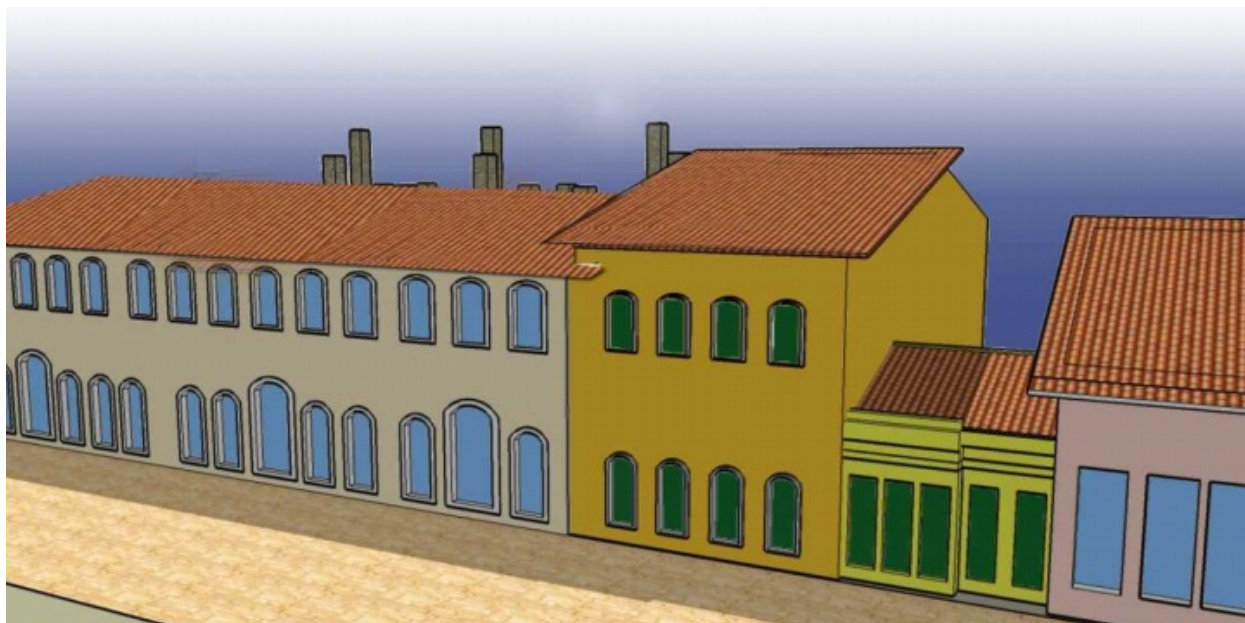


Image. 2 – Model Electronic

Through the use of tools for web, we intend to create an environment free with features and extremely flexible, allowing the establishment of a collaborative activity to systematize data,

putting the academic skills articulated in different areas of knowledge - Architecture and Urban Design, Computer, History, Archaeology and Museology at the service of community (Image.4).

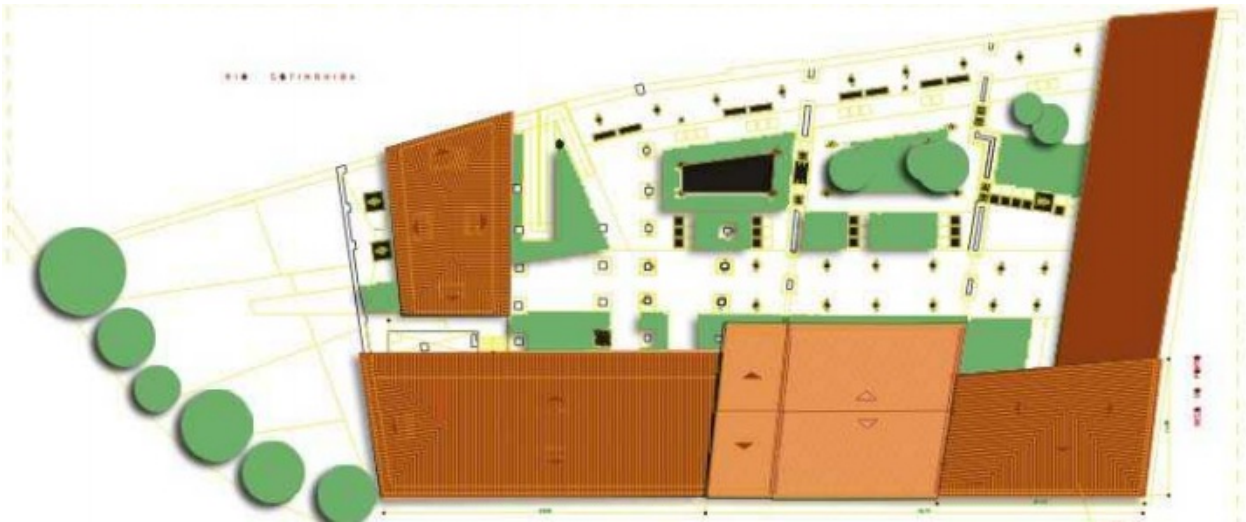


Image. 3 – Layout drawing Trapiche's Quadron

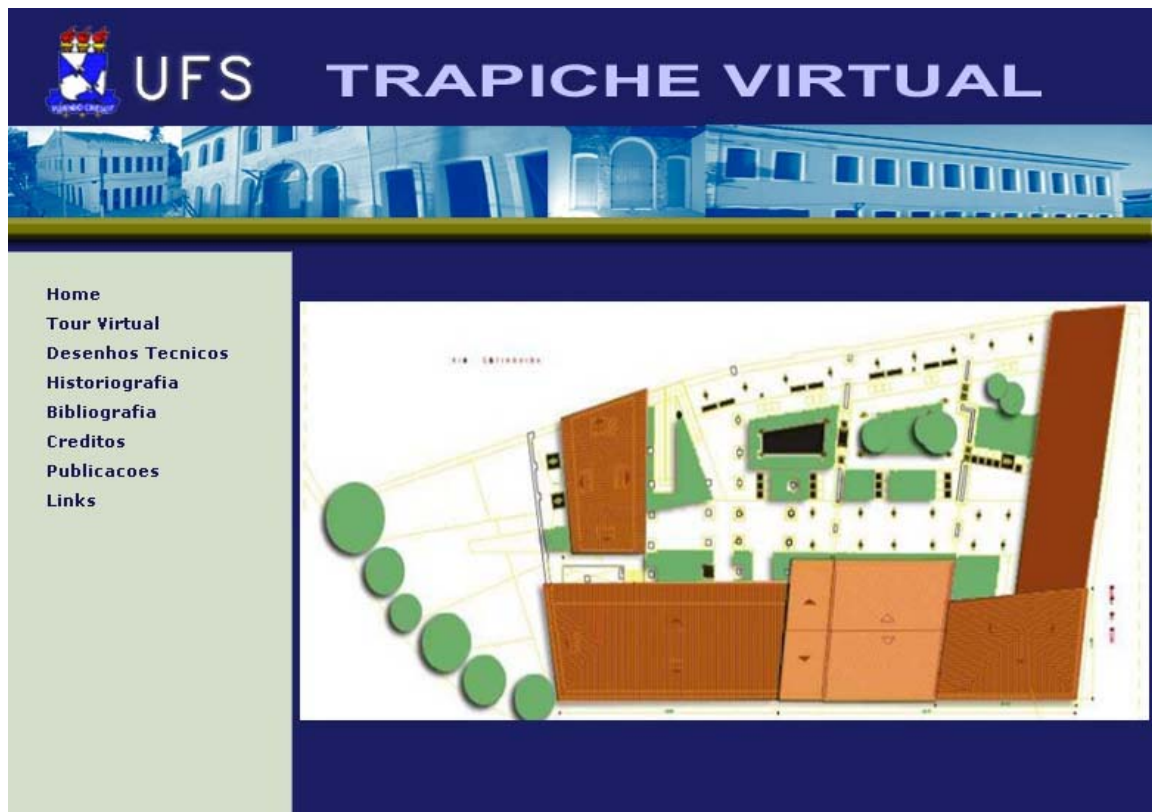


Image. 4 – Site Trapiche's Quadron

From this project, we intend to set up a systematic methodological procedures that use information and communication technology that is applicable to all the historic town of Laranjeiras city.

It is extremely relevant to the collections available to rescue the history of the Laranjeiras city, and systematize information about their cultural heritage with low cost of deployment by the

specific needs of dissemination and preservation of heritage and the need to promote the training of specialized personnel the use of digital technologies applied to asset documentation. This project contributes to the production of digital data while assessing the applicability of the methodological procedures adopted throughout the cultural heritage of the Laranjeiras city aggregating the traditional system of documentation for the possibility of virtual reconstruction.

4. Methodology

In this project we made a practice of sustainable resources in the Laranjeiras city, holds a priceless cultural heritage of historical value and so we designed a methodology that considered an activity for the preservation and dissemination of knowledge of that heritage.

We decided to use information and communication technology to build a digital database of the architectural case study known as the Trapiche's Quadroon, impressive building of historical interest of the Laranjeiras city, with a view to integrating the systems of traditional heritage documentation existing historic city offering this material on the Internet in order to ensure access to knowledge of it in plain language geared not only to the specialized audience, but also for the layman public, especially to the community of Laranjeiras city.

In search of articulated historical building activities interdisciplinary teaching and research graduate in Architecture and Urban Design, Computing, History, Archaeology and Museology at face activities and distance.

The Trapiche's Quadroon, representative of the architectural history of the Laranjeiras city, will be focused as a case study in order to create guidelines to systematize information concerning the heritage of the city with low cost of implementation with a view to disseminating and safeguarding heritage and the training of specialized personnel in the use of digital technologies applied to asset documentation.

Thus, the project envisages the following steps (Image. 5):

1. Historiographic search of the whole architectural Trapiche's Quadroon.
2. Photographic search
3. Architectural Drafting Model: Based on technical drawings and photographs to produce the Trapiche's Quadroon model and then after the definition of travel itineraries will be drawn up the walkthroughs. For modeling and rendering of the model and image processing we use the following programs: 3D Studio, Adobe Premiere, After Effects and Photoshop (Image 5; Image 7).
4. Preparation of a site (home page) where the material produced will be available resources associated with image, video and sound. In this section we use the Flash program and will use sound editing program Sound Forge.

ARCHITECTURAL MODEL PREPARATION

**SEARCH
TECHNICAL
DRAWINGS**

**ELETRONIC
MODEL
PREPARATION**

**WALKTHROUGHS
PREPARATION**

**CONTACT WITH
OTHER MIDIAS
(AUDIO, VIDEO,
PHOTOS)**

Image. 5

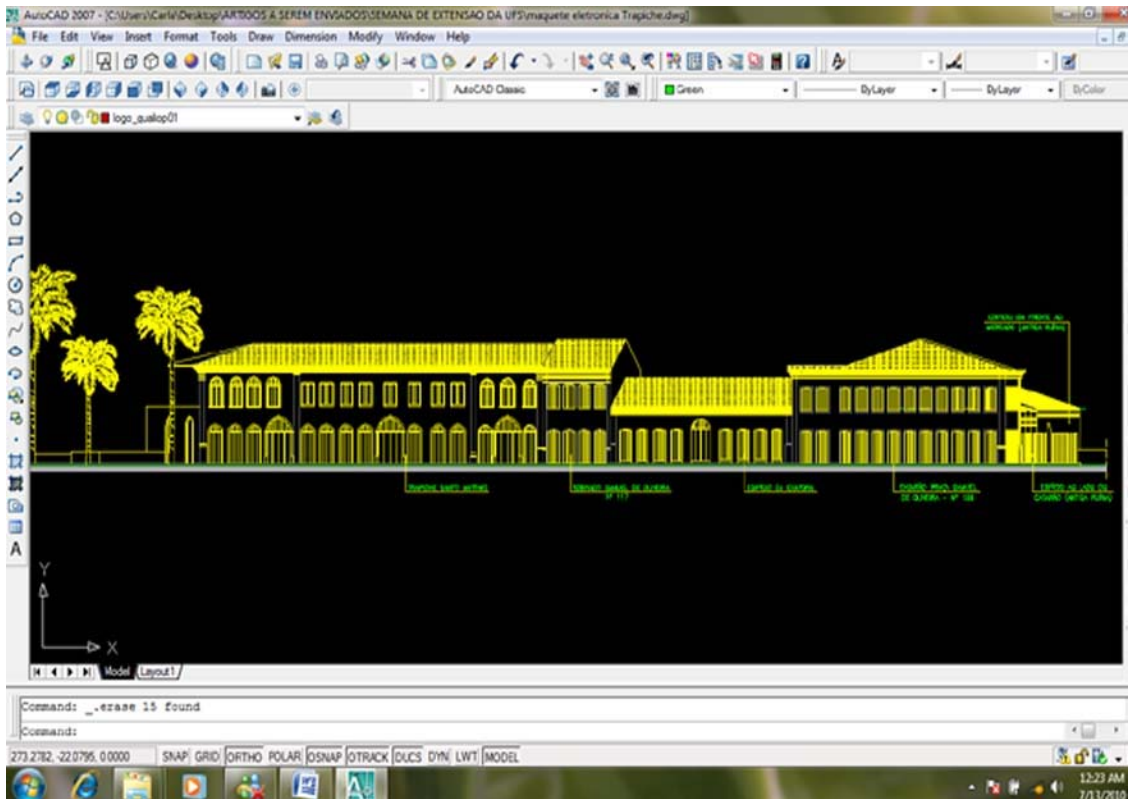


Image. 6

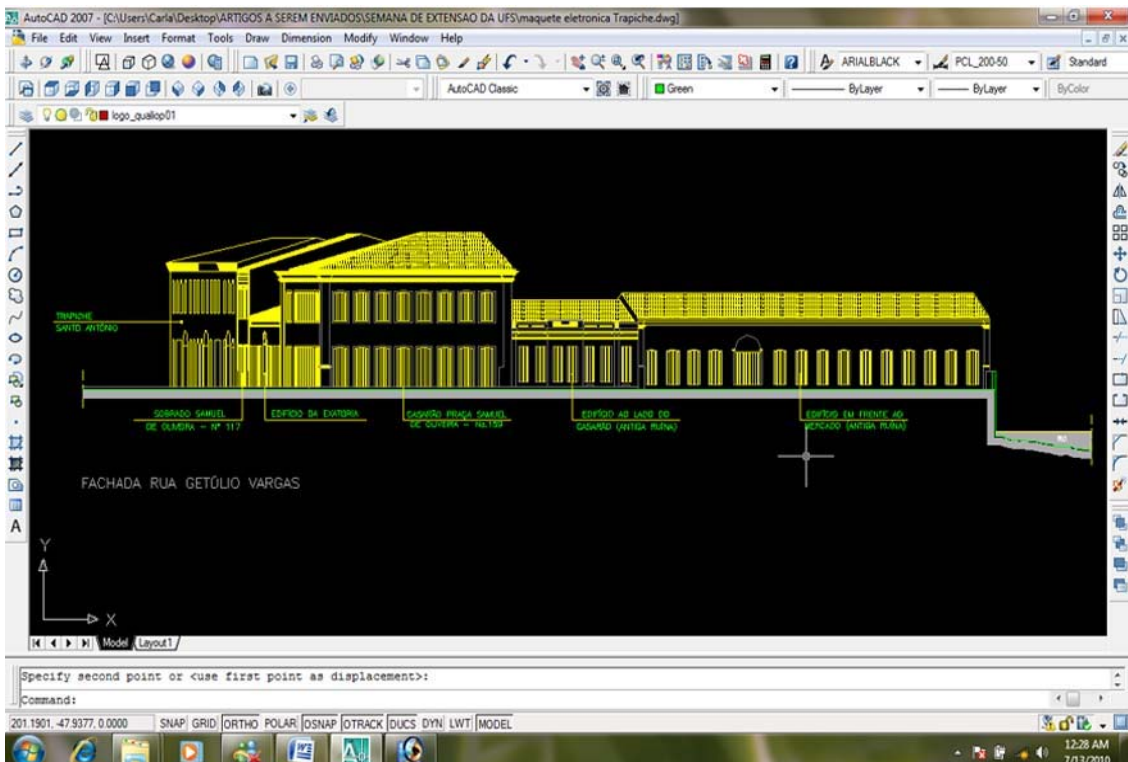


Image. 7

5. Conclusions

Till the time we could verify that the methodology presented in this project to systematize the process of digital record of the cultural heritage of the Laranjeiras city, demonstrates the importance of human factors to achieve the proposed objectives with critical consciousness in the process of building knowledge, fostering Awareness of cultural values that are his own.

Undeniably the productivity gain that the technology allows the conformation of the digital data and induces a growing trend of interactivity and connectivity that can be observed over the years, but the implications of the use of Information and Communication Technology (ICTs) within the educational processes represent a challenge in the task to motivate and diversify human relationships, enabling interactivity.

You can check that the extension of the virtual space helps to stimulate critical analysis in the preservation of historical contexts and intervention architectural and urban planning, fundamental processes of decision making.

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