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### Abstract

The present work (composed by video + article), is a development carried out in the research group Algo+Ritmo, dedicated to mapping of the current state of the cultural heritage of Mato Grosso do Sul and the use of digital mediation as a way to discuss, give value and create new meanings to the architectural and urban memory. By applying video mapping techniques to aid heritage education, we were carried some practices out aiming the enhancement of spaces of historical value in Mato Grosso do Sul, adding new information layers to the existing architectonic objects and, then, making them hybrid.

**Keywords:** Heritage, Digital mediation, Video mapping

## 1 Introduction

The main goal of this paper is to discuss the potentialities of digital mediation as an active actor in the construction of the collective memory of the population of Mato Grosso do Sul and society itself, on a cybernetic basis. We discuss the use of available technologies as catalysts of a patrimonial valorisation process, the reading of the existent memories and the construction of other possible ones. Thus, the article presents three actions, as case studies. The proposal came from the observation of the patrimonial routine that is currently developed in the State of Mato Grosso do Sul, where today a large part

of the population of the State is disinterested in knowing about its memory, and distancing is created over decades to their historical-cultural assets. Thus, many people do not recognise their historical-cultural assets, and few people feel part of the historical construction and local memory of cities. The little that is known is not discussed critically but accepted by most of the citizens as some isolated buildings and old monuments that reproduce a look that is not the result of its history, but of selective manipulation of the information that has been precisely increasing the distance between the population and its own history. When this deprived form of discussion and criticism about our origins occurs, recreating a false or even produced story from a single look, a distortion and a certain accommodation occur since it is much easier to deceive the population not dedicated to the study of these phenomena.

The spaces have the possibility of producing signs capable of potentializing innumerable meanings, thoughts and discussions. The memories carried by them trailed and built passages and mental states until our days. These mental passages are, at the same time, product of time and objects capable of transmitting memories simply because they are physical, since they are old buildings full of meanings from decades and centuries past. Also, the ways of life and social relations, the routines that once occurred in these places are also sources of memories, informative legi-signs of the practices and regular activities of different eras. To function as such, having these two forms of memories requires both to work together in a feedback process, where the physical - the actual real space, interacts with its informative memories, and can offer its customers the best interaction with the environment in which they live. However, the vast majority of cities do not offer this level of interactivity.

*The course of events not only reduced the opportunities for walking as a form of locomotion but also besieged the cultural and social functions of the city's space. The traditional function of the city space as a meeting place and social forum for the residents was reduced, threatened or progressively discarded (Gehl, 2013, p. 3, our translation).*

Our urban spaces, the physical forms of memories that we possess in the cities, are outdated and does not show concern for those who live and pass through them today. There is a mutual contempt of the population towards the historical scenario, as well as the scenario itself towards the population. Strategies to make cities a safe and sustainable place of exchange amongst their inhabitants through the use of public space seems not to be a priority in the governmental practices of most Brazilian cities. As Jaqueline Moll proposes:

*The city needs to be understood as living territory, permanently conceived, recognised and produced by the people who inhabit it. It is necessary to associate school with the concept of educating city since the city as a whole will intentionally offer to the new generations continuous and meaningful experiences in all spheres and themes of life (Moll, 2009, our translation).*

Therefore, getting people to interact and foster coexistence is important for the evolution of our society. Believing in these values, the present work focuses on the patrimonial issue, seeing in it an opportunity to value public spaces, a greater democratization of society, the possibility of expanding ties with the local memory, from rich monuments of coexistence, full of layers of information that, in a playful way, can reach and provoke the interest of the regulars.

Also, the current technologies merge with previous ones. Computer and Internet immersion enable fast sharing and continuous creation of contents through applications and computer programs. Overlapping layers of memory that preceded us, digital mediation promotes the interchange between tangible physical memories and the information memories that are built up over time, justifying and promoting technological evolution as far as we know it.

Technological evolution has been unceasingly increasing the interaction in people's lives. Democracy in cyberspace, more and more direct and without intermediaries, is something that has been happening all over the world. The empowerment of the population, claiming their rights and using the great global communication network, is showing its fruits. The public spaces are linked to contexts of the memory of the population that become increasingly targeted for actions and interventions, in squares and sites of relevance to the city, places that have a history and become a potential for occupation, manifestations and protests. A sort of update on the concept of the Greek Agora.

The research that underlies this article developed three interventions in the cities of Campo Grande and Corumbá in Mato Grosso do Sul in the years 2016 and 2017. We believe in the potential offered by Cyberculture and Digital Mediation and dealing with patrimonial themes, in the spheres of material and immaterial, as well as the current use of these goods. Practical actions and experiments were carried out, as well as reflections and theoretical productions, based on the bibliographic review. It is believed in the feedback between theory and practice, as a methodological procedure that allows greater depth and scope to the research. Next, the experiments will be reported, accompanied by a brief analysis of the materials and methods used, as well as the goals achieved.

## **2 Space Between: anamorphosis, video mapping and digital manufacturing**

The event took place from July 12 to August 13, 2016, at SESC Morada dos Baís, in the city of Campo Grande, Mato Grosso do Sul State, Brazil. It was about creating a changeable space within a defined roadmap, with a historical basis. The space in question is one of the most important architectural patrimonies of the city, registered in the municipal sphere. The mansion was built between 1913 and 1915 and is a part of the eclectic architecture of Campo Grande. The intervention was carried out inside the building in one of the rooms offered by SESC, creating a space of immersion that the public visited and in which can experience the intense video mapping.

The process began in June 2016, when SESC Morada dos Baís invited the research group Algo + Ritmo to create an exhibition. The creation of the script and the animations were done by the academics Sol Ztt and Natacha Figueiredo under the supervision of the guiding professor Dr Gilfranco Alves, as well as the conception of the levels of interactivity. We used Adobe Photoshop, Adobe After Effects and Adobe Premier programs. Photoshop was used to create the elements that would be

animated in the future, as well as the elaboration of the mask that would be used as the basis for the elements. After Effects software was used to animate the elements created in Photoshop using the common tools of the program as well as plug-ins responsible for creating different effects and with greater applicability. With the animations finalized, the Premier software was used to edit and apply the soundtrack. The sonority was worked in a simpler way than the work of the animation, but it was very important for the action as a whole to obtain significant answers, regarding the immersion of the spectators. Image and Sound require complementary procedures and were applied in the next two interventions to be detailed.

The script created was the result of discussions about the old and current state of the art of the city of Campo Grande, reaching the definition of the scope, which pointed to the place where Lídia Baís lived, a Campo Grande artist of great relevance and popularity. Video mapping actions played a role of integration, an element of union between historical buildings and worked information. In this case, we built a scenario based on the artist's work, playfully treating her subjects. Lídia as a different woman from her time. She studied fine arts in the city of Rio de Janeiro and later returned to Campo Grande. Considered crazy by many, in other glances was a woman ahead of her time, a woman who had to struggle to express her views in a sexist society of the 1930s (which remains, in a way) (Perez; Ikeda, 2011).

Involved by the place and the history of the artist who lived for years in that space, we considered the technology of video mapping an opportunity to unite at the same time, the building, the information of a society that did not accept the different, and the personal and artistic experiences of Lídia, discussing and questioning the place of the values of social groups historically objects of domination. Thus began the research by several works of the artist, photographic survey, historical, documentaries that explained better who was and how Lídia Baís thought, as well as the routine of the society of the time, to better understand the way they saw it and how to own it artist was inserted in this context. Within the ideas developed, we paid special attention to the "Micróbio da Fuzarca" painting, a work created by the artist, and consequently the main one to be studied and developed in the script of this animation.

To suggest to the public the integration between the building itself and the historical information, we sought to produce an optical illusion, which could be created in video-mapping, transforming the main wall into a large screen where the Micróbio da Fuzarca itself was. We dressed him up and created an acceptable aspect, a cover created for the audience he initially attended, inducing him to accept it, as was the life of Lídia, a woman who often had to "hide" in layers so that the society at the time would accept her. Gradually the graceful clothing of the work collapses as if nothing could cover it for a long time, and the original work of the artist comes to the surface, to shock the spectators. Thus the historical and artistic information linked to the building makes it possible to bring a little of the life of the artist to the present, seeking a notion of contemporaneity in the next animated paintings, when the work of Lídia takes life.

The interaction and the incorporation of art was developed in this second act, when we animated the work, and the Fuzarca microbe toured the wall, taking care not only of a frame but the whole environment. In the opening session of the show, he ran the wall until he disappeared into one of the great doors, characteristic of the mansion. In this act, the animated microbe gives place to the artist Amanda Dim, invited to an artistic performance, in make-up and dressed as the work, hidden behind one of the doors, and permeates the audience in a frightening performance, creating a third act added to the animation and also to the painting initially proposed by Lidia. Therefore, the experiment rescues and proposes re-readings to historical passages, from the use of video mapping, with strong social criticism about the values of women in society and the way we see them.



**Fig. 1:** Internal intervention Morada dos Baís. Campo Grande. Source: Jéssica Rabito Chaves, 2016.



**Fig. 2:** Internal intervention Morada dos Baís, participation of the plastic artist Amanda Dim. Campo Grande. Source: Natacha Figueredo Miranda, 2016.

We should also mention that the opening event on July 12, 2016, a Tuesday, also had the presence of live music and support from SESC with a cocktail offered to the public. The atmosphere was packed with people, with almost every table occupied. We believe that the public, enthusiastic about the action, was also transformed by the narrative proposed by the video mapping, recovering a meaning presented in memory, made hybrid by the presence of the invited artist in the Morada dos Baís, producing a type of memory that we are constantly approaching these days. The action proposed an intervention that motivated the public to experience virtually the reconstruction of a memory that could be accessed by several other minds that were not part of that past, but that could participate and, in some way, re-signify it. The intervention, the physical object, now wasn't the only building housing an exhibition, but also the historical virtual information, adding more information to the people, influencing them and spreading the collective memory.

### **3 Municipal Seminary of Cultural Heritage 2016**

The event took place on August 17, 2016, at the closing of the Municipal Seminary of Cultural Heritage, from an invitation made by FUNDAC (Campo Grande Culture Foundation). The facade in question constitutes an important urban public space in Campo Grande. Unlike the first intervention, in which an immersion was developed with the public, this second one used an external facade where surprise took the public walking through the city. That's different from the previous one, in which the public had previously been invited for the exhibition in the Morada dos Baís. Therefore, the video mapping was done on the facade of the Campo Grande Railway Station - NOB. The pediment was built in 1914, with a typical railway architecture of English influences in the frames. The mapped projection was performed at the main entrance of the now Cultural Warehouse. The choice of such facade was due to its historical importance for the city of Campo Grande, and its great perspective obtained by the opening of the street Dr Temístocles, forming an esplanade.



# Seminário Municipal de Patrimônio Cultural 2016

## Programação

8:00h – Abertura

8:30h – Palestra Iphan (Tema: imóveis tombados nível federal)

9:00h – Palestra FCMS/GPHC (Tema: imóveis tombados nível estadual)

9:30h – Intervalo

10:00h – Palestra FUNDAC/DPC (Tema: imóveis tombados nível municipal)

14:00h – Palestra ARCA (Tema: História de Campo Grande)

15:30h – Apresentação pesquisa FUNDAC/DPC

(Tema: Tombamento - Atualização da Lei 161 de 20/07/10)

17:00h – Intervalo

17:30h – Comentários e Sugestões

18:00h – Video Mapping - Projeção Mapeada (UFMS – Grupo Algo+Ritmo)



Local	Data	Horario
Casa da Ferrovia [Auditório Acyr Vaz Guimarães] Avenida Calógeras, s/n	17 de agosto	8h - 11h 14h - 18h
Informações: patrimonio_fundac@hotmail.com • (67) 3314-3226 • fb.com/patrimoniofundac		



Fig. 3: Folder of the event: MUNICIPAL SEMINAR OF CULTURAL HERITAGE. Source: FUNDAC, 2016.

The animation script for the video mapping action was primarily based on integrating architecture and society since the building has a favourable location to deal with floating and the unknown public, what happens when the intervention is done in a public space and directly in connection with the street. We try to treat architecture on several levels to produce discussions and generate criticism as to the current state of the city's patrimony, both in the material and intangible. We have projected some illusions. As for the architectural elements, we now recreate the windows that made up the facade, spreading them over the pre-existing ones, modifying what we are accustomed to seeing daily - an architecture stopped in its time that receives a sudden and dynamic change, where the windows pulsed with the beat of the programmed music. At another moment we modified the materiality, changed the texture of the traditional smooth facade by other coatings such as bricks, tiles and even worn paintings, referring to the possible changes that occurred in time.

The Railway Esplanade that receives little attention today occupies an important place in history and the city. In the same way, some intangible assets that do not receive due attention were also included in this intervention. The nature of the Pantanal could appear in the facade that also served as support for the tribal forms of the indigenous people of the region. Kadiwéu's drawing opened its eyes and "saw" viewers. To achieve this effect, we use the optical illusion to open reptilian eyes on the facade, changing the eyes/windows of the forgotten building, by a sign that references another group also forgotten.

In a second moment, the eyes disappeared, and a spectrum of colours imitating a television without signal appeared in its place, almost as if it were breaking the charm. The criticism "with which eyes we see the excluded", the last animation follows. The one who creates daily memory in the ignored places is also excluded from society. The Railway Esplanade is not frequented by most of the people of Mato Grosso do Sul, but has along the route certain points invaded or minimally occupied, where a small part of the population, inhabits a place created for transport machines. A memory is re-signified and constantly creating new meanings to other people. Finally, we tried to develop an animation that left the facade without paintings and attached on its windows and doors, clothes as if they were thrown and stuck together, and in these, a lady gracefully waved with a small red cloth, in which the wind was blowing, ending the animation, and proposing a little metaphor of farewell and criticism, as to the uses we are developing or with which types of memory we are leaving to relate.





**Fig. 4:** Intervention Railway Esplanade. Mapping of the facade. Campo Grande. Source: Gilfranco Alves, 2016.



**Fig. 5:** Intervention Railway Esplanade. Campo Grande. Source: Sol Ztt, 2016.

This intervention made in August 2016 may have a further unfolding. During this period, the game Pokémon GO was released, which allowed the option to place a sort of the point of obtaining prizes (pokéballs) in some spots of the city, necessary to give continuity to the game. In order to gather more people close to the intervention we added a point of recollection of the pokéballs at the intervention site and thus attracted players who had smartphones with internet, in a possible place of making photos and videos online, and in this way we got an unexpected audience, taken by surprise with the projections, which helped us to further spread the action and, therefore, the patrimonial question.

#### **4 13th Pantanal South America Festival (FASP)**



**Fig. 6:** Folder of the event: SOUTH AMERICAN PANTANAL FESTIVAL (FASP), Corumbá, 2016.

The event took place from November 11 to November 14, 2016. The FASP is an annual festival, held in the city of Corumbá-MS, with regional and international cultural activities. As the city of Puerto Quijarro (Bolivia) borders Corumbá, its regional aspects are confused with those of its neighbours. A place of movement and meeting between Brazilians, Paraguayans, Bolivians, Argentines and Chileans, among other people.

Through an invitation from the State Culture Foundation, we had the opportunity to carry out an intervention in the city, using video mapping, and dealing with cultural issues with the same focus as the festival.

The video mapping was carried out in two institutional buildings located in the Casario do Porto, a region in front of the port of Corumbá with several historic buildings. The choice of venue was based on the suggestion of the MS Cultural Foundation, which glimpsed the opportunity of creating a second space beyond the main stage where musical shows were taking place and thus generating two structures of interaction with the public that was in the city. The Casario do Porto is a historical architectural complex, and in this place we chose two buildings, looking for the most contrasting buildings regarding colours, and also because they are public agencies with the possibility of dialoguing with the population after the event. The buildings in which we developed the actions were the MUHPAN (Pantaneiro Man Museum) and the IPHAN (National Historical and Artistic Heritage Institute), located close to each other, about 100 meters away.

MUHPAN is housed in the Wanderley Commercial Building, Baís & Cia, a historic building that has important architectural value. The building, built in 1876, stands out for its architecture and self-supporting structure. The IPHAN building in Corumbá belonged to a network of fortifications to defend the frontiers and demarcation of the national territory. The original core of the fort, the New Coimbra Prison, was built in 1775. The Fort's set of buildings gathers the chapel, the gunpowder house, a lodge, internal courtyards and the ramparts wall.

One month before the festival, the group carried out the photographic survey of the buildings for the creation of the masks and preparation of the animations that would be made. Due to the magnitude of the MUHPAN and particularities of the local landscape, it was not possible to map through the photos. We contacted IPHAN-MS in Campo Grande to look for books that could help with architectural drawings and also know better the location in which we would deal with historical issues. With this we can perceive some cultural factors, such as the rotation of people of the region, that creates a mixture of languages and nationalities, the old architecture that approaches with that of other Latin countries, the nature that is part of the Pantanal and that extends beyond the Brazilian borders entering other countries, and the different services and uses that each building had throughout history. At the end of the study, we decided to approach various themes, which could be seen as complementary, within the local culture system. Memory is something that is always in constant contrast to the present, creating dichotomies between the old and the new, the dead and the living.



**Fig. 7:** Intervention in the IPHAN-MS building. Corumbá, 2016. Source: Sol Ztt.



**Fig. 8:** Intervention in the MUHPAN building. Corumbá. Source: Sol Ztt, 2016.

In this third intervention, since we had two buildings to perform the video mapping, we chose to separate the themes for each building, divided into two spheres. In one of the buildings, we dealt with the theme of material heritage, while in the other we dealt with immaterial themes. In a first interpretation, one intervention seemed to oppose the other, but they dealt with the complementarity between matter and information, high-tech and nature. At the IPHAN building, where we handled with material goods, we chose to use only two colours, black and white, while in the MUHPAN building, we discussed the immaterial goods and treated the Pantanal nature, focusing on fauna, flora and ways of doing, everyday life and the Pantanal culture. We should note that nature is not opposed to High Tech, but instead, it becomes the inspirational source for the evolutions that can be adapted and developed by technology.



As we have described previously, Corumbá is bordered by other countries, and it was an international Latin American event. It was a complementary objective to promote and value the local culture, where its neighbours could also witness and feel the interventions as an integrating possibility. The themes, therefore, were not opposed, but complementary. While in the treatment of material goods we created life in the structures, displacing the porches, causing them to move with the beats of the songs. The IPHAN building, like a machine, took prominence in the street and became much more alive for a few hours. At the MUHPAN building, the structure also moved, but the movement did not come from the beat. He came from nature that covered him with plants, the Indians crying its condition of abandonment and the loss of space that was their one day. As a technological graphism that appeared in the structures.

Unlike Campo Grande, the city of Corumbá has a much larger heritage collection, built and preserved as a whole. Heritage education is a little more present because of the proximity that the inhabitants have the goods. But another problem is observed when the repetition of the fallen house becomes homogeneous and induces that these goods "disappear" in the routine and go unnoticed. Video-mapping has the potential to bring them to life and allows them to "wake up" for a while, in a different way.

We had full support from the organisation of the event, which was great for the execution. The event was connected with the local and international community. During all the days social and patrimonial actions took place. Following the methodology for heritage education, the connection they offered us with the public made the action better utilised. Several people took photos and broadcasted live via the internet using Facebook, which amplified our action in a broader field. Collaborative forms of collective construction of memory, in which the population that was watching could also transmit and share the sensations with other people who were not present, fostering knowledge about heritage, and even acting as a gimmick for the observation of reality.

On the last day, almost at the end of the intervention, a group of young people asked to dance while the intervention took place on the facade. While not being responsive to their movements, there was interaction with the light that arose. They danced following the projection, in an inverse process of when light follows the mapped body if a micro-motion sensor stimulates it. At that moment they used their perception, their intuition and their abilities to follow the light and there was a reversal of what we are used to seeing the interaction. These young people who participated without knowing much about the ideas represented in the video mapping responded positively to our expectations linked to the exchange and certain levels of interaction, going far beyond what we imagined. They have made the architectural and urbanistic structures that go unnoticed day by day even more lively.



**Fig. 9:** Intervention at the IPHAN-MS building. Corumbá. Improvised interaction on the part of the public that watched. Source: Sol Ztt, 2016.

As proposed by the philosopher Paul Virilio in his book *Critical Space*, space is not exclusively the built, physical, but also, an incessant profusion of special effects that affect the awareness of time and distances, as well as the perception of the environment. A network of coexistence between people, constructions, behaviours and lively, interactive routines.

## **5 Final considerations**

Videos, photographs, they are elements of memory storage, but there are criticisms about new protection technologies, especially about their preservation time. When compared to older forms of preservation, such as books and sculptures, they are ephemeral. But it is the characteristic of our digital age, and it is up to us to be able to deal with the difficulties and the potentialities that it can offer us. The preservation and construction of memory need not be just physical, as they have been in decades past. They ceased to be linear and branched off. The preservation and construction of memory occur today rhizomatically, if we use as reference the concepts of Deleuze and Guattari. Stimulating preservation in the digital age is going beyond the use of efficient hardware for the production of books and modelling of buildings. It also spreads the thought and culture of memory appreciation in a network, to make them present in more physical and digital systems. It is to seek alternatives to sensitise the population to the issue of equity using available technology. It is to thrill people to stimulate relationships and affections, among themselves, and towards the city in which they live.

Understanding how this content is created, transmitted, and preserved, we must also remember the information contained in them, as to how we should propagate the subjects so that it can expand to other locations. When we refer to the locality, we do it not only as a physical locus, but also the hybridised fields entering new spaces through the internet and programming algorithms. We think it is necessary to create enthusiasm and interest in people.

Therefore, just as technologies evolve, the society that creates them needs to keep up with the changes, which often seem disconnected from their being, either by the speed with which they change or by the feeling that they were not directly responsible for the demands. According to Pierre Lèvy (2001, p. 21), technology is a secretion produced by society itself, but sometimes it is not comprehended in its entirety. The bias of virtuality is present in people. Touch, smell, flavours, looks and sounds are important, and they develop the intuition in people, being necessary to involve ourselves fully. We are interactive beings, and our technology is producing more possibilities. To develop an interest in places and heritage, and to value memory, it is important that experiences and exchanges occur as close to people as possible, as this is how they are currently receiving most of the content around them on their personal devices.

Video-mapping showed dramatic results in the interventions, from the way the illusion with light created narratives and transformed forgotten buildings into a new, rich and power-packed setting. Digital mediation functioned as a link between physical memory and informational memory. It provided the conditions to create enthusiasm and exchange ideas, in a successful attempt at interactivity between humans from the machines. We believe that the videos, animations and images, both produced by our project, and what was perceived, registered and shared by the public, made up a kind of collective memory of the event and the actions, a small response within more updated preservation of assets. Quoting the musician Cazusa, observing the video mapping applied to the architectural patrimony, we thought to have seen "a museum of great news".

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