

# Aesthetics of the Digital Ruins and the Future of Art Conservation

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#### Abstract

This paper is a shortened version of "Corrupted Memories. Aesthetics of Digital Ruins and the Museum of the Unfinished" presented in Uncertain Spaces: Virtual Configurations in Contemporary Art and Museums (Lisbon, 2014). It addresses the aesthetics of memory emerging on the horizon of digital culture, aiming to understand their critical potential towards the proposition of new parameters for historic conservation, archive and museum systems in the digital age. Based on art works by myself and other artists, I suggest that glitch, recyclism and other similar movements/genres point to critical views of contemporary culture and memory. Instead of celebrating a progressive stable future, their peculiar "ruinology" allow us to deal with the social and emotional perception of loss, without betting on an imminent process of disappearance and planned obsolescence. I contextualize my approach in the contemporary "documentary overdose" produced in social media environments, and the "forgetting architecture " that prevails in it, due to permanent updates and discontinuities.

#### **Keywords**

Digital ruins, Glitch, Media Art Museums, Planned Obsolescence, Aesthetics of Memory, Digital archive

## **Memory and Aesthetics**

Since the 1990s, we have been witnessing the emergence of transnational policies relating to memory. Unconnected events, such as the 50th anniversary of the end of the Spanish Civil War and the beginning of the Second World War, the Fall of the Berlin Wall, the end of Latin American dictatorships and of apartheid in Africa, have been celebrated together through the recognition of special anniversaries and various commemorations worldwide. In parallel to the discussions that these events have aroused, new architectural works have been constructed, together with new designs for cities, while new commissions have been made for works of art, and countless books and films have been produced, both relevant and frivolous ones. In short, we could say that the most disturbing feature of this 21stcentury culture of memory is that it simultaneously stresses both the multifaceted and the banal aspects of these celebrations. Everywhere, there are critical discourses and superficial products created by the complex network of the

culture industry. Memory has become both an intellectual challenge and a commodity for easy consumption. [1,2] Although the aesthetics of the spectacle of memory is a recent phenomenon, we cannot say the same thing about the relationship between artistic practices and memory. Classical funerary art, such as the tombs and sarcophagi of the walls of the Medici Chapels in Florence, sculptured by Michelangelo and his disciples, the famous Renaissance portraits and the way in which they expressed a "choice of how and by whom one might be immortalized" [3,4], as well as the prestigious iconography that accompanied the whole fabrication of Louis XIV's public image [5], are just some examples that serve to clarify this hypothesis.

Until the end of the 18th century to talk about aesthetics of memory is to talk about strategies of keeping to posterity the image of some individual through the arts. Throughout the 19th century, in Europe and in American cities, as national independencies are accomplished, despite prevailing the construction of monuments devoted to celebrate individual personalities, the aesthetic of memory expand to urban scale. In the context of the transformations that followed the Industrial Revolution, the arts mingle with architecture and with planning itself, embodying new roles as to operate as guiding references for the collective memory.

As we see, until then there is a direct relation between the monopoly of power and the monopoly of memory and its forms of artistic expression. This monopoly, however, is not absolute. In contrast to the celebratory aesthetics of big names and glorious acts, rise up other points of view. The romantic images of the ruins, which envisaged in the past a supposed state of sublimity higher than the present misery is one of them. We must not forget, though at that time not so relevant, the innovative approaches by Baudelaire, who preferred painters of customs and physiognomists, as Charles Meryon, to the great masters of his time, for his ability to "extract the eternal from transitory". [6,7]

The aesthetics of memory that offered an alternative to the works of art produced within the central apparatus of power only became consolidated from the 1960s onwards in the field of contemporary art. In their diversity, it is possible to say that there are two basic components: site-specific practices that involve a profound reconfiguration of the paradigms and concepts of public art, and a whole 'wave' of artists whose work is dedicated to the theme of archives, an aspect that we focus on here. This is because it is possible to glimpse, in these archival arts, procedures

that will be incorporated and reviewed within the digital arts, especially those taking place in networked environments.

From the notebooks of the German artist Hans-Peter Feldmann to the works of the Brazilian artist Rosângela Rennó, but also including the artistic production of Marcel Broodthaers, On Kawara, Christian Boltanski, Bernd & Hilla Becher, and even younger artists such as the Brazilian artist Ícaro Lira, there are countless ways in which contemporary art, as Osthoff suggested in the title of her book, transformed the idea of the archive "from a repository of documents to an art medium". [8]

These transformations range from Feldmann's deconstructions of media to new approaches to history, as in the case of Lira, who has documented life in the concentration camps built for the isolation of poor sick people in Fortaleza (Ceará, in Northeast Brazil) in the 1940s, Boltanski's personal memories of Nazism in France, the European process of de-industrialisation registered by the Becher couple, to the appropriation of anonymous personal memories that became raw material for the fascinating narrative rearrangements of Rosângela Rennó. Among other projects by this artist, I should like to highlight here The Last Picture [A Última Foto] (2006). In this work, the whole history of photography and its relationship with the contemporary tourist industry are questioned, along with its tendency to privatise the landscape. In order to realise her project, Rennó invited 43 professional photographers to photograph the monument of Christ the Redeemer in Rio de Janeiro, using mechanical cameras of different formats that she had collected over several years. The project The Last Photo consists of 43 diptychs, each pairing the cameras with the last photo that they registered. Conceived at the time when Kodak announced it would stop selling the films traditionally used in cameras, this project raised a disturbing question: are these cameras capable of storing the history of photography that the digitalisation of images has changed the direction of? Moreover, with the increasing corporatisation of nature and of what we can see, how much longer will we be allowed to photograph Christ the Redeemer for free? Are these also our last photos of this famous landscape? How long will this statue remain accessible to our eyes?

For Rancière [9], the fight for visibility is one of the main topics of the political struggle that is taking place in the contemporary world. And, in that sense, the game of archival appropriations, which calls into question the monopoly of memory, also contests the images of power that are projected into the public sphere. But, since the beginning of the 21st century, this public space has also become an informational space [10], and, in that sense, it allows us to ask this question: what are the aesthetics of memory in the age of the digitalisation of culture?

### **Digital Ruins**

The above question seems absolutely essential to me. Never before has so much been said about memory as nowadays, and yet it has never been so difficult to have access to our recent past. This is undeniable. Few words have become as commonplace in the 21st century as 'memory'. Being confined until recently to the fields of historiography and neurological and psychoanalytic thinking, memory has become a basic aspect of everyday life. It is now considered to be a form of quantifiable data, a measure and even an indicator of someone's social status. There is a 'memory' fetish, as if it were a 'thing': How much memory does your computer have? And your camera? And your cell phone? That much? Is that all?... Memories are bought, memories are transferred, memories are erased and get lost.

We are not only experiencing a super production of memory, but also a documentary overdose. Every minute, 100 hours of video are uploaded to YouTube and 27,800 photos are uploaded to Instagram. As for Facebook, another 208,000 photos are posted in the same amount of time (every 60 seconds). In a recent presentation made by an analyst from Yahoo!, it was claimed that as many as 880 billion photos were supposed to have been taken in 2014. [11]

Where does all of this go?

It is common sense to say that the Internet never forgets, but the digital culture does not allow us to remember. We produce and publish on petabyte scales, using services that can disappear at any time. Our equipment crashes at the speed of a simple click and a strange nostalgia for an unlived past invades the circuit of popular consumption. How to deal with memories so unstable that they become depleted together with the lifespan of our equipment, and whose different types do not correspond to the cataloguing models used by museum and archive collections? What memories are we building on networks, where the more immediate present seems to be our essential time?

These are questions that artists are asking themselves. On the one hand, they question the overdose of documents, through projects related to database aesthetics and to the processes of information curatorship. Good examples here are the recent studies undertaken by artists/researchers such as Lev Manovich and Aaron Koblin, among others. On the other hand, they place in circulation approaches to digital ruins that provide a possible parameter for thinking about museums and archives at the present time. My point of departure is that the imminence of loss and the potential impossibility of restoration and retrieval have become the 'default', and not the exception, in the digital storage ecosystem. To learn how to deal with this permanent state of absence can be crucial for a new understanding of the basis of historical preservation. After all, as Henri-Pierre Jeudy wrote in one of his essays about historical conservation, "a contemporary aesthetics of abandonment would consider the 'ruins of modernity' to be something other than a disaster". [12]

This path makes it possible to think of the ruin as an opening to the future and to consider it within critical paradigms that operate as an aesthetic counterpoint to our linear visions of progress. It also allows us to rethink technology from points of view that are immediately less euphoric and less conservative, frequently contextualising it in relation to perspectives of instability and social disarrangement. Artists working on these themes and thinking about these questions seem more inclined to approach technology and the future in a more critical, more ironic and less desperate way. For me, a major point of reference in this discussion is Ernesto Oroza, a designer and artist who was born and grew up in Cuba, with a degree from the Instituto Superior di Diseño Industrial de la Universidad de Habana. He now lives in the US and is the creator of concepts that have proved particularly meaningful for my reflection on historical conservation, such as 'architectures of necessity' and 'technological disobedience'. Both are different dimensions of a vast 'ruinological' process ('ruinology' is another concept I'm borrowing from him) and, in order to understand them, we must remember that in 1991 Cuba's economy began to implode, after the announcement of Perestroika. The Special Period in Time of Peace [Período Especial en Tiempos de Paz] was the Cuban government's euphemism for what was the culmination of thirty years of isolation. This isolation had begun in the 1960s with the US boycott.

Oroza studied the mechanical devices created by the Cuban population for their survival from the 1990s onwards and began to collect some of these machines. Later he was to contextualise them as 'art' in a movement that he dubbed Technological Disobedience [Desobediencia Tecnológica]. He stresses the subversive potential of those creative machines, saying that technological disobedience is a concept that allowed him to "summarize how Cubans acted in relation to technology. How they disrespected the 'authority' held by these contemporary objects". By doing so, they desacralized technology and ruins at the same time. Every time I see these devices, I remember the statement of the Brazilian artist Helio Oiticica at the opening of A Nova Objetividade Brasileira (The New Brazilian Objectivity) (1967) - one of the most important avant-garde exhibitions of the 1960s and, furthermore, held during the military dictatorship: "Of adversity we live!" (Da adversidade, vivemos!).

This point of view is important if we are not to surrender to a simplistic analysis that would be compliant with the scarcity or precariousness existing on the one hand, and at the same time not to romanticise the way in which technology is produced and delivered to us daily. These questions arise in different ways in many artistic works, but I will concentrate here on *Chipped Movie #1: Minhocão* [Cinema Lascado #1: Minhocão] (Beiguelman, 2010) and *Broken Things* [Das Coisas Quebradas] (2012) by Lucas Bambozzi.

The videos of my series Cinema Lascado focus on devastated urban environments, where raised viaducts have led to social fractures in the cultural territory of the cities in

which they were built. This is the case with the *Minhocão* ("Big Worm", officially known as the Costa e Silva elevated highway) built in 1969, under the Brazilian dictatorial government. In Minhocão, images follow on from one another through a movement scanning the landscape, mixing hi and low tech, combining HD video with the technique of animated GIF1. The result is a series of sequences that deconstruct the space, which is then recreated as visual noise, guided by the predominant colors of the surroundings. In an intermittent way, it plays with saturation and suppression to reconstruct the perception of the surroundings and the city, the old and the new, up and down, the tool and the device.

Conceived by myself to be a video installation showing the *Minhocão* simultaneously from above and below in an art gallery, in the context of the *arte.mov* Festival in São Paulo, the final project is the result of a sequence of accidents, which included problems in the recording of images, software bugs and browser crashes. If, at first, my intention was to make an incursion into the urban ruins of São Paulo (or to discuss the lack of urban planning in the city as a process of sociocultural ruination), within a few weeks, the project had become a parallel and overlapping aesthetic discussion about the making of technological ruins today.

When I arrived at the gallery to set the piece up all the artists had already defined their own spaces and there was only a very small room with very tall walls left for me. The only way of showing the piece was to pile the two videos on top of one another. This final 'error' situation led me to re-edit the video that portrays the bottom of the viaduct upside down, which produced the effect of a continuity of the vertical lines in the video installation. The accidental way in which I arrived at the final set up of that piece signalled not only my first contact with the glitch aesthetic, but the discovery of how similar the materiality of the code corruption was to the noisy social attributes of some of South America's big cities, above all São Paulo. Long afterwards, when reading Rosa Menkman's book about the glitch aesthetic, I recognised myself in many excerpts, which could have been used as epigraphs or explanations for my own work. She says: "As an exoskeleton for such (post-utopian) progress however, the glitch does not just take place on a critically ruined surface. The choice to accept the glitch, to welcome it as an aesthetic form, means to accept a new critical dialectic that makes room for error within the histories of 'progress'". [13]

Brazilian artist Lucas Bambozzi has been exploring these ambivalences in different works. In *On Broken Things* (2012), he deals with the flow of communication turned into waste around us. The piece is an autonomous machine, which makes its own decisions based on the

<sup>&</sup>lt;sup>1</sup> The title in Brazilian Portuguese *Cinema Lascado* could be translated into English as *Chipped Movie*, but it loses its double meaning. *Lascado* refers to the Palaeolithic age, to thin slices, in trouble and in some contexts, to very good. The way it was produced combining techniques from the 'paleoweb' with the post cinema is behind its name ('lascado').

intensity of the electromagnetic fields that hover above us. The project refers to the tensions found in the relationship between consumption, consumerism and planned obsolescence, avoiding a paternalistic discourse about an allegedly ecological practice based solely on individual goodwill. It is a physical simulation of a continuous mechanism, which operates between the networks, and the real world, where autonomy eventually expires and everything becomes obsolete, leading us to realise that we live in the era of the 'Internet of Broken Things'. Bambozzi explains:

"On Broken Things is an installation-machine, whose autonomy makes use of the electromagnetic flows existing in the space where it is installed. Insistently, in a dramatic and ironic way (if such things can be described as machine attributes), it repeats the action of smashing obsolete mobile phones. The machine has as its input the variations in the reading of the signals circulating in the airspace (Radio Frequency signals, or fields/waves known as Extreme Low Frequency ELF or Electromagnetic Fields), whose saturation in certain environments can be troubling in several ways. From these data, the system accelerates and performs movements that culminate in a destructive action of the equipment stored on the machine, which for many may be a kind of revenge of the consumerism associated with technologies that we observe today". [14]

The piece was commissioned for *Tecnofagias*, the 3rd 3M Digital Art Show (2012), curated by myself, an exhibition that was held in one of the most important Brazilian contemporary art centres, the Instituto Tomie Ohtake. This was the first digital art show to have been held there and, in spite of the fact that the exhibition as a whole was remarkable for the institution and attracted large audiences, this piece in particular greatly excited the visitors to the exhibition space. Besides the crowds of people protesting about the destruction of mobile phones, it was common to hear them making comments, sometimes with a certain nostalgia, pointing to the phones as they came down the ramp towards their 'execution': "wow, I used to have that model"... "I remember that one"... "My mother gave me one of those", etc.

#### Museums of the Unfinished

Obsolescence, loss, broken devices and "files not found". This seems to be the more perfect picture of the digital culture and the aesthetics of abandonment that prevail in its realm. Maybe the imminent disappearance that is constantly to be found everywhere all the time justifies the apocalyptic tone that is suggested in the most basic commands for handling digital editing programmes, which invite us to 'save' files all the time, and not simply store them. Networks have no time. A system of permanent urgency prevails over them. The most recent publication is supposedly more relevant than the previous one. Now is what counts. And this 'now' has an increasing intensity. Try to find that very important comment posted by your friend thirty days ago on Facebook, that photo you 'liked' in some remote

day of 2012, or that remarkable event in which you shared a video back in 2008. Don't even try it.

It is true that all data can be tracked. Scandals related to electronic surveillance, such as Prism, involving the US government and companies such as Google and Facebook, can confirm this. But this is far from meaning that we have the right to remember whatever we want about ourselves whenever we want. Not that the models existing for the traditional cataloguing and retrieval of data are better, or even that they are the only possible ones. They are historically engendered and are related to forms of power and to the political, social and cultural authorities that define the criteria for conservation, the ways to institutionalise memory locations and to decide what is or is not left to be told as history. It is not a coincidence that the protagonist of one of the most brilliant short stories by Jorge Luis Borges - The Book of Sand [El Libro de Arena] - chooses precisely the National Library as the place for losing the book that tormented him. Putting it on a random shelf was like hiding a leaf in a forest. It could never be found again.

But this human scale restrained by institutions is now shaken by an overdose of documentary production that is unprecedented in history. If there is any question about this statement, let us make a comparison between the volumes of data stored in the world's largest library collection - The Library of Congress of the United States – and the Internet Archive Wayback Machine, an independent service that archives web pages daily. The Wayback Machine contains 3 petabytes of data (equivalent to approximately 700 thousand fully loaded DVDs and this is only part of the 9 petabytes of the Internet Archive as a whole). [15] If the Library of Congress had its entire collection of books scanned (32 million volumes), there would be 32 terabytes archived, considering 1 megabyte per scanned book (Lesk 2005). The Wayback Machine was created in 1996. The collection of books from the Library of Congress dates from 1815. The Wayback Machine grows at the rate of 100 terabytes per month, which is almost three times the size of the whole book collection of the Library of Congress in bytes accumulated over almost two centuries.

In an anthological essay — "The Historiographical Operation" — Michel de Certeau wrote a concise History of Historiography and summarised what this operation consists of in a few lines: "In history, everything begins with the act of separating, gathering and turning certain objects that were otherwise distributed into 'documents'. However, this separation is always done after the work of the archivist, who is responsible for the selection and organization of documents that will be kept at the expense of those that will be discarded". [16]

But, given the media avalanche we produce every day on Facebook, Instagram, Twitter and other similar social networks, how do we choose what will be stored? And what if they were simply deleted by a system error or a discontinuation of the product? How to deal with so much unstable and fragmented information produced by us and about us? Is all this information really relevant? And what can we do when it suddenly becomes unavailable? Could

museums be a solution in a context like this or should we remember Adorno, who wrote a long time ago: "Museum and mausoleum are connected by more than phonetic association. [...] They testify to the neutralization of culture." [17]

It is clear that in the age of the documental overdose we are living in, "accumulating data is like breathing: involuntary and mechanical. We don't choose what to keep, but what to delete." [18] Nevertheless, it must be stressed, all that we cannot keep is on the probable horizon of permanent loss. And this includes personal memories, private and professional information, relevant data, a lot of futility for sure, and culture, art, and uncountable (perhaps fundamental?) unfinished works. Of course it is important to prevent loss, but it is impossible to store everything that is produced nowadays.

Until practically the end of the last century, according to Michel Melot, one of the world's leading authorities on archival and library science, budget constraints "in their wisdom" prevented institutions from literally overflowing. In an article suggestively entitled "Des archives considérées comme une substance hallucinogène", he pondered what would happen if every citizen became a collector and a curator and we could keep absolutely everything in the name of future historians. We would arrive at a paradox, he concludes: "History finally produced solely for historians and also blocked by them, like the surgeon who immobilises his patient in order to operate on him". [19] After all, as we have learned in another short story by Borges ("Funes the Memorious" [Funes El Memorioso]) thinking is generalizing, not only archiving and adding more and more data. After all, as we learned in another short story by Borges ("Funes the Memorious" [Funes El Memorioso]) thinking is generalising, not only archiving and adding yet more and more data.

Just as important as paying attention to the instability of the cultural system we are living in, and understanding

#### References

- 1 Huyssen A. A cultura da memória em um impasse: memoriais em Berlim e Nova York. In: Huyssen A. Culturas do passado-presente: modernismos, artes visuais, políticas da memória. Rio de Janeiro: Contraponto; 2014. p. 139-153.
- 2 Peris Blanes J. Hubo un tiempo no tan lejano... Relatos y estéticas de la memoria e ideología de la reconciliación en España. 452°F. Revista electrónica de teoría de la literatura y literatura comparada. 2011 January:35-55.
- 3 Rubin PL. Understanding Renaissance Portraiture. In: Christiansen K, Weppelmann S, editors. The Renaissance Portrait: From Donatello to Bellini. New York: Metropolitan Museum of Art; 2011. p. 2-25.

how it demands new preservation methods, is realising that these are only provisional and palliative solutions. Due to the continuous speed with which technologies are discarded in shorter and shorter periods of time, the solutions provided for the time being are bound to create the same problems we seek to resolve. The transposition and adaptation of works to new equipment or their reprogramming does not result in definitive solutions. On the contrary, these procedures indicate the need for continuous updating, which, at some point, may also produce a quite distinct result from the work created by the artist in a given historical context. From now on, loss, change and even replacement will be more and more part of our conservational practice.

We are facing a noisy 'datascape', which goes far beyond our screens. Its signals and inputs/outputs are everywhere, and they amount to much more than just some reading or coding mistakes. The peculiar 'ruinology' of the art works discussed here is a constituent part of this digital epistemology. Because of this, they can point to alternative directions for thinking about the emerging politics of memory in the age of new monuments, museums and archives. As Robert Smithson wrote, "Instead of causing us to remember the past like the old monuments, the new monuments seem to cause us to forget the future. (...). They are not built for the ages, but rather against the ages".

Paraphrasing his words, then, we could say that, instead of celebrating a progressively more stable future, by preserving fragments of the past, museums of digital art should be the museums of the unfinished, the unrepaired, and the unretrieved. By doing this, they will allow us to deal with the social and emotional perception of loss without counting on an imminent process of disappearance.

- 4 Wölfflin H. A arte clássica. São Paulo: Martins Fontes; 1990.
- 5 Burke P. A fabricação do rei: a construção da imagem pública de Luís XIV. Rio de Janeiro: Jorge Zahar; 1994.
- 6 Huyssen A. A nostalgia das ruínas. In: Culturas do passado-presente: modernismos, artes visuais, políticas da memória. Rio de Janeiro: Contraponto; 2014. p. 91-114.
- 7 Brissac Peixoto N. Paisagens Urbanas. 1st ed. São Paulo: Marca D'agua; 1996.
- 8 Osthoff S. Perfoming the Archive. New York/Dresden: Atropos; 2009.
- 9 Rancière J. The Politics of Aesthetics: The Distribution of the Sensible. London: Continuum; 2004.
- 10 Castells M. Communication Power. Nova York: Oxford University Press; 2009.

- 11 Limer E. All the Stuff That Will Happen on the Internet in the Next 60 Seconds. [Internet]. 2013 [cited 2014 December 29]. Available from: http://gizmodo.com/all-the-stuff-that-will-happen-on-the-internet-in-the-n-
- 509886669.

  12 Jeudy HP. Espelho das cidades. Rio de Janeiro: Casa da Palavra; 2005.
- 13 Menkman R. The Glitch Moment(um). Amsterdam: Institute of Network Cultures; 2011.
- 14 Bambozzi L. Das Coisas Quebradas (On Broken Things). [Internet]. 2012 [cited 2014 December 29]. Available from: http://www.lucasbambozzi.net/archives/1929.
- 15 Drinehart. 10,000,000,000,000,000 bytes archived!. [Internet]. 2012 [cited 2014 December 2014]. Available from: http://blog.archive.org/2012/10/26/100000000000000000bytes-archived/.
- 16 Certeau Md. A operação historiográfica. In: Certeau Md. A escrita da história. Rio de Janeiro: Forense Universitária; 1982. p. 65-106.
- 17 Adorno TW. Valèry Proust Museum. In: Adorno TW. Prisms. 4th ed. Cambridge: MIT Press; 1988. p. 173-186.
- 18 Quaranta D. Collect the WWWorld: The Artsit as Archivist in the Internet Age. Brescia: LINK; 2011.
- 19 Melot M. Des archives considérées comme une substance hallucinogène. Traverses. 1986 Jan.:14-19.
- 20 Smithson R. Entropy And The New Monuments. In: Flam J, editor. Robert Smithson: The Collected Writings. 2nd ed. Berkeley: University of California Press; 1996.
- 21 Foucault M. As palavras e as coisas. 6th ed. São Paulo: Martins Fontes; 1992.
- 22 Lesk M. How Much Information Is There In the World? [Internet]. 2005 [cited 2014 December 29]. Available from: http://www.lesk.com/mlesk/ksg97/ksg.html.

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