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(ORGANIZATION)

ARTS AND MEDIA

AN OVERVIEW BY RESEARCHERS
FROM THE BRAZILIAN AMAZON



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FOREWORD

Arts and Media: an overview by researchers from the Brazilian Amazon brings together the results of studies carried out by five researchers in the field of arts working at two universities located in the Brazilian legal Amazon: Federal University of Tocantins (Universidade Federal do Tocantins – UFT) and Federal University of Roraima (Universidade Federal de Roraima – UFRR). Four of these researchers are part of the *Artefacto Research Group* | Research Laboratory in Art and Interactive Technologies, in which they investigate the dialogue between new technologies, communication aesthetics and contemporary art. The group is registered in the groups directory of the National Council for Scientific Research and Development of Brazil (CNPq); also is part of the Brazil Connected Network (Rede Brasil Conectado) and collaborates in investigations with LARSyS / ITI - Laboratory of Robotics and Engineering Systems (Laboratório de Robótica e Sistemas de Engenharia - Portugal).

The collection aims to present to both Portuguese and English speakers the ways in which artist-researchers who live and work in the legal Amazon region understand the relationships between art forms, media and digital technologies, whether in their immediate context or in displacement through other landscapes. Their experiences of artistic and academic practices in the Brazilian Amazon are the lens through which these authors look and interpret their productions and, eventually, those of others - including artistic pedagogical productions, irremediably associated with creative and investigative practices when it comes to artists -researchers.

In chapter I, *From the right to the city to gentrification: an analysis from urban and dystopian scenarios in Kleber Mendonça Filho's Movies*, authored by **Luís Müller Posca**, questions about the representation in the cinema of gentrification and the alteration of the urban fabric are discussed. The author uses three films by the Pernambuco filmmaker to approach that issues from a filmic perspective and, through a set of relations between the right to the city and urbanist intervention, he establishes a parallel between the remodelling of the city of Boa Vista (State of Roraima's capital) in the 1940s, by the architect Darcy Aleixo Derenusson, and the gentrification process brought about 1990s by the current municipal policy that has been transforming a marginalized space in the city into a place of tourist attraction.

In chapter II, *Between black boxes: remote-digital theater and the pandemic*, **Gustavo Henrique Lima Ferreira** approaches the experience of the dissemination of theatrical shows through digital media, a mode of diffusion intensified by the preventive social isolation to the pandemic of COVID-19, confronting it with the exploration of audiovisual elements in the play *Bagagem de Dejeitos*, produced with graduate students of theatre at the Federal University of Tocantins. Analyzing the multimodality characteristic of presential theater presentations, the text problematizes the relationship between technical images and performer presence, working with the concept of transmediality to think about the displacements between those theatrical productions and the ones which emerge due to the impediment of going to the theatrical building, imposed by the health crisis.

In chapter III, *For a tactical teaching of the performing arts: mediation and theater filmed in the North of Brazil*, presented by **Thaise Luciane Nardim**, the emphasis is on teacher training and the problem of student access to theatrical performances in Northern Brazil. Considering

the relevance of the student appreciation experience in the development of skills and competences necessary for drama teaching, the author argues in favor of theater mediation experiences lead in the classroom starting from the projection of filmed theater plays - a procedure usually considered inadequate by the literature in the field, whose production takes place mainly in the southeast and south of the country. The text then presents a proposal to adaptation of a conventional didactic sequence of theatrical mediation processes (those carried out in the physical presence of a performance), in a transposition that incorporates specific qualities of the experience of enjoying an audiovisual record.

In chapter IV, called *Celestial landscapes: an artistic perspective on three sky dimensions*, **Anderson dos Santos Paiva** presents a series of operating concepts and a set of artworks that are articulated providing an overview of a cartographic research. This investigation, carried out between 2014 and 2019, dialogues with ambulation and the creative practices in maker spaces, spanning from image and mobile devices to the creation of its own photographic equipment to discuss authorship and creation possibilities with nature agencies. It is a research in contemporary art that crosses several languages.

Finally, in chapter V, entitled *Memories of the sea: an interactive sandbox experience - grains in memory*, **Adriana Moreno Rangel** delves into the search for synesthesia and interactions between public, space, and the sea as a place of memory and a factor of creation and immersion. The author presents her career as an artist-researcher in the field of multimedia art, producing an interactive installation between journeys through different parts of the Portuguese coast. In this process, she tells us her encounters with some characters and their marine narratives, that get together like grains in a box capable of aggregating more and more memories every interaction.

This publication results from this meeting of researchers working in the Amazon, offering an overview of practical and theoretical works that point to an approach in the field of the arts focused on the media and technological devices. In the approximation between these investigations, it is perceived how a common reality plan is forceful in the north of Brazil, which certainly is not restricted to Tocantins and Roraima, and which resides in ways of thinking about reality through current themes related to the city, identity, location, landscape, and contemporary artistic production. Thus, it's worth noting that the impact caused by gentrification is added to the changes imposed by the pandemic of COVID-19, or even that sky and sea are in an interaction system where nature is not just a scenario. This is a meeting that makes it possible to think of the media as a factor to enhance contemporary theater and visual arts, through languages that hybridize and reinvent themselves between scenarios that open up to new perspectives.

CHAPTER I

FROM THE RIGHT TO THE CITY TO GENTRIFICATION: AN ANALYSIS FROM URBAN AND DYSTOPIAN SCENARIOS IN KLEBER MENDONÇA FILHO'S MOVIES

Luís Müller Posca

INTRODUCTION

Is thinking about the ideal city a waste of time? Or to bring light to the ways in which we live? When More (1516) wrote *Utopia*, he imagined a kind of non-place, non-existent in the real world, composed of an ideal government that provided the best living conditions for a balanced and happy people. In an attempt to answer objectively these initial questions about this utopian place that is the city, Park (1967) mentions that it is man's most successful attempt to remake the World in which he lives according to his heart's desires. But the city being that World that man created is also the place where he is condemned to live from now on. Therefore, indirectly by making the city, the man remade himself.

Inspired by this context of thinking about the city as a great utopia, this article addresses some aspects of the discussion about the right to the city, specifically about the process of gentrification, in order to support the central idea of this article, which is to demonstrate how the phenomenon of urban dystopias, depicted in cinematographic works, resemble the daily life of the cities today, so so address this theme: Dystopia and the city. I decided to sew the writing of the text along two central lines: How the city and urban problems, for example gentrification and the right to the city, were portrayed in urban and dystopian scenarios in the three cinematographic works of the director Brazilian director Kleber Mendonça Filho. After such fictional exemplifications, we will point out similarities of these processes associated to the "urban dystopias" linked to the capital interests, exemplifying with the case of the "revitalization" of the neighborhood known as "*Beiral*", an urban space of the city of Boa Vista (Roraima, Brazil), which is suffering a kind of erasure to give rise to the construction of the *Rio Branco* square, a tourist complex and commercial buildings, project that started in 2017 and is expected to be concluded in 2020, thus aligning the themes discussed in Mendonça's films with my research object in the PhD Program in Visual Arts - PPGAV-UNB, that will deal with the urban space of the city of Boa Vista-RR and its urban imaginaries.

SEGREGATION OF URBAN SPACE: from the right to the city to gentrification

A city is a place or urbanized area that includes a specific population that can vary from a few hundred to tens of millions of inhabitants. The term city is used to designate a given urbanized political-administrative entity that concentrates offers of cultural, religious infrastructure or consumption services and that gathers the most diverse flows and human activities.

The daily life, the excessive working hours, tons of visual information's and communication technologies are some of the factors that lead the populations to a dynamic of mechanization, in the use of city spaces. With all this, we no longer focus on architecture, nature, recreation spaces in this place, so the feeling of opacity limits us more and more to our individualities, that is, an opaque or diffuse mode in our way of using the city, in which we look to the things but do not see what is around us anymore, we see only what is within our reach quickly and in many cases through the lenses that can be glass windows or smartphone screens. This feeling of "opaque lenses" is very common to be identified in the landscapes of this urban space, disturbing the moments of contemplations of the everyday life and changes our ways of seeing the city.

In this urban space that we believe to dominate so well, that we fall asleep because we stop seeing it, the landscape imposes the distance that will make us (re)see the city that surrounds us. From this place, we are always on the verge of looking and not seeing, of learning or letting go of what is before our eyes. The everyday landscape would then be found, at all times, at the threshold of vision, between the possibility of being perceived or not, of going from the state of non-vision to vision. It would be there, always on the verge of appearing, waiting for the city observer to recognize its outline (DIAS, 2017, p. 96).

Factors such as the lack of public investment in the revitalization of collective recreation spaces, the depreciation of urban space by the citizens and the imminent feeling of lack of security mean that people no longer feel the urge to sit in the seats of a square for a chat or to read a book in this space. These and other factors make us think twice before going to enjoy a sunny day using the urban devices, to be able to sit on the street, chat, play, be left of on the grass, all this feelings has to do with what Lefebvre (2001) calls the right to the city¹. This right/possibility, it is related to explore your city, to move and use this urban space.

In urban studies, a term that has been recurrently used and is closely interconnected with the dystopias of the city is "gentrification", something that is close to the revitalization of abandoned and or neglected neighborhoods, however the intentions behind such revitalization are not the same as when such action comes from a social demand, that is, from the residents of the neighborhood. Situation understood by ENGELS (1872) apud HARVEY (2013):

The growth of large modern cities gives land in certain areas, in particular those of central location, a value that increases in an artificial and colossal way; the buildings already constructed in these areas decrease their value, instead of in-

1 Lefebvre defines the right to the city as a right not to exclude urban society from the qualities and benefits of urban life. The author writes about social economical segregation and its phenomenon of alienation. He refers to the "*banlieusards* tragedy", people forced to live in residential ghettos far from the city center. Against this backdrop, it demands the right to the city as a collective recovery of urban space by marginalized groups living in the city's peripheral districts (LEFEBVRE, 2001).

creasing it, because they no longer belong to the new circumstances. They are overthrown and replaced by others. This is especially true for workers' homes that are centrally located and whose rent, even with the maximum overcrowding, can never, or only very slowly, increase above a certain limit. They are torn down and in their place stores, warehouses and public buildings are built.

In gentrification, the potential of the site in terms of generating income and profits by increasing the values of the square meter is evaluated. With that, the city ends up modifying its urban and social design according to the speculation of the real estate market, soon regions becoming more expensive and others cheaper. A classic example of gentrification, very present in several cities around the world, is from a certain neighborhood, forgotten by the public authorities, in which, by the social imagination, it is full of problems, ranging from bad lighting, lack of security, pollution to drugs, but which may become interesting for a certain group of citizens in this city, either because of its privileged location or even because of its investment potential, with this, new businesses begin to settle in such location, due to the low rent price. The streets start to gain new visitors, attracted by the popularity of new stores and recreation places. With all this, new lighting is installed by the government to meet this social demand, works for the recovery of previously forgotten spaces appear, and all this has a cost, so the rents start to rise in price and finally, this old neighborhood has a different face, totally modified, inserted in the dynamics of the city and very popular, however the population that now frequents this neighborhood it is no longer the same, the former residents of the neighborhood, which was neglected, can no longer afford the prices of the new rents, nor do they have the purchasing power in these new local businesses, that are more expensive, and end up being "kindly" expelled to other city areas, so a neighborhood was revitalized for a particular social group to take advantage of, but its original residents were not contemplated and ended up expelled to other areas, often from central spaces to peripheral areas of the city (FURTADO, 2014).

In order to contextualize aspects related to this right to the city and about the gentrification process, in the next section of this article we illustrate these urban problems in Kleber Mendonça Filho's dystopian plots and then we will present the gentrification process in the *Caetano Filho's* neighborhood at the city of *Boa Vista*.

URBAN DISTOPIAS - The city in the plots of Kleber Mendonça Filho

Starting from the principle that dystopia is an utopia that has been badly accomplished, we bring to this text the vision of the city's problems from the perspective of three cinematographic works by brazilian Kleber Mendonça Filho, especially the dystopian background of the Brazilian cities present in his films through his view of the capital *Recife (Pernambuco, Brazil)*. I bring these examples because when we talk about dystopia, one of its main characteristics is the need for the art presence as a way of liberating the subject unlike utopia where the art does not exist, as well as the need to create a plot, because the dystopia allows us to reflection. These dystopian and urban plots can be seen in the director's three films, *Neighboring sounds* (2013), *Aquarius* (2016) and more recently *Bacurau* (2019) in partnership with Juliano Dornelles.

In his first feature film, *Neighboring sounds* (2013), we have as the background of the plot only one block from *Setúbal*, a subdivision of *Boa Viagem - Pernambuco*. The whole film

takes place practically in the space of this middle-class neighborhood of *Recife*. In this movie, it is possible to verify the verticalization process of the urban space, through scenes that shows old houses giving space to buildings of twenty floors or more, the “insecurity” of this urban space ends up attracting private security guards, not without first receiving the endorsement of a “street colonel” – Francisco, who owns several properties in the quadrangle and is therefore the boss of the land just as he was in his old disabled mill, the origin of his fortune. Throughout the film the deafening sound of the big city accompanies the characters of the plot from the stressful noises of a watchdog, the typical fallacies of a condominium meeting to the constant sounds of constructions. In addition to the noise, images of fences and bars trap the viewer in this block of *Setúbal*, full of condominiums and guarded by all types of security and protection technologies. The utopia of a nostalgic character Anco, attached to the past in the form of his former *Gurgel*, the only resident who still resides in a single-story house in the neighborhood and the memories of what this quadrangle was like in childhood, without paving, full of trees, bird sounds and the sea can be a counterpoint at the end of the first chapter of the film, when the character João at the top of a building has on one side the dystopian view of houses crowded without any finishing flanked by large and imposing tall buildings with the sea of *Boa Viagem* in the background and on the other side, a view of a nature that is still resistant, where it is already possible to see large residences on the seafront, but different from Anco’s utopia, contaminated by the cacophony of the big city, a future of dystopian uncertainties that loses space to rampant urbanism.

In *Aquarius* (2016), the setting also takes place at *Boa Viagem*’s beach, more precisely in the apartment of the protagonist Clara, who has lived there for decades attached to the ghosts of the past and the memories of a life residing in the small *Aquarius* building, which in a way, he ends up also becoming a character in the film, since his story is completely linked to Clara’s story. The building completely disagrees with the “revitalized” landscape of the place with tall, modern buildings around it. In his building, Clara lives among her nostalgias a very peaceful life that is drastically modified when real estate speculation and progress knock at her door, in the figure of a great contractor interested in her building to ramp up a large residential building by the sea, on *Boa Viagem*’s avenue above the *Aquarius* building. While all of her neighbors accept the value that the contractor offered, Clara is the only one who bravely resists the offers, the insecurity of being the only resident of the old building and the attacks made by the former neighbors and by the young and ambitious engineer Diego, grandson of the owner of the construction company, in order to pressure the resident to give up the offer without measuring scruples for Clara to abandon the *Aquarius* building. This sensitive situation demonstrated by Mendonça Filho reflects not only the reality of *Recife*, but also of several other places in Brazil and around the World, affecting thousands of people who live in large urban centers, where real estate speculation sees a certain area as noble and make the impossible for houses, townhouses and small apartments to make space for buildings with dozens of floors, due to the gentrification of their neighborhoods as mentioned in the previous section.

In his most recent movie *Bacurau* (2019), a futuristic dystopia that takes place in the northeastern hinterland far from large urban centers. The backdrop is the fictional city of *Bacurau*, which gives the film its name and is the name of a bird. In the timeline that unfolds the plot, this city is mysteriously erased from digital maps, as if it no longer exists. Even in this dystopian future, we can see the strong presence of technology with cell phones, tablets, internet and even a drone present in the plot, even though the city has basic infrastructure problems such as lack of food, medicines, basic sanitation and especially the lack of water. In addition to the church that

now serves as a kind of deposit and no longer as a place of faith, there is also the city's museum as a symbol of the place's memory and refuge, a kind of fortress present to ensure the survival of its inhabitants. The fall of politics, in the figure of a discredited mayor and a cowardly judicial employee subordinate to foreigners, villains of the plot, are aspects that add to the geopolitical erasure, with the disappearance of the city on the map, the elimination of the population is also portrayed by the genocide of the most "fragile" caused by foreign (American) figures who appear to decimate the local population, as if they were participating in a vile and sordid game. It is also possible to infer the state of urban chaos in which this future is found through a TV scene that shows the execution in public square of people in the city of *São Paulo*, it is a dystopia that portrays the erasure as well as the population (genocide) in favor of foreign and utopian interests, in an attempt to build a "better place".

Kléber Mendonça Filho's films generally address major themes related to the city such as coronelism, gentrification, localism, real estate speculation, the power of capitalism and genocide in urban settings at the capital *Recife*, in a poetic way reinventing the dystopian concept, which according to Gomes and Siciliano (2018) "provide a reflection on the representations of the metropolis and its political and ethical implications. The right to the city is discussed (Lefebvre, 2001) based on the imperative of progress - the binomial demolition/construction, the erasure of memory, combined with the processes of gentrification". All of this inserted in a temporal space that demonstrates how capitalism can trigger urban dystopias.

Also, according to the authors "The contemporary city is allegorized in the images of cancer and termites [in the case of the *Aquarius* film], which refer to corrosion: the disease of the human and urban body, whose locus is the metropolis.

THE CASE OF THE "REVITALIZATION" OF THE "BEIRAL" NEIGHBORHOOD IN THE CITY OF *BOA VISTA*

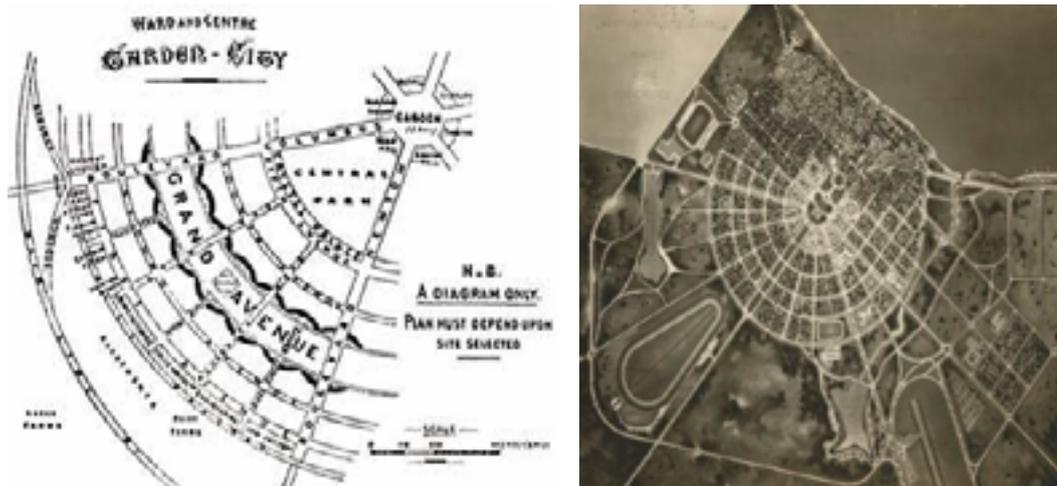
The city of *Boa Vista* (Roraima, Brazil), is an Brazilian urban space in which we find vast population and cultural diversity, mainly due to the great migratory process that has occurred since its foundation, attracting people from different parts of Brazil and its neighboring countries Venezuela and Guyana, as well as the presence of the variety of indigenous populations that still inhabit this place. It is the second capital with the smallest population among the capitals of Brazil and is located in the North, in the famous "Amazon Region"; it is also the only capital that is totally above the Equator, which makes it, consequently, the most distant capital of *Brasília* (Brazil's capital).

The state of Roraima was transformed into a member state of the Federation only in 1988; before, it was under the jurisdiction of the state of Amazonas, between 1890 and 1943, becoming, later, "Federal Territory of Rio Branco", in 1943. Its urban plan was started after 1944 (VERAS, 2009). Planned in an "open fan" format by civil engineer Darcy Aleixo Derenusson, between 1944 and 1946, *Boa Vista* was carefully wooded, with its wide radial avenues converging on the administrative center. According to Darcy Romero Derenusson, son of the architect who designed the city of *Boa Vista*, many people confuse the urban planning of this city with the urban planning of Paris and dispel this myth citing that at the time the inspiration of his father,

as of several other architects who planned cities, was to print the concept of garden city² on the project, but ponders some similarities with the planning of the French capital:

In the planning of Paris there is a relationship between the width of the street and the height of the buildings, which could not have more than half the width of the street as height, which makes the city ventilated. Because of this, there are not many tall buildings in Boa Vista, as there was no need to build large buildings. What was more valuable was the layout (CORREIA, 2016).

Figure 1 - Comparison of Garden city project design and urban planning of Boa Vista



Source: Adapted from Howard (1898) and Veras (2009)

With the proposal to integrate the urban space of the *Caetano Filho*, *Calungá* and Downtown neighborhoods, a region popularly known as *Beiral* with the *Taumanã* waterfront, which overlooks the White River, this, which is one of the oldest regions of the city, has seen its landscape change drastically since 2017 when the eaves revitalization was initiated by the city hall, requiring the removal of about 300 families from this region, either through social rent or through property indemnities for this population to “migrate” to other neighborhoods in the city, some of which were included in social programs and were relocated to the *Laura Moreira’s* neighborhood, about 10 miles away from the place where they lived before, within the central perimeter of the city (BARBOSA, 2019).

2 Ebenezer Howard (1898), like his utopian contemporaries in England at the turn of the century, envisioned a model for the ideal city by proposing a circular spatial design, the evolution of which can occur through “sections”. In the center is a space for the population, a central square from which radial tree-lined roads depart. The concentric circles are numbered avenues from the center, all wide and gardened. The third avenue, larger than the others, houses community facilities (schools, playgrounds, libraries, etc.). On the periphery are industries and commercial warehouses, and beyond them is the green agricultural supply belt.

Figure 2 - Demolition of houses at Beiral - Boa Vista



Source: Barbosa (2019)

Still in the year of 2017, the first houses that entered into an agreement with the City Hall started to be demolished, causing distress to the residents of the community, and some residents were even prevented from entering their homes at the time, however a commitment made by the Mayor was that the demolitions of all the houses would be carried out after all the agreements were closed and the residents handed over their keys. To occupy this “chaotic and intense drug dealing” space, a major tourism project, with water mirrors and administrative buildings, will take this place with the opening scheduled for 2020 (BARBOSA, 2019).

Figure 3 - “Rio Branco square” Project - Boa Vista



Source: Barbosa (2019)

The “Rio Branco square”, designed by the same architect responsible for *Ponta Negra* waterfront in *Manaus* (Brazil), intends to solve structural problems in the region, such as the preservation of floods, typical in times of river flooding, installation of public equipment to promote tourist attraction of the place, but at the cost that a portion of the city’s population was gentrified. We know that today, cities are focused on the market, including new production methods and new forms of segregation and exclusion in order to meet external demands and neglect internal demands.

There is an absence of population participation in the formation of the city by those who have been excluded from economic development, those who have been displaced through gentrification as in the aforementioned case or those who are suffering from exclusionary immigration policies. Social theorists Harvey and Mayer outlined the demand for the right to the city, originally defined by Lefebvre, as a kind of demand for all people living in the city.

The right to the city is a far cry from the individual freedom of access to urban resources: it is the right to change ourselves by changing the city. In addition, it is a common right before an individual, since this transformation inevitably depends on the exercise of a collective power to shape the urbanization process. The freedom to build and rebuild the city and ourselves is, as I try to argue, one of the most precious and neglected human rights (HARVEY, 2008, p.74)

Finally, this is just one of the examples that illustrates a little of the changes in landscapes and the roughness³ of the capital city of *Boa Vista* today. and benefits of urban life. Often, seen as a social utopia, it is above all the right to change ourselves for the change we promote in the city.

CONSIDERATIONS

In this text, we brought the thoughts of some authors about the theme of the city, in dialogue with the utopias and urban dystopias represented in cinematic plots and in the observation of the city of *Boa Vista*. Resuming Park (1967) the city is the world that men created, so he is doomed to live in that World as a process of building himself, a great utopia of an ideal World. Lefebvre (2001) points out several urban situations, problematizing the question about the right to use the urban space, a space that due to several factors has deprived a large part of the population in its use. Some problems that violate this right to the city were exemplified in Kleber Mendonça Filho's films in the name of "progress", through the binomial demolition/construction, the erasure of memory, combined with the processes of gentrification, real estate speculation, silencing and erasing the population in name of these revitalizations and amazing ventures to attract buyers, commerce and foreign tourism. All of these situations served as a basis to point out the utopia of a tourist space, under construction in the city of *Boa Vista*, the "*Rio Branco square*" from the process of gentrification of about 300 families in the space known as "*Beiral*". "Kindly", these families were expelled to other parts of the city, far from the central area they used to live in, especially away from White river, which was a source of income for several of the former inhabitants of this place. Finally, the city expels those who were there, violating their right to use this space by its former residents in the name of an utopian progress, sanitizes the central area (and more valuable in the eyes of the capital and the foreign), solving countless social problems from the region and transforming the ugly and chaotic into a dreamlike place, with the potential to attract outsiders who come to look at that urban space as a utopia of a modern and ideal city.

3 What in the current landscape represents a time of the past, is not always visible as time, it is not always reducible to the senses, but only to knowledge. Let us call roughness what remains of the past as form, built space, landscape, what remains of the process of suppression, accumulation, superposition, with which things are replaced and accumulated everywhere (Santos, 2006, p.92).

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CHAPTER II

BETWEEN BLACK BOXES: REMOTE-DIGITAL THEATER AND THE PANDEMIC

Gustavo Henrique Lima Ferreira

As a cultural and social manifestation, theater reflects its own time and, in turn, makes use of the technological advances of each era. As Ciro Del Nero points out, about the *Theatron* in ancient Greece: “In the architecture of open-air theaters, the perfect geometry guaranteed the perfect sound for any spectator, wherever he was seated” (2010, p. 60). From the machinery of medieval theater, to the use of lighting in the modern era, until we reached the use of projections and audiovisual resources on the scene, technological innovation has always been present in the theatrical manifestation. It is reasonable, therefore, that in a society in which a large part of interactions take place through digital media, this virtual coexistence takes place also in the theatrical making.

At the end of the 20th century, Hans-Ties Lehmann talked about a Post-Dramatic Theater, as a manifestation that broke with the predominance of drama and established itself in a hybrid relationship “located between ‘theater’, performance, visual arts, dance and music” (2007, p. 174). His work, published in Brazil only in 2007, is still actual and curiously already pointed to remote manifestations, considering those as a great risk to the theater.

What should really upset the theater is the tendency to transition to an interaction of distant partners through technological resources. Will this increasingly improved interaction dispute the place with the domain of live theatrical arts, whose principle is participation? (LEHMANN, 2007, p. 370).

Lehmann’s speech foresaw some of the questions posed by the emergence of what we are calling here remote-digital theater. The choice of the term takes into account all that theatrical presentation carried out remotely, that is, when artist and audience do not cohabit in the same space, and transmitted through digital media, communication vehicles based on the internet.

The advent of the global pandemic, caused by COVID-19 (Corona Virus Disease 2019), established a necessity for social isolation among people, impacting various sectors, among them the cultural sector, with physical spaces closed and their activities suspended. On the other hand, the need for quarantine and physical withdrawal of individuals, ended up promoting the use of digital tools for the establishment of social interactions, both at work and at leisure. This situation provoked a rush in search of a remote medium for the production of scenes, which boosted the number of shows transmitted digitally. It is in this context that an investigation is proposed on the structuring of this theatrical performance before the media apparatus, with its

implications, thinking about communication through digital media, in the very expansion of the notion of presence in an increasingly connected world.

Considering this panorama, we divided the sequence of this article into two moments: first, we will try to present examples of this remote-digital theater both before and after the advent of COVID-19. In the second step, an analysis of the relation of the scenic apparatus in a multimedia scenario, that is, what happens when the scenic stage, the theater black box meets the black box of the technical device, as Vilém Flusser presents us in “Philosophy of the Black Box” (2018). The process of creating images and (re)translating text into images, through the actor on the scene, which is now (re)organized, (re)translated and (re)transmitted through the mediatic technical-image.

Remote digital theater pre and post pandemic

Even before the outbreak caused by the pandemic of COVID-19, some experiences with the use of digital media and explorations of virtuality in the making of theater were already being noticed. In August 2015, Dirce Waltrick Do Amarante wrote an article for the newspaper *Noticias do Dia* (Daily News), where she pointed to “rethinking theater, the actor and the stage, also taking into account other media and other languages of the XXI century.” (AMARANTE, 2015). At the same time, Valmir Santos wrote about the play *Odiseo.com* (2015), which presented a postmodern and digital reading of Homer’s work:

Three situations combine fictional plans captured by a webcam in real time (also subverted after some time) and whose actions take place in three different places. In short, the Skype connection is the driving force of this scenic-technological system that operates on affects through image and speech. (SANTOS, 2015).

Going even further back in time, we find a great example of this relations between the scene and the digital in the work of British-German group *Gob Squad*, which has mixed elements of performance, theater, video in works since the 1990s. In 2003 the group created the play *Super Night Shot*, where four actors leave with exactly 60 minutes before the exhibition, each one with a camera, filming themselves at the streets. With time established by a chronometer, they propose a specific script in the region around the theater building, each with different functions and with a hero, whose main objective is to make a kiss scene, with someone who is on the street, worthy of Hollywood cinema. By the end of the 60 minutes, the four actors return to the theater and the result is immediately shown to the audience, through four screens set up on stage, with the sound of the footage synchronized live by two DJs.

The *Gob Squad* itself, when defining this work, places it in this suspended place, as a result of “an experience halfway between theatre and film that comments on our relationship to the urban environment”. (GOB SQUAD [2020] b), where fantasy and documentary mix and the Hero of the scene, tries to save the world by solving the problems that appear before him in that immediate moment, in those 60 minutes, prior to the pay is exhibited to the public. *Super Night Shot* had some presentations in Brazilian cities in 2006, one of which I had the opportunity to witness, twice, at the Nelson Rodrigues Theater, in downtown Rio de Janeiro, during the Rio-cenacontemporânea Festival. About those exhibitions on Brazilian soil, Renato Mendonça, in

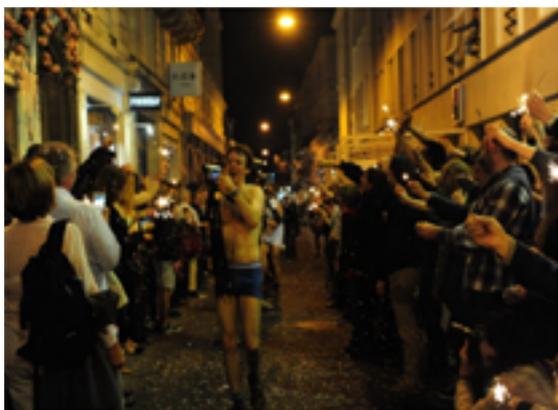
a report for the newspaper *Zero Hora*, highlights how the play ends up suspending, displacing this traditional connection between public and scene, breaking with characteristics of theatrical making:

If, in a traditional setting, silence has always been one of the most important elements, *Super Night Shot* follows the book of contemporary electronic media and approaches the Baroque spirit when it does not tolerate voids, spaces to be completed. On the other hand, the lack of a dramatic drawing weakens the connection between the viewer and what is on the scene (or on the screen) but reduces the emotional manipulation typical of the proximity between actors and the audience, which characterizes the theater. (MENDONÇA, 2006).

This proximity to the event, but displaced from the audience, who watches it through the suspended screens, already pointed, more than a decade earlier, to the remote relations between actor and viewer that this work seeks to discuss. Another point is related to the camera. The group itself emphasizes how the duration of the presentation and the time this ‘Hero’ has to act, were defined by a restriction imposed on the recording capacity: “Working under the constraints of the time limit (the length of the DV tapes) the group set out to capture a great moment of emotion, passion and liberation on camera” (GOB SQUAD, [2020] b).

Therefore, we have an effectively remote interaction. The actors record the scene through devices, cameras, and then display to the audience, who watches from inside the theater, through other devices – video and sound projectors – the scene that had just been performed. A curiosity is the fact that the final scene is recorded with the arrival of the actors at the theater, guided by the Hero. The audience, therefore, even before entering the theater room, observes this arrival, so that, at the end of the exhibition, they finally understand their place in the context of the scene, as a participant in the final triumph. Therefore, the audience is placed in an untimely displacement, where the place where it is physically present is displaced from the place where it is located on the scene.

Images 1 and 2



On the left, the actors arriving at the theater, greeted by the audience – credits *Gob Squad*. On the right, the audience, watching the videos that make the presentation – credits *Kraftwerk*.

When the audience is in the scene, it is not yet officialized as an audience and is not yet aware of the play. In turn, when it watches the presentation, it is out of the place of the event, to the point that those spectators come to watch themselves, as part of the video that is presented

as the spectacle, ending the cycle of physical and temporal displacement in that encounter. The audience filmed at the entrance of the theater is presented on video to itself as the audience sitting in the theater seats. *Super Night Shot*, according to information from the group's website, continues in repertoire, with the last performance recorded in November 2019, in Lisbon, and was presented in more than 30 countries, on 4 continents.

Serving as an example of this remote interactions of theater, through the digital field, for decades, *Gob Squad* also places itself as a reference of the study in the current conjuncture. The group planned to launch the work *Show me a good time* in 2020, in a format similar to *Super Night Shot*, where the audience would watch from within the theater an interaction in real time, of artists broadcasting their scenes live in different locations in the city.

In *Show Me A Good Time*, Gob Squad send out time-travelling, shape-shifting explorers into a strangely unfamiliar reality, to find out how to go on and where, amongst the dust and the dirt, a good time might be found again. (GOB SQUAD, [2020] a).

With the advent of the COVID-19 pandemic and the impediment of the public's presence in the theater building, the group reorganized the work, which opened on June 20, 2020, directly from the HAU - Hebbel am Ufer theater, in Berlin, with a 12 hour live broadcast (6 pm to 6 am local time), where only one person stood on stage, in front of an empty audience, interacting with the other artists by videoconference, while "the remaining Gob Squad performers were scattered at home or on the streets and met strangers for joint actions via a split-screen, always looking for good times in bad times." (KAMPNAGEL, 2020).

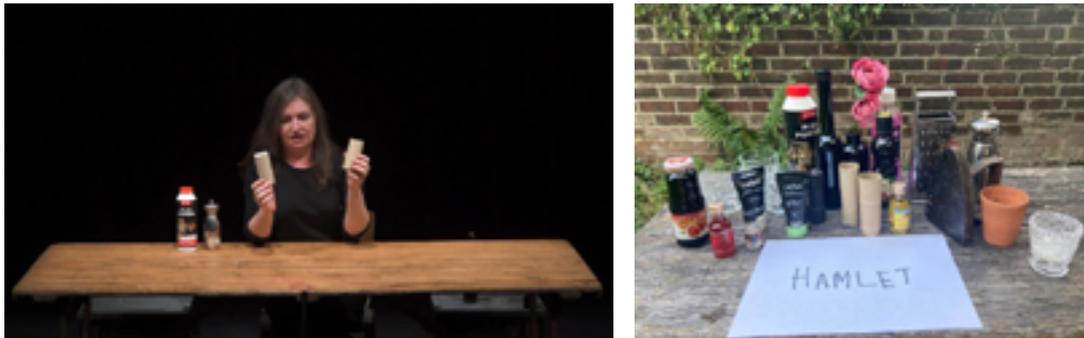
The play was later presented in July, directly from the Theaterhaus, in Stuttgart, and, in August and September, directly from Hamburg and Frankfurt, respectively, where this great 12-hour event was divided into a 4 days presentation. In Stuttgart and Hamburg, in addition to the virtual modality, with online broadcasting, there was a resumption of the face-to-face audience, even though the theater seats were only partially occupied. This leads us to another important issue, which is the realization of plays in the presential and remote modes, simultaneously. At the center is the notion of a "tele-presence" in the Greek sense of *tele*, as distance and presence from its Latin etymology of *praesentia*, being ahead, being within reach. On one hand, there are those who inhabit the *théatron*, the place from which one can see, on the other, there are the remote spectators on their *tele-théatrons*, places from which the event is seen from a distance. At the same time, we see the actors perform the same kind of interaction, between those present on the stage, in direct contact with other actors and actresses through a telepresence. If the face-to-face viewer is invited at a certain moment to participate in the scene on stage, the one who watches at home is summoned to participate to name each of the chapters of the show, by telephone, again the radical *téle*, away, now next to *phoné*, of sound, in a distant communication by sound. The theater then functions as a vortex, a force of attraction that seeks to intertwine these presences in the search for the scenic event. In search of a "good time"

Another example of a presentation that shares live audience with a virtual one is in the project of the English group *Forced Entertainment*, called *Complete Works: Table Top Shakespeare* (2016), created to mark the 400 years of the bard's death, in which all his plays were presented as short stories of about 40 minutes each, always in the same format, the stage had only a table and chair, where the artist sat, using everyday objects as characters to assist him in this storytelling. In front of him was the audience and, in the middle of it, the camera, positioned

to frame the artist and table, broadcasting the play in real time, free of charge, through an electronic address, however, without being stored, allowing that the work could only be followed live, in temporal coexistence before its physical exhibition.

In 2020, responding to the COVID-19 pandemic, the English group returned with Shakespeare's plays as *Complete Works: Table Top Shakespeare at Home*, now with storytellers broadcasting directly from their homes, at their tables, adapting to the objects from their personal use. The presentations, now could only be followed by remote access.

Images 3 and 4



On the left, *Hamlet's* presentation, in 2016, in its original format. On the right, *Hamlet's* "cast" prepared for the performance in social isolation. Image credits - *Forced Entertainment Group*

Back to 2019, I sought to work on this relationship between theater and technical images in the construction of the play *Bagagem de Desjeitos* (a pun on the similarities in Portuguese of the term "Tailing Dam" with a "Luggage of Clumsiness"), with graduating students from the Theater Degree Course at the Federal University of Tocantins - UFT. The stage proposed a dialogue with the audio-visual, mainly with media images, using for example excerpts from television news, videos that fed back into the scene and served as a setting for the presentation. The actors found themselves immersed in this great television news panel that raised themes of social and political relevance. In addition to the live audience, the play was broadcast live via Facebook and also had its scenes recorded, which were later edited and used as material for an installation carried out under the same name. In addition to video clips, the installation featured photographs, texts and materials that were used on the stage, such as vinyl record player, and the combination of scenic lights with the use of candles with the production of aromas by mixing the burnt wax from the candles with the use of incense sticks.

The objective, therefore, was the construction of a theatrical experience on three levels of testimony: an audience in person and contemporary to the event; the audience that followed live through digital transmission; and, finally, an extemporaneous testimony to the event, through the installation, where all elements that formed the presentation were presented, as well as objects of testimony of its realization.

Images 5 and 6



From left to right, records of the play *Bagagem de Desjeitos* (2019), and the Exhibition *Bagagem de Desjeitos* (2019). Both credits from the author.

Different levels of presence and access to the theatrical event. On the one hand, access to works that could not be seen by those people in a democratization of access to art. On the other hand, the loss of presence and the risk of an even greater elitization of the audience's physical space, restricting the access of part of the public to the remote mode only. With technological advances and the multiplication of interactions through digital and virtual means, the very concept of presence begins to be rethought. So, how can an art that is still defined by the presence deals with a situation where the presence itself is transformed. If the presence becomes virtual, would that be also a possibility for the theatrical construction? How the interaction between the scene and the audiovisual appear in this expanded reality?

Returning to the consequences of the advent of COVID-19. As already mentioned, the necessary social isolation caused the closing of theaters and the cultural sector had its activities in general suspended, making it impossible to perform on-site presentations. Several artists tried to reorganize their projects, or to create new works for a virtual format. Public policies were created for this purpose, such as the *Funarte RespirArte*, which offered a contribution for the construction of cultural products for virtual exhibition in various areas, including scenic arts in general. Another initiative was the approval of Law No. 14.017, known as the *Aldir Blanc Law*, which "Provides for emergency actions aimed at the cultural sector to be adopted during the state of public calamity." (BRAZIL, 2020)

A new way of commercializing these works has also emerged, on platforms like *Sympla*, defined in its own website as: "a set of solutions created by Sympla to hold events remotely" (SYMPLA, 2020). Among this set of solutions is the sale of tickets for virtual broadcasts, including theatrical performances, through the *Zoom* videoconferencing platform (another company that became popular during the period of social isolation). Examples of theatrical activities used by Sympla include the play *A Arte de Encarar o Medo* (The Art of Facing Fear), by Grupo Satyros, from São Paulo, produced directly for the virtual modality, as well as the project *Solos em Todos os Solos* (Solos in all Grounds), which brought together works from the repertoire of artists Fábio Vidal, from Salvador, and Vinicius Piedade, from São Paulo, reorganized for the digital-virtual format.

The group *Clowns de Shakespeare*, from the city of Natal/RN, in the play *Clã_Destin@* (Clandestine), worked with an idea of direct contact, advertising on their social networks, where the viewer could make contact, thus receiving instructions for transferring or depositing the

ticket price and filling in a form, which would prepare him to be, at the appointed time, with a link to access Zoom. Designed for the virtual format, the work tries to build a more intimate relationship with the public, by restricting the number of accesses, with closed presentations, each for only 6 people.

The works transmitted by Zoom were not recorded. In both projects there is an attempt to maintain a unique character of the theatrical exhibition. The idea that each presentation is unique and not repeated over time.

Images 7 and 8



From left to right, advertising for the project *Solos em Todos os Solos*, by Fábio Vidal and Vinício Piedade, and *Clã_Destin@* from the Clowns de Shakespeare.

In this first part of the article, we seek to present examples, pre and post pandemic, of the construction of this remote-digital theater. We were able to observe, then, how the set of projects shown via streaming increased radically, highlighting the importance of discussing these issues and analyzing the impacts of this mediation through media, a transmediality. For a second part of the article, we will analyze this process of mediation and transmediality, as well as the relations between theater and technological apparatus.

A Transmediality through devices

Understanding the media as a communication tool, we used this concept of *mediality* and *transmediality* as presented by Lars Elleström, who uses the term *mediate* “to describe the process of a technical medium realizing some sort of media content is mediated for a second (or third or fourth)” (ELLESTRÖM, 2017, p. 182) and the *transmediality* when the media content goes through a new mediation process, “is mediated for a second time (or third or fourth) time by another technical medium” (ELLESTRÖM, 2017, p. 182). Elleström uses the poem as an example:

A book page can mediate a poem, a diagram or a musical score. If media content is mediated for a second (or third or fourth) time by another technical medium, I say that it is transmediated; the poem that was mediated by and therefore

seen on the page can be heard later when it is trans-mediated by a voice. (ELLESTRÖM, 2017, p. 182).

Elleström advocates that media products can be analyzed and, thus, categorized, based on what he defines as characteristics, as basic traits, inherent in all media products, without exception. These traits, which the author will call media modalities (2010 and 2018b), fall into two categories: pre-semiotic and semiotic. The modalities called as pre-semiotic, are not so named by a relation of denial to the process of signification. On the contrary, the prefix chosen reinforces the notion that these features are necessary characteristics and conditions for the process of signification and communication to be established. According to Elleström, there are three pre-semiotic media modalities: the material modality - “Media products are all material in the plain sense that they may be, for instance, solid or non-solid, or organic or inorganic” (ELLESTRÖM, 2018b, p.19); the spatiotemporal - “the spatiotemporal modality consists of comparable media traits such as temporality, stasis, two-dimensional spatiality, and three-dimensional spatiality.” (p.19); and the sensorial - “sensory perception is the common denominator of the media traits belonging to the sensorial modality – media products may be visual, auditory, tactile, and so forth.” (p.19-20).

The fourth type of media is part of the semiotic. It is directly derived from the other three and is responsible for the representative traits. While the pre-semiotic modalities have mediation relations, being responsible for the conditions under which the media product is formed, the semiotic modality is representative, being responsible for the perception of the other three. How does materiality reveal itself? How it is perceived through the form of representation. The same is understood for space-time and for the sensorial, as the author himself approaches:

The mediated sensory configurations of a media product do not transfer any cognitive import until the perceiver’s mind comprehends them as signs. In other words, the sensations are meaningless until they are understood to represent something through unconscious or conscious interpretation. This is to say that all objects and phenomena that act as media products have semiotic traits by definition. (ELLESTRÖM, 2018b, p.20).

Theater would therefore be a media product with multimodal characteristics. Its materiality, for example, mixes organic and non-organic elements. Its activity is inserted both in time and space and works with visual, auditory, olfactory and, often tactile and gustatory senses. As for the semiotic modality, the theatrical representation, in turn, can be either iconic, indicative or even symbolic.

It must also be noted that media products are often more or less multimodal on the level of at least some of the four modalities, meaning that they in some respect include, for instance, both the visual and the auditory mode, both the iconic and the symbolic mode, or both the spatial and the temporal mode [...] I think it is fair to say that all media are multimodal as far as the semiotic modality is concerned, whereas some media types, such as computer games and theatre, are multimodal on the level of all four modalities. (ELLESTRÖM, 2018b, p.21).

Elleström understand theatrical making, in its multimodality, as a construction process based on different references, that is, this construction of scenes that are the result of a succes-

sive development of research and practices involving different stimuli from different sources, whether textual, imagery, audiovisual, among others.

Returning, then, to the notion of the mediate, we can consider the making of theater as a mediation process, in itself. The mediation of the theatrical spectacle through digital media would be in the field of transmediality, that is, in this mediation of the second degree. If we consider the realization of this remote-digital theater as a transmediation and that, according to Elleström, “all transmediations involve some degree of transformation” (2017, p. 182), a fundamental point to this research is justified, which is the transformation of the theatrical making when moving to a remote-digital format. What would these transformations be? Are they sufficient to establish their own distinct characteristics? What is the impact of this transmediality through digital media and the use of the technological device.

The impact seen throughout the 20th century of the dialogue between theater and other languages, resulted in a post-dramatic theater that presents a fluid notion of theatricality, leading to aesthetic hybridisms, as Lehmann (2007) points out, mixing incorporating characteristics of different manifestations and directly influenced by that Flusser will point out as technical images. How, then, can this new relationship with digital media and the profusion of the production of scenic content through these media could transform the making of theater? In this Flusserian perspective, where the ontological elements of technical images render the phenomena that manifested before them obsolete, what would be the impacts of this digital transmission of the theater, of this remote-digital theater, in the theater itself and in the notion of theatricality?

Whoever owns the device does not exercise power, but who programs it and who carries out the program. The game of symbols becomes a game of power. It is, however, a hierarchically structured game. The photographer exercises power over who sees his photographs, programming the receivers. The photographic apparatus exercises power over the photographer. The photographic industry has power over the camera. And so ad infinitum. In the symbolic game of power, it is diluted and dehumanized. This is what “computer society” and “post-industrial imperialism” are. (FLUSSER, 2018, p. 40).

For the realization of what we are calling here remote-digital theater, the artist’s action, the scene, needs to be captured by a device, in this case a camera, passing through a transmission via digital media, and then been displayed on another device (TV, cell phone, computer, tablet, etc.). Unlike photography, we do not have a permanent physical surface where the image produced by the device is arranged. The subjective spectator will have to relate, himself, with another device, with questions analogous to those of the director. Watch scenes in full screen, or split, or even in the background, while performing other activities. He can be a hidden spectator, or have his image shared too. In some cases, you can interact, make comments. But you will also have to deal with possible limitations, related to the device’s technical capacity and the speed connection of the internet network.

Transposing the relationship presented by Flusser (2018), the theatrical scene has power over those who watch it. Meanwhile, the cameraman exercises power over the theatrical scene. The video camera has power over that camera operator. The digital media vehicle has power over the technical image produced by the camera and, on the other side of the spectrum, it has power over the industry in the production of applications and devices depending on its broadcast. The digital vehicle, therefore, has power over the device in which the viewer watches the play and

this device has power over the viewer itself. In this brief analogy of the chain of dehumanizing power that Flusser pointed out in the game with the devices, we can see how the issue unfolds when we are talking about a simple transmission of a play via a digital medium, where we would still have to consider its multimodal character, involving the game of power between individuals with different functions, in addition to different operators, playing with different devices, such as lighting, sound, image projection and so on. Each operation presents its own game with an apparatus and all of them organized in a single presentation.

(In) Conclusion

What are the consequences of a phenomenon whose categories, that were previously organized by physical interaction in person, are now organized by technical images, and when even the notion of presence is virtualized? Are we facing another theater, another artistic form, or just the subsequent transformation of an activity that goes back thousands of years?

Césaire Molinari, in his work on the *History of the Theater* (2010), points to a very specific moment of an eclipse of the theatrical institution, but, nevertheless, presented a great development of what the author defines as a “generalized theatricality”: “It is not, obviously, a question about the survival of the most simplified forms of theatrical language, but of perpetuity and, moreover, the detailed dissemination of the category of spectacle professionals.” (MOLINARI, 2010, pp. 79-80). Taking only this information, the reader might think that the Florence teacher was referring to the transformations that the theater had undergone since the late 19th century and throughout the 20th century, leading to what Peter Szondi (2001) initially called “the crisis of modern drama” and which Hans -Ties Lehman (2007) defined it as the emergence of a “post-dramatic theater”. Molinari’s text, however, mentions centuries before, about the medieval period. When quoting the 14th century philosopher Hugo de São Vítor, he points out that, even in what is considered one of the periods of greatest hiatus of the theatrical institution, there were thinkers who pointed out that: “The theater, could be concluded, that does not exists as a thing in itself, before there are the theatrants⁴.” (MOLINARI, 2010, pp. 79-80). New theatricalities emerge, exactly as responses to the challenges of their times. In the 21st century, how the next steps of this transformation of the scene will take place in the digital world? We may need a greater historical distance to affirm about some of the questions raised here, but we can already see that the theatrical work, as a reflection of its time, continues to reorganize itself, finding new ways of existing and, as a reflection of an increasingly connected society, it is also connecting itself more and more to the devices.

We cannot say that the theater abandoned the precepts of its magic scenic black box, but it is notorious that it enters more and more, together with all the society that forms it, in these new technological black boxes. Technologies that more and more are driving us.

4 The term *theatrant* is a free translation of *teatrante*, wich, in context, means theater maker.

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CAPÍTULO III

FOR A TACTICAL TEACHING IN PERFORMING ARTS: MEDIATION AND RECORDED THEATER IN THE NORTH OF BRAZIL

Thaise Luciane Nardim

The well-known quote from Boaventura de Souza Santos tells us that, in order to practice thoughts that foster some cognitive justice with historically subsumed epistemologies in relation to the modern Western thought, it is needed “learning that there is the South, learning going to the South; and learning to depart from the South and with the South” (Santos, 1995: 508). For the case of the experience from which this text departs, just like in many other cases in which the idea of South is mostly metaphoric – as in the drawing “América Invertida”, made by the Uruguayan artist Joaquim Torres Garcia – the South here discussed is geolocated in the North: in the Brazilian Northern political macro-region (NO) – and, more specifically, the area where since 1988 is composed by the state of Tocantins.

The demarcation of such a stance in the text is justified not because I intend to ponder upon the *tocantinense* identity or upon elements that characterize the *tocantinenses* scenic arts, but because the task to which I commit is, based on my practice as an artist-professor-researcher; born, raised and shaped as human being and artist within the South-east region; migrated and shaped as a professor to and in Tocantins; to think about didactic strategies that foster learning in/with theater from a precise cut over the Tocantins we live in, namely, the little presence of professional theater plays – if we think of theater in its conventional Western definition.

The contact with this context opened me to reflect that, differently from those cities in which I had studied and professionally performed before arriving in Palmas, the theatrical schedule from the most part of the cities is closer to scarcity than abundance. How, then, to train theater/drama professors/teachers by saying that performing and attending plays is the way one learns, if strategies are not developed in order to bolster the access, by these professors in training, to a reasonable amount of theatrical reception experiences; and in the same time accessibility tactics to students – which these future professors will assist – are not jointly thought?

Set in motion by these concerns, I’ve carried out some inquiries over the mediation of recorded theatrical plays projected in classroom with the available audiovisual equipment for

the theoretical classes. Currently, we find theatrical plays from all sorts of companies in *online* video platforms, a lot of times available for free, something that seriously expands the possibility of a student, who is out of the usual and commercial theatrical circuit, with the most diverse poetic theater. From these experiences, I've been practicing with a method which I consider still in development, but with enough maturation to make it available to professors with similar concerns.

To start the explanation about the practice of theatrical mediation in classroom with recorded theatrical plays, it is appropriate to introduce the reader to the didactics of a theater class. The didactic sequencing of a traditional theatrical play presupposes a chain of activities that range from the emphasis in preparing the body and mind for the creative work (improvisations and scenes). I call this sequence as I-everyone-world, even though its usage has a more practical didactical effect than a conceptual precision. Carmela Soares, a professor at the Federal University of the State of Rio de Janeiro, proposes that these moments, in the context of teaching theater to non-actors, should be understood in four steps: the first as the group integration; the second, the scenic stimulus; the third, the scenic composition; and the fourth, the evaluation. The author observes that this division is not rigid and that shorter classes, as those held in a formal educational context, will probably encompass only two or three steps per class – a case to which the author recommends, following the traditional methodologies of theater teaching, to include the evaluation step. The author refers to (Soares, 2007: 88) too. The author also quotes Hilton Araujo, to whom there are two kinds of games in theater classes, when categorized by its function in the class structure: the preparatory game and the dramatic game. “According to him, the preparatory game, as the name implies, is a preparation. Its goal is to bring to the student the necessary skills for the execution of the dramatic game, such as creativity, socialization, observation, imagination and relaxation” (p. 88), being necessary to turn to them according to the needs that the planned activities in class impose. Araújo justifies his categorization as:

In the ontogenesis, the dramatic game (make-believe) precedes the theatrical game. Differently from the dramatic game, the theatrical game is intentional and explicitly aimed to observers, i.e., it presupposes an audience. However, to both the dramatic and the theatrical games, the dramatic or symbolic performance in which the players get involved is developed by the improvisational action and the roles to each player are not established a priori, but conversely they emerge within the games' interactions (Japiassú, 2001, p. 21)

According to Soares (2007), an adequate method to begin the kind of classes she suggests is the discussion circle – that she considers to be a method integrating the first step, “group integration”. Without explicitly characterizing what, in the circle, would configure a discussion, the author affirms that the circle would be a prime moment in which the professor conveys information over the theatrical practice to the students, such as the practice's benefits and the motivations to take part of the classes – besides the opportunity for the professor to perform a diagnosis about the energy and the willingness of the students.

A big amount of people who have been present to theater classes within the last 50 years in Brazil may identify these steps in the great majority of their classes. Few of us, however – and even among the graduated ones – had access to the sources that had given rise to this structure, or even to the reflections or thoughts that justify this sequence is performed this way and not by any other. I don't intend, in this text, to rewrite this historical recovery, but only to observe that

even within the arts – where many of us claim to find the most complete exercise of freedom – there are many hidden prescriptions, subtle impositions received acritically. They are not, necessarily, bad or wrong⁵. Or good. But, it is bad or wrong not to acknowledge this hereditary quality in our practices, since this a featuring attitude of a servile and prone to colonization mind. When in a professor’s shoes, it is always worth to ask: what is the sequence this class asks for? What is the activity this class’ learning goals require? To accomplish this learning goal, do I really need body stretching? Do I really need to work with games? Should I use the spectacle room (or the rehearsal one), or might I use other spaces – the court, the garden? After all, can I make theater in the garden? Is it theater if it happens in the garden? Is it theater if it happens with a low level of performance? Why?

Is it theater if it is watched in the television?

It would be arrogant and colonial to say that the Northern region does not have its own theater. It would be totally erroneous, actually. In Tocantins, there are numerous scenic manifestations with traditional features – as the *dança da súaia* – indigeouns or as I will call it, *popular renewed (popular renovado)* – as the *juninas*, formerly known as *quadrilhas juninas*, a collective spectacle with contextual and strucutral similarities to *carnaval* parades or to the *feira do boi* (cattle party) at the *Festival Folclórico de Parintins*. The point of this paperwork is not aimed to destitute the scenic arts produced in this region or its genuine status. The problem placed to me by the theater professors training, established in the pedagogical project of the course and by the demands presented to me by its syllabuses, was about showing these students what the identification regime of the contemporaneous theatrical scene considers as a good theater. We may, certainly, question the values and directions that determine what, who, when and how get into this category. Undoubtedly, it carries elements with a great colonial load, guided by the modern Western theater and very close to cultures that perhaps are not the ones we wish to exercise and buld. However, the building of this critique is not my goal in this paperwork. Inclusively because, in consonance to the guidance the professor offers to the work of mediation of the recorded plays, this experience may have an allineation or emancipation feature, because one can not wish to escape something she doesn’t know well.

The didactic sequence structured by Carmela Soares, showed above, shows us a class with emphasis in the corporal-vocal creation by the students. Despite being a dominant practice in theater classes, it is not the only possible sequence. If we consider, as a work metaphor, the Triangular Approach’s tripod by Ana Mae Barbosa (2014), composed of the actions “do”, “see” and “contextualize”, we may infer that, although seeing and contextualizing are present in this model’s theater class, it tends to favor doing. It is evident that, in every game class, a reception dimension is involved – as when the students watch their colleagues’ improvisations and comment them in their evaluations. But, how may one work with emphasis in the reception, with the so-called audience “formation” and the expansion of the student’s repertoire, shifting the provisional privilege from doing to seeing? And, particularly, how to do it when the traditional

5 About the technique and its transmission, the stage director Jerzy Grotowski used to say that “A philosophy always comes after a technique [...] Do you go home on your legs or your ideas?”. Ansewring to this question, the Brazil-based stage director Yan Michalski, in the preface of a book about Grotowski: “A thoughtful reading of this book will help any actor to arrive at her house – the theater – on her legs and ideas, in a convenient way” (Michalski, 1971, not numbered).

formulas of this kind of practice presuppose a resource one only has poorly – the frequent trip to theatrical plays? Mediation is one of the possible ways to achieve this goal.

According to the experient theater mediator Wendell Oliveira, “theatrical mediation is an artistic pedagogical process that connects the public and the theatrical work, making access and training available to people, as autonomous audiences, capable to watch, criticize and get transformed by experiencing artwork” (Oliveira, 2011, p. 32). As for Flávio Desgranges, current university professor at the State University of Santa Catarina, theatrical mediation can be understood as “any initiative that enables the audience’s access to theater, physically or linguistically” (Desgranges, 2007, p. 76). The proposal I present dialogues to both definitions, since it presupposes the processual condition; the hybrid artistic-pedagogic feature; the access both physical and linguistic; and the fostering of a self-thought audience condition, aiming at promoting a sensible and interpretative consumption autonomy, and an artistic-cultural artifact appreciation; possibly producing, inclusively, an affective demand for the gathering with these artifacts and events – namely, spectacular, scenic or theatrical ones.

According to Ingrid Koudela, retired professor by the São Paulo University and broadly read by the literature about theatrical pedagogy, audience formation actions aim to make sure to the audience the access to the symbolic goods of the culture with which the audience is involved. In the current practice, it is about, as noted above, promoting access to the dominant culture – the theater with European origins, in the way it assumes under influence of the patriarchal colonial modern capitalism. According to Koudela,

The German playwright and stage director Bertold Brecht understood theater appreciation by the audience as a democratization process of the means of production. At the same time that the physical access to theaters should be expanded, diversifying the ways theater is produced, the access to symbolic goods implies in a process of education, focused in appreciation and the reading of theater performances by the audience (KOUDELA, 2010, p. 15).

The choice of video-screening of theater plays may be used as a colonization or emancipation resource, just as a potential renovation to theater itself. In the classroom, the contextualization promoted by the professor is what makes possible that this tactic assume one of the those features. A theater professor who does not have access to theater plays in her city, or who does not gather material conditions to take her students to the theater, may opt for the planning of a video theater reception class aiming to bring to the student appreciation tools, fruition and plays reading and this may, by itself, bolster the progressive linguistic and expressive emancipation for those individuals. Maybe, via videos, the professor may take them to get to know a theater’s structure, and certainly she will be able to work with theatrical language issues that, even in the video, are evident. But the political-cultural status this experience has to the students will be guided by the speech the professor builds around it. Is all of this “real” theater? Is all of this the “correct”, “good” way of doing theater? Is all of this something we don’t possess, locally, under any way and that we need to bring over here? Or is all of this another scenic manifestation, the same as the one from the Western modern capitalism, fruit of its relationships, just as our traditional scenic manners are fruit of our culture and our process over time? Is all of this a good spectacle, just as our artists are also producing?

reception mediation process may be held in different spaces and formats. One of them is a mediation inside a theater, that happens when a group goes to the theatrical space chosen by

the spectacle to its establishment (being the theater building the traditionally established place), and within this own space, after the performance, the process of mediation is developed, conductable by non-scholar institutional mediators, by the artists themselves or even by a professor in early agreement with the spectacle staff. Within the schools I attended, in the countryside of São Paulo in the 1990's, whenever the professor took her classes to the theater, it was called as an "excursion" (*saída*) or "cultural excursion" (*saída cultural*).

It is also very recurring to the excursions that their mediation actions happen not within the theatrical space, but inside the school, before and after the excursion to the spectacle, with preparation activities with the group and their participation as audience in the play – before the excursion – or other activities that collaborate with the reading and acknowledgement of processes of theatrical language identified in the play – after the excursion, as the group returns to school or on the next day.

According to Koudela, the preparation before the excursion to the theater and the activities after it may build opportunities to establish teaching-learning situations "where discovery and knowledge building are present" *despite* the extraordinary aspect of the excursion, when compared to a school routine (Koudela, 2010: 13). My perception, however, is that precisely this extraordinary aspect of the activity gives it a big learning potential. The teaching performance in moments prior to or after the excursion helps the expansion and the reinforcement for the learning – or only for schooling, depending on the case. Hence, I don't perceive that learning can happen despite the extraordinariness, but by the means of it and with it – indeed, it seems to me that the professor may appeal to the extraordinary aspect of the event as a learning bolster.

Another similar process to the mediation that happens within the excursion, before and after it, is the mediation of a theater play screened in the classroom. Spectacles may happen in the school's theater, if it has one, in theater-like places the school may have, as amphitheatres or stages in assembly rooms; or even in yards or other spaces, depending on the poetic options the spectacle presents. Also in case of a process within the school theater, mediation actions may be executed by the professor before and after the play. It is important to stress, however, that although the first scenario and this one may be very similar, they keep differences⁶ between them that should be taken into account when planning the activities: is watching a play in a small yard stage, sitting on the floor, with no lighting equipment, different (or not different) than watching a spectacle in a equipped and comfortable theater? The difference is not for better or worse: being sit on the floor may not feature luxury of being sit on a leather chair in an antique theater, but may, also, promote less intimidation, leaving the student at ease to simply watch the play. The point to be stressed is that the professor should be aware about the differences and make good use of them to enhance her planning.

The classroom, then, is a space where previous and subsequent mediations in relation to the experienced spectacles may happen both in the theater building and at school. However, besides these two kinds of experience, mediation processes can also be executed with the reception of recorded theater plays screened inside the classroom. It is certainly not an ideal situation, since the recording of the play is not followed by the main feature of the audience experience, which is the attendance sharing – being it between stage and audience, or among enjoying-audiences-in-situation (*espectadores-fruintes-em-situação*). I don't intend to claim that this didactic

⁶ However, without any hierarchy funded solely in the quality aspect from both experiences, reaching to a perception of a better or worse experience.

strategy should substitute for the excursion to the theater-itself. But in many cities this is perhaps the only contact a student is able to have with theater or certain kinds of theater.

I am used to attend to movie-screened opera sessions in Palmas. In this very privileged city, in terms of cultural equipments when compared to other cities within the state, and even in comparison to some other state capitals within the Northern region, there are some annual theatrical exhibitions, sometimes even more than one a month; we have the privilege to have a municipal theater room, and a very well equipped room in SESC's Activities Center. However, none of these rooms has the capacity to host a big opera. It would also be very hard to bring a big opera company to this small town, and the possibility to go to a bigger city only to enjoy an opera exhibition is small, since we are 800km away from the nearest state capital. So, watching an opera in the movies, even being very far from the experience of watching it in an opera theater, is of great value to me. It may be an impulse to my demand of consuming more opera, and to organize my schedule to go physically to an exhibition; or it may be, conversely, sufficient by itself, offering me every opera possibility available.

Likewise, the renowned literature researcher Massaud Moisés, a former professor at the São Paulo University, had published in 1960 a book about Portuguese literature where he analyzes and presents many excerpts of the analyzed works. At the time it was published "A Literatura Portuguesa", the Brazilian editorial market was small; publishing a book was a very costly process; there was no internet to ease access to paperworks; and libraries existed in a lower number. Many of the books analyzed by Massaud were only available in Portuguese editions, and many of them only in Portugal. Trying to bypass this restriction so his Portuguese literature presentation could make sense to the reader and reached a larger audience, he crafted his literary mediation work, promoting physical and linguistic or symbolic access to the texts at issue and, consequently, bolstering popularization of the Portuguese literature in Brazil.

Tactic/Didactic: mediation of the theatrical reception using recorded theater plays

Before preparing the class, I suggest the professor to perform a memory exercise: how was your experience with theater in school? Did you or did you not have classes? When was the first time you have been to the theater? Do you remember how you felt? From these feelings you had, which one would you like to convey to the students? What are your relationships with other scenic manifestations? Does this professor participates in any of them as an actor, player, performer? What about the students, do they? The answers to these questions must be triggers to be rubbed with learning goals of the class (or classes) for the spectacle choice.

To choose the recorded spectacle that will be watched by everyone, thus, keeping consonance to the learning goals, unvariably the professor will have to watch it carefully. Having watched it, and selected the chosen spectacle to be screened, the professor must gather information about it. She must also research about the company that produced it, search its release or synopsis, check every place it had been already performed and learn about the audience reactions in these locations. All these informations can be gathered from the internet. The professor must also check if the text the spectacle uses, or that serves as a basis to it, in case there is one, is available for reading, or if can be made available by the companies or researchers. With the

text in hands, she must read it carefully. It is possible that, inclusively, this professor may have selected this spectacle because she is working in an interdisciplinary project with the Portuguese professor, for example. This is great. She can also plan some of the activities listed above so they can be executed in classroom with the students. I call this classroom activity that precedes the play Relationship Dynamics (*Dinâmicas de Relação*), because I conceive this activity as the moment to promote a first approach between the student and the spectacle to be watched, always stressing it is all about a recorded play, i.e., showing the students it is not a movie, a product made to be consumed as an audiovisual by a video mediation – just like us, the student must be aware that it is about an experience that substitutes another one, that, in the moment, is not within our reach.

Ingrid Koudela points out to two methods when the goal is to prepare the students to watch a theater play: the discursive (*discursivo*) and the exposive (*apresentativo*) ones. According to the author,

The discursive method focuses mainly on the information mediation (introductory lectures, text documents) and on the verbal opinion exchange (debates). It aims mainly to rational and cognitive knowledge. The exposive method uses creative and ludical techniques to prepare for a theater visit and spectacle reading after the return to school, like games, drawings and conversation circle, through which students tell their sensible experience. It aims primarily the associative and emotional understandings. (KOUDELA, 2010, p. 23).

Despite considering elucidative the nomenclature proposed by the author, I will not use it, due to the understanding that it does not entirely fit to what I seek to propose: in the Relationship Dynamics, the discursive and the exposive aspects are matched, showing up as possibilities to the academic planning inasmuch as the spectacle requires it, convoking the professor to create her own actions as in an artist crafting process, coming up with what is needed to be invented. The Relationship Dynamics must offer the student the first key for the “opening” of the spectacle –i.e, to allow them to get closer to the play, offering some basic tools so she can be at the video without much prejudice, fears, lazyness, not only in a rational and discursive perspective, but also in a sensible and symbolic one.

Many people, critics of a certain dirigisme of the mediation works, may say that this initial guidance overconditions the student’s glance to the play – as if, by the professor’s propositions, the student starts to see the same play the professor sees, and not the one the student herself would. I counterargument that this look arrives at the classroom already driven, i.e., it is never neutral, or a theatrical “nobel savage” look – someone with a supposed pure and clear perception: a student, even being a child, is buried under an audiovisual culture that drives the way she looks – literal and metaphorically – to the theater. And, in general, the contemporaneous student is looking at the theater looking for the blockbuster’s or TV’s soap opera’s esthetic. Lens after lens, he shall use the one we carefully planned to offer – although, of course, a certain care must be always kept since our goal is to favor the student’s autonomy as part of an audience.

There are two triggers for the choice or selection of the Relationship Dynamics: 1) the learning goals – here they are once again! And 2) the theater play itself. The professor may choose only a theme or feature of the spectacle, as the usage of a certain scenic resource, or the scenographic building space, or any poetic choice by the stage direction. These themes – formal or by its content – will determine the activities – lectures, speeches, correlated videos projec-

tions, text reading, dynamics, improvisations, scene creation and many, many other possibilities to be invented – that will relate to the spectacle to be watched.

Here I bring a brief narrative from a Relationship Dynamic I executed for the mediation of the theater play “Inimigos” (Enemies), of the company Cia de Feitos (São Paulo/SP), with a Pedagogy class, in the context of the course Foundation and Methodology of Movement and Arts Teaching. It was a class with no experience in theatrical practice, that had been practicing some games for two months, only in our weekly meetings. In this case, each of the three steps here described lasted for about three hours. I’ve started our first meeting reading out loud the definition of “Inimigo” from Wikipedia, hiding all the incidences of the word “inimigo” – creating a guessing game with it. During the guess trials, many alternative ideas within the semantic field of enemy, such as opponent and contestant, were suggested – and then it was possible to discuss these issues in a comparative perspective. In sequence, we enumerated common sense sentences or popular sayings about enmity and also thought about them. At last, using some of the enounced sentences and what we had discussed about them, we’ve created a brochure called “Breve manual de como ser um inimigo” (A brief manual on how to be an enemy), in dialogue with an existant manual from the play, which is an important element of the dramaturgy for the expression of the ethical stance of the spectacle towards the theme it discusses.

The following class – in my case, but it is possible it is “the next moment”, for people who does not have long classes – is the moment where we watched the play. Although we were not in a spectacle room, it might be appropriate to think along the students about the traditional structure of a theater building. Box-office, *foier*, spotlights, teasers, aisles, dressing-rooms, sound mixers and light mixers, the display and the folder of the play: which of these absent elements in the experience of watching a recorded play makes its effects felt? The same is valid to spectacles that appeals to other kinds of scenic spaces: what can we learn from the experience of this space not being in it? Depending on the space where the recorded spectacle was featured, it is also important to think about its social and historical context. The São Paulo Municipal Theater, for example, or the Amazonas Theater, in Manaus, The Peace Theater, in Belém, involve a rich history around their buildings, the audience disposal – organized by social classes – stories about their construction, architectural elements. How is it adressed in the video reception?

At a traditional spectacle room, the spectacle starts with the traditional announcing three buzzers. Maybe also with the curtains opening. There may be a black out (many spectacles use the resource of turning off all the lights in the spectacle room before its beginning). Are these elements present in the recording?

There is a lot to watch, listen to, analyze. Although, one can not forget: the experience of watching theater is good by itself, and that’s why one needs to allow to the student the privilege to focus upon what he sees. For this reason, I do not recommend the allowance of questions during the projection, neither there is an observational script nor a questionnaire about the play given to the students prior to the play. This kind of material pedagogizes the experience and avoids the sensible relationship with the spectacle. This moment is the opportunity to just watch, perceive (or not) a certain detail, enjoy it (or not), choose where your eyes are at. Watching the spectacle must be simple and good, so the willingness to watch another one may come.

We then arrive to the after-play – a moment I call Appropriation Dynamics (*Dinâmicas de Apropriação*). In this occasion, we will incentive some actions that would happen naturally for

students that had been more affected by the experience, such as commenting over the spectacle. At a first moment after the class watches the recorded spectacle, the professor must worry about favoring a sharing movement of perceptions. Koudela suggests, for a live spectacle mediation case, that the professor “may develop varied procedures to evaluate the appreciation and reading of the spectacle, making suggestions for the thematization of the play’s content” (KOUDELA, 2010, p. 25), something that also applies here. However, more than evaluating, the first moment must be willing to foster talks – but talks *about*. Even that, in this moment, there is no need to guide thoughts, the experience will be better if the stimuli the professor gives are directed to issues of the spectacle. The questions may be as, for example, “What took X to do Y?”; “Why couldn’t Character A marry Character B?”; “What did the characters want to do the most?”. They vary according to the age range and the cultural repertoire of the students, such as to the class’ or module’s learning goals. With younger students, it is crucial that the stimulus of the talks approach tastes: what did you enjoy? What didn’t you?

Conducting the dialogical stimuli, it is up to teacher to be organized to move from a general standpoint to a narrower one. In this way some mediation techniques are structured, among which is *Image Whatchig*, a technique developed by Robert Ott for museums mediation. For example: in a play with a traditional fable-like narrative (a story with a beginning, middle and endlogically and chronologically chained), the professor may start asking what is the story the play tells; then, more specifically, what is the theme or subject of the play; then, being even more specific, asking about the happenings in specific scenes and about characters, scenario, time passage; and then about their specific features.

Another guidance that helps conducting productive talks in the after-play, this one a bit more directed to future professionals or audiences who are not so immature, subsets the appreciation moving from the objective to the subjective standpoint. The first step, the most objective one, is the one in which one questions what was seen or heard – what was captured by the senses, but in an objective way. The expected answers are: “I saw a red clay brick”; “I heard an acute sound”, “I saw a continuous left-to-right movement”. The attempt is to get answers with the least possible subjectivity – although a pure objectivity is, as we know, impossible. The second step, intermediate between objectivity and subjectivity, brings up questions about interpretations – “what you understood”. Answers: “Character A was jealous of Character B and that’s why he killed her”; “The house was old and that’s why she was afraid. At this point, one may wonder what took the student to that understanding, reinvoking, if possible, answers to the first questions. The third step, by its turn, is the one worried about subjectivity, where one may ask: “What did you feel? What did you think of it? Have you, or have you not enjoyed?”. Once again, the previous answers may be brought back to the discussion aiming to help the student build a path of elaboration of her reception experience, at the amount it is possible and interesting.

Koudela warns that professors and students must be conscious or have their awareness raised that the task to understand a theatrical experience is personal to each of them. “The goal of the conversation circles is to stimulate students to produce personal interpretations, developing their autonomy” (2010: 25). It is not about, however, not having a correct or wrong answer, as it is recurrently said in mediation processes: this is why there is a group sharing an appreciation experience within a common play, to which symbols and signs are erected based on the culture these people share. A student who saw or heard something very different from the others and says that during a conversation will be rapidly “corrected” by the others – she may be hu-

miliated too. This situation is an excellent opportunity to approach a noises on communication topic – in both the artistic and everyday communication.

The second step of the class or Appropriation Dynamics moment, to be executed after the dialogic stimuli, must be carried out in a way that the students translate their experiences symbolically. The creation of improvised or written scens, performances, urban interventions, or even works in other languages as drawings, collages, tridimensional visual works: all these expressive possibilities can make the student to come back to herself to be in power over the experience she underwent, getting to know even more its meanders and her relationship with everyday cultural practices. Once again, one thing may bring out the other one: if the students improvise over the play and you check there was a thematic or formal recurrence, it can be followed by an improvisation of another activity, or an adaptation of those that had been planned before, so this theme that gained relevance in their perception may be problematized. In this sense, I conclude the section with another brief narrative of an experience: with the same Pedagogy class, still in the course Foundation and Methodology of Movement and Arts Teaching, in the Appropriation Dynamics of another spectacle we had recorded, “O pato, a morte e a tulipa” (The duck, death and the tulip), of the same company. At the end of the reception class, I had noted that the students were bothered with the end of the spectacle. But in the Relationship Dynamics class, during the mediated talk, they talked about this discomfort and we started naming it. Then, identifying that the main scenic reason for the discomfort was the way the final scene was given, and having in sight the learning goals of the class- which were still related to the esthetic training of the educator, to her development as a person who appreciates art -, I improvised a convenient solution to that experience’s appropriation, abandoning the activity I had planned and guiding us to improvise variations over the final scene, including an obstacle where each of the groups would have to use a certain material, selected by me, in their scenes. Executing this new activity, I checked that the reflection over the theme of the play was expanded, collaborating for a mature psychical elaboration by the students.

Concluding Remarks

As the reader may note, in general terms, the theatrical mediation of the theatrical reception using recorded spectacles does not differ a lot from that mediation made with a local experience, with live plays. However, it is not the reason why the professor could offer the same treatment to both processes. To start with, exhibiting a recorded play means to opt for an acknowledgement of the need to exhibit a spectacle of that kind in that context and being aware of what it means. So, exhibiting the recorded play must come from a secure understanding that it is about a tactical action, whose occurrence is strictly attached to its context. It is a positioned action. The awareness of this stance makes sure to the professor that the conditions to build a speech over the practice that pours the particular context of the academic planning out to arrive at the classroom – inclusively, although not only, in an invention format. Sharing the motivations of this didactic option with the students – being it in a Basic Education level, or in a Higher Education one – is an indispensable part of this tactical pedagogy of the scenic arts.

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CHAPTER IV

CELESTIAL LANDSCAPES: AN ARTISTIC PERSPECTIVE ON THREE SKY DIMENSIONS

Anderson dos Santos Paiva

INTRODUCTION

Celestial Landscapes is a project initially founded by <Anonymised artist> in the scope of the PhD in Contemporary Art of the College of Arts of the University of Coimbra, in early 2014, through a research centered on the precarious image and the perspective of celestial presentation.

Field works performed in Portuguese territory allowed the project to reach a larger scale and produced a series of artworks from photography to interactive installations, in a cartography of spaces and territories aimed at the exploration of a persistent and at the same time fleeting landscape, similar to the way we perceive the sky.

As a practice of discovery, wandering was one of the main triggers of the artistic project. Additionally, the search for a minimalist view of the landscape and a certain visual silence where atmosphere and nature feature a co-creative presence was the basis chosen to undertake our practice.

This process is at the center of the reflections on the Anthropocene (in the sense of the impact of the Human as the main geological element able to shape the landscape of the planet), as a disequilibrium, producer of dystopias that jeopardizes the future of humanity by the impacts against non-human beings. We believe that the current condition makes it necessary for emerging artistic actions to be capable of dealing with this critical point through the processes poetics, rescuing the fabulation plane to confront reality. It is to this initiative that we report through this project.

In this article we present the main questions of the development, concerns and concepts we worked on during five years (2014-2019) demonstrating how the research was done, methodologically and procedurally, as a displacement and construction of a new perception about nature agency, encompassing both cosmologies and the level of lightness, fable and cosmicity.

In order to clarify the research process, this paper is structured around the concepts of *Behind-Sky*, *Full Sky* and *Beyond-Sky*, related references and corresponding artistic explorations. Finally, we present the developments and convergences that enable to define new contours and impact in academic, artistic and community contexts.

1. SKY-BEHIND

The first layer of the sky – *Sky-Behind* – is the one anchored in the horizon line and makes reference, as visibility, to the secondary plane of the composition, be in painting or photography. Although artists such as John Constable (1776-1837) and William Turner (1775-1851) raised the status of this landscape in their paintings in the nineteenth century, the celestial atmosphere was for a long time portrayed from its relationship with other nature elements and not as a territory of thought and reflection capable of taking the central plane of the image.

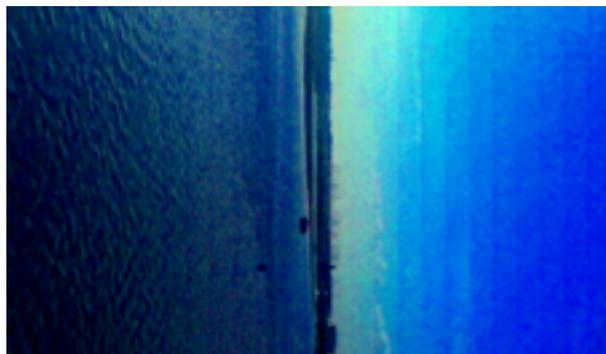
Marked by the notion of temporality, *Sky-Behind* often appears as a twilight and dawn passage, radiating in resonance and perspective from a point of light. It has a luminous agency by chromatic variation that, however, gives way to a certain framing and balance between the recurring shades of blue, white and gray used to portray its “mood” due to variations and climatic changes. Being in the base plane of the three layers of heaven, as we here propose, it is not subordinated to other hierarchies such as the celestial spheres of aristotelian astronomy. *Sky-Behind* is done by the linearity that forces gaze crossing, from its resting point in parallel to earth.

Invitation to deep immersion by this landscape is, therefore, of first order and was through which we left to capture its poetic atmosphere with the *Vertizon* work.

1.1 Vertizon Photographic Serie

Vertizon (2014-2016) is a photographic series that we created in order to begin our cartography of the celestial landscapes and that was produced as precarious images (SHAEFFER, 1996) by means of low resolution mobile media (Figure 1). *Vertizon* is also the concept incorporated in the creative process and refers to the unconventional lines that arise from the photographic capture of images of the sky in a 180° vertical panorama, from a front horizon to a background.

Figure 1 - *Vertizon*



Anonymised artist, *Vertizon* (detail), 2015

The concept originated in our wandering practices and aimed at georeferencing as a support in affective mapping of landscapes from the recognition of reference spaces for photographic captures and sky appreciation.

Japanese artist Hiroshi Sugimoto's (1945) artworks entitled *Drive-In/Theaters* and *Seascapes* were instrumental in establishing a parallel between the lines of force caused by the light rays and the contrast of the celestial field obfuscated or diluted when in contact with the sea.

The subtle filmic and temporal transition that reveals the audiovisual residue as pure white on the projection screen and at the same time records the movement of the celestial stars in *Drive-In*, creates a double dimension through a game in between elements that seem to antagonize each other on different fictional planes. In *Seascapes* the balance by the centrality of the horizon line also defines two levels of diverse nature (sky and sea) that simultaneously cross and unite from the fog that suppresses the linear framing.

Developed from the dissolution of the landscape and the transitory movement in Sugimoto's images, allied to the practice of wandering inherited from the flaneur – walking and getting lost in time – and from the surrealist walks, the *Vertizon* series proposes an encounter with nature through both corporeality and perception on a sky also formed by lines of subjectivity (Figure 2).

Cartography was both the poetics and creation process (ROLNIK, 2011) we used as a method in our research practice, as proposed by Hissa (2017), where the artistic research generates its own method.

Figure 2 - *Vertizon*



Anonymised artist, *Vertizon*, 2015

Vertizon was consolidated as a tracklog and photographic series, produced in 30x30cm format and printed in the fine art setting from precarious low resolution images with the use of pixel noises aiming to show not a passive-contemplative view, but critical and reflective perception of the sky as a singular landscape in continuous agency of forces within the earth.

The series was exhibited in *Ocupação Tropicana: Multiplicities* in 2015 in Coimbra (Portugal) – a collaborative and independent artistic event promoted by artist-researchers. Since then it has been reconfigured to large dimensions and the overlap of transparent grids in new artistic applications.

2. FULL SKY

The self-referenced sky in evidence and plenitude – *Full Sky* – exempts an open dialogical conduct by overcoming the horizontal gaze level into a vertical displacement. This attribute consciously recalls the archaic model most common in mankind beginnings according to which the sky and not the earth is considered the reference.

Full Sky is located between the subordinate level (*Sky-Behind*) and an insubordinate level (*Sky-Beyond*) of this landscape and is characterized by the timelessness, ephemerality and transitoriness of the elements, whether indexed (clouds and stars), natural (birds and insects) or artificial (drones, airplanes, satellites). No inhabiting exists in this plane, it is by excellence a non-place (AUGÉ, 1994) that works as a transition passage. Symbolic meridians such as *Vertizons* are brought to evidence mainly by contrails, the trails of condensed water from aircrafts at high altitude then visible as white stripes on the sky, that in this artistic and affective cartography are captured along urban routes memories. Traces of artificial clouds left by aircraft have been added to the mnemonic clouds, a term we reference as affective memories synthesized in “timeless images” by analogy or visuality – and create a path of percepts (DELEUZE, 1994) of the verticalized perspective we seek to undertake. It is from this reframed perspective that both *In Stricto Linea* (2015-2016) and *A-Cumulus* (2015-2018) series were originated. The latter is thus presented as the symbolic element of *Full Sky* in the scope of the *Celestial Landscapes* artistic research project.

2.1 A-Cumulus Generative Sculptures

Images of mnemonic clouds photographed during wanderings, and subsequently processed using creative programming, resulted in *A-Cumulus*, a set of 3D printed generative sculptures. We name such images by *ephemeris*, as singularities of the celestial landscape captured from a certain georeferenced point that emphasizes its ephemerality. Additionally, its persistence is considered a relevant event through the materialization previously captured by the photographic device (Figure 3). These synthetic images are those whose relevance lies on a contemplation and reflection level.

Figure 3 - *A-Cumulus*



Anonymised artist, *A-Cumulus*, 2017

A-Cumulus refers to the accumulation of memories as the gathering of heavy clouds that are transformed into rain on earth. It is an encounter with subjectivities materialized in image and three-dimensional object, and also an *ephemeris* of the place about the impossibility of capturing a real cloud.

In the process of *Full Sky* poetic creation, the most inspiring work was the series of *Skyscapes* by American artist James Turrell (2013). His buildings have been designed for appreciation of the sky in the form of autonomous structures with aperture in the upper plane. These open ceilings frame the celestial landscape with diverse shapes that can range from round, oval or rectangular, from where the public can cultivate a look of an ambiance that gives the place a status similar to time itself, almost with a mystical or religious aura. In the scope of the *Celestial Landscapes* artistic research, these spaces evoke nonhuman agencies of nature that can be found in the atmosphere as resonances and climatic variations in conjunction with nature.

When creating the *A-Cumulus* pieces, we sought to find relationships such as these in the very fabric of the cities. At first, it confers them an architectural framework so that in a second phase it captures the spaces *ephemeris* with a greater vision of the sky such as tops of towers, belvederes, piers and canyons. The multiple possibilities of observing the fleeting celestial landscape through displacement and roam between the cities made possible the creation of a map of images captured and event places that we relate to Turrell's *Skyscapes* – not for the fixity of the artificial construction but for the simplicity of the place where the image happens so that it can become material.

Since clouds are the sky's protagonists, creating compositions on the background colors from atmospheric variations, we opted to materialize them exactly as a symbolic residue of the ephemeral landscape as mnemonic clouds. In order to accomplish this embodiment, we took as reference the 3D printed sculptures *Eu-Abstracto* and *Binary Sculptures* by Portuguese programmer-artist André Sier, building on polygonalisation from the algorithm with Marching-Cubes that was previously developed and shared in the public domain by Paul Bourke and Core Gene Bloyd.

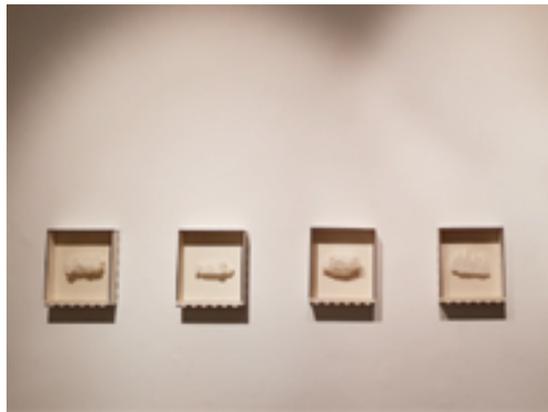
At the intersection of Turrell's artistic work (2013) with the practice in creative programming we seek to develop a path between processes and languages by analogy with the advance between layers of sky. This is reflected in the methodology and conceptual plans presented here.

As in the other pieces created within the scope of the *Celestial Landscapes* project, the *A-Cumulus* series was produced in the scope of affective cartography made through discovery of places of contemplation and activation of memories as allegorical images (mnemonic clouds) captured in wandering walks and urban encounters.

The images produced originated a corpus that was used to create the pieces. As a selection criterion, we choose both scope and meaning. Thus, we sought to demonstrate the junction between contrails and paths made as the fragmentary route of a sky map from the various Portuguese cities we have traveled. At the second moment, image records were worked in the Processing software with an algorithm adapted from Sier. This code made possible the conversion into a three-dimensional modeling file that was then worked on open-source 3D computer graphics software Blender for final adjustments and digital fabrication at MILL – Makers in Little Lisbon – using PLA (Polylactic Acid) plastic filament for 3D printing.

This process generated transparent sculptures capable of triggering various interior images, something typical of what is expected when one sees clouds fading away, dissolve and recovering in the firmament. The conceptual connection with the memory capture was complemented with mounting a support base suggesting the form of a storage box. In the first pieces, antiques boxes were used, whereas in the following pieces, boxes of laser cut plywood were by much closer to the desired “maker aesthetics” (Figure 4). Image capture as storage and the artwork as an archive element were part of this production of traces of passage and consciousness: a map drawn between languages and artistic processes.

Figure 4 - *A-Cumulus*



Anonymised artist, *A-Cumulus* Serie, 2018

The *A-Cumulus* pieces were exhibited at the Cerveira Art Biennial (2015) and at the exhibition “Approximately 800cm³ of PLA”, linked to *The Wrong (Again)* in the scope of the New Digital Art Biennale (2015-2016) held at the Galeria de Arte Universitária at UFES (Vitória, Brazil). It was also exhibited at *Synaísthesis* (Fine Arts gallery of the University of Lisbon, 2017) and at *Maker Art* (National Society of Fine Arts) as part of *The New Art Fest* in 2018. In each of these exhibitions new pieces were created and added to the series that has been increasing its cartographic potential in the project.

A-Cumulus future perspectives include expanding to new countries and research and experimentation of 3D printing materials with larger scale, as well as exploration in different spaces until their defragmentation through virtual and augmented reality applications that we will further develop.

3. SKY-BEYOND

Our third and last dimension of the landscape, *Sky-Beyond*, is the space of reverie, myth, fantasy and scientific vision, with its powerful telescope lenses pointing to the stars and other celestial bodies. It stretches from heaven-firmament to sky-space and consolidates itself in the words of Carl Sagan when dealing with the universe as everything that existed, exists and will exist (SAGAN, 2017). This landscape also brings together a cosmicity as a key element capable of approaching cosmologies, fictions and imaginary.

In this artistic and research project we developed such cosmicity from (BACHELARD, 1978) as a way of awakening our planetary consciousness through inner perception (microcosm) in a fabulation process – shared with both human collectivities and nature agency – and the resonant and creative forces (macrocosms).

This statement is proposed as a reaction to the “anthropic principle” as the foundation of the Anthropocene with its “petrifying danger” as opposed to the notion of lightness (CALVINO, 1999). Becoming light is escaping gravity and acquiring movement towards space in a reconciliation with both our expansive imagery and our individual symbolic subjectivities and universes.

In *Sky-Beyond* we seek, above all, a becoming-sky that emerges from the encounter with the unitary feeling of full interconnection between existing things. For this, the agency of nature is made through a cosmic call capable of evoking affects and percepts that cross the artistic practice and the notions of interactivity and spatiality related to it.

Thus, outer space (expansive cosmos) gives way to a zidereal space (convergent cosmos), which emerges as subjectivity power, capable of encompassing cosmologies and imaginary far beyond astronomical reality. And, in this dimension, the parts of the *Sky-Beyond* are inscribed.

3.1 SkyFIE Interactive Installation

SkyFIE is a device-process consolidated in an interactive synesthesia-producing installation. By capturing the interactor’s hand movement, videos and images of the celestial elements are then “manipulated” in their top projection.

This techno-nature piece was conceptualized when thinking about the possibility of producing “selfies” from the sky. As such, nature is established as an element of co-creation in the attempt to confront the notion of authorship of artistic work through the definition of a work line with nature agency.

SkyFIE is therefore a moist media (ASCOTT, 1999) installation formed by the imaging device through climatic variations (humidity and temperature) and the interactive part that incorporates them into its database and algorithm. It addresses the “sensitive potential of technologies” (MCLUHAN, 2013) and the poetics of interaction through the humanization of technology (DOMINGUES, 2003) in the understanding of agency by multiple relationships.

“Agency repeatedly has been identified as a primary goal of multimedia technology. Interactive technologies and agency have become so closely connected that meaning in multimedia signifies as agency, in so far as meaning derives from the qualities that agency obtains in interaction. Meaning is purposive, entailing intention, aim, and objective result. While meaning is inherent in the semiotics of the interactive exchange among artist, artwork, and audience, in order to be meaningful, agency and interaction must activate semiotic signification that is literally full of meaning. Interactive multimedia art, therefore, can be meaningful when it enhances the fullness of agency, otherwise meaning is missing in interaction, and meaningfulness is missing in agency.” (Lovejoy; Vesna, 2011, p. 141).

The installation is a step towards establishing a dialogic and transdisciplinary dimension between art, science and nature. A synthesis of the larger *Celestial Landscapes* proposal of to bring the sky atmosphere, as cosmicity, to the central creation plan.

In this larger scope transdisciplinarity, in *SkyFIE* we use diverse artistic references, among them the ARTiVIS project (MENDES et al., 2018), whose artist-programmers was our partners in several initiatives and productions.

The close relationship between the artistic explorations of the ARTiVIS project with *SkyFIE* lies in the way in which “interactive nature” is present and in the production of subjectivity that results from it. The interactive installations *Play with Fire*, *B-Wind!*, and *Hug@ree* (Figure 5) simultaneously evoke the responsibility of human action on the natural environment and ecosystems and produce a sentient call for convergence between microcosms and a planetary consciousness that recalls Lovelock’s Gaia Hypothesis.

In these interactive installations, creative programming was used with microcontrollers and motion sensors for real-time video recording and processing. The ARTiVIS multimedia resource kit itself (MENDES; ANGELO, 2013) served as a model for creating the *SkyFIE* photographic device.

Figure 5 - *Hug@ree*



Anonymised artist, *Hug@ree*, 2010

Another important reference was the interdisciplinary collective teamLab, founded by Japanese artist Toshiyuki Inoko (1977). His interactive works are exhibited at the Mori Building Digital Art Museum, known as the first interactive digital art museum in the world, created in 2018 in the city of Tokyo. There are about fifty artworks of the *teamLab Borderless*, a world without borders connected in the 10.000 m2 of physical space.

The *Crystal Universe* installation is one of the most emblematic of the games of light that favor an imaginary journey from Earth to the Cosmos.

Finally, the Leo Villareal *Cosmos* installation, present at the Johnson Museum of Art at Cornell University, in which 12,000 LEDs are used, refers us to comets, nebulae, atoms and structures or biological forms in their operation by random processes on top of an architectural setting.

All these interactive artworks was present in the initial conceptualization of *SkyFIE* as an artistic and technological repertoire allied to the concept of *Sky-Beyond* that it represents in the scope of our project.

Both the device and the installation were developed in the context of Expand!, an artistic maker residency promoted by the portuguese institutions *Ciência Viva*, *O Espaço do Tempo* and *Audiência Zero*, to advance research projects in the digital arts with a strong technological research component. The residence was held at *Convento da Saudação* (Montemor-o-Novo), from December 3 to 15, 2018, and had twelve projects in total.

We conceived and produced the piece with the most diverse contributions, from software solutions with *Bonsai (2.0)*, regarding the visual programming language created by developer *Gonçalo Lopes*, to the prototyping of the device in the digital platform *OnShape* by designer and programmer *Tiago Rorke* (co-creator), who were also residency participants.

SkyFIE (Figure 6) is thus embedded in the context of a DIT – Do it Together – maker art, encompassing processes common to FabLabs and artistic research and creative programming. In the structure of the imaging device we basically use a *DHT11* sensor and *Raspberry Pi Zero* microcontroller to ensure low cost and reproducibility of the proposal by other artists and stakeholders. The algorithm was created in Python language and can be easily changed to generate different results.

Figure 6 - *SkyFIE*



Anonymised artist, *SkyFIE* (device), 2018

The container that protects the circuits was created in pyramidal format housing a webcam at the top, weatherproofing materials and a 60cm tripod to facilitate its sustention and resistance to the force of the wind because it was designed to be installed in the wild in places of relative isolation. To do so, it has a removable battery that feeds the instruments every 10 minutes to extend the data capture time (Figure 7).

Figure 7 - *SkyFIE*Anonymised artist, *SkyFIE* (device), 2018

In the installation (Figure 8) we use programming with the Bonsai software installed in a mini PC with Windows operative system. This processes the images of the sky (photographs and videos) captured from environments opened by the device and displays them in a random way in the ceiling of the exhibition environment for public viewing and interaction, through a Kinect sensor that captures and processes their movements by hand, allowing the control of elements of the celestial landscape.

Figure 8 - *SkyFIE*Anonymised artist, *SkyFIE* (installation), 2018

This playful game in *SkyFIE* aims to reflect on the images of dilute shapes that trigger memories and the plan of the fable from childhood when imagining drawings formed by the clouds. On the other hand, it reflects on the cosmicity and agency of nature in their co-creation and imagery composition.

This interactive installation was first exhibited at the residency project show in December 2018 in Montemor-o-Novo and later presented at the Expand! exhibition at the Knowledge Pavilion in Lisbon. Currently this and all other pieces of *Celestial Landscapes* are being prepared

for new exhibitions in the city of Boa Vista, capital of Roraima, where the project have been continued.

CONSIDERATIONS

Throughout the five years of the *Celestial Landscapes* project we have produced a series of artworks and convergence processes that have resulted in a maker art collaborative and co-creative perspective. The whole conceptual plane of the project in its course between the three layers – *Sky-Behind*, *Full Sky* and *Sky-Beyond* – now point to an unfolding as *Decolonizing Nature* (DEMOS, 2019), through other action perspectives regarding the Anthropocene in the Amazon context.

The affective cartography is in course with the weather-based sonification into the next versions of interactive installations and the addition of solar panels that will enable more autonomy to the *SkyFIE* device. In this way, we are develop our art work in the relationship between art, science and techno-nature in a transdisciplinary approach based in the cosmicity.

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CHAPTER V

MEMORIES OF THE SEA: AN INTERACTIVE SANDBOX EXPERIENCE - GRAINS IN MEMORY

Adriana Moreno Rangel

INTRODUCTION

Studying the sea as a place of memory and identity arises from a personal experience lived in the Algarve region of Portugal, and from some emotional reports experienced by the Algarvians and immigrants who reported the presence of missing at different levels - from the time of youth, others from the land of origin. The sea was recurrent in its narratives. This was, fundamentally, the motivation to investigate more about these narratives as an identity process. In a subsequent phase, field records were searched in the Algarve in 2014 and 2015.

The records made in this phase favored my perception of the identity expression that the sea conferred in that emotional context. It was thus understood the potential to develop a theoretical-practical study that raised questions about the sea, its memories and the possible ways to feel and practice this place. The experiences gathered in the Algarve and the emotional reports in which the sea was present as a place not only of memory, but also as a metaphorical space capable of enabling and adding different experiences, identities and relationships, led to the concretization of this work.

SandBox is an interactive installation immersed in complex and peculiar dimensions such as: nature, human, science and technology, which when overlapped enable an immersive poetics capable of operating discussions about this “sea place” and its relationships in different contexts: emotional, ecological, political and even institutionalized when it touches the social and essentially economic aspects.

For the conceptual and methodological development of this work it was necessary a continuous dialogue between different fields of knowledge, fundamentally, art and technology. We also consider issues inherent to the user experience. It was not intended to find concrete answers, but to provoke discussions that transpose art from human everyday life with the use of technology and thus allow to broaden participatory actions that can promote and potentiate possible developments in the field of art, as well as to extend this study.

The aim of this artistic project is to present an identity landscape existing in the relation man → (fragment) → sea, independent of its representational character: objective (real) or subjective (abstract); the physical with the phenomenological or the natural environment with the symbolic. From this relationship we have new soundscapes, which may make it possible to extend other identity references of the sea and their conflicts, as well as to understand *SandBox*'s space of poetic experimentation concerning the (re) production of a sound landscape composed by different sonic fragments.

The present work, *SandBox—Grains in Memory*, is an interactive installation, part of the project “Sea Grains: place of memory and identity immersed in sensorial interactive experiences”, developed as a PhD research at Faculty of Fine Arts of Lisbon, multimedia specialization, accomplished in 2020. The aim of this project is to produce interactive digital art experiences through the memories of people who describe the sea as connected to them.

The installation consists of a set of sound expressions defined as emotive *swells*, obtained from memory *Plungings*. In those memories the sea is referred as an identity link (Hall 2006). The memory *Plunging and emotive swells* are conceptual elements which are intrinsically linked to the stored set of memories.

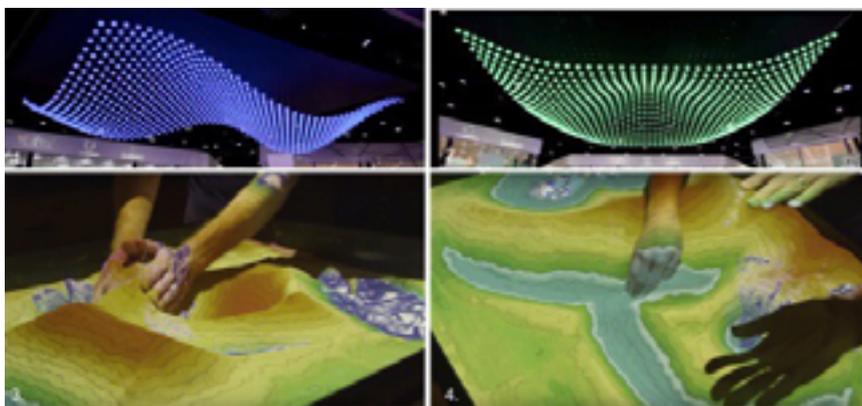
This set of memories composes a heterogeneous *corpus*. Therefore, the aim is to emphasize the symbolic implications of those memories to point how the (practical) relations with the context, the sea are placed.

Thus, *SandBox* unleashes emotions, visuals and sensations through sound expressions extracted from the memories of people who are intrinsically related to the sea. Those expressions have been (de)composed from overlapped sonic fragments (noises, whistles, onomatopoeias, songs, voices, natural sounds and melodic fragments) referring to emotive *swells*.

Contextualization

The art project *SandBox—Grains in Memory* started in March 2016, when I was researching installations that use sand and wave movement as immersive elements.

Fig. 1. Researched works.



1 and 2: Kinetic sculpture with symmetrical LED beads;^[SEP]3 and 4: Sandbox project of augmented reality (AR) created by researchers at UC Davis.

The symbolism suggested by the sand and sea waves has long appealed to me. These essentially dynamic elements are the basic components of the whole conceptual framework involving “sea grains”. Coming up with an installation involving these two substances — sand and water, started to make sense to me at this point. From the outset, the desired concept for this installation was to encompass the memories of “sea grains”, ie the “*plunging in memory*” in line with “emotive swells”, as evidenced in images from the sea.

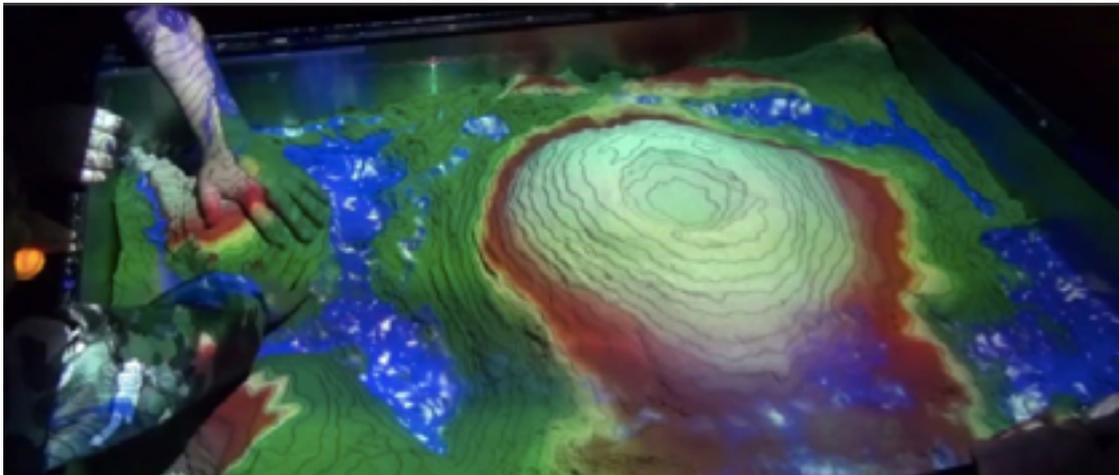
In this context, sketching of the sandbox began. Its purpose was to materialize people’s memories of the sea, more precisely those that involve them in a network of meanings, either through (re)signification and/or appropriation of identity relations.

Reference

In the first stage of research, I analyzed the augmented reality *sandbox* project (AR), developed by Davis University of California and WM Keck Center, at the *University of Texas in El Paso*. The goal of this project was to develop an integrated real-time augmented reality system to physically create topography models, that are then scanned into a computer and used as a background for a variety of graphic effects and simulations.

Thus, *sandbox* allows users to create topographic models by modeling real sand, which is then augmented in real time by an elevation color map, topographical contour lines and simulated water. The system teaches geographic, geological and hydrological concepts such as reading a topographic map, the meaning of contour lines, catchment areas, dikes, and so forth.

Fig. 2. *Sandbox* (AR)



Being presented at *Lawrence Hall of Science* in 2014.

The sandbox is equipped with a 3D Kinect camera, and a projector to show a colorful topographic map in real time. The projection inserts boundary lines on the surface of the sand, allowing the virtual water flow to appear on the surface. For this purpose, a Saint-Venant GPU-based simulation (set of shallow water equations) is used.

This project was inspired by a video created by a group of Czech researchers, demonstrating an early prototype of a sandbox (AR) with elevation color mapping and some limited flow and fluid.

Development

From observing the project of UC Davis' and W.M. Keck Center, I considered my technical limitations in developing something in a similar format. I then analyzed features that I found interesting for my work, and how they would favor interactivity. I therefore adopted the dynamics of the sandbox and the immersive action of the movement that it allows. This project enabled the first prototype of the *SandBox—Grains in Memory*, presented in October 2016 in Guimarães, at the *Noc Noc Guimarães* exhibition.

Based on what has been analyzed up to this stage, it was possible to make adjustments and apply other interaction strategies to improve the functions of the box. At this point in the project, I had already eliminated the use of images, prioritizing motion and sound as immersive elements for multisensory interaction.

In between plungings and swells

Plunging arises from oral narratives recorded in Portugal between 2014 and 2016, where the sea is referred to in the memories of people with different experiences and identities. As with plunging waves, the narrated memories show the emotional intensity related to the “sea” as a place. The sea is defined as a recollection of individually lived moments (Bachelard 2007), where each memory marks its emotional arousal (McGaugh 2003). In other words, the process of belonging permeates realities which are produced in different contexts, levels, and relations, regardless of the time factor:

(00: 53s)... I was born near the sea (pause), in Hastings. (...) I live in Lisbon because of that. (06: 05s) in Paris, when I was 18, I missed the sea (...) I only realised that when I was far from the sea! (07: 22s) In Hastings I had a sea view with the horizon... like a clean line. (08: 19s) We can see a curve in the horizon if we shake the head! (laughs)... I like guessing what is beyond the horizon. What can the sea be hiding from us? (Plews, 2016)*

This dive tends to represent more immersive narratives, in other words, narratives from deeper memories of something experienced—the (re)presentation of the personal biographical past, which holds a feeling of belonging and identity with the sea, in an intense way in the emotional aspect:

(01:24s) I remember well when I was six (pause). Thirty years have already passed, how fast! (01:27s) I remember so well (...) the salt and the strong smell of the sea air around me, and my burning eyes from leaving them open under the sea water. (01:43s) I used to feel the sea through my eyes (pause) (02:03)

(smile) like tears falling from my eyes. They were all sea, they were part of that big sea! (Caldas, 2014)

To put it briefly, *plunging* in memory encompasses events and/or experiences immersed in intimate / personal feelings for the element “sea”, independently of its appropriation (Ricoeur 2007). Therefore, each narrator has his interpretation of what has been experienced, lived and understood from their innermost feelings. Each person then becomes owner of the context “sea”, only they have the power to carry out that relationship. Here there is no value judgment, the emphasis is not on describing their lives, but on understanding the link that makes this “sea” an important element in their identity practices.

Complementing the *plunging* in memory, emotive *swells* are hybrid compositions that house the emotional feelings that run through the *plunging* movement. They can be visual only or they can be composed of synesthesia (Wittoft; Winawer 2013), which means that they contemplate other sensory elements, especially the links between emotions and stimulus. Thus, the *swells* are linked to the set of characteristics of the human sensory system (hearing, taste, smell, sight and touch), which emphasize the ways of feeling the sea of each narrator.

With this in mind, the emotive *swells* are composed by performances given in different densities, developed by what is shown through the memories. In other words, they are a reflection of what was felt by the sea.

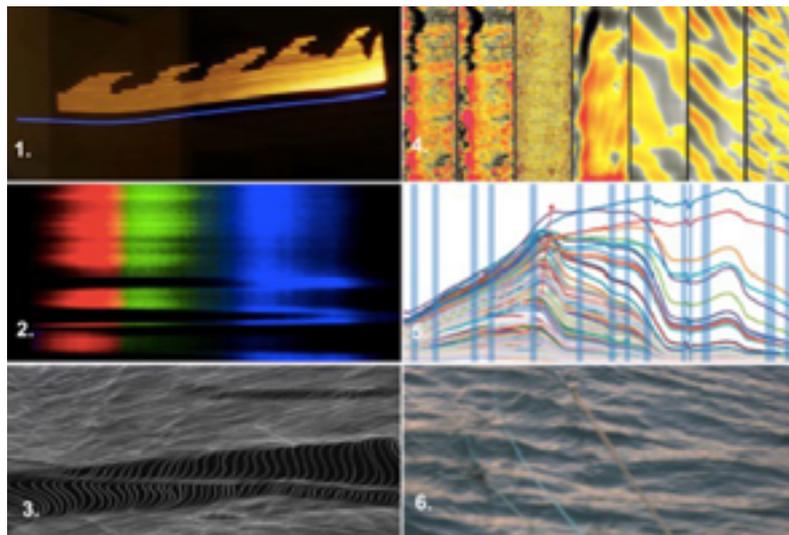


Fig. 3. Examples of emotive visual swells generated by: 1. PoV PRO POVO device; 2. Portable spectrometer; 3. Open Frameworks; 4. Image generated from the Seawifs sensor; 5. Image of the Spectral Classification of the Sea and Implications for Coastal Ocean Color Remote made by Remote Sensing and 6. Photography.

The purpose of the *swells* is to generate different sensory forms to represent the *plunging*. The narrators’ personal archives are used; new records are produced from the places indicated by the oral narratives, and hybrid compositions are created. So, these sensorial interpretations determined by the emotive *swells* are extended in this particular case of the SandBox, which allows a continuous dialogue between the *swells* and new sound sources.

SOUND SOURCE: SENSORY INTERACTION SCENARIO

SandBox is performatively a listening box “which invites others to concentrate the entire body in the voice” (Barthes 2009) or in the different sound sources (conventional and unconventional). When previously manipulated, these sound fragments generate different narrative paths, or an appropriation of the initial context — of *plunging* in memory.

It is important to note that in addition to sound, other elements act in the installation. The sand just collected from the sea still exhales the fresh sea air (the rough and moist texture sometimes bothers some people) and its colours change as the seawater evaporates, making it brighter and lighter to move around. But in order to get the maximum interaction in the box, the listening is essential. Sound (in that context) is “directed and easily infected by other sounds and materialities it crosses..., sound brings them closer to their source of identity (...); listening makes the plural singular, the multiple into individual, and the body becomes part of that sound.” (Pinto and Ribeiro 2011).

The interactors are also narrators, or (co)authors, and producers of different sound sources. They have the power to (re)construct their sonorous territory, from an experience that is not only “submerged in sound” (Barthes 2009), but also in multisensory experiments.

This interactive unleashing has distinctive parameters related to the interactive modalities and, consequently, to the behavior of the interactor. “It is common to recognize among the interactors of the same artwork, possessing interactive multimodality, differences of attention on its elements.” (Leote, 2012)

On this matter, we highlight that the artistic language of *SandBox* understands different modalities of stimuli, deepening of experiences and perceptions in relation to the sea. Therefore, the interactive experiences mentioned here are formed from the immersion with the box and later from the intimate interpretations that each interactor establishes with the narratives and/or sound fragments.

In this sense, we seek from this lived environment (affective) conditions to trigger specific sensors that are able to understand and provide a more intuitive interaction.

Thus, the territory is interpreted and introduced in *SandBox*, but not restricted to it, because its poetry is constantly redesigned by different sensations and sound effects—cuts of experienced moments or impressions perceived by the interactors. The identity content is manifested from this scenario, capable of eliciting a catch of fragmented meanings, which depends on the interpretations made by each individual (Barthes 2005). Thus, *SandBox* is always unique and individual, because the interactors are triggered to be part of its poetic and mark its identity pulse.



Fig. 4. Test in the wet sand of Caxias beach, Oeiras, Portugal.

Accordingly, sound has a central function in the installation. Its ability to evoke emotions, especially through memory, turns SandBox into a space of dialogue that involves and integrates the interaction in multiple sensorial scenarios. It also presents itself as a way of “seeing” (Blessner and Salter 2007; Pallasmaa 2005) and feeling, enabling the interactor to create trajectories personified with the medium, in this case with the sea and its representations.



Fig. 5. Moment of interaction: SandBox exhibiton in the lobby of António Rosa Mendes Library — Campus de Gambelas, University of the Algarve (UAlg), in Faro, Portugal (December 2016).

Therefore, the sound source allows the interactor to immerse and connect sensations of the “sea” as a place, such as the waves crashing on the rocks, seagulls, the wind blowing, someone whistling, a dive; to extend in its own way an intimate connection with what is heard, felt, remembered, silenced, understood, and so on. In short, the sound source contains countless possible meanings of the place “sea”.

SPACE AND TIME: TERRITORIALIZATION

SandBox addresses some situations of interaction between space and time — overlaps of instants (Bachelard 2007)—which mark the path of the territorialization of constructed (personal) experiences through the sound source of the “Sea” as a place. In this particular case, sounds can (re)configure space, memory and emotion through breaks between the present and the past. Thus, the appropriation of the “sea” as a place, made by the interactors, is accomplished

by means emerged from its constant readings and interpretations. They can trigger possible pauses or, perhaps, void spaces ready to be filled with different appropriations.

This understanding of the narratives in *SandBox* is also beyond its physical space. Some interactors immerse in the box, but do not record their impressions. Instead, they simply mention what they felt during the experience, or emotionally demonstrate their experience.

In any case, the interactions in *SandBox* extends access paths to very particular readings, and for this reason it was necessary to reconfigure the first prototype of the *SandBox* to better enable the interactions. The means of listening has been modified—a headset with a built-in microphone—and the addition of a new sensor, which can stop what is being played. Thus, triggering narratives is at the discretion of the interactor. With those adjustments, we expect *SandBox* to get its insight not only visually and/or verbally, but also through voice recordings.



Fig. 6. Two moments of *SandBox* in Portuguese cities, Guimarães and Faro.

After making the modifications in the box, questions have arisen: would it be possible for *SandBox* to present the Sea as possibilities of synesthetic production capable of influencing human sensory perception? Could *SandBox* conduct a synesthetic experience, ie, conditions to trigger the various sensors that a person can experience? From a first prototype, we realized that *SandBox* provided a multisensory experience for the participants — tactile, olfactory and auditory.

SANDBOX — GRAINS IN MEMORY

SandBox—Grains in Memory is an interactive installation which presents the sea as a place of synesthetic production, capable of persuading human sensory perception through sonic fragments and memories—oral narratives recorded over the last two years in Portugal. These oral narratives are (re)appropriated and overlapped from sonic fragments produced by different sound sources.

Firstly, tactile immersion of the interactor is requested to drive the (fixed) sensors on the submerged sea sand acrylic surface. Those sensors evoke the *plungings* in memories, which are revealed (randomly) by different identity dips and, consequently, different cultural and contextual displacements, even if it is an apparently “common” place.

Between traces and memories — sound landscapes

The sea smell is evidenced by the movement of the hands through the sand, which connects the tactile experience to the traces of sound expressions (noises, melodic fragments, music, voices, natural sounds). After this first moment, the interactors are invited to record their own memories—new sonic fragments— either by his own voice or by any sound narrative. Thus, fragments are (re)com- posed and sound landscapes are constituted by the interactors.



Fig. 7 *SandBox* before and after an interaction.

After this first moment, the interactor is invited to record his own memories and/or insert new sonic fragments, either by his own voice or by any other sound narrative (noises, whistles, onomatopoeias, song fragments, music, voices, natural sounds, among other possibilities).

Above all, the (re)constructions and deconstructions of the sound expressions previously stored in *Sandbox*, will allow the interactors to (re)compose *SandBox* through their own sound landscapes. Therefore, the narratives become either intermittent or continuous, since the process of (re)composition produced by the interactors is not a linear path, but a construct one, made of different sonic fragments and memories that they had experienced in their identity practices related to the sea theme.

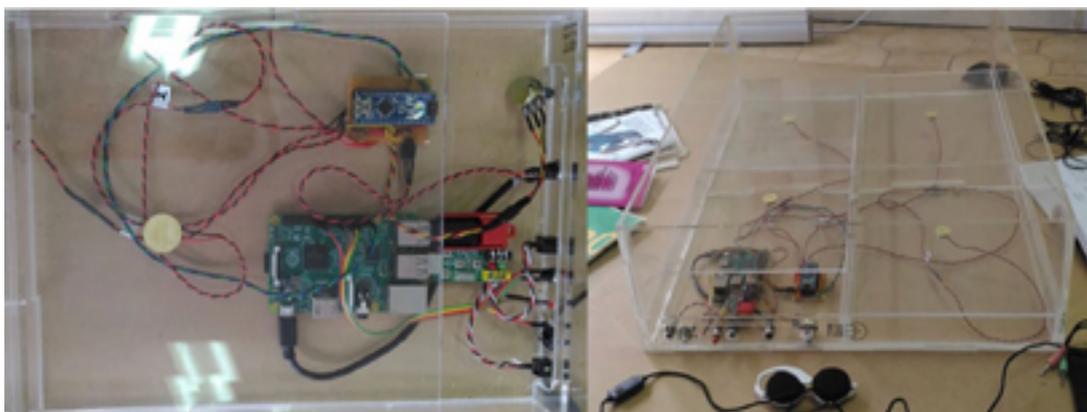


Fig. 8. *SandBox* Test at MILL — Makers In Little Lisbon (September 2016).

Installation setup and operation

The installation is adaptable and can be assembled either indoors or outdoors. It is a 0.6mm thick acrylic box, with dimensions of 60 cm length, 45cm width and 15cm height, divided into two compartments: at the (internal) base is an Arduino nano microcontroller board, a Raspberry Pi computer and an 8GB USB drive; On the outside of the base there are five I/O devices — audio output, power on / off, recording switch, power supply, and sensors sensitization. In the upper part there is a platform divided in 4 movable trays (each one with one sensor) and a single sensor in the center (stop), which support the sand and the movement of the interactors. To listen, both speakers or headphones can be used, depending on the environment. To accommodate the acrylic box, a table with compatible dimensions is ideal. To connect the power source, one electrical plug is sufficient and, when required, an extension cord with at least 2 power outlets.

All of the hardware that permits interaction with *SandBox*, including audio recording and reproduction, is located in the base of the box. Vibrations created by movement in the sand are detected by four piezoelectric elements that are measured by an Arduino Nano microcontroller. If there is sufficient vibration (as defined by an adjustable threshold) a pulse is sent from the Arduino to a Raspberry Pi Linux computer, which randomly selects and plays an audio recording stored on a USB flash drive using OMXplayer. During audio playback, no other recordings are played; however, a push-button in the form of a rock lying in the sand permits the participant to stop the playback and continue interacting with the installation. An additional button on the exterior of the box, when pressed, signals to the Raspberry Pi to make a new 30s recording using arecord via the attached microphone, which is then added to the collection of recordings on the flash drive.

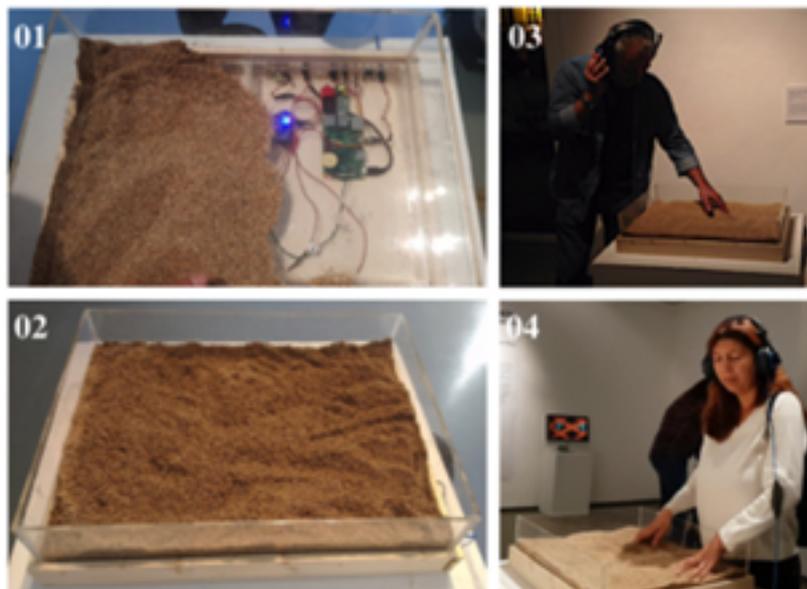


Fig. 09 SandBox during an exhibition SynaísThesis

Images 01 and 02 feature a hardware organization and a sandbox immersed in sea sand. Images 03 and 04 show the interactors during the Synaís Theses Exhibition in the Gallery of the Faculty of Fine Arts in Lisbon

Modifications

1st modification: the form of listening was changed – an auscultator was coupled to a microphone and a new sensor (in the form of a stone) that can interrupt listening was added, leaving the narratives to be triggered at the interactor's discretion. It was hoped that, with adjustments, SandBox would obtain the involvement recorded through the recordings and not only in a visual and/or verbal way.

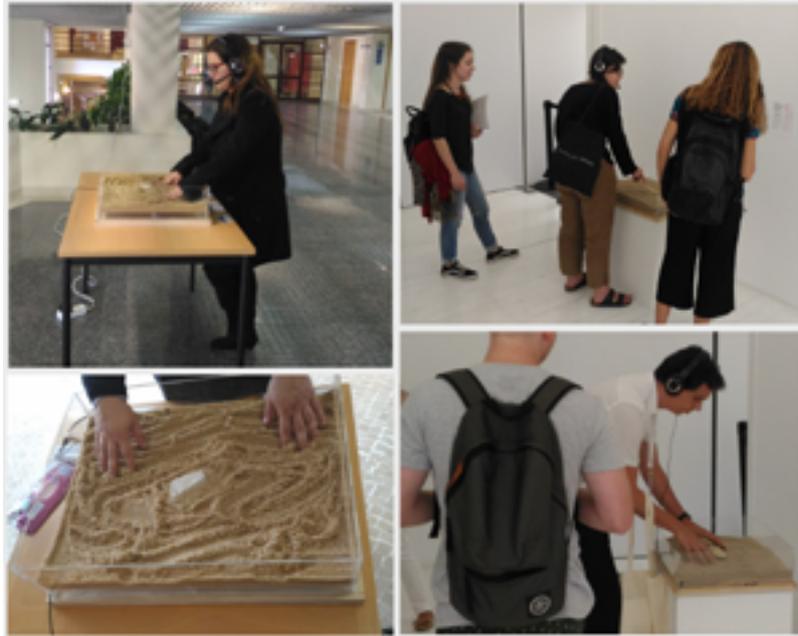


Fig. 10 SandBox version with central sensor

2nd modification: the removal of the central sensor – when observing the trajectories of the interactors' hands, we noticed that the stone prevented a more spontaneous movement, because it was in the center of the box delimiting the space of interaction. In addition, the touch on the stone became constant, and this could indicate that the interactor was not comfortable with the listening, and when touching the stone he knew that something new could arise. Before this doubt was asked (through questionnaire) to some interactors how they would describe their experience and specifically about the presence of the stone in the middle of the litter box. The return was interesting because the initial suspicions about discomfort did not proceed, but we had the curiosity as a determining action for the interactor's behavior: A) by the curiosity to have an element in the center of the box they felt instigated to the touch; in other words, they wanted pick up the stone to see what it was doing; B) they were curious to hear a new fragment.



Fig. 11 left: SandBox with the central sensor in stone form on display in the Museum of Chiado and next to the installation's version without the stone displayed in the Gallery of Fine Arts of Lisbon during the exhibition SynaísThesis.

CONSIDERATIONS

SandBox — Grains in Memory is an active and continuous work in progress, always capable of getting new sound landscapes. It also continuously expands forms of experiencing identity relations with the sea as a place. Therefore, some preliminary results and experiences were described in this article, both about the technical production of the installation, and the immersive experiences of the interactors during its exhibitions.

On the immersive experiences, the use of time (length) and space (covered areas) was observed as influencing the interactions in *SandBox*. Interactors established their particular immersion levels with the box, which resulted in different multisensory experiences according to the tactile path they set. The box, therefore, was adjusted to the rhythm imposed by their movements.

We also observed that many interactors placed their hands only in one side of the box, triggering more action to the sensors located under that specific surface, while the other sensors entered in a kind of inertia. As a result of this behaviour, the next interactor, while manipulating the sand around those inactive areas, found it more difficult to interact with the whole, intuitively forcing the central sensor (positioned by a rock) to restart the box.

It is important to emphasize that the initial objective of the central sensor was to override the activity of the other active sensors. If the interactors did not wish to continue listening, they could press it to stop all sensor activity. By doing that, a new path of different sonic fragments was restarted.

Regarding the technical construction of the installation, some adjustments were made in order to improve interaction with the box. We found, for instance, that the use of headphones changed the way interactors listened to the sonic fragments. The headphones enhanced sound details, and we believe the experience was less intimate when sounds were played on speakers.

After including headphones, *SandBox* obtained more recordings than the first prototype exposed.

In the SandBox version (prototype 3), presented at the InShadow 2017 Festival and the SynaísThesis Exhibition at the Gallery of Fine Arts in Lisbon, the interactor had the entire surface of the box to go through. As he moved the sand, he listened to the fragments that were allowed, and as the movement stopped the listening was interrupted. In this way, it was noticed that there was more interaction of the hands in the sand because the process is more intuitive than in the first versions.

With SandBox artistic experience, important discoveries have been made regarding the theme of the sea and its contexts, especially when revealing different ways of interacting with this place and different practices of belonging presented in narratives recorded throughout the exhibitions.

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