

**CREATION OF AN EXCEPTIONAL NATURAL PHENOMENON OF CHAINS OF DUNES AND LAGOONS THROUGH A RARE BALANCE OF FIVE KEY ELEMENTS IN THE NATIONAL PARK LENÇÓIS MARANHENSES IN THE NORTHEAST OF BRAZIL: SAND, RAIN, WIND, RIVER AND VEGETATION - AN ARTISTIC APPROACH**

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**ABSTRACT:** *During our travels in the State of Maranhão in the northeast of Brazil, we explored the region of the National Park Lençóis Maranhenses in 2012 and 2013 before crossing the park during 5 days in September 2013 with the aim to produce nature art photography and organize subsequent itinerant exhibition throughout the country and abroad. We could confirm in loco the creation and constant modification of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the park: sand, rain, wind, river and vegetation. Questions were raised and answers need to be found. Where is the sand coming from? What are the roles of the tides? How is the wind transforming the dunes? What are the natural lagoons or water ponds that exist in the middle of the dunes? What is the role of the vegetation? The dunes are in constant movement, what is their annual rate of dislocation? Is the balance of the five key elements to recreate the phenomenon threatened at present time or in the future, for instant due to ongoing, negative climate changes? A special approach was taken, as the production of nature photography of the dunes and lagoons in the park allowed us to know and observe the vast park area very closely. For the consecution of the aim of the research, we collected data based on bibliographic research, extents field studies in the area of the Lençóis Maranhenses National Park in 2012 and 2013, while conducting interviews with the habitants of the three communities living in the middle of the park and realizing artistic productions of nature photography and itinerant exhibitions to accompany the process of creation of dunes and lagoons in the park. We concluded that the balance of the five key elements to recreate the phenomenon depends on some fundamental factors such as, for instant, the same direction of the steady winds throughout the year, the elevation of the groundwater level due to rainfall during the month of January until July and the drying out of the water ponds during the month of July to December. We could distinguish the existence of free dunes inside the park and the fixed dunes on the Southern borders of the park and near to the village Atins. An important role plays the vegetation, that are fixing the dunes and delimitating the area of the park as further crowing of dunes is inhibited beyond theses areas due to the fixation of the dunes by vegetation. Furthermore, vegetation can deviate the direction of the winds, which might result in some cases in accumulation of a great amount of sand where vegetation was able to fix itself on the surface of a dune (the so called shadow dunes). In the first six months, due to rainfall, elevated groundwater level causing the creation of lagoons or water ponds, the free dunes in the park are almost not migrating, whereas during the months between July and December, with the drying out of the lagoons, sinking of the groundwater level and the*

*continuing steady winds, the free dunes are migrating and moving in average 20m per year. The change of the landscape is confirmed by members of the three families living in the middle of the park, the Paulos, the Britos and the habitants of Baixa Grande during interviews. In the dry period of the year without rainfall, algae and vegetation can be found on the bottom of the lagoons and serve as food for domestic animals as pigs, horses and sheeps that are walking free inside the park. One scenario in the future is that the crossing of the park might be prohibit by the park administration alleging environmental prejudice to the balance of the park, as well as dust left behind while camping inside the park. Based on our experience, this kind of alternative tourism is not threatening the environment, as, for instant, we did not see any remains, and nothing was left behind by ourselves during the crossing and due to the fact that only few people are entering the park by food. As the results of our research show, the exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the park: sand, rain, wind, river and vegetation continuous to be intact and is not threatened, even not due to climate changes that occurred in this area. In recent years, it could be observed that, due to a dryer year with less rain occurrence during the month of January to July, the lagoons dried out in the subsequence months very quickly. Some lagoons contain fish. Even drying out (in the case of the not perennial water ponds) in the second half of the year and located in the middle of the park with no other water source visible next to it, the fish reappears in the following rainy season at the beginning of the year. One explanation is the possible ability of the fish to adapt to the situation by digging themselves into the sand into ground water layers where they are able to survive. Future research needs to be carried out to accompany closely the recreation and constant modification of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of the five key elements needed.*

**KEYWORDS:** Lençóis Maranhenses, dunes, lagoons, balance, key elements, wind, groundwater, rainfall, vegetation, river, Brazil

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## Overview

This is the last article of a series of three that we are currently finishing writing concerning our latest long-term art projects in Brazil: loss of cultural identities in Brazilians North and North-East, vertical growing of neighbourhoods along the Brazilian coast from South to North and the creation of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the National Park Lençóis Maranhenses: sand, rain, wind, river and vegetation.

In this article, we discuss our research and in loco observations undertaken between 2012 and 2013 in the area of the Lençóis Maranhenses Nation Park where we witnessed the creation and constant modification of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key in the park: sand, rain, wind, river and vegetation. This imposes questions in search for answers: What is the role of each of the five key elements for the creation of the natural phenomenon? Is the balance between these key elements to recreate the phenomenon stable or is it threatened at present time or in the future, for instant, caused by ongoing negative climate changes or changes caused by human beings?

This work is part of a PHD thesis in Visual Arts to be concluded.

## INTRODUCTION

The Lençóis Maranhenses National Park, created in 1981 by the Republic Presidency, is located in the northeast of Brazil (coordinates S 02° 19' and 02°45', and W 42°44' and 43°29'). With an area of 155.000 ha, the park comprises the largest dunes field in South-America, which occupies an area of 120.000 ha of the total delimited area, with thousands of fresh water lagoons, formed by the rains that fall every year during the months from January to July. Average annual precipitation can reach 2.000 mml. The rainwater is absorbed by the sand, raising the level of the water tables above the ground. The dunes reach between 10 to 20 meters in heights and in days of strong winds, sand is blown with a velocity of +50km/h further into the park. Climate at Lençóis Maranhenses is semi-humid tropical, with sparse vegetation, air humidity of 68% and annual average temperature about 28.5°C. The Lençóis were formed in a time period of 10.000 years; in the microregion of Lençóis live today 150.000 people. (IBAMA, 2003; Floriani et al, 2004).

Figure 1 shows the extension of the Lençóis Maranhenses Park located in the State of Maranhão in the northeast of Brazil.



Figure 1: Delimitation of the area of the Lençóis Maranhenses Park (Source: IBAMA, 2003)

The location of the distinguished free and fixed dunes can be seen in Figure 2, where the free dunes are found inside the Lençóis Maranhenses and the fixed dunes covered partially with

vegetation are delimitating the area on the southern borders and can be found near the village Atins in the northeast of the park.

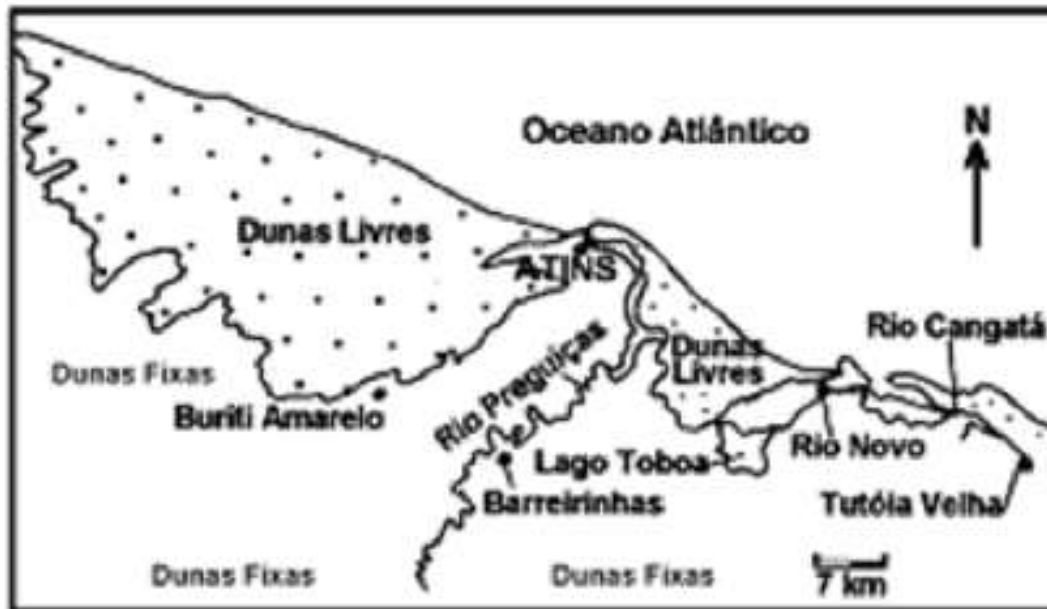


Figure 2: Localisation of the studied area, east sector of the coastal plain of the State of Maranhão (Source Gonçalves et al., 2003; adapted by Andreas Hornung)

This research aims to give answers to the questions about the constitution of the dunes and lagoons in the Lençóis Maranhenses National Park, where the sand is coming from, what are the roles of the tides, how is the wind transforming the dunes, what are the natural lagoons or water ponds that exist in the middle of the dunes, what is the role of the vegetation, what is the annual rate of dislocation of the dunes that seems to be in constant movement. Finally, we are looking for answers to the main question of this research: is the balance between the five key elements to create the phenomenon of dunes and lagoons in the Lençóis Maranhenses National Park threatened at present time or in the future, for instant, due to ongoing, negative climate changes or other changes provoked by the influence of human beings.

## MATERIAL AND METHODS

### Data collection

### Bibliographical research

Included analysis of theses, dissertations, articles, documentaries, technical reports and legislation to support the issues and broaden the knowledge of the investigated creation of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the National Park Lençóis Maranhenses.

## **In loco activities**

### **Interviews**

The work is based on field studies in the area of the Lençóis Maranhenses National Park in 2012 and 2013, while conducting interviews with habitants of the park and realizing artistic productions of nature photography and itinerant exhibitions<sup>1</sup> to accompany the process of creation of dunes and lagoons in the park.

### **Aesthetic approach**

Through our aesthetic approach by producing nature photography, we were able to gain knowledge of the environment and nature processes at place, as well as recognition of spatial and environmental dynamics in the investigated area of the park.

### **Presence at place**

Our continued field studies in the investigated area of the park in 2012 and 2013 helped us to gain greater understanding and knowledge of the subject at this stage of the research.

## **RESULTS AND DISCUSSION**

Answering the principal research questions of the work:

### **HOW ARE THE LENÇÓIS MARANHENSES CONSTITUTED?**

#### **WHERE DOES THE SAND COME FROM?**

The role of the rivers

The rivers are the principal source of the sand for the beaches and dunes. In the Lençóis Maranhenses, most of the sand comes from the river Parnaíba and other smaller rivers of the Ceará, Piauí and Maranhão states. The coastal currents carry then the sand to the coast of Maranhão, thus, entering the Lençóis.

The roles of the tides

On the coast of Maranhão, the lunar tides are varying greatly, causing the sea water advance and retract a lot on the beach during the day. During the retreat of the sea, the sand on the beach is exposed to the action of the wind that carries the sand to the inside of the continent, where the Lençóis Maranhenses are located.

### **HOW THE WINDS ARE TRANSFORMING THE DUNES?**

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<sup>1</sup> See the artwork of nature photography about the creation of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the National Park Lençóis Maranhenses in the northeast of Brazil: sand, rain, wind, river and vegetation in the annex of this work, as well as photos of permanent exhibitions in Rio de Janeiro and throughout the country and photos of inaugurations and workshops of the itinerant exhibition SUI GENERIS - Nature, travelling throughout Brazil from 2012 to 2016.

Additionally to the amount of sand available for transport, constant winds are necessary so that the dunes can develop and can be constituted. The coast of Maranhão receives these constant unidirectional trade winds from the northeast that blow from the sea to the mainland.

As the winds are blowing always in the same direction and together with the absence of vegetation, it results in free dunes in the form of half moons (barchan dunes) or stretched (transversal dunes). In some climate areas and with more vegetation, the so-called parabolic dunes are formed that are more rare in the park.

The shape of dunes can be significantly modified due to natural agents such as vegetation growth or cementation of sand by mineral salts (Schatz et al., 2006).<sup>2</sup>

### **Dunes migration**

During the rainy season, from January to July, there is an elevation of the water table and consequently the fixation of the dunes. During the dry season, from July to December, the water table sinks and the dunes migrate. During this period, dunes can move up to 10 cm per day (in average about 20m per year). See also Gonçalves et al. (2003).

### **WHAT ARE THE NATURAL POOLS THAT EXIST IN THE MIDDLE OF THE DUNES?**

The porous sand of the dunes allows rainwater to penetrate easily into the subsoil, forming the so-called water tables. During the rainiest months of the year, water from the water tables rises in the lower areas of the dune field, forming the well-known lagoons as well as natural pools that have no inlet nor outlet and are exclusively filled by rainwater. In general, these are small and shallow.<sup>3</sup> During the dry season, the smaller lagoons can dry out. There are three types of lagoons in the National Park of Lençóis Maranhenses: Temporary lagoons that dry out each year, like most lagoons located in the region of Atins. Eventual lagoons that dry out in exceptionally hot periods or after periods of low rainfall occurrence. And the perennial (permanent) lagoons that never dry out, like Lagoa Azul.<sup>4</sup>

### **CONCLUSIONS AND IDENTIFYING PERSPECTIVE FOR FUTURE RESEARCH**

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<sup>2</sup> During our 5 day crossing of the Lençóis Maranhenses Park, entering the park in Atins and leaving it in Santo Amaro, for approximately 100 km, we went up dunes on the side where the sand was cementated by mineral salts so we did not sink. See also Photo 3 in the annex of this research article that shows a common scene where Park habitants, living in the middle of the Lençóis Maranhenses reserve, using bikes to cross the dunes. See also Photo 2 showing the Track- Log of the crossing in the annex of this article.

<sup>3</sup> We learned during the crossing of the dunes and lagoons, that in the worst case, the water level in the water ponds reached our chest region while walking through the water with the bags over the head, therefore, impossible to sink; very important to know in our case as photographic equipment is expensive and very sensitive to humidity. Read excerpts of the book *Le Petit Prince in the desert of Lençóis Maranhenses– 5 days on the way to art* about other experiences in the annex of this research. First edition 2013.

<sup>4</sup> The naming of the lagoons is due to its main touristic origin, for instant, Lagoa Azul is on the beginning of the south park entrance close to Barreirinhas. It exists three main entrances or exits of the Park: Atins in the Northeast, Santo Amaro in the West and Barreirinhas in the South. Was a Toyota cheep, you will be able to entre on additional points the Lençóis Maranhenses Park, for instant close to the river at Buriti Amarelo, a region that were studied much to understand the creation of dunes and lagoons by oscillating water tables. If one named lagoon is drying out early in the year, the search for other “touristic” favourable lagoons ends in new names of long existing lagoons in the park.

We concluded that the balance of the five key elements to recreate the phenomenon depends on some fundamental factors such as, for instant, the same direction of the steady winds throughout the year, the elevation of the groundwater level due to rainfall during the month of January until July and the drying out of the water ponds during the month of July to December. We could distinguish the existence of free dunes inside the park and the fixed dunes on the Southern borders of the park and near to the village Atins. An important role plays the vegetation, that are fixing the dunes and delimitating the area of the park as further crowing of dunes is inhibited beyond these areas due to the fixation of the dunes by the vegetation. The vegetation can deviate the direction of the winds, which might result in some cases in accumulation of a great amount of sand where vegetation was able to fix itself on the surface of a dune (the so called shadow dunes). In the first six months, due to daily rainfall, elevated groundwater level causing the creation of lagoons or water ponds, the free dunes in the park are almost not migrating, whereas during the months between July and December, with the drying out of the lagoons, the sinking of the groundwater level and the continuing steady winds, the free dunes are migrating and moving in average 20m per year. The change of the landscape is confirmed by members of the three families living in the middle of the park, the Paulos, the Britos and the habitants of Baixa Grande during the interviews. In the dry period of the year without rainfall, algae and vegetation are found on the bottom of the lagoons and serve as food for domestic animals as pigs, horses and sheeps that are walking free inside the park.

One scenario in the future is that the crossing of the park might be prohibit by the park administration, alleging environmental prejudice to the balance of the park, as well as dust left behind while camping inside the park. Based on our experience, this kind of alternative tourism is not threatening the environment, as, for instant, we did not see any remains, and nothing was left behind by ourselves during the crossing and due to the fact that only few people are entering the park by food.

As the results of our research show, the exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of five key elements in the park: sand, rain, wind, river and vegetation continuous to be intact and is not threatened, even not because of climate changes that occurred in this area. In recent years, it can be observed that due to, for instant, a dryer year with less rain occurrence during the month of January to July, the lagoons dried out in the subsequence months very quickly. Some lagoons contain fishes. Even drying out (in the case of the not perennial water ponds) in the second half of the year and located in the middle of the park with no other water source visible next to it, the fishes reappear in the following rainy season at the beginning of the year. One explanation is the possible ability of the fishes to adapt to the situation to dig themselves into the sand into ground water layers where they are able to survive. Another very curious experience during the park crossing were the constant attack by seagulls, with their loud cries, certainly, we were near their nidification areas while crossing the dunes<sup>5</sup>. These attacks were only simulations just to frighten us away from these locations.

Future research needs to be carried out to accompany closely the recreation and constant modification of an exceptional natural phenomenon of chains of dunes and lagoons through a rare balance of the five key elements necessary.

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<sup>5</sup> We witnessed, on the border of the park near Santo Amaro, habitants who took their eggs to use at food.

## REFERENCES

- FLORIANI, D.C., Fukuda, J.C., Pinto, E.F., 2004. *Lençóis Maranhenses National Park: The Largest Coastal Dunes Area in South America*. Gerenciamento Costeiro Integrado 2, 62-64.
- GONÇALVES, R.A , 1997. *Contribuição ao mapeamento geológico e geomorfológico dos depósitos eólicos da planície costeira do Maranhão: região de Barreirinhas e Rio Novo – Lençóis Maranhenses*. 1997. 260 f. Doctoral studies - UFRGS – Instituto de Geociências, Porto Alegre.
- GONÇALVES, R.A., Lehueur, L.G.O., Castro, J.W.A., Pedroto, A.E.S., 2003. *Classificação das Feições Eólicas dos Lençóis Maranhenses - Maranhão - Brasil*. Mercator - Revista de Geografia da UFC 03, 99-112.
- IBAMA, 2003. Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, *Plano de Manejo do Parque Nacional dos Lençóis Maranhenses*.
- JOSIBEL G. Oliveira Jr.; Walter E. Medeiros; Werner F. Tabosa; Helenice Vital. *From barchan to domic shape: evolution of a coastal sand dune in northeastern Brazil based on GPR survey*. Rev. Bras. Geof. vol.26 no.1 São Paulo Jan./Mar. 2008  
<http://dx.doi.org/10.1590/S0102-261X2008000100001>.
- WASSON, R.J., Hyde, R., 1983. *Factors determining desert dune type*. Nature 304, 337-339.



**ANNEX**

ANDREAS HORNUNG ART IN RIO

**Le Petit Prince**

**in the desert of Lençóis Maranhenses – 5 days of meditation on the way to art**

1<sup>st</sup> edition

ANDREAS HORNUNG ART IN RIO 2013

**Entry Atins 23M 0750518/9716553**

I went into the desert of Lençóis Maranhenses in a way that nobody would have gotten me unintentionally. Without a mission, with weight on my shoulders and a bag in my hand, I headed towards the dunes. I was determined because of the following aims: leaving the park on the other side with renewed energy. I did not know the exact time I would stay in the park, nor the exact way I would take. I was going to climb up the dunes on the side where they receive the wind, on firm sand, and descend on the other side, protected from the wind, on soft sand. Crossing lagoons, initially dry, to climb the next dune, again on the firm sand. In this manner for days until I would be seeing signs of the populated zone of Santo Amaro on the other side.

4

Along the way, many things deceive, domestic animals in the park walk freely and do not indicate proximity to human beings. On the contrary, they become quite frightened when they perceive your presence from afar. The most fugitive are the wild pigs, to avoid turning themselves into food, I guess. My machete did not have this purpose, but they did not know it. It is with these thoughts that I must always laugh, reminding myself of reports of people carrying machetes in this environment thinking about it. Hehe. All animals show great agility to be quickly out of sight.

6

But, at first, they just stand still and look at you. They just look, look and suddenly run away.

My constant companionship was the sound of a helicopter in the air, caused by the wind blowing permanently the baggy clothes, which stops when being out of the wind line while descending the dune on the soft sand and continuous on the other side entering again the wind line. This pleasant silence increases during the night, with fresh air and full moon.

8

I learned from the absence of human beings in the park that each serves for a specific positive purpose; you just need to know to turn the contact in a direction that gives you something in return. Instead of fleeing, I approached people with much natural motivation. Despite the

negative reactions I already had expected, I received something that served me. I refused to get myself affected by negative energies. It sounds like an easy thing, but before entering the desert I did not see it so clearly.

10

You just react to negative energy because it corresponds with what is inside of you. It is so simple. You react, because, consciously or unconsciously, you look out for it. Before entering the park, there was so much empty space inside me, where unwanted things could take refuge. When I left 5 days later, there was no more. The space was closed, forming a unit that prevents the accumulation of negative things. Simply they are not able to enter anymore.

12

I was prepared for the walk, equipped with GPS and compass, with good physical and mental constitution. I knew my enemy would be me. I would need to trust myself, there was only me, and I should not panic to lose the energy I needed to get out after a long walk across the park. First lesson learned in the ascent of the dunes in the soft sand. You just advance with patience, regular and continuous steps in a controlled way. You need to use your willpower for this, otherwise you despair and in panic you cannot go up after a while, you just get exhausted.

14

You always should go around the soft sand to get to the firm sand, as you should go around the problems to focus on the solutions, on free and promising paths. During a walk of almost 100 kilometres in 5 days, walking up and down dunes and cutting water ponds, this makes all the difference. You chose your life, your hands are on the steering wheel, and your choices mirror within you. Do you want to suffocate, hurt and mistreat yourself or use this positive energy for other purposes?

16

In the desert, there are no signs of traffic, neither marked paths. If you want to follow someone, after a moment, there are no more traces, no more footprints to follow. The only useful footprints in the dry water ponds are those of the animals, as they know instinctively to avoid quicksand in their search for water or truffles. The immensity in the dunes at night in a universe that seems to be all yours, illuminated by the natural light of the full moon, the increase of silence, cut off by your cries of joy and sadness, anger and love.

18

The pleasant solitude that let you seek the company of other beings. An universal peace during an unforgettable and eternal night to complete the interior spaces forever. Another constant companion is the sand moved by the wind, which enters everywhere, accumulates in all wholes of your body, eyes, ears, nose, in the bag, in the backpack. Breathing it. Eating it. This park would not exist like it exists without a steady balance of various correspondent factors - sea, wind, sand; rain, river and vegetation.

20

A constant struggle of elements competing against each other, thus, balancing. The sand is coming from the rivers. The birth of new dunes on the beach all year round. The vegetation of the restinga that caves in the sand and holds it in place. The rainwater that modulates the dunes. Breaking its lateral sides, forming long chains of sinuous dunes, interspersed with lagoons. A beauty of natural, organic, artistic forms. Here, the lens enters the scene, trying to capture what the eye captures a thousand times better.

22

Lines and lights, shadows and clarity. A beauty of nature in a universe that seems to be supernatural. A joy that enters the eyes, eating the whole body, uniting it. Water is the vital element for survival and body cleansing in the desert. Depending on the season, there is plenty of water, which can even be inconvenient, because it requires going around the long chains of dunes and lagoons, of up to 75 kilometres in length, resulting in an increase of walking distance by a third in crossing the desert.

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It is also a source of relief and relaxation, in the form of frequent bathing in the lagoons on the way. Besides the fresh water, the sand is not burning the feet, which allows walking barefoot. However, the constant friction, caused when going up and down the dunes, can hurt the skin of the feet and put on socks solves the problem. I did not burn my feet in the park, but during a walk in the dunes in Santo Amaro, after crossing the park, breaking with my precaution, I burned the sole of my feet one afternoon.

26

I understood this only on the way out of the park, while hosted in a hotel room. I have been very focused and carefully controlled all my steps during my stay in the desert. I experienced the easiness of cleaning body and belongings in the urban environment. The greater cleansing, that of the soul, I only succeeded in the solitude of the dunes, in the immensity of the silence and illumination of the desert moon.

### **Baixa Grande 23M 0720247/9719481**

The return to the company of other beings only succeeded on a second and third attempt.

28

At the first approach on a high dune, on a Toyota full of people, I met a group of people, some of them I knew before entering the park, but I could not connect in a desired way and even received some negative, ironic and sarcastic reactions by some. A strangeness that let me to look, 5 hours later, the same company with more force.

**Rio Negro 23M 0716002/9721886 Queimada dos Britto 23M 0715494/9722192**

30

Arriving at the village at night, not knowing where the houses were, seeing no lights, no dog barking, ahead a closed forest in the darkness, I felt an immense desire to join other human beings and, surrounding the forest without finding ways to enter, nor traces or footprints, I was ready to return to the dunes to camp out in the open for the third time in a row. But something called me to keep searching, and despite the fatigue, the weight on me shoulders and the desire to stop, I found footprints of beings, on the other side of the wood and without hesitating, I entered.

32

Roaming the area for about two hours, with no signs of homes or beings, I gave up a second time and thought to look for a trail to get out of the woods. In a large opening, following my path out, I realized that I walked in the middle of a dry lake and yet I went on. When I approached the exit of the woods, I suddenly heard a noise of a power generator and I saw an illuminated house. Speaking to the owner, I found myself just next to the home of the dune group, and with hugs and kisses, I gained food, a hammock to sleep and company.

34

**Saída Santo Amaro 23M 0696179/9722694**

The third search for company took place in Santo Amaro, already out of the park, when I offered the rest of my ration to the first person I met on the exit of the park, who, by the way, was very happy for the gift. On the square of the village, I approached to travellers and soon we formed a group with the same interest: to get to know the lagoons of the park. Myself, who just had left the desert behind, where I lived with thousands of dunes and lagoons, went to see another one, in a new company where I spent a very pleasant time.

36

The greatest and lasting achievement of this personal journey.

A memory still accompanies me. Sleeping can be a very simple action, but sleeping in a tent can be quite challenging. On a first try, I passed a night full of complications. The wind did not bring down the tent, but it caused a constant nuisance through continuous movement and noise throughout the night until sunrise. The next night, on a second try, I covered the sides

of the tent with a lot of sand and put the hooks deep into the sand to avoid repeating the experience of the first night.

38

I woke up suffocated in what remained of the space of the tent that the sand had not yet occupied completely. Due to this experience, I decided not to sleep the next and last night in the park and therefore I spent an unforgettable night on the top of the dunes, with full moon until the next morning exiting the park. I went out of the park more complete as when I entered. Trust yourself without panicking to save energy, the golden way to live your life. I also learned to appreciate the usefulness of each object in such a circumstance. Invest heavily in your equipment, which will give you a return briefly. And you will certainly get much further! I do not recommend doing the crossing alone.

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## BODY OF WORK

Permanent exhibitions on the islands and abroad

### **SUI GENERIS – art exhibition in movement, extended with new work of art**

Maranhão, Ilha de Lençóis, Escola da ilha e Memorial da ilha, permanent

September 2, 2014 – September 30, 2014, permanent, from mon to fri, from 10 AM - 5 PM  
Maranhão, Ilha de Guajerutíua, Escola da Ilha e Posto de Saúde da ilha, permanent

May 20, 2015 – June 30, 2015 permanent, from mon to fri, from 10 AM - 5 PM

Maranhão, Baixada Maranhense, Ilha de Retiro, Conselho da Ilha, permanent

Opening March 11, 2016 - permanent, from 10 AM - 10 PM

Rio de Janeiro, Centro, Restaurante Crystal, downstairs, Rua Assembleia 11, permanent

29 July, 2015 – permanent, from mon to fri, from 11 AM - 4 PM

Rio de Janeiro, Ladeira dos Guararapes, Soccerfield, permanent

October 5, 2016 – November 30, 2016, permanent, from mon to fri, from 10 AM - 5 PM

Itinerate exhibitions throughout Brazil

### **SUI GENERIS – art exhibition in movement, extended with new work of art**

Rio de Janeiro, Centro, Centro Cultural Cândido Mendes, downstairs, Rua da Assembleia 10

March 20 – April 30, 2013, from mon to fri, from 11 AM - 4 PM

Rio de Janeiro, Aterro do Flamengo, Espaço Cultural Monumento Estácio de Sá,

May 5, 2014 – June 30, 2014, from tue to sun, from 10 AM - 5 PM

Maranhão, Ilha de Lençóis, Escola da ilha e Memorial da ilha, permanent

September 2, 2014 – September 30, 2014, permanent, from mon to fri, from 10 AM - 5 PM  
Rio de Janeiro, Jardim Botânico, Museu do Meio Ambiente, Rua Jardim Botânico, 1008

22 September 2014 – 11 January 2015, from tue to sun, from 10 AM - 5 PM

May 20, 2015 – June 30, 2015 permanent, from mon to fri, from 10 AM - 5 PM  
Maranhão, Ilha de Guajerutíua, Escola da Ilha e Posto de Saúde da ilha, permanent

Rio de Janeiro, Leblon, Clube Monte Líbano, Av. Borges de Medeiros, 701

July 2, 2015 – July 20, 2015, from mon to sun, from 10 AM - 5 PM  
Rio de Janeiro, Centro, Restaurante Crystal, downstairs, Rua Assembleia 11, permanent

29 July – permanent, from mon to fri, from 11 AM - 4 PM  
Rio de Janeiro, Alto Gávea, Sociedade Germania, Rua Antenor Rangel, 210

August 9, 2015 – August 11, 2015, from tue to sun, from 10 AM - 5 PM  
Janeiro, Rio de Janeiro, Centro, Colégio Cruzeiro, Rua Carlos de Carvalho, 76

August 29, 2015,- September 30, 2015, from mon to fri, from 11 AM - 4 PM Rio de  
Três Rios, Centro, Estado de Rio de Janeiro, Gallery Sesc Três Rios, Rua Nelson Viana, 327

September 3, 2015- October 31, 2015, from tue to sun, from 9 AM -9 PM, Sat/Sun until 6  
PM  
Maranhão, Centro, Museu Histórico e Artístico do Maranhão, Rua do Sol, 202

September 18, 2015 - October 31, 2015, from tue to sun, from 9 AM - 9 PM,  
Rio de Janeiro, Centro, Centro Cultural Light, Av. Marechal Floriano, 168

December 1, 2015 - January 15, 2016, from mon to fri, from 10 AM - 5 PM,  
Maranhão, Ilha de Retiro, Escola da Ilha e Posto de Saúde da ilha, permanent

March 5, 2016 – March 31, 2016, permanent, from mon to fri, from 10 AM - 5 PM  
Rio de Janeiro, Ladeira dos Guararapes, Soccerfield, permanent

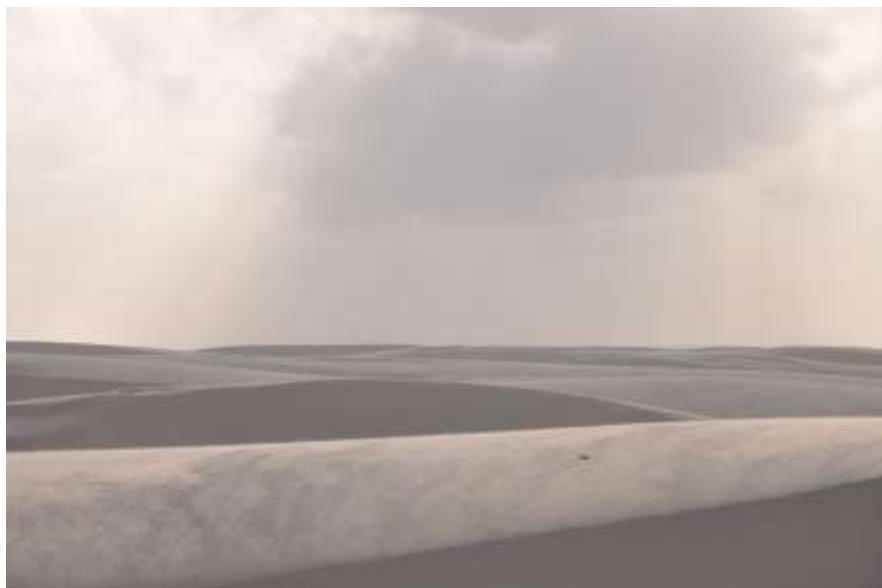
October 5, 2016 – November 30, 2016, permanent, from mon to fri, from 10 AM - 5 PM

#### BIBLIOGRAPHY LAUNCHED DURING OPENINGS OF THE ITINERATE EXHIBITIONS SUI GENERIS DURING 2012 AND 2016

BOOK *SUI GENERIS – L'ESSENCE DE LA VIE* :: *people and landscape*, published by  
Galerie Art in Rio, Andreas Hornung in 2016, premier edition, Rio de Janeiro. 152 pgs. ISBN  
978-85-67475-00-4

BOOK *LE PETIT PRINCE IN THE DESERT OF MARANHÃO STATE* – *five days on the way  
to art* published by Galerie Art in Rio, Andraes Hornung in 2013, second edition, Rio de  
Janeiro. 148 pgs. ISBN 978-85-67475-00-5

See portfolio exhibition SUI GENERIS using this link: <http://www.artinrioandreasornung.com>



artwork 1: Lençóis Maranhenses 9/2013



artwork 2: Lençóis Maranhenses 9/2013



artwork 3: Lençóis Maranhenses 9/2013



artwork 4: Lençóis Maranhenses 9/2013





artwork 5: Lençóis Maranhenses 9/2013



artwork 6: Lençóis Maranhenses 9/2013



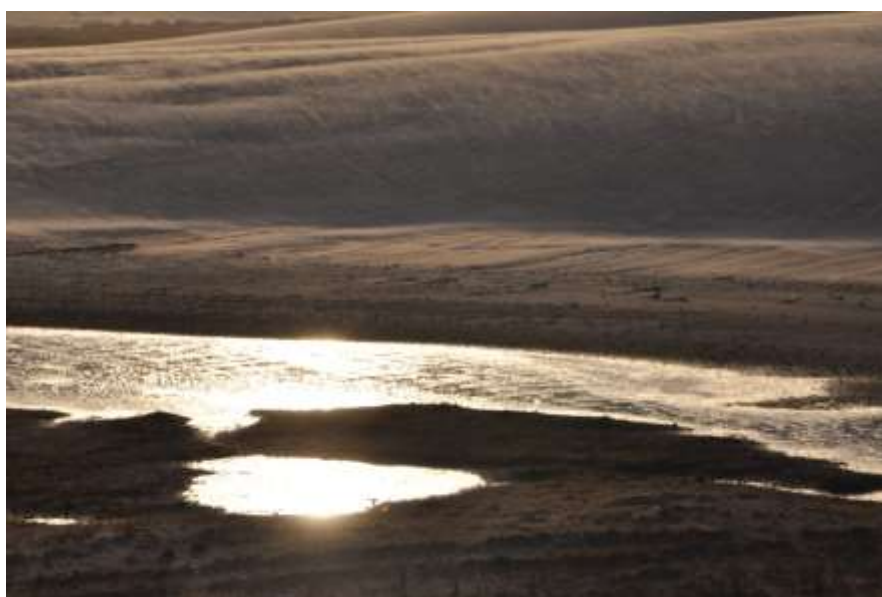
artwork 7: Lençóis Maranhenses 9/2013



artwork 8: Lençóis Maranhenses 9/2013



artwork 9: Lençóis Maranhenses 9/2013



artwork 10: Lençóis Maranhenses 9/2013



photo 1: Biker on the dunes in the middle of the park (Source: mochileiros.com.br, taken by Nivea Atallah on 17/11/2011)



photo 2: GPS Track-Log (Source: Wikiloc - Travessia nos Lençóis Maranhenses trail - on 02/09/2013 00:03).

<http://www.wikiloc.com/wikiloc/view.do?id=367450>



photo 3: Exhibition in Gallery Aterro, Rio de Janeiro, 5/2014



photo 4: Exhibition in Museum Jardim Botânico, Rio de Janeiro, 9/2014-1/2015



photo 5: Exhibition in Museum Jardim Botânico, Rio de Janeiro, 9/2014 - 1/2015



photo 6: Exhibition in Leblon, Rio de Janeiro, 6/2015



photo 7: Exhibition in Museum MHAM São Luís, 9/2015



photo 8: Exhibition in Museum MHAM São Luís, 9/2015



photo 9: Exhibition in Museum MHAM São Luís 9/2015



photo 10: Exhibition in Gallery Três Rios, RJ, 9/2015 -10/2015





photo 11: Exhibition in Gallery Light 11/2015-1/2016



photo 12: Workshop in Gallery Três Rios, RJ, 10/2015



photo 13: Workshop in Gallery Três Rios, RJ, 10/2015



photo 14: Workshop in Gallery Três Rios, RJ, 10/2015



photo 15: Workshop in Gallery Light, Rio de Janeiro, 1/2016



photo 16: Workshop in Gallery Light, Rio de Janeiro, 1/2016



photo 17: Workshop Olympic Games, Rio de Janeiro, 8/2016



photo 18: Workshop Olympic Games, Rio de Janeiro, 8/2016



photo 19: Workshop Olympic Games, Rio de Janeiro, 8/2016



photo 20: Workshop Olympic Games, Rio de Janeiro, 8/2016

