

**University of Plymouth
Schumacher College**



**UNDERSTANDING THE FRONT:
A Holistic Approach to Apprehend Traditional Communities' of Belém
Relationship to Nature**

Holistic Science Masters

**Author: Thais Moreno Soares
Primary Supervisor: João Meirelles
Secondary Supervisor: Stephan Harding**

August 2016

**University of Plymouth
Schumacher College**

**UNDERSTANDING THE FRONT:
A Holistic Approach to Apprehend Traditional Communities' of Belém
Relationship to Nature**

Holistic Science Masters

**Author: Thais Moreno Soares
Primary Supervisor: João Meirelles
Secondary Supervisor: Stephan Harding**

August 2016

ABSTRACT: In the frontiers between forest and cities, people live their daily struggle in the complexity of scarcity and abundance. This scenario, however, is fertile ground for developing new strategies to deal with environmental challenges and social welfare. [This is the beginning of an exploration of their narratives, their stories of place and life, in search for a better understanding of their relationship to nature. From their relationship with nature it became clear that the narrative still oscillates between the nature as resource and nature as an idyllic metaphor for life. This, however can be seen as an opportunity for new strategies to be developed through the strengthening of their community ties and history.

Key-words: Traditional Communities; Belém; relationship to nature; Deep Ecology; Amazon; phenomenological approach.

TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	1
INTRODUCTION	3
LITERATURE REVIEW.....	6
METHODOLOGY.....	15
FINDINGS AND DISCUSSION	20
ANALYSIS:	50
CONCLUSION	52
BIBLIOGRAPHY	54
APENDIX I: GUIDING QUESTIONS	59

LIST OF FIGURES

Figure 1: Amazon Biome Overview (RAISG, 2014)	11
Figure 2: Combu Island (Google, 2016)	21
Figure 3: View from D.N.'s house	22
Figure 4: Cocoa Fruit.....	25
Figure 5: The <i>Barcaça</i> structure with Cocoa almonds left to dry	26
Figure 6: Cotijuba Island (Google, 2016).....	31
Figure 7: Açai (<i>Euterpe oleracea</i>) tree	33
Figure 8: Marajó Island (Google, 2016).....	40
Figure 9: Typical House in Vila dos Pesqueiros	42
Figure 10: a view of the mangroves	46

ACKNOWLEDGMENTS

This inquiry is the result of the deep learning and detoxing process I went through while doing the Holistic Science Masters at Schumacher College during this past year. At the same time it is just the beginning of this exploration.

A special thankyou goes to Stephan and Phillip, amazing humans that I've had the opportunity to spend these past months with and that inspire me to pursue while also guiding the right path. Thank you Jonathan, it was an amazing opportunity to learn from you as well. I'm also eternally grateful to all the great teachers that I met throughout this time at Schumacher, thanks for sharing your time and experiences.

Thank you to João Meirelles for your patience and for sharing so much knowledge and understanding with me. I had an amazing time working with you.

I thank all the other Masters Students from whom I learned so much and shared memorable moments that I will forever cherish.

Thank you to all the participants of this research who received me in their homes and towns, I fell honoured to have met your wisdom.

Thank you, Evelyn and Emma for your love and support.

Thank you to my family, this is beyond words.

I am grateful to all those who contributed to this process, to all the staff members who are so attentive to the details and helpful in the times of need and the kitchen who fed our brains and bodies with deliciousness and love.

Thank you to the more-than-human-world who is guiding me every step of the way.

With love,

Thais

INTRODUCTION

‘The future belongs to the most compelling story’
(Dellinger, 2013)

In the frontiers between forest and cities, people live their daily struggle in the complexity of scarcity and abundance. The pressure of modernization¹ forces upon them a series of expectations, disguised desires and imposes relations that challenges their way of living. Also, it limits the possibilities of creative alternatives when antiquated generalized solutions are delivered. This scenario, however, is fertile ground for developing new strategies to deal with environmental challenges and social welfare. Abandoning the one solution fits all blueprint, the starting point of this opportunity is to hear and understand the stories of people who live in this contradictory edge, people whose lives are connected with greener territories, who face the challenge of preservation of a greater whole and self-preservation. This is the beginning of an exploration of their narratives, their stories of place and life, in search for a better understanding of their relationship to nature.

So far the negative impacts yielded by humanities’ economic growth strategy and mechanistic world view have not been addressed with the proper weight that they hold as externalities, this is shown by ‘key indicators of planetary and social ill-health’, which ‘are growing exponentially fast, including species extinctions, water use, the damming of rivers, urban populations, the loss of fisheries, and average surface temperatures’ (Harding, 2010, p. 19). At the root of the problem is a set of beliefs widely incorporated by mainstream economics that have aggravated a feeling of human detachment from the rest of the world.

Even though it is possible to find in many places around the world examples of economical innovation occurring, such the ideas of transition towns, green economy, the Commons and *Buen Vivir* [good living], there is still a strong cultural push towards economic growth and development. In developing nations such as Brazil this pressure comes from not only from big corporations and governments, but also from people

¹ Modernization as in the progressive transition from a 'traditional' to a 'modern' industrial and technological society.

seeking minimal material comfort, health, education, as it is in their right. This adds to the complexity of the situation, for example, where some fight against the building of dams in the middle of the Amazon because of the damage it causes, others support it to because they believe it will create jobs, provide energy, bring further investments and eventually result in their well-being. Nowadays this pressure is felt everywhere, from big cities to isolated communities.

A possible way out of this crisis goes through the understanding that there is a demand of new creative solutions permeated by another perspective: a world that is a living organism and we just another piece of this beautiful composition. As Naess cited by Harding (2010) says:

‘this mechanistic world-view has brought us to the brink of a catastrophe so great that our very civilization is threatened, and that we urgently need to make peace with nature by rediscovering and embodying a world-view that reconnects us with a deep sense of participating in a cosmos suffused with intelligence, beauty, intrinsic value and profound meaning...’ (p.19).

From an anthropocentric point of view by embodying and reconnecting with nature ‘we realize how dependent we are on the well-being of nature for our own physical and psychological well-being’ (Harding, 1997).

This understanding helps to see through the complexity of our times and allows for a curiosity to emerge about how are we to change from the development narrative through alternative strategies. Where, to make sense these have to be place specific considering local peculiarities and complexities, also, developed with and for the community in an autonomous process that respects diversity of opinions and of lives.

Listening becomes an important step to truly consider the context of a place where a strategy is to be constructed; this, in fact, is a fundamental part present from the beginning and through the unfolding. From listening an understanding can begin to form, a process which is never truly finished due to the transformation that occurs in time, it is an ever changing unfolding process, according to Harding (2010), is where we come in ‘contact with the realm of meaning, where we seek intimacy and connection with what has been explained’ (p. 14).

This research is going to listen to the people who live between forests and cities, specifically communities that are close to the city of Belém, in the Pará state, but live in islands of the Amazon delta. These islands have some restrictions because they are preservation areas, which will be explained further on, at the same time these places often lack proper infrastructure to attend the population basic needs, where the 'solutions' that work for cities and rural areas don't necessarily work in their case. These peculiarities of: living within a preservation area; with all its abundance and some restrictions; having big cities as a close reference; still in need of much to achieve wellbeing; are what draw my attention. They can bring key insights to the shift to a more integrated living. This is the complex landscape from which this research germinates.

Also, this research is deeply intertwined with my own journey of exploring meaning in scientific inquiries, a burning desire to serve all life and protect the natural world using the tools of knowledge that I have come across over the past years. As my understanding grows dichotomies of separateness begin to resolve themselves internally, so this is also about how does this inform my actions, how this helps me see the world differently, with new eyes.

LITERATURE REVIEW

My most vivid childhood memories are all related to times spent in nature, the joy, freedom and excitement I felt. Soon after came the concern for environment, with news from the media talking about deforestation in the Amazon. But the generalized guilt is harder to historically pinpoint a birthplace; I just know it was early on that I felt somehow responsible for what was happening.

There is a tendency, though, in the general media to externalize and simplify the attribution of blame, for example: climate change is due to the consumption of fossil fuels; loss of biodiversity is due to illegal wood logging; loss of environmental services is due to corporations; deforestation linked to agribusiness; and war is to fight terrorism; it is always to something or someone external from ourselves. Again, this doesn't help to see the root of the issue, if analysed in the end we realize that these things are not even the problem in itself, but a consequence of a series of happenings that boil down to our humdrum lives.

At the same time we find that some key concepts that are deeply ingrained, so far that it is hard to see it in everyday life, some these are: the idea that human society is somehow separate from the natural world; where humanity is placed hierarchically above it; that we need to control it commodifying it; turn it into profitable units; of which some humans are more deserving than others. Much of this concept separation can be linked to the evolution of science, "the enlightenment heritage that our rational thinking and technological creations can "appropriate nature" and "unlock its secrets" to serve our needs" (Löschmann in Weber, 2013, p.7). Goodwin (2007) explains that the goal of science was to discover the ultimate truth in terms of laws; the key was to identify the 'mechanical causality' which then was used for 'prediction and control of many of these processes' (p.31).

To the objectification and fragmentation of the living world resulting in the environmental problems we now face the embraced response from world leaders has been the idea of 'sustainable development', meaning to this concept conceived in European setting has the notion that nations want to develop and achieve certain standards. According to Guattari (2000):

‘Political groupings and executive authorities appear to be totally incapable of understanding the full implications of these issues. Despite having recently initiated a partial realization of the most obvious dangers that threaten the natural environment of our societies, they are generally content to simply tackle industrial pollution and then from a purely technocratic perspective’ (p.27-28)

This way we enter in a paradox, where sustainable growth is an unnatural economical ever-growing system which is being mostly used by corporative business and government leaders who are stuck within this antiquated narrative.

In fact, even in emerging economies of the Global South, as Gudynas (2011) points out, ‘a series of socialist, progressive or new left governments present themselves as emerging economies that defend classical growth strategies (cheap goods, natural resources) (p. 442)’. Where, in the name of progress, development projects, often don’t take into account the peculiarities of a certain location and disregard negative effects (both social and ecological).

In a couple of years sustainable development will be seen as the first step in the global mental shift from this model that we have right now to a more prosperous diverse community. Using Weber’s (2013) terminology, it is an enlivened world, meaning a ‘pluralist world of living beings constantly entangled with each other within a biosphere that must we understood as a continuous unfolding of diversity, freedom and experience’ (p.7). Exposing the invisible assumptions of our old narratives, these enlivened concepts can guide new narratives. Rekindle the collective dream of a more beautiful world. This is not just an economical, but a shift in all areas. In the sciences Naess cited by Harding (1997) explains that: ‘ecological science, concerned with facts and logic alone, cannot answer ethical questions about how we should live. For this we need ecological wisdom. Deep ecology seeks to develop this by focusing on deep experience, deep questioning and deep commitment’.

In fact, this concept developed by Weber is greatly influenced by Naess' concept of Deep Ecology, which is the recognition that we humans are a part of the systems that created and sustains life on this planet. ‘Deeper ecological awareness recognizes the fundamental interconnectedness of all phenomena and the fact that, as individuals and

societies, we are all embedded in (and ultimately dependent on) the cyclical processes of nature.’ (Capra, 2014, p.36-37). Another influence is the work of Lovelock who developed the Gaia Theory which states that there is an active modification of the environment by the organisms which live in it, this allows for life to continue and diversify. (Lovelock, 1988).

If we are adopting an integrated view of nature and believe that we are nature so relationship with the more-than-human-world is a basic necessity. This is in agreement with the findings of Max-Neef (1991), who in the ‘Human Scale Development’ described the basic ontological needs. According to his research these needs are also constant through all human cultures and across historical time periods, but their strategies for satisfying them change across cultures and time. An important point is that there is no hierarchy of needs (Max-Neef, 1991, p.17). The theme of human relationship to nature shows up throughout the matrix of possible satisfiers developed by Max-Neef. The matrix classifies needs ‘according to the existential categories of Being, Having, Doing and Interacting and, on the other hand, according to the axiological categories of Subsistence, Protection, Affection, Understanding, Participation, Idleness, Creation, Identity and Freedom’ (p. 30). In the cross of the needs subsistence and interacting for example, we find living environment. Meaning that a part of our subsistence is interacting with a living environment. Also in the crossing of satisfier for affection are having relationships with nature. In Idleness we find interacting with landscape. In this list are just a couple of examples.

This scale also brings an important criticism to the measurement of GDP as a measure of a developed country, in his words: ‘it is in this way that the indiscriminate depredation of natural resources makes the GNP grow, as in the case of a sick population when it increases its consumption of pharmaceuticals or use of hospital facilities’ (Max-Neef, 1991, p.58)

In the introduction I mention that that these communities are a fertile ground for new strategies to be developed, this is widely based on the concept of Buen Vivir, which comes to challenge the concepts of growth and development and proposing alternatives, it is ‘a reaction against the conventional domination of utilitarian values, particularly expressed in the reductionism of life to economic values and the subsequent

commoditization of almost everything' (Gudynas, 2011, p.445). Here he uses the word modernity is used to describe the division between nature and society, Gudynas (2011) explains that it is 'a colonial distinction between modern and non-modern indigenous peoples, the myth of progress as a unidirectional linear path, and a strong confidence on Cartesian science.'

The quality of life in Buen Vivir is understood rooted in a location and in expanded community (humans and nature) Buen Vivir, it is a concept in constant construction therefore there is no formula, no applied blue print. Also it is intercultural, meaning it is not the return to rudimentary ways, but it takes into consideration all the cultures currently inhabiting that place: 'Buen Vivir is more than a simple coexistence or juxtaposition of different cultures, because they interact in dialogue and praxis focused on promoting alternatives to development' (Gudynas, 2011, p.445).

These ideas have become an important point of reference to this analysis, for it is essential for the traditional peoples of Brazil to regain their power and be recognized by society for their importance. It is also coherent with the Deep Ecology concept nurtured by Naess, proposing a shift from the anthropocentric perspective to the biocentric approach. In the Buen Vivir concept nature is seen as a subject, with intrinsic value and has its own rights, the ultimate dissolution of the dualism between humans and nature. Another contribution of western society to the idea of Buen Vivir is the Feminist movement, which brings forth the discussion of gender equality which is not always present in traditional cultures. This emerged from the need of reclaiming the power of cultural identities and a recognition of *decolonial* efforts, and 'acknowledges that there are several ways to give value, such as esthetic, cultural, historical, environmental, spiritual and so on' (Gudynas, 2011, p.445).

Since the concept of Buen Vivir is locally based it needs community engagement and deep reflection about not only what is valuable to them, their belief cosmology placed in the *interculturality*. An important part of this analysis of place is informed by landscape, from which much information is gathered. Here though the idea is not natural landscape viewed separated from culture. Culture and nature act upon each other changing themselves physically and symbolically.

The Amazonian landscape

Much of the Amazonian intricate history is still a mystery, archaeological findings show that complex cultures have not only lived there but they also transformed their surroundings, some of the artefacts are 7 thousand years old (Ribeiro, 2016). The first Spanish, Portuguese and other European explorers greatly contributed to this for in the documents of the time a great deal of exoticism is attributed to the Amazonian expeditions. Even the origin of its name is still a puzzle, where, like many traditional cosmologies, time and space, *myth-facts*² and facts, mingle in its elaborate unfolding. To begin with the name, a clear reference to Greek mythology, is attributed to the writings of Gaspar de Carvajal (1504-1584), a Dominican priest who wrote of Francisco Orellana's journeys, as cited by Silva (2011) 'There were 10 or 12 warrior women that came to help the natives in their hassle. These we did see: they fought in front of all natives like captains, as brave as the man... They were white, tall, with long hair... with their bow and arrow; they fight like ten natives'. According to Silva (2011) 'the etymology of the name Amazon is the clear link between the mythos based on the Eurocentric standpoint', where 'personified in the figures of warrior women that are often confused with the personification of the Americas'.

Nowadays the Amazon region is divided in 9 countries, where 'thirty-three million people live, including 385 Native peoples' (Meirelles, 2007). The Amazon is the largest biome on Earth and it occupies 5% of Earth's surface, equivalent to Australia, where more than half of the Biome is in Brazil.

'The Amazon we are talking about is the biome itself, although it is common to refer to legal Amazon in the political sense. The Amazon biome lies within legal Amazon and occupies 4.19 million km² (419 million hectares), or 49.29% of the Brazilian territory (equivalent to the total area of the European Union's 28 countries)', this is where 25 million people live, 'amongst which are 1 million families in traditional communities dedicated to family agriculture' (Meirelles, 2007).

² This term is used to describe what to the western point of view might seem as a mythological story, it is, from a cosmological point of view, an understanding, a poetical explanation of how the world works, which is sometimes the only way of explaining something.

'It is the most complex known biome, with 1.5 million species. This means that presumably in an area of 5% of the Earth's surface, ¼ of all living species are found. Most diversity is found in inferior plants (algae, fungi etc.) and invertebrates. With one single footstep in the upland forest, a person steps on close to 1.500 small animals, a true zoological tractate' (Schubart cited by Meirelles, 2007).

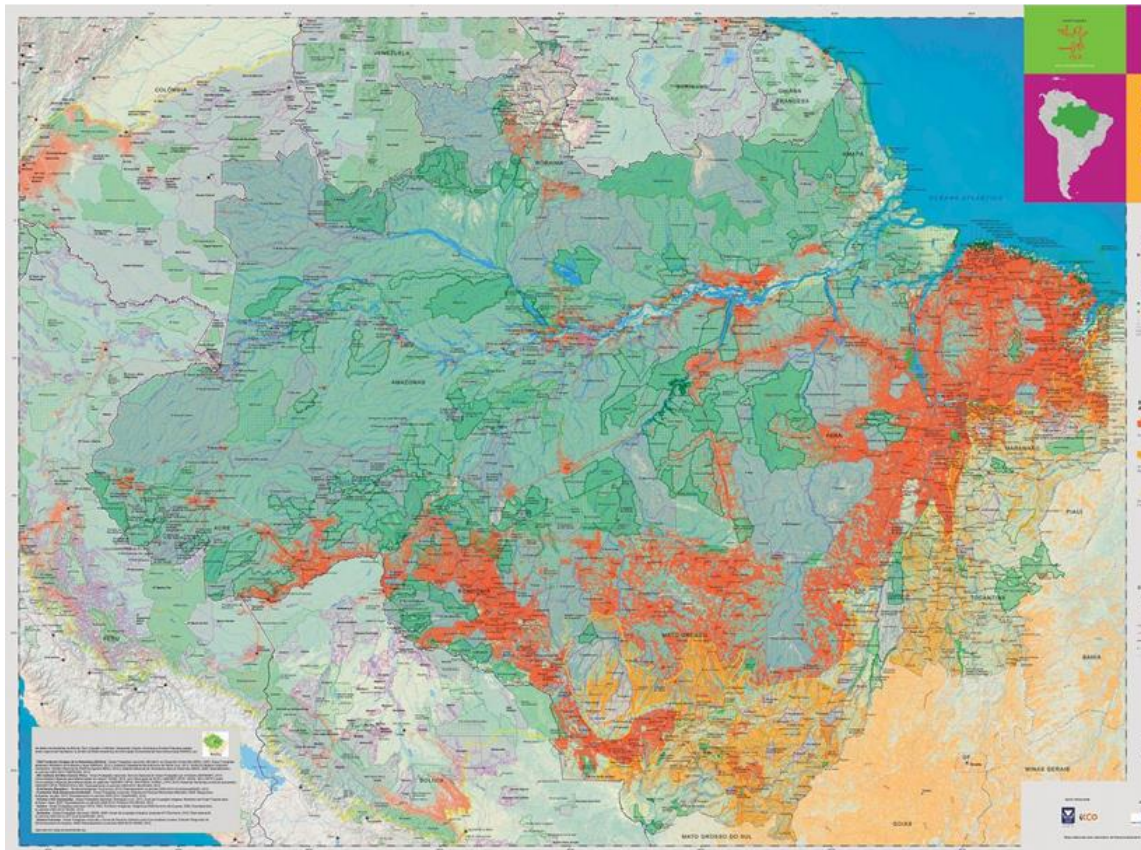


Figure 1: Amazon Biome Overview (RAISG, 2014)

The Amazon is fundamental when the topic is environmental services, which are the functions the biota, land, water and air provide. Also:

'Environmental services are more valuable than the short-lived uses that replace the forest. These services include maintenance of biodiversity, of water cycling and of the stocks of carbon that avoid further intensification of the greenhouse effect. Feedback between climatic changes and the forest through such processes as forest fires, tree

mortality from drought and heat and the release of carbon stocks in the soil represent dangers for the climate, the forest and the Brazilian population' (Fearnside, 2006)

For example, the Amazon contains a fifth of the planet's river water and an essential part of the water cycle of neighboring regions due to "flying rivers", in fact, the Amazon region pumps 20 billion tons of water/day from the soil into the atmosphere (TED, 2014).

Including the region that this research will take place, '96% of the Amazon is considered lowlands, where more than half lies below 100 m above sea level, and less than 5% lies above 500 m' (Meirelles, 2007). 'In the Brazilian Amazon there are 70 types of natural environments (ecosystems) and another 6 types of anthropic environments.' (SAE cited by Meirelles, 2007).

It is also essential to talk about the Amazon when speaking of Climate Change, it is estimated that only 'the Brazilian Amazon is believed to house 82,100.00 million tons of CO₂' (INPE cited by Meirelles, 2007), a major concern for environmentalists, but hardly noted by agroindustry and illegal logging.

Historical references of Brazilians' relationship to nature:

Piza³ (2003, p.14) states that 'nature is the main reference point of the Brazilian self-image'⁴. Since colonial times references of grandiose forests, biodiversity and natural abundance are encountered in much of Brazilian literature, music and other art forms. In fact, even the country's name derived from a tree species called 'Pau-Brasil' (*Caesalpinia echinata*) [Brazil-wood]. This land is often described as a mother full of life; these qualities can be seen in the national anthem:

Do que a terra mais garrida
Teus risonhos, lindos campos têm mais
flores,

Than the showiest land,
Thy smiling, pretty prairies have more
flowers

³ Daniel Piza was a journalist, writer and artist who contributes to this analysis a cross between Brazilian history, literature and a construction of a concept of nature.

⁴ All quotations of Piza (2003) were freely translated from the author by myself.

Nossos bosques têm mais vida,
Nossa vida no teu seio mais amores.

...

Dos filhos deste solo
És mãe gentil,
Pátria amada,
Brasil!

Our groves have more life,
Our life in thy bosom more love.

...

Of the sons of this ground
Thou art gentle mother,
Beloved homeland,
Brazil!

Piza (2003) points out the contradiction Brazilians still live with, where 'at the same time that living in a country beautiful by nature is vaunted, nature is mistreated with the same intensity' (p.17). Though this is absolutely not a true generalization of all peoples and ethnic groups that live in this country, it is clearly seen in relation to industrialized and rural settlements.

If we look at our history, the Portuguese were, at the time, excellent sailors and adventure seeking wealth driven conquerors (Hollanda, 1936). Upon arriving in such an exuberant land they were prepared to conquer it, what Hollanda (1936) called an 'Eden like paradise'. According to Piza (2003) 'the idea of an exuberant nature helped to reinforce an attitude which ended up delaying the enrichment and formation of a new nation' (p.19). They based their economy on the export of commodities, such as sugar, gold and rubber, which were all highly lucrative in the European markets and made possible due to slave labour of Africans and the natives. These products went through cycles of prosperity and decadence (Piza, 2003, p.19) before industrialization ideas began to sprout, in considerable delay in comparison to Europe.

The dichotomy of having an exuberant nature that is explored in full for the benefit of very few is still an unresolved wound in the Brazilian story. The constant struggle between conservation and development are still lived in the contradictions found in everyday life, the examples are many, but a very recent one is the fact that while the opening ceremony of the Olympic Games had Brazilian biodiversity as part of the theme, we have the Olympic golf course constructed on the land of a conservation unit - the Parque Natural Municipal de Marapendi (Marapendi Municipal Park), and while crossing the Amazon region the torch ceremony caused havoc resulting in Juma,

the jaguar (*Panthera onca*) military mascot being put down because it got uncontrollably scared, and stressed pink dolphins (*Inia geoffrensis*) from excessive picture taking.

The stagnated repetition of a colonizing attitude towards natural richness and social needs creates a relationship with nature that oscillates between idealism and devastation. This fosters antiquated ways of relating to land, '...besides polluted rivers, the forest suffers with burnings and deforestation, with the savage exploration of wood and ores, with the lack of research about its flora and fauna... and opening areas for plantations that are not even suited for that ecosystem' (Piza, p.17).

METHODOLOGY

The separation between researcher and subject in scientific inquiry is another theoretical construct which is not needed from lab work to field work, because what makes research fascinating and creative is deep involvement with not only the subject, theme, but also with the surrounding environment of the research. Swantz, as cited by Reason and Bradbury (2001), says that scientific inquiry is 'really a quest for life, to understand life and to create what I call living knowledge...' (p.1).

In this research I will bring all of myself, as it is not possible to alienate the researcher self, from the rest of the self. Exemplifying how intertwined we are with everything the world around us Abram (1996) says 'the scientist does not randomly choose a specific discipline... but is drawn to a particular field by a complex of subjective experiences and encounters, many of which unfold far from the laboratory and its rarefied atmosphere' (p.33). In fact, I'm only doing this research, because this question is relevant not only to my logic mind, but every cell of my body seems to vibrate in unison coherence in this quest for a better understanding. This needs to be not only acknowledged but revived and used in our favour, 'a research agenda that lacks any felt or visceral connection with that which it studies will necessarily yield poor results' (Abram, 1996).

The methodology is inspired by action-research, where, according to Reason and Bradbury (2001), action-research is:

'a participatory, democratic process concerned with developing practical knowing in the pursuit of worthwhile human purposes, grounded in a participatory worldview which we believe is emerging at this historical moment. It seeks to bring together action and reflection, theory and practice, in participation with others, in the pursuit of practical solutions to issues of pressing concern to people, and more generally the flourishing of individual persons and their communities.' (p.42)

Participation in the context that I wish to understand is therefore a fundamental part of this investigation. A guiding questionnaire (Appendix 1) based on the research topic was made to be referred to as a guideline of the different themes to be explored, but not directly applied as to allow for more freedom in the topics raised by the

participants. In this sense the methodology is using a phenomenological approach, where the aim is to let the phenomenon appear as it presents itself. The interactions will resemble unguided conversations not based on preconceived ideas or agendas, and engaging will allow for them to reflect about life, nature and relation to place, which in turn will guide my interaction in a feedback loop, 'one way of putting this is to say that we neither discover an objective reality nor invent a subjective reality, but that there is a process of responsive evocation, the world 'calling forth' something in me that in turn 'calls forth' something in the world.' (McGilchrist by Bortoft 2012 p.378-380). It was important that these happened in a setting that they felt conformable and that their daily routine was not interrupted, so I went to meet them in their preferred place, either their work place or their houses. This is to recognize the influence of bodies upon one another and the transformation that occurs both ways when that encounter happens. Therefore the product does not belong to the researcher; it was collectively constructed within the interaction of parts.

Though interacting with the parts I to get a glimpse of the whole, for 'the only way to encounter the whole is within the parts through which it presences, and not by standing back from the parts to try and get an 'overview' of the whole' (Bortoft, 2012, 208-210). At the same time while engaging with the people I will be in a '...mode of understanding sees the part in light of the whole' (Bortoft, 1996, p.3-4). This research is qualitative, which is coherent with Goethe's approach, where 'he worked to achieve an authentic wholeness by dwelling in the phenomenon instead of replacing it with a mathematical representation' (Bortoft, 1996, p.19).

A possible critique of this research method is the possibility of projection and lack of objectivity, the senses and experience are therefore considered lesser, of a spiritual nature and were ostracized from science, a thing of poets and artists, where 'the features of nature which we encounter most immediately in our experience are judged to be unreal – just illusions of the senses. In contrast, what is real is not evident to the senses and has to be attained through the use of intellectual reasoning' (Bortoft, 1996, p.17-18).

The way of understanding the world that came from the insights of the founders of modern science such as Galileo, Descartes, Francis Bacon and Isaac Newton is a

glorious achievement that must not be lost or discarded in any new paradigm shift that might occur. However, its limitations are now beginning to overwhelm its effectiveness. Bortoft (2012) says that the Cartesian model is based on mere intellectual impression of the whole. For, the belief that we get an objective view from a distancing or removal of ourselves from the subject studied is 'in essence subjective because the witness is compelled to answer questions which the scientist himself has formulated...not realizing that it is the transposed echo of their own voice' (Bortoft, 1996, p.17), one could say that the experiment says as much about the phenomena as it says about the scientist himself.

On this note phenomenology questions that such objectivity portrayed by many Cartesian scientific methodologies is even possible, but what one should do is to recognize the preconceptions within humans and *suspend* them, as to allow for the phenomenon to show itself. Also, to counter argument the negativity claimed by projection in scientific inquiry, Abram (1996) says:

'...one perceives a world at all only by projecting oneself into that world, that one makes contact with things and others only by actively participating in them...It will suggest that perception is always participatory, and hence that modern humanity's denial of awareness in nonhuman nature is borne not by any conceptual or scientific rigor, but rather by an inability, or refusal, to fully perceive other organisms' (p.276).

To deny this is to fail to recognize the richness of the multiple aspects of human interaction. In this case, what some see as lack of boundaries can be used in favour of a greater understanding. To nullify this sensitive aspect of the interaction, limits the possibility of understanding and recognizing the whole aspect of the interaction.

To manage the logistics and the contacts with the participants I had the support of the NGO Peabiru, they were a fundamental part in helping me get to the places and the people that would participate in this research, especially due to the restrictions of time.

The criteria for the places chosen where:

a) All had to be somehow linked to conservation units: all three locations belong to Conservation Units that fall under the sustainable use category. Both Combu and

Cotijuba Islands are an *APA* (Area of Environmental Protection). Where there is 'a certain degree of human occupation', but also 'biotic, abiotic, aesthetic or cultural attributes important for quality of life and well-being of human populations'⁵ (ICMBio, 2011). Their main objective is to protect biological diversity, control human occupation, restrict human activities and ascertain sustainable use of natural resources. Soure is a *Reserva Extrativista Marinha* (Marine Gathering⁶ Reserve); the main objective is to secure the way of life and culture of these populations as well as the sustainable use of natural resources. 'These are destined for traditional populations whose livelihood is based on forest gathering, complemented with subsistence agriculture and small animal herding'⁷ (BRASIL, 2000).

b) Had an important income provision with activities that were related to the place and to nature: the groups that participated in the construction of this narrative were traditional communities living with products from the forest or, mostly run by women.

c) Feasible in the amount of time for logistics: considering the short amount of time available a compromise had to be made in the logistics, places that would take longer than a day were discarded.

The criteria for the selection of participants were:

- a) One anchor person was selected from each place; this person had previous contact with the NGO Peabiru.
- b) The anchor person suggested other people that were available to participate.

These encounters happened from the 29th of July to the 16th of August of 2016. A total of 16 people were engaged: 5 people in Combu; 8 people in Cotijuba; 3 people in Soure, out of which 12 were women between 25 and 60 years old. The conversations were recorded using a normal smart phone and the relevant parts were then transcribed for this analysis. From all of the information gathered only a selected part is going to be used in this report, the criteria of selection is based on the major themes that arose from

⁵ Free translation by the author from original text in Portuguese

⁶ In English the word extractivism holds a negative connotation removing raw materials from the earth, where in Portuguese language it is used to describe the activities of traditional gatherers or foragers that depend on the forest as the central part of their subsistence and income.

⁷ Free translation by the author from original text in Portuguese

the conversations and that can be linked to the topic, meaning, indicate their understanding of their relationship to nature and place. To protect their identities only initials will be used, also, to gift back to the participants a shorter document in Portuguese containing the main points will be produced and given to them.

The construction of the narrative of the encounters is written in such a way to try to convey how all the senses we active and participated in this analysis.

FINDINGS AND DISCUSSION

Belém is a city just a little south of the Equator, inside the Amazon biome and one of the most devastated frontiers. It is bathed in the waters of the Guamá River from one side and the Pará River⁸ on the other. The metropolitan area has approximately 2 million inhabitants (IBGE, 2016), fascinating historical buildings and all of the collateral damage associated to highly populated locations. Big cities are not what people normally associate with the Amazon, but Belém holds strategical importance in national history since it was the entrance to the Amazon and it will be the contrasting scenario that will offer insights into this reflection.

This is the beginning of my journey, riding down a typical two way avenue to reach a small plaza with a dock where boats come and go taking people and goods from Belém though the Guamá River towards Combu Island. The plaza is named after the only Imperial Princess Brazil ever had, Princess Isabel, though its oppressive greyness does not reflect the opulence of such a name. At the plaza the piercing morning sun shows the decadent concrete present in most of the manmade structures. The square seems to be forgotten in history, evidenced in the flaking yellow paint that a child scratches out of the old swing. To the perceptive eye human abandonment materializes into opportunity for the more-than-human-nature, a battle in slow motion where life begins to slowly find its way resurfacing through the crevices and cracks of cement, a true proof of resistance through persistence.

With each soft blow of warm wind that came from the river, also came a fresh breath of longing to be on the other side. The boat man rest under the shade of a solitary tree, waiting for more people to cross, the organization occurs organically amongst them and the passengers. My gaze drifts into the vastness of the river, behind me are buildings, vehicle sounds, roads, shops, busy people and development. In front of me the slow and steady flow of a massive amount of water, the morning sky and wonder. It is immensely difficult to keep a wider awareness to the more-than-human-world in a city context, the tree, the river and the rare bird become dull and lifeless. In

⁸ The Pará River is the southern branch of the Amazon and is the result of the mega delta of the Amazon and Tocantins rivers among other small rivers, such as the Guamá River.

their objectification they are reduced to their function, trees are for shade, the river for crossing, these city birds which are not particularly beautiful have no real purpose. In the same way humans are also defined by their function in a lifelong game of coming and going, where we lose track of the each other's aliveness.



Figure 2: Combú Island (Google, 2016)

PART I:

Combú Island

In search of Combú's gold

The boat to cross the Guará River towards the Combú island (Figure 1), what before is just a thin greenish line in the horizon, in 20 minutes that it takes to cross, begins to show all its complexity, becoming a full blown forest inhabited by about 300 families of '*Ribeirinhos*' (riverbank dwellers) who live of traditional fishing, non-timber forest products, subsistence agriculture and the eventual tourist visit. It is impressive looking at Belém from the waters; you realize the concrete jungle you were in. The heat difference felt like it decreased by about three degrees. My body reacts in deep breaths and relaxation to the dissipating image of the local Manhattan Island. Enzensberger

(1987) describes in his book about the feeling that you get in journeys that you cross not only imaginary lines of space but also lines in time, what he called 'isocronas' (p.129). Like that I feel that I'm entering another '*isocronas*', going to a different time, this vessel, my time machine.

The Combu Island is a 15 square kilometre landmass among a series of islands in the middle of the Guamá River near its delta situated at 1.5 km from Belém city centre, and an APA (Area of Environmental Protection) since 1997. Regardless of its proximity, public energy arrived just recently in 2011, before some had their own generators.

The place I was going was a fissure in the Island, a segment of the river made its way into the land, but not enough to cut it in half, like it I wanted to infiltrate with my senses this landscape and its people to learn. Shades of green from the trees contrasted with the milk-chocolate waters and the blue sky. Countless species of trees and some birds passed by, but all we could hear was the toc-toc of the boat's engine. The trees bend towards the river in a welcoming gesture to the new comers, I greet back with a smile. The neighbours live quite far from one another and most of their houses were still wooden constructions, but all of them had boats, sometimes more than one tied to their door step, of all shapes, colours and sizes. These are the fundamental means of transportation, even to go from one place to the other within the island.



Figure 3: View from D.N.'s house

The boat arrived at D.N. house and I climbed up the 12 steps in the slightly precarious wooden stairs to a little wooden deck. This is where I got a first look at the house. I walked in and was greeted by a generous smile belonging to her eldest daughter, P.N., we shook hands as my nostrils were filled by a strong bitter-sweet aroma. She knew I was arriving and affirmed: 'you are the person who was coming to see us work, right?' I nodded in agreement 'Mom is feeling ill, so she is in bed,' she said. When I asked what she was suffering from they told me that they didn't know but it was probably due to too much traveling. Already grabbing her tray, she introduced me to another woman who was also quietly peeling cocoa beans (*Theobroma cacao*) in the corner, 'This is R., she helps us with the production' who greeted me with a timid smile. I mention the powerful cocoa (*Theobroma cacao*) smell and they comment that they hardly smell it anymore.

Outside, the soil around the house is bare red earth, beaten down, except for a few trees, it is flat, almost no rocks. The cocoa trees (*Theobroma cacao*), native to the Amazon, were planted spread out in the back yard sharing space with açai palm trees (*Euterpe oleracea*), among other exotic plants – coconut trees, lemon trees and many others. In fact, the ground was full of lemons and coconuts, the overflowing abundance is remarkable. You walk a little further and meet the forest, a lot of this forest is already secondary, but it is still impressive to walk into someone's house whose back garden is Amazonian forest. About ten meters away from the house you are greeted by what the indigenous call the mother of all trees, the *Sumauma* or *Samaumeira* (*Ceiba pentandra*). Its tall canopy demands reverence while its roots offers shelter to many critters. The gigantic exposed roots are needed to support this monumental tree; they hold the soil in a thigh and welcoming hug. As I approached her a small bat (a nocturnal animal) flew a little higher on its bark and we exchanged curious looks. His skin was the deepest shade of black which made it hard to distinguish his features, wings, feet, small ears were tightly packed together. His eyes brightened by the sunlight reflected back to me a small mirrored surface making known our mutual acknowledgement of each other's existence.

Knowing a little more about their surroundings I went back into the house. D.N. lives with her two daughters in a three bedroom concrete house, with a living room, one

bathroom and a kitchen that doubles as artisanal chocolate factory. Her brand is called Daughter's of Combu (*Filhas do Combu*), children of this land.

In the doorway appeared a short woman in her late forties with soft brown indigenous skin and dark straight hair. With a half-smile and tired eyes, D.N. stepped out of her room to apologize for her absence, saying that she didn't know what she had, but all she was able to do was lay down. I thanked her for receiving me and that she was to rest as much as she needed to, for we could talk later.

The eldest daughter and I talked as her dexterous hands peeled the cocoa (*Theobroma cacao*) almonds, her hands seemed to have a life of their own and didn't stop; there was no need to look at the tray on her lap. She explained that relationship with the cocoa (*Theobroma cacao*) began in rudimentary form with her grandfather (D.N.'s father), while everyone else was working with açai (*Euterpe oleracea*), both the palm-heart and fruit, he insisted that cocoa (*Theobroma cacao*) one day would be recognized as 'the gold of the Amazon'. The açai (*Euterpe oleracea*) is one of the most important trees of the Amazon for it is one of the main food sources for families and also a main source of income for some. They drink the açai (*Euterpe oleracea*) with their meals with a specific type of local manioc toasted flour. When her family moved to Combu they began managing the forest in a traditional way, by enriching it with fruits and nuts, especially with more cacao trees (*Theobroma cacao*), but also fishing and selling açai (*Euterpe oleracea*). At that time, this visionary man, sold the dried cocoa (*Theobroma cacao*) seeds to merchants, but kept some for their use, of which were toasted and then made into a past with added sugar in a traditional wooden pestle that hardened the next day was used to make hot cocoa (*Theobroma cacao*) for the family. Considering the importance of açai (*Euterpe oleracea*) to the region her father and D.N. were pioneers in persisting with the cocoa.



Figure 4: Cocoa (*Theobroma cacao*) Fruit

Native to the Amazon the cocoa, here we find the variety known as *Forastero*. The small height tree prefers deep, porous grounds and warm and humid climates with not much variation. A beautiful flower sprouts unexpectedly from the trunk and thicker branches; these are small yellow five-pointed stars with burgundy projected appendages, an alluring sight ready to reciprocate the pollinator's kiss. The ovoid fruit is a little bigger than our hands and is ready when it becomes deep yellow, the white pulp envelops deep brown seeds. The trees abundance gives off fruits twice a year around January and July. They fertilize the plants with the local forest residues. Also, recently, they started working with composting using earthworms, method influenced by the suggestion of a client.

One must be careful while opening the fruit as to not damage the seeds. The pulp of the fruit is pressed and juice is given off, it is delicious by itself and D.N. uses it to make cocoa (*Theobroma cacao*) liqueur. The juice is extracted by putting the almonds in a long weaved indigenous cylinder-like artefact made from different types of palm trees (e.g. Jacitara – *Desmoncus Orthacanthos*) called *Tipiti*. The liquid is then cooked to eliminate any bacteria then organic cachaça⁹ is added.

As soon as the pulp is extracted, the almonds must go through a process of fermentation for two to three days. The seed enters in a fever stage where the temperature goes from around 30 to 45-55 degrees Celsius, this process is how yeast, lactic-acid bacteria, acetic acid bacteria change the environment around the bean making acetic acid (vinegar) which, together with the heat, will start to decompose cell

⁹ Brazilian hard liqueur made from sugar cane.

structures, which is the death of the seed to give off the characteristic aroma of chocolate. The seed gives itself up to form something that is highly appreciated by humans, who in turn, help the cocoa (*Theobroma cacao*) plant to propagate. The seeds go through natural sun drying in wooden structures lifted off the ground called *Barçaças* (barges), named like that because they resemble boats with a movable roof, for about four days. Then they are cleaned, selected and processed manually. The result is either 100% cocoa nibs or a cocoa (*Theobroma cacao*) paste, all organic. Just before the paste hardens it is separated in smaller 100grs pieces and folded in a cocoa leaf (*Theobroma cacao*). To all of their products they attach a tag explaining. Their production has increased greatly after they became known by a national chef, who started using their cocoa (*Theobroma cacao*) in his deserts. But they affirm that they can produce more even if they need to call for some extra help, in four days they have already produced 100 bars.

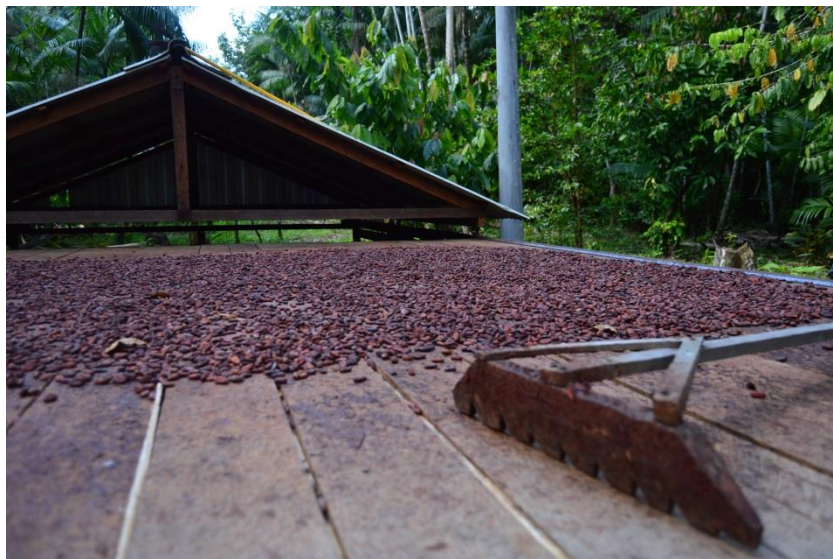


Figure 5: The *Barçaça* structure with Cocoa (*Theobroma cacao*) almonds left to dry

Another important fruit for them is the *Cupuaçu* (*Theobroma grandiflora*)¹⁰. Cacao and *Cupuaçu* like cousins, have very similar structure, they are medium sized trees, with broad leaves. The *Cupuaçu* flower small, cream and burgundy like the cacao, but much more expressive in the burgundy, mixing round and spikes in its shape. The smell of this fruit is a perfume like no other, already widely served as juice, for it contains

¹⁰ Brazilian fruit similar to cacao, but the product is a cream colored.

much more pulp than the cacao, it is also used to make jam and its almond can produce the 'cupulate', a chocolate out of *Cupuaçu*.

Everything that is done here allows for people to have a different understanding about cacao and the process of transformation that the fruit undergoes. Some visitors come completely naïve about how chocolate is made, having never seen neither the tree, nor the fruit and become marvelled. They told me that sometimes parents that bring their children to see the real chocolate factory.

D.N. says that cocoa (*Theobroma cacao*) 'is her source of income', and her dream right now is to build a space next to her house where she can work, so that it can be separated from her house, because with the visitors, privacy has become issue. The contact with people and programs has had an important impact in strengthening her culture, as she puts it: 'My cocoa was already organic, I just didn't use that name'.

My ears caught the vivacious sounds of monkeys swiftly passing by on the other shore. They almost see no animals there anymore, the number has decreased considerably since they arrived in the island, and they believe that it is highly due to over hunting by local inhabitants. In fact the biggest non-human animal there was Bela, their dog.

This past year they began working with native non-stinging bees, from the Melipona family, called yellow Uruçu-amarela (*Melipona rufiventris*). This is a project offered to them which they accepted not only because of the honey, but also because the non-stinging bees are the major pollinators of most of the fruits the family handles. In the island no one really takes care of bees. N. says that naturally 'the hives used to appear in termite mounds, but to get to the honey they used to burn it, and ended up killing the bees'. Her late husband used to tend to the European bees (*Apis mellifera*), but now she knows that they are not appropriate for they are exotic, according to her 'they produced a lot of honey, but it was also quite risky dealing with them, their stings were really painful and it is dangerous for those who are allergic, the hives need to stay away from the house.' This year they have already collected 700 ml of honey from the wild bees. 'It bewildered me to look at the bee house and see that around the little entrance it was wet, I wondered if the rain was getting inside the box somehow. But latter I learned that as they bring the wet nectar they dehydrate it, as if they spat the

liquid outside. We still have a lot to learn. We don't really have much experience to care for them, but we are learning'. Nature here is a teacher. Like the work inside the house, her words sounded like she was sharing the work with the bees.

The smell of wet earth came only seconds briefly before the sound of the rain, heavy drops drowned out the sound of the forest, with in a couple of minutes of rain the river had gone up to the second step of the ladder at the deck. Later that same day I learned that the level of the river changes within minutes influenced by the daily rains and the tides, 'the river fills up and drains' D.N. said. They believe that the water is always murky because of the strong tides that work in a 12 hour cycle and are influenced by the moon. She mentioned how some elders still guide themselves by the moon, they knew that women had their children at specific moon times.

'There is a good tide to fish, to catch shrimps. After the cocoa I lost myself from that culture. I miss going to the port to fish with my fishing cane. My brothers go fishing sometimes, they put their nets in the *bayou (igarapés)* in the afternoon, the tide then goes up and in the next morning they go to catch their fish, small fish.'

The river's water is used only to wash clothes, dishes and shower; they pump the murky water into a reservoir, where it is left to decanter. Their drinking and cooking water is either brought from Acará¹¹ coming by boat or it is mineral water is brought from Belém. Rain water is collected and it goes into the reservoir. When I mentioned that you wouldn't think that a place surrounded by water would have water problem she said that it wasn't potable. Last year there was a dry spell that lasted 4 months. It is worrisome to go such a long time without rain in the Amazon. 'When the rain finally came it killed the fruits because of the thermal shock' D.N. said. They don't know how to explain it, but the TV mentioned it was due to the El Niño.

They come to Belém at least once a week to sell in the organic foods market, and have travelled around Brazil to talk about their cocoa production. Her eldest daughter has lived in the city of Belém for five years already, but due to the noise, violence and traffic jams, she affirms no desire to go back. These women are extreme hard workers and their bodies are feeling it, her smaller daughter has a pungent back

¹¹ Another town which is about two hours away.

pain and D.N. suffers from neck pain, to treat it they use normal pain medication and her daughter is going to physiotherapy in town.

Dinner was freshly juiced açai, with manioc flour and steamed shrimp. Our purple stained mouths shared smiles as we talked about the few times they ventured into the forest and got lost, claiming it was because of the Curupira¹². D.N. herself was walking in the forest going after her husband who had gone fishing. She heard him call her name and as she followed the voice into the forest all of the sudden she was on the other side of the island and it was 2 hours later, they had to bring her back by boat. Being it more of a mythical story nothing in particular is done to keep the Curupira satisfied, 'we only don't abuse of the forest' D.N. said. It is quite common for people who are catholic to believe in these stories, but not really admit that they do. There are many Pentecostal Churches around the island and people are either Pentecostal or Catholic.

Amongst other things she told me that her brothers and sisters used to joke that she was indigenous and they found in the Oiapoque River¹³. It struck me that even though it is quite obvious their mixed indigenous origins, it is something that they don't talk about. They even seem a little uncomfortable when asked about who were their elders and where did they come from.

Considerations:

This is an amazing group of hard working women, they never stop producing, most times there are things to do throughout the entire week, and they have managed to keep up their strength, but all this hard work is beginning to take its toll on their bodies, all of them back pain or worse problems. I also found quite interesting that they had no idea what D.N. was suffering from, she identify what the symptoms where. These things hint to a disconnection with their own bodies. This strikes me because the body is the fundamental way through which we relate to the world, as Abram (1996) describes: 'humans are tuned for relationship. The eyes, the skin, the tongue, the ears... all are gates where our body receives to nourishment of otherness' (p.ix), this resilient body can still relate even if it is badly bruised, but I'm not sure it will work as

¹² Curupira is a protector of the forest from Brazilian folklore who is said to trick people into getting lost.

¹³ The most Northeast river In the Brazilian Amazon, in the frontier of Brazil and French Guiana.

well if it is ignored. This is important because being in contact with your own body is part of being in relationship with nature.

The abundance is visible in the island, just around the house there were many fruits on the ground, trees overflowing with ripeness. But they are so busy with production that they don't have the time to celebrate it or to use it all. Also, when asked about the fallen coconuts (*Cocos nucifera*) she didn't seem to mind that they were going to waste. At the same time nature and its fruits are their main source of income, they depend on this generosity and abundance.

Their relationship is still highly based on what can nature provide in terms of resources. There is an initial shift in understanding provoked by the work with the bees, they see their importance in the context of a chain of events, at the same time, there is a respect established, evidenced by her commenting on the fact that they still have a lot to learn on how to care for them, D.N.'s discourse reflected a collaborative relationship, more so then with the cocoa (*Theobroma cacao*) trees.

However the description of the chocolate making process is to show how much knowledge and precision is behind the making of artisanal chocolate, and also, it is intriguing that the pulp of its own fruit would change to seed, killing the possibility of germination to give off this aromatic flavour.

It is evident the influence of indigenous culture in their daily lives, the food, their physical appearance, the desire to stay in the forest, their stories about the mysteries of the island, and yet there is a palpable resistance to this heritage. This is deeply liked to our history and it has causes a profound feeling of loss, it is that feeling of belonging to a place. This to me is a deep wound, still latent to be resolved, though which reconnecting to the ancient knowledges of the forest might help. Feeling like you are part of and belong to a place is also fundamental in preserving it.



Figure 6: Cotijuba Island (Google, 2016)

PART II

Cotijuba Island

From the sun of the river to the Golden trail

First you need make your way to Icoaraci, a neighbourhood of Belém, which is the junction of 'y (water, river) and *kûarasy* (sun) (Ancient Tupi Dictionary, n.d.), that is where the boat leaves from. On the way to get to the water meets the sun there is a long bus ride (about 90 mins), those long rides are always good to gather your thoughts, that moment where you are neither here nor there yet and have nothing else to do except to make your way. The journey is an important aspect of peoples` lives here, especially considering that Pará is the second largest state of Brazil (1.247.689 km²) – larger than Spain and France together. From the tired eyes of daily commuters I could get a feel for Belém city.

Already after 45 minutes, the first steps off the boat seem more buoyant than normal, which is nothing to be alarmed considering a trip through space and time. You arrive at a small cemented dock, which for those 20 minutes that it takes for people to go to their destinations, bursts with life, street vendors selling food and drinks and

people in offering their transport service. There are no cars in the island so you have the option of walking, a horse carriage or taking *mototaxis* (literally motorbikes that offers taxi service), in fact, as soon as you get off many man approach you offering to take you.

In this town of dirt roads and simple block houses all divided by rudimentary fences, according to Santana cited by Melo (2008), once was inhabited by *Tupinambá* natives, they were the ones that called this land Cotijuba (Golden trail) (p.12-13). Years later, in 1933 the island was the host of a corrective facility for minors from Belém, as criminal rates had drastically increased due to the rubber economic decline. This facility was called *Educandário Nogueira de Faria* (Nogueira de Faria corrective educational facility), but later on, during the military dictatorship it became repository for political prisoners (Dergan, 2005, p.3). In 1968 a penitentiary was built and both facilities coexisted for a while before the *Educandário* closed. The island was known as a prison-island until 1977 when it finally closed down. Now all that is left are its unkempt ruins of the *Educandário*, which is the first building you encounter when you get to there.

I arrived in the back of a motorcycle where the MMIB (Women's Movement of Belém Islands) resides; it is a non-profit association born in 2001 under a mango tree where the first meetings were held. The association came out of the felt necessity for more participation in the decision making process, professional training and economical emancipation, though not exclusive to women their emphasis is on women's rights, environment and social development of the Cotijuba, Jutuba, Paquetá, Ilha Nova and Urubuoca Islands. E.M., an associate, explains that 'The idea of MMIB was to work with questions raised from the women of the island, and it has already reduced misogyny in the island'. The differential to other associations is that it is run by women only, man have the right to vote and to voice their opinions.

I could hear their voices and laughter from the door way. The women were gathered around a table, a few beads spread around and some were working on necklaces made out of açai (*Euterpe precatoria*) seeds and a thin satin. In 1999 the *Biojewellery* (artisan making of ornaments from local gathered material) crafting was born, from a Project called *Escola Ribeirinha de Negócios* (riverbank dwellers school of business), in partnership with Peabiru Institute and Mapinguari Design. There were 30

women who participated and were taught about craftsmanship, entrepreneurship, and accounting. The craftsmanship involved training in how to use equipment like the drill to make the pieces that compose their jewellery.

Soon it became clear that the initial chatter was the group thinking together the solutions for the complications that arise from the different pieces that they are making. They discuss about how to make their work look nice for people who come from other places, 'people who buy our work like pieces that are really natural, they do not like metals' D.C explains, 'so we began to do crafts with the things that we had here. We were taught how to prepare the seeds. Collect from nature, to prepare to make the product' she told me. Some seeds and materials that are used are collected and prepared in the island, some they prepare themselves by filing and varnishing them, others they buy from the city. While their work is appreciated by people from outside the island, C.F. says that 'locals don't appreciate our crafts, they say it is an *indigenous thing*'. In the Portuguese language this an expression with a negative connotation meaning things that are not sophisticated.



Figure 7: Açaí (*Euterpe oleracea*) tree

They use many type of local seeds, such as the following native palm trees: *Açaí-do-Pará* or *Açaí-de-sequeiro*, (*Euterpe oleracea*), *Açaí-de-Manaus* or *açaí-de-*

Terra Firme, (*Euterpe precatoria*), *Tucumã* (*Astrocaryum aculeatum*), *Inajá* (*Attalea maripa*), *Mucajá* (*Acrocomia aculeata*), *Bacaba* (*Oenocarpus bacaba*), *Jupati* (*Raphia Taedigera*), as well as the coconut (*Cocos nucifera*) an exotic species. 'The *Açaí* (*Euterpe oleracea*) seeds from Pará look like brains, they are divided in two parts, and in Manaus it is only one', she continues to explain. Today seven women still directly work with *biojewellery*, now they are looking for ways of expanding their commercialization and promotion of their products, 'My dream is to make enough money from my crafts' D.C. tells me with a soft smile. She explains that the seeds now also have the purpose and can be used to embellish, 'it is important for nature what we do here', and raises the concern that when you throw them out they don't damage the soil as much as others.

From their narrative we can tell that the biojewellery project has taught them not only about an alternative way of how to make income, but also about nature:

'I learned that we can reuse from nature, everything that falls we don't lose it, using creativity one can make many beautiful things, from the leaf to the seed. The *Tucumã* (*Astrocaryum aculeatum*) we eat and then use the seed, the *Açaí* (*Euterpe oleracea*) we drink and then use the seed. When you strip away the *Açaí* (*Euterpe oleracea*) and there is that 'broom' that is left behind, you can make adornments. From leafs you can make baskets. If you have creativity and a little technique everything can be reused.' D.C.

According to C.F., a short tanned skin woman with indigenous eyes, this work showed her that she had a relationship with nature, one that is based on reciprocity:

'My relationship with nature began with biojewellery crafting. The *Açaí* (*Euterpe oleracea*) is not just for drinking. I learned to respect nature more. It is good because we can take it home with us, sometimes even becoming bossy, about the trash, about the open taps while one brushes their teeth.'

Not only the crafts project, but the work that is being developed by the association, opened them to new meanings, takes on a different proportion and impacts other aspects of their lives:

‘Before I used to mow everything, now I let things to grow and the residues I put them under the trees. The *Cupuaçu* tree (*Theobroma grandiflorum*) always gives fruit, and I can make a little money out of it by extracting the pulp and making popsicles, the fruits don’t go bad.’ C.F.

‘My neighbour, who happens to be my cousin, commented that my garden was ugly, with overgrown grass and fallen leafs. I told him, on the contrary, that it his that was, because on his bare ground the trees weren’t fruiting and the soil was becoming sand.’ S.S.

This was learnt from the work developed by the *Priprioca* (*Cyperus articulatus*), project, which will be explained later on, and it is crucial to for that region, ‘because of the poor soils, recycling of nutrients in leaves, trunks and dead animals by fungus, insects (ants, termites etc.) is very important. The forest grows over the soil and not from the soil, using it merely as a base and not as a source of nutrients’ (Sioli cited by Meirelles 2007).

According to them the production of artisanal and natural paper is also part of the same project, to do so they use banana bark and colour it with the pulp of fruits like *Muruci* (*Byrsonima crassifolia*) giving it a yellow tinge and *Urucum* (*Bixa orellana*) for a red tinge, S.S. explains to me. They are also using the residual leafs from *Priprioca* (*Cyperus articulatus*) cultivation to make paper.

This project of *Priprioca* (*Cyperus articulatus*) cultivation was taught by a National Cosmetics industry, and though it is native to the biome (Toledo, 2004) they didn’t have this plant in the island and it was unknown to the local population.

According to Brazilian indigenous folklore (Toledo, 2004), the name *Priprioca* came from *Piri-Piri*:

‘A major warrior who lived in an Indian village in the heart of the Amazon jungle. It is said that he gave off a wonderful smell. Once, the daughter of a shaman named Supi was desperately in love with Piri-Piri. She asked her father to teach her a spell to capture Piri-Piri. The shaman then told her to tie her hair at Piri-Piri's feet on a full moon night. Piri-Piri disappeared in a cloud, anyways, never to return. In the place where the warrior was last seen, a plant sprouted which also gave off his magnificent

aroma and the woman started to use it to attract the man...Sapi de Shaman said that he became the three stars, what we call Orion's belt. (Toledo, 2004)¹⁴.

Even now after they produce it for the cosmetic industry, they have no other use for it, apart from making paper out of the residual material. 'We open the windrows, rid of the grass, add some natural fertilizer, then once the plant is ready we collect the seeds, put them in bags which are then taken to the manufacturers. To me *Priprica* (*Cyperus articulatus*) represents income.' E.M

D.C. is a short dark skinned woman with indigenous eyes, born in the island and tells me that when she was small they used to bathe in the smaller rivers close to her grandmother's house. A big influence in her life her grandma seems to hold a connection not only to family, but to many cultural traditions that were lost:

'Before, my grandma used to make *Tucumã* (*Astrocaryum aculeatum*) oil, a remedy for headaches, throat aches, swelling, and many things. Now that they found out it is good for many things. There are very few women that are making oil now... When the fruit falls from the tree and it stays on the ground a larvae gets inside and feeds of the inside part of the nut. The nut is broken open and they fry the grown larva, you can eat it too, before they used to do it just to eat, but now they do it to keep the oil, since they discovered its properties. I've never done it, so can't tell if it's hard.'

As her hands keep working, making the seeds fit into the satin, memories are revived in her. 'My grandmother used to make cocoa bars from the seeds, then we would grate it to make hot chocolate, but we drank it with flour¹⁵, they laughed 'that is what you do when you have no money for milk.'

Also craft making with natural elements retrieves memories and wishes that might have been forgotten, as she expresses when she says: 'my grandmother used to weave *Paneiro* (traditional weaved basket), my fathers' mother, my mother was a teacher and didn't learn anything like that. When she passed away I was only 10 years

¹⁴ Freely translated by myself from the author Toledo.

¹⁵ This is a special type of manioc flour, normally toasted.

old, so I didn't have the time to learn it from her, I only know how to begin, but I still want to learn.' *Paneiro* is an Amazonian indigenous basket, made out of *Guarimã* also called *Arumã* (*Ischnosiphon arouma*) it is widely used in everyday life to carry things, keep things, from clothes to food. It has a hexagonal weave and a hybrid name composition, the word *Paneiro* is composite from Tupi - *Panakun* (Ancient Tupi Dictionary, n.d.) means basket and the Portuguese suffix -eiro expresses usage (finality or profession).

The background noise of a mowing machine downs out the birds, making it difficult to even gather my thoughts. Few speak about abundance when we talk about the island, C.F. emphasizes 'especially during mangos season', but most speak with nostalgia of a time when 'before you used to plant straight and now you need to fertilize the soil. There used to be a lot of fish and crabs. It is due to not taking care, if you fish everything out and doesn't let them procreate' D.H. explains. Furthermore, 'it is hard to talk to people, because they have always done things that way, they have always burnt and cut the grass, so it is hard to convince them. They believe that an uncut garden looks dirty. Some even broom the dirt, leaving a trail of dust. Their soil is terribly poor.' C.F.

Even though this is a preservation area, there is still a lot of deforestation, according to D.C. it is 'because people come, invade and starts to build their houses. We can already feel this here in the island, the rise in temperature because people keep deforesting. They have ripped the roads, they have already burned a lot, take things down, there's a lot of dust. So we begin to feel it.' At the same time she tells me that, though she is afraid to walk into the forest, her husband goes sometimes because he likes to hunt, 'there are very few now, due to the amount of people' D.C. Trash and noise pollution is another problem raised by them, according to A.G.L., a young tall dark skinned woman, the main problem are the 'people come from Belém and leave their trash here. They don't respect the environment'. D.C tells me that the island was much quieter before as well, but now 'we wake up with the sound to the motorbikes since five in the morning'.

To my surprise two of the women in the circle said that they never drank Cocoa juice. This is a surprise because it is something that they have available to them. M.L.S. believes that 'nutrition is not good in the island, because here we don't have fruit,

everything comes from Belém. Here we only plant *Maxixe* (*Cucumis anguria*), kale (*Brassica oleracea* var. *sabellica*) and green beans (*Phaseolus vulgaris*).’ Considering this, people still choose the island to be in a healthier environment. The city contrast is recurrent in their lives M.L.S. says that as soon as she is crossing over ‘the problems are left in the city. Here my depression is better; I used to have fibro myalgia and many headaches, now they are much better. D.C, for example, tried to live in the city for five years, but it was too agitated for her taste. A.G.L. is from Belém and chose the island as a home.

The representations of nature are all positive, but at the same time anthropocentric. To D.C. ‘Nature represents money and health. If you know how to do things nature can give you lots of money and without nature you don’t have health.’ To S.S. ‘Nature represents life’. She is a tall white woman and when she was a child her father used to take them to the beach, her and her seven brothers. ‘He placed the fishing net in the water; we took the manioc flour and made a little fire. We spent Sunday eating fish and swimming at beach.’ D.H., a tall dark skinned young man, is headstrong about the gains: ‘nature has to work with us, not only us that need to work for it. We need to treat it well so that it can benefit us.’

Also there seems to be contradictions, for example, energy is provided by generators run on fossil fuels. Water provision is also a problem, as emphasizes by S.S. ‘Water is scarce sometimes, especially in June due to tourists, but recently I have installed an artesian well.’ S.S.

Other complaints that came up were that the most worrisome thing in the island is education. Publically hired teachers who don’t want to work in the island, so there aren’t enough to give classes. Also the teenagers don’t have much perspective in their lives.

Considerations:

This island has a very intriguing history and historical sites, both which are abandoned, history is culture in a landscape across time and helps immensely in the development of a relationship to place. Like the island, people have confusing information about their own past, but the work with crafts helps them reignite that memory, shedding some light on the meaning of the work that they are making.

There is a strong contrast between the *Priprioca* (*Cyperus articulatus*), a project and the *Biojewellery* project, this is gathered from the people who remained working in them, and that is of connection to the materials. The Priprioca only represents a commercial trade to them, they haven't developed any other relations to the product of their labour. While the latter seems to bring a different quality, here nature is beauty, this manual, but the creative work allows for memories and desires to resurface. This way a reconnection to the natural materials is established and well as a connection with something deeper, some tradition, some means of signification.

The attribution of problems to the external was really evident when they spoke of tourists and trash. Even though many of them need tourism as a source of income, there is an association that they bring trash and leave it there for them to take care of, words that came out from many of our conversations. The symbolic interpretations of this are many, but there is a strong feeling of rejection ingrained in this attribution. Tourism can be quite abusive, in fact, not only because of the trash they bring or the water that they consume, but also the fact that people come to *recharge* their energies.

Nature is once again seen as a bank of resources, where I need techniques to extract and benefit myself, under this light living in a conservation unit, might be seen as more of a burden than a good thing.

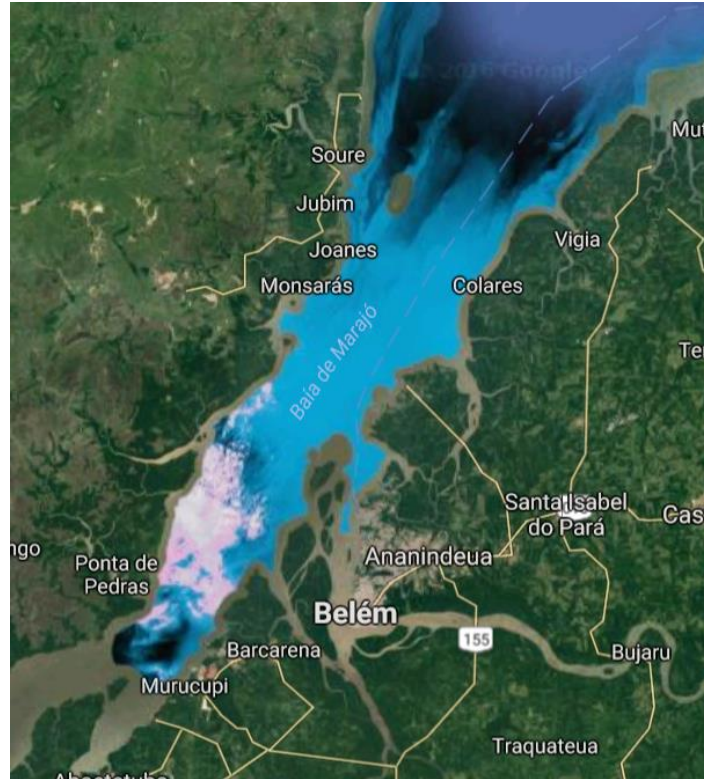


Figure 8: Marajó Island (Google, 2016)

PART III

Marajó Island

Where to Andes is delivered to the sea

At 6:30 am the boat is ready to leave from the fluvial port in Belém, the 80km journey takes about 3 hours down the Pará River, this time the final destination is Marajó island. The name comes from the Tupi word *Mibaraio* meaning 'shelter from the sea'. A 42 thousand km² land, the size of Switzerland, of ever changing contours that lies in the middle of the Amazon & Tocantins rivers deltas, all the sediments collected along its 6,992 km makes it the biggest Brazilian island and the biggest island to be bathed by the river and the sea. The Amazon River, a conglomeration of more than a thousand affluents, is born in the Nevado Mismi Mountain, part of the Andes, and carries within its molecules the Spanish Latin American influence, which is felt in the loud music played from local bars.

The Marajó is a particular island; although it lies within the Amazon bioregion it contains more than 48 different ecosystems (Meirelles, 2007) within it and a long history of anthropization, including the heavy impact of the largest population of water buffalos in Brazil that inhabit the island, together with cattle one of the main economic activity. They eat the meat, make cheese, use their leather and even the local police ride them as a means of transportation. There are many versions of the story of how the buffalos got to the island, but the one that is most told is about a boat that coming from India to the Guianas sunk close to the shores land and the buffalos that survived made their way to the island, adapting perfectly to the local climate. Now there are about 320 thousand (G1, 2013) buffalos kept in farms and present in everyday life.

The intriguing ancient history of the island brought to life by the ceramic pieces found in excavations, where between the years of 400 to 1300 AC the island was occupied by about 40 thousand inhabitants that lived in fishing, managing turtle and manatees and manioc flour. Stories of these times hardly leave academic circles though.

The island in general has a medium to low HDI, in fact, 4 out of the 10 poorest municipalities in Brazil are in Marajó. the town within the island, Melgaço, was ranked last of the entire country with a score of 0.418 (UNDP 2010).

The climate is divided in summer and winter, which completely change the landscape. During winter months it rains constantly between January and June, the temperature oscillates between 24 to 34°C. The fields develop many shades of green and some are flooded. During summer from July to December the fields dry, hardly ever rains, and temperatures go up to 28 to 35°C.

The recurring scene as soon as you get off the boat, many approach you offering their *mototaxi* services. You arrive in a town called Soure (from Saurium – lizard in Latim), previously the land of the Muruanases indigenous tribe.

Once you arrive at Soure, there is 11km that needs to be covered to get to the Pesqueiro village. The name means a place where you can fish from and this is at the root of this community was born out of a fishing settlement. The village lies within the first ever to be created *Reserva Marinha Extrativista (marine gatherer reserve)* created

in Brazil. The *Resex of Soure* is a federal conservation unit established in 2001 with an area of 27.463 hectares.

The agreement between the community and the federal environmental institution is that some activities would remain after the area became reserve, but there would be no means of compensation for activities that were forbidden, like hunting. Before they used to hunt iguanas (*Iguanidae iguana*), capybara (*Hydrochoerus hydrochaeris*), Howler monkeys (*Alouatta seniculus*) and cutias (*Dasyprocta Aguti*), and many loved to have birds in cages at their house.

Most of the houses are still made out of wood and are suspended above ground reflecting the transformation that the island goes through. I woke up in a house like that between the loud calls of roosters and the funny chatter of parakeets couples. Outside my window a mango tree is intertwined in a love affair with the cashew tree, one flowering the other waiting. C.P., a woman in her thirties, married, dark indigenous skin, long wavy black hair, prepares *Tapioca* (starch extracted from manioc root used as a substitute for bread) with local buffalo cheese for breakfast, all while the coffee is brewing in the coffee machine.



Figure 9: Typical House in Vila dos Pesqueiros

She tells me that they just had a family meeting where they tried to resuscitate their family history, much of it is left unknown, but they are trying to build a family tree.

They believe that her ancestors came with the first Spanish explorers of the island; in fact her last name P. resembles Peñate, a Spanish surname, and then mixed with the Portuguese after. Which to her understanding is in agreement with the first settlers of Joanes, in the neighbouring town, Salvaterra, where her grandfather is from. This version of the story is not found so far in the written work about the island, but there might be stories that are just not in the history books.

She explain that in the fight between the Portuguese and the Spanish the indigenous were decimated, 'of the Aruans, Karians, Marajoaras that populated the island, before there are none left, all we have is the physical traits of the mixture that existed many years before' she says. Once again, what is known is that the indigenous were widely decimated by disease and those who survived were used for hard labour. There is no evidence of a fight between the Spanish and the Portuguese there. But this is the first time she mentions physical traits. Though she doesn't see so much similarity with her appearance only some traits in other members of the family, such as straight hair and dark skin. These stories are all from her father's side, she knows almost nothing from her mother's side.

In 1494 the Spanish and the Portuguese crowns signed the Tordesilhas Treaty that divided the portions of the land that where to be explored by each, the Marajó Island was in the Spanish side, but they were more concerned with the silver found in the pacific side, leaving much of this legacy for the Portuguese to explore. Only after the Portuguese came and Jesuits and Franciscan priests where then designated to Marajó.

Her grandfather came from Joanes to Soure where met his first wife, who died at child birth from their thirteenth child. The second marriage was with C.P.'s' grandmother, with whom he had another 4 children. He brought a new profession to town with him of buffalo tannery. Soon it became popular and received visits from people, tourists who came to see the production and to buy handcrafted products. To tan the leather they use the bark of the mangroves, even though it is forbidden now as mangroves are protected forests within the Resex. Their main product is the Marajoara Settle still used for both buffalos and horses. Today it is her mother and her brother who take care of the business.

She recalls that one day her father received as a gift a buffalo's head with the hole of a firearm right in the middle of its head. He told her that some buffalo cannot be domesticated; they remain wild, and therefore can only be stopped with a bullet. So he cleaned it and displayed at their tannery. The Family that gave her father the gift they used to do buffalo hunting, where they would leave the animal to freely breed and be wild. The meat was then distributed amongst the families.

Her husband is from the village. They received their house as part of a social program offered by the government to encourage people to go back to the community many had left in search of better jobs. Her husband, for example, worked at a supermarket in Soure before they decided to go back, now he works with electrical installations.

C.P. has a university degree in Portuguese from the Federal University of Pará that has an advanced Campus in Soure, but left her teaching career to work with Community-based tourism, where they stay in local homes and have a glimpse into traditional life. The main focus of this tourism is to benefit the community, not only due to the provision of services, but by strengthening their traditions. The ever-growing number of tourists that come is a clear indication of how much they love to bathe in those brackish waters, but with the tourist needs to be educated as well. All of the people that I spoke to complain about how much trash is brought by tourists, how the restaurants by the beach don't seem to understand just how much they are dependent on nature. In C.P.'s words: 'the beach is part of the community and this community is alive. It is the community that must take care of the Pesqueiro Village. It doesn't belong to the eventual tourist that comes or the restaurant owners. You change the way you see the community once you live in it'.

This potential for community based tourism began to be mapped out by a private organization linked to entrepreneurs federation called SEBRAE (Brazilian service of assistance to micro and small enterprises). The idea was to foment new touristic opportunities in Pará. For a year and through much dialogue the gastronomical and touristic potential of the community was fomented and refined through this partnership. 'This wouldn't become our only source of income', said C., 'but it definitely helps everyone'. Most people have two or three activities that allows for them to sustain a

simple life style. And from their everyday activities the organizers of the program proposed ideas that seemed attractive to tourists.

C.T., for example, is mainly a fisherman, but he also goes into the smaller rivers and collects the river fallen coconuts (*Cocos nucifera*) to sell. From these activities he began to take tourist, now he teaches them traditional fishing and since he knows these rivers like the back of his hand, much like the indigenous did with the Jesuits and Franciscan priests, he guides the tourists with ancestral abilities in his water trails.

Another important point raised in one of these communitarian meetings was that one of the elders emphasized the fact that they used to always have Carimbó at their festivities and that recently it has stopped. Carimbó comes from the indigenous language Tupi 'Korimbó', which is the junction of two words 'curi' (wood) and 'm'bo' (with holes or hollow) (Ancient Tupi Dictionary, n.d.), and it refers to the instrument used. This dance shows the mixture of cultures that are a part of the Brazilian nation, the African rhythms, the indigenous instruments and curved way of dancing and the Portuguese clapping and finger snapping. The dance is choreographed to imitate animals like the monkey, the alligator and birds such as the migratory bird *Maçarico* (*Tringa Solitaria*), in vibrant rhythm steps. Since then they began to work with a group of children from four to sixteen years old, teaching them to dance, sing and play Carimbó.

The federal authority than runs the RESEX, ICMbio (*Chico Mendes Institute for Environmental Conservation*) understand and foment the community based tourism of the island, and are much more active than the tourism ministry. It is in their interest to preserve these *Ribeirinho* (riverbank dweller) communities and to develop a good relationship with them. This way they can work together in preserving that ecosystem and preventing future invasions from other people that don't have regard for the rules of the natural reserve. Today you can see that some houses, bought before the land became reserve, serve as summer houses and are closed most of the time, which is not positive for the community. The land, in fact, doesn't belong to the people that live there, officially it is federal land and it cannot be bought or sold. Now they have the right to use it, but no legal ownership. This is a big issue, especially for the elders who complain that they bought the land and that the government wants to take it away from them, but the only confirmation that they have is what they call receipt of the payment, which is a

signed piece of paper, but with little or no legal formalization. This is the reality of many occupied land.

But with this new partnership between preservation areas and traditional communities, the more those people stay and engage, the more they can defend their land. Once they received the proposal to open a resort at the beach, with promises that they would provide jobs for everyone, but they refused and were backed up by ICMBio (*Chico Mendes Institute for Environmental Conservation*).

There is still a great need for continuous education of the community members, many still do not understand what means community based tourism, nor to be part of a preservation area. Due to this lack of understanding, many ignore the rules, don't engage or go in the meetings.

C.P. defines a natural reserve as 'a space that has vivacious communities living in it positive coexistence with nature. To do this I need to understand that I cannot destroy the mangroves because I will be ruining a resource that I might not live from, but will impact the lives of many other families. I need to know how it is that I coexist with this environment that I want to preserve'. She wouldn't trade her life here, to her the 'reserve represents quality of life, here we live much better and it is safer'.



Figure 10: a view of the mangroves

From the forest they gather coconuts (*Cocos nucifera*), the Turu (*Teredo* sp.), crabs (*Ucides cordatus*), shrimps and seeds used in *biojewelry*, similar to those mentioned before in Cotijuba. C.P. tells me that sometimes, for fun, they gather a group of women to catch crabs in the mangroves, they would in, legs in mud up to their knees and came out with more thorns in their feet than crabs in their hands. Other times they would go fishing, whatever they caught they would cook in a fire by the beach and spend the day swimming. 'This is the forest of our mangrove, not only we have the mangroves, but in it we find *tesos* (a land that is free from water, inundation), Açaí trees (*Euterpe oleracea*), coconuts (*Cocos nucifera*), *Taperebá* fruits (*Spondias mombin*), at the beach we find *Muruci* (*Byrsonima crassifolia*), *Ajuru* (*Hirtella hebeclada*), there are many fruits that are native to these beaches' N.M.

Residues is still a challenge, according to C.P., many things arrive from the sea, pieces of plastic, many soda bottles, these things go into the mangrove and hardly ever come out. In fact the aerial roots of the typical mangrove vegetation works like a net for all the trash brought by the tides. For educational purposes they collect trash from the beach with the kids. 'The more we collect the better it is to keep our environment.' Now the local public administration collects the trash twice a week, but some people from the community still throw it in their back yards, or burn it, they haven't developed the habit of placing it in front of their house for the collectors to take. Also, there are no trash cans at the beach, which is a problem during touristic season. In the sand by the restaurant there are numerous bottle caps, straws, pieces to tissue.

N.M. works in at the local school preparing the meals and takes the eventual curious soul in to the conscientious exploration of the *Turu* (*Teredo* sp.) flavour. Though it looks more like a worm it is actually a mollusc, N.M. says that when no fish was caught, they would go into the mangroves in search of the *Turu* (*Teredo* sp.). The technique is passed on through generations and it is traced back to indigenous tribes as a powerful tradition of the region. In 2009 with the Project called VEM (Travel Encountering Marajó), financed by the Tourism Ministry, they mapped this as a possible touristic attraction, where they take people into the mangroves to participate in the capture of the *Turu* (*Teredo* sp.) and talk about the local gastronomy.

The tides help the worm like mollusc find its way to the decomposing wood of the mangroves; they devour them forming sunken galleries with smallish teeth on top of their heads, true termites colonies on wet wood. The wood pecker holes signals to the specialist where the mature worms are. Even in decomposition the wood is hard and needs to be broken open with an axe. This specialty dish can be eaten raw, with some salt and lemon, but it is mostly made into soup. Rich in proteins, calcium and iron it is known and the Marajó Viagra, since it is believed to be an aphrodisiac. Some say it tastes like mangrove, other say it is like oysters.

Both C.P. and N.M. told me that many things changed after the area became a Resex. To build you need a signed document from ICMBio the environmental institution, 'Before anyone could come and build a house taking place away from a son of the island' said N.M. Forest fires are forbidden, motorcycle at the beach is forbidden. People would come here to fish and hunt, now there are more rules and many benefits. Fishing nets have a limit of how small the space between the lines can be, as to allow for the smaller fish to grow and reproduce.

There is a period between January and April that the crab makes its way into the mangroves to reproduce, this time it is forbidden to catch them. The government gives the registered fisherman a stipend so that they can buy other food. And yet even with these precautions one can tell that there isn't as much fish as there was before. The younger adults already look for other means of survival, now fishing is seen as complement, not the main activity anymore.

Nature represents life, more life time, if you preserve, you can also preserve the life of you family and of the community. 'This is a healthy community, people are healthy, because the food is healthy, here people live to 80 years old' said N.M. Here nature is health as well for N.M.

N.M. believes that is important what they are doing, 'showing the beauty without having to deforest is a way of preserving. If you take a lot and don't replenish, it is going to end. If man changes nature he will feel it in his own skin'. Nature is seen as beauty, worthy of preservation and display.

'My house is really close to the sea, it is in a risky spot, that is the reason why we don't remove this tall grass in front, we learned that it is a natural barrier, we have also

planted some coconuts (*Cocos nucifera*) trees, and even the natural residue that is brought by the tides, we don't remove anymore all of that protects the house.' Before in front of the island there were huge sand dunes, the impact is felt when many houses are taken by the tides. It is already the third time the community is rebuilt, the sea level is rising and it will rise more, we know.

Her dream is to see the community grow in participation and associations. Communitarian centre being built, where they will be able to have activities for everyone.

Considerations:

The way this work with tourism is being developed in the village has helped to keep their traditions alive. This is especially important, because their traditions are closely related to nature and its preservation. This is probably the place, out of the three that I visited, with the most well established relationship to nature, it is still an outlook on personal gain, but there is also a concern for its wellbeing. This way the external influence from the governmental institution, has yielded positive results so far.

From their speeches, the representations of Nature, are related to life and community which seems like a great advance from saying that it is income. Here they are working to strengthen also other traditional cultures, like the *Carimbó*, which honours nature.

PART IV: FURTHER UNDERSTANDINGS

About belonging to the land, all of the people I spoke to are only second or third generation to that place, where their elders moved in search for a better life, in search for a place that could provide more, this is can be called the fragmentation of socio-cultural-natural identities, and it impacts how they perceive that locality, and it is reflected in their speech when they reduce nature to provision of resources. Therefore it is an important aspect to be taken into account when working with their relationship to the place. Maybe a new culture needs to be established, one that respects the diversity of this group.

At the same time, there is a historical work to be done of bringing back the wisdoms of the past. Here nature is a teacher to humanity and it works with memories and beauty towards resignification.

The relationship with animals is an example of the commodification of nature. Wild animals are only mentioned when they talk about hunting, which is now rarely done, either because of the scarcity of animals due to overhunting and drastic change of habitat or restrictive laws, and even though people do eat the animals this activity is greatly done for sport. There are the farm animals like chickens, turkeys, goats and pigs, and the power animals like the horses used in the island as a sport or transportation and the water buffalo. The pets are cats and dogs, but the relationship to dogs is quite different from city dogs, they are cared for they but not pampered. In fact, most dogs wondering around the town are in poor health conditions, which are a threat to humans. Normally, dogs don't go into the houses, but they have their place around them. Most run freely around and at night return to their homes. In Cotijuba the local health department was doing prevention against the chronic disease called Leishmaniosis (*Leishmania Trypanosomatidae*), it is spread by bites infected insects in dogs and humans. It would eventually kill the infected dog, so the procedure is to put down the infected ones and vaccinate the ones that aren't infected, but many owners where determined not to let them do it, as an indication of their attachment.

Also I gathered that many interactions between smaller communities and institutions are centred on an agenda, the government looks to establish their modular

programs, NGOs develop projects in whatever strategic priority they have developed. These don't necessarily yield negative results in terms of social benefits, but the point is that in doing this one risks imposition their modular solution and visions that transforms, when it doesn't completely override, the communities' desires and diminishes their self-sufficiency. This is to say that we shouldn't improve social and infrastructural conditions, but there is a missing dialogue. It is about gentleness and respectfulness to their knowledge; this is a dialogue in a true democratic sense, changing in mutual learning.

Their colocations express the diversity of roles that nature takes, we talked about nature as resources, income, as beauty, health, life and teacher. I believe these are just a few of the representations that we discussed. They are however a good starting point for a plan to be developed.

CONCLUSION

In this journey what I found were stories infused with meaning that the tellers were interested to share. The background philosophy of deep ecology helped me see the opportunities beyond the immediate problems, we are talking about 'an evolving but consistent philosophy of being, thinking and acting in the world, that embodies ecological wisdom and harmony' (Harding, 1997). This is the north which needs to inform everyday practices that are concerned with life as a whole.

These inhabitants of the frontiers are a good thermometer of the influence of the big cities. They have internet and cell phones and may dream about having a car, but most don't identify with the city living style. According to the people that I have spoken to, some of the young people, who do go, do so more out of necessity especially for learning.

In some ways we were talking about the relationship between conservation and progress and all of its contradictions, which escalate to a much bigger level of complexity when you consider the cultural and environmental diversity and the geographical dimensions these places. Their view still oscillates between the practical view of nature and the idyllic life and health symbolism. However, the other-than human-world still takes a secondary place in most of the speeches and it is still widely seen as a resource to be explored. This needs to go through a healing, where:

'We must keep alive and nurture a sense of the 'otherness' of whatever phenomenon we might be considering, allowing a strange kind of intimacy to develop in which the urge to control is replaced by a quickening awe at the astonishing intelligence that lies at the heart of all things.' (Harding, 2010, p. 37)

Their narratives are the starting point for an alternative to growth and development to begin. New symbolic relationships need to be formed, as well as old ones re-signified. This is a fundamental part of a healthy community. For *Buen Vivir* to be in constant transformation it involves creativity and autonomy, the concept evolves as the people who are in it. In creating a world that is malleable one is able to play with its different alternatives. For a discussion around alternatives, like *Buen Vivir*, these

characteristics need to be developed and reinforced in the spaces created in the islands.

BIBLIOGRAPHY

ABRAM, David, (1996). *The Spell of the Sensuous*. New York: Vintage Books.

ABRAM, D. (1997) *Waking Our Animal Senses: Language and the Ecology of Sensory Experience*. [Online] Available from: http://www.wildethics.org/essays/waking_our_animal_senses.html [Accessed 7th April 2016].

ABRAM, D. (2005) *Depth Ecology* [Online] Available from: <http://wildethics.org/essay/depth-ecology/> [Accessed 29th August 2016].

BOAL, A. (1990). *The Cop in the Head: Three Hypothesis*. The MIT Press. Vol. 34, No3, pp. 35-42.

BORTOFT, Henri (2012). *Taking Appearance Seriously: The Dynamic Way of Seeing in Goethe and European Thought*. Floris Books. Kindle Edition.

BORTOFT, Henri (1996). *The Wholeness of Nature*. 5th ed. Edinburgh: Lindisfarne Press and Floris Books.

BRASIL (2000). Federal Law N^o 9.985 of 18/07/2000. [Lei Federal N^o 9.985 de 18/07/2000, Artigo 225]. Available from: https://uc.socioambiental.org/sites/uc.socioambiental.org/files/snuc_sistema%20nacional%20de%20unidades%20de%20conservacao.pdf [Accessed 23rd August 2016]

CAPRA, Fr. et LUISI, P. L. (2014). *The Systems View of Life [A Visão Sistêmica da Vida]*. São Paulo: Editora Pensamento-Cultrix

CEPLAC (Executive Technical Commission for Cocoa Culture) *Cocoa History and Evolution [Cacao História e Evolução]* Available from: http://www.ceplac.gov.br/radar/radar_cacau.htm [Accessed 23rd August 2016]

DELLINGER, D. (2013) *Occupy Love*. Available from: <http://occupylove.org/drew-dellinger/> [Accessed 28th August 2016]

DERGAN, J.M.B. (2005). Historical formation of the Belém Islands: the Relation between Culture and Nature (*Formação Histórica Das Ilhas Em Belém: A Relação Cultura E Natureza*). Londrina. Available from: <http://anais.anpuh.org/wp-content/uploads/mp/pdf/ANPUH.S23.0504.pdf> [Accessed 23rd August 2016]

DICIONÁRIO TUPI GUARANI (n.d.). *Ancient Tupi (Tupinambá) Vocabulary* [*Vocabulário de Tupi Antigo (Tupinambá)*] Available from: <http://www.dicionariotupiguarani.com.br/tupi-antigo/> [Accessed 23rd August 2016]

ENZENSBERGER, H. M. (1988) *A Outra Europa*. [Ach Europa!] São Paulo, Companhia das Letras.

ESTRADA, J. O. D., (1971). *Brazilian National Anthem, (Hino Nacional)*. Available from: http://www.planalto.gov.br/ccivil_03/Constituicao/hino.htm [Accessed 16th August 2016]

FAPESP na mídia [Online] Available from: <http://www.bv.fapesp.br/namidia/noticia/47209/pais-amazonas/> [Accessed 23rd August 2016]

FEARNSIDE, P.M. (2006) *Deforestation in the Amazon: dynamic, impact and control*. [*Desmatamento na Amazônia: dinâmica, impactos e controle*]. Acta Amaz., Manaus , v. 36, n. 3, p. 395-400. Available from: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S004459672006000300018&lng=en&nrm=iso. [Accessed on 30th August 2016].

GLOBO 1 (17/05/2013). *Pará Has The Biggest Buffalos Of Brazil, With 460 Thousand Heads*, [*Pará Tem O Maior Rebanho De Búfalos Do Brasil, Com 460 Mil Cabeças*]. Available from: <http://g1.globo.com/pa/para/noticia/2013/05/para-tem-o-maior-rebanho-de-bufalos-do-brasil-com-460-mil-cabecas.html> [Accessed 23rd August 2016]

GOODWIN, B. (2007) *Nature's Due: Healing Our Fragmented Culture*. Edinburgh: Floris Books.

GUATTARI, F. (2000) The three ecologies [Trois ecologies]. Trans. Pindar, I. and Sutton, P. London: The Athlone Press

GUDYNAS, E. (2011) *Buen Vivir: Today's tomorrow Development*. 54 (4), (441–447)

HARDING, S. (2010) *Animate Earth: Science, Intuition and Gaia*. Totnes: Green Books Ltd.

HARDING, S. (1997). What is deep ecology? *Resurgence* issue 185.

HOLLANDA, S.B. de (1936) *Roots of Brazil [Raízes do Brasil]*. São Paulo: Companhia das Letras.

IBGE (Brazilian Institute of Geography and Statistics) Available from: <http://cod.ibge.gov.br/340> [Accessed 23rd August 2016]

ICMBio (Chico Mendes Institute of Biodiversity Conservation), (19/05/2011). Difference between APA and APP is not clear for everyone, according to the article [*Diferença entre APA e APP não é Clara para todos, diz artigo*] Available from: <http://www.icmbio.gov.br/portal/ultimas-noticias/20-geral/889-diferenca-entre-apa-e-app-nao-e-clara-para-todos-diz-artigo> [Accessed 23rd August 2016]

LOVELOCK, J. (1988). *The Ages of Gaia*. Oxford: Oxford University Press

MEIRELLES FILHO, J.C.S. (2007). *Golden book of the Amazon [Livro de Ouro da Amazônia]*. 5th ed. Rio de Janeiro: Ediouro.

MELO, O., do C., (2008). *Community and the Construction of Place in Cotijuba Island (PA), [A comunidade e a construção do lugar na Ilha de Cotijuba (PA)]*. Pará: Programa de Pós- graduação em Geografia: UFPA Available from:

<http://observatoriogeograficoamericalatina.org.mx/egal12/Geografiasocioeconomica/Geografiadelapoblacion/83.pdf> [Accessed 24th August 2016]

PEABIRU INSTITUTE (November 2015). *The Amazon, pollination and the Peabiru Institute: A quick view about the Amazon and its socioenvironmental challenges*. Belém. Available from: https://institutopeabiru.files.wordpress.com/2015/11/peabiru_english-version_the-amazon_pollination.pdf [Accessed 23rd August 2016]

PIZA, D. (2003). *Brazilian Account: An Exposition based on the Essays of the Contest: a Letter for Brazil of the 21 Century*. [Leituras do Brasil: Um Ensaio a Partir das Redações do Concurso: uma Carta para o Brasil do Século 21]. São Paulo, Editora Talento.

RAISG (Amazonian Association of Georeferenced Socioenvironmental Information) (2015). Amazon 2015. Available from: https://raisg.socioambiental.org/system/files/Amazonia2015_ingles_2015.pdf [Accessed 23rd August 2016]

REASON, P. AND BRADBURY, H., (2001). *Handbook of Action Research: Participative Inquiry and Practice*. London: SAGE Publications.

RIBEIRO, G. F. (2016). *Forgotten History: Brazil has the oldest human of the Americas but few know about it* [Historia esquecida: Brasil teria os registro humanos mais antigos das Américas mas poucos sabem] Available from: <http://www.uol/noticias/especiais/fosseis-no-brasil-onde-estao-registros-humanos-antigos-no-pais.htm#historia-esquecida> [Accessed on 29th of August 2016]

SACHS, W. et al. (1992). *The Development Dictionary: A Guide to Knowledge as power*. London: Zed Books Ltd

SILVA, A. C. da (01/10/2011). In the country of the Amazons [No País das Amazonas]

TED (2014). *Antonio Donato Nobre: The magic of the Amazon: A river that flows invisibly all around us*. Available from: <https://www.youtube.com/watch?v=ClesJyZUWTY> [Accessed on 10th of August 2016]

TOLEDO, P. M. de (24/11/2004). *The Legend Of The Indigenous Piripiri* [A Lenda Do Índio Piripiri]. Folha do Meio Ambiente, Acervo da Folha do Meio, nº11. Available from: <http://www.folhadomeio.com.br/publix/fma/folha/2004/11/filatelias153.html> [Accessed on 28th of August 2016]

UNDP (2010). *Municipalities HMDI Ranking 2010* [*Ranking IDHM Municípios 2010*]. Available from: <http://www.pnud.org.br/atlas/ranking/Ranking-IDHM-Municipios-2010.aspx> [Accessed on 25th of August 2016]

APENDIX I: GUIDING QUESTIONS

- A) Tell me about your family? Where you, your parents or grandparents born here? How did you get to this land?
- B) Why did they move to this place? What activity attracted them to this place?
- C) How did your activity come about in your life?
 - 1) What does the cacao/seeds/forest represent for you?
- D) Are there any myths or stories that you remember that your parents or grandparents used to tell you? Which ones?
- E) What represents nature for you?
- F) What are your dreams? How about future plans?
- G) What are your fears or apprehensions concerning this place/ your activity/ the community?
- H) What is health for you? Is your community healthy?
- I) What from your learnings and understanding from nature you would like to tell your children? Or to emphasize?
- J) Did something change in your understanding about nature since you began to work with this?
- K) Do you believe that what you are doing is important for nature?