

**DEAD WATER**  
**A PHOTOGRAPHY-BASED INQUIRY INTO**  
**THE IMPACT OF DAMS IN BRAZIL**

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the requirements of the University of  
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This thesis is dedicated to:

All those who have fought  
for the rivers, their shores,  
curves, scents, creatures,  
stories, horizons.

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Daniel, Margarida and Nilo,  
who have never allowed  
the wild river I am to be  
dammed.

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And Melissa, who has  
taught me how to blend  
souls.

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## **Abstract**

The costs of dams have been underestimated mainly due to the subjective matters involved in them. This practice-based research seeks to reveal the nature and the magnitude of these costs: the damage to people, livelihoods, communities, and, of course, to the environment. To investigate the perspectives of riverine people, as these are the peoples affected most by dam development, and to engage with their stories, this research blends methods and knowledge from the fields of Anthropology, Ecology, and Visual Arts in order to achieve its major aim: to communicate the intangible impacts caused by dams. Photography, in particular documentary photography, plays an important role in the way society operates and is shaped; this research explores this mode of communication with the view to empowering its subjects and giving greater voice to their stories.

This project focuses specifically on hydropower schemes in Brazil. The method consisted of inviting people who have been affected by dam projects for hydropower purposes in three distinct areas of Brazil for an interview followed by a photo shoot in which they would be simultaneously the sitter and co-director. During the interview, every participant describes her/his story and feelings about the respective hydro project. The sitter then works collaboratively on the portrait, so that each image is based on an exchange between subject and researcher. The work, which comprises textual pieces that are in dialogue with these portraits and with other visual material gathered, represents how hydropower affects these people's lives as well as the riparian ecosystem. This practice is also analyzed within the frame of theories and insights concerning (i) photography in the political arena (like those of Ariella Azoulay, and Jacques Rancière), and (ii) perceptions of nature and development (like those of Eduardo Gudynas).

This research considers and reaffirms transdisciplinary approaches as a refined means to access, understand, and present complex phenomena (like those of the dams and hydropower) as well as photography as an important agent in the processes of negotiation and transmission of knowledge between individuals, particularly those that involve intangible matters. It shows that affected people are important as voices to expose structures of power in societies, as well as advocating changes in our understanding of hydroelectricity, wealth, and welfare. It highlights that collaboration with the subject, and also with traditional communities, can play a vital role in the disclosure of sensitive knowledge and the way stories are told.

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## Declaration

I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree, and does not incorporate any material already submitted for a degree.

A handwritten signature in black ink, appearing to be 'M. J. ...', written in a cursive style.

October 12, 2018

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## Acronyms and Key-words definitions

BRICS: is the acronym for an association of five major emerging national economies: Brazil, Russia, India, China and South Africa. The BRICS members are all developing or newly industrialized countries, but they are distinguished by their large, fast-growing, economies and significant influence on regional and global affairs in the twenty-first century.

COP15: is the 15<sup>th</sup> Conference of the Parties (the scheduled meeting of the countries that participate of the Kyoto Protocol) which took place in Copenhagen, 2009.

COP21: is the 21<sup>st</sup> Conference of the Parties (the scheduled meeting of the countries that participate of the Kyoto Protocol) which took place in Paris, 2015 (November 30<sup>th</sup> - December 13<sup>th</sup>).

DSLR camera: digital single-lens reflex camera.

Environment: according to Luiz Enrique Sánchez (2013) environment is the interconnected net of water, atmosphere, and soil where species interact among themselves and society unfolds behaviors/relationships, eventually evolving.

Environmental Impact: according to Luiz Enrique Sánchez (2013) environmental impact is any modification of the environment directly or indirectly caused by human activities. Impacts can be classified as positive (if this modification leads to an improvement) or negative (if this modification leads to an impairment).

Global Warming: is the term used to describe a gradual increase in the average temperature of the Earth's atmosphere and its oceans, this change is believed to be permanently modifying the Earth's climate.

Greenhouse effect: phenomenon in which the atmosphere of a planet traps radiation emitted by its sun, caused by gases such as carbon dioxide, water vapor, and methane that allow incoming sunlight to pass through but retain heat radiated back from the planet's surface.

Greenhouse gas (GHG): gas that contributes to the greenhouse effect by absorbing infrared radiation. The main greenhouse gases are, as listed in the Kyoto Protocol: CO<sub>2</sub> - Carbon dioxide, CH<sub>4</sub> – Methane, N<sub>2</sub>O - Nitrous oxide, PFCs – Perfluorocarbons, HFCs – Hydrofluorocarbons, and SF<sub>6</sub> – Sulphur hexafluoride.

INDC: is the acronym for Intended Nationally Determined Contribution, which consists of a report to be sent by all Parties, before the scheduled COP, to the secretariat of the United Nations Framework Convention on Climate Change (UNFCCC). This report (INDC) may address and describe each Party's national plan to reduce its carbon emissions within a time frame (e.g. between 2020 and 2030, for the INDC presented to the COP-21).

IPCC: is the acronym for the Intergovernmental Panel on Climate Change - a scientific body under the auspices of the United Nations. It reviews and assesses the most recent scientific, technical, and socio-economic information produced worldwide relevant to the understanding of climate change. Thousands of scientists from all over the world contribute to the work of the IPCC on a voluntary basis.

Kyoto Protocol: The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current high levels of GHG emissions in the atmosphere as a result of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "*common but differentiated responsibilities*". The Kyoto Protocol was adopted in Kyoto, Japan, on December 11<sup>th</sup>,

1997 and came into force on February 16<sup>th</sup>, 2005. Its first commitment period started in 2008 and ended in 2012. The second commitment period began on January 1<sup>st</sup>, 2013 and will end in 2020.

Large dam: the International Commission on Large Dams (ICOLD) defines a large dam as any dam with a wall height of 15m or higher. Dams with a wall between 5m and 15m but with a reservoir volume of more than 3 million cubic meters (m<sup>3</sup>) are also classified as large dams.

Large river system: a river system that has, anywhere in its catchment, a river channel section with a VMAD of  $\geq 350\text{m}^3/\text{s}$ .

Lentic and lotic ecosystems: Both lentic and lotic are freshwater ecosystems. The main difference is the lentic ecosystems are calm and still freshwater habitats (like lakes and ponds) whereas lotic ecosystems are habitats in rapidly running or washing freshwater (like streams, creeks, and rivers). *Lentus* in Latin means calm, slow and *Lotus* in Latin means washing, running.

Mega dam: the International Commission on Large Dams (ICOLD) defines a mega dam as any dam that meets one of three criteria: dam wall higher than 150m, dam volume larger than 15 million m<sup>3</sup>, or dam reservoir storage larger than 25 km<sup>3</sup>.

Rio +20: is the short name for the United Nations Conference on Sustainable Development which took place in Rio de Janeiro, Brazil, in June 2012. Its central aim was to start a process of international agreements setting up global sustainable development goals (as targets for consumption and production), mechanisms for periodic follow-up and reports, and specific actions for key areas such as water, food and energy.

River system: a group of rivers discharging water by way of a common flow or system of channels into a sea or lake. A river system consists of the main river and primary, secondary, and later order tributaries. A river system is named after the main river, which is usually the longest and has the greatest discharge in the system.

UNEP: is the acronym for the United Nations Environment Programme: the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment.

UNFCCC: is the acronym for United Nations Framework Convention on Climate Change. It comprises 197 Parties that, building upon the Kyoto Protocol, work together promoting actions and agreements that aim to stabilize greenhouse gas concentrations in the atmosphere so that the level is below that which is presumed to be hazardous to the climate system.

VMAD: virgin mean annual discharge, i.e. the annual discharge of a river channel (e.g. in m<sup>3</sup>/s) in its pristine condition.

## **Introduction**

## **Framing the project**

This practice-based research explores collaborative processes in visual storytelling and anthropological tools to assess a contentious, global, and contemporary issue: the socio-environmental costs of dams, focusing on infrastructure projects in Brazil.

Dams and hydropower have a long history that is strongly attached to the history of civilisations (WCD, 2000a; Biswas, 2012; IHA, 2016). For many, dams have been perceived as incredible and stunning sculptures that enable development to thrive (Pearce, 2006b:137-139; Cestti and Malik, 2012; Berga, 2016); for others, as man-made agents of destruction and poverty (McCully, 2001; Nilsson et al., 2005; Tsikata, 2006; Richter et al., 2010; Benchimol and Peres, 2015; Lees et al., 2016). After being officially condemned by the late twentieth century as too expensive and too harmful for both the environment and riverine communities (Keller et al., 2000; WCD, 2000a:28), large dams and hydropower have re-emerged in national and international agendas from the last decade onwards, particularly when climate change became a global priority (Pearce, 2006a; Finer and Jenkins, 2012; WB, 2012; Zarfl et al., 2014). Within this context, Brazil and other emerging economies/developing countries have faced aggressive policies for expansion in hydroelectric power plants (e.g. Ministério do Planejamento, 2011, 2013; Government of Russia Federation, 2013; UNFCCC, 2016; WEC, 2016), despite the arguments of biologists, anthropologists, and social movements concerning the high price to be paid by both vulnerable communities and the environment for these endeavours to happen (Fisher, 1995; Namy, 2007; Sevá Filho, 2005; Santos et al., 2009; ISA, 2013; IRN, 2014; Little, 2014; MAB, 2014). Meanwhile, these downsides of dams remain under-reported (or even restricted to specific audiences, like those of biologists, environmentalists, and social movements), especially when compared to the widespread notion of hydropower as being less harmful to the environment than other energy sources, like coal and fossil fuels (Fearnside, 2005, 2015c, 2015d; Varis et al., 2012; Nombre, 2014; Kumar et al., 2016). Moreover, the damages inflicted by dam projects tend to operate via intangible matters (e.g. the loss of references of identity and belonging experienced by local inhabitants, as a consequence of the drastic change in their environment), making the former more difficult to be measured, presented, and compared to the benefits generated by these ventures, which are more concrete and measurable via monetary values (McCully, 2001; Wang et al., 2014; Zen, 2014).

This research proposes an intervention in this scenario through visual storytelling and collaboration, and centres three dam schemes in Brazil (the Sobradinho dam, the Belo Monte

dam, and the Garabi-Panambi dam complex) as a window onto this global concern. The inquiry delves into accessing and documenting the nature and the magnitude of the costs of hydroelectricity from the perspectives of those who have been affected by these infrastructure schemes: riverside dwellers, and using a means that is regarded as being more sensitive to communicating intangible matters: photography (Barthes, 1981; Franklin, 2016:199). At the same time, this practice-based work aims to reflect on, discuss, and respond to debates around collaboration within the field of the Arts and Humanities, and about the way documentary practices are conceived, perceived, and operate within society.

Since its invention, in the nineteenth century, photography has been tied to the recording of things, individuals, groups, and landscapes (Ferrez and Ferrez, 1984; Cavalho and Wolff, 1991; Fabris, 1991, 2004; Kossoy, 2002a; Morton and Edwards, 2009; Edwards, 2015). Yet, far from furnishing an impartial and faithful record of what it represents (as was believed in the early years of its existence), photography has been used as an agency to convey particular (authored) viewpoints to its audiences (Tagg, 1988; Solomon-Godeau, 1991; Flusser, 2000; Kossoy, 2002b; Edwards, 2015). As such, most of the high-profile events of the late nineteenth century and throughout the twentieth century have been recorded and broadcast via photographs, as have also been done denouncing atrocities and injustices (Sontag, 2001, 2003; Marien, 2010; Bogre; 2012; Linfield, 2012). And this mode of “informing” about situations, places, and people seems to continue in the twenty-first century (albeit in a very different fashion) as we become a society whose communication relies progressively on photographs, as illustrated by interfaces like Instagram, Facebook, and Twitter, whose billions of users, ranging from ordinary citizens and small shops to mass media institutions and political parties, interact amongst themselves mediated through photographs. Events (or stories) that have not been made visible via photographs comprise those that have either not been allowed to be photographed or rather kept hidden by the systems (“regimes”) that rule our society (the system that sustains the food production and consumption would be an example). Confiscation of photographs in order to prevent unsuitable “information” from reaching others has also happened over time, even in regimes named democratic (Tagg, 1988; Marien, 2010:425 and 433; Azoulay, 2012:234; Franklin, 2016:60). Magnum photographer Stuart Franklin describes the control the American governmental agency Farm Security Administration (FSA) had upon what would be shown by its photographers (who comprised acclaimed documentarians, like Dorothea Lange and Walker Evans) concerning the situation of sharecroppers in the United States in the 1930s (John Tagg also cites this episode in his book *The burden of representation – essays on photographs and histories* – Tagg, 1988:169).

*“[...] The FSA was a government bureau with an agenda linked to Roosevelt’s ‘New Deal’ administration, and was focused on the plight of Dust Bowl farmers. It had strict rules and [Roy] Stryker [the head of the information division of the FSA] ‘killed’ pictures that didn’t fit his expectations, piercing the negatives with a hole-punch. [...]” (Stuart, 2016:60)*

Another striking example was the discovery, after the defeat of the Khmer Rouge regime in Cambodia, in 1979, of over 5,000 mugshots of individuals (political prisoners) that were about to be killed by the regime (Marien, 2010:425 and 433). By remaining invisible until the day they become available to us, viewers, in the form of images, these events (and stories) simply do not exist in the eyes of society: that is, unaware of these events, for us, society, they never took place. It is not only with these “confiscated” or “prohibited” subjects but also with other stories that are under-reported for various reasons that a fraction of the named *documentary photographers* are prone to deal with (Bogre, 2012; Linfield, 2012; Jaar, 2013).

The term *documentary* was first coined by the social scientist and filmmaker John Grierson, in 1926, when describing the kind of cinema that he expected could replace the “*dream factory*” of Hollywood (Price, 2015:79). At the time, Grierson “*stressed the educative function of film, which he saw as one means of creating an informed public able to play an active part in running a democratic society*” (Price, 2015:107). The term was immediately appropriated by the world of photography and was paradigmatically used to refer to photographic works that drew their viewers’ attention to a social, political, or economic issue, aiming social education and arguing for a politics of reform (Price, 2015:106). Photographic works by Dorothea Lange and Walker Evans on the consequences of the severe drought of the 1930s for American sharecroppers in Southern United States (commissioned by the Farm Security Administration) became icons of classic documentary work, as did Jacob Riis’ photographs concerned with the deplorable conditions that the “*other half*” lived in New York, by the turn of the twentieth century as a reference for this genre of photography.

Nonetheless, documentary photography is a dynamic entity and cannot be restricted to the above definition or aesthetics, as it embraces innumerable nuances, subjects, and approaches. The way documentary is made and presented varies as a response to the political, social, and technological scenarios that unfold over time. It can be as diverse as the visual narratives presented to us by W. Eugene Smith, Susan Meiselas, Nan Goldin, Cindy Sherman, Sally Man, Martha Rosler, Sebastião Salgado, Anna Fox, Martin Parr, Jim Goldberg, Cláudia Andujar,

Marizilda Cruppe, Miguel Rio Branco, Cristina de Middel, and Adam Broomberg and Oliver Chanarin, or by participatory initiatives like the ones developed by Wendy Ewald, and Zana Briski. As such, it is acknowledged by those who survey documentary photography as a subject that it is not possible to provide a sharp definition for the term *documentary photography* nor can it be constrained to one form of aesthetic only (Freund, 1995; Marien, 2010; Price, 2015). As writers with expertise in documentary photography Mary Warner Marien (2010) and Derrick Price (2015:77 and 94) note, documentary is closely associated with and, often, overlaps other genres of photography, like photojournalism, fine art, street, and war photography, not being possible to distil the former from the latter by the occasion that documentary merges to one of these other classes. These authors understand that documentary is something that lives in-between and incorporates so many approaches and styles that, in the end, it could comprise most of the photography works that are produced.

Aware of this debate but also keen to standardise parameters that will be tackled in this thesis, for the purposes of this research, I will use the term *documentary photography* to refer to practices that employ photographs in order to tell stories, and/or social investigations undertaken by photographers, and/or to visual storytelling. I will also use the term “traditional documentary photography” to make reference to the most popular way of undertaking this practice: the sole photographer or the photographer accompanied by someone from the same “field” (like a journalist, a writer, or another photographer) photographing events that unfold before her/him, or re-staging past events in order to photograph them, or even photographing straightforwardly her/his subjects subject in order to draw the viewer’s attention to a particular theme.

Documentary projects focused on exposing social, political, and, more recently, also environmental issues have been conceived in the past and might continue to be produced in the future, as such uses of photography are underpinned by the belief practitioners have in photography as a tool not only to document but also to trigger reactions in its viewers (Barthes, 1981; Horta, 2011:127-129; Luvera, 2017). One example of the permanence of this engagement with exposé is Mathieu Asselin’s recent work on the destruction caused by the powerful Monsanto, the leading corporation in the industry of agriculture and genetically modified organisms (GMOs) (Asselin, 2017). Asselin dedicated five years to producing, gathering, and assembling a visual narrative that could present to his audience the damages Monsanto has inflicted upon the environment and people throughout its history. Due to its quality and impact, this work has been nominated for the Deutsche Börse Photography

Foundation Prize 2018.

As documentary photographers try to transfer into the images they produce the sorts of things they perceive regarding a given event or theme—which usually involves someone else’s (the photographer’s subjects’) wounds—and these images are released to the public, debates about the ethics, the function of images of “injustices” in society, and also about the role of the art market in this triangle involving the photographer, the subject, and the audience, emerge (e.g. Rosler, 1981, 2001; Sischy, 1991; Solomon-Godeau, 1991; Kimmelman, 2001; Sontag, 2001, 2003; Strauss, 2003; Azoulay, 2008, 2012; Bogre, 2012; Goodyear III, 2012; Linfield, 2012). The *concerned* documentary photographer and the potential accomplishment of her/his goals are questioned. *Concerned photographer* was the term articulated by photographer Cornell Capa in 1968 (Capa, 1968) to describe “those photographers who demonstrated in their work a humanitarian impulse to use pictures to educate and change the world, not just to record it” (ICP, 2008). Critical essays have demonstrated how problematic it can be to try to speak on someone else’s behalf, and to claim for oneself, as a photographer, the role of indoctrinating people and reforming the world, as these seem to be over-inflated claims for a sole individual to achieve, especially when external factors, like specific agendas of governments, art dealers, galleries, and other art-alike institutions, can undermine the photographers’ original intentions (e.g. Rosler, 1981, 2001; Solomon-Godeau, 1991; Sontag, 2003). Big claims aside, thinkers have counter-pointed that “concerned” photography has its merit in being a powerful agent to reveal hidden stories, to shape and reformulate our understanding and concepts about situations and facts, consequently, to ultimately propel changes in society (Azoulay 2008, 2012; Bogre, 2012; Goodyear III, 2012; Linfield, 2012; Jaar, 2013). I opted for not using the term *concerned photography* in this thesis because this research is also keen to investigate the relationship between the photographer and the depicted person, and the possibilities of the medium in storytelling, besides aiming to reveal the harms dams cause to the environment and to people. I also understand that nowadays photographers are more sensitive to their roles as mediators rather than indoctrinators and to the negotiation that photography has to articulate with other (political) elements in order to achieve the author’s aims (e.g. Phillips, 2005:6); consequently, the above sharp definition of *concerned photographer* could no longer fit in the kinds of photographers whose work focuses on exposing social, political, economic, and environmental problems. Nonetheless, I considered referring to this expression as it holds an important position in the history and understanding of documentary photography (Williams, 2008); then, it is also part of the fundamental knowledge for this PhD research.

This practice-based research articulates and builds upon the entire context outlined above. Moreover, it explores the collaboration with the subject depicted in the photographic work as a way to add layers to documentary practices and provoke further discussions on this theme.

In this thesis, I first outline the methodology I use: a research design which I argue enables the researcher-researched (photographer-photographed person) mutual engagement and reveals the harms dams have caused.

Then I move to the theoretical context where this practice is grounded (which motivated this research, and also which involves debates that this work aims to enrich and contribute to). These aspects are presented and discussed in Chapters One, Two, and Three. As this thesis deals with three considerably vast themes that could generate three individual theses, in themselves (hydropower, photography, and collaboration), relevant literature will be presented in depth, integrated with these chapters, rather than being surveyed in this Introduction. This will strengthen and back up my reasoning and arguments, improve relevance and flow, and reduce repetition.

In Chapter One I set a historic overall view regarding large dams, hydropower, and the climate change agenda. I also provide a literature review on the theme negative impacts of dams as well as factual information about the damages dams have already caused in different parts of the world, as these are the reasons that underlie my focus on this subject of inquiry.

In Chapter Two I introduce the demand for deeper exchanges between art and anthropological tools in both anthropological and art works, and discuss the collaboration with the subject (as in subjects of the images) as a fertile ground for exploration. This underpins my rationale with regard to the methods I apply in my research. I present, discuss, and situate my practice, specifically in relation to my research into the works by photographers Susan Meiselas, Jim Goldberg, Anthony Luvera, and Sharon Lockhart, which tackle this commitment between photography and anthropology as well as between photographer and “subject”. I also set out the debate triggered by the increase in collaborative art practices (especially those named socially-engaged art, relational art, community-based art, etc.) that took place in the early years of the twenty-first century and onwards, and how this model has been evaluated by art critics and art historians, particularly by two authors who have been the protagonists (with contrasting standpoints) of this debate: Claire Bishop and Grant Kester. I also interweave my

own arguments and perspectives about this matter along with Bishop's and Kester's, as the points I make throughout this discussion refer to my understanding of art and also of my own practice.

This practice-based research is deeply rooted in the subjects of representation and communication, i.e. it is based on the process of making meaning through socially intelligible codes. In Chapter Three I visit the founders of Semiotics, Charles Sanders Peirce, and Ferdinand de Saussure, and also absorb seminal pieces by Roland Barthes and Jean Baudrillard to discuss the uniqueness of photographs as objects that can retain the "aura of the 'real'" and make those before them believe they "are experiencing the 'real' thing". Throughout this Chapter I demonstrate how I make use of this peculiar attribute of photography in order to (conceptually speaking) take my collaborators, their arguments, and their claims to their potential audience. As this point also intersects with the idea that photography has the capacity of shaping and articulating relations in our society, I bring Ariella Azoulay's and Jacques Rancière's rhetoric on the relations of power that drive our society, and the active role of the depicted person and the viewer within this context into the discussion. I discuss how their theories have been relevant in the fields of arts and photography, and explain how they are applied in my practice. I use some examples from this practice-based research and return to Susan Meiselas', Jim Goldberg's, and Anthony Luvera's works in order to illustrate and develop my arguments. I then intersect this civil contract of photography with my subject of inquiry, dams and hydropower, uncovering the geopolitics of these ventures, the international profiteering associated with them, as well as their implications for national policies in Latin America (including the energy ones)—policies that have invariably resulted in the infringement of both Human Rights and Rights of Nature. I finish this chapter arguing that my encounters with my collaborators as well as the outcomes of this PhD research invite us, from ordinary citizens to policy-makers, to understand hydropower within this sphere of Power and also to re-think the way we conceive and evaluate wealth and welfare, as claimed by Eduardo Gudynas (with his concepts of *Pachamama* and *buen vivir*).

I then move on to the practice itself. Chapter Four is devoted to setting up the specifics regarding each dam covered in my fieldwork (regarding their geographic, historical, and political contexts), so the reader can have a clearer picture of the "stage" where my collaborators' stories unfold. Eventually, after outlining and detailing the landscape in which this practice-based research is embedded (in Chapters One, Two, Three, and Four), I introduce my reflections on my practice and its potential impact, in Chapter Five.

It is intended that this practice-based research is of value as an innovative way of producing a relevant visual work, as well as providing arguments to support further discussions regarding photography, collaborative practices, transdisciplinarity, and, most importantly, the environmental and human costs of hydropower.

### **Major aims**

This research is underpinned by some major aims, which are:

- To produce knowledge that challenges current perceptions regarding the costs of dams and hydropower, by means of a transdisciplinary approach;
- To discuss the relevance of the methods used in this research in accessing and showcasing points that have been difficult to deal with via traditional scientific means;
- To raise awareness concerning the situation of those (people and ecosystems) affected by large dams, and using Brazil as a case for an issue that afflicts many parts of the world;
- To explore possibilities in visual storytelling and collaboration as a way of empowering subjects photographed;
- To develop a practice that can add to the understanding of and discussions about the exchanges between the photographer and the photographed person, photography, and its relevance in society.

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## **Methodology**

In order to achieve my aims, I designed a method of working that concentrates on the perspectives of those who have been affected by hydropower projects and responds to these people's experiences. It blends tools from different disciplines: interviewing techniques from the field of Anthropology with image-making from the field of Photography. It also prompts exchanges between researcher and researched, and fosters, in the process of representing through imagery, the contributions each part can make to each other's knowledge. I explain and justify this systematisation below. When applicable, further explanation on the methods is also given in **Chapters Four and Five**.

### **Target-sites**

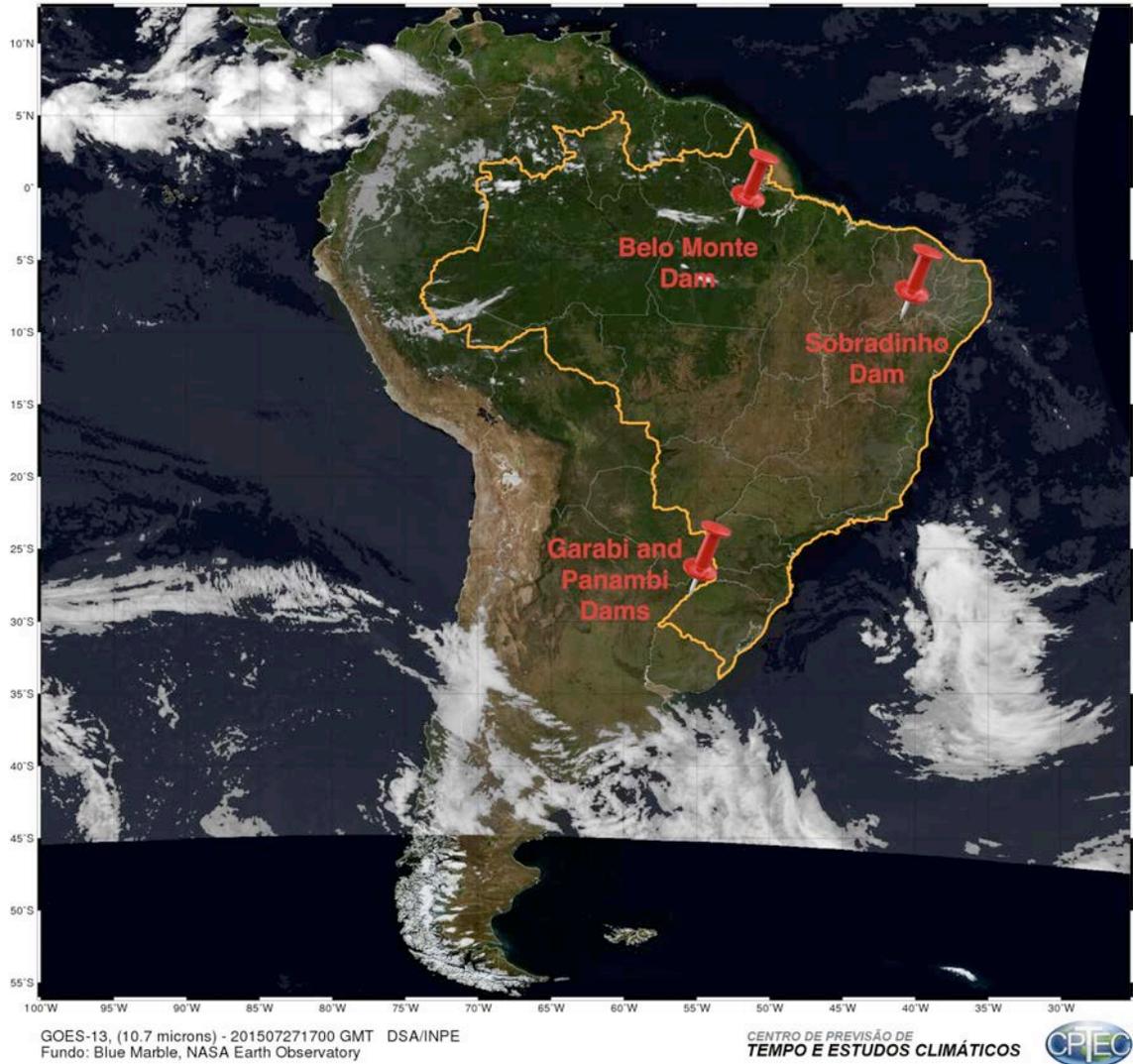
As a Brazilian with 'insider' knowledge about the Brazilian environment, its national policies, and the linguistic competence to speak to local people, I focused my research on the Brazilian territory. However, I do not intend to limit the reflections and debate triggered by this practice-based research to Brazil only, as I understand they concern broad subjects, i.e. photography, collaboration, energy, geopolitics, and transdisciplinarity.

In order to take samples from a range of (i) chronological periods, (ii) different biomes, and (iii) socio-cultural and historic contexts within Brazil's diversity, I have picked as my case studies three hydro schemes: the Sobradinho dam, the Belo Monte dam, and the Garabi-Panambi dam complex (see Fig. i). Sobradinho dates from the 1970s, and is located on the São Francisco River, in Bahia state—an area within the *Caatinga* (semi-arid) Biome. Belo Monte works started 2011 and are still ongoing (estimated to be completed by 2019). It is situated on the Xingu River, in Pará state, as part of the Amazonia (rainforest) Biome. The Garabi-Panambi dam complex comprises two dams, the Garabi and the Panambi, both designed to be built on the Uruguay River, in Rio Grande do Sul state. The dam works were planned to start around 2016, however, the project is currently suspended. If one day it is carried out, the Garabi-Panambi dam complex looks set to submerge a large area of Brazilian Atlantic Semi-deciduous Forest.

I will set out the specifics concerning these three ventures in **Chapter Four**. The stories of these dams are connected to my participants' experiences and to my own perceptions in each site. I considered it more appropriate to present them right before my analysis of the practice, so that the reader understands the atmosphere in which my encounters took place and how

the context regarding these sites visited might have influenced the practice.

FIGURE i. Location of the dam projects covered in this research.



ORIGINAL IN COLOUR

Adapted from INPE and CPTEC 2015

### **Transdisciplinary approach**

*"[...] After a lull, transdisciplinarity reemerged in the 1990s as an urgent issue relating to the solution of new, highly complex, global concerns, beginning with climate change and sustainability and extending into many areas concerning science, technology, social problems and policy, education, and the arts. Transdisciplinarity today is characterized by its focus on 'wicked problems' that need creative solutions, its reliance on stakeholder*

*involvement, and engaged, socially responsible science. In simultaneously studying multiple levels of, and angles on, reality, transdisciplinary work provides an intriguing potential to invigorate scholarly and scientific inquiry both in and outside the academy.”*  
(Bernstein, 2015:1)

Transdisciplinarity was conceived as the result of epistemological enquiries and reflections on the customary compartmentalised way knowledge is produced and, then, reproduced in the education system of Western countries: segmented into fields and disciplines (Nicolescu, 2010). It investigates how these different disciplines and fields (physics, arts, economics, for instance) can exchange methods, become integrated, and transcend their boundaries to evolve into a new whole that will eventually generate a new knowledge, (*“between, across, and”*) beyond that one which has been restricted to their very compartments and structures (Nicolescu, *ibid*). Notably, transdisciplinary researches are sensitive to social demands and social welfare, and underpinned by intricate contemporary scenarios (Kagan, 2012; Nicolescu, 2012). So, transdisciplinary research consists of investing in and interweaving backgrounds from different fields, making them work integrated in order to better understand, explain, and/or find solutions for complex, “wicked” issues (Bernstein, 2015). Bernstein defines “wicked problems” as *“pressing problems [like those related to sustainability, conflicts, or] even crises, reaching in multiple domains or dimensions and involving not just academic disciplines and the interplay among them but also practitioners seeking solutions in the real world outside the academy”* (Bernstein, 2015:7). Thinking about these new horizons for knowledge brought by transdisciplinarity and its importance for the comprehension of complex, multi-layered matters (like the one of dams and their impacts on people and the watershed), I decided to undertake this research through this path. My methodological approach, which brings together techniques used in sociological and anthropological inquiries, photography, and collaboration with the subject, will be detailed as follows.

As I became more aware that the downsides of dams and hydropower have been underestimated, my focus in this research was to access, document, and present in an intelligible fashion what kinds of damages hydropower projects can cause and their repercussions. From my understanding, those who live alongside (and in close contact with) rivers and, at the same time, who dwell or have dwelled in areas subjected to these hydro projects, have expertise in both subjects *riverine environment* and *impacts of hydropower*, as they have experienced both of them. Consequently, delving into these people’s stories would provide an accurate picture regarding how (and how intensely?) dams harm the riparian

landscape (both physically, biologically, sociologically, and culturally).

Yet, communicating these matters in an accessible way is considered difficult due to constraints associated with the incapacity of more objective, scientific means to represent things that are intangible—as are many of the negative effects dams have on nature and people (McCully, 2001; Wang et al., 2014; Zen, 2014 – as I will outline in **Chapter One, section 1.5**). For instance: how could the destruction of a physical landscape that holds sentimental value for a given individual or community be properly represented in a chart or in a statistical table?

Image-making processes have the capacity of absorbing personal experiences (which comprise immaterial things) and turning them into objects (e.g. photographs); which, in their turn, function as agencies that connect the author to the audience (Gell, 1998; Franklin, 2016:5, 76 and 199). Photographs, in particular, have some characteristics that are peculiar to the medium, including those concerned with the relation of the “proximity” that they have with the “actual thing” that they represent (Barthes, 1981; Baudrillard, 1988). Consequently, photographic images tend to have an impact on their viewers (Azoulay, 2008, 2012; Horta, 2011:127-129 and 180-181). Photography would then be the most appropriate means for this research to develop, as it would enable me to transpose these intangible matters into an object (a photograph), making visible the wounds my “subjects” (riverside dwellers who have been affected by dam projects) would reveal to me. I also considered that these photographs should include (apart from the stories my “subjects” would tell me) these people as “real” individuals who could “interact” with their viewers “face-to-face”. As a result, my research design is focused on the construction of portraits of participants of this project (riverside dwellers) as a way to tell their stories about the three Brazilian dams covered in this work.

Still regarding the matter of conveying this “proximity” to the “real referent” and immediateness, colour photography was used in the making of the portraits, as it “*more accurately equates to the way we see the world*” (Marien, 2010:422). Colour also provides more information about the state of objects and sites depicted in the photograph, apart from their shape, contrast, and lines.

More than just documenting people who have been affected by dams and their personal histories, I wanted the photographs to embody their very emotions, their environment, their perspective, and their collective and personal memories regarding themselves, the respective

dam and its consequences in their lives. I was keen to see how they would perceive themselves within this context, and also how they would like other people to perceive them too. I was interested in sharing with my participants the position of makers of the work too, in challenging and contributing to debates around authorship in photography, in exploring the tension that exists between photographer (researcher) and “subject”. Unlike traditional forms of documentary photography, I do not focus only in reciting or transforming into imagery what I am aware of or experience (as researcher and photographer). Nor do I exclusively work on capturing events that “spontaneously” take place. I also do not engage in having my collaborators clicking themselves or building up a record of what they perceive about their life and surroundings, which is what *participatory* approaches to photography usually explore, like the projects run by photographers Patrícia Azevedo, Murilo Godoy, and Julian Germain (Germain et al., 1998); Wendy Ewald (Ewald, 2000); Zana Briski (Briski, 2005); and by the organisation *Photovoice* (Photovoice, 2010). Rather, I attempt to challenge these boundaries by telling a story that grows from my participant's and my own knowledge and engagement stitched and shaped together. I propose my “subjects” take part in the making of their own portraits together with me, to be my collaborators in this project (as I understand the participants of this research as my collaborators, as my co-authors of this work), as I will detail in the next section, which is devoted to explaining the method used to make the portraits of this research.

Unlike the proposal of this research, *participatory photography* practices engage in providing individuals of a given community with cameras (and instructions on how to operate these cameras) for them to photograph themselves either what they feel interested in capturing or to make images of a predetermined topic. The initiatives of Patrícia Azevedo, Murilo Godoy, and Julian Germain (with children from the Brazilian shantytown Cascalho); Wendy Ewald (with children from different communities); and Zana Briski (with kids from a brothel area in Calcutta) focus on constructing a visual narrative based on the photographs made by these children about various themes, usually driven by the children themselves and concerning daily life events or explorations of the apparatus. *Photovoice*, on the other hand, is more interested in the *participatory photography* sensu stricto, which employs photography to directly articulate enhancements in the community where this technique is applied. It consists of photography workshops that engage participants not only in producing images that can work as personal and collective “evidences” of a given issue but in discussing this given subject with these participants (discussions that are mediated by the images that are made) and also including local authorities in this debate, in order to ameliorate the life of the local people.

This process was first documented by Caroline Wang and Mary Ann Burris in 1994 (Wang and Burris, 1997). They used this method with women in rural Chinese areas to reflect on the latter's health and work realities. Broad participatory photography practices (not only in photography, but also in film and anthropology) are rooted in the arguments of Brazilian educationist Paulo Freire. In his book, *Pedagogy of the oppressed* (Freire, 1970), Freire argued that the reason most of the educational, political, and communication initiatives failed was because they were designed without considering the perspectives of those whom those proposals were directed at. One of the points Freire made was that instructing these groups on the use of cameras, for instance, could enable them (even if illiterate) to articulate their own perspectives to the others and this could be emancipatory. As I will show in the next section and throughout this thesis, I wanted to explore the exchanges and relationships between the trained photographer and her subjects, to investigate collaboration within the act of photographing. And this concern for exploring these specifics is why I did not focus on using participatory methods, as they could restrict the making process to the subjects only (as opposed to the photographer only), reducing the effect of exchanges of knowledge gained through collaboration.

Back to the techniques applied in this research, in order to have access to the knowledge and experience my collaborators (i.e. riverside dwellers participants of this project) have about the theme I survey (impact of dams), I use qualitative interviewing (Mason, 2002). Qualitative, semi-structured, or in-depth interviewing is a widespread and reliable method that has long been acknowledged and used by both anthropologists and sociologists (Mason, 2002; Bernard, 2006). For being considered an efficient method to retrieve information regarding individual's lived experiences and subjective matters, it has also been largely used in studies within the fields of Social Care, Medicine, and Mental Health (McIntosh and Morse, 2015). As anthropologist H. Russell Bernard classifies in his book, *Research methods in Anthropology: qualitative and quantitative approaches* (Bernard, 2006), which is taken as a guideline for anthropological research designs in Western countries and whose sixth edition was launched a couple of months ago, semi-structured interview is an open-ended method that, at the same time, enables the researcher to be fully in control of the topics she/he wants to cover (by means of key questions that are written and addressed to the interviewee along the interview), and makes space enough for the interviewee to lead the "conversation", to detail what she/he considers important as well as to bring out further relevant points concerning the theme that might not have been anticipated by the researcher her/himself (Bernard, 2006:210 and 212). Sociologist Jennifer Mason, from the School of Social Sciences of the University of

Manchester, in her acclaimed book *Qualitative researching* (Mason, 2002), asserts that semi-structured interviews are the choice for inquiries that seek a deep learning about individual experiences and perspectives, as well as that are interested in subjective matters, like (the interviewee's) emotions (Mason, 2002:62-67).

*"[...] If you choose qualitative [semi-structured] interviewing it may be because your ontological position suggests that people's knowledge, views, understandings, interpretations, experiences, and interactions are meaningful properties of the social reality which your research questions are designed to explore. Perhaps most importantly, you will be interested in their perceptions. [...]"* (Mason, 2002:63)

Moreover, as the assessment of the costs of dam projects tends to be subjective (i.e. it has to do with how people perceive and value "things", like a fish or a tree, for instance), I decided that emotions and feelings could also make me, researcher, and the audience achieve a better understanding of these costs. Then, emotions and feelings are explored both in the interview and in the making of the portraits in this work (as I will present below), hoping that this helps us (my collaborators and me) reveal the relevance of the impacts caused by hydro projects on riverine people's lives and on their environment. The key questions of the semi-structured interview undertaken in my fieldwork can be found in **Appendix 4**.

Once it involves "human participants" in its methods—hence there is the potential risk of exposing, exploiting, or harming them somehow—this research had to undergo a process of ethics evaluation, as required by the University's Research Ethics Code of Practice. The methodology proposed in this project was assessed and approved by the University's Research Ethics Committee. The Informed Consent Form used in this research was also previously submitted, assessed, and approved by the Committee. Both the Informed Consent Form and the Research Ethics Committee's letter of approval are available as **Appendix 3**.

### **On the act of transposing lived experiences into a visual narrative**

In the early stages of this PhD, I approached the Brazilian Movement of People Affected by Dams (MAB), a social movement that has fought dams and for the rights of affected people since the 1980s (I will introduce the MAB and the anti-dam movement that emerged in different parts of the world by the late twentieth century in **Chapter One**), and told them

about my wish to work with its support. Working in collaboration with the MAB, I contacted local leaders in each one of the three sites to be surveyed and explained my research to them. These leaders would guide me on the best way to reach and approach potential participants (who would be my collaborators in this research).

My method consisted of traveling to the three dam project sites and, once in each community, I would search for and invite people who live, or had lived, in the area under the influence of the respective dam for the interview. In this (semi-structured) interview, every participant would be able to set out their individual and communal everyday life, tell their personal history regarding the dam and whatever else they think is relevant in relation to this upheaval and its consequences, as well as express their feelings about it. After the interview, every participant would also be invited to sit for a portrait where I would operate the camera but the participant/sitter would co-direct the shoot. For this photo shoot, I would ask each sitter to choose a relevant place, as well as to select an object that could represent the feeling(s) she/he has with regard to the situation experienced as a consequence of the dam (i.e. considering what she/he stressed in the interview). We would then start to work on the portrait at the chosen location, depicting both the sitter and his/her selected object. Rather than running a “typographic catalogue” using my own perspectives only, I would invite every sitter to take part in this process. After the first shot, which I framed myself, I asked the “subject” to join me in making his or her own changes for the next picture, so that the images could evolve through mutual consent and collaboration, according to what we both saw in the previous frame (by means of my DSLR camera’s digital display). This process would carry on until the sitter was satisfied with the image he/she saw on the camera display. Eventually, I would take a final shot of my own choosing, at this point reflecting and encapsulating all that the sitter had indicated to me (Fig. ii). Notably, from my second fieldwork onwards, I started to ask the sitters to also come up with ideas to frame their own portraits since the very first shot, no longer making it myself, and, since the first fieldwork, anytime I had considered myself also satisfied with the sitter’s last suggestion for the shot, I would not take any further “final” shot myself.

FIGURE ii. Sequence of portraits of Maria Dalva.





Maria Dalva's feeling: "memory"

Location chosen: living room of her current place of living

Object chosen: her wedding dress

Top to bottom/left to right: location, 1<sup>st</sup> shot, 2<sup>nd</sup> shot, 3<sup>rd</sup> shot, 4<sup>th</sup> shot, 5<sup>th</sup> shot, last shot.

(For details on Maria Dalva's story, see **Chapter Three**, p. 123-124)

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Once the shoot was finished, we (every sitter and I) would go through all the images we worked on and the participant would select the one(s) she/he considered that best represented her/his story and her/himself. Hence, throughout the entire process of image-making (from its conception to the editing of the photographs), the power that the photographer normally holds is shared and negotiated with her "subjects". This led us towards an outcome that seems to best represent the sitter, her/his story and feelings before the potential viewers of the work. Then, a narrative of each encounter I had with my collaborators was created by means of these photographs, as well as through other means that I included into the research design as the project evolved. Dialogues, comments, and testimonials taking place during these encounters were also recorded, as they were crucial to situating the images produced in this research.

I spent around two months in every site and two days, usually, with every participant, in order to provide enough time for them to feel comfortable, to talk, to reflect, to revisit their memories and their valuable places and specially kept objects, and to address what they

considered important to them and why.

During my three fieldwork visits, as the knowledge about my subject of inquiry unfolded, the practice developed, and I could adjust and improve my methods. Apart from the improvement I mentioned above that I made regarding the first shot (i.e. welcoming the sitter to interfere not only in the conception but also in the framing of her/his portrait from the very first shot onwards), I decided to add other layers to this first research design. Gathering vernacular images from my participants' (collaborators') personal archives and having them draw me some scenes were examples of these extra layers I absorbed into the practice in order to better assemble the visual narrative. Throughout the next chapters (particularly in **Chapter Five**, wherein I strictly focus on reflections on my practice), I will articulate how this process of making the portraits and juxtaposing material (these jointly constructed portraits with, for instance, excerpts from the interviews, vernacular images, and drawings) functioned in the construction of the work. These points, as well as the rationale for making these rearrangements in the research design as my fieldwork took place, can be better understood in face of the circumstances that will be addressed and discussed in these chapters; consequently, I opted for detailing them further on.

## **Chapter 1: On Hydropower and Large Dams**

*“But what we need to stress is that hydropower dams – whether small, big, mega, large or massive – are all a dire necessity for developing countries. We need to proceed with a proactive approach to development. Ignoring large dams would be like ignoring the much needed development of emerging countries.”*

(Jayaraman Punidhan, hydropower manager, India, in an article published by the International Hydropower and Dam Construction magazine, 2014)

**Aims of this chapter:**

- Addressing the sociopolitical, economic, and environmental situation concerning the construction of dams for hydropower purposes (worldwide and in Brazil) and its resurgence in the latest decade.
- Presenting facts concerning the negative impacts that large dams/hydroelectricity have caused.
- Highlighting the difficulty to empirically assess or measure the negative impacts associated with large dams due to their intrinsic subjective characteristics.
- Presenting this research as an efficient tool to access these subjective hazards by means of a transdisciplinary collaborative work.

This first Chapter is focused on compiling and setting out factual information regarding large dams and hydropower so that the reader can comprehend the overall context which this practice-based research is embedded in and has grown out of.

### **1.1 Hydropower: History, politics, economics, and the climate change agenda**

A “race” for energy production during the last century all around the world has been triggered by the exponential increase of the world’s human population and the demand for energy to support activities that drive countries’ development (like the ones related to the industry, agriculture and transport sectors, and urban services, such as trade, health care, finance, administration, and education) as well as to assure citizens’ welfare (providing energy for heating, cooking, and leisure, for example). On the other hand, global warming has raised a new challenge for every country to deal with as around two-thirds of the global greenhouse gases (GHGs<sup>1</sup>) emissions come from energy production, conversion, and use (IEA, 2015; IEA, 2017).

Today, heads of state are pursuing not only renewable sources of energy but also “low-carbon”, “clean” alternatives in order to boost a sustainable green-economy as firstly agreed at the Kyoto Protocol (1997) and then reaffirmed at the Copenhagen Climate Change Conference (COP15) in 2009, at the United Nations Conference on Sustainable Development (Rio +20) in 2012, and also carried on at the United Nations Conference on Climate Change (COP21), held in Paris, in 2015, where leaders from 196 States and the European Union (197 Parties) have agreed to make concrete efforts in order to reduce the global carbon emissions to a level that prevents the temperature on the Earth’s surface from rising more than 2<sup>0</sup>C above pre-industrial levels until 2100<sup>2</sup> (Ghezloun et al., 2016).

Thus, hydropower reappears in the world’s economic frame as the most suitable strategy for both energy production and assurance of economic growth, in accordance with the United Nations premises on sustainability, once: i) hydroelectricity comes from a renewable source (water), as opposed to the energy generated from the combustion of coal and oil, which are

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<sup>1</sup> For definitions on acronyms and concepts addressed throughout this Chapter, please go to the **Acronyms and key-words definitions** section.

<sup>2</sup> According to the IPCC, a global warming of more than two degrees Celsius would be seriously hazardous, leading to natural catastrophes and mass extinctions.

finite sources; ii) it is capable of providing thousands of Megawatts (MW) that can feed a country's electric grid easily and continuously, in contrast to wind power, for example, which generates energy only intermittently, when the wind blows; iii) it creates income-employment, as such massive projects usually last almost a decade from the studies of feasibility to completion, demanding thousands of workers and services to supply their daily basic needs, like individuals to prepare and deliver meals to them (mainly during the process of construction of the dam-power plant and its related works, such as the creation of new roads); and iv) was believed to be "clean", i.e. not emitting relevant amounts of GHGs as does fossil fuel, since hydropower stations produce energy via a mechanical process, i.e. when water running through the dam spins the turbines, which are connected to generators, whereas the energy that comes from burning fossil fuels (petroleum, coal, peat, or natural gas) inherently generates carbon dioxide and nitrous oxide (i.e. GHGs) as a result of its combustion.

The construction of dams for irrigation, water supply, and flood control dates back 6,000 years (WCD, 2000a) whereas the first documented use of dams for electricity production was in 1878, on the Debdon Burn, England (Pevsner and Richmond, 2002:246). Five years later, Brazil built its first hydroelectric plant, on the Ribeirão do Inferno (Hell's brook) (Mello, 2008:4). Yet, the boom in large dam building for hydropower, irrigation, water supply, flood control, and/or navigation purposes only began after the Second World War, remarkably during the 1960s, 1970s, and 1980s, mostly in developed countries (WCD, 2000a).

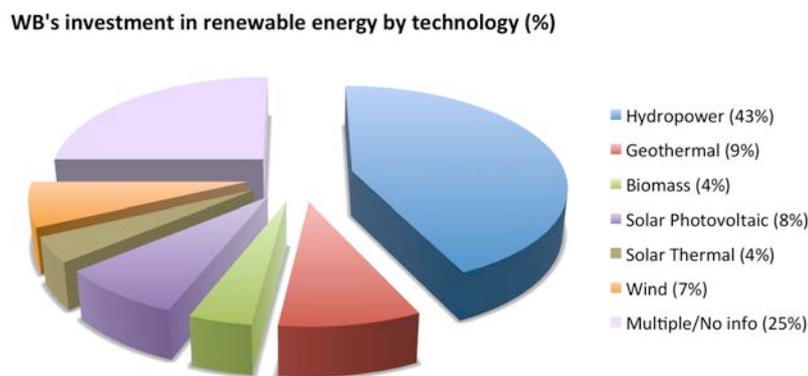
From the 1980s onwards, the pressures by an increasing global anti-dam movement (see details below—**section 1.3 The anti-dam movement**) and also by more rigid environmental laws led to a significant drop in the commissioning of large dams, and this culminated in the virtual ceasing of investments in dams by the last decade of the twentieth-century/first years of the twenty-first century (Zarfl et al., 2014, and Fig. 1.1). In 1997, for the first time in the United States, which was then ranked as second in terms of the number of large dams they had built throughout its territory (8,000), the speed of decommissioning exceeded that of commissioning large dam projects (Keller et al., 2000); hence, previously dammed rivers were turned back into free-flowing waterways. A remarkable fact that demonstrates this global trend in abandoning the construction of large dams by the late 1990s was the announcement



hydroelectricity was still to be reached, and 90% of this potential would lie in developing countries.

Even with stricter regulations regarding the approval of large dam proposals from the late 1990s and after, and especially after the WCD's Report in 2000 (WB, 2008), the World Bank has lately renewed efforts to encourage large dam projects for hydropower globally (Fig. 1.2), believing that this support will ultimately foster a sustainable development (Khagram, 2004; Pearce, 2006a; WB, 2012).

FIGURE 1.2 – World Bank financing for renewable energy projects during 2007-2012 (total investment worldwide of US\$12.487 billion). Note that almost 50% (over US\$5 billion) of the World Bank's budget for renewables was spent on hydropower projects within this time frame.

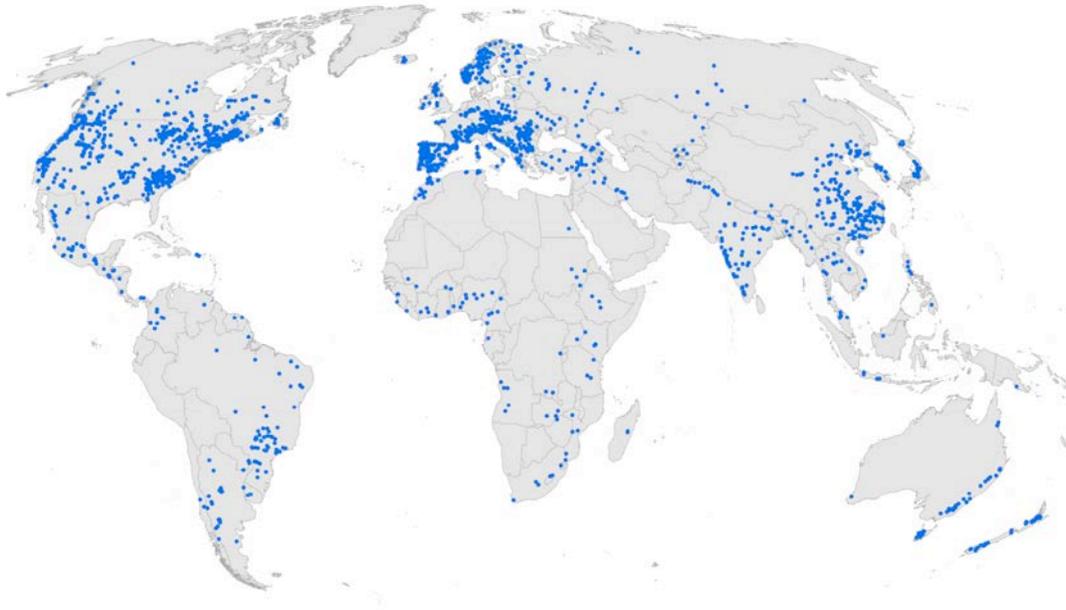


ORIGINAL IN COLOUR

Adapted from the World Bank Data 2007-2012

Developed countries have also invested in large-dam-hydropower projects in developing countries in the last decade. Firstly, because most of the developed countries, especially inside the European Union (EU), hardly have any rivers left, inside their own territories, to be dammed (Fig. 1.3); secondly, because they need local energy available to supply the demands of the industrial and infrastructural activities they undertake in developing countries; and thirdly, because the United Nations Environment Programme (UNEP) has recommended developed countries to finance “low-carbon” energy initiatives in developing countries (UNEP, 2012).

FIGURE 1.3. Spatial distribution of existing hydropower dams worldwide until 2010.



Based on the Global Reservoir and Dam (GRanD) database (Lehner et al., 2011).  
All hydropower dams recorded via the GRanD database regardless their size/dam height.  
ORIGINAL IN COLOUR

Extracted from Zarfl et al., 2014

Considering this scenario, The BRICS countries Brazil, India, and China have therefore put together a generous offer of free-flowing freshwater they still have available in their territories so as to take advantage of the opportunities of funding to underpin their energy policies on hydropower, as a way to sustain their economic growth in the future. Consequently, by 2035, it is predicted that the hydroelectric large dams in Brazil, India and China will provide about 40% of global energy from renewables (this will be achieved if all the large dam projects currently planned and under construction in these three countries are accomplished – IEA, 2011:91). In spite of South Africa having not demonstrated any major interest in constructing large dams within its own boundaries (REI4P, 2015), it has rather supported Mozambique’s plans of incrementing the latter’s hydropower capacity in order to eventually feed South Africa’s growing demand for energy since South Africa’s economy relies upon hydroelectricity imported from Mozambique and the Democratic Republic of Congo (REI4P, 2015; Fabricius, 2016).

Then, almost four decades after ecologists, environmentalists, and social scientists, to name but a few, started to fight against the large dam industry, governments, businesses, and demands for energy have led to increased pressure to build them regardless of the damage they cause. This is how hydropower re-appeared on the world's political and economic agenda. It is due to my previous training as an ecologist that I became aware of the significant dam-related issues. Consequently, such global investment sounded to me like a disastrous mistake, as I outline below.

## **1.2 Issues regarding dams and hydroelectricity**

Classically, one of the crucial points that decision-makers consider before approving a big project, including the ones of large dams for hydropower purposes, is the project's budget. When it comes to large dam projects, an investment of several billion dollars is usually involved and, considering that it will take 8-9 years after the approval for them to start delivering benefits, decision-makers must be convinced that the amount of money generated by the proposed project<sup>4</sup> will in fact surpass its financial cost in the end.

Nevertheless, companies in charge of proposing and/or undertaking large dam-hydropower projects have presented budgets that have roughly doubled at their completion, as demonstrated by a critical study from the University of Oxford (Ansar et al., 2014)—i.e. hydropower has been historically much more expensive than initially presented to decision-makers by developers. Moreover, the actual implementation schedule for these large dam projects has usually stretched to 44% over the initial time estimate, i.e. they also have significantly overrun. In their paper entitled *Should we build more large dams? The actual costs of hydropower megaproject development*, expert in business administration Atif Ansar and colleagues (*ibid*) conclude that, if agencies which analyse and finance such projects (e.g. power and water authorities, and the World Bank) applied the methods used by the authors (the *reference class forecasting*) to evaluate the actual viability of hydroelectricity projects, several projects already approved, like the ones of Gilgel Gibe III dam (in Ethiopia), Myitsone dam (in Myanmar), and Belo Monte dam (in Brazil<sup>5</sup>), would not have been signed off. These same authors eventually recommend that policy-makers invest their efforts in energy alternatives

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<sup>4</sup> During the project's lifetime, which usually comprises fifty years (Fearnside, 2015b:265).

<sup>5</sup> The Belo Monte dam is also one of the projects surveyed in this PhD.

that require less “up-front” outlays and that can be implemented faster than hydropower, instead of fostering hydroelectricity as a cost-effective solution for energy production. Another point that adds to Ansar and colleagues’ arguments, also reducing the net benefits of hydropower, has been the previous finding by the World Commission on Dams (WCD, 2000a) that 55% of the world’s large dams they surveyed produced less energy than what was originally announced.

As expected, due to the potential repercussion of the above mentioned article in further decisions throughout the world about the building of dams, especially because it consisted of a study undertaken by researchers of the highly respected University of Oxford, the dam industry promptly responded to it, mainly arguing that the methodology the authors had used was not accurate enough (Nombre, 2014).

***“ICOLD President answers Oxford misleading study. Yes, we need to build more large dams for water storage and energy for sustainable development! [...] The study is based on a sample of 245 dams, which appears as a total misrepresentation of the 50,000 large dams existing today [...] The above comments have been made quickly and could be more accurate, provided the authors make their data and methods public.”*** (Adama Nombre, ICOLD President, 2014:2 and 4).

Noteworthy, Ansar and his collaborators stress (as the World Commission on Large Dams had also noted in 2000) how difficult it is to find open-access and detailed data on projects of dams, regardless of their geographic location, as developers and governments tend to not publicize them. The authors explain in their article that this was the reason for them to have selected 245 dams only for their study (which were the only ones they managed to have all of the data they required to apply their research method).

Research projects undertaken in the last two decades have demonstrated that, contrary to what was believed, large dams also release considerable amounts of GHGs into the atmosphere (Rosenberg et al., 1997; Bergkamp et al., 2000; Fearnside, 2005, 2015c, 2015d; Varis et al., 2012). The decomposition of the submerged vegetation inside the reservoir generates carbon dioxide, methane, and nitrous oxide gases that reach the atmosphere via evaporation through the reservoir’s surface and also via water discharge (when the reservoir water spins inside the turbines), downstream. These rates of emission vary with the morphology of the reservoir, its age, and its location. The larger and shallower the reservoir,

the higher its GHG emission rate. The older the reservoir, the lower its emission. Hydropower plants situated in tropical areas are expected to have higher rates of emission than those located in temperate zones, as higher temperatures optimize the process of decay, while the distinct chemical composition and density of plants in the tropics contribute to a higher rate of GHG production per submerged area. Nowadays GHG emissions represent the largest-scale impact of hydropower and this has potentially contributed to global warming, as argued by acclaimed researcher and specialist in climate change Dr. Philip Fearnside (2005, 2015d, 2016a). However, the role of hydropower in climate change when compared to other sources of energy, like fossil fuels, is still under debate, mostly due to constrictions concerning both the difficulty in accurately measuring GHG emissions from reservoirs and the lack of independent studies, i.e. studies not carried out by the hydropower industry itself (Varis et al., 2012, Kumar et al., 2016).

Despite providing a reasonable amount of energy through a renewable source (i.e. water), large dams are one of the major causes of both terrestrial and freshwater biodiversity loss (Wang et al., 2014; Benchimol and Peres, 2015).

Dams negatively affect ecosystems by submerging the land, fragmenting the river channel, and modifying its seasonal runoff patterns (Straskraba and Tundisi, 1999; Lees et al., 2016; Latrubesse et al., 2017). These primary side effects of damming a river lead to a cascade of interconnected secondary and tertiary damages driven by: i) the stagnation of water (i.e. the transformation of a lotic ecosystem into a lentic one); ii) the drowning of plants, habitats, and whatever else is not able to leave the reservoir's flooded area in time; iii) the loss of usually fertile and productive lands; iv) the blocking of the free transit of water, organisms, nutrients, and sediment from upstream to downstream of the dam and vice-versa; v) the decrease of freshwater input in the watershed areas close to the river mouth. Moreover, further works necessary to the dam construction itself, like the opening of areas for new roads and workers' accommodation sites, contribute to deforestation and soil erosion.

In this regard, in 2005, ecologist Christer Nilsson and collaborators announced that over half of the world's large river systems (LRSs) were already either moderately or strongly affected by dams (Nilsson et al., 2005). According to them, the eight more biogeographically diverse LRSs in the world (i.e. the Amazonas-Orinoco, in South America; the Zambezi, in Africa; and the Ob, the Yenisey, the Amur, the Irrawaddy, the Ganges-Brahmaputra, and the Indus, in Asia) have been moderately or strongly impacted by dams. Although aware of this situation, policy-

makers have continued with new proposals of hydropower dams within these areas over recent years. Russia plans to expand its current hydropower capacity, initiating pipeline hydropower projects capable of providing 22,561 MW of installed capacity by 2030, as a strategy to reduce its GHG emissions by 25-30% from 1990 levels by 2030 (Government of Russia Federation, 2013). In Laos, the proposal of international banks, developers, and large corporations has led to the planned building of 70 new dams along the Mekong river basin, one of the most important LRSs in Asia in terms of both biodiversity and agriculture (Corredor, 2015), until 2030 (UNFCCC, 2016). The Intended Nationally Determined Contribution presented by Lao People's Democratic Republic to the COP-21 states:

*“Intended Mitigation Activities to be implemented by Lao PDR in 2015-2030:*

*Action 5 - Expansion of the use of large-scale hydroelectricity. The objective of this activity is to build large-scale (>15 MW) hydropower plants to provide clean electricity to neighbouring countries. Approximately total installed capacity of the hydropower plants will be 5,500 MW by 2020. In addition, 20,000 MW of additional hydroelectric capacity is planned for construction after 2020.”* (INDC, Lao PDR, September 30 2015, table 1, p. 4 apud UNFCCC, 2016)

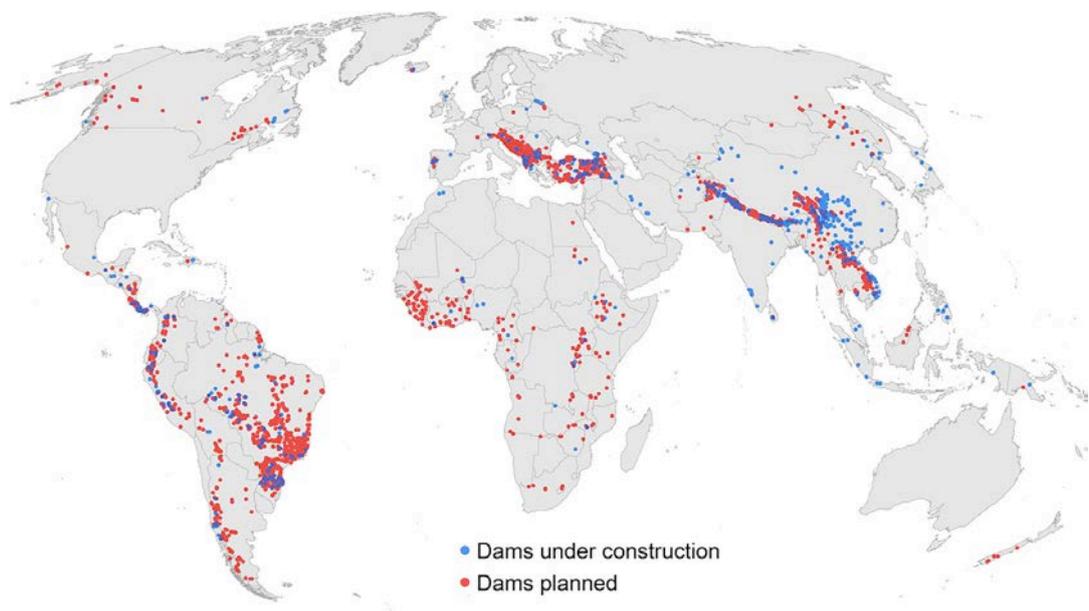
Since 2012, China has encouraged hydropower throughout the world as a way to sell the knowledge it acquired from its Three Gorges dam project. The China Development Bank (CDB) and China Export-Import Bank have openly funded dams in Latin America (Shortell, 2014; Fundación Proteger, International Rivers, and ECOA, 2017; also in **Chapter Three**, p. 171-172 – Fig. 3.14) and leaders of Venezuela, Peru, Brazil, and Bolivia, have underpinned their countries' development programmes on such infrastructure projects, remarkably large and mega dams to be built within the Orinoco and Amazon river basins (Finer and Jenkins, 2012; Little, 2014).

Mozambique, where the greater part of Zambezi river basin is situated, is a country whose fragile economy is driven by the trade of commodities like aluminium. To cope with the increasing demand of this sector, as well as the one from South Africa (which Mozambique shares its energy production with), Mozambique government is negotiating new hydropower projects, i.e. Mphanda Nkuwa, Boroma, and Lupata (WEC, 2016), all of them in the lower Zambezi river basin, downstream of the existing Cahora Bassa dam.

In 2015, expert in water and environmental sciences Christiane Zarfl and colleagues (Zarfl et al., 2014) modeled a future global figure for the scenario presented by Nilsson and his

collaborators in 2005, by collecting and analyzing data from hydropower projects planned or under construction worldwide. Their results highlight that the current re-acceleration of hydropower construction projects will not only increase the pressure on those basins already impacted upon, but also reduce the remaining free-flowing LRSs in the world by 21%, especially in South America. That is, the global environmental impairment faced up until now will become even worse if the current hydropower plants planned or under construction succeed (Fig. 1.4).

FIGURE 1.4. Future worldwide scenario concerning newly constructed dams only (as of March 2014).



Future hydropower schemes that have a maximum design capacity of 1MW or greater. Note the figure for South America (remarkably Brazil), Southeast Asia (namely China), India, the Balkans, and also for Africa. ORIGINAL IN COLOUR

Extracted from Zarfl et al., 2014

By looking at the figure above (complemented by Fig. 1.3, p. 56), one may predict how rivers are being turned into mere lines of sequential “impoverished pools” and also how freshwater is being seized, owned, and controlled by the few in charge of running these ultimate hydro plants.

Regarding plans for South America, last year, researcher Edgardo Latrubesse, from the

Department of Geography and the Environment at the University of Texas at Austin in the USA, and fifteen collaborators published a striking article in the high-profile journal *Nature*. In this paper, the authors stressed the vital role some tributaries of the Amazon River play in the dynamic of sediments within the Amazon basin and along South America's Northern coast. They warned that, if the current 288 dams that are being built or planned to be built in the area succeed, the future scene for the Amazon basin, the Caribbean, and the Atlantic Ocean would lead to a physical, biological, and climatological collapse (Latrubesse et al., 2017).

In addition to being harmful for both terrestrial and freshwater ecosystems, hydropower dams are charged with negatively impacting on human lives too. The World Wildlife Fund (WWF, 2006) argues that the increasing loss of free-flowing rivers is a trend that is threatening not only wildlife but also the supply of water for drinking, sanitation, agriculture, and fishery-related products. Rivers and their catchment areas have played a vital role in sustaining human existence by providing vital resources for human survival, known as ecosystem services. Ecosystem services are understood as the benefits human beings get as a consequence of biological, chemical, and physical processes and interactions led by both biotic (living organisms) and abiotic (nonliving, e.g. rock, water, atmosphere) factors on Earth (Vierikko et al., 2015). Benefits provided by running water and its associated ecosystems can range from good quality water, food, and soil nourishment to spiritual enrichment, recreation, and aesthetic experience.

When a water channel is dammed, it triggers a cascade of damage that ends up compromising all these ecosystem services previously offered to society by the waterway itself, the riverbanks, the floodplains, the riverine, and freshwater biota (Roma et al., 2013; Roma, 2014; Forest Trends, 2015). Thus, dams also impact people's lives in a negative way (Fisher, 1995; Sánchez, 2013). Those who live close to the riverbank and depend on fishing, farming, and hunting for their living, as well as those whose culture has been closely associated to the river patterns, are more sensitive and vulnerable to such effects of the damming process, i.e. traditional communities that dwell along the rivers (in Brazil known as *ribeirinhos*), and indigenous people (McCully, 2001; IRN, 2014; Little, 2014). These people usually lose their fertile lands, their source of income, their livelihood, their traditions, their sacred places, their social networks and identity, their collective (and personal) histories (Jackson and Sleight, 2000; Khagram, 2004; Zen, 2014). This research discloses these matters. In order to illustrate this, I introduce some points raised by Maria Eliete and Maria das Dores, participants from my fieldwork in the Belo Monte and Sobradinho dam areas, respectively.

Maria Eliete, from the ethnic group Yudjá/Juruna, who lives in the Paquiçamba Indigenous Reserve in the Amazon basin, explains that, since the Belo Monte dam project arrived in the area in 2010, her community has faced significant alterations in their livelihood<sup>6</sup>: from a way of life rooted in fishery to the struggle to survive as cocoa growers. Fish have drastically reduced in the river since the dam was built, especially the species her community used to eat most, the *pacu branco*. In addition, the cocoa plantation involved clearing the native forest, consequently, exterminating game and nuts, thus forcing a change of habits. Maria Eliete underpins her idea for her own portrait in this research on this rupture that happened in the bond between fish, the Amazonian floodplains (*igapós*), and her people (Maria Eliete's portrait is presented and discussed further in **Chapter Three**).

Maria das Dores (Dorinha), a riverside dweller who was displaced by the Sobradinho dam in 1976, perceived the dam as catastrophic for riverine people: “[...] *it was the End Times*. [...]”. Dorinha's family used to organise traditional activities in the Grande Island (her previous home, located in the middle of the São Francisco River, which was dammed to make the Sobradinho hydropower station a reality). She tells me about the Saint Francis' Festival (*Festa de São Francisco*) and how it finished due to the dam.

“[...]”

*It was a massive festival – the one of the São Francisco [Saint Francis], by the riverside! Every 4<sup>th</sup> October. It happened indeed. There would be the procession walking down with the [statue of] Saint Francis and, as it reached the shore, they would put the Saint [the statue] in the boat and canoe towards Santana [a riparian town], many boats would align along the river. There would be many [boats] coming from Santana too, to meet and cross each other in the middle of the São Francisco [River]. It was beautiful. All boats decorated with colorful ribbons, paper-made ribbons – we made the ribbons. This was a party! People singing together and tapping the caixas [drum-like instrument] on the Island. I myself do know how to tap the caixa, because I was the ‘man’s’ daughter! There is no longer the Festival, this is all gone once there is no more river, no more boats, our people took different paths... [...]”*

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<sup>6</sup> Excerpt translated to English from Maria Eliete's interview is found in **Appendix 5**.

Saint Francis (Fig. 1.5) is believed to protect the São Francisco River, i.e. the Saint Francis River, in English.

FIGURE 1.5. Image of Saint Francis (*São Francisco*), which belonged to Maria das Dores's father.



Re-photographed from Maria das Dores' personal object. Original as print on mdf sealed with plastic film.  
ORIGINAL IN COLOUR

© Marilene Ribeiro 2015

For her portrait, Maria das Dores selects this image of Saint Francis to represent faith to face the "End Times" that was, for her, the Sobradinho dam. She also suggests that her husband (who was born and bred in Grande Island too) is portrayed at her side (Fig. 1.6).

FIGURE 1.6. Maria das Dores straightens up Nezinho's sleeves for the shoot (below). Portrait of Maria das Dores (Dorinha) (following page).





Maria das Dores' feeling: "the End Times"  
Object chosen: image of San Francis, which belonged to her father,  
to represent faith  
Location chosen: her current house in Brejo de Dentro village  
ORIGINAL IN COLOUR

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Besides the Saint Francis Festival, Dorinha also comments about the *Batuque de Reis*, festivity that is more widespread in Brazil and that also took place in Grande Island. Yet, the place where she moved to, after leaving Grande Island, does not celebrate the *Batuque de Reis*: consequently, Dorinha's family has not seen or taken part in a festivity of this kind after the move. Despite this, Dorinha and her family managed to perform some folk songs that accompanied the *Batuque de Reis* in Grande Island for me to see—and also record them (Fig. 1.7).

FIGURE 1.7. Still – Dorinha sings some songs from the former Grande Island’s traditional events. Nezinho (Dorinha’s husband) improvises a drum from a kitchen pot and Gildejane (Dorinha’s granddaughter) dances.



Notably, like the lyrics of the songs from other riverside villages, traditional folk songs from the Grande Island also portray elements from the natural world, like jaguar<sup>7</sup> and beetle, which are taken as part of riverine people’s “cosmos”. ORIGINAL IN COLOUR

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The WCD (2000a) estimates that 40-80 million people have been displaced due to dam works worldwide. Yet, if river-dependent communities living downstream of the dam are also included as the population affected (those who usually are not obliged to move due to the dam works but who are equally affected by the impoundment of the river), this number is considered to be ten times higher: 472 million people, in a conservative estimate (Richter et al., 2010).

Furthermore, the villages/towns which “receive” those relocated experience a socioeconomic degradation due to the lack of structure to absorb the demands of the abruptly increased local population. It is common that conflicts and violence rates rise in these situations (IRN, 2014).

Ultimately, the rights of all these affected communities are eventually usurped in the name of “progress”, “development”, and the prioritization of urban dwellers and multinational companies.

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<sup>7</sup> For lyrics of traditional songs gathered in this research, see **Appendix 7**.

Hydropower enthusiasts claim that, considering that around 1.2 billion people (17% of the 7 billion current global population) remain without access to electricity (IEA, 2015) and the world's population is expected to reach 9 billion by 2050 (UNEP, 2012), the demand for energy will skyrocket in the upcoming decades. Thus, large and mega dam projects should be considered the most suitable solution to fight inequality, as they could eventually fill this energy gap. However, the above-mentioned study by Zarfl et al. (2014) showed that this gap will not be resolved, even after all the hydropower plants currently in the pipeline and under construction are fully implemented. Essentially, because the actual consumer of the massive amount of electricity generated by the new large and mega dams is not going to be the ordinary villager but the giant companies in the mining industry instead (Khagram, 2004; IRN, 2008; ISA, 2013; Little, 2014; MAB, 2014; Wang et al., 2014; Zarfl et al., 2014; Fearnside, 2015a; Aleixo and Condé, 2015). Regarding this point, the figure is that the dam and the mining industries together have dictated governmental policies and international agreements about energy resources (as I will discuss in **Chapter Three**). Consequently, national and international energy production and distribution policies will eventually favor their interests.

In summary, the dilemma of large dams/hydropower has returned, but the cost of their construction has increased as:

- 1) The majority of ongoing or planned hydropower plant projects are situated in basins of extremely rich biodiversity, like the Amazonas, the La Plata, the Congo, the Chenab, and the Mekong, places well-known for their biological endemism, regions where species have evolved within complex, fragile, and specialized ecological processes (Finer and Jenkins, 2012). Thus, the losses due to the damming process are even more devastating than the ones that followed the block of rivers in temperate zones, as temperate zones have fewer species. Besides, the destruction of the terrestrial environments tied to these specifically rich freshwater systems by the hydropower plant works will lead to a considerably higher carbon counter balance, turning hydropower into a false solution in these regions, in terms of a low-carbon energy source (Fearnside and Pueyo, 2012; Fearnside, 2016a);
- 2) The most vulnerable human groups in developing countries inhabit the banks of rivers and depend upon the river's ecological services to survive (Pearce, 2006b; Richter et al., 2010). These people are being negatively affected by

the global energy policies, making them even more vulnerable, poorer, and more marginalized, and exacerbating the already critical situation of inequality in the world.

Together this uneven distribution of the costs and benefits of hydroelectricity and the significant negative environmental impacts of hydropower dams provide the strongest arguments against its implementation, underpinning the anti-dam movement claims.

### **1.3 The anti-dam movement**

During the 1980s, scientists, environmentalists, and human rights groups began to turn their attention to the side effects of large dams and hydroelectricity. The anti-dam movement started simultaneously in different countries as a local response to the announcement of the proposal of damming the river. Rapidly, those incipient protests flourished both nationally and internationally and got stronger.

Amongst many, I name here three initiatives due to their relevance and international reverberation of their actions: the NBA, the MAB, and the IRN.

Founded in 1985, the *Save the Narmada Movement (Narmada Bachao Andolan – NBA)* gained international attention for its non-violent strategies and persistence in the almost twenty-year struggle against the controversial Sardar Sarovar mega dam in the Indian Narmada River. The movement, which began as villager-led non-violent protests, promptly attracted activists from distinct backgrounds and countries. This popular resistance headed by Medha Patkar as well as the social, environmental, and political tensions involved were exposed and explored in the films *A Narmada Diary* (by Anand Patwardhana and Simantini Dhuru, 1995 – Fig. 1.8b), *Drowned Out* (by Franny Armstrong - Spanner Films, 2002 – Fig. 1.8a), *Narmada* (by Manon Ott and Grégory Cohen, 2012), as well as in the essay *The greater common good* (by Arundhati Roy, 1999). In spite of all efforts, Sardar Sarovar dam was eventually built. Nevertheless, NBA's battle continues to inspire artists, social, and environmental movements around the world.

FIGURE 1.8. (a) One of the non-violent protests by local villagers against submergence by the Sardar Sarovar dam (scene also portrayed in the film *Drowned Out* - 2002) and (b) government forces investing against to-be-affected people who marched in Dhule, in November 1993 (Still from *A Narmada Diary* - 43:07).



(a)

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(b)

© IRN 1995

© Anand Patwardhana and Simantini Dhuru 1995

Before the establishment of the NBA in India, by the end of the 1970s (during the Brazilian dictatorship), some people affected by the dams built in Brazil started to claim individually for their rights, mainly those impacted by the Tucuruí, Itaipu, Sobradinho, and Itaparica/Luiz Gonzaga hydropower dams. These originally sparse groups strengthened from the 1980s onwards, and, in 1991, decided to gather as a formal organization: the Brazilian *National Movement of People Affected by Dams* (*Movimento Nacional dos Atingidos por Barragens – MAB*).

In 1997 the 1<sup>st</sup> International Meeting of People Affected by Dams took place in Curitiba, Brazil. Representatives of people impacted by dams from 20 countries countersigned the *Declaration of Curitiba* (see **Appendix 2**), a document which reaffirms the rights to life and livelihood of those affected by dams worldwide and urges that companies in charge of dam projects fulfill requirements. These requirements were eventually integrated to the WCD Final Report’s recommendations, in 2000. With the current slogan “*Water and energy are not commodities*” (MAB, 2014), the MAB fights against the world’s modern energy policy, for the rights of people affected by dams, and for a more equal access to water and energy (Fig. 1.9).

FIGURE 1.9. MAB's call for people to "Fight in Defense of Rivers, Water and Life", on the International Day of Struggle Against Dams – March 14, 2016 (online poster).



English translation:  
March 14 – International Day of Struggle Against Dams

© MAB 2016

As a resonance to this international movement in the United States, in 1985, a small group of volunteers founded the *International Rivers Network* (IRN) with the aims of broadcasting the issues regarding the dam industry and developing a worldwide network of people working to protect rivers and promote fair and sustainable water and energy development. Nowadays the IRN has global reach and provides local support to communities threatened or affected by dam projects throughout the world (IRN, 2015).

The 1990s were a landmark in the debates on large dams and the actual costs of hydropower. As the concern for the negative impacts of the dams strengthened and quickly became public and widespread, the pressure on decision-makers, the dam-building companies, and the financiers of dam projects (mainly the World Bank) heightened. It culminated with the commission by the World Bank, in 1997, of a detailed study to review the actual effectiveness of the large dams built in distinct parts of the world (upon which future decisions on funding large dam projects could be based). Amidst difficulties, political and ideological conflicts, in 2000 this multi-stakeholder body (the World Commission on Dams – WCD) released its final report *Dams and development: a new framework for decision-making*, which became the most important and internationally acceptable (but not totally unbiased, as stressed by McCully, 2001, and the IRN, 2014) guidelines for the planning, construction, and operation of dams. One

of the most cutting-edge contributions this report brings to the global dam-building arena is the recommendation that decision-making processes involve the actual participation of all stakeholders, i.e. that decision-making processes take into account the opinion and wishes of people who are expected to be affected by the proposed project, as previously urged by the *Declaration of Curitiba*.

Mostly, the anti-dam movement has been a milestone in the global context of large/mega dams, both accessing and exposing the social, political, economic, and environmental fragilities of this system to the wider public, and also gathering people to collectively demand for changes in the political agenda that concerns watercourses and its uses. Aware of the significance of the MAB in this process since its early days and also believing that, ethically speaking, a work on this theme (on the problems facing communities affected by dams<sup>8</sup>) in Brazil should involve the MAB, I approached this social movement in order that this practice-based research could be carried out with its support. As a partnership between myself (the researcher) and the MAB, I could be guided by and learn from its long-term experience whereas the fieldwork as well as the outcomes of this PhD could ultimately benefit and strengthen it in its claims<sup>9</sup>. Thus, the understanding of this network of resistance also had a strong influence on my decisions on how to undertake my practice.

As highlighted not only by the above briefly named anti-dam movement, but also by experts in the field of social sciences, human rights, and ecology, large and mega hydropower dams have built up a history of social and environmental damage throughout the world. However, most of this information remains under-reported or rather ends up circulating amidst the very same groups of the already-aware scientists, activists and local communities (e.g.), not reaching the masses as often and incisively as it would be expected to and regardless of the advancement of the internet—particularly social media—on amplifying and magnifying all sorts of news. I decided to gather and name here some of these already authorized disasters<sup>10</sup> that, despite being somehow publicized, still remain unknown by the majority of the population, as this is another rationale underpinning my decision to investigate the impacts of hydropower, using a medium that can reach multiple audiences: photography.

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<sup>8</sup> And particularly the work I propose here, which engages people affected by dam projects as makers.

<sup>9</sup> Importantly, since the beginning of this work, I have assured the material produced in this PhD is available to the MAB for its own uses, apart from being also available to every co-author/participant (see the Informed Consent Form used in this research for details - **Appendix 3**).

<sup>10</sup> As I shall bring up in discussion further on in this thesis Ariella Azoulay's concept of "*regime-made disaster*" (see **Chapter Three**).

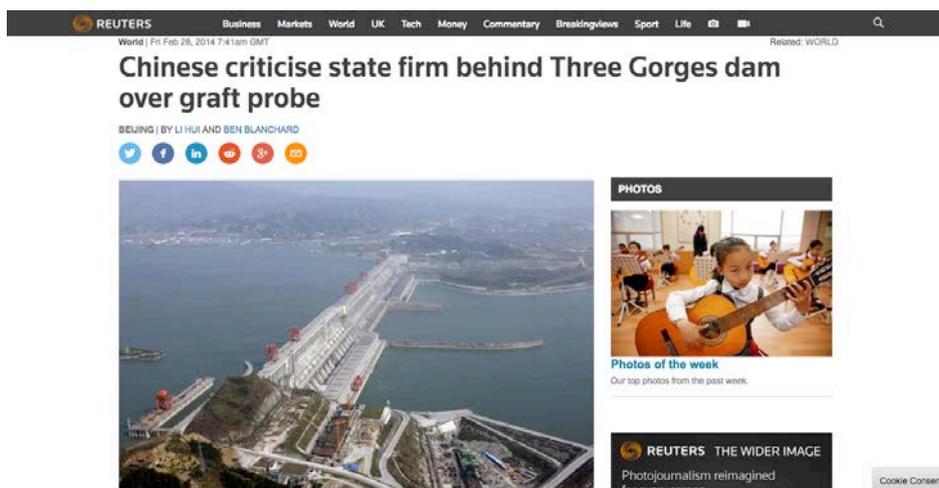
## 1.4 Some facts on the negative impacts of large dams and hydropower

For the purpose of this Chapter, I present four striking examples of damage to newly industrialized (of which the BRICS are a part) and developing countries as a result of damming and hydropower projects. By straightforwardly condensing these figures here in a fact sheet style, I hope the reader/viewer can perceive the scope of the harm that has propelled me to work on this theme as my practice-based research project.

### 1) Three Gorges dam (Yangtze River, China, 1994-2012/2015):

In 2011, Richard Stone reported in the renowned scientific magazine *Science* that the Three Gorges mega dam construction was being more harmful to the environment than what was previously foreseen as the worst-case scenario (Stone, 2011). Besides being involved in schemes of corruption in China (Hui and Blanchard, 2014 – Fig. 1.10) and costing four times as much as what was set out in its original plan, this US\$60-billion dam project led to the extinction of two plant species (*Myricaria laxiflora* and *Adiantum reniforme* var. *sinese*) (Xie et al., 2006 apud Wang et al., 2014:47).

FIGURE 1.10. Headline of an article on Reuters' website broadcasting corruption behind the Three Gorges Dam works, on February 28, 2014.



Photograph caption: *The Three Gorges Dam – aerial view, December 2, 2009.*  
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© Reuters/stringer

Furthermore, in 2006, scientists failed to identify a single Baiji dolphin (*Lipotes vexillifer*) in the 1,669 km stretch of Yangtze River downstream from the Three Gorges dam, the location of its historical distribution (Turvey et al., 2007). Zoologists then believe that the effects of the Three Gorges dam in the Yangtze River may well account for the presumed extinction of this cetacean (Turvey, 2008; Turvey et al., 2010). Parallel to this, the annual harvest of four species of carp (Bighead, Black, Silver, and Grass) downstream of the dam dropped 50% two years after the dam sluices gates were shut for the first time (in 2003) whereas the harvest of carp eggs and larvae in the same year represented 0.5% of the pre-dam baseline (Xie et al., 2007). This decrease in local fish population below Three Gorges dam may have contributed to the potential extinction of the Baiji dolphin, whose diet basically comprises fish (Turvey, 2008; Turvey et al., 2010).

At the same time, riverbanks downstream of the Three Gorges dam are collapsing because upstream sediment input is not happening anymore. Upstream of the Three Gorges dam the scene has not been good either: landslides have been reported more often than before the construction of the dam (Xinhua, 2007).

To make things worse, the modifications of ecological processes caused by the dam spread a snail-borne disease throughout the basin (Stone, 2011). With a dam wall of 181 meters and an installed capacity of 22,500 MW, the world's largest dam flooded over 8,000 archaeological sites, 13 cities, 140 towns, 1,350 villages, displaced 1.3 million people (Fig. 1.11), and caused a significant impairment in those people's livelihood (Ponseti and López-Pujol, 2006).

FIGURE 1.11. Photographs by Edward Burtynsky depicting the Three Gorges dam massive works (top) as well as its associated destruction of entire towns and villages—here represented by Feng Jie (bottom), one of the first towns to have been submerged after the sluice gates were closed<sup>11</sup>.



Top: Dam #6, Three Gorges Dam Project, Yangtze River, 2005  
Bottom: Feng Jie #3 & 4, Three Gorges Dam Project, Yangtze River, 2002  
ORIGINAL IN COLOUR

© Edward Burtynsky

## 2) Sardar Sarovar dam (Narmada River, India, 1987-2017):

This thirty-year long mega dam project recently inaugurated (Safi, 2017) was a case for the Supreme Court of India three times (Cullet, 2007). The social movement against its completion, especially against its original design (i.e. featuring a 163m-high dam wall),

<sup>11</sup> Burtynsky has captured the process of the Three Gorges dam building. In 2003, he launched the photobook *Before the flood*, which documents the “scale” of the dam project in terms of both man-made piece as well as its range of devastation.

argued that the project did not have the proper Environmental Impact Assessment—a document required for such infrastructure projects to be approved (Fisher, 1995; McCully, 2001; Anton and Shelton, 2011). Even considering the high social and environmental cost of Sardar Sarovar (what had been taken as the public reason for the World Bank to withdraw from this project, in 1993), the Supreme Court, in 2000, authorized India’s government to carry on with the dam building. In 2014, the Narmada Control Authority granted permission for Sardar Sarovar dam wall to be further raised from its then 121m to 138m, which ignited protests and criticism not only in India but also in Western countries (Desai, 2014; The Buck Stops Here, 2014), as it would represent a vaster area to be submerged by its reservoir waters.

Over 13,000 ha of tropical forest vanish into the Sardar Sarovar’s reservoir (Sahoo et al., 2014). Since the shut of the Sardar Sarovar’s sluices gates, fish have no longer been easily found in either upstream or downstream stretches of the Narmada river (IRN, 2008). Sardar Sarovar has displaced approximately 240,000 people and the government belatedly acknowledged that there was not enough land to resettle all the families directly affected by the dam (*Drowned Out* 2002, 47:39 and Fig. 1.12). Researchers documented that traditional ceremonies faded and eventually disappeared after the move (IRN, 2008). Above all, the resettlement ended up leaving affected villagers even poorer (IRN, 2014).

FIGURE 1.12. Reportage by Chetan Salve (*Video Volunteers’* correspondent), for *India Unheard*, in 2016, shows some dwellers displaced by the Sardar Sarovar Dam project living in neglected conditions and still waiting to be rehomed. According to interviewees, the government has allotted land for them “on paper” but these properties either belong to someone else or are not fit for use (Salve, 2016).



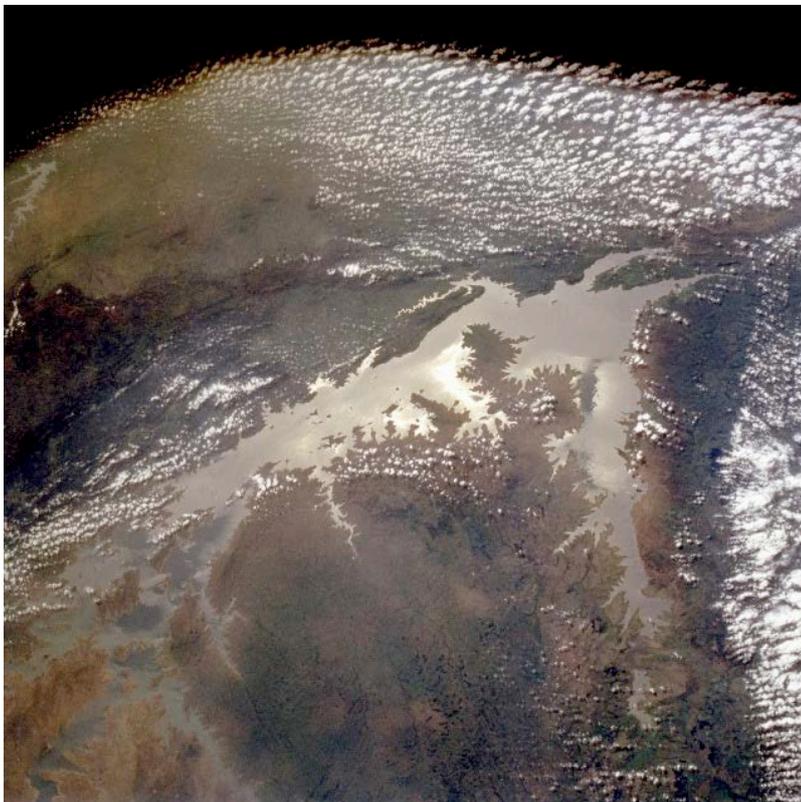
Stills from the original reportage. ORIGINAL IN COLOUR

© Video Volunteers Community

3) Akosombo dam (Volta River, Ghana, 1961-1965):

Akosombo dam was conceived to supply energy for multinational aluminium production plants and created one of the largest reservoirs by surface area in the world: the Lake Volta (Fig. 1.13). The image below illustrates the scope of the transformation in the landscape created by the Akosombo dam in the region.

FIGURE 1.13. Lake Volta view from outer space (Akosombo dam located at the upper right corner). April 1993.



NASA - Mission: STS056, roll - frame: 090-079, April 1993. ORIGINAL IN COLOUR

© NASA

The consequent impoundment of the Volta River triggered a cascade of phenomena (e.g. proliferation of aquatic weeds which led to a rise in snail population and a drop in shrimp population) that culminated in local people suffering from several forms of schistosomiasis (snail-borne diseases), reduction of

navigable space, and impairment of fishery (Fobil et al., 2003). The increase of the weed density in the channels of the Volta river tributaries downstream of the dam has turned these waterways into meadow-like areas, altering drastically the local environment (Fig. 1.14). Furthermore, modifications of the Volta River's runoff patterns by the dam altered the soil fertility in downstream riverside stretches (Van De Giesen et al., 2001). Within one year only, 20,000 people fled from the communities downstream of the dam, to the capital Accra and nearby towns, and most of these people have lived in even more deplorable conditions ever since (Tsikata, 2006).

FIGURE 1.14. Reportage by Joseph Opoku Gakpo for *Joy News*, on March 22, 2016, depicts the transformation of the landscape (from a six-meter-deep river to a dense "meadow") in the village of Devime, a former fishing community downstream from Akosombo dam, since the dam sluices gates shut (Gakpo, 2016).



One of the interviewees states that several inhabitants of Devime have decided to move out due to the modification in the local ecosystem – what eventually compromised the fishery.

Still from the original reportage.

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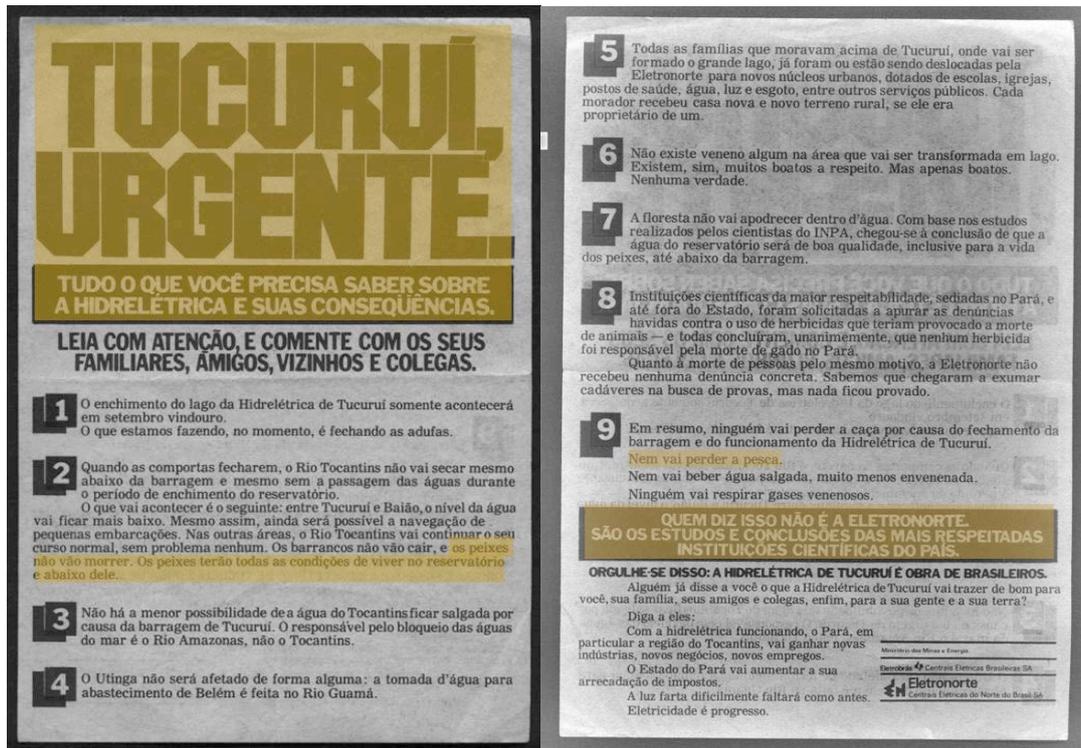
© Joy News 2016

#### 4) Tucuruí dam (Tocantins River, Brazil, 1974-1984):

Tucuruí hydropower station was also built to provide energy to Japanese aluminium plants situated in this same region of Brazil.

Despite ELETRONORTE (the governmental agency in charge of conducting the project) trying to convince local people that the project would not have major harms (Fig. 1.15), time has eventually revealed the downsides of Tucuruí dam.

FIGURE 1.15. Leaflet produced by ELETRONORTE and dropped by helicopter, as an attempt to “clarify” to readers that Tucuruí dam would not cause any major social or environmental issue.



At the left: front. At the right: back.

My emphasis in orange.

Highlighted passages state: “TUCURUÍ URGENTE. Everything you need to know about the hydropower project and its consequences.” “Fish will not die. Fish will have all the conditions they need to live in the reservoir and also downstream.” “Fishery will not be affected.” “This is not ELETRONORTE’s words, this is the outcome of research undertaken by the most respectful research institutions of the country.” It is important to mention that this leaflet was distributed on the same day that a protest against the first shut of the Tucuruí’s sluices gates took place (in Belém, 1984) and that no researcher who took part in the Tucuruí research project had endorsed any of the information presented on the leaflet (Fearnside, 2001). At that time, Brazil was under a dictatorial regimen.

Modified from Fearnside, 2001

As a consequence of drastic modifications in the local ecosystem (including changes in the physical and chemical characteristics of the water, and the total block of migration along this stretch of Tocantins river, as no fish passage, like a fish ladder, was built to enable fish to move from upstream to downstream of the dam and vice-versa), the variety of fish species were found to have fallen following the closure of the dam gates. From 1981 to 1998, the number of fish species decreased by 29% upstream of the dam and 19% downstream of the dam (WCD, 2000b:xi)

The reservoir of the Tucuruí dam submerged part of the Parakanã Indian Reserve (Fearnside, 1999). Apart from violating the indigenous people's rights, the construction of the dam also led to the impoverishment of their traditions (Fearnside, 2015b). Another big issue regarding this dam was the accumulation of mercury in the reservoir (due to gold mining activities in tributaries which drained to it). Total mercury concentrations in plants in the forest near the Tucuruí dam have been found to be much higher than those in Canada, where mercury contamination of reservoirs was well established (Fearnside, 2001). Another downside of the Tucuruí dam was the abrupt increase in cases of malaria in the area around the reservoir, as its stagnant water facilitated the mosquito proliferation (Couto, 1996).

From all of these examples, it is evident that some of the drawbacks of the dams are comparatively easy to track and measure by objective tools, e.g. the concentration of mercury, but others are more difficult, such as the impoverishment of a given tradition, or the extinction of a given species. This point has been the major limitation in the process of assessing the costs versus benefits of hydropower projects, and this is the peculiarity that particularly interests me. In order to explore the immaterialities involved in the process of damming a river in a way that could be better understood, I was motivated to immerse myself into the affected people's feelings concerning their own experiences with hydropower projects. I shall clarify these specifics regarding objective and subjective impacts so the reader can comprehend the intangible effects uncovered by my practice.

### **1.5 Assessing the socio-environmental costs of large dams and hydropower**

According to Pu Wang, researcher from the Department of Natural Resources of the Cornell University in New York, and collaborators (Wang et al., 2014) the socioeconomic impacts of large dam projects have to do with three classes of wealth:

- 1) Material wealth (concrete things that can easily be measured like land/real estate, crops, houses, household and agriculture devices, livestock, and forests);
- 2) Embodied wealth (wealth that is implicitly carried and built-up by a person during his/her life, like the skills one uses to make a living; this wealth may be difficult to

weigh up in the process of assessment and negotiation);

- 3) Relational wealth (wealth provided by means of ecosystem services, culture, and the commons. Individuals profit from this class of wealth but do not materially possess it. It comprises the social infrastructure - i.e. a person's social network, language, customs, and traditions, and the physical infrastructure – e.g. access to transport, healthcare, education, drinking water, fish, and the fertility provided by the river runoff patterns).

Proponents of hydropower dams, funding agencies, and decision-makers have argued that the benefits generated by hydropower outweigh its costs, (i.e. eventually the investment in hydroelectricity would have a positive net benefit) and this would be a sensible reason for big hydropower dam projects to be approved and implemented. However, when it comes to the losses regarding people affected by dams' *embodied* and *relational wealth* as well as the short-, mid-, and long-term consequences of the biological erosion caused by dams for life on Earth and human welfare, the “negative weights” on this scale become tricky as it is not possible to properly measure them using standard scientific and/or monetary units (as commented above). Furthermore, it is these intrinsic subjective characteristics of the socio-environmental component that mean that the costs of hydropower dams have been overlooked during the processes of assessment and decision-making (McCully, 2001; Namy, 2007; Vale, 2010; Moraes and Pimentel, 2013; Ansar et al., 2014; Little, 2014; Zen, 2014; Fearnside, 2015b). The testimonial of one of my participants demonstrates how matters classified as *embodied* and *relational wealth* can be as precious as (or even more valuable than) those belonging to the *material wealth*.

“[...]”

*Marilene Ribeiro (myself, researcher) – In case the Panambi dam is built, what you do not want to lose, Ailton?*

*Ailton – I wouldn't like to lose my occupation [as a small farmer]. I wouldn't like to lose the thing in which I've got proficiency, which I've mastered. This is what I've learnt how to do, this is what I've got the expertise in. This is what I like to be. [...]”*

Note that Ailton does not mention any concern about losing his land or his crops but rather something that makes him himself: his vocation, his history, his identity. Compensation and Rehabilitation Programmes of dam schemes usually concentrate in listing, pricing, and

“replacing” the *material wealth* that is lost due to these endeavours. Yet, they have not succeeded in tackling the other two classes of wealth.

I perceive this discussion concerning the costs versus benefits of dams as a tension that will be irresolvable if we insist in applying the same filter for different substances (and this will be elaborated on in **Chapter Three** and in the **Conclusions**). Using another strategy to make the magnitude of these costs more “visible”, I selected photography as a medium that can better absorb and present these matters (particularly those related to the *embodied* and *relational wealth*), than more traditional scientific techniques. As images are a powerful means to communicate abstract ideas in a more understandable form for a broader audience (Franklin, 2016:76 and 199). Apart from the brief examples used in this Chapter, this process and its outcomes will be presented in the next Chapters.

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**Chapter 2: Exploring the intersections between photography, anthropology, and collaborative processes**

**Aims of this chapter:**

- Addressing the intersection between anthropology and photography as a promising source of research within both Arts and Humanities in my practice.
- Discussing collaboration with the subject as a reliable approach to undertaking projects in both anthropology and documentary photography.
- Addressing the current role of collaboration within a contemporary visual arts context as well as the theoretical discussions triggered and inspired by collaborative works of the twenty-first century.
- Stressing the importance of this proposed research as an innovative way of producing a relevant body of visual work as well as data to support further arguments and discussions regarding transdisciplinarity, collaborative practices, photography, and the impact of dams.
- Introducing works that have also used the interstices between collaboration, photography, and anthropology to explore something new, such as those by Susan Meiselas, Jim Goldberg, Anthony Luvera, and Sharon Lockhart.

## **2.1 Working in-between**

As addressed in **Chapter One**, assessing the socio-environmental impacts of the dams is a complex task, as they involve not only physical, measurable results, but also psychological phenomena, social and cultural issues, loss of ecosystem services, and genetic erosion. These aspects are hard to define, as they are often subjective, intricate, and difficult to evaluate via traditional scientific methods used in academic disciplines such as Anthropology, Sociology, and Biology (McCully, 2001; Namy, 2007; Little, 2014; Silva, 2014; Wang et al., 2014).

Taking this myriad of complexity into consideration, a photographic work undertaken in collaboration with local people whose lives have been drastically changed by the dams offers a useful additional tool in assessing the effects of these engineering works on both people and the environment, as addressed in the **Methodology**. As such, my practice adds to understanding, and has its own merit as a contribution to the debate around both the need for dams and collaboration.

As also detailed in the **Methodology** section, I lead this collaborative practice through the interstices between the disciplines of photography and anthropology. This equips me with the tools and means to accomplish my aims. The transdisciplinary approach I propose is based upon the perspectives of Jay Hillel Bernstein interwoven with the views and arguments of Arnd Schneider and Christopher Wright, Carolyn Fluehr-Lobban, Grant Kester, and Claire Bishop. Apart from Bernstein, whose interest is focused on transdisciplinarity as a subject of inquiry in itself (as already addressed in the **Methodology**), these other thinkers have challenged the way anthropologic, imagery, and collaborative means can be understood once applied together. It is their discourses that I concentrate in analysing and expanding in this Chapter. However, I do not restrict my rethoric to them, bringing other sources into the discussion, when appropriate.

Arnd Schneider (anthropologist) and Christopher Wright (specialist in visual anthropology and filmmaker) have jointly written two seminal papers on the exchanges between artistic and anthropological practices (Schneider and Wright, 2010, 2013). They encourage proposals that come into existence through this intersection between anthropology and arts, proposals that profit from both fields in order to raise relevant information as well as visual artworks. These authors urge image-makers not to restrict themselves within the frameworks of the disciplines they originally studied and this is what I also pursue in my research: to absorb what these two

fields have to offer and blend this according to my purposes, i.e. to generate “data” exposing the socio-environmental impacts of large dams, as well as to explore new perspectives in documentary photography.

Anticipating Schneider and Wright’s proposed blended ground, Magnum photographer Susan Meiselas assembled two distinct long-term projects that involved an anthropological as well as collaborative approach: *Kurdistan: in the shadow of History* (1998/2008) and *Encounters with the Dani: stories from the Baliem Valley* (2003).

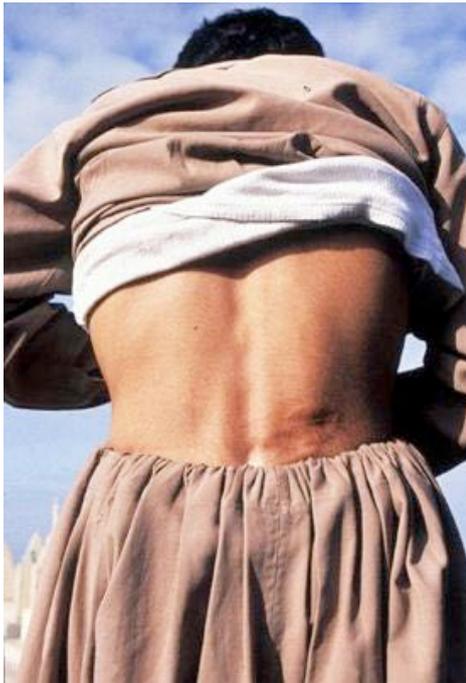
In *Kurdistan*, a project conceived over six years (1991-1997), Meiselas uses a methodology close to the one employed by anthropologists and historians to assemble distinct standpoints on the Kurds and the issues they have endured as a human group over the years. To do this, she undertook a process of gathering and setting out images made by Kurds themselves and by anthropologists, missionaries, journalists, soldiers, colonial administrators, and photographers (including herself) who have been in Kurdistan over the last two centuries. The personal diaries, letters, government reports, news, advertisements, maps, and photographs sorted and organised by Meiselas reveal multiple layers of representation, juxtaposing different orders of historical evidence and memories, thus allowing the reader to discover voices of the Kurds that, in many cases, contest the Western notions of them (Fig. 2.1 and also **Appendix 6** – Susan Meiselas’ answer to question 11). Her project also has a virtual platform allowing people online to search, make comments, and add visual/textual information regarding the Kurds.

FIGURE. 2.1. Images from *Kurdistan: in the shadow of History* (Meiselas, 2008).



a) "Juive", wife of a Kurdish chieftain, ca. 1890-95. Antoin Sevruguin was an Armenian photographer who travelled throughout Persia in the late nineteenth century and photographed many tribal chieftains.

© Antoin Sevruguin



b) Taymour Abdullah Ahmad, Kurdish boy, displays bullet wounds in his back, 1991. The Kurdish boy shows Meiselas the scar resulting from a bullet wound received during a mass execution of Kurds by Saddam Hussein's troops. He was the only survivor of this event.

ORIGINAL IN COLOUR

© Susan Meiselas/Magnum Photos

The above images assembled by Meiselas present the Kurds not as fierce human beings but rather as individuals with a unique culture as well as victims of persecution and acts of cruelty perpetrated by others (acts that sometimes are supported by Western countries).

At the same time, Susan Meiselas addresses her project on the Dani people as a “*project of reconstruction and stitching together stories from the Baliem Valley* [in Papua-New Guinea]” (Meiselas, 2003:194) from public and private archives she came across (photographs, newspapers, web logs, letters, diaries, interviews, etc.).

Meiselas first met the Dani when invited by the anthropologist and documentary filmmaker Robert Gardner to collaborate in a piece of research he was undertaking with them, in 1988 (twenty-seven years after he had first filmed them in the Baliem Valley, in 1961). From 2001 to 2003 she sought collaboration with journalists, anthropologists, photographers, etc. in order to accomplish her aims:

*“I wanted to explore the ways in which the Dani have been seen by travellers, anthropologists, missionaries, colonialists, and perhaps themselves, throughout this century, and through available technology, create access to that work and a dialogue with the Dani about that representation.”* (Meiselas, 1999<sup>12</sup>)

The Dani’s everyday life as well as the distinct relationships constructed between them and these other participants (travellers, anthropologists, missionaries, journalists, etc.) are presented alongside Meiselas’ book in a layout that resembles the format of anthropological works. She also sets out the book chronologically in order to show how the Dani’s habits, values, and traditions have been transformed (and sometimes seized) over time as a consequence of their contact with other cultures, perhaps risking their own integrity as a group (Fig. 2.2).

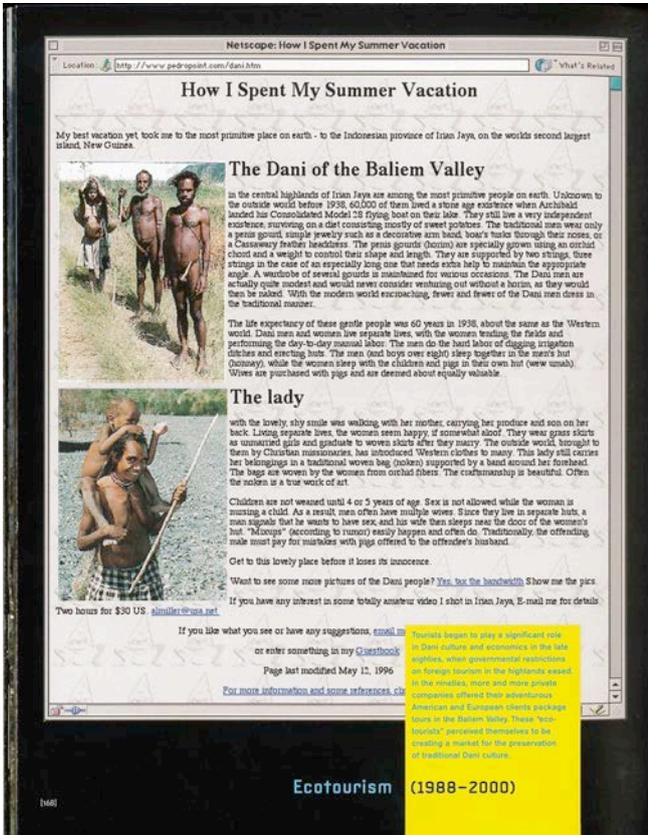
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<sup>12</sup> Excerpt from Meiselas’ statement in the webpage dedicated to this project on her website. [online] At: <http://www.susanmeiselas.com/archive-projects/dani/#id=book>





c) When Gardner arrived to film the Dani again, about thirty years after his first contact with them, he found them completely deprived from their traditions and land, outsiders within their own territory. Indonesian general Acub Zainal dictated the rules. For example, even the film starring Madonna, depicted in this photograph, does not have the subtitles in a language that the Dani could understand but in Bahasa Indonesia. ORIGINAL IN COLOUR  
© George Steinmetz 1993



d) By the late twentieth century, the Dani people were depicted as a "tourist attraction". After having their traditional livelihood destabilized, they tried to profit from this in order to "survive". ORIGINAL IN COLOUR

© Al Miller/www.pedropoint.com

In both projects, she creates a multifaceted perspective by gathering information from distinct sources to discuss representation and politics, to question the “single and unbiased truth” of documents, to question the role of the documentary photographer and ethnographer as “deliverers of facts and reality”, and possibly to eventually claim rights for these human groups. Meiselas’ works will be further discussed in **Chapter Three**.

The methodology Meiselas applies to achieve her aims relates closely to the above-mentioned Schneider and Wright’s advocacy for works that run in the intersection between anthropology and arts.

Schneider and Wright (2010, 2013) also address how the methodologies in anthropology urge a shift away from the traditional methods of researchers immersing themselves in a scenario and attempting to (re)present afterwards what was experienced (through her/his reflections) of a subjective nature, to a more diffusional approach (i.e. absorbing and including the subject’s perspectives within this analysis too). Regarding this point, anthropologist, and specialist in anthropology and ethics, Carolyn Fluehr-Lobban states that an open collaboration with the subject is in fact the ethical form of the twenty-first century anthropology (Fluehr-Lobban, 2008). She recommends that researchers take up their subjects as actual partners of the research process in a non-hierarchical relationship. She stresses that proposals which co-opt the people to be studied as co-creators, actively participating not only in the process of producing data but in the process of outlining the “reciprocally informed consent” (as addressed by the author), designing the methods, and publishing the papers, are keen to generate more reliable data and better outcomes. While I tend to question the actual feasibility of projects that fully meet Fluehr-Lobban’s criteria, since it demands a long-term almost daily proximity to the research base, the target community, and the research-related facilities (laboratory, office, library, etc.), I embrace her considerations on the ethics and the social scientific reliability and authenticity of researches undertaken in this collaborative fashion, when compared to studies where this level of mutual participation is lacking or even entirely absent. Vivality, these two points underpin my research: 1) I argue that collaboration with my subjects (people affected by dams) is essential to bringing to light the actual costs of hydropower and for this reason I discuss with participants every step regarding the process of making and editing the images (and intend to discuss the final results with all communities that engaged with this project too, when the work is completed, as I will explain in **Chapter Five**, p. 299); 2) I also opted for working closely with the National Movement of People Affected by Dams (*Movimento dos Atingidos por Barragens – MAB*, in Brazil), an institution

which has fought for the rights of communities affected by dams all over the country since the 1970s, as I believe it is ethical to share my practice and outcomes with those who have actively participated in the anti-dam movement (as outlined in **Chapter One**, p. 69-70). Moreover, MAB is able to disseminate my findings and draw the attention of a broader audience to the hydropower-led damages, as this organization is already engaged in strategies that aim to raise awareness, mobilize people, and persuade decision-makers in Brazil and Latin America to take action concerning a fairer energy policy: both locally and nationally speaking. Thus, the aims of my collaborators (i.e. speaking up for what they have gone through as well as for their evaluation of the whole picture concerning the construction of dams) will hopefully be achieved via the MAB's activities, which might use and distribute the photographs and information developed through this research.

Currently, I do not believe that a completely non-hierarchical relationship between researcher and researched is possible, but rather I perceive and work towards creating an optimal balance in which researcher neither oppresses nor strictly guides the researched, a relationship built on a degree of understanding where the researched feels sufficiently comfortable to express her/his own ideas and sufficiently confident to carry out the plans she/he has conceived. I aim to welcome an atmosphere of intimacy where both researcher and researched can plan and develop ideas which coexist and interweave, building a body of co-operative work, instead of obstructing one another's visions. Regarding this topic, Arnd Schneider and Christopher Wright (2010, 2013) have similar thoughts concerning this researcher-researched hierarchical relationship. According to them, there are intrinsic differences between researchers and their research subjects (concerning power, economics, politics, educational training, self-ascribed identities, etc.) that cannot be denied or overlooked, "since difference is part of it" (as highlighted by Benson and O'Neill, 2007). Thus, for Schneider and Wright, the researcher must be aware of this, not taking the subjects of their fieldwork encounters blindly as equals. However, researchers might use such differences in order to achieve a productive encounter.

On the other hand, cultural theorists Roland Barthes (1981) and Christopher Pinney (1992, 2014) remind us that the participation of the subject in the production of a portrait (even for systematic and predefined aims) cannot be underestimated too, as it is an inherent part of the contingency of the encounter. According to Pinney (*ibid*), the photographer might carefully direct her/his sitter but even though the subject tries to do her/his best to pose according to the photographer's wishes, the "unlikely" participation of the very sitter in the construction of the meaning will happen, whereas Barthes (1981) argues that the sitter consciously influences

the production of the portrait according to his/her own wishes and not to the photographer's exclusive one. Then, for Barthes, portraiture is always a struggle between the one in front of and the one behind the lens: sitter driving photographer's (and consequently viewer's) eyes to the former's aims and photographer positioning his/her lens (and consequently also drawing viewer's attention) according to her/his own goals.

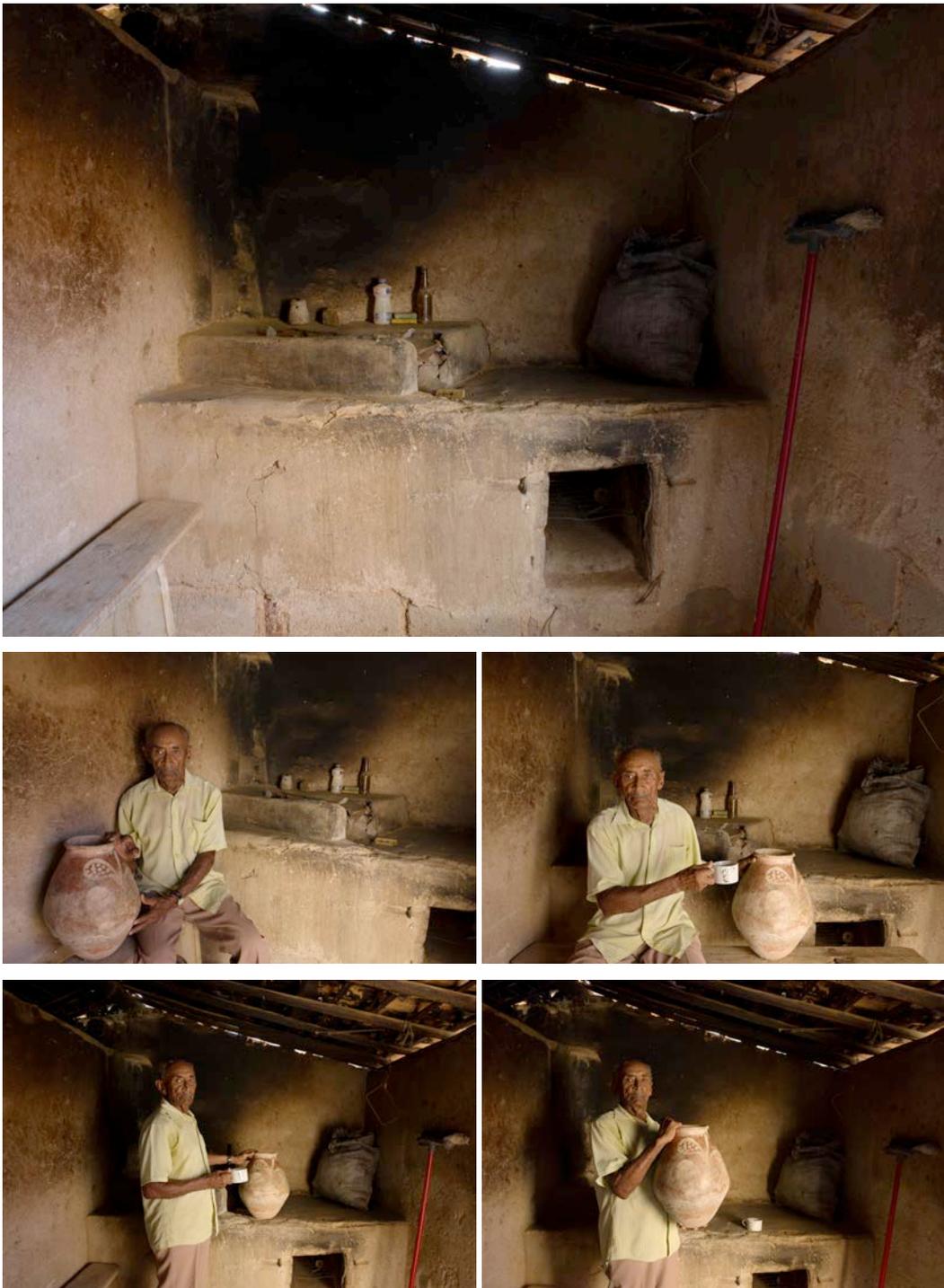
Taking the roles of researcher and researched further, Elizabeth Edwards (2014) claims that collaboration has always been a significant part of anthropological studies, with negotiations and compromises taking place on both sides for many reasons, even if this is somehow veiled. According to Edwards, the subject also retains power: the power of revealing just what she/he wants and when she/he wants to, the power of controlling and maintaining ownership of the knowledge, and also drawing the researcher's/photographer's attention for what she/he wants, even considering the asymmetries of the researcher-researched relationship. The subject is also aware of the opportunity of documenting (and thus perpetuating) what she/he considers important (e.g. her/his community's traditions) that comes with the work of a photographer and/or anthropologist. These perspectives are also shared by anthropologist H. Russel Bernard (Bernard, 2006:197-200).

For the purpose of clarification, hereinafter, whenever I use the word "collaboration" referring to this research, I mean collaboration between the participants of this project (i.e. riverside dwellers) and myself.

Since the originality of this research is based upon the exchanges built up over the course of the encounters I have had with my subjects (in order to gather, analyse, shape, and present information on the dimensions of the harms of large dam projects), I not only acknowledge the views and thoughts of Pinney, Barthes, and Edwards but also respond to them by actively encouraging and pushing the boundaries of the sitter's power. I want participants to express, to articulate, to think of, and to react to the information they own, and eventually provoke the viewers to expand their thinking and knowledge on what is, in fact, involved when it comes to the construction of hydropower plants, as well as the relevance of the consequences of damming a river. Fig. 2.3 provides an example of this. Participant from the Sobradinho dam, Hilarino, wanted to showcase the hut he had to build for his family to live in after the enforced move (location chosen by Hilarino), and highlight their struggle to get drinking water in the new site (object chosen by Hilarino to appear with him in his portrait: the crock that his family used to collect and store drinking water). For Hilarino, Sobradinho dam/hydropower plant

signified sorrow (feeling named by Hilarino), loss of a proper house to live in, and deprivation from drinking water (Fig. 2.3).

FIGURE. 2.3. Location and sequence of portraits of Hilarino.



ORIGINAL IN COLOUR

© Hilarino Nunes dos Anjos and Marilene Ribeiro 2015

Considering Schneider and Wright's suggestion about the use of the intrinsic differences between researcher and researched in order to achieve a productive encounter, I do not attempt to conceal or disguise my presence in this work, as impartial documentary work does not, I would argue, exist. Rather, I try to not only reaffirm this but also to take advantage of this fact by using my expertise as a photographer to bring every sitter's idea to life in the form of photographs, co-creating, step-by-step, this joint discourse to be showcased to the Other<sup>13</sup>. Hence, more than co-workers, the subject and I become accomplices in what takes place throughout this process of making. Ultimately, I want the visual narrative presented as a result of this research to embody the intimacy and intensity of the exchanges in these encounters as well as the actual costs of hydropower. By openly elaborating this negotiation of knowledge and representation along with my collaborators<sup>14</sup> (i.e. the actual sitters), I also intend to push the boundaries of traditional documentary practices.

According to photography writer Derrick Price, in the seminal book edited by scholar and researcher Liz Wells *Photography: a critical introduction*, the problem that traditional forms of documentary have faced is connected to the way photographers generally depict their subjects: "[...] *photographers often rendered those they recorded into passive sufferers [...] rather than active agents of their own lives.*" (Price, 2015:98). As I have noticed throughout this project, my subjects do not intend to set out photographs that depict themselves as stereotypes of victimhood. Rather, the atmosphere that inhabits these collaborative portraits is more about the sitter's perceptions and reflections concerning him/herself before the dam works and also before his/her own life. My collaborators are embedded in the community they belong (or belonged) to, thus I invite them to transpose their personal and collective thoughts, attitudes, and memories into our work. We incorporate what we both consider to be relevant into the process of producing meaning and this allows for the subjects portrayed to present themselves as active agents in the social fabric instead of reinforcing the perception that they are simply suffering victims (Fig. 2.4 - see also **Appendix 9**, for the whole set of portraits assembled throughout this research). Building upon Price's standpoint, the approach I use in this research might be considered a turning point within documentary practices because, even if the photographs in my project concentrate on the sitters' (usually) negative feelings regarding the role of large dams, the former do not appear to be asking for pity or passive contemplation from the viewer. Rather, these collaborative portraits depict

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<sup>13</sup> i.e. everyone else but the sitter her/himself.

<sup>14</sup> See **Methodology** for details.

(and call for) attitudes: photographed subjects deliberately construct their pose, choose the location, set up the objects to display, and actively present to the viewer what they are there for.

FIGURE. 2.4. Sequence of portraits of João Evangelista (a) and portrait of Eliezé (b).





a) João Evangelista's overwhelming feeling regarding the move from Alto do Melão village due to Sobradinho dam works was that of longing. He said he missed the fertile soil that provided everything he and his family needed to eat throughout the year (*"How I miss that land that provided us everything."*). He chooses as his objects: cassava and sweet potato, to represent all the vegetables they used to grow at the riverside. During the photo shoot, João Evangelista proposes different positions in which to present himself and the formerly mentioned blessed food provided by that "land". The location chosen by João Evangelista is: his current living room (which contains some parts of his old house in Alto do Melão). During the shoot, João Evangelista does not pose as an individual asking for mercy, instead he comes up with ideas to show how the ecosystem services offered by the offshore water pattern of the river are crucial for human lives, how people living by the banks of this river can, given the chance, be self-sufficient.

ORIGINAL IN COLOUR

© João Evangelista do Espírito Santo and Marilene Ribeiro 2015



b) Eliezé's idea for his own portrait: *"I want my photograph to be taken by the dead water [by the reservoir, whose water, according to him, no longer contains life]. The lamp bulb is going to represent the purpose of all this destruction."* Eliezé uses the camera as a tool to deliberately draw the costs of hydropower. He does not even consider portraying himself as a sufferer. In contrast, he wants the viewer to be aware of the extinction of life he has witnessed as a consequence of the process of damming the São Francisco river. ORIGINAL IN COLOUR

© Eliezé dos Santos Souza and Marilene Ribeiro 2015

I shall carry on with the debate around documentary photography and my own practice in **Chapters Three** and **Five**, when I set out some perspectives concerning the role of each protagonist of the photography triangle (i.e. the subject, the photographer, and the viewer) through the lenses of communication and citizenship.

## **2.2 Hybridization of perspectives, ideas, and knowledge**

As outlined above, this practice-based PhD research is about photographer and subject exploring one another, jointly working, exchanging knowledge, experiencing together the process of producing a narrative that absorbs the magnitude of the social and environmental impacts of large dams primarily from the subject's point of view. My intended result is a visual storytelling from a hybrid perspective, the perspectives of both photographer/researcher and subject/researched, learning and discovering together. Hence, its agency rises from what happens during the process of making, in-between, and this will support the discussions as well as the essence of the work I propose here<sup>15</sup>.

For Alfred Gell (1998), anthropologist whose body of work was focused on the anthropology of art, the agency of an artwork resides in the whole background of the artist as well as in the process of making, reflecting, and adjusting, what is lately appropriated by the very final art piece. In other words, the process of creation is controversially the most important part of an art object—the “soul” of it, where its agency lies.

In this process of becoming through collaborative labour, participants initially contribute with their background, i.e. the knowledge concerning their local environment (seasonal patterns on the river system/floodplains, plant and animal communities, names and habits of local species, cultural features, traditions, etc.) as well as their history and their thoughts on their individual and communal lives in relation to these hydropower plant projects. My background is my skills in the fields of photography and ecology, and the experience I have built up from previous collaborative artworks I have worked in. From this starting point, we elaborate together forms to expose, reveal, critique, and reflect on the energy system and its consequences for both

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<sup>15</sup> This is also one of the reasons that underpin my choice for juxtaposing text and image in this work, as I will explain in **Chapters Three** and **Five**.

nature and people. This process subverts the “individual” way of producing artwork, as the visual result of each portrait is embedded in the phenomena that emerged during the encounter between each participant and me, from discussing and finding together the most fitting solutions to present participant’s thoughts/feelings by means of photography, and expressing our ideas and directing each other during the photo shoot to walking around and perceiving together the sites of importance to each sitter, even when nothing is verbally communicated. Hence, the power (and also the agency) in each portrait of this collaborative work lies in these untouchable, unseen, things that happen in between the picture making and that are symbolised in this final image. As a consequence, in this PhD work, Gell’s *agency* is expanded to embody many people’s thoughts, instead of just representing one individual mind alone.

Regarding this “expanded agency” and this process of jointly “carving” an art work, Grant Kester (2008, 2011), art historian and critic whose work has been dedicated to analysing collaborative methods within contemporary art practices, postulates that collaboration operates at three different levels:

- a) The most basic, according to him, are those termed *technical collaborations* – i.e. collaboration between two artists, among three or more artists or between an artist and a designer, journalist, etc.;
- b) At the second level are those in which the artist transforms spectators into participants;
- c) At the third are those in which the artist is involved with a given site or group of people/community.

Kester (2008) argues that works of art that comprise the first level of collaboration might not be considered a cutting-edge approach, as such collaborations do not go beyond the boundaries of the artistic community and its related institutions, whereas collaborations that stand at the third level are the most emancipatory and immersive, as not only do the boundaries between artist and his/her collaborators become indistinguishable, but also the conception of the artist as an entity with special “gifts” seems to melt.

This PhD project is a result of a blurring of these boundaries, as described by Kester, making them sufficiently ambiguous to interfere in the way the audience perceives, interprets, and reacts to what they are looking at, since they will be witnessing a process of blending

perspectives, creative ideas, and knowledge, which prompts them to question their own stance in regard to the issues of dams and hydropower.

Back to Kester's points on collaboration at the third level, I take Brazilian artist Hélio Oiticica's *Parangolé* (1964-1968) to expand my idea of a practice that blends perspectives, creative ideas, and knowledge. *Parangolé* consists of mainly fabric-made banners/mantles/cloaks conceived by Oiticica to be worn by someone else other than himself (his collaborators). The concrete objects produced by Oiticica (i.e. the banners themselves) have no meaning if presented as still objects. Instead, they "come to life" once worn by participants, in this case, primarily the samba dancers of the *Escola de Samba Estação Primeira de Mangueira* (dwellers of Mangueira shantytown, in Rio de Janeiro) with whom the artist had already built a relationship/dialogue (Oiticica had previously learnt how to dance samba there, made friends there and spent time immersed in Mangueira's daily life). The "object" only exists when the banner embodies the participant's performance, as the dancer moves, appropriately displaying its composition of colors, its shape, its materiality, and also politically pungent statements, like: "*Incorpo a revolta*" ("*I embody rebelliousness.*"), written by Oiticica on the banners (Fig. 2.5).

FIGURE 2.5. Stills from Oiticica's *Parangolé* performed by some dwellers of Mangueira shantytown in Rio de Janeiro, Brazil.





Previous page: participant wearing Oiticica's *Parangolé* and revealing hidden parts of it as he moves (including the written part "*I embody rebelliousness*").

Top: Oiticica depicted in the foreground and participants (wearing Oiticica's *Parangolés*), in the background.

Bottom: two participants dancing at their own will, hence transforming the banner (e.g. mixing its colours, changing its shape) into the ultimate work of art.

ORIGINAL IN COLOUR

© Centro de Artes Hélio Oiticica/RJ (previous page and top) and Ivan Cardoso, 1979 (bottom)

*Parangolé* is in fact conceived from the background of both the artist and his collaborators and its agency stands on what happens when the skills of Oiticica and his collaborators work together, mixing and becoming indistinguishable from each other when the "final product" rises (what Oiticica calls "*in-corporação*"/"*in-bodiment*": the body embodies the banner and the banner embodies the body—H. O., 1978). Even 50 years later, Oiticica's proposal is revolutionary in relation to how he pushes the boundaries of this blend between artist and collaborator and how he uses each party's skills interchangeably to raise the agency of the artwork; as a consequence, what is presented to the audience is what develops from this momentum of commitment between the artist and his collaborator.

Moving towards photography and more recent works that address this commitment between artist and participants (as well as question some of the critiques on documentary photography – see p. 95): from 2003 to 2008, Magnum photographer Jim Goldberg undertook a project (entitled *Open See*) on the stories of people who had fled (or wanted to flee) Ethiopia, Congo, Bangladesh, Sudan, Somalia, Kenya, Egypt, Palestine, Kurdistan, Iraq, Russia, Afghanistan, Albania, Ukraine, Pakistan, Bulgaria, Moldavia, and China to Europe. Instead of drawing the viewers' attention to the strict suffering of his subjects, Goldberg opts for focusing on other relevant points involved in the context of illegal immigration either triggered by war, disease, religious conflicts, political insurrections, or economic crash: the deprivation from the basics (food, house, law support, family, and identity), the dreams, as well as the responsibilities of all countries in this scenario. He embeds his photographs with his subjects' opinions about the situations that they live in, by asking that they physically interfere in (and then re-signify) the images made and gathered by the photographer (Fig. 2.6).

FIGURE 2.6. Some images from *Open See* (Goldberg, 2009).



Note participants' writings on the photographs, providing new and personal information to the viewer regarding the themes of migration, international relations, and boundaries, thus, re-signifying these photographs. ORIGINAL IN COLOUR

© Jim Goldberg/Magnum Photos

Goldberg's work fulfills his aims to not simply show what is in front of the camera, but rather what is behind and beyond the photographic image, when he gives room for his collaborators to express themselves<sup>16</sup>, interacting with him and the photographs he takes/gets, merging his subjects' perspectives and discourse with his own; before generating the "final piece".

In my research, I investigate the significance of a collaborative work between photographer and subject in presenting the harms associated with the construction of large dams; consequently, I also believe the more my subjects engage in showing their points of view and interfere in the process of making, the more effective the results will be.

Also interested in exploring this environment of co-creation and trying to evolve from some issues related to the documentary approach (especially with regard to the hierarchy that might be commonly established between the photographer and his/her subjects of enquiry), Australian-born artist Anthony Luvera has run collaborative projects with people who have experienced homelessness in the United Kingdom since 2002. Luvera's method consists of running workshops where individuals from this group are invited in, trained to use photographic equipment, and asked to photograph what is relevant to them. An important part of this collective project consists of self-portraits made by every participant (Luvera has also trained them to use large format cameras, flash, and other devices and techniques to work on their own portraits – what Luvera later called *Assisted Self-Portraits*, as Luvera was on-hand to guide them throughout the process)<sup>17</sup>. The result of this long-term participatory project is a built-up memory as well as a materialized existence of these people not only as individuals but also as part of the history of the cities they live in (e.g. Belfast, Colchester, London, and Brighton). This work, then, functions as documentary, as collaboration, as archive, as a process of empowering people to become a part of their local and historical context, an embodiment of the relationship developed between Luvera and participants of this project (Fig. 2.7).

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<sup>16</sup> Noteworthy, it seems that, sometimes, Goldberg had to push his collaborators to speak as, due to what they had faced, they were not used to speak for themselves.

<sup>17</sup> For more details on the context wherein the *Assisted Self-Portraits* series emerged from and how this collaborative documentary practice evolved, see **Appendix 6** – interview with Anthony Luvera.

FIGURE 2.7. *Residency - Assisted Self-Portraits*. Belfast, Northern Ireland (Luvera, 2008).



a) documentation of the process (left) and portrait of Chris McCabe (right).

ORIGINAL IN COLOUR

© Chris McCabe and Anthony Luvera.



b) some participants' *assisted self-portraits* arranged in a grid – Polaroid shots.

Note that it is assured that the framing includes the automatic trigger held by the self-portraitist.

© Anthony Luvera and collaborators from the workshop in Belfast

While talking about this work in the round table interview that took place during the Brighton Photo Biennial 2014, Luvera stressed: “[...] *I really wanted to be true to the fact that my interests were about exploring the perspectives of people I was looking at and looking with, as opposed to being a kind of ‘community photographer’.* [...]” (Burbridge et al., 2014). In other words, like Goldberg and I, Luvera is keen to elaborate a visual discourse that highlights the participants’ points of view. Obviously, the portraits we, the audience, see hold more than just one perspective, i.e. the sitter’s perspective: their agency resides in all the immaterial things that happen between Luvera and participants throughout this process of creating the idea—the sitter’s idea of representing him/herself and what is relevant to him/her to the Other—codifying it and eventually presenting it by means of photography. Despite each sitter framing, staging, and operating the camera, Luvera is there to assist, to mediate the relationship between every sitter and the audience. Hence, the work exists with and through the involvement of both artist and participant/sitter interchangeably. Luvera formally acknowledges this blur of authorship by ensuring participants’ names go together with his own name on the credits.

I intend to push the boundaries of the paradigms regarding authorship and the exchanges addressed in Luvera’s *Assisted Self-Portraits* even further. Like Luvera, my research also seeks to immerse every sitter into the process of constructing their own image to the audience. Yet, it merges even more the roles of each one of the actors of this process (i.e. myself and my collaborator/sitter), as the one who operates the camera, frames the shot, and presses the shutter release button (myself) is not the one who comes up with the initial thoughts for the portrait and devises further modifications on the photograph to be taken (participant). Interestingly, my research also incorporates performative acts undertaken by the sitter/self-portraitist along the shoot (e.g. testing of poses the sitter makes with her/his selected object, the inclusion or not of relatives in the photograph, etc.) as part of the final work, making this process of image making more visible than that of Luvera, who largely relies on the coding of conventional portraiture—i.e. one upright photograph (see Fig. 2.7b)—as the result of his collaborative project.

Regarding this point, and also in the endeavor to situate my own practice within the contemporary scene of initiatives in collaboration and photography, artist Sharon Lockhart also acknowledges these performances and applies a participatory as well as an anthropological perspective in her *Apeú-Salvador Families: Portraits*, part of her work *Teatro Amazonas* (2000)—which comprises a video and other types of photographs too. Lockhart

asked to join the work that anthropologists Ligia Simonian and Isabel Soares de Souza were undertaking with families in the Amazonia. Once in contact with the families selected by Isabel Soares de Souza in Apeú-Salvador, Brazil, Lockhart explained to them her proposal: she would photograph them using a Polaroid and a professional camera at the same time. They would be asked to select a location for the portrait. They would be also allowed to pose for 4 shots in a row and they could rearrange themselves before posing for the next, final 3 shots, after being able to check every Polaroid film out. All the Polaroid shots were left with each photographed family/person. The strength of Lockhart's *Apeú-Salvador Families: Portraits* work lies in this interference her subjects make in her role as photographer as well as in the option of choice the subject has to represent him/herself before the camera, before his/her own family, and before the eyes of the beholder (Fig. 2.8).

FIGURE 2.8. *Teatro Amazonas – Apeú-Salvador Families: Portraits* (Lockhart, 2000).



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© Sharon Lockhart

My interest in Lockhart's approach is focused on how she experiments with her subjects of *Apeú-Salvador Families: Portraits* possibilities of self-representation, how her proposal disrupts the control the photographer holds before the ones she/he photographs and questions the sole rights of the authorship, as these are also points assembled in my work.

Lockhart also intends to develop a relationship of reciprocity and respect with her subjects by giving all the original photographs (i.e. all the Polaroid shots she takes) to her sitters immediately after being produced, and that was one of the reasons I decided to use instant films as one of the activities I proposed for my fieldwork in the Garabi-Panambi dam region (see **Chapter Five** for details), instead of photographic film roll or digital photography: to leave immediately to each participant an object that could represent something important to him/her as well as our exchanges.

In contrast, despite the fact that she welcomes her subjects' participation in the creation of their own portraits, I consider Lockhart's approach timid when compared to Luvera's, in terms of the level of engagement required by her collaborators, as both Luvera's and my work involve discussions with our participants about the choices made by the artist and participants during the entire process whereas Lockhart's subjects do not hold this sort of power in the work she proposes. Moreover, in Lockhart's work, sitters are not allowed to interfere in either the photographer's perspective (e.g. setting and/or suggesting whether to zoom in or out) or number of shots to be taken (as the deal was restricted to four shots - three rearrangements).

### **2.3 Challenges and controversies of contemporary collaborative practices**

The work I propose as this PhD is underpinned by transdisciplinarity and reciprocity as well as engaged with an important contemporary political and economic dilemma (energy, hydroelectricity and its costs), characteristics highlighted by Grant Kester (2008, 2011, 2013; Kelley Jr. and Kester, 2017) and Claire Bishop (Roche, 2008; Bishop, 2012) as the core of proper collaborative projects.

In 2006, art historian and critic Claire Bishop wrote about what she called *The social turn* in art practices (Bishop, 2006a). In her paper, Bishop acknowledges the role that social and political agendas have played in driving proposals that she considered avant-garde. However, Bishop also stresses her concern about works labelled as "art" despite not having any impact in the field of arts, according to her criteria. She argues that actual collaborative art practices have to be more than just ethical forms of socialisation with a political aim, but rather agencies that re-think the society in which we live. For Bishop, good intentions and the self-sacrifice of the

artist's autonomy/authorship (inspired by the discourse of the "Christian good soul") are not enough to classify a socially engaged piece of work as "art".

She later (Roche, 2008) added that she appreciates and welcomes transdisciplinary collaborative projects that are in fact equally committed in contributing to all the fields they comprise. She rather criticises collaborative projects that overlook the aesthetics and claim to be artworks just because they merge cooperative tools with art-related techniques (like drawing, collage, photography, video, etc.). Bishop points out that more than ameliorating directly the situation of the community involved in such projects, actual artworks address the dominant conventions and the socio-political dilemmas of their times, even indirectly. According to her:

*"[...] I completely agree that turning to other disciplines can help to sharpen our mode of discussion about works of art, particularly those that step into the social arena. [...] But if the claims for transdisciplinarity are to be taken seriously, then these projects should also function within other discourses too [i.e. these projects should contribute to discussions within both Sociology and Arts]. The situation I would want to avoid is of inconsequential practices that make no impact on either field. [...]"* (Claire Bishop apud Roche, 2008:205)

In response to Bishop's points, Grant Kester (2006) argues that collaborative/participatory/socially-engaged art is in fact a continuum that ranges from community-guided reactions to the current social-political-economic system (like *Imagens do Povo*, *Hackney Flashers*, or the *AA Project* by *Ala Plastica*) to "performances" that provoke social interactions as well as "indirectly" (using Bishop's word) point out a society's issue (like Luvera's project, regarding the situation of living in the streets in the UK, and Goldberg's work, showcasing the points involved in illegal immigration to Europe). Kester (*ibid*) criticizes Bishop's presumed bias on relational projects that either directly pursue social/political awareness/change or work essentially as an environment for community interactions and empowerment. He defines Bishop's arguments as strict, as well as a reflection of the prejudice art critics have with everything that can somehow suggest social and political "activism". He replies that the art projects she addresses as "good examples of collaborative art practice", like Santiago Sierra's works<sup>18</sup>, do not either threaten the artist's autonomy or in fact engage

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<sup>18</sup> Santiago Sierra addresses the tension between labour and freedom by conceiving "collaborative art pieces" whose marginalized groups are called to participate in performances ruled by the artist which usually involve the endurance of physical discomfort as an exchange for money (paid by the artist), e.g. prostitutes got the amount of

participants in the process of labouring together, as the artist pays for “participants/collaborators” to take part in his constrained proposal instead of stimulating participants to actually embrace his discourse and aims.

For Kester (2011, 2013), collaborative art practices arise as a challenge for art critics and curators as they push the boundaries of the current understanding of what art is for, i.e. these socially engaged art forms somehow transgress and question the common place of defining and evaluating art. Such practices generate new forms of signification, directly addressing issues to the audience. They generate what Kester entitles a *dialogical aesthetics*. Goldberg’s work *Open See* (2009), for example, would not be considered art, according to “art standards” effective twenty years ago. Kester (2008, 2011) stresses that traditional art and humanities theories are not able to fully absorb or adequately contribute to the discussions on social interactions and the emancipatory potential involved in collective proposals/actions. He argues that upcoming research into collaborative art committed to an open condition of practice that operates across the boundaries (i.e. across disciplines) will, however, be capable of understanding, analysing, and underpinning theoretically this new form of producing agencies and that is the reason he also considers collaborative/participatory practice-based research as “avant-garde” (Kester, 2013).

Taking both Bishop’s and Kester’s above analyses on collaborative practices in the twenty-first century, my position is that ethics and aesthetics do not have to be taken as immiscible entities. The artist has to bear in mind that the work proposed has to in fact consider both of them equally during the whole process of making and disseminating her/his ideas. The artist has to keep this as a constant reflection and evaluation in his/her practice (and actually all artists have to take both aesthetics and ethics into consideration in any form of art practice, not just collaborative projects) and “guide” the whole process in order to not let it become loose or empty in meaning, at the end (i.e. end up being a mere form of socialization, as Bishop states). I am not claiming that artists should control and/or rearrange every step their collaborators take (and that is what happens in Santiago Sierra’s works—the reason for Kester’s critique on Sierra’s way of working), or even overlook ideas or “products” created by their collaborators, when presumably not looking like “aesthetical objects”, but rather that artists take the responsibility for the process of working, not in an oppressive or “closed” way, but at the same time pushing their collaborators’ thoughts and creativity to get the best of

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money they paid for one shot of heroin to allow the artist to tattoo a line on their backs, homeless people were paid to stand facing a bare wall inside the gallery for one hour, illegal immigrant workers were hired to randomly move heavy concrete-made blocks around the gallery at the local minimum rate of income per hour of work.

these joint experimentations, equally considering the socio-political and aesthetical context, like Luvera and Goldberg have done.

According to Kester (2006, 2013), curators and art critics have a bias against everything that might challenge their authority or might be out of their frame, i.e. the artist as a being with “supernatural capacities”, and critics and curators as superior creatures who hold absolute power to shepherd the masses (that is, the rest of mankind) through the complex and elevated tunnel of the arts. Could this behaviour be understood as “the art market’s self-protection” against competition as well as against the loss of its value as a closed group in charge of producing vital knowledge for society? In his article *A collaborative turn in contemporary photography?*, Daniel Palmer (2013), academic with expertise in the field of photography, highlights how the art world has struggled to break free from the ghost of “single authorship” in photographic works. Despite the awareness that collaboration has been used in this field since the nineteenth-century, there still seems to be an attachment to the idea of a photograph being the creation of one single person (or of two, or three people working together, but belonging to the same art community) as a premise for a work to be considered as art. In his recently launched book, Palmer restates his position with regard to photography (Palmer, 2017:5-13) and spends its 174 pages to demonstrate that collaborative practices have resulted in good quality works aesthetically speaking too.

Although keen not to dismiss Bishop’s concerns, what I believe that has also to do with the “obscure” use institutions (especially governmental ones) have made of socially engaged/community-based art “tools”, since these institutions have financially invested in projects mistakenly labelled as community-based art as a way of: a) getting rid of the former’s legal commitments to improve these vulnerable target communities through other means, and b) to state that they are fostering art (rationale that Bishop briefly cites in her response to Kester – Bishop 2006b – and develops more in her book *Artificial hells* – Bishop, 2012:276-277), I rather reaffirm Kester’s thoughts that art and activism can, may, and have been working together. As a response to the new political, economic, and socio-cultural scenario that arose during the 1990s (and settled afterwards), characterized by an increasingly individualistic (in spite of “globalized”) society underpinned by the capitalistic mode of production, work, and consumption, the so-called socially-engaged art, community-based art, experimental communities, dialogic art, participatory, interventionist, research-based, or collaborative art comes out as a political act, as an ability to disrupt power structures, as a means artists have found to manifest their anxieties, tensions, desires, and reflections concerning (and to) this

new social arrangement (Kester, 1998, 2011; Rancière, 2002, 2004). Hence, when it comes to contemporary works assembled via the third level of collaboration described by Kester (see above: **2.2 Hybridization of perspectives, ideas, and knowledge**, p. 99), there is no choice, but addressing, positioning, and working through the social, environmental, and political activist arenas. As a shift in the way a work of art is rendered, these collaborative practices inherently bring their own aesthetics and it does not mean that this aesthetics has to match the current art standard concepts and scores. At the same time, as a reflection of this context wherein projects of this kind are generated, as noted by Kelley Jr. and Kester (2017:2) particularly in Latin America, most of the conceivers of these works end up deliberately opting for disseminating the work via channels that are not restricted to the strictly art spheres, as a way to establish other paths of dialogue with the public than the one shaped and constrained by the mainstream art world.

Ultimately, I intend my practice-based research to explore Kester's following ideas: i) Collaborative art practices melt the "ego imperialism" of the artist's identity as the authorship is diluted amidst all the participants, they corrupt the concept of the artist as a powerful entity with a divine gift, they make the artist more accessible (and less "glamorous") as his/her role has more to do with being a mediator than solely the creator (e.g. Oiticica's *Parangolé* and the joint work *Assisted Self-Portraits* conceived by Luvera); ii) They move from autonomy to interdependency, from the mastery of a technique to the atmosphere of contingency and improvisation; iii) Their agency arises from an open-ended experience, driven by the inter-subjective exchanges of the encounters in a fluid process where adaptation and multiplicity are part of the process. At the same time, I am also interested in producing with my collaborators a body of work that engages with the aesthetic, as claimed by Bishop.

I hope this work invites both audiences and thinkers to immerse themselves in the experience of collaboration, to reflect on what socially-engaged practices trigger and challenge, and to perceive collaborative processes as new shapes in where art manifests itself.

## **2.4 Building upon the contemporary context of visual storytelling and collaborative art practices**

When interviewed by Jennifer Roche (Roche, 2008), Bishop argues that *relational*<sup>19</sup> art projects are about imagination, intelligence, risk, pleasure, and generosity of both artist and participants. I claim that the practice I propose as my PhD acknowledges these points described by Bishop.

Furthermore, this research is engaged with a form of documentary where not only techniques from another field (Anthropology) are absorbed, but the perspective of the photographer and the subjects (i.e. collaborators) blend in order to tell a story. Consequently, this work addresses and intervenes in traditional conventions of visual storytelling. It is about the subject steering the photographer's works and the photographer enabling a new visualization of the subject's story simultaneously and with a degree of reciprocation in order to set out to the viewer the dimensions of the socio-environmental impacts of large dams. The participants' actual involvement, presenting their perspectives and working collaboratively with the photographer, is vital for this work to happen and be meaningful, a point that I explore in my next Chapter.

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<sup>19</sup> Claire Bishop refers to Nicolas Bourriaud's concept of *relational aesthetics*. Bourriaud (1998) considers experiments and art-practices involving social relations as rich environments, once the relations between participants (research subjects) and researcher/artist triggered by the process of making become the actual agent and producer of knowledge. For him, the work of art exists when a situation mediates an encounter/social interaction and the consequence of this encounter/interaction hence generates its own aesthetics: the *relational aesthetics*.

**Chapter 3: Hydropower and Power—photography, representation, and politics  
within the frame of mega development projects**

*Lo que describía sigue siendo cierto.  
El sistema internacional de poder hace  
que la riqueza se siga alimentando de la  
pobreza ajena. Sí, las venas de América  
Latina todavía siguen abiertas.*

*What I wrote before is still true.  
The international system of power  
works as wealth feeds from poverty of  
others. Indeed, the veins of Latin  
America remain open.*

(Eduardo Galeano  
apud Marcos, 2009)

**Aims of this chapter:**

- Addressing Roland Barthes', Charles Peirce's, Ferdinand de Saussure's, Umberto Eco's, and Jean Baudrillard's discourses on representation and applying them towards the purposes of this practice in order to enable communication between participant and the beholder.
- Discussing Jacques Rancière's and Ariela Azoulay's rhetoric on politics and images as political acts, and intersecting the information assembled with other publications and data unfolded by this PhD research.
- Discussing the role of subject and spectator in Photography and transposing this to its political uses.
- Exposing the *behind the scene* of policies underpinned by hydroelectricity—international market, neo-colonialism, corruption, high profit, and propaganda—and reinforcing these facts by means of collaborators' attitudes towards the proposed research method.
- Introducing works that have also surfaced social, economic, and political matters by means of photography and collaboration with the subject, such as those by Susan Meiselas, Jim Goldberg, and Anthony Luvera.
- Setting out Eduardo Gudynas' concepts, reflections, and proposals regarding development, well-being, Nature, and neo-extractivism, and tallying them with my research aims.
- Stressing the relevance of this practice-based research in dissecting and exposing a multilayered issue, this project also attempts to build an ethical approach for development.

### **3.1 What do you want to show to the Other?**

It is not within the scope of this thesis to conduct an in-depth epistemological and ontological inquiry into Semiotics, representation, and politics but rather to bring these concepts and related phenomena together to assemble reflections on this PhD practice as well as its implications on the world's contemporary issues. In order to achieve this, in this Chapter I combine the seminal studies by Charles Sanders Peirce, Ferdinand de Saussure, Umberto Eco, Roland Barthes, and Jean Baudrillard with Ariela Azoulay's, Jacque Rancière's, Michelle Bogre's, and Eduardo Gudynas' arguments to advocate not only the choice for photography (particularly focused on portraiture) but also the process of image-making in this PhD research as a powerful exposé of what is involved in mega-development projects throughout Latin America (and might also be pertinent to Asia and elsewhere).

I also take into consideration the works by Anthony Luvera (*Assisted Self-Portraits* - 2002-ongoing), Susan Meiselas (*Encounters with the Dani* - 2003, and *Kurdistan: in the shadow of History* - 1998/2008), and Jim Goldberg (*Open See* - 2009) concerning their perspective on photography as a way to contrast either the broadcasted notions of specific social, economic, and political matters or History via collaboration with their subjects.

### **3.2 Making meaning**

For communication to happen, it is mandatory that one individual uses a channel that is understood by her/his interlocutor. In 1976, the Italian philosopher, novelist, and semiotician Umberto Eco stated, in his seminal book *A theory of Semiotics*: "[...] Every act of communication to or between human beings [...] presupposes a signification system as its necessary condition." (Eco, 1976:9). In other words, for Eco, every culture is the result of processes of signification as well as the means for them to occur. Consequently, communicating is to "negotiate" through a system of codes. This system of codes operates in a very peculiar way, where a given sense-mediated stimulus (e.g. visual, scented, audible, or tactile stimulus) prompts one's mental activity in order to give meaning to it; for instance, the apparently simple act of looking at any image participants and I have produced in this research will automatically demand the beholder's mind to give meaning to what she/he has

just grasped with her/his eyes from that given photograph she/he looks at. Continuing this inquiry into communication, in the late nineteenth and early twentieth century, the American philosopher, mathematician, and logician Charles Sanders Peirce and the Swiss linguist Ferdinand de Saussure produced a prolific amount of work regarding this signification system. Saussure's and Peirce's diagrams and classifications on this theme are still widely used amidst scholars whose inquiries involve the Peirce's so-called *Semiotics* (Berger, 1999; Chandler, 2007). Briefly, the semiotic process comprises: a given sense-mediated stimulus (what Peirce identified as *object* – Peirce, 1868, and Saussure approached as *signifier* – Saussure, 1966:67) which has the function of taking the addressee to its sheer meaning (i.e. to the *interpretant*, in Peirce's words, or to the *signified*, using Saussure's term). This ultimate meaning is the product of the addressee's mental interpretative process that, in its turn, is mediated by *signs*. Sign is the entity that stands for the *interpretant/signified* (i.e. the entity that links the *object/signifier* to its *interpretant/signified*). Within this universe of signs, Peirce (1868, 1907) identified and described three categories: i) *icon* (type of sign which operates based on "likeness", i.e. the object resembles somehow its interpretant, like a miniature of a car—it is not the actual car, but mimics the latter in its shape and components); ii) *symbol* (understood via cultural conventions, learnt by each individual who belongs to a specific society, as do the green, yellow, and red colours in traffic lights and the words themselves); iii) *index* (in this case, the object does not necessarily resemble its related interpretant whereas cannot exist without the latter, e.g. smoke – object – indicates fire – interpretant, clock – object – points to time - interpretant).

Taking the above phenomenon forward, one given interpretant can lead to further interpretations, i.e. it can start a cascade of object-sign-interpretant associations, which eventually form our ordinary thoughts.

*"[...] To say, therefore, that thought cannot happen in an instant, but requires a time, is but another way of saying that every thought must be interpreted in another, or that all thought is in signs."* (Peirce, 1868:112)

Importantly, the object/signifier is not fixed to one exact sign only. The former can lead to the signified (i.e. to the eventual meaning) via more than one sign. Photographs, for example, hold a paradoxical and also complementary position in this original Peirce's classification of signs, as they may carry indexical, iconic, and symbolic features (Johansen, 1988:499).

It is crucial to note that, for the system of signs to operate, objects (or signifiers) need to present to the beholder something that is recognizable, i.e. something that she/he has come across before (Barthes, 1972). In other words, the object needs to re-present to the interlocutor, by means of the sign involved in the cognitive process of giving meaning, a thing he/she has acknowledged in his/her memory beforehand. Then, one needs to have a previous experience within the signification process (i.e. previous contact with both signifier and its supposed signified) to be able to “decode” the meaning of a given “object” (object here understood as its broader definition as signifier) once perceiving the latter otherwise communication will not happen. In other words, representation enables the system of codes and meanings to operate between individuals.

When I ask my collaborators to both choose a location for their photo shoot and select a concrete “thing” that might symbolize their feelings regarding the impact of the hydropower plant/dam project on their lives, I am in fact making them immerse themselves into this whole context of representation outlined above. By coming up with and discussing ideas for and throughout the shoot, my sitters/co-directors are actually shaping the resultant image(s) in compliance with their thoughts, i.e. in compliance with the succession of object-sign-interpretant connections that run in their minds from the moment they had opened up their individual experiences (not only but mainly during the interview) until the very last shot.

The photographs that every sitter and I have assembled together might not make immediate sense to the viewer, as my priority is to assure they represent their own story in their own terms. Nevertheless, this sort of first glimpse communication noise (generated by a process of making chiefly driven by individual’s perceptions and history) provokes the audience as it plays with the thresholds between the common sense/collective system of codes and subjective experience/memory. By providing further information (like captions and/or excerpts from the interview) along with the photograph itself, the message is likely to be eventually delivered, as the beholder may be capable of putting into context what stands before her/him. This subject-photographer-beholder social intercourse is only possible due to the signification system.

I take the interviewees Marinês (Fig. 3.1), Maria Zilda (Fig. 3.2), and Maria Dalva (Fig. ii, p. 46) as examples.

When Marinês, her husband (Dalmir), and I decide to depict the couple in a sequence of poses that indicate (via the cultural system of interpretation stressed by Eco at the beginning of this Chapter) they are dancing throughout the “stage” (i.e. the location Marinês chose for the shoot: the couple’s living room), we do not expect the viewer to instantaneously understand the link that exists between the dance and the impact of hydropower. We rather build this link by: i) assuring the couple keeps a “standard de-coded” grave look throughout the entire sequence – hence prompting the viewer to ask: “*why are they dancing if they are not enjoying it?*”; ii) informing (through a written caption, for instance) that the performed dance “represents” the communion of dwellers during local communities’ fetes—occasions like the Nossa Senhora de Fátima’s Day, in which people from neighbouring villages in that stretch of the Uruguay River get together, celebrating, among other things, the spirit of being one single family. Marinês and her husband know local folklore styles and are used to spending long times dancing with each other, and also swapping partners with their peers during these festivities. She foresees the Garabi dam (originally planned to take place on the Uruguay River within the near future) ripping villagers apart and, consequently, bringing these times of communal empowerment and joy to an end. For her, this is outrageous. Thus Marinês, Dalmir, and I weave her feelings with her dance through the photograph in order to speak about the connexions between Garabi dam and her story (Fig. 3.1).

FIGURE. 3.1. Sequence of portraits of Marinês.



Marinês' feeling: outrage and rebelliousness

"Object" chosen: the dance with her husband (Dalmir). For the couple, this represents the amusement of the community's get together, which would finish if the Garabi dam is built, as they assume their community will be split, villagers will take different routes, then, these traditional festivities might eventually end.

Location chosen: living room of their current place of living (which will also disappear if the Garabi dam takes place).

ORIGINAL IN COLOUR

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Maria Zilda, in her turn, was displaced by the Sobradinho dam in 1975. She moved from the riverside Juacema village (situated by São Francisco River), to the São Francisco River's semi-arid surroundings where her family and relatives have struggled to feed their goats, themselves, and, foremost, to get water. During the interview, she recalls how blessed they were when previously living by the São Francisco River: they used to go fishing and grow their own beans, corn, sweet potato, squash, water melon, etc., their livestock could find themselves abundant food and there was plenty of water from the river for all purposes. Moreover, Maria Zilda's family, like Marinês' family, was part of a riverside community which also gathered people and set up festivities before being submerged by the dam-reservoir. Ever since, Maria Zilda's family has lived in an isolated group of six houses in the middle of the vast and remote stony *Caatinga*. During the interview, Maria Zilda indeed recalls the traditional dances, the folk songs, the community's auction, the everyday life in Juacema village (we even performed these traditional dances together, after the interview). These thoughts take her to the core feeling regarding the compulsory move due to the Sobradinho dam project: sorrow. She carries on and compares this sorrow to the same feeling she gets when one of her goats does not resist the harshness of the current environment they live in and die, or when one of her sons passed away. We eventually agree to depict one of her goats (one of those she had to bottle-feed) along with her in her photo shoot in order to "represent" this sequence of thoughts as well as the feelings she unfolds to me: love, death, and sorrow—which we aim to articulate to the potential viewer of the photograph (Fig. 3.2).

FIGURE. 3.2. Portrait of Maria Zilda – last shot.



Maria Zilda's feeling: sorrow

"Object" chosen: one of her goats (one of those she bottle-fed)

Location chosen: living room of her current home, in Poço do Juá

ORIGINAL IN COLOUR

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The same is true for the sequence of portraits of Maria Dalva. Maria Dalva was also displaced from the village of Juacema by the Sobradinho dam. As her family were not happy with the Chesf's<sup>20</sup> re-housing "offer": plots of land with facilities at Serra do Ramalho (a place located nearly 800km southwards from Juacema, in a region still to be colonized, in the *Caatinga* region - a semi-arid biome that surrounds São Francisco River, in Bahia state), they decided to head to an area not far from their previous home, however still in the middle of the *Caatinga*: São Gonçalo village. Dalva's family were not used to the lack of water, as they had formerly lived by the riverside. After several years facing the scarcity of water, food, and access to basic life support, like health services, in São Gonçalo, her family decided to move again, this time to Sobradinho (site that arose as a dormitory for the workers of the Sobradinho dam and lately was turned into an actual town). Dalva stated: "[...] *Since we left Juacema, we have lived like roaming pigeons.*" When asked about her feeling regarding this entire situation, she

<sup>20</sup> Chesf – the *São Francisco's Hydroelectric Company (Companhia Hidrelétrica do São Francisco)* - was the company in charge of the Sobradinho dam project, including its resettlement and rehabilitation programme.

replied: *“Memory. Memory on how good was our life in Juacema.”* She chose her wedding dress to represent her feeling (she got married in Juacema), and, during the photo shoot, she makes her experiments, she moves herself and her wedding dress throughout the frame and eventually ends up putting it on. Hence, the sequence of Maria Dalva’s portraits has the quality of stills from a performance in which she plays with ideas of memory and remembrance (see Fig. ii, **Methodology**, p. 46). In fact, Maria Dalva not only mentally links her wedding dress to the feelings she has for her previous home, providing us—researcher and spectators—with an idea of the magnitude of what the submerged Juacema village means to her (as viewers will be aware of what a wedding dress symbolizes to a bride, hence the number of married women who keep theirs), but she also plays with the object chosen throughout the shots (metaphorically, I would say she plays with her memory) to assure the viewer (and perhaps herself?) will understand the emotional resonance of her experiences.

At first glance, these juxtapositions of self-chosen sets create incongruity, which is the “deformed” result of the process of de-codification occurring in the viewer’s mind (which, in its turn, had relied mainly on the cultural codes background to achieve an “intelligible” interpretant – *“what is the purpose of this couple dancing and staring at me at the same time? What is this goat doing in this photograph? What do I have to look at it for? What does this wedding dress stand for?”*). The additional information provided by each sitter’s testimonial and attitude during the shoot (what is presented in this main text here and is also set up as a piece of text alongside the portrait in the layout for exhibition purposes) not only complements every photograph but, and particularly, strengthens as well as re-signifies it, leading the audience to perceive how hydropower has impacted on these portrayed people’s lives. Therefore, one of the foundations where this collaborative work stems from is this process of detaching and re-attaching meaning, signifying and re-signifying, mixing collective interpretation conventions with private mental processes as well as written language with image-mediated codes.

But how can the magnitude of the impacts experienced by my subjects be accessed? I argue that the relevance of this PhD research and its outcomes lie in the act of imprinting on photographs the individual experience around a visceral and primitive trigger: emotions (easily grasped as a spoken/written word but often not fully perceived by the interlocutor).

The methodology applied in this practice-based research (i.e. the openness of the “questionnaire” as a semi-structured interview, as well as the possibility of immediately

seeing the image just shot and subsequently interfering with it) instigates participating subjects to seek information in their own minds, to link meanings (via the process of semiotics), and to reflect on all this assembled “data” to eventually transpose this to the language of the image. This process of speaking about and bringing to the surface the lived experiences, environments, memories, beauties, values, powers, communities, struggles, fears, loves, frustrations, disappointments, losses, profits, anxieties, uncertainties, futures, etc. makes participants keen to publicize their perspectives and to engage with the process of meaning-making. It also motivates them to show me special sites, objects, documents, and photographs they have kept. I am compelled to say that this time we spend together digging and polishing the very essence of every sitter’s story and discourse is so intense that these encounters touched and triggered further reflections not only in myself—as a researcher, photographer, and human being—but also in my subjects, as I demonstrate below.

Gumercino is a cassava grower who used to live and work in Boçoroca village. In 1975 he and his family were forced to move due to the Sobradinho hydropower plant project. His family decided to settle in Sobradinho town, where the company in charge of the resettlement programme offered him a standard town-size plot of land situated in a marsh (according to Gumercino). As he also needed land to grow the cassavas, he and his wife also got another plot, but it was located in the semi-arid landscape of the Brazilian *Caatinga*, where water is scarce. Despite this, Gumercino and his wife started to grow cassava there. The couple has commuted between these two sites to be capable of both growing the vegetable and selling it. I interviewed Gumercino at his place in Sobradinho town. My assistants and I spent about three hours with him altogether and I was impressed by his opinions on the Sobradinho dam project as well as on Brazilian politics as a whole. The day after, I came back for his photo shoot as we had arranged. He brought along a notebook and started: “*Yesterday, after you left, I kept thinking and decided to write down some words regarding the move.*” Gumercino’s notes set the scene of the Sobradinho dam: locals deceived, dumped, the São Francisco river and its riverine landscape destroyed, animals neglected, trauma (Fig 3.3).

FIGURE. 3.3. Text written by Gumercino in the night after his interview.

A nossa finta como  
 parciais por uma elite  
 da Católica sustinida a base  
 de Sabiduria.  
 Todos os Pibicinhos e  
 Regiao de mãos dadas decaus  
 Toda a nossa sabiduria de  
 Buz, de Curitiba deixando  
 um Talento inscavalil em cada  
 um de nos.  
 Na época nós fomos detidos  
 de uma maneira tão graciosa  
 como se fosse elipato inquerito  
 Vou  
 O que eles chamavam de fide  
 vigatio era um valor sem debate  
 de negociacao  
 O que eles diziam era que o  
 Pibicinho depois da Barrage  
 tinha uma vida melhor  
 Como assim?  
 Tinha fregia gratuita, agua tratada

Escola, Saúde, Estrada, Siga  
 nunca e até a Escola não se  
 mais frequente na região.  
 O Proposta deles era que o Pibic  
 tinha que de nos Agosilias  
 Criada pela EMBRAPA na região de  
 Bom Fium da Lagoa onde muitas  
 Pessoas foram e depois Saíram  
 Para outros lugares com dinheiro  
 Pioria e os Agosilias não se  
 vê nem falar.  
 Quem não foi para os Agosilias  
 não tinha direito a Transporte de  
 mudanca, até tinham responsa-  
 bilidade por mudanca por cada Família.  
 O Transporte que arrega eram  
 Condição Para de Alota para todos  
 Foi Idem Sembar gestantes e  
 Crianças.  
 O Alagado foi uma distrição  
 Generalizada na região em Curitiba  
 Humo, mas Divisor, e sem Tala

Condição de animais que  
 existia na Baía de Lagoa  
 Edificios de tantas vantagens que  
 eles falavam não parecia mais  
 falar. Da para todo Humo de  
 O que não nota é o Talento  
 de um Sanchero Alaga não  
 que ainda estão vivos sem  
 nunca mais se Conhecem.

Re-photographed from Gumercino's notebook. Original as notes on paper.  
ORIGINAL IN COLOUR

English translation:

*Our struggle, as inhabitants, with regard to the notorious hydropower plant project that built the Sobradinho dam.*

*All of us, riverside dwellers and the region altogether, donated all our means of subsistence, our sense of community, what led each one of us to an unbearable trauma.*

*At the time, they removed us so rudely as we were unbreakable objects.*

*What they [those in charge of the dam project] called compensation was an arbitrary amount, no negotiation allowed.*

*They said riverside dwellers would enjoy a better life when the dam was finished.*

*How? They said riverside dwellers would have access to free-of-charge energy supply, drinking water, school, health care, roads. Even rain would be more frequent in the region.*

*Their proposed affected people might move to the Agro-villages assembled by the Chesf in the area of the Bom Jesus da Lapa district. Many headed to there but subsequently decided to move to other sites. Nowadays, nobody hears about the Agro-villages anymore.*

*Those who decided not to move to the Agro-villages weren't entitled to have an appropriate transport for their belongings. The company didn't hold any responsibility concerning the displaced families. What became available was a 'pau-de-arara' lorry to transfer the elders, pregnant women and children.*

*The flood caused a mass destruction in the region, destruction of the bonds between local inhabitants, trees, and all sort of animals that existed in the river basin.*

*They [those in charge of the dam project] broadcasted so many advantages of the dam. No more need to say, everyone can see what happened: we've just got the trauma of a long goodbye hug we exchanged with those who are still alive but who we have never met again after the move.*

What caused a man to write a two-and-a-half-page testimonial, during the night, about an event that took place roughly forty years ago? Might this sort of question enable us (researcher and audience) to assess the magnitude of the impact the Sobradinho hydropower station has had, not only in Gumericino but also in the entire area? Gumericino's feelings are outrage, indignation, and rebelliousness against what was imposed by the dam project, as he stated during the interview. Even almost a half-century later, Sobradinho dam is still something unbearable to him because he had witnessed its (as the letter says) clear damages, losses, and lies. Indignation and fury took him to his text and, consequently, took myself, as an interlocutor and researcher, to his agony. Indignation and rage also guided Gumericino to his choices for his own portrait, as I shall discuss further on in this Chapter.

My encounter with Cirlei (one of my collaborators from the fieldwork in the Garabi-Panambi dam complex region) was also powerful concerning participant's feeling-led engagement,

representation, and the subjective dimension of the impacts of hydropower. The Panambi dam has been a case for the Brazilian Supreme Court since 2013<sup>21</sup>. It was originally planned to be built in the near future but its construction has been interdicted due to the impact it would cause in one part of the UNESCO's Atlantic Forest Biosphere Reserve (DEFAP/Programa RS Rural, 2005; InGá, 2014). If it happens, it will submerge 60 ha of the Turvo State Park and will also potentially affect over 20,000 people, including Cirlei and Nilson (Cirlei's husband). During my interview with the couple, Cirlei says:

*"[...] It's hard... when we go for a trip, we leave, but we know we're coming back. What a holy gift is to come back. However, if we have to move due to Panambi, it's gonna be for good. It's no return. Everything we now see here will vanish! Only that stagnant water will remain... [...] Animals, trees, plants, these are all precious to us otherwise Nilson [Cirlei's husband] and I wouldn't have planted trees, you wouldn't have seen so many animals around here. These have a high value to us. Furthermore, our history lies in our land, in our community, and this history will be erased. Nilson was born and raised where we are stepping on right now. I was born and raised in this community too. No money will compensate this altogether. Impossible! No money will replace the relationship we've got with this patch of land. If we keep silent here, we hear the birds singing. If there are birds, it's because there are also trees, there is also food. This will all vanish. Not to mention the fish and the river itself. My husband is not a professional fisherman, but he catches fish to feed us. We have started to get prepared to leave because we're aware that when it comes to the government, power, money, it's not our will that is at stake, it's the government's will, the government's interests that rule decisions instead. We haven't heard of any single dam that has been fully stopped up to now. It takes time, but sooner or later they build it. Then, we've been trying to get prepared to not get ill by the time it eventually comes... [weeping]... it's hard... sometimes it's hard to stand it... We need to be prepared in order to not get ill, because getting ill will make things worse. We need to be prepared to face it. But, as Nique [her husband's nickname] says, 'we think we are prepared to... When the time to pack what you can and leave comes, it won't be easy...' because the things we love here, we can't pack: our land, our little corner of the world, our plants, our animals. Even if we try hard to get prepared, when the time comes, we won't be prepared at all. It's sort of a thief breaking through your place: 'make your move otherwise I kill you', in this case:*

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<sup>21</sup> For the overall context of the Garabi and the Panambi dams, see **Chapter Four**.

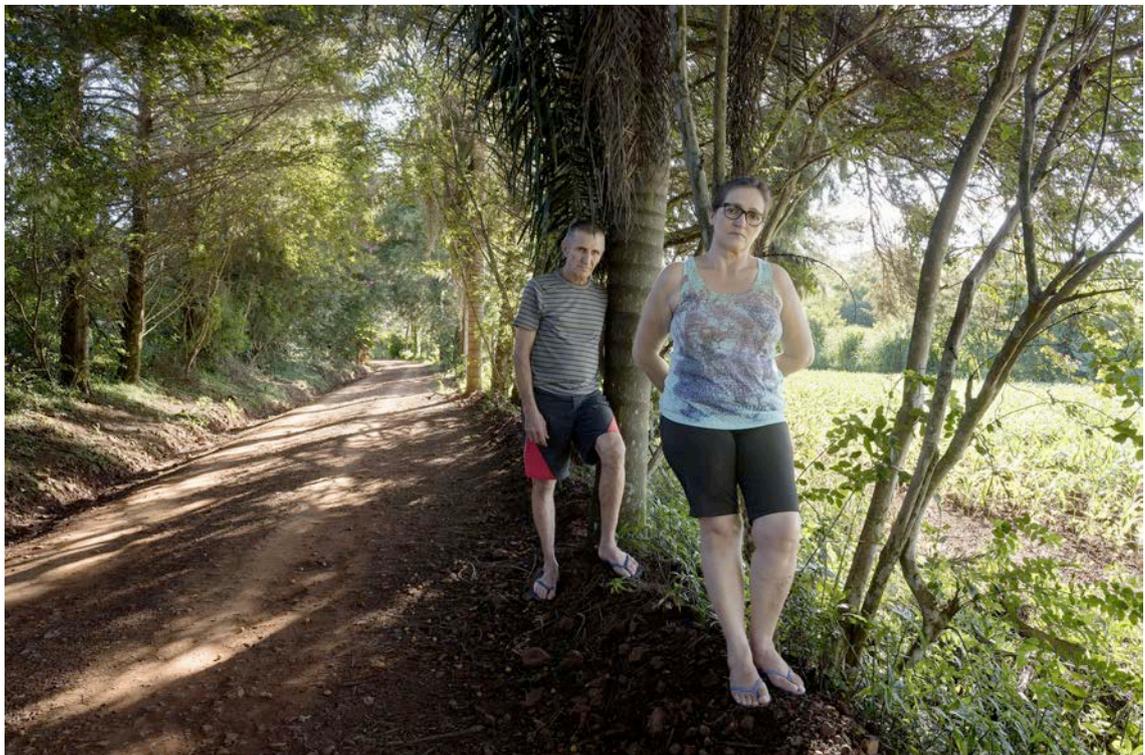
*‘make your move otherwise you drown’. We hope Panambi doesn’t happen...’* (Cirlei Heming Dawies, interviewed on February 23, 2016)

Nilson completes:

*“We’ve got a bomb in our hands. Up to now, nobody can tell if it will explode or not... But the fact is: this bomb is connected to our minds and hearts.”* (Nilson Roque Dawies, interviewed on February 23, 2016)

Cirlei and Nilson chose to be portrayed at “tunnel of trees” located at the main entrance to their land (the first sight that reminds them they are back home, after any trip, as they said). She positioned herself by one of the over six hundred native trees herself and her husband have been planting and looking after in their property. We set the details up and started the shoot. As I was about to start clicking, Cirlei looked at (through?) the camera lens and tears started to roll down her face. I waited a bit before clicking, in order to give her time to wipe them away, or to recover herself, if she wished for it, but she remained there, posing, convinced of her attitude, eyeing “me” through the lens. Then I carried on (Fig. 3.4).

FIG. 3.4. Portrait of Cirlei (Nega) and Nilson (Nique) – first shot.



Cirlei's and Nilson's feeling: sorrow

Location chosen by the couple: tunnel of trees at the main entrance of Cirlei and Nilson's property.

Object chosen by the couple: trees.

ORIGINAL IN COLOUR

© Cirlei Heming Dawies, Nilson Roque Dawies, and Marilene Ribeiro 2016

As the photo shoot finished, she explained: *"while I was standing there, it came out. I decided not to hold back but rather let it flow. After all, it is all truth, isn't it?"* Somehow, our encounter touched her in a way that she ended up finding herself overwhelmed by her thoughts and feelings. Her body engaged in presenting herself to the camera as nothing else but Cirlei's (genuine) feeling. She consciously decided to be depicted in that way—"quietly" weeping. Cirlei resolved not to conceal her pain from the Other<sup>22</sup>, probably because she wanted her arguments clear enough to whoever receives the image produced as it openly speaks (to me, to the audience, to herself, and mainly, I assume, to decision-makers and all those in favour of the Panambi dam project): look at what the Panambi dam project represents to me. Notably, Cirlei is not crying for mercy, she is precisely showing the viewer how damaging the Panambi dam looks.

As I have briefly cited in the previous chapter, after some time, when my time staying with Cirlei was coming to an end, she stated: *"take it for sure: my husband and I will talk about this<sup>23</sup> tonight... This time together with you was really strong for us."* I didn't sleep well that night and I guess neither did Cirlei, because of the emotional resonance of our encounter, which I hope was captured, to some extent, in the photograph we made.

Like Gumercino, Isabel was also displaced by the Sobradinho dam. She moved from Fazenda das Pedras village to Correnteza village, then to Algodões village, and finally to Sobradinho town, where she currently lives. During the interview, she recalls her origins, Fazenda das Pedras' legends, traditional folk songs, landscape, and describes the day of the move:

*"The saddest thing was to watch families being torn apart. Relatives crying, passing out, throwing themselves in the river... desperate... desperate about taking distinct routes. People who might never have met each other again..."* (Isabel Aniceto, interviewed on

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<sup>22</sup> Everyone else, but Cirlei herself.

<sup>23</sup> The issues concerning the Panambi dam project along with Cirlei's and Nilson's thoughts on them and their experiences with the photo shoot.

April 22, 2015)

Isabel named her feeling with regard to the Sobradinho dam “dismantlement” and chose the iron which had formerly belonged to her mother to represent this lively scene she had described. Some days later, when I returned to say “farewell” to Isabel, she replied:

*“Thank you, Marilene, for giving us self-esteem, for redeeming our history, for lighting up things that were fading inside us, for making us remember what we should never forget.”*

What led Isabel to the above “conclusion” about our encounter? What motivated Isabel to keep thinking about our experience together even during all those days I was not there anymore? Was the assembled feeling regarding the Sobradinho dam – dismantlement – as well as was her shoot that triggered such thoughts? Isabel’s words suggest participants eventually not only making meaning to the Other but also (re-)shaping signs and relations in their own minds to present outcomes to themselves. As such, the work the participants and I undertook together became a channel for empowerment—as will be elaborated in this Chapter, building my arguments on subject and power in the realm of photography and politics.

I argue that the other reason for the strength of this research lies in the other foundation of the practice, i.e. the medium selected as method of inquiry: photography. When Jean Baudrillard, French philosopher, sociologist, and photographer, also interested in Semiotics, published *Simulacra and Simulations*, in 1988, he urged that media like photography, and video (especially television, within the author’s discourse), emulate what they represent in such a peculiar and precise way that they end up overlaying the “reality”, eventually becoming the “reality” (Baudrillard, 1988). This is where the power of these *écran*-made images lies in: by pretending to be the “real”, they immediately convince those before them that what they see is in fact the “real” and no longer mere representations of the “real”. Roland Barthes, also a French philosopher, literary and cultural theorist, and semiotician, had previously reflected on this feature of photography in his seminal book *Camera lucida* (1981)—originally published in French, in 1980. According to Barthes, every photograph pertains the *spectra* of its referent, consequently, what addressees in fact perceive, once before a photograph, is the real thing that “*was there*” facing the lens to make the shot happen – i.e. once before a photograph, viewers are not looking at a piece of paper (the print, e.g.) which represents something or someone “*that/who was there*” when the camera captured that given instant, they are rather

looking at the very thing/individual as does the artist while drawing through a *camera lucida*: the artist is looking at the real model before her/him and at the drawing paper at the same time, what is in front of him/her is the actual referent (Barthes, 1981:106). This phenomenon addressed by Barthes and later expanded by Baudrillard makes photography, video, and television effective means for claims, protests, activism, and so on, as they not only seize the audience's attention but also impel the audience to react to them as the latter cannot simply ignore that "real thing" which/who performs before their very eyes. Even aware of the digital manipulation of images (and the postproduction/edit that has accompanied these media since their early times), one cannot help having this prompt reaction: *this was there* (Price and Wells, 2015:19-20), which also relates to the indexical property of the photograph<sup>24</sup>. Therefore, once looking at the portrait of Cirlei and Nilson (Fig. 3.4), for instance, the beholder might perceive the actual couple in front of him/her and mentally interact with them<sup>25</sup>. These reflections draw me to the political attributes of photography.

### **3.3 Photography and power**

I do not aim to analyse politics in all its aspects, including the arguments that cover its sheer definition (as this would deserve a further entire thesis). Nonetheless, I am interested in discussing the role of photography in the process of negotiation between individuals and groups, therefore, in politics as its strict (but not less elaborate) definition: *the complex or aggregate of relationships of people in society, especially those relationships involving authority or power*<sup>26</sup>.

Although the French theorist and philosopher Jacques Rancière deconstructs the term by, at the very beginning of his gathered volume *Dissensus* (2010), affirming that politics is not the exercise of power but rather the every ordinary act of every person within a given society – society which is ruled by systems or, as Rancière stresses, "regimes" (*Ten thesis on politics* – Rancière, 2010:27-44), I tend to consider that, despite the author seeming to distance politics from power, he is in fact bringing the latter to the daily individuals' negotiation arena (which is, in the end, organised by those in power, e.g. market demand).

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<sup>24</sup> Even if nowadays, with the advantage of software-generated photographs, this indexical characteristic has been questioned (e.g. Price, 2015:93; and Lehmuskallio et al., 2018)

<sup>25</sup> Also because the couple "stands" before the viewer in their "live colours" – see **Methodology** for details on my choice of colour photography in this project.

<sup>26</sup> One of the over ten possible definitions by the Collins dictionary. [online] At: <https://www.collinsdictionary.com/dictionary/english/politics>

Also, according to Rancière (2004), the system that regulates aesthetics, equips art practices (e.g. photography) with a political agency, i.e. the inherent characteristics of art make its practice able to establish relations between people by making the invisible visible and leading those involved in such negotiation (i.e. producer and recipient) to art-mediated actions, what he calls the “meta-politics of the sensory community”<sup>27</sup>. For him (Rancière, 2004, 2010), aesthetics and politics cannot be considered antithetic, or inter-excludable agencies as they run together, blended and overlaid. At the same time, Rancière (2010) highlights that it is not the object of art itself (i.e. what the beholder sees limited by the frame only) that will determine whether it will be faced as political or not but the discourse where such work is embedded, the context where it is inserted into. This unveils the role that artist (producer), audience (recipient), and the site where the work is presented to its viewers play in moulding the existence of the political agencies in a given work.

The artist, curator, and photography writer Ariella Azoulay shares the same vision of Rancière’s. During the last eighteen years, Azoulay has been working with the role of photography and citizenry in contemporary disasters (with her special interest in the Israeli-Palestinian conflict) and has produced two groundbreaking books: *The Civil contract of Photography* (2008) and *Civil imagination – a political ontology of Photography* (2012). In *Civil imagination* (2012), Azoulay retakes the debate around the validity of works that reclaim the political. For most art critics, curators, and art historians (who Azoulay addresses as “trained spectator”) nothing else should be labelled as “art” but the formally presented beauty – taking the formal and beauty as qualities pre-determined by the regime of the art world (e.g. by the art market community), which Azoulay refers to as the institutionalized “third judgment of taste”. According to these trained spectators, everything that looks “too political” does not deserve to be regarded (i.e. considered “art”) as, for them, the political and the aesthetics are oppositional and immiscible agencies, hence, “too political” means “not aesthetical enough” to be perceived as art (Azoulay, 2012:38-41). She denies this assumption by affirming that every art piece is made of the political (“*a space of relations between people who are exposed to one another in public*” – Azoulay, 2012:52) and the aesthetics (the arrangement of form, shape, contrasts, opposites, etc.): hence, a piece under scrutiny cannot be judged based on the inter-exclusion between political and aesthetical as these two features are intertwined. Again, using as an example the portrait of Cirlei and Nilson (Fig. 3.4): aesthetic choices, like how to position

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<sup>27</sup> Meta-politics is defined as a way of doing politics other than the way politics is usually run.

the couple in relation to the lane, the field and the trees, how to make use of lines and diagonal, light and shadow, etc., are thought out when the photograph is being made; at the same time, relations between the photographer, the two sitters, and potential viewers of this portrait are triggered by the photograph, i.e. by the object. Notably, the main purpose of Cirlei and Nilson's photograph is to expose the harms caused by the Panambi hydropower project. Hence, besides the strong political message it contains, aesthetic elements are designed to reach the viewer. As I have explored in **Chapter Two** (p. 110-113), Grant Kester's discourse (1998, 2006, 2013) has also reinforced Rancière's and Azoulay's. As I have also stated in **Chapter Two**, I am compelled to agree with Rancière's, Azoulay's, and Kester's arguments as well as to advocate for bodies of work not to be maligned because they look "too political" or appear as a form of "activism" as, in the end, both advocacy and politics are at the core of what art is. In my understanding, art consists of an individual or a collective provoking society by articulating their perceptions, enquiries, inquiries, anguishes, and criticisms about the world they live in. Artists are in a position to somehow challenge the rule-ruled relationship.

This same logic applied by trained spectators seems to be the cornerstone for a not less fervent debate involving art, photography, and politics for the last thirty years: the aestheticization of the suffering.

Critics, journalists, writers, academics, etc. have stressed that some works look "too aesthetic" to advocate for anything but art itself, as their beauty ends up concealing the actual issue portrayed, making it appear banal, predictable and therefore mundane, not "political enough", whereas, to be political there needs to be a "jarring" element to stimulate the viewer (see Strauss, 2003:6 and Azoulay, 2012:42-43, 101, 118-119). Regarding this, one artist that springs to mind is the Brazilian photographer Sebastião Salgado. Salgado's work has long been widely criticized for being much too beautiful to be able to expose his audience to the inconceivable tragedy he tries to depict<sup>28</sup>. Critics have said Salgado's photographs distract the viewer's eyes from what needs to be looked at—whether one intends to take his work as a claim for how uneven and cruel this world we all live in is—towards the beautiful light, shapes, and texture presented (see Pires, 2015).

David Levi Strauss, an American essayist, poet, and educator who has produced a substantial work for the Aperture Foundation, opens up his arguments regarding this theme, which has

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<sup>28</sup> Most memorable drawback analyses from Salgado's work coming from The New Yorker's journalist Ingrid Sischy (Sischy, 1991) and the New York Times' writer Michael Kimmelman (Kimmelman, 2001).

insistently haunted social documentary photography, in an article he wrote back in 1992 (entitled *The documentary debate: aesthetic or anaesthetic? Or, what's so funny about peace, love, understanding, and social documentary?*) and re-published later, in 2003, as part of the gathered-essay book *Between the eyes - essays on photography and politics*. Strauss argues that once the aesthetics is the result of the codifying process used by human beings to visually communicate to each other (i.e. the result of semiosis) the former is inherent of photography despite its area. In other words, even the named social documentary photography has no option but to present itself as “aestheticized” to the viewer.

*“To represent is to aestheticize; that is to transform. It presents a vast field of choices but it does not include the choice not to transform, not to change or alter whatever is being represented. It cannot be a pure process, in practice. This goes for photography as much as for any other means of representation. But this is no reason to back away from the process. The aesthetics is not objective and is not reducible to quantitative scientific terms. Quantity can only measure physical phenomena, and it is misapplied in aesthetics, which often deals with what is not there, imagining things into existence. To become legible to others, these imaginings must be socially and culturally encoded. That is aestheticization.”*  
(Strauss, 2003:9)

By stressing this, Strauss tries to counter-point *The New Yorker* writer Ingrid Sischy's stakes on Salgado's photographs, as Sischy had argued that beauty does not claim for action but for contemplation only; hence, Salgado's “beautification of tragedy” would not be acceptable as a political act—i.e. as socially-engaged photography (Sischy, 1991). Strauss is not defending Salgado but actually considering the fact that beauty might be a strategy to grasp the viewer's attention to a social issue. Against social documentary photography created to be an object of consumption (conceived aestheticised with the aim to be saleable in the art/photography market or to be used as propaganda—to indoctrinate people), Strauss stresses that there are photographers who are honestly engaged in communicating the tension they perceive and they will make use of every skill needed to communicate, which will inevitably involve absorbing the aesthetics into their work too (Strauss, 2003).

To photography writer Mark Durden, beyond the issues related to the so-called “beautification of the suffering”, the weakness of traditional documentary practices might lie in the way that many documentary photographers capture and present those who stand in front of their lenses (Durden, 2000). In his writing, Durden suggests that the empathetic involvement of the

researcher (i.e. photographer) into the researched's world, the engagement of the researcher with her/his subject's perspectives (an example of this affiliation can also be found in *Photography today* – Durden, 2014:300) as well as the use of subjectivity in the making/setting up of the work could overcome these problems related to documentary practices and, potentially, prevent the social documentary work from being turned into an object for contemplation only (as Sischy has warned) or rather into a commodity for the art (or even the advertisement) market. In his first book, Durden (2000) takes as example James Agee and Walker Evans' book *Let us now praise famous men* (1941). He compares Agee's (writer of *Praise*) to Walker Evans' (photographer of *Praise*) approach. Durden points out that Evans' objective, clinical, almost didactic way of presenting his subjects (sharecroppers in Southern United States) transforms them into mere icons of the effects of the American great depression, hence the resultant images are not capable of triggering any response from viewers but the punctual acknowledgement of the factual situation and the harmonious composition of the portraits they see. In contrast, Agee's texts concerning the same tenant farm families exude the author's reflections and insights regarding the lives of his subjects (and also concerning the experiences of the writer and the photographer when staying with them, albeit temporarily), not restricting himself in presenting a straightforward vision of the situation sharecroppers were facing. Unlike Evans', Agee's "book" brings up his engagement and empathy with those he represents. Concluding his analysis, Durden invites photographers to explore this subjective and more empathetic and sensitive approach.

*" [...] While drawing attention to Praise I am looking back to a moment in documentary history, but a moment crucial in understanding the very real and difficult social exchanges which have to be negotiated in documentary making today. Praise helps us rethink the idea of documentary as simply one of disengagement, the disengagement of the aesthetic spectacle of celebrated artistic forms of documentary practice, the disengagement of emotionless TV news reporting of disasters. Instead, Let Us Now Praise Famous Men helps us acknowledge the need for a documentary which is more empathetic, subjective, engaged. And this move to engagement [...] opens up a space for contestation, orients us to action."* (Durden, 2000:37)

In this PhD project this sort of subjectivity and engagement with the "depicted subjects" is pursued. Firstly, because participants' feelings are at the core of this practice; secondly, because the narrative constructed is rooted not exclusively in my own evaluation and framing of the situation riverside dwellers (my "subjects") have faced but in what rises from the

altogether participants' and my own perceptions regarding the dams surveyed. Participants feed and add to my understanding and, at the same time, my proposal gives them room for reflections and externalisation of their thoughts. This commitment between us then permeates both the photographs delivered to the audience as well as the juxtaposed textual information that accompanies—and contextualizes—these images. Furthermore, the photographs we work on do not intend to set the depicted person as an objective victim but as a speaker<sup>29</sup>. That said, it is worthy to note that, at the same time, I am not denying or putting the aesthetics aside throughout the making (as I have addressed in p. 133-134), as, like Strauss has reminded us, the aesthetics is inherent to the process of enabling communication between people through a visual means—in this case, photography. Then, every portrait in this work is carefully arranged, posed, and taken based on my technical training as a visual arts practitioner.

Building upon Strauss' discourse previously outlined here, Azoulay (2008, 2012) draws her arguments in compliance with his insight to demand that photography can (and must) be used not only to communicate but also to appeal for action concerning regime-made disasters<sup>30</sup>. She acknowledges both subject and viewer as active parts in the process of photography and not mere "things" that respectively reflect light and passively observe the image but as protagonists that enable the politics through the photography thread to happen. By positioning like this, Azoulay tackles another dilemma of photography: does photography (or art) have any power to change the world?

This is a key aspect of my practice. However, the power of art (including photography) in politics is simultaneously always in doubt, take the American artist and writer Martha Rosler in her striking paper *In, around and afterthoughts (on photography)* (1981). Even decades after its publication (which was followed by another piece delivered in 2001—entitled *Post-documentary, post-photography?*), the rationale presented by Rosler has been taken as the ground to sustain the arguments that photography (including documentary photography) would not make any difference to the wounds inflicted (and that will continue to be inflicted) by the "regime". For Rosler and her followers, photography would end up simply documenting

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<sup>29</sup> As already outlined in **Chapter Two** (p. 95-97).

<sup>30</sup> According to Azoulay (2008), regime-made disaster is every catastrophe (famine, genocide, oil "accidents" in the sea, global warming, etc.) that consists of nothing else but the outcome of the system (regime) of power in which we live (capitalism, democracy, etc.), i.e. the system operates in a way that either allows or fosters such disasters to happen.

these wounds and reinforcing the social and economic extremes it exposes, like a reverse mirror that shows and reminds those before it who (luckily) are not them.

*"[...] The liberal documentary [the work that is dealt as a commodity by both the media and the art gallery system] assuages any stirrings of conscience in its viewers the way scratching relieves itch and simultaneously reassures them about their relative wealth and social position; especially the latter, now that even the veneer of social concern has dropped away from the upwardly mobile and comfortable social sectors. [...] Documentary, as we know it, carries (old) information about a group of powerless people to another group addressed as socially powerful." (Rosler, 1981:307)*

Rosler's "afterthoughts" can make even more sense today, considering the interest of photography festivals, gallery dealers and their clients in transforming the "threats" depicted in the photographic work "into fantasy" (adopting Rosler's words), or considering the abuse the internet and social media make of socially-engaged/activistic images, shifting the latter from exposé/claim for reaction to common place and noise, consequently numbing their audience.

However, Michelle Bogre (2012) responds to Rosler's arguments by suggesting that photography can make the difference, not as an end but as one of the interconnected means that will eventually lead to change. As a writer and educator in the field of photography (also a photographer), Bogre reminds us that the photographs from Vietnam changed the public opinion regarding the role of the United States and the heroic look of the war, triggering the anti-war movement. She also cites the work photographer Marcus Bleasdale has done for over ten years: covering the violence inflicted by the Lord's Resistance Army (LRA) upon the civilians of the Republic Democratic of the Congo (RDC). This work, which had been presented at the United States Senate, the United Nations, and Ministry of Foreign Affairs in France, eventually contributed to President Obama signing, in 2010, the bill that pledged for logistic and financial support to put an end to the LRA.

In 2012, Aperture Foundation and the Smithsonian Institute published the book *Photography changes everything* (edited by Marvin Heiferman), with one of its chapters dedicated to stress the power of photography as a relevant tool for change. The author, Frank H. Goodyear III (2012), associate curator of photography of the Smithsonian National Portrait Gallery in Washington DC, like Bogre, acknowledges the impact of photography in the understanding of

social (and, I need to add here, environmental) outrages as well as in the struggle for a “revolution” in the social, political, and economic norms. My understanding is that this has been one of the major uses of photography within social media nowadays (*selfies* and diary-related posts apart)—take, for instance, viral photographs (and videos) that uncover appalling facts, which then motivate people to sign online petitions that urge for the ban of plastic bags in the oceans or for the permission of arrivals of refugees in a given country.

Regarding these reflections, photographer Anthony Luvera adds (Luvera, 2017)<sup>31</sup>:

*“I think photography and photographs can have very powerful effects on people – I know that they certainly have on me. There would be moments in History where the use of a particular image has a really extraordinary effect on the political, social, cultural moments, that is something that is very well documented, and very well written and thought about, you know... I forgot the name... there is the photographer who created the image of the man falling from the Twin Towers, for instance... There are key images that emerged from, let’s say, the Vietnam War or from the refugee crisis – [the image] with the small boy washed up on the beach<sup>32</sup>. Some of that imagery that came out of the recent Grenfell Tower’s tragedy, I think, will be burnt on people’s consciousness in relation to debates around homelessness and social housing. So, I do think that photographs play a very important role in mediating information about events, people, and places.”*

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<sup>31</sup> For the entire interview I undertook with Anthony Luvera, please see **Appendix 6**.

<sup>32</sup> Regarding Luvera’s statement and yet concerning the power of photography as a means for change, there is the headline of an article at *The Independent* about the images of this little boy: ***If these extraordinarily powerful images of a dead Syrian child washed up on a beach don’t change Europe’s attitude to refugees, what will?*** [headline] “The boy was part of a group of 11 Syrians who drowned off the coastal town of Bodrum in Turkey after an apparent failed attempt to flee the war-ravaged country. [...] They are extraordinary images and serve as a stark reminder that, as European leaders increasingly try to prevent refugees from settling in the continent, more and more refugees are dying in their desperation to flee persecution and reach safety. The Independent has taken the decision to publish these images because, among the often glib words about the ‘ongoing migrant crisis’, it is all too easy to forget the reality of the desperate situation facing many refugees. [...]” (Adam Withnall, September 02, 2015, The Independent) Photographs © Reuters 2015 [online] At: <http://www.independent.co.uk/news/world/europe/if-these-extraordinarily-powerful-images-of-a-dead-syrian-child-washed-up-on-a-beach-don-t-change-10482757.html> As also discussed in this Chapter (a topic that I will return to in **Chapter Five** too), the images of the dead boy led to feverous debates on the need or not to expose readers/viewers to images of atrocities, not only amidst social media users but also amongst newspaper readers, as testified by a long text that followed the release of the images depicting the drowned boy by *The Guardian*—text that provided readers the rationale behind the decision of *The Guardian* staff to publicise those images: “[...] News photographs, when used in the context of reporting, can become tipping points in changing attitudes and awareness. [...]” (Jamie Fahey, September 07, 2015, The Guardian) [online] At: <https://www.theguardian.com/commentisfree/2015/sep/07/guardian-decision-to-publish-shocking-photos-of-aylan-kurdi>

I insist that such impacts are only possible to achieve because photography embodies the simulacrum: the “actual thing”, in flesh and blood, is unfolding in front of the viewer. I will come back to these discussions in the chapter dedicated to my own practice (**Chapter Five**).

Photographer Susan Meiselas also notes images as potential igniters of transformation in society (Meiselas, 2017)<sup>33</sup>: *“Photography can influence how we see, think, understand and perhaps at times engage or act. We simply cannot always measure or trace how it works on our minds and actions.”*

Unfortunately, most socially and/or environmentally engaged photography works do not cause such quick responses from either society or decision-makers, they rather become one of the steps in a long process that can take decades, or even centuries to transform a specific matter (and, as Meiselas has stressed above, the participation of photography in such transformation would happen through paths that are usually difficult to track). But, as part of the process, they are equally necessary for the change to happen. Hence, it is important that this kind of work is undertaken as we, individuals living in society, need to see ourselves as part of the system, i.e. part of the problem and its accomplices too (but also part of the solution, as Bogre and Goodyear III have illustrated). I reinforce my above considerations using Rancière’s, Azoulay’s, and Barthes’ reasoning.

When discussing what Rancière had called “critical art”, he stated:

*“Critical art is an art that aims to produce a new perception of the world, and therefore to create a commitment to its transformation<sup>34</sup>. This schema, very simple in appearance, is actually the conjunction of three processes: first, the production of a sensory form of “strangeness”; second, the development of an awareness of the reason for that strangeness and third, a mobilization of individuals as a result of that awareness.”*  
(Rancière, 2010:142)

Further on he assumes that “critical art”<sup>35</sup> has been moved towards “testimony art”, in which the practice turns to “[...] testimony, archive, and documentation processes seeking to give us

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<sup>33</sup> For the entire interview I undertook with Susan Meiselas, see **Appendix 6**.

<sup>34</sup> My emphasis: underlined.

<sup>35</sup> Critical art accounts for those practices that aim to produce a sensory clash in the beholder - e.g. by juxtaposing an iconic image to a “new” context, i.e. setting up this image “out” of its original purpose or interpretation - in order to speak about an issue that need to be changed. Martha Rosler’s work *House Beautiful (bringing war home)* (1967-

*(spectators) a new perception of the traces of our History and the signs of our community*” (Rancière, 2010:145) in order to present “proofs” to the audience regarding how a given society operates to, surprisingly, question and criticize it. He presumes “testimony art” would be more effective than “critical art” in rupturing the common sense. However, the same above schema elaborated by Rancière (apart from the word “strangeness” which should be swapped to “evidence”) drives “testimony art”. In other words, both critical and testimony art come to life to advocate for something that one (its conceiver) believes must be rethought, as a consequence, one and another could be taken as a manifestation of “activism”.

Reflecting Rancière’s above reasoning on my own practice, participant Vilberto, fisherman who was also displaced by the Sobradinho dam about forty years ago, decided to be portrayed by the riverside holding his fishing net, which led me to photograph his fisherman IDs and the diapositive from his former place of living his mother-in-law had kept (Figs. 3.5 and 3.6). Our choices mean that we are in fact documenting how the life in the riverside communities used to be before the dam. At the same time, we are witnessing what the regime has seized from these people (because his portrait and the photograph of his ID are brought together with additional images, testimonials, and information that communicates this meaning—a design that I will develop and exemplify in more depth in **Chapter Five**). By testifying, we are also denouncing something that needs to be rethought: the way energy, people, and the natural landscape are regarded in the society that we currently live in. Not forgetting that Vilberto and I are making use of aesthetics to accomplish this.

FIGURE. 3.5. Portrait of Vilberto – 3<sup>rd</sup> shot.



ORIGINAL IN COLOUR © Vilberto Alves Neri and Marilene Ribeiro 2015

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72), which consists of collages of photographs gathered from newspapers and magazines that put the Vietnam war literally inside the American families’ homes, is an example of “critical art”, according to Rancière.

FIGURE. 3.6. (a) Vilberto's Fisherman ID, variable times; (b) onion plantation near to the currently submerged Juacema village, ca. 1970 (Vilberto's wife: at the centre, wearing a white dress and a handkerchief around head).

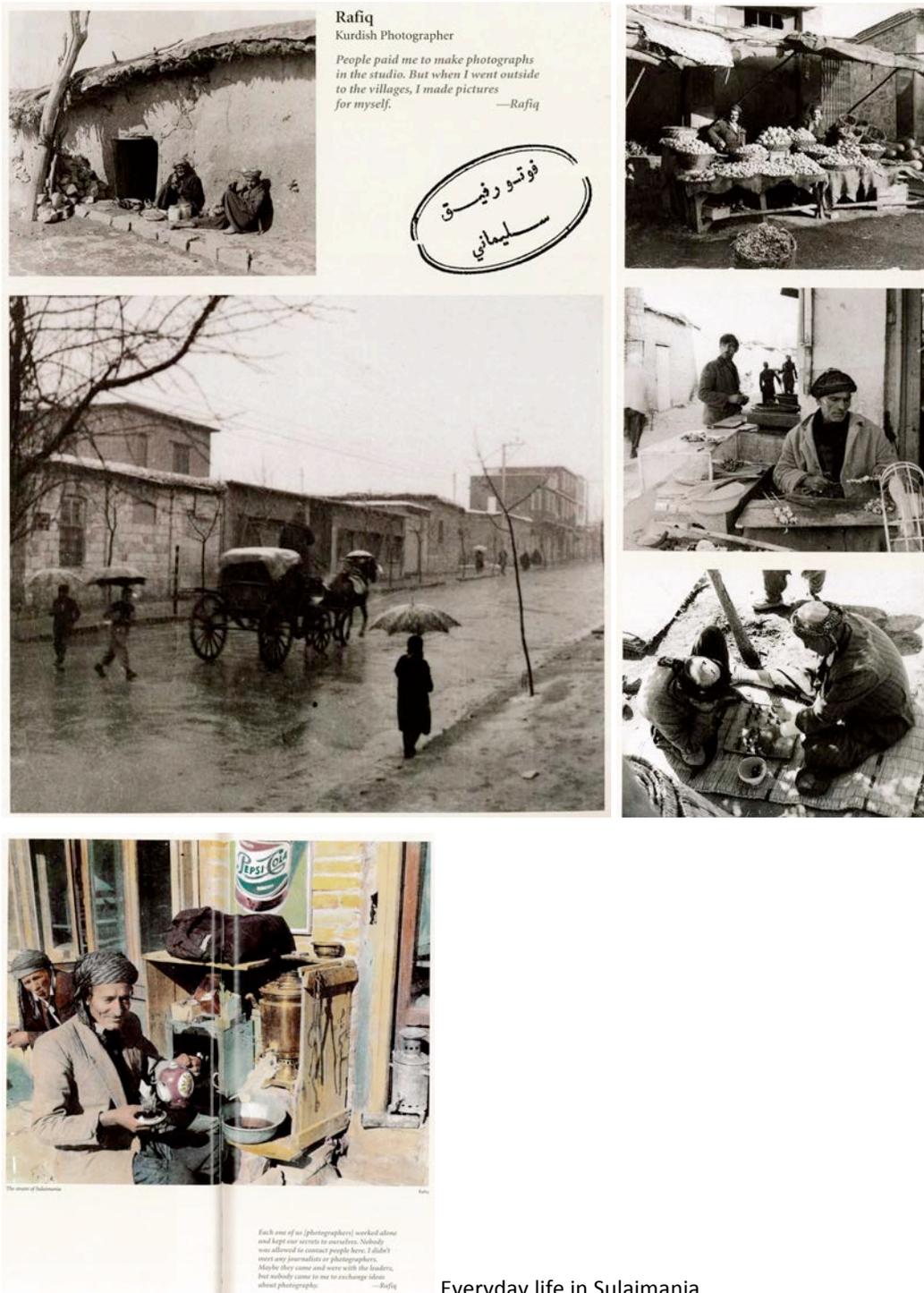


Re-photographed from (a) Vilberto's and (b) Valdenice's personal archive. Originals as (a) printed ID cards and (b) diapositive.  
ORIGINAL IN COLOUR

© Marilene Ribeiro 2015

Both works conceived by photographer Susan Meiselas, *Encounters with the Dani: stories from the Baliem Valley* (2003) and *Kurdistan: in the shadow of History* (1998/2008), emphasize this approach highlighted by Rancière: “testimony, archive, and documentation processes in order to reaffirm and question”. By gathering “documents” (e.g. newspaper and magazine articles, missionaries’ diaries, anthropologists’ testimonials, etc.) from distinct periods of time and distinct sources, including herself and collaborators who belonged to the researched community (i.e. respectively Dani and Kurd), Meiselas reaffirms, in the form of a book, the way our society understands and undertakes history. At the same time, Meiselas’ work raises questions concerning whether the so-called experts told the “truth” about facts, whether their accounts are unbiased, what is the “truth” when it comes to history. Given that history and anthropology are academic subjects that adhere to political norms regarding knowledge and facts, have the voices of those who have been the subject of study been included in the process of recording history? Meiselas’ books de-construct our pre-conceived Western idea about natives from New Guinea and Mesopotamia, by considering the kaleidoscope of possibilities to tell one story, particularly from the Dani’s and Kurds’ perspectives on themselves (Fig. 3.7; see also **Chapter Two** – Figs. 2.1 and 2.2, p. 87, 89-90). She also points to how disastrous the relationship between human beings from different cultural backgrounds can be and even this fact can be concealed, depending on the way the story is told. The rearrangement proposed by Meiselas questions the authority of the idea of a single history, as it has been embedded in our education. For Meiselas, History as our society currently understands it should be challenged.

FIGURE. 3.7. Some images from *Kurdistan: in the shadow of History* (Meiselas, 2008). Note how Meiselas gathers and weaves different sources of information in order to play around distinct possibilities of interpretations of the role of the Kurds throughout history.





Shaikh Letif, son of Shaikh Mahmud



Typewords of Sulaimania

Note (right): also “everyday life” in Sulaimania. Kurds depicted as warriors and people of war.

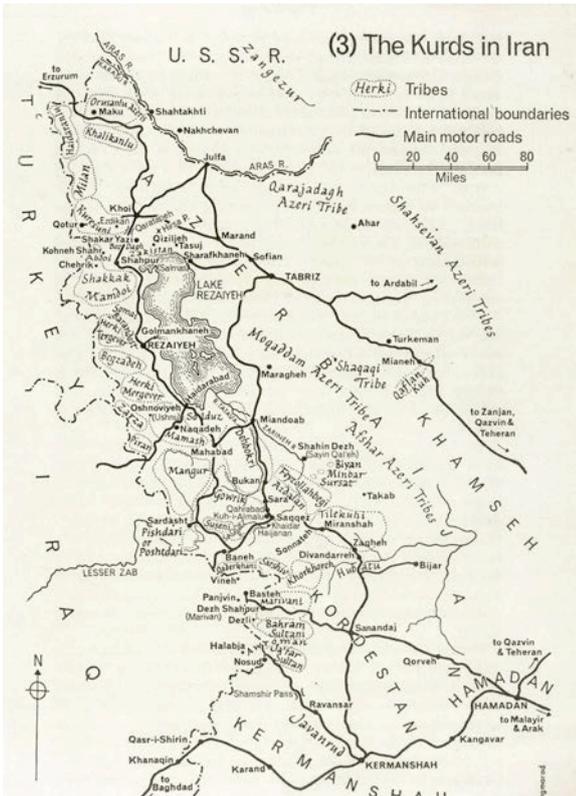
© Mahmud Efendi - Kurdish photographer (father of Rafiq)



From the note at bottom-left *Kurdistan princess reveals harem dances!* Here the Kurdish culture is depicted as a fairy tale.

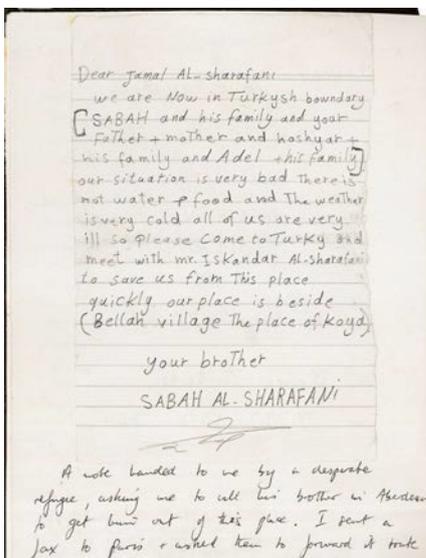
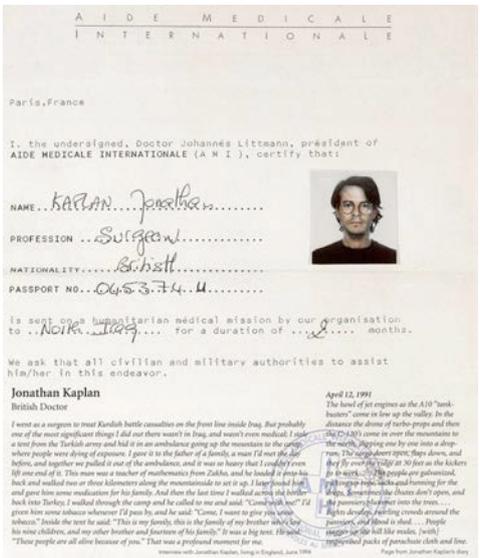
ORIGINAL IN COLOUR

© M. Camuzzi/Kurdish Institute of Paris (left) © Unknown/UPI/Corbis-Bettmann, New York (right)



Map of the Kurdish tribes in Iran. Reproduced in Hassan Arfa *The Kurds* (1966). Note the existence of Kurdistan as a geographical territory (Kordestan). ORIGINAL IN COLOUR

© Hassan Arfa



Top-left: Humanitarian Medical Mission ID; right: archive; Bottom-centre: Kaplan's testimonial about the struggle of the Kurds he witnessed himself. ORIGINAL IN COLOUR

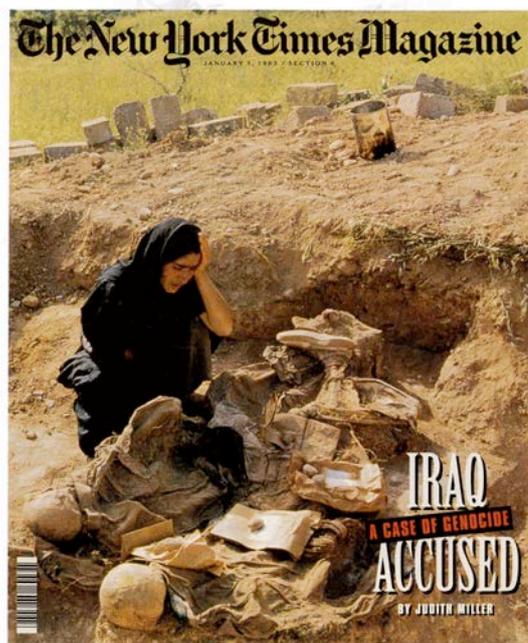
© Jonathan Kaplan



Kurdish refugee fleeing during Saddam Hussein's regime.  
 Kurds portrayed as refugees.

ORIGINAL IN COLOUR

© Anthony Suau/Life 1991



Reportage on the mass murder of Kurds during Saddam Hussein's regime. In this case, the just found mass grave with the killed villagers of Koreme.  
 Kurds as victims of genocide.

ORIGINAL IN COLOUR

© Susan Meiselas/Magnum Photos

"Critical" or "testimony" labels aside, this uneasy feeling awakened by every work of art (with my interest here specially in the photographic work) has to do with the property of art to

deliver what Rancière (2010) names “*dissensus*”. The regime in which people interrelate works sustained by the “*consensus*”—something agreed by the whole given community, and reinforced by those who rule such regimes, as the natural order of things, hence, taken as the comfortable truth (e.g. we, contemporary society, need energy, thus we need to cope—and cooperate—with this system as we cannot see any other scenario but this one). *Dissensus* is any proposal that urges for a different rule, disrupting that widely accepted *consensus*, even if this proposal is conjectural. It might happen that, after some time, this first collectively inconceivable proposal (*dissensus*) is absorbed and accepted by that given community, becoming a new *consensus* until the time comes for another *dissensus* to rise. For Rancière, this is how politics is performed: between this transit and tension between *consensus* and *dissensus*. Those who rule (“the police”) use the *consensus* to authenticate their power. Those who are ruled can either reproduce the *consensus* or produce *dissensus*. But, if their voices are not listened to, they are virtually excluded from any action. As ruled-excluded, they would have no option but to follow that which is imposed upon them by the other two portions of society: the rulers and the ruled-included. This is also the case for democracy: ruler-ruled (and in amongst the ruled, those whose voices are included or excluded). Obviously, this political play is not fixed, it can change over time, as revolutions may occur.

If photography can be a “place” for *dissensus* to manifest, thus it is a channel for pleading against environmental and social abuses that are widely acceptable as the costs paid for our way of living, or the sacrifices of the “development” (*consensus*) as well as for urging for a new order. If photography can embrace *dissensus*, it is a relevant piece in the process of social, political, and economic change, hence photography may be used thus. If both the environment and specific communities have been overlooked and silenced for the global economic good and this logic needs to be reviewed, then photography can be one of the means towards this redefinition in the social norm. Especially because photography also holds another crucial feature for triggering reflection (and action): “*photography has something to do with resurrection*” (Barthes, 1981:82).

Roland Barthes warns his readers by the second page of *Camera lucida* (1981), and expands this concept throughout his book, that one of the powers of the photograph (as a simulacrum) upon its beholder resides in its ability to reproduce to the infinity an event that has taken place only once. Many thinkers have also acknowledged and discussed this characteristic along the History of photography (e.g. Sontag, 2001), but it is Ariella Azoulay (2008, 2012) who fiercely plays with it within the arenas of politics and citizenship. Azoulay defines the “act” that is

being unfolded when the camera, the photographer, and the subject occupy the same time/space as “the event of photography”. The resultant image that eventually becomes available (or not) to us, beholders, via TV news, magazines, newspapers, the Internet, museums, institutions’ archives, etc.—which is definitely not capable of capturing everything that was happening at that certain space/time, but rather providing us with a selected fraction of it only—is the “photographed event”. Even considering this limitation, the photograph still has the ability to resonate the “event of photography” in the future, informing the beholder about what might have happened. However, this is not the sheer information that the photograph brings with itself, as I have elaborated above in this Chapter, when the beholder is looking at the photograph she/he is watching the actual event of photography happening again, like in a play, “live”. As an actual thing, the beholder cannot ignore what she/he sees and has no choice but to be somehow touched by such a thing, as also noticed by Barthes (1981). Azoulay carries on concluding that the beholder (reader of the image) holds a fundamental role as an active piece in the photography net (which Rancière has also asserted – see p. 133) and urging she/he to take this power further as an instrument to (once aware of the “thing” she/he has just seen) negotiate with the regime, as a means to citizenship.

*“[...] The civil use of the attributes of photography forms part of the effort to read the past from a vantage point other than that of the regime – the regime of disaster – and to describe it in terms of a vocabulary that contests the rhetoric of the regime [the consensus?]. This is the attempt to contest the claims of the regime through the evocation of a civil language that it consistently fails to recognize.” (Azoulay, 2012:241)*

Whether the experience of the “event of photography” from the “photographed event” can lead individuals to psychological reactions as well as to everything else derived from this, then photography can be an efficient method to reach those geographically or socially far from the “event”, to raise awareness, and to pursue change. One cannot deny the power of the Internet and social media in pressing for changes, and photographs are a vital part of their accomplishments with regard to environmental and social claims (as cited on p. 139).

Azoulay calls every individual to stand for his/her citizenship by reading the history hidden between the lines through the photographs available to her/him and also by using the civil imagination to mentally stitch together visual information that has been denied by the regime (the “photographs not taken”) as well as to chase a different “reality” (*dissensus*), starting from questioning the *consensus*.

Azoulay advocates that we should all “talk about” (Azoulay’s emphasis) the “photographs not taken” or rather destroyed/censored by the regime, i.e. not available to the public. These resultant “made up images” (assembled in our minds, while we put together the actual facts we hear/read in the news, articles, conferences, magazines, social media, etc. about a situation that the access to the concrete photograph was denied to the audience) is what she calls the “civil imagination” (Azoulay, 2012:232-235). For her, this is the only way we have to fully understand the power the regime holds upon us and to perceive the real dimension of the situations that happen far from our very eyes.

In this PhD research, I propose we do the reverse: participants and I invite the audience to picture—imagine, mentally piece together—the consequences of the regime of large dams (the regime imposed by both corporations and heads of state, and somehow replicated by us, the ruled) from the departing point of the photographs taken (i.e. the photographs produced during this research). Once the propaganda of hydroelectricity as a sustainable and green alternative on which the world should pin all its hopes has been widely spread (as a way to eventually control the population because “the need for more and more energy is urgent to sustain the cities and the countries’ development”—that is the discourse, the *consensus*), mankind finds itself having no option but hydropower (another *consensus*). Using the same path proposed by Azoulay (i.e. using the “civil imagination”), participants and I expect the viewers to build up the information that has been denied to them by interacting with the making and the outcomes of this work (i.e. the testimonials, the proposals made by each participant/collaborator regarding his/her portrait, the gathered photographs, and the sequence of portraits themselves). By firstly presenting to the audience images, subjects and I expect the image-reader might be able to set the scene concerning the impacts involved in the act of fragmenting a river as well as concerning the articulation of power that facilitates and maintains this veiled dictatorship of the dams. In summary, complementary to Azoulay’s thoughts, I propose this visual work to be used as a source for the civil imagination to happen, since written information concerning the issues of hydropower has been restricted, concealed, or deformed.

I would also suggest the noun “spectator” (based on the long discussion outlined above) should be shifted to “provoked” or “collaborator”, as I understand the viewer/beholder does not function as a passive observer, instead she/he, like the photographer and the subject, also “plays” photography.

Regarding this citizenship of photography, Azoulay (2008) speaks about the urgency of the “spectator” (i.e. the “provoked”) to take what he/she sees before him/her as something that concerns herself/himself too, once what she/he looks at is a result of the regime-made disaster, is a result of the so-called democratic regime in which we all participate (but some—many?—have no voice). In her acclaimed paper *The cosmopolitical proposal* (2005), Belgian philosopher Isabelle Stengers acknowledges those who are excluded from democracy even living in (consequently, taken as being part of) a democratic society—those not contemplated by the matters of choice and rights; which takes me to the scene the essayist John Berger sets in the Introduction he wrote for David Levi Strauss’ book *Between the eyes: essays on photography and politics* (2003). Berger’s thoughts could not be more up-to-date. In his essay, Berger charges the contemporary tyranny that rules the world (the one inflicted by transnational corporations, the Pentagon/National Defence, politicians, the global market, economic liberalism, capitalism, and the Capital, altogether) for the unnecessary pain suffered by either ecosystems and billions of people worldwide (he addresses the case of AIDS in Africa and in other parts of the world, where people suffer and die simply because they do not have access to treatment that would cost less than two dollars a day). According to Berger, this tyranny would lead to uneven decisions that would benefit some and compromise the majority of the others.

“[...] *Today the fundamental decisions, which affect the unnecessary pain increasingly suffered across the planet, have been and are made unilaterally without any open consultation or participation. [...]*” (Berger, 2003:xi)

He uses the withdrawal of the United States from the Kyoto Protocol in 2001 as an example of these biased decisions. Attempts to speak up these issues as well as to fight this tyranny—by “those who have different visions or hope for the world, along with who cannot buy and who survive from day to day (approximately 800 million [by 2003])”—have been labelled as, for instance, “terrorism” in order to promptly block any threat to the supremacy of those in power, to the supremacy of “the regime”. Impressively, Aronor’s testimonial, in 2016, ratifies this scene. Aronor, participant from my fieldwork in the Belo Monte dam area, is a fisherman who belongs to the Juruna ethnic group and was displaced by the Belo Monte dam a couple of years ago. As a member of the *Xingu Forever Alive Movement* (*Movimento Xingu Vivo para Sempre—MXVPS*), he has fought the Belo Monte dam project since its early stages. While

speaking about the losses of the people of the Xingu River due to the Belo Monte dam, he unburdens:

*“What drives us even madder is this: when we go demanding for our rights, the police come and treats us as criminals. I don’t understand... I keep wondering, ‘My Lord, where are we?’ I barely believe we are in Brazil, such a democratic country... and... it happens to happen to us here?! Many times we wonder, we try to figure it out because we can’t tell where we are anymore.”* (Aronor, interviewed on October 14, 2016)

Whether those who have been ruled and excluded by the “regime” or those who want to manifest thoughts that question (*dissensus*) the comfortable truth (*consensus*) organise themselves in order to have their voice heard, they can be tagged as criminals... terrorists. For them (once more), no mercy.

The MXVPS rose in 2009 as a collective initiative by the local catholic church, environmentalists, and individuals from areas to be affected by the Belo Monte dam project against this hydropower plant. As the name suggests, they were aware of the consequences of the Belo Monte dam project, they knew it would be a disaster, they knew that the dam would destroy the Xingu River. Like the *National Movement of People Affected by Dams* - MAB (already set in **Chapter One**), the MXVPS was a result of individuals gathering and putting their shared urgencies forward. Both the MAB and the MXVPS have been crucial for this research to happen. Without the MAB this PhD practice simply would not exist, as they have been a key element for my fieldwork to run and for my close understanding of the role of the social movement within this puzzle involving power (which has also nourished my enthusiasm for this already passionate subject throughout my inquiry). Also, without the MAB much of the information concealed would not reach the communities affected and to be affected by future dams, without the MAB the wounds both the companies in charge of the dam projects and the government inflict upon the affected communities would be even worse. While working side-by-side, researcher/photographer and social movement interweave their contributions to the *dissensus* and this no doubt makes respective practices and their aims stronger.

Photography may not change anything on the ground, but it helps change the way people think, as regarded by the references I have used in this discussion. What if it is used to “document”, to “testify”, to expose what is taking place far from the majority of the population’s eyes (and bodies!)? What if such a “document” is put towards the social

movement's goals in order to strength its struggle and pledges? After all, one cannot deny what she/he sees because of the power of photography in reverberating out and loud: *this is here, this is now*.

But what if, regardless of all my efforts, no major changes happen? Does it matter? Photography struggles to change the world yet it does have impact. The *dissensus* has been revealed, the concerns of the people affected by the dams resonates in the project, the thoughts and emotions explored by my collaborators and I have been unfolded and exchanged between us. We have learnt from each other and the work itself speaks, and, depending on the methods chosen to disseminate it, it will speak to many others. Most importantly, the subjects' voices are out there.

### **3.4 Subject and power**

Azoulay (2012) focuses her arguments on the role depicted subjects also play in the "photographed event" as active participants of the process of photography. She stresses that subjects, once aware that the "event of photography" is taking place, will also assume a posture (like the photographer) in order to arrange a discourse to potential viewers. Moreover, the photographer-subject encounter can also lead the photographer to question a specific situation or to want to further explore a special matter, impelling the latter to pursue further "images" to build upon this first encounter-mediated perception (Azoulay, 2012:59), i.e., at the end, the subject wields influence upon the photographer's perspectives and choices too.

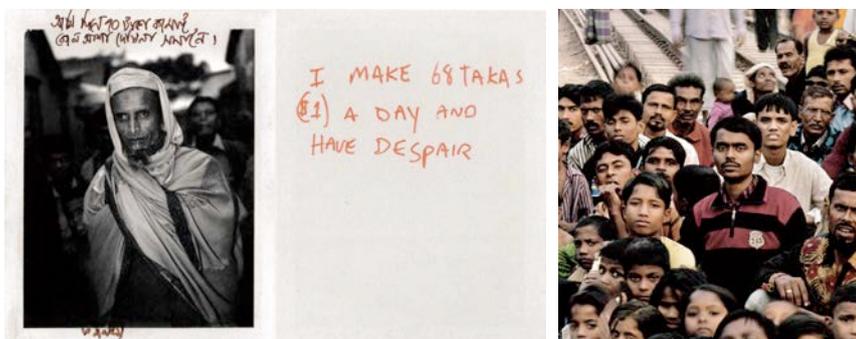
Jim Goldberg's work *Open See* (2009) provides a simple way of clarifying and developing Azoulay's standpoint. Goldberg's interest in undertaking *Open See* started as a commission from the Hellenic Cultural Heritage, in 2003, to come up with a portrait of modern-day Greece (a project entitled *Periplus – Magnum photographers in contemporary Greece*) to mark the Olympic Games in Athens (2004). This commission asked twelve Magnum photographers to construct a narrative around the theme and Goldberg came across the immigrants that were fleeing mainly Africa and Asia, dreaming of better days in Europe. These first encounters Goldberg had with his subjects instigated him to go deeper into this issue, which consequently took him not only to fly to Bangladesh, Ukraine, and Liberia, but, eventually, to delve into the politics of illegal immigration in Europe. Hence, *Open See* is a work conceived from a subject-

mediated experience. It also brings to the foreground the role of the depicted person in the process of making meaning through imagery.

Regarding the subject's active role, Azoulay (2008, 2012) reframes and builds upon Barthes' notion of every subject's consciousness regarding the power she/he also holds in the process of making meaning: "(...) *In front of the lens, I am at the same time: the one I think I am, the one I want others to think I am<sup>36</sup>, the one the photographer thinks I am, and the one he makes use of to exhibit his art. (...)*" (Barthes, 1981:13). And I would add to Barthes' statement: the "one the viewer interprets I am" too. For Azoulay (2012:44 and 51), when it comes to situations of conflict, the photographed person faces photography as a space of appearance that opens before her/him (in which she/he can potentially draw her/his discourse through), as a possibility to be heard.

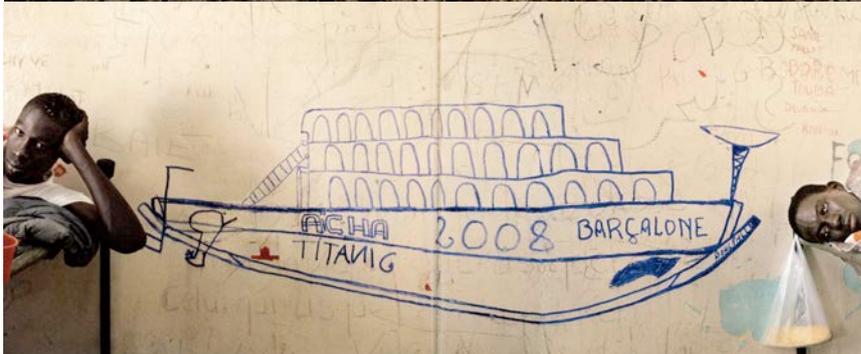
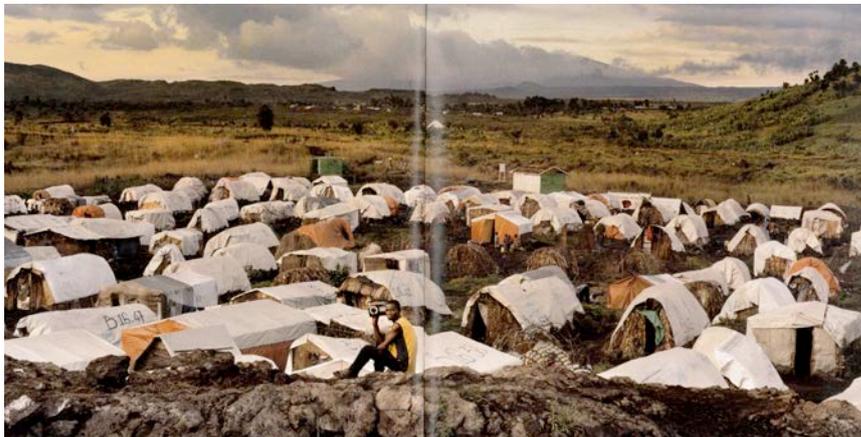
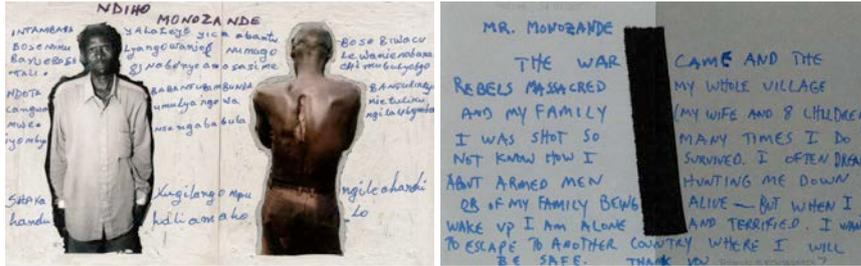
Goldberg's subjects literally write their thoughts to the viewer on the photographic work, highlighting the intricate political, economic, and social matters involved in the wish for fleeing, like the aftermaths of the imperialism, religious persecution, and HIV (Fig. 3.8 – see also Fig. 2.6, **Chapter Two**, for further images). Photographed individuals consciously interfere and re-arrange the piece that will be presented to the Other<sup>37</sup>. By unveiling the global responsibility for illegal immigration, *Open See* questions the common European argument (*consensus*?) that illegal migration is not Europe's full responsibility as it inherently starts outside Europe: hence, Europe should not be expected to provide employment, shelter, and facilities for the outcomes of such "external" issues.

FIGURE. 3.8. Some images from *Open See* (Goldberg, 2009). Note how the conditions that lead people to flee are part of a bigger issue, which has no borders but rather concerns every country in the world.



<sup>36</sup> My emphasis: underlined.

<sup>37</sup> i.e. to everyone else but the photographed individual her/himself.



ORIGINAL IN COLOUR  
 © Jim Goldberg/Magnum Photos

In contrast to Goldberg, Anthony Luvera does not use the camera himself to capture his subjects. He rather transfers this power to the latter by teaching participants how to take photographs of themselves (Fig. 3.9 – see also Fig. 2.7, in **Chapter Two**). Obviously, Luvera is still there to assist and exchange ideas with his subjects: in other words, Luvera’s influence on the final images cannot be ignored (and, somehow, nor can Goldberg’s “participation” in what is eventually written by his subjects on their own portraits, once he is there watching and encouraging them to “speak”). Nonetheless, every person throughout the UK depicted in the *Assisted Self-Portraits* makes use of photography as a tool to somehow show her/his own perceptions, history, memory, and emotions—which are not usually explored in the mainstream media when it comes to speaking about people living in a condition of homelessness.

FIGURE. 3.9. *Residency - Assisted Self-Portraits*. Belfast, Northern Ireland (Luvera, 2008).



Left: Documentation of the making of the Assisted self-portrait of Caroline McDonnell.

Right: Assisted self-portrait of Caroline McDonnell (2006-2008).

ORIGINAL IN COLOUR

© Caroline McDonnell and Anthony Luvera

At the same time, Sharon Lockhart’s attitude towards her sitters in her *Apeú-Salvador Families: Portraits* (part of her work *Teatro Amazonas*, 2000)—i.e. giving them the option to see themselves on the “anthropological style” photograph just taken (via Polaroid films she lately gave to each photographed family) and subsequently rearranging themselves at their own will

for the next shot to be taken (see Fig. 2.8 – **Chapter Two**)—can also be interpreted as a strategy to empower the subject/researched not only before their audience but before the researcher(s) (anthropologists Ligia Simonian and Isabel Soares de Souza) and photographer (Lockhart herself) too, as every family’s imagery and social order eventually finds its space within the final scientific and artistic publications (i.e. within Simonian and Souza’s papers as well as within Lockhart’s exhibition).

In this PhD project, I go further: I want those photographed to explicitly reclaim their role as committed protagonists within the *civil contract of photography* as all portraits assembled during my fieldwork are conceived based on each sitter’s testimonial and initial ideas to transpose their thoughts to the final image (something that resembles Luvera’s proposal). Moreover, along the shoot, these sitters work out how to best represent themselves and their ideas to the viewer (which can be scrutinized as an evolved version of Lockhart’s methods). However, differently from Luvera and Lockhart, I rather highly hybridize my subjects’ perspectives with my own during the process of image-making (because both sitter and I discuss and co-interfere in the process that comes up with the virtual image that we will work on as we also do in the actual sequence of shots during the photo shoot, yet, the one who operates the camera is still myself and not the subject him/herself), bonding our mutual engagement in the photograph we present to our viewers.

By proposing that my participants speak about what has happened to their lives since the dam project was announced and, after this, to imagine a way to place what they consider important with regard to this theme in a photograph, which will depict themselves as sitters, as well as by enabling them to instantly see each photograph taken and co-direct their own shoot, I automatically share the power photographers usually hold when they run what we could call a “classic” documentary photography project (which is traditionally grounded on the sole image-maker, or a group of them, shaping what will be captured by the camera). At the same time, I am there in the moment of creation, I control the technical features of the photograph-to-be and press the shutter release, then, I do not deny my interference in this thread of communication. All this described above happens simultaneously, dynamically, interwoven, and without a total control of each part—photographer and photographed: none of us can tell what that specific photograph will disclose, before we meet; none of us can tell beforehand how the researcher-researched experience will operate, because this is all part of the encounter. By acknowledging a major voice (who was supposed to systematically set the “stage” to the viewer) in this “play” to every actual actor (i.e. every sitter-collaborator), but, at

the same time, by considering the whole play as an outcome of all sorts of exchanges that took place between every actor-director and the so-called “main director” (i.e. the photographer—myself), this approach ends up pushing the boundaries of documentary photography.

This co-experience of (self-)representation intends to be a channel for visibility. Firstly, it reinforces and builds upon this participation of the subject noted by Barthes (1981) and advocated by Azoulay (2012). Secondly (and mostly), it spotlights voices that have been silenced by the regime of the dams.

I could have easily photographed my subjects myself, straightforwardly, like Gideon Mendel has done with those whose homes have been affected by catastrophic floods as a consequence of climate change, for example (Mendel, 2007-2015). Why didn't I go for this instead? Again, politically I believe that involving my participants co-operating at all levels provides a more powerful effect and way of working than taking photos I conceived or staged myself. I wanted my “subjects” to expose what I believe needs to be heard and how this needs to be heard. I wanted them to join the game of signification in order to provoke the viewer with their full existence in the photographs that pertain their iconic and indexical presence. I wanted to share the power the photographer holds in conceiving, directing, framing, clicking, and editing the shoot herself—this is, for instance, quite distinct from the approach Brazilian photographers João Castilho, Pedro David, and Pedro Motta used to present the story of the region that was affected by the construction of the Irapé dam, also in Brazil (Castilho, David and Motta, 2008). Regardless of being constructed as a collective work, Castilho, David, and Motta's project consisted of a collaboration between individuals from the same “group”, i.e. themselves (the “less challenging” type of collaboration, according to Grant Kester, as they are all photographers – see **Chapter Two**, p. 99), and was focused exclusively on their own perceptions and interpretations concerning the local scenarios that unfolded as the construction of the dam progressed. Apart from engaging in this co-operation with my “subjects”, I also wanted to learn from them and from the riverine environment. I affirm that what they (the local environment and my subjects) bring to the photographic image is inconceivable to assemble without their intervention: the vivid dimension of the impacts that large dams have caused.

I also consider this practise-based research an agency for empowerment: it has provided participants a moment to revisit their memories and strengthen their history, to reflect on their own individual experiences as affected people, to situate themselves within this social-

environmental-economic-political scenario, to digest their own thoughts and manifest them by means of (their own) speech and imagery, i.e. using the method applied in this PhD project. Summarising, these research methods have offered participants a channel into politics and citizenship too. This empowerment also makes this work stand out from traditional forms of documentary practice that simply try to illustrate events within a specific theme.

For participants, this working together has functioned as protest, claim, catharsis, and memory. I will present a longer discussion on this phenomenon in the chapter dedicated to the practice, but I consider that it is important to set here some reflections on my encounter with Gumericino, Nelci, and Maria Rosa as a proof of what I have drawn above regarding the subject, photography, and power.

As I have mentioned before, Gumericino's feelings (outrage, indignation, and rebelliousness) guided him to his choices for his own portrait. During his brainstorming while looking for the object that he will use in his portrait, he came up with this:

*"I can set in the stage the water tank and the solar panel I have to take with me basically everyday, when I head to my place out of Sobradinho town – the place where I grow my cassavas. They will expose my indignation and enragement for sure! Because the one who will look at my photograph will wonder, 'what the hell are this water tank and solar panel for, in this photograph?' and I will reply, 'This is because I was afflicted by a hydropower plant and haven't gotten either water or energy!'" (Gumericino, interviewed on April 18, 2015)*

During the shoot, Gumericino tries different positions for the solar panel and himself (Fig. 3.10). He also proposes that he does not look at the camera as we shoot, in order to look "unaware" of the "click" towards the potential viewer (Fig. 3.10 - fourth and last shot), i.e. pretending not to play any relevant role in the "event of photography". He said: *"let's now make as I look unaware."*

FIGURE. 3.10. Sequence of portraits of Gumercino.



Gumercino's feelings: outrage, indignation, and rebelliousness

Location chosen: his backyard (where he straightens up the solar panel and the water tank in the trunk to take them to the place he grows the cassavas)

Object chosen: solar panel and water tank

From top to bottom, left to right: 1<sup>st</sup> shot, 2<sup>nd</sup> shot, 3<sup>rd</sup> shot, 4<sup>th</sup> shot, 5<sup>th</sup> shot, last shot.

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© Gumercino da Silva Anjos and Marilene Ribeiro 2015

Gumercino turns our encounter into his protest against the Sobradinho dam, especially because those dumped by it did not have the option to oppose to the fate both the government and the dam industry had imposed upon that entire area (as his notes stress – Fig. 3.3).

Nelci is a teacher who was born and raised by the Uruguay riverside. In her interview, Nelci anticipates the uncountable losses that would be triggered by the Garabi dam project (originally planned to take place in the upcoming years): native vegetation down, animals and plants dead, fertile lands flooded, community and individual memories crashed, locals impoverished and knocked out. Both Nelci's and her parents' places would be submerged by the dam. For her, the Garabi dam has been affecting people psychologically even before it is concrete: they will not be able to take with them the immaterial things that make them themselves, they will not be able to pass on their legacy, they cannot rely on the future they have foreseen for themselves, they cannot guarantee whether they will have food, a job, and a home. Uncertainty and antagonistic rumours have been driving them sick.

When the Garabi-Panambi dam complex was firstly announced (at that time: Garabi-Roncador-São Pedro dam complex), back in the 1980s, the local population, tired of being ignored, gathered and pulled, seized, and threw into the waters of the Uruguay River the stakes the company in charge of the studies for the Roncador and Garabi dams had installed along that stretch of the river in order to measure the variations in its level. This act later became one of the marks of the people affected by dams' struggle as well as the initial organisation of what would constitute the MAB too. Nelci took part in this act of protest. She recalls the atmosphere of panic that hovered over the to-be-affected people by that time. Since governmental agencies and enterprises have re-designed the project and re-presented it as the Garabi-Panambi dam complex, in 2010 (as part of the second stage of the Brazilian Growth Acceleration Programme – the PAC 2), this air has come back to haunt the Uruguay riverside inhabitants.

Before the interview starts, while I explain to her my research aims, she does not hesitate: *“You need to show this [work] to Dilma [the then president of Brazil]! Because I think the power is in her hands! I mean, in my opinion, the president is the one who delivers the final word regarding to build or not to build it.”* (Nelci, interviewed on February 11, 2016)

Again and again, during her interview, Nelci highlights that what is at stake for the to-be affected dwellers is not about money and material things but emotional bonds, identity and riches instead. She also stresses the situation of exclusion both affected people and nature have been facing in the process of decision-making.

When asked about how she feels concerning the Garabi dam, she replies: “it’s hard to tell... really angry!” Then, when invited to choose a “thing” that could represent this “anger” before her potential viewers, Nelci stares at me and does not vacillate: “fire!” She carries on:

*“if they decide to run the dam works close to here, I tell you: what they put up on the daylight I would put down by the night. I would set fire at a barrel of petrol and would throw it at them. If they do not have any mercy on me, why should I have it on them? Anger destroys, doesn’t it?”* (Nelci, interviewed on February 11, 2016)

Bearing in mind Peirce’s and Saussure’s theories outlined at the beginning of this chapter (p. 119), one might notice the impact Nelci’s chosen object (fire) can have upon the viewer because of the meaning (*interpretant/signified*) it is commonly associated with: power, strength, destruction, rage, witchcraft, etc. Regarding the location for the photo shoot, she also has something in mind: her parents’ house. According to her, it would be painful to see the water slowly swallowing what she literally helped to raise brick by brick.

During the shoot, something powerful blooms before my eyes (and I record it): shot after shot, Nelci spontaneously proposes to move her own body and the fire throughout the living room until she eventually asks me to frame the fire in front of her face in a way that could turn her face into the flames. The cathartic sequence of movements I witness is a stunning *pas de deux* Nelci plays with her very feeling (Fig. 3.11).

FIGURE. 3.11. Sequence of portraits of Nelci.





Nelci's feeling: anger

Location chosen: her parents' place (which she literally helped to build brick by brick)

Object chosen: fire

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© Nelci Bárbaro and Marilene Ribeiro 2016

At the end, she exclaims: *"for those who will watch this 'reportage', for the God sake, this is our plea: Do not do this [the Garabi-Panambi dam complex project]! This will destroy a lot! This*

*will destroy lives, and lives, and lives! Those who receive this material, look at it carefully, analyse it with care.”*

What Nelci and I experienced together takes the form of protest, but also catharsis and claim to not to be silenced. Our encounter unfolds as an action—a performance on the stage of politics.

My first contact with Maria Rosa, a dweller whose family was displaced by the Belo Monte dam in 2015, showed me how far the system that hides “inappropriate information” can go.

Conversation over the phone with Maria Rosa’s husband, Jaime:

“[...]

*Researcher – Maria Helena, Zé Preto’s daughter, has told me that Rosa’s father used to be one of the most prestigious leaders of traditional celebrations in the region of Palhau. Maria Helena has also told me that Rosa and her mother, Antônia, were born and raised in Palhau, and they both only left Palhau due to the Belo Monte dam. They both remained there until the very last day.*

*Jaime – Indeed.*

*R – So, I think Rosa might have important things to tell me, as I assume she knows a lot about everything concerning the region as well as she probably witnessed many things during all this time her mother and she were still there.*

*J – Is your research commissioned by the Norte Energia [the consortium in charge of the Belo Monte dam project]? If so, we are not interested in taking part in it, because we’ve been already interviewed by them a couple of times, but they never pass what we’ve really said on. They change our words and broadcast this in a way that is appealing for their own interests, instead.”*

My encounter with Maria Rosa’s family was intense and also very powerful. The couple detailed the unfair and inconsistent process of reparations for their land, crops, cattle, house, and stable; the tone of menace for the family to accept the final amount the company wanted to pay for them to leave their land, even aware that they should receive at least a higher/honest amount for the tangible things they had; the furniture the company buried in site, as Maria Rosa’s family took too long to move it out; the harms lorries and heavy machines inadvertently caused to local animals, like pacas and marmosets, while clearing the area in

their backyard; the dismantling of the community and the consequent disappearance of traditional celebrations; the clearance of the woodlands her father had cherished during all his life; the islands and living beings of the Xingu River either drowned or left to die from starvation. For those wounded by the Belo Monte dam there is no outlet allowed, but, instead, either resignation or death.

Maria Rosa and Jaime push it beyond:

“[...]

*Maria Rosa – They never tell the truth! We’re at the centre of it, we see what’s really going on, but it never gets out. They cover it up! It’s only the good stuff that gets reported. We see it whenever it’s on [popular TV current affairs programme] Fantástico – they only show the housing they built, just the good stuff!*

*Researcher – From your point of view, what is the truth? For you.*

*MR – The truth would be to show everything that people are going through here: hunger, suffering. What they show doesn’t exist! The area they cleared, which they left just the way they wanted, they don’t show! ... We see that nature...so many islands...the boy just told me that the islands are dying! [...]*

*R – Do you think that the Belo Monte dam has been good for someone?*

*MR – I’m not sure... I think it’s been good just for them [those who conceived and have run and fostered the Belo Monte project].*

*Jaime [in the background] – For those who don’t belong to here for sure! Only for them. For them and for those to whom they will sell the energy generated by Belo Monte, for the big ones based in other countries – those who are just looking for profit – these people are living good life, they are not enduring what we have gone through here – for them, Belo Monte is wonderful! But for us...*

*R – Do you think the energy from Belo Monte has been or can be a good deal for the environment or the people of the Xingu?*

*MR – I don’t think so. Belo Monte has not been and won’t be good either for nature, animals, or anyone but for them, the foreigners, for those who will rule its energy.”*

After the interview, I explained to the family about the methodology regarding the “object” and “location” for their portrait and left, giving them time to think about what they wanted to choose. That night, when I called them back for us to arrange the shoot, Jaime spoke:

*“We’ve decided already about our portrait: we’re gonna take the whole family to Antônia’s former place of living – where is the lake [reservoir] now – and we all will get into the fishing net for the shoot. We’ve also agreed a caption for our portrait, ‘By using the same method we apply to get our food, the Norte Energia silences its affected people.’ How about this?”*

Rosa’s family not only got into the fishing net but also performed reactions as they “realised” they were “immobilized” by the rulers (Fig. 3.12).

FIGURE. 3.12. Portrait of Maria Rosa’s family (Maria Rosa: the 4<sup>th</sup> left to right).



*By using the same method we apply to get our food, the Norte Energia silences its affected people.*

Maria Rosa’s feeling: rage

Location chosen by Maria Rosa: her mother’s former plot of land (where Maria Rosa was born and raised, and also where locals used to celebrate the *Imaculada Conceição* fest), currently partially submerged by the Belo Monte dam

Object chosen by Maria Rosa’s family: fishing net

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© Maria Rosa Pessoa Piedade and Marilene Ribeiro 2016

The idea for the portrait of Maria Rosa’s family was like a release of everything the Xingu River and its inhabitants have been forced to witness, lose, and accept since the dam project started. It exposes the tension that has been concealed by the propaganda of hydropower as

sustainable and green. It urges people who have been eradicated and their stories that have been veiled by the system to surface.

Ultimately, participants choose how they want to be perceived by the Other, how they want to be included. They also end up pointing to the other unattended actor within this fabric of power: nature.

### **3.5 Nature and power**

Participants, through their own portraits, highlight the complexity of the things that are at stake when a watercourse is dammed and one critical point concerning this theme is how we, society, have been dealing with “Nature”.

The eighteenth and nineteenth century European-centred mercantilist and imperialist vision of understanding and mapping to control and monetarily profit from it still insists in reverberating nowadays. Using a similar logic, the utilitarian and anthropocentric perspectives have founded the way people perceive and should value “things” like water, earth, other species, etc. From these viewpoints, nature would be a mere provider of resources for human beings to use and, as such, these resources should be put (at their maximum capacity) into service in order to feed and sustain economic development. For nature: no power, but subservience. After the paradigm shift that followed the new notions of the limits of the economic growth associated with the carrying capacity of ecosystems, in the 1970s-1980s (Meadows et al., 1972; Gudynas, 2013), the market turned its attention to the concept of sustainability<sup>38</sup>, trying to fit the latter into its agenda via what would, more recently, be named sustainable solutions/development alternatives. The label “sustainable” would then refer to everything involved and, at the same time, prevent the over exploitation of those resources, and work side-by-side with the premises of conservation for the welfare of future generations. The “sustainable” (and, later on, also the “green”) flag quickly gained space within the political arena, especially after the acknowledgement of global warming as truth by both the industry and heads of state (as already set out in **Chapter One**). This is the context in which hydropower re-emerges as a socially and politically “acceptable” strategy to, in fact, maintain

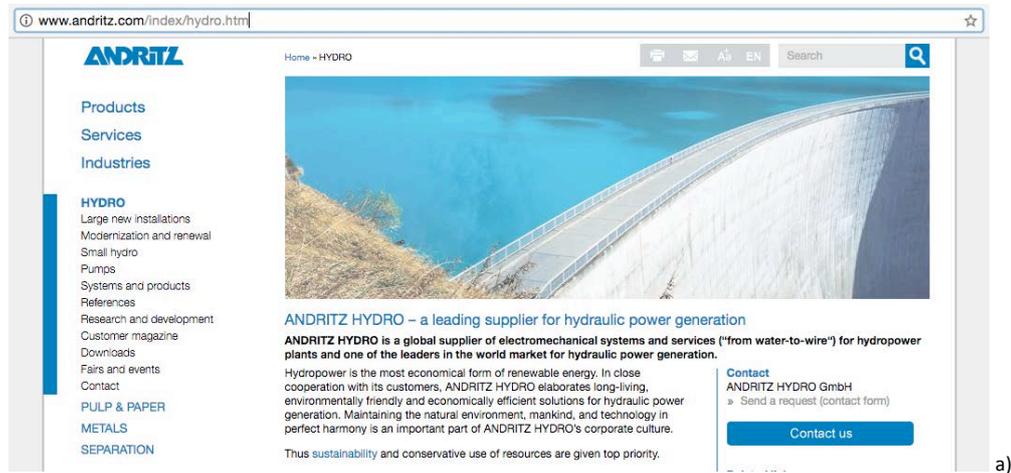
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<sup>38</sup> Definition of sustainability/sustainable development, according to the IUCN, UNEP and WWF’s report (1991:10): “*improving the quality of human life while living within the carrying capacity of supporting ecosystems*”.

the same old engine of power continuing. This new discourse once more revisits anthropocentrism and utilitarianism: if Brazil (and China, India, Cambodia, Ghana, and elsewhere) has an outstanding potential for hydroelectricity (i.e. a significant area of free-flowing rivers with its associated co-evolved biota) why shouldn't we 'dispose' of it? (i.e. why not dam these rivers and use it to boost our economy?) After all, it is better than burning oil or coal? This rationale, generally taken as a *consensus*, provokes further questions: i) what value do free-flowing rivers and their associated biota have in themselves, apart from being used (and abused) by human beings? And, if they do have value other than in being a utility, who cares?; ii) what is the relationship between dams, nature, and power? I will deal with this last query now and will leave the first one for the end of this Chapter and the **Conclusions**.

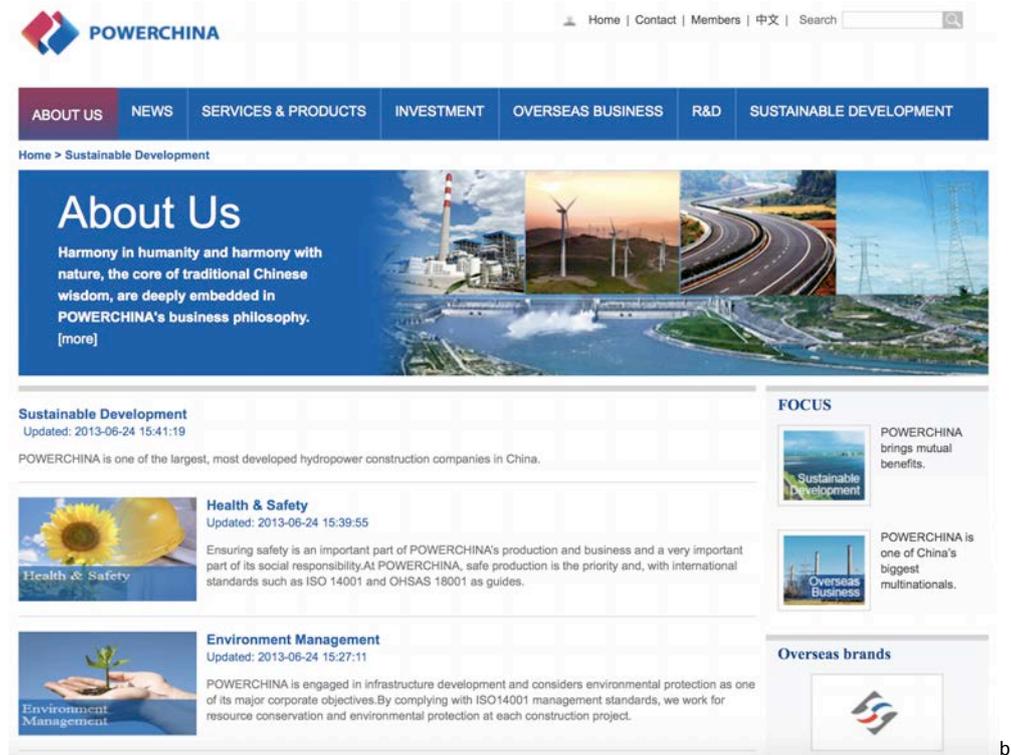
The trade of commodities plays a vital role in global business (Gudynas, 2015; Fearnside, 2017), because urban requirements hinge upon steel, gold, copper, aluminium, meat, grains, and, not least, energy. All these products exist as a consequence of an interference of man into natural landscapes: hence, the market of commodities impacts upon the environment. Notably, the sector of commodities has long been ruling not only Brazil's but also the majority of Latin American countries' economy. Thus, the wealth (and the likelihood of growth, according to the currently accepted model of development) of Latin American countries has been historically pinned on their ability to provide those resources to the world—at any cost. Mines need a huge amount of energy to operate as their work continues non-stop all year round. This industry is rooted on maximum profit and subsidising political parties, lobbying and making sure “provider” countries comply. As environmental laws have evolved internationally and biodiversity conservation has gained importance amidst society among the last decades, both governmental and private agencies have found in the discourse of the “sustainable” and the “green” a cosmetic to cover up their real interests and the actual dimensions of the negative impact of their activities upon both nature and specific fractions of society. As such hydroelectricity is touted by politicians, companies specialised in providing technology and know-how for infrastructure projects, and even the stock market (Little, 2014; see also Fig. 3.13). Together, all these actors (the stock market, mining and infrastructure companies, and decision- and policy-makers) co-operate to consolidate and perpetuate their sovereignty (Little, 2014; Aleixo and Condé, 2015; Fearnside, 2017).

FIGURE. 3.13. (a) ANDRITZ (a globally leading supplier of plants, equipment, and services for hydropower stations) and (b) POWERCHINA (one of the world’s leaders in the business of hydropower) websites illustrate the strategy of the “sustainable” and the “green” as a cosmetic discourse towards customers and society.



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The contentious Belo Monte dam<sup>39</sup> provides some facts that are not exceptions but the common scene throughout the world concerning this relationship between hydropower and Power (Barnett, 1999; Brookes, 2000; Gudynas, 2015).

Politicians claimed Belo Monte would be a booster for the development in the Amazon as well as a keystone to sustain Brazil's economic growth. It was also declared that it would be a model of a successful sustainable project (Ministério do Planejamento, 2011; TV Folha, 2014). Since the Belo Monte project was approved, The Canadian Belo Sun Mining Corp. has been fiercely negotiating to establish Brazil's largest open-pit gold mine in a strategic area "*located on large greenstone belt, which remains largely unexplored*"—only fourteen kilometers away from the Belo Monte dam and exactly in the stretch of the Xingu River that eventually had its water level reduced (consequently more land/rock exposed) due to the upstream damming. This non-Brazilian corporation advertises gold and sustainability to potential investors (Belo Sun, 2017). Since 2010, the *Mais Democracia* Institute (a Brazilian Non-Governmental Organisation whose research seeks to bring more transparency to the processes involving the Brazilian economy and politics) have investigated the net of interests behind the energy policies in the Brazilian Amazonia. Their final report, entitled *Who are the owners of the hydropower plants in the Amazon? (Quem são os proprietários das hidrelétricas da Amazônia? – Aleixo and Condé, 2015)*, uncovers the entangled thread that involves transnational corporations, development-fostering agencies, infrastructure engineering companies, and political parties. Besides Belo Sun, the report names many other transnational organisations requesting licenses to operate within the area under the influence of the Belo Monte hydropower plant in the last decades, among them, the British Anglo American, the British-Australians BHP Billiton and Tinto Rio, the South-African AngloGold Ashanti, and the multinational—with 49% of its shares belong to Brazilian investors—Vale (Aleixo and Condé, 2015:39-41). It is important to note that 6,621.203 ha of these areas requested for mining purposes are located within the borders of Indigenous Reserves (Aleixo and Condé, 2015:39).

In different ways Siemens-Voith, Andritz, Alstom, and Hydro China have also encouraged and profited from the dam building business by supplying components to the Belo Monte hydroelectric plant. Activists fighting "the destruction of the Amazon" (because Siemens, Alstom, and Andritz had co-signed a €500 million contract to provide the twenty-four turbines of the Belo Monte dam), were told "*we make our deals based on the proposals presented to us*

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<sup>39</sup> Belo Monte dam is one of the case studies of this research. Details on its story can be found in **Chapter Four**.

and the Belo Monte dam proposal looks ethical to us” (MXVPS, 2014; *Count Down am Xingu V*, 2016; 9:34-10:52). Apparently, killing 22 tons of fish, bringing over 15,000 ha of rainforest down, and letting thousands of people (including indigenous groups) without subsistence means (MPF, 2015b; ISA, 2016) do not seem to be matters of concern for these companies.

Not less impressive is the role of construction companies in solidifying this armored block. By bribing politicians and executives in order to gain the contracts to build the dam, these firms end up not only monopolizing the business of infrastructure projects (and becoming more and more powerful) but also interfering in the process of presidential/state elections as well as influencing national policies. Once elected, these politicians/political parties turn their agendas towards the need for more dams, perpetuating the cycle (see **Chapter Four** for the bold case of the Belo Monte dam).

Noteworthy, the majority of these projects are funded by agencies that run based on tax-collected money, like the World Bank (WB), the China Development Bank, the Export-Import Bank of China, Inter-American Development Bank, and Brazil’s National Bank for Economic and Social Development (Banco Nacional de Desenvolvimento Econômico e Social—BNDES), as shown in Fig. 3.14 (Fundación Proteger, International Rivers, and ECOA, 2017). In other words, apart from ignoring the populations will and claims (as in the case of the Belo Monte dam, whose protests against the dam echoed from various parts of the globe), dam projects are concretised using public money.

FIGURE. 3.14. Interactive website jointly created by Fundación Proteger, International Rivers, and ECOA, which gathers and overlays data about the dams in the Amazon region.





Note (a) the future scenario for the Amazonia, considering the number of dams-to-be (red and pink dots) and (b) the filter applied by the researcher—funders involved—highlighting the major supporters of these projects.

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© Fundación Proteger, International Rivers, and ECOA, 2017

Above all, the most striking fact regarding large dam projects is the authoritarian way governments, and infrastructure and mining corporations have imposed their plans over nature and human beings. In the case of the Belo Monte dam, for instance, altogether, Brazilian federal public prosecutors have sued Norte Energia and the Brazilian Government twenty-four times, demanding that the project be cancelled or suspended. Both prosecutors and scholars advocated that the social and environmental impacts of the Belo Monte dam were inadmissible. Ignoring all these lawsuits and scientific evidence, the dam was built.

In addition to this, in the last decade politicians in Latin American countries have arbitrarily changed laws aiming to alleviate the commitment of these transnational corporations with workers, nature, and local dwellers as well as to facilitate the implementation or the widening of their businesses in order to please the global commodities industry (like allowing them to use energy at lower prices), which will, in exchange, maintain these politicians/political parties in power. Examples from Brazil are Brazil's new Code of Mining - PL 37/2011, the PEC 65/2012, and Brazil's new Forest Code, in force since 2012 (as discussed in *A Lei da Água*, 2014; El Bizri et al., 2016; Fearnside, 2016b). This "trend" is acknowledged by the Uruguayan researcher

Eduardo Gudynas as one of the characteristics of *neoextractivism*<sup>40</sup> (Gudynas, 2009, 2012, 2013, 2015). I will come back to Gudynas' theories and afterthoughts concerning mega development projects and strategies for economic growth further on.

From what I have presented above, one can conclude that, when it comes to dams and hydropower, what is at stake is neither sustainability nor the country's welfare or the combat of global warming (Fearnside, 2015b), but rather how to highly profit and keep "business as usual". What is at stake is how to keep and detain more and more power over countries that contain abundant natural resources as well as how to control people, rivers, and ecosystems (Marcos, 2009; Little, 2014; Gudynas, 2015). This draws me to this additional thought: if the watercourse is considered to be a common property, consequently, it should not be controlled (or owned!). However, from the perspective of the (Azoulay's named) "regime", it seems sensible to arbitrarily dispose of nature's and mankind's wealth: clean drinking water, food (e.g. fish and fruits), fertile lands, species, genetic diversity, and also the rights of both humans and nature.

During my fieldwork, participants' words and postures have overwhelmed the feeling of violation that involves these mega development projects: violation of nature, violation of the affected people's identity, history, culture, and citizenship. Short statements by collaborators Aronor and José Nunes, during their respective interviews, provide a glimpse about this:

"[...] They [Norte Energia] *didn't respect anything, either individuals or nature.* [...]" (Aronor, interviewed on October 14, 2016)

"[...] *What's it like today, the island where we used to live? The one with all the trees, the rubber trees? It's deserted. They [employees of Norte Energia] chopped down the trees and buried everything. What they didn't bury, they burnt. When I pass in the boat, I see it. It's just a desert.* [...]" (José Nunes, interviewed on October 23, 2016)

Brazilian journalist Ana Aranha (who has produced several reports about the Belo Monte dam issues) directed a video entitled *Ashes of Belo Monte (Cinzas de Belo Monte, 2015)*, which

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<sup>40</sup> *Neoextractivism* is defined by Gudynas (2009, 2012) as the twenty-first century's approach of running the business of commodities with remarkable governmental support. *Neoextractivism* subordinates a country to the interests of transnational corporations and encourages the overexploitation of the former's own natural resources. *Neoextractivism* bonds the virtual country's economic growth to the sacrifice of both nature and traditional communities (via the subsidies progressive governments throughout Latin America has gotten from mining activities within their territories to fight poverty, for instance).

depicts this process of “chopping down and burning” the vegetation of islands to be submerged by the dam addressed by José Nunes. While she was interviewing one of her subjects in situ, sometime after the burning had happened, the latter spotted the corpse of a crocodile, killed by the heat, amidst the dead vegetation. As her interviewee (who was already emotionally touched by all that devastated landscape) suddenly stops speaking and points to “something” that took her by shock in that altogether creepy scene, the camera immediately turns and shows us what Ana Laíde Barbosa (the interviewee) was also obliged to witness (*Cinzas de Belo Monte*, 2015, 4:12). This unexpected scene from Aranha’s video instantaneously resonated Aronor’s testimonial in my mind (indeed, “*they didn’t respect anything, either individuals or nature*”).

This scorn about life led by the regime of the dams and also the neglect regarding the fragility and vulnerability of the lines that interconnect every part of the riverine ecosystem (including the riverside dwellers as one of these parts) makes these hydropower projects even more unacceptable as a strategy to (sustainable) development.

Maria Eliete, another subject collaborator (also mentioned in **Chapter One** and **Chapter Four**), is a teacher and the daughter of Manoel Juruna, former chief of the Paquiçamba Indigenous Reserve. The Paquiçamba Indigenous Reserve (ethnic group Yudjá/Juruna) is located by the Xingu River, downstream of the Pimental dam (the major wall of the Belo Monte dam complex). After describing and detailing the struggles her community have endured since the dam project was announced, she speaks of her feelings of desperation and sorrow. Particularly with regard to the rupture of the characteristic Amazonian cyclic regimen of flooding and drought in that stretch of the Xingu River and its consequences for the link between trees/fruits and fish, since the Pimental dam sluice gates were closed for the first time, in November 2015. Usually, from November to March, the discharge of the Xingu River increases considerably, partially submerging trees situated in islands along the river. The fruit release of these tree species is synchronized with this “high tide” season in order that fruit fall in the water by the time they get ripe. As soon as they fall in the water, fish eat them. Once the water level does not rise anymore (due to the upstream damming), these fruits are now falling on the sand banks that remain constantly exposed. Consequently, the seeds of these trees cannot be dispersed and fish cannot find food anymore. Fish, once abundant in the area, are now rare. Many fish species are dying from starvation, some may manage to migrate. Paquiçamba’s dwellers will have to shift their diet and habits too, as their main source of

food/protein is scarce now. Eliete chooses to highlight these intricate evolutionary connections and the severe damages the Belo Monte dam has inflicted on them (Fig. 3.15).

FIGURE. 3.15. Portrait of Maria Eliete.



Maria Eliete's feelings: desperation and sorrow

Object chosen: native trees whose fruits can no longer fall in the water and feed fish which depend on them to survive but rather drop from these trees on the exposed sand riverbank of the stretch of the Xingu River located downstream of the Pimental dam (stretch where Eliete's home, the Paquiçamba Indigenous Reserve, is situated).

Location chosen: the dam-led exposed riverbank of the Xingu River, where the Paquiçamba Indigenous Reserve (Eliete's home) is located.

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Besides having all their references of nature, identity, and belonging torn apart, affected people are also actively encouraged to accept employment in the construction of the dams. Every time a new dam plan is announced, the job offers skyrocket. The uncertainty involved for those affected when they understand they are going to be displaced (including the concern for having enough food in the near future) forces them to accept these roles that effectively destroy their homes, landscape, history, and identity, a cruel irony that must be psychologically torturous. Frequently I came across affected individuals who built the wall, operated computers, cooked for the employees, etc. In my fieldwork in the region of the Belo Monte dam, virtually all my interviewees or their relatives worked for the Norte Energia at

some point. How can a system that (economically) forces citizens to “dig their own grave” be conceivable? What are the psychological effects of this on these individuals? Practically speaking, they have no choice but to join the works that will wipe out all their references of beauty and their own essence.

Delcilene (one of my collaborators) told me that her cousin accepted the job of collecting fish that died along the Xingu river due to the dam works. She said he did not last in this job for too long, as he could not cope with seeing all those fish (something that riverside inhabitants take as precious and beautiful) dead for no purpose (rather than being eaten). Taking this straightforwardly, these fish were killed by all those who were directly or indirectly working on the dam wall, including riverside inhabitants employed by Norte Energia. Azoulay (2012:243-248) has also discussed this effect of regime-made disasters: they make contingency perpetrators. Azoulay, like myself, advocates that these people have the right of not being a perpetrator—like any other citizen. But we need to remember that these people have been considered “non-citizens”, these people and these ecosystems consist of the “excluded”: those excluded from democracy, those not contemplated by the matters of choice and rights<sup>41</sup>, those whose voices have been historically overridden. Human rights have not been able to reach these people (Zen, 2014), mainly because these people’s values are different from the ones of those who rule. These people’s rights have to do with the relationship they have with the place they live in.

Regarding the place and its role in politics, the revised Constitution of Ecuador (2008) is a mark in this discussion as it has made Ecuador the first country to openly acknowledge and grant inalienable rights to Nature:

*“Article 10. Persons, communities, peoples, nations and communities are bearers of rights and shall enjoy the rights guaranteed to them in the Constitution and in international instruments. Nature shall be the subject of those rights that the Constitution recognizes for it”*<sup>42</sup>.” (Constitución de la República del Ecuador, 2008:11)

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<sup>41</sup> I considered repeating the same passage I wrote in **section 3.3 – Photography and Power** in order to emphasize here what I had stated before.

<sup>42</sup> My emphasis – underlined.

“Article 71. Nature, or Pacha Mama, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes.

*All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. To enforce and interpret these rights, the principles set forth in the Constitution shall be observed, as appropriate.*

*The State shall give incentives to natural persons and legal entities and to communities to protect nature and to promote respect for all the elements comprising an ecosystem.”*  
(Constitución de la República del Ecuador, 2008:33)

As noted above, the Constitution of Ecuador puts into practice the concept of all living things having the same right to live and flourish, as human beings do, instead of just being regarded as something at the service of mankind’s needs. It *“changes the status of ecosystems from being regarded as property under the law to being recognized as rights-bearing entities.”*<sup>43</sup> Then it is time to revisit my first query at the beginning of **section 3.5**, asking about the value in themselves of free-flowing rivers and their associated biota, apart from functioning to be used by human beings. And, if they do have any, who cares about it? I also come back to Eduardo Gudynas to support my final arguments on hydropower and Power.

Gudynas is well known for his studies involving strategies of development, environment, and traditional cultures in South America. In his acclaimed book *Derechos de la Naturaleza – ética biocéntrica y políticas ambientales* (2015), which came as a compilation of thoughts he had built up and published before in the form of various articles and book chapters, he argues that, for real development to happen, we all need to change our posture concerning what the system in which we, society of the Capital, live has “sold” to us as a standard of living (i.e. the definition of well-being being grounded in consumerism, accumulation, overexploitation, and mercantilist values). Gudynas challenges us to switch our perception of nature from the Western widely accepted point of view—as resource—to the perspective of the traditional

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<sup>43</sup> Statement by the spokesperson of the Community Environmental Legal Defense Fund (a Pennsylvania-based group that provides legal assistance to governments and community groups trying to mesh human affairs and the environment): entity that helped the writing of this part of the new Constitution of Ecuador. Andrew C. Revkin, September 29, 2008, The New York Times. [online] At: <https://dotearth.blogs.nytimes.com/2008/09/29/ecuador-constitution-grants-nature-rights/>

Andean groups—as *Pachamama* (i.e. as a subject that enables and perpetuates life in its broader and diverse form). For this, Gudynas brings back the roots of *deep ecology*—a concept originally coined by the Norwegian philosopher Arne Næss, in 1989, and put forward by George Sessions (1995), which later became one of the milestones of biocentrism<sup>44</sup>—and blends it with knowledge from ancestral indigenous groups in the way they relate with the environment they belong to. Those traditional groups do not have their daily lives ruled by profit, accumulation, or overexploitation, but rather by getting from the environment what they strictly need for their subsistence and welfare, and, at the same time, looking after the area they occupy, as they are aware of its importance in providing life not only for themselves but also for all other creatures. Furthermore, these communities take seriously the subject of respecting and cherishing *Pachamama* so as to ensure future generations can also perceive it and enjoy it, as well as a matter of acknowledging the fundamental role it plays in their everyday existence. There is also a sense of gratitude and responsibility, which creates the need to give back to nature.

Gudynas also brings together visions from the feminist critique of his arguments on perspectives for a more holistic approach to development, which affirms that for society to thrive, it should turn its focus from the sovereignty of patriarchal values based on possession towards a more feminine perspective of living that ponders the ethics of care, equality, sharing, and reduction of the consumption of both goods and energy (Aguinaga et al., 2013).

Gudynas urges for “alternatives to development”, i.e. “*proposals [dissensus?] that try to break with the commonly accepted ideas [consensus?] of development as growth or progress.*” (Gudynas, 2013:32-33). He suggests that these proposals aim at “well-being” not from the current Western/Modernist frame of accumulation, consumerism, industrialization, and property, but from the perspective of these indigenous, feminist, and biocentric groups—what Gudynas refers as *buen vivir*: a welfare based on conviviality; dematerialization of the economy; and the high value of water, soil, natural areas, and its associated beings *per se*.

This all might sound like a naïve and romantic view in face of the craving for supremacy and control, but the fact is that global warming, alarming extinction rates, famine, and desertification have demonstrated that the up-to-date geopolitical structure can no longer be

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<sup>44</sup> *Deep ecology* assumes that every component of nature is equal in the rights to exist and to be nourished as, according to these ideologies, the natural world has a value *per se*, independently of having any other purpose than being there.

supported or continued. Gudynas' reasoning sets up the ethical choice for development (in its full sense regarding wealth and well-being<sup>45</sup>) eventually to happen and sustain itself and not surprisingly, this has been what my collaborators/participants have stressed along this research. For them, the actual value of the river basin ecosystem and of their own welfare as part of it cannot be accessed using decision-makers' tools because the latter comprises the above-mentioned Western's measuring devices. I argue that the ideas modeled by Gudynas need to be put forward by policy-makers and society as a whole and this is one of the points tackled by this practice-based research: to explore other possibilities for nature and traditional communities rather than treating them as tradable resources.

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<sup>45</sup> Here understood as Eduardo Gudynas' perception of wealth and well being (which I personally agree and advocate): biodiversity; cultural diversity; sharing; even access to food, water and culture; freedom and equal rights to all species, races, and genders; water, air and soil health.

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**Chapter 4: How and where – The stories of Sobradinho, Garabi-Panambi, and Belo Monte**

**Aim of this chapter:**

- Providing relevant detailed context regarding each dam surveyed.

To enable a better comprehension of the context where the photographic process unfolds (as much of participants' and my own arguments and explanations throughout the practice are influenced by a background that relates to either the Brazilian agenda and policies or the role of Latin America in the geopolitics arena), I organised this chapter to provide an overall picture of each dam project included in my fieldwork before I proceed to an in-depth analysis of my practice. It includes technical information as well as the story of these dams. In case the reader needs to understand how the system of licenses for hydroelectricity schemes in Brazil operates, the Brazilian Environmental Regulatory Framework for Hydropower Projects can also be accessed as **Appendix 1**.

#### **4.1 Technical information about each dam project**

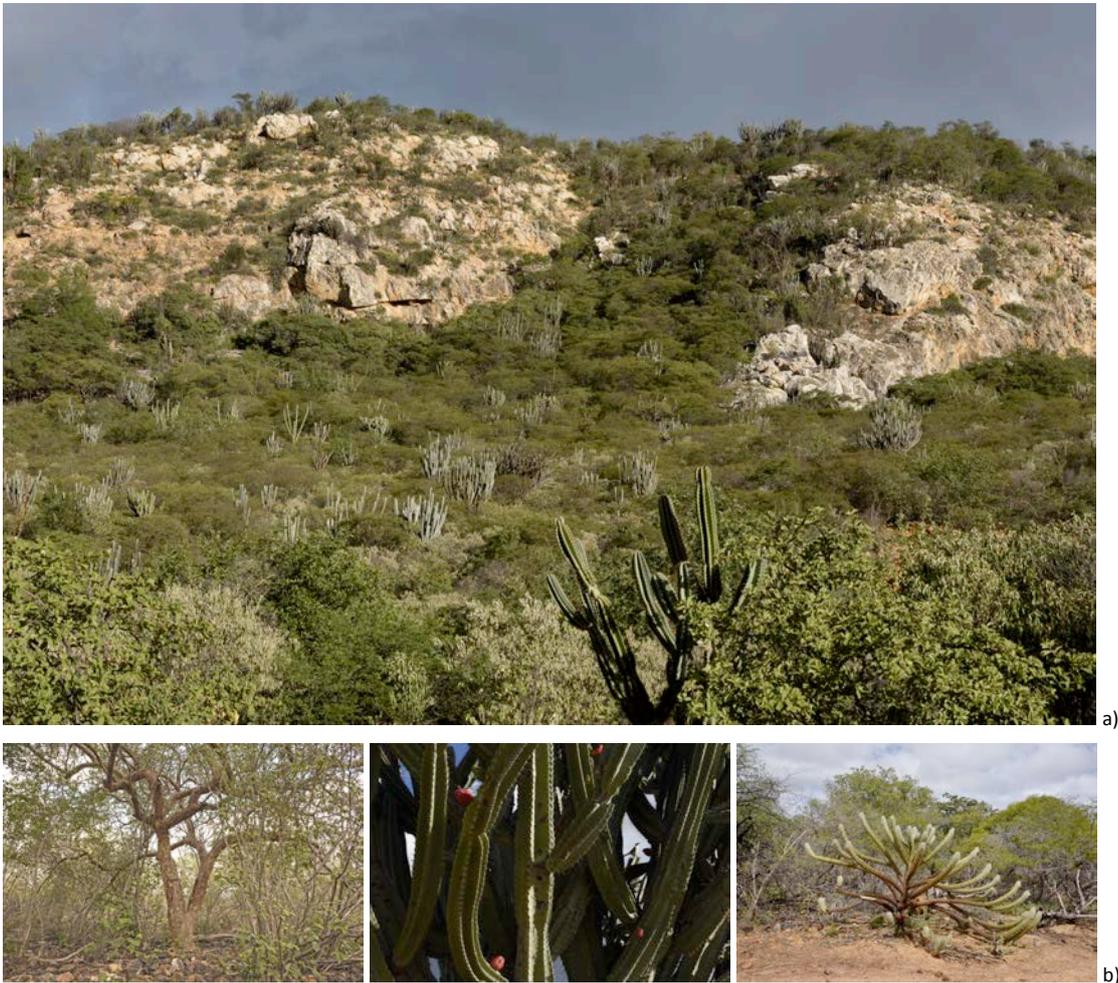
As cited in the **Methodology**, this research covered three hydropower plant projects in Brazil: the Sobradinho hydropower plant project, the Belo Monte hydropower complex project, and the Garabi-Panambi hydropower complex project (see Fig. i, p. 39). They have been selected due to their specifics regarding geographic location, Biome, local ethnic groups, year, and relevance concerning the context they are embedded in.

##### **4.1.1 Sobradinho hydropower plant project**

The Sobradinho hydropower plant is situated in the São Francisco River (9°35'S 40°50'W - ANA 2014), northeast of Brazil (see Fig. i, p. 39). It features a 41 m-high dam wall, 34.1 km<sup>3</sup> reservoir storage capacity, and 1,050 MW of hydropower-installed capacity (CHESF, 2015). More than just a large dam, Sobradinho is classified as a "major dam" due to its reservoir storage capacity (ICOLD, 2012). It is one of the largest artificial lakes in the world (Sperling, 1999), with a surface of 4,214 km<sup>2</sup> (CHESF, 2015).

The Sobradinho dam is located in the Brazilian semi-arid region locally known as *Caatinga* (MMA, 2015 and Fig. 4.1), in a climate type classified as BWh (according to Köppen's climate classification), whose annual precipitation is less than 500 mm.

FIGURE 4.1. Surroundings of the stretch of the São Francisco River where the Sobradinho dam is situated. (a) Local landscape and (b) detail of three local plant species (from left to right: *umburana de cambão*, *mandacaru*, and *xique-xique*).



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It was built between 1971 and 1978 (Fig. 4.2), during the Brazilian dictatorship, for hydropower, irrigation, and natural river seasonal flood-control purposes (Braga et al., 2012). In 1979 the hydroelectric plant started to operate (CHESF, 2015).

FIGURE 4.2. Sobradinho dam works (s.d.).



Re-photographed from José Vitorino's personal archive in 2015.  
Original as diapositive. ORIGINAL IN COLOUR

Author unknown.

The Sobradinho dam (Fig. 4.3) is part of a hydropower complex comprising nine dams constructed along the São Francisco River (i.e. Três Marias dam; Sobradinho dam; Itaparica/Luiz Gonzaga dam; Moxotó dam; Paulo Afonso I, II, III and IV dams; and Xingó dam). These dams depend on each other for the optimum performance of the system as a whole (Braga et al., 2012).

FIGURE 4.3. The Sobradinho dam in May 2015.



Dam wall in the centre, reservoir to the right,  
and the São Francisco River downstream of the dam,  
in its original design, to the left.

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As one of the longest rivers in the world (2,700 km long – ANA, 2014), the São Francisco River has historically held a vital role not only because it has enabled the movement of people, goods, and wild species, back and forth between Brazilian inland and coast but also due to its role as an oasis for both wildlife and people in a harsh, dry part of Brazil.

At the time of this dam's construction, Brazil had an authoritarian government, then, any discussion of the potential downsides of the Sobradinho hydropower plant were forcibly repressed. Bearing this in mind and reflecting on my approach of inviting affected people to openly express their feelings, memories, thoughts, and viewpoints about this project makes me realize that, in the Sobradinho region, this methodology, which builds upon the freedom to speak about what was once a prohibited subject (even though forty years have gone by), is a political statement in itself.

It is important to mention that, parallel to this environment of repression, the Sobradinho dam project did not go through the more strict Brazilian four-stage environmental regulatory framework for hydropower projects, as this process of licenses came into force in 1981 (MMA, 2009b; Sánchez, 2013), but rather had its environmental impacts assessed more straightforwardly and only because the World Bank required an environmental impact study priority to its approval for funding (Barbieri, 1995:80; IUCN/WB, 1997:123). This more superficial form of assessment was also true for other large dam projects approved throughout the world until the late 1960s (Sánchez, 2013).

The reservoir of the Sobradinho dam flooded a stretch of 400 km of riparian vegetation on each side of the São Francisco River (CHESF, 2015), disrupting an important ecological corridor as well as extinguishing a refuge for the fauna (Moura and Schlindwein, 2009).

It is estimated that over 72,000 people were displaced by the project (Silva and Germani, 2009; Observatório Socio-Ambiental de Barragens, 2015). The Resettlement Programme aimed to move the affected families to plots of land with infrastructure (dwellings, school, basic health unit, and space for livestock and crops) that could enable them to keep their livelihood and subsistence—the so-called *Serra do Ramalho Special Colonization Project (Projeto Especial de Colonização Serra do Ramalho – PEC/Serra do Ramalho)* (Fig. 4.4). However, as this location was far from the riverside, situated 700 km southwards their previous homes, and the water found there, even for drinking, was salty, most dwellers did not accept the plan that both the government and the company in charge of the hydropower dam works (the *Companhia*

*Hidrelétrica do São Francisco* – CHESF) proposed to them (Silva and Germani, 2009). Eventually, most families ended up finding their own solution and moved to places not that far from the river—such as the Sobradinho town<sup>46</sup>—or near other relatives who already lived in the *Caatinga*. Some took a more radical decision and moved to São Paulo city: a metropolis situated in South-eastern Brazil, over 2,000 km away from their former places of living. This disorganised movement of people culminated with the rupture of both familiar and community structures (CDDPH, 2010).

FIGURE 4.4. Overview of the *Serra do Ramalho Special Colonization Project* (*Projeto Especial de Colonização Serra do Ramalho – PEC/Serra do Ramalho*).



Still from the original video *Projeto Serra do Ramalho* directed by Fábio Silva / Agência Nacional

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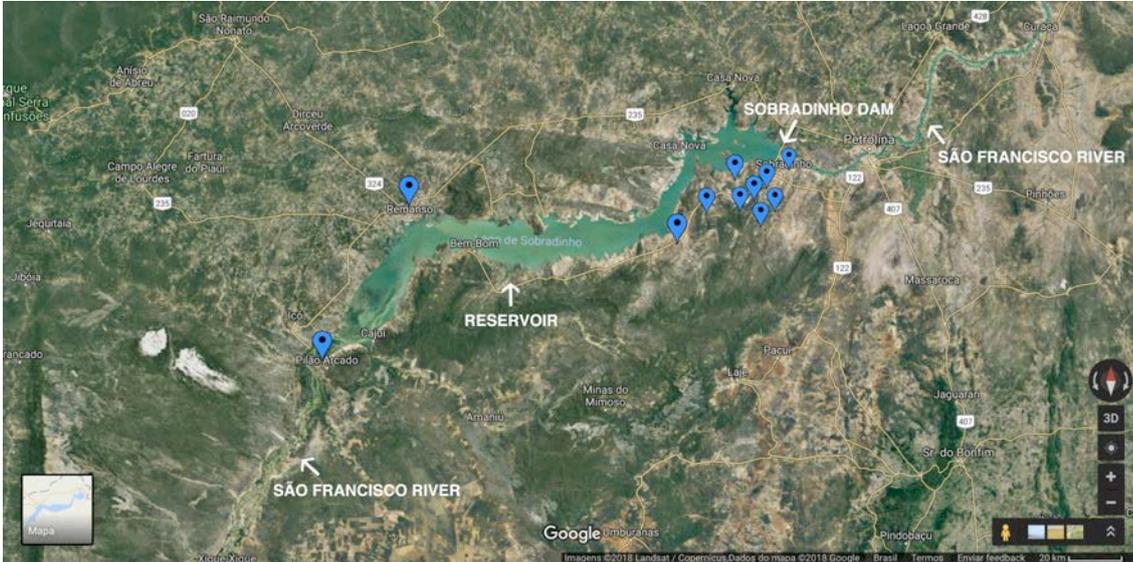
© INCRA 1976

In April 2015, I travelled to the dam and, during April and May 2015, I interviewed, photographed, gathered images, and exchanged experiences with 39 families (41 individuals) who were displaced for the construction of the Sobradinho dam. These interviews took place in their current place of living, i.e. new Remanso town; new Pilão Arcado town; Sobradinho town; and Piçarrão, Brejo de Fora, Brejo de Dentro, São João, Berro do Bode, Poço do Juá, São Gonçalo da Serra, Campo Alegre, Algodões Velho, Algodões Novo, Poço do Angico, and Mergueira hamlets (Fig. 4.5).

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<sup>46</sup> Sobradinho town was actually created as a ‘facility’ to host families of individuals who would work in the Sobradinho dam project. It was planned to be disassembled once the plant was done. As it was near the São Francisco River and provided with basic health care, school, as well as several other services, like the trade of food, cloths, and household items, many displaced families decided to move there instead of resettling themselves in other areas. Furthermore, many workers decided not to move out as the project was completed as did the people who moved there to provide these services mentioned above. This all led to Sobradinho town remaining after the dam works finished and eventually to flourish as a village, and, then, as a town.

FIGURE 4.5. Areas visited by the researcher (note the scope of the reservoir of the Sobradinho dam).



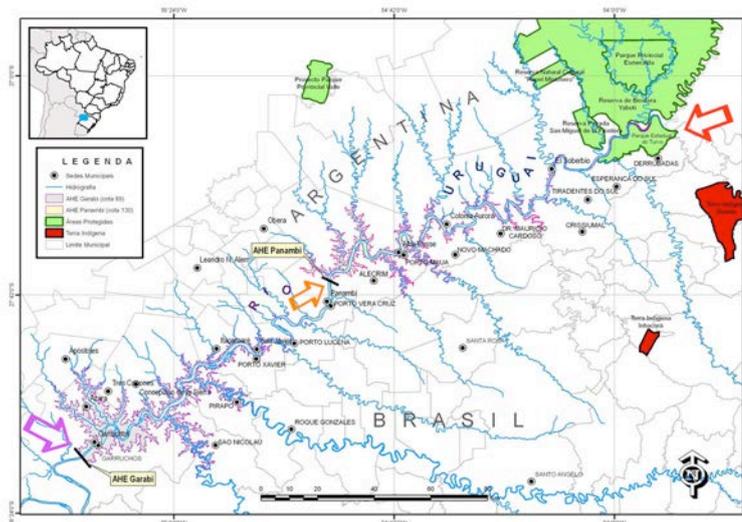
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Modified from Google Inav/Geosistemas SRL 2015 – <http://maps.google.com>

### **Garabi-Panambi hydropower complex project**

The Garabi-Panambi dam complex is part of Brazil and Argentina's joint plan to increment their production of energy until 2025 (MMA, 2005; EBISA, 2016). This dam complex is planned to be built on the Uruguay River, Southern Brazil/North-western Argentina, at the Brazil-Argentina international border (see Fig. i, p. 39, and also Fig. 4.6). It consists of two separate dams and hydropower plants (i.e. the Garabi –  $28^{\circ}12'50''S$   $55^{\circ}41'17''W$  – and the Panambi –  $27^{\circ}39'07''S$   $54^{\circ}54'20''W$  – dams and hydropower plants) in which, like the complex of nine dams in which Sobradinho dam is one of its components, the one located downstream (i.e. Garabi) depends on the one built upstream (i.e. Panambi) for its best performance (EBISA/Eletrabras, 2010). However, the story of Garabi-Panambi is more complex as these dams are still yet to be built, unlike the Sobradinho dam.

FIGURE 4.6. Map made by the Eletrobras (Brazilian governmental agency for energy affairs) spots the future location of the Garabi (purple arrow) and the Panambi (orange arrow) dams along the Uruguay River at the border between Brazil and Argentina. Also note the Turvo State Park (red arrow) as the bottom part of the whole green area (which is considered a core zone of the UNESCO's Atlantic Forest Biosphere Reserve – Lino et al., 2009) depicted at the top right of this figure.



Adapted from *Estudio de inventario hidroeléctrico de la cuenca del río Uruguay en el tramo compartido entre Argentina y Brasil* (Studies for potential hydroelectric uses of the Uruguay River basin at the boundary between Argentina and Brazil).

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© Ebisa/Eletrobras 2010

The Garabi hydropower station will feature 1,152 MW of installed capacity and a 40 m-high dam wall with a reservoir of 642 km<sup>2</sup> whereas the Panambi hydroelectric plant might generate up to 1,048 MW through its 40 m-high dam wall with a reservoir of 327 km<sup>2</sup>, considering its maximum level of water 130 m above the sea level (Eletrobras, 2016b).

The original vegetation of this stretch of the Uruguay River comprises the Atlantic Forest Biome (Fundação SOS Mata Atlântica/INPE, 2009) – Fig. 4.7, one of the world's hotspots for conservation (Myers et al., 2000). Local climate is classified as subtropical – Köppen's Cfa type (DEFAP/Programa RS Rural, 2005; MMA, 2009a).

FIGURE 4.7. Original vegetation along the Uruguay River basin in the area surveyed.



(a)



(b)

(a) Turvo State Park, Derrubadas district.

(b) Detail of the local landscape: *Salto dos Gringos* waterfall, located in one of the tributaries of the Turvo River; three miles downstream the latter drains into the Uruguay River.

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Nowadays the landscape of this region consists mainly of large grain monocultures (especially soyabean) and pasturelands (Fig. 4.8), except for riparian zones and their surroundings—which are occupied by small farms run in a family basis (IBGE, 2010)—where patches of the original Atlantic Forest still remain. I consider this information vital for the reader to understand what is at stake when it comes to clearing/submerging these riverbanks and their hinterland as the dam works develop. Firstly, like the facts brought up above from the experience regarding the Sobradinho dam, the disappearance of these strips/patches of remanent forest (that comprise the last refuge for the local flora and fauna amidst the endless heavily-manipulated plots of pasturelands and soyabean crops) will probably condemn native wildlife to local extinction. Secondly, the Garabi-Panamby project would also eventually reinforce the dominance and strengthen the pressure of latifundia owners upon small farmers, as most of the small farmers' lands are situated within the to-be-affected area.

FIGURE 4.8. (a) Soyabean plantation in Porto Biguá (situated within the area surveyed) and (b) prospective location of the Panambi dam (far at the Uruguay River's bend).



(a)

Note the strip of original vegetation (Atlantic Forest) in the background.



(b)

Note the thin strip of original vegetation along the Uruguay River as well as watershed's local landscape. ORIGINAL IN COLOUR

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Official reports (EBISA/Eletrabras, 2010; Eletrabras, 2016a) cite that the Garabi-Panamambi hydropower complex would displace about 12,000 people. However, both Argentinian and Brazilian social movements estimate that over 20,000 people would be affected (MAB, 2015; No a Garabí, 2015; Río Uruguay Libre!, 2015). Notably, this is another pattern that insists on repeating over time: apart from the budget and the time for the completion of the dam (see **Chapter One**, p. 57-58, and Ansar et al., 2014), official documents usually also underestimate the number of people to be affected by these type of project (Little, 2014). Amongst numerous other projects of large dams around the world (Richter et al., 2010), this was also true for the Sobradinho dam (Silva and Germani, 2009) and for the case of the Belo Monte dam (FGV, 2016).

When it comes to big and contentious projects (like hydropower plants), not only this matter of underestimating numbers but the entire story tends to repeat, as participant Maria Eliete, whose indigenous traditional community was affected by the Belo Monte dam (see also **Chapters One**, p. 63 and **Three**, p. 174-175), stated: *“As I listened to those people [those to be affected by another dam planned to be built in the Brazilian Tocantins River] speaking about the information that reached them, their thoughts, their hopes or rather concerns about these news and promises of a better life that would come with the dam, I thought ‘Gosh! It’s like I’m watching the same film... again... the same film in which I was one of the ‘characters’ years ago is happening again...”* (Maria Eliete, interviewed on November 06, 2016). I will briefly outline here the historic context of the Garabi-Panamambi dam complex and will also present the story of the Belo Monte dam further on, for the reader to perceive the similarities Maria Eliete and I refer to.

The initiative to build hydroelectric dams in the stretch of the Uruguay River between Brazil and Argentina dates back to 1972 when the boom in dam building was happening around the world (see **Chapter One**, p. 53). At the time, presidents of these two countries co-signed an agreement to jointly undertake an inventory on potential uses of this binational portion of the Uruguay River for energy production. This preliminary study pointed to three potential hydropower plants: San Pedro, Garabi (reservoir’s water up to 94 meters above sea level), and Roncador (reservoir’s water up to 164 meters above sea level). Brazil and Argentina then carried on with the implementation of the Garabi and the Roncador dam projects until late 1980s, when both projects stopped due to: i) the political and economic fragility both Argentina and Brazil faced at that time; ii) uncertainties about funds from the World Bank, as

the latter was stepping back its support for large dams around the world (see also **Chapter One**, for details on this international context); and iii) protests by the to-be-affected people (Hüffner and Engel, 2011; Eletrobras, 2016b). In 1988 and 1989 local populations gathered; and pulled, seized, and threw into the waters of the Uruguay River the stakes the company in charge of the studies for these dams had installed along that stretch of the river in order to measure the variations in the river level. These acts signified the initial organisation of what would constitute the Movement of People Affected by Dams (MAB) and, later on, they also became a mark of the people affected by dams' struggle. More information on the "anti-dam movement" and the MAB can be found in **Chapter One** (p. 68-71).

As large dam projects made a comeback by the turn of the twenty-first century (see also **Chapter One**, for context, and Pearce, 2006a), Brazil and Argentina (via their respective energy agencies Eletrobras and EBISA) resumed the plans to take advantage of the Uruguay River's hydroelectric potential. From 2008 they carried out new inventory studies that, once finished in 2010, suggested that the Garabi dam should decrease its level to 89m (instead of the previous 94 m above sea level) and the Roncador dam should be replaced by the Panambi dam project, situated in a slightly different position and featuring 130 m (above sea level) as its maximum water level instead of the 164 m first suggested for the Roncador dam (Eletrobras, 2016b), as this would prevent the longest waterfall in the world and also a Rio Grande do Sul state's site of cultural and environmental heritage, the Salto do Yucumã/Moconá, from being submerged. Notably, this new study also intended to adapt these previous projects for the IBAMA to approve them, as the proposal written in the 1980s would hardly succeed considering the new environmental regulatory framework for hydropower plant projects that came into force in 1986 in Brazil (see **Appendix 1**).

To continue, in 2010, the Brazilian government took the Garabi-Panambi hydro complex as a priority and included it in the second stage of the Brazilian *Growth Acceleration Programme*<sup>47</sup> (*Programa de Aceleração do Crescimento 2 - PAC 2*) (Ministério do Planejamento, 2013). The so-called *Uruguay River's Energy Consortium* (*Consórcio Energético do Rio Uruguai*) won the public auction and started to conduct the studies for the Environmental Impact Assessment, as well as to organise public consultations (Eletrobras, 2016a).

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<sup>47</sup> The Brazilian Growth Acceleration Programme (PAC) is a national programme firstly launched in 2007 that underlines economic policies and projects considered by decision-makers as priorities to sustain the country's growth and development. The PAC is planned considering a timeframe of four years (Ministério do Planejamento, 2013).

Ever since, not only locals but also biologists, environmentalists, and academics have started fighting the project, particularly because: i) the process of public consultation was being led in a biased fashion; ii) one of the companies of the consortium, the Engevix Engenharia S.A., was known for misleading previous Environmental Impact Assessments, and had been already convicted of fraud<sup>48</sup> (InGá, 2014); iii) whether these two dams took place, the Uruguay River would no longer have any stretch free of dams, which would isolate/isle populations of fish, jaguar, and tapir, and condemn them to death as species (locally), which would ultimately violate the Brazilian Constitution (Cruz, 2009); iv) the Panambi dam, as currently featuring a water level of up to 130 m, would flood 60 ha of the Turvo State Park (DEFAP/Programa RS Rural, 2005), an area also classified as core/intangible and of extremely high importance for conservation (MMA, 2007:85 and 122); and v) experts were also aware that even with the changes in the original project design, the Salto do Yucumã/Moconeia would still be affected (InGá, 2014).

Throughout 2013 and 2014, locals, biologists, environmentalists, researchers, and scholars had objected to the Garabi-Panambi in different forms, from publication of reports and posts in social media to the seizing of one of the consortium's busses and occupations (Fig. 4.9). Amongst many claims, they argued that the project was being put forward at the costs of already endangered species and a world heritage site, with the participation of an unreliable company (i.e. the Engevix Engenharia S.A), and without informing and listening to the to-be-affected properly.

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<sup>48</sup> As an emblematic case, in 2001, for the Environmental Impact Study of the Barra Grande hydropower project, the Engevix Engenharia S.A. affirmed that only 9% of the area to be flooded consisted of an endangered vegetation type. Later on it was proven that in fact that floristic physiognomy comprised 70% of the area (InGá, 2014).

FIGURE 4.9. Families to be affected by the Garabi-Panambi dam complex occupy the local office of the *Uruguay River's Energy Consortium* in Alecrim, Brazil, and claim for the project to stop (2014). One of the to-be-affected people's protests against the proposed Garabi-Panambi dams project.



English translation for the banner on the right-hand side:

*“Out with the Consortia –  
you torture, kill rivers, cause violence and poverty.  
Out! This land already belongs to someone else.”*

Extracted from the article about the occupation of the consortium's office published by *Jornal das Missões* on May 28, 2014.

[online] At: <http://www.jornaldasmissoes.com.br/noticias/geral/id/4531/atingidos-por-garabi-e-panambi-ocupam-escritorio-d.html>

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© *Jornal das Missões* 2014

In 2015, these people gathered and, jointly with Federal and State Public Prosecutors, took legal action against Eletrobras (that promoted the Panambi dam project) and the IBAMA (that carried on the process of licensing for this infrastructure project, even aware of all the points named above), demanding that the project was cancelled (MPF, 2015a). The Panambi hydro project was then a case for the Brazilian Federal Court from then to late 2017.

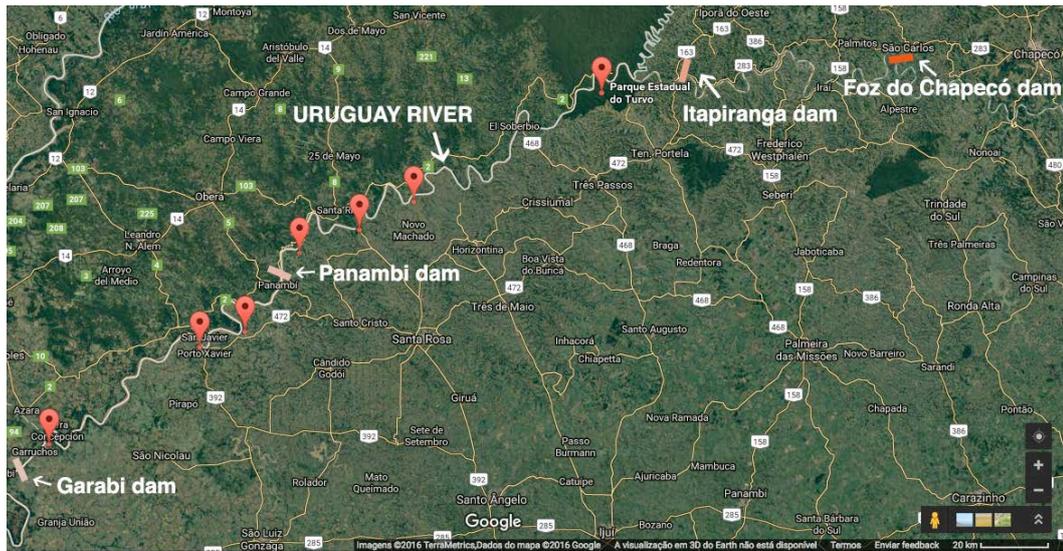
Also in 2015, Engevix's top executives were arrested and charged with participation in a cartel, corruption, and money laundering, during the *Operation Car Wash (Operação Lava Jato)*—a massive and still ongoing investigation into political corruption in Brazil involving politicians

from all major parties, their relatives, infrastructure/engineering companies as well as powerful corporations and businesspeople from the private sector.

Eventually, on August 22, 2017, the Federal Judge issued his sentence. It acknowledges the threats of the Panambi dam project as it is currently designed (i.e. featuring 130m as its maximum water level); nullifies the Reference Term the IBAMA had already provided for applicants to undertake the Environmental Impact Study; demands all studies for this project, including the ongoing Environmental Impact Study, to stop; and suspends the process of licensing for the Panambi dam project (Justiça Federal, 2017). As the Garabi dam project depends on the Panambi project for the former's appropriate performance (as previously cited in this section), it is likely that the Garabi project will not progress either. Indeed, I recently spoke to a couple of participants who live in the area to be affected by the Garabi project and they informed me that the local office of the company in charge of the studies for the Garabi hydropower station (that used to be located in Porto Xavier town) was dismantled and they have not seen any employees around anymore. However, at any time these projects can be re-designed and applied to the process of licenses again as improved projects, as we will see below in the case of the Belo Monte dam.

During January and February 2016, I travelled along the area to be potentially affected by the Garabi and the Panambi schemes in Brazil, interviewed, photographed, gathered images, and exchanged experiences with 30 families (36 individuals) who will be displaced if these projects eventually take place. It is important to note that at the time of this fieldwork, the above-mentioned lawsuit was still to be judged, then, neither participants nor I had any clue about what the verdict would be. My proposal arrives in the area amidst this atmosphere of uneasiness and anxiety, also articulating its space within this already set movement of resistance. The interviews took place in their current place of living, i.e. Porto Mauá town, Porto Lucena town, Garruchos town, and also in settlements called Poço Preto, Lajeado Paraíso, Lajeado Tigre, São Miguel, Barra do Santo Cristo, Esquina Santo Antônio, Três Pedras, Lajeado Marrocas, Linha Uruguai Sul, Linha Uruguai Norte, Linha Dourado, Linha Mineral, Linha do Rio, Itajubá, and Reservado Mauá (Fig. 4.10). All these sites are located within the Brazilian territory.

FIGURE 4.10. Areas visited by the researcher.



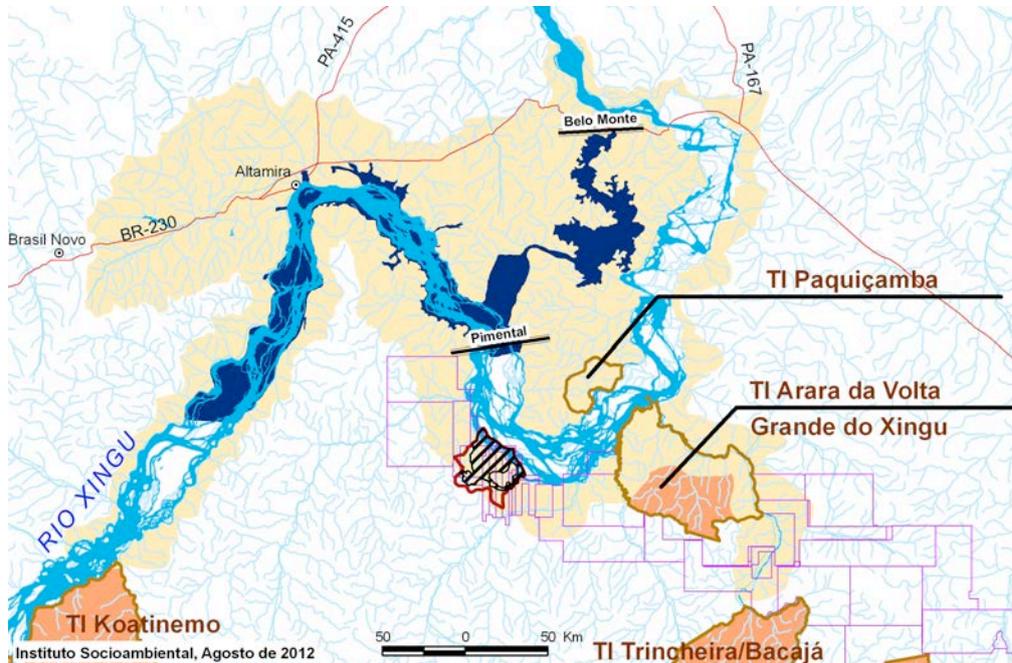
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Modified from Google TerraMetrics 2016 – <http://maps.google.com>

### **Belo Monte hydropower complex project**

The Belo Monte hydropower complex comprises two dams and hydroelectric stations located in Northern Brazil, in an area known as Xingu's Big Bend (*Volta Grande do Xingu* – see Fig. i, p. 39, and also Fig. 4.11). They are named as: i) the main dam and complementary plant—the Pimental dam ( $03^{\circ}26'15''S$   $51^{\circ}56'50''W$ ), and ii) the secondary dam and main plant—the Belo Monte dam ( $03^{\circ}07'35''S$   $51^{\circ}46'30''W$ ). The innovative and challenging design of the Belo Monte dam complex allows the water of the Xingu River that is held back by the Pimental dam to be redirected towards the main station (situated downstream, within the Belo Monte dam wall) through a 20 km-long canal/bypass built for this purpose in an area of land beside the actual river (Norte Energia, 2015). Consequently, as the water is diverted from this stretch of the Xingu River between the Pimental and the Belo Monte dams, Xingu's Big Bend, in its 134 km, has its average water discharge reduced by up to 80% (Eletrobras, 2009, v. 1).

FIGURE. 4.11. Map of Xingu’s Big Bend (Pará state, Northern Brazil) highlights the Belo Monte dam complex. Xingu River depicted in light blue and the reservoirs of the Belo Monte dam complex in dark blue (main reservoir—above-left the Pimental dam in the map, and secondary reservoir—below the Belo Monte dam in the map).



Altamira (the closest city to the dam works) is located above left. Note that the Paquiçamba and Arara da Volta Grande do Xingu Indigenous Reserves are situated within the stretch of the Xingu’s Big Bend that had its average water discharge extremely reduced (up to 80%) as a consequence of the Pimental dam upstream. Also note the location of the area that has been requested by the Canadian Belo Sun Mining corporation as a future open pit gold mine, shown below in the map (overlaid black and red lines). The implications of these two points were examined in **Chapter Three** (p. 168, 170-171)

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Adapted from ISA 2012 – *Xingu’s Big Bend region*  
 [online] At: <https://piib.socioambiental.org/en/noticias?id=117274>

Once finished, in 2019, the Belo Monte hydroelectric complex will feature 11,233.1 MW of installed capacity (11,000 MW generated by the Belo Monte plant and 233.1 MW by the Pimental plant), ranked as the third largest hydropower station in the world and the biggest in the Amazon (Norte Energia, 2015).

The climate in this region of the Xingu River is classified as monsoon (Köppen’s type Am3), with minimum annual temperature averages between 24°C and 25°C, maximum between 31°C and 33°C, annual rainfall between 2,000 and 2,500 mm, and relative humidity of the air between 80% and 90%, the rainy season occurs between January and July whereas the “relatively dry” season is from August to December (Fereira, 2008 apud ICMBio, 2012). Original

vegetation of this region of Brazil comprises the Biome Amazonia (Velloso et al., 1991 apud ICMBio, 2012). The rainforest still remains exuberant within local Indigenous Lands/Reserves, Nature Reserves, islands, and as chains along the Xingu riverside and its tributaries (Fig. 4.12); whereas in other areas, due to the pressure of historic fronts of occupation, the original vegetation is constrained in scattered remaining patches amidst large cattle ranches along the *Transamazônica* Highway, urban areas (such as Altamira and Vitória do Xingu cities), and artisanal gold mines (like the one in the surroundings of the Ressaca village).

FIGURE 4.12. Aerial view of the Xingu River's local landscape at the Pimental dam building site. Xingu's Big Bend. Note the scope of the river bed, its islands and original vegetation.



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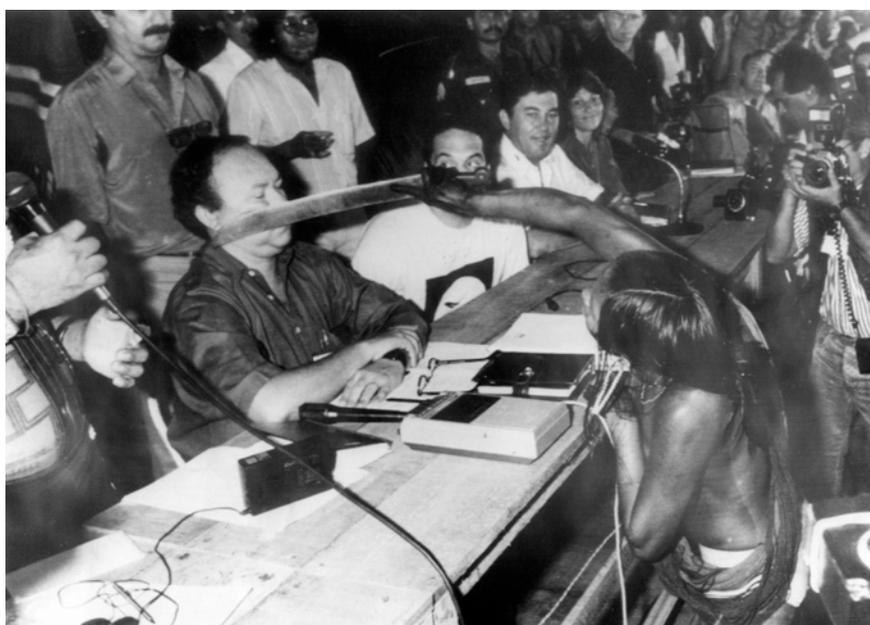
© ISA 2012

It is estimated that around 40,000 people have been affected by the Belo Monte hydropower project to date (FGV, 2016; MAB, 2016).

Similarly to the Roncador dam, which was conceived in the 1980s as part of the São Pedro-Garabi-Roncador dam complex, and, by the beginning of the 2000s, was revised and re-designed as the Panambi dam, the Belo Monte dam complex first appeared in the late 1970s, as a complex of six dams in the Xingu River, in which one of them was the Kararaô dam. At that

time, a global movement against the dam emerged and the figure of Tuíra—an individual from the Kayapó ethnic group who, during the public consultation that took place in 1989, employed her machete against the director of the company in charge of the project—became emblematic as a symbol of resistance to the Kararaô dam (Fig. 4.13). Eventually the World Bank refused to finance the dam (due to reasons already exposed in **Chapter One**) and the project was not carried out.

FIGURE 4.13. Tuíra employs her machete against José Antônio Muniz Lopes, director of the company in charge of the Kararaô dam project (the Eletronorte) during the public consultation organised to discuss the Kararaô dam project. *First Encounter of the Indigenous People of the Xingu, Altamira, 1989.*



Original caption: *Tuíra Caiapó, aos 19 anos, encosta o facão no rosto de diretor da Eletronorte. (Tuíra Caiapó, 19, presses the Eletronorte's director's face with her machete)*

© Protasio Nene/AE 1989

In the early 2000s, Kararaô was re-designed and reappeared as Belo Monte. In 2007, the Brazilian government put the Belo Monte dam project in the pipeline as part of the *Growth Acceleration Programme (Programa de Aceleração do Crescimento – PAC)*. A remarkable national and international movement fighting the dam emerged once again—it consisted of indigenous groups, traditional non-indigenous riverside dwellers (known as *ribeirinhos*), academics, ecologists, individuals, and Non-Governmental Organisations around the world

that feared the disastrous consequences of the dam on the environment, specially, in the Xingu River's watershed and its inhabitants. The major actors in this resistance have been the *Brazilian Movement of People Affected by Dams* (MAB), *Xingu Vivo para Sempre* Movement (MXVPS), *Instituto Socioambiental* (ISA), *Conselho Indigenista Missionário* (CIMI), *Movimento pelo Desenvolvimento da Transamazônica e Xingu* (MDTX), Greenpeace, Amazon Watch, and International Rivers (IRN).

In 2010, the IBAMA granted the *Provisional Environmental License (Licença Prévia - LP)* to the Belo Monte dam project. This ignited protests, and physical confrontations between civilians and the police/army became commonplace. In the same year, the Norte Energia S.A. won the public auction to manage the Belo Monte dam project as well as the energy the plant would generate. Notably, the Brazilian government holds almost 50% (49.98%) of the Norte Energia's shares.

In 2011, the Brazilian government auctioned the dam works to the *Consórcio Construtor Belo Monte (CCBM)*, which is composed of the most powerful engineering companies operating in Brazil's infrastructure projects: Camargo Corrêa, Odebrecht, OAS, Andrade Gutierrez, and Queiroz Galvão. The dam works began.

The socio-environmental provisions (*condicionantes socioambientais*)<sup>49</sup> were then required (as part of the *Basic Environmental Plan – Plano Básico Ambiental - PBA*<sup>50</sup>), which meant to ensure that the forest, fish, water quality, and the health and livelihoods of *ribeirinhos* and indigenous people were protected. They also aimed to guarantee that infrastructure and public services in Altamira (the closest city to Belo Monte) were improved in order to receive the thousands of migrants who would be attracted to the area by the opportunities generated by the mega infrastructure project. Likewise, Indigenous Lands/Reserves would be improved and defended.

In this regard, before the Belo Monte hydroelectric plant building started, back in 2010, the FUNAI (the Brazilian *National Indian Foundation*, governmental agency that deals with indigenous affairs and welfare) demanded the consortium that was leading the Belo Monte hydropower project (i.e. the Norte Energia S.A.) outlined and carried out emergency actions.

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<sup>49</sup>As part of the process of licenses detailed and available in **Appendix 1 – Structure of the environmental regulatory framework for hydropower plant projects in Brazil**.

<sup>50</sup>The *Basic Environmental Plan (Plano Básico Ambiental – PBA)* is a long-term project that the company in charge of the dam project has to run to mitigate and compensate the potential negative damages caused by the proposed hydropower plant. This can also be found in **Appendix 1**.

This happened because the FUNAI was concerned about the imminent hazards the indigenous population were exposed to due to the changes to be triggered by the initial stages of the Belo Monte dam works until the PBA were implemented. These emergency actions aimed to prepare these indigenous groups for the modifications that would happen in the region; protect indigenous land from poachers, illegal loggers, and *grileiros*<sup>51</sup>; assure the affected indigenous groups would have access to food according to their traditional diet; as well as foster the development of these traditional communities based on their own ancient knowledge and practices. Hence, the *Emergency Plan for the Protection of the Middle Xingu's Indigenous Lands Under the Influence of the Belo Monte Hydropower Plant, Pará State (Plano Emergencial de Proteção às Terras Indígenas do Médio Xingu sob Influência da Usina Hidrelétrica de Belo Monte, Pará)*, referred as the PEPTI or the “Emergency Plan”, should involve mainly<sup>52</sup>: building 21 stations for territory protection (UPTs) in key sites along Indigenous Lands/Reserves and their surroundings; equipping the FUNAI with material and human resources to proceed these surveillance both on location and remotely; improving the FUNAI's facilities in Altamira city; encouraging these people to remain in their lands through the strengthening of their sense of community and autonomy. The consortium agreed to spend R\$30,000 (around £7,500 pounds) with every indigenous community on a month basis during the time proposed for the implementation of the PEPTI in order to make this assignment happen.

The PEPTI ran from 2010 to 2012 (FGV, 2016; ISA, 216). By the end of 2012 the Norte Energia had not finished one single UPT (ISA, *ibid*; MPF, 2013). Remarkably, at some point, the consortium started to negotiate privately and directly with every indigenous leader on how the monthly R\$30,000 should be allocated: each leader should make a “list” of things she/he considered the community needed and these items would be provided by the company. As there were no criteria, these “lists” ended up reflecting personal demands and including items like vehicles, boats, boat engines, fuel, soft drinks, biscuits, TV, and even a mine pit (MPF, 2015b; ISA, 2016; Leonardo Moura and Pablo Lobato, pers. comm.). Even aware of the real purpose of the *Emergency Plan*, the Norte Energia delivered the monthly requested items to every indigenous community. This not only ignited conflicts within every group (as some

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<sup>51</sup> Brief definition of the term *grileiro*: an individual who produces fake documents of rural property and sells these properties without actually owning them. This has been a widespread illegal activity that dates from the nineteenth century and has been a largely lucrative business specially in the Amazonia—notoriously in the Pará state, where the Belo Monte dam is located. *Grileiros* are powerful people, generally working in a scam-based business which includes the support of register officers, software engineers/hackers, local-hired killers as well as corrupt judges, governors, and representatives. *Grileiros* were accused of the murder of the missionary nun Dorothy Stang, in 2005—which took place in Anapu, one of the districts cited as to be also impacted by the Belo Monte dam project.

<sup>52</sup> As listed in the FUNAI's reference document n<sup>o</sup> 126, March 2011.

leaders started to promote the pro dam discourse as well as kept some items for their personal use) but eventually culminated with the split of communities. Up until 2010 the FUNAI had registered 18 indigenous communities within the area to be affected by the Belo Monte dam. In 2015 this number raised to 51 (MPF, 2015b). These “lists” also led these groups to suffer from diet-related diseases like hypertension, diabetes, and malnutrition<sup>53</sup>, as they suddenly switched from a diet based on cassava flour, freshly caught fish, fruits, nuts, and game to one of processed food. Moreover, having their daily food needs supplied by these monthly deliveries made these people abandon their crops. As crops vanished, litter built up within these indigenous lands. Apart from this, as local indigenous leaders needed to be constantly commuting to Altamira city in order to negotiate with the company, they did not have time to listen to their own communities’ internal demands. This dismantled their autonomy and their cohesion as a group that claimed that their worldviews and rights were heard and respected. Consequently, in 2015, federal public prosecutors charged the Norte Energia and the Brazilian government of ethnocide (MPF, 2015b).

In a retrospective analysis, the Federal Public Prosecutor’s Office conclude what became of the PEPTI in the end:

*"What was commonly known as the 'Emergency Plan' was a path outside the licensing norms, defined away from the legitimate spaces of indigenous participation and protagonism, through which the entrepreneur succeeded in attracting indigenous people to their counters, keeping them away from the construction sites of Belo Monte, even without complying with indispensable [socio-environmental] provisions. A massive policy of pacification and silencing, performed with the use of resources destined to ethno-development. And, from the offices of Eletronorte to the counters of Norte Energia, it quickly reached the most remote village of the middle Xingu, with damage not even sized yet but already present<sup>54</sup> [...]" (MPF, 2014)*

Ultimately, the impacted indigenous people have not been either protected/empowered or properly consulted as required by the Brazilian legislation and the International Labour Organization (ILO) (Fearnside, 2017).

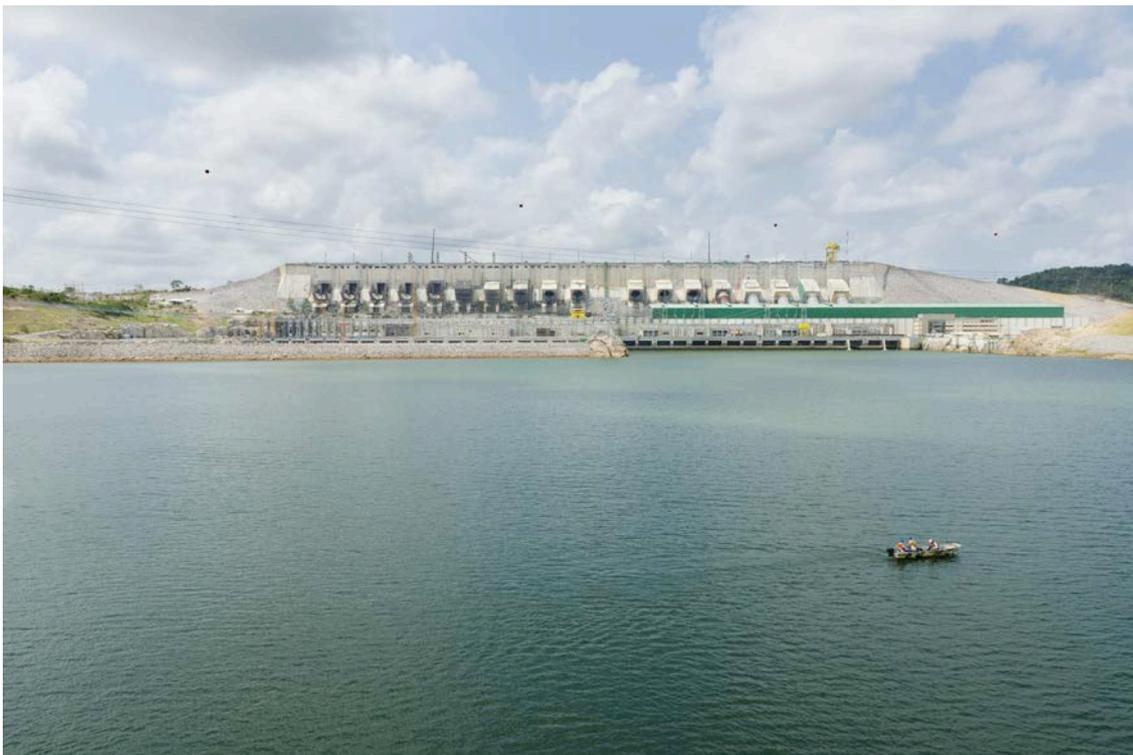
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<sup>53</sup> From 2011 to 2013, the incidence of hypertension and diabetes (type not specified) in the indigenous communities located within the area to be affected by the Belo Monte dam doubled (MPF, 2015b). Between 2010 and 2012 the children malnutrition index increased 127% (6 to 60 months old – FGV, 2016; ISA, 2016).

<sup>54</sup> My emphasis: underlined.

In 2011, the IBAMA granted the permission to install the project (*Licença de Instalação - LI*), despite being aware that Norte Energia had not accomplished all socio-environmental provisions required to start to work on the dam. In 2015, the same *Operation Car Wash (Operação Lava Jato)* named above for the Garabi-Panambi project also revealed the involvement of the engineering companies in charge of the Belo Monte dam project (i.e. Odebrecht, Camargo Corrêa, Andrade Gutierrez, OAS, and Queiroz Galvão) in a scheme of corruption. It was discovered that these companies had funded the PMDB and the PT party election campaigns in 2010, 2012, and 2014 and had paid bribes for the rights to this venture. On November 24, 2015, the IBAMA issued the License for Operation (*Liçenca de Operação - LO*), allowing the sluices gates to be shut, the reservoir to be filled, and the hydropower station to start to operate (Fig. 4.14).

FIGURE 4.14. Belo Monte dam in October 2016.



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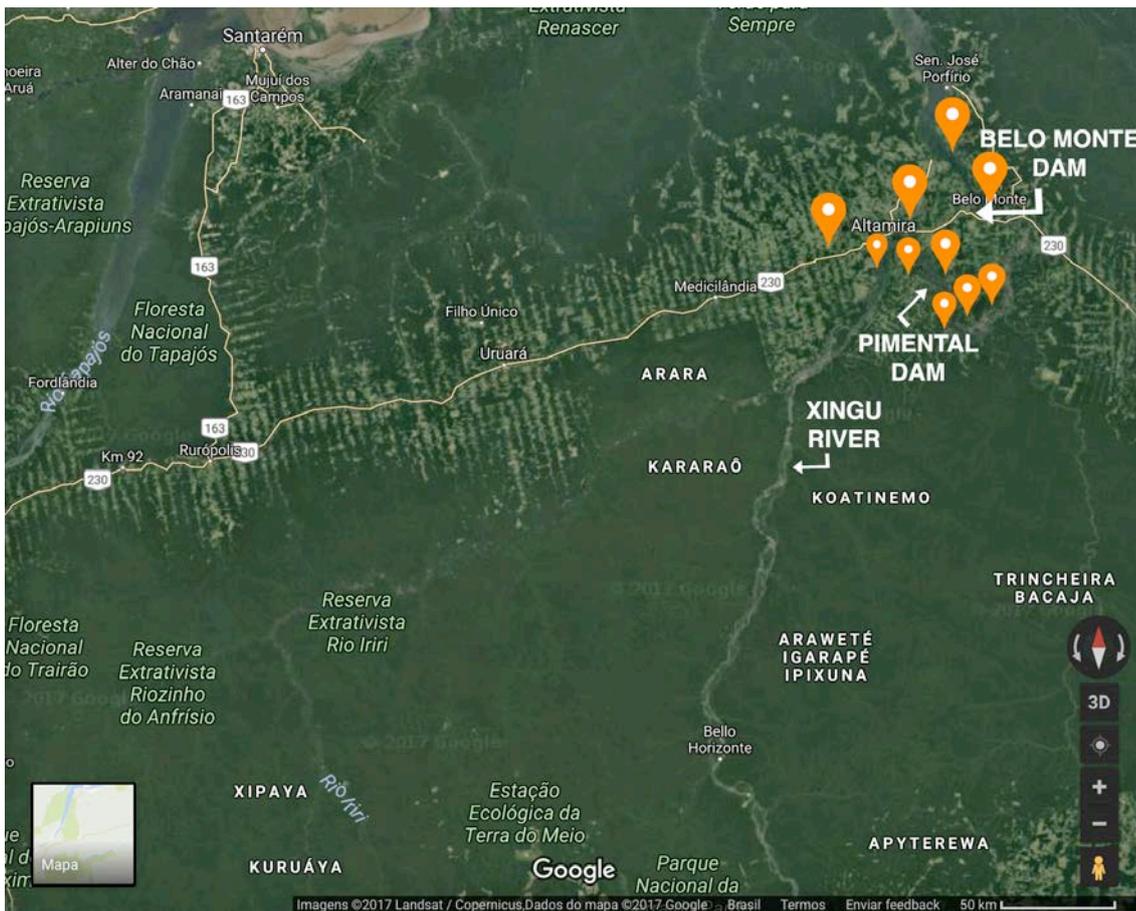
Since the early stages of the Belo Monte project, researchers, scholars, federal public prosecutors, environmentalists, and social movements have argued that both the social and

environmental impacts of the Belo Monte were unacceptable. Despite this, the dam works have never stopped.

Up until now, the Belo Monte dam project, primarily funded by Brazil's *National Bank for Economic and Social Development (Banco Nacional de Desenvolvimento Econômico e Social - BNDES)*, has overrun its budget by 100%: the initial cost of R\$16 billion (about £4 billion) is now estimated as being in the region of R\$30 billion (about £7.5 billion), as predicted by Atif Ansar and colleagues in 2014 (see **Chapter One**, p. 57).

During September, October, and November 2016, I interviewed, photographed, gathered images, and exchanged experiences with 16 families (21 individuals) who have been affected by the Belo Monte dam complex. Except for Juma Xipaia and Maria Rosa (who I interviewed in Altamira city instead of in their actual address), these interviews took place in the participants' current place of living (Fig. 4.15). For the purpose of records and mapping of the area surveyed: nine families had previously lived in areas of compulsory movement, i.e. Santo Antônio hamlet, Itapiranga Island, Pallhau, Pivela island + Peixaria (Altamira city), Trindade Island + Manoel Ferreira, Cashew Island, Barriguda's Island + Invasão dos Padres (Altamira city), and Paratizão + Ernesto Acioly (Altamira city); the other seven families, that were not officially ordered to move, have their current address in Jardim Independente I (Altamira city), Jardim Independente II (Altamira city), Farm's Island, Sítio Terra Bacabal, Tukamã village (Xipaya Indigenous Reserve), and Paquiçamba village (Paquiçamba Indigenous Reserve). Despite not being classified as sites of compulsory movement, these latter six places are located within the area under influence of the Belo Monte hydropower complex.

FIGURE 4.15. Areas visited by the researcher.



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Modified from Google Landsat/Copernicus 2017 – <http://maps.google.com>

Now that the reader has an understanding of the setting my participants' lives have been embedded in, I can proceed to the analyses of the actual practice.

**Chapter 5: Transposing feelings – Inside and beyond the event of Photography**

*“Every form of contestation against this tyranny is comprehensible. Dialogue with it is impossible. For us to live and die properly, things have to be named properly. Lets us reclaim our words.”*

(John Berger, 2003)

**Aims of this chapter:**

- Reflecting on my practice and on the matters that unfold through researcher-researched encounters.
- Presenting the rationale behind my choices on how to build the narrative I propose as this PhD.
- Drawing the paths through which dams inflict damages on both nature and human beings from my experiences with my collaborators.
- Situating my findings within the context of Human Rights and the Rights of Nature and presenting the scenarios emerged from this collaborative work interwoven with the concepts and reasoning drawn by Boaventura de Sousa Santos and Eduardo Gudynas.
- Reflecting on how this project functions for my collaborators and on the impact of this work on viewers.
- Discussing the potentialities and challenges concerning the dissemination of this work.

## **5.1 Immersing and emerging**

This chapter comprises my immersion in the practice. I concentrate on the reflections and knowledge my encounters with participants unfolded, as well as on the analysis of choices made along this journey in face of this research's major aim: to communicate the nature and the immateriality of the negative impacts of dams through a visual narrative. I will be also referring to and weaving information from **Chapters One, Two, Three, and Four** into this current Chapter in order to situate my reasoning.

As outlined in **Chapter One**, my proposal is to explore the intangible costs of hydropower, as well as to present them in a way that reaches people from different backgrounds. This is distinct from projects that aim to produce written reports, strictly scientific papers, and formal tables and charts. I believe these media are not sensitive to matters that cannot be objectively measured (like those related to the *embodied* and *relational wealths* cited in **Chapter One**) nor are they as accessible to the majority of the population as broadly and pungently as photography is. Therefore, I decided to build this practice in photography. Yet, in contrast to more traditional documentary approaches, which tend to be restricted to the perspective of the one who holds the camera<sup>55</sup> only, I decided to shape the image-making in collaboration with those affected by these infrastructure schemes. As stated in **Methodology**, and **Chapters Two and Three**, the experiences lived by those who have been affected by hydropower projects<sup>56</sup> are at the core of this practice as I perceive these individuals as experts<sup>57</sup> who can unravel and detail the intricate net that comprises the negative impacts caused by hydropower in the river basin and its associated systems (both biological, social, and cultural systems). That said, for the elaboration of the visual narrative proposed as this practice-based PhD, I needed to find ways to absorb their discourse and perceptions coherently in the work<sup>58</sup> as well as to make them intelligible to the audience.

So, this chapter is structured based on key questions I had to deal with throughout this practice: i) how to adapt my practice to the different situations that I encountered, and optimize the collaboration I pursue?; ii) what have my encounters been able to evoke

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<sup>55</sup> Sometimes along with the perspectives of others who belong to the same "community", e.g. journalists, writers, and other photographers.

<sup>56</sup> In this case, the three hydro projects described in **Chapter Four**.

<sup>57</sup> I consider them experts in the subjects of the "river" and "impact of hydropower", and that is the reason for having selecting them as my collaborators in this research, as already mentioned in the **Methodology**.

<sup>58</sup> Not forgetting about my own presence in this work too, by means of the sensations/understanding triggered by what I lived once in contact with my collaborators and those fresh water landscapes, and also based on my previous lived experiences and professional background.

regarding the immaterial nature of the costs?; iii) how my collaborators might have understood photography as a means for them to express themselves and communicate with others?; iv) what impact might this work have on viewers?; v) once these lived experiences, feelings, and immaterial values have been accessed, how to best present them to these potential viewers?; and vi) once completed, how to disseminate the work so that it reaches the audience and eventually accomplishes its goals?

As I expand the paths I forged through these questions, I present how my practice worked and why my methods were significant.

## **5.2 Question I – Practical challenges**

As Grant Kester (2008, 2015) and Daniel Palmer (2017) have sensibly pointed out, in collaborative art practices the artist's sovereign control makes room for mediation, negotiation, and contingency, as the process of making (and, consequently, the "final piece" too) depends on a collective engagement as well as on the kind of exchanges and situations that happen between participants/collaborators instead of on the single individual's (the artist's) will, ideas, and knowledge (see **Chapter Two**, p. 98-114, for discussions on collaborative art practices). As I propose to construct a narrative on the impacts of hydroelectric power departing from the riverside dwellers' personal experiences on these infrastructure projects and as this narrative includes responses to my encounters with the participants, "adaptation" is a key term for implementation of my methodology. By acknowledging this, I do not mean it made my practice easier. Instead, dealing with and having myself to adapt and find solutions to the peculiarities each fieldwork (and each participant) revealed to me tended to add a reasonable level of vulnerability and distress for me, as I could neither assure the proposed joint labour would happen at all (even with these "solutions") nor control the whole process but rather negotiate it. On the other hand, as Palmer (*ibid*) and Kester (*ibid*) have stressed, this is what makes collaborative works unique and remarkable as art practice.

The structure of families and communities are dynamic processes, as is history. They are subjected to external influences that cannot be controlled by photographers and/or researchers, regardless of what the latter originally planned as her/his process of inquiry. It is up to us, photographers and/or researchers, to be sensitive to them and to try to find ways to

undertake our work on these mutable and unsteady grounds. Retrospectively looking at the challenges I was faced with, in regard to my fieldwork, makes me realise how much they contributed to my better understanding of photography, power, history, human beings, rivers, environment, endurance, resistance, resilience, and dams.

The first thing I had to perceive, reflect on, and adapt to was the strict (if any) access to water in the harsh *Caatinga* (see also Fig.4.1 and associated text in **Chapter Four**), during the fieldwork in the Sobradinho dam area. As underground water in this semi-arid patch may be salty and the rain is virtually absent throughout the year, locals often get their drinking water supply essentially via water lorries (*caminhões pipa*) that travel amidst hamlets and fill dwellings' water storage tanks or pumps connected to mile-long pipes that drag water from the reservoir of Sobradinho dam to eventually deliver it in the participants' current places of living. Importantly, these services depend on those who regulate them—from policy-makers to lorry owners. As a precious substance, every drop must be saved (no taps in the sinks in kitchens, toilets, and laundry facilities—water handled in bowls, from doing the dishes to bathing) and, as a person with whom participants would need to share water with, during the time of my stay with them, I needed to manage to save it too, generally by bringing along with me my own gallons of water (to drink and, occasionally, also to bath). One can imagine the logistics that is involved in bringing dozens of litres of water, apart from handling the photographic equipment and other stuff, considering I would spend about a week in each one of these places. Aware that these people used to live by the river, enjoying the plenitude of water on their doorsteps, it was painful to consider what they endure simply because they no longer live close to the river. As I tried to adapt my logistics and my routine to this, I experienced, together (albeit it briefly) with participants, their everyday struggle, I had a more in-depth perception on water and power, on the magnitude of the transformation affected people face when infrastructure projects of this kind happen within a dry region, like that of the São Francisco River: water is power, it separates life from death, dependency from independency, as I will illustrate in the next section of this Chapter.

Regarding Arnd Schneider and Christopher Wright's claims for challenging researches within both the fields of arts and anthropology outlined in **Chapter Two** (Schneider and Wright, 2010, 2013), these authors welcome open-ended procedures for the fieldwork design, as encouraged by George E. Marcus. Marcus is an anthropologist who participated in the

Postmodernist Anthropology<sup>59</sup> movement of the United States and who, after that initiative, went beyond, pushing the boundaries of classical Anthropology (a discipline arguably founded upon pre-determined and rigorous methods of collecting data towards pre-conceived outcomes) by urging that researchers undergo a journey of discovery and adjustments with their collaborators/subjects (Marcus, 2010). Marcus believes that, in doing so, unexpected possibilities are likely to unfold and be incorporated into the process of learning as well as to generate knowledge. In other words, Marcus is not interested in final products originated by “fixed methods” but he rather appreciates the contributions the practice itself can make in transforming its ends and in understanding mankind.

In this respect, it is interesting to note how “subject” and situation have driven my practice. Being open to perceive situations and specificities that arose while I was working with my collaborators as well as to tune my fieldwork in accordance with them has helped me to get what I considered the best of every experience with each participant and I assume this is what these authors envisage when they demand open-ended procedures. I present some examples below:

Interactions with my collaborators, still in my first fieldwork trip, opened me up to the potentiality of incorporating vernacular photographs as well as drawings in my methods. These two sources of visual information were not part of my initial plan for this research, which aimed to concentrate on the interviews and co-directed portraits only (see **Methodology**). However, during my stay with participants, this arose as a possibility, as I perceived that, once juxtaposed to the images I had already conceived for the work (i.e. the jointly constructed portraits), these “extra” layers (comprised of vernacular images and drawings) could strengthen the narrative built by this research.

During my first fieldwork trip, when one of my first collaborators spoke about one of the villages affected by the Sobradinho dam and I attempted to envisage what he described, I asked him about any photograph he happened to have in which the place was somehow portrayed—considering that I could not see for myself that place in the present, as it had been either submerged or, at least, transformed, likewise the entire area, since the Sobradinho dam was concluded, in 1978. As I browsed a couple of the photographs that he showed me, I

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<sup>59</sup> Postmodernist Anthropology was a movement that began in the 1960s criticising the previously established mode of undertaking and setting out anthropological researches. Members considered those traditional methods of research as unreliable due to their emphasis on the standpoint of the researcher only; consequently, these researches ended up reinforcing bias and stereotypes concerning other cultures.

decided I should incorporate this extra layer into my methods, i.e. I should start to actively look for images from my participants that somehow addressed the existence of those currently physically vanished places, as another layer that, once juxtaposed to the other one I had already conceived for the work (i.e. the jointly constructed portraits), could bring up the significance of the places that were lost (or might be lost, for the case of the Garabi-Panambi dam complex, as it still exists as a project only—see **Chapter Four**). I wanted to showcase what these submerged/destroyed sites meant in the end: more than simple pieces of land and stretches of water. I thought that selecting photographs these people have taken or kept could indicate their actual loss, bearing in mind that no one takes or stores photographs that do not mean anything to them. For me, these vernacular images signify sentimental landscapes, that I myself could not photograph, as, from my point of view, the former reflects what people see and what they value concerning the place where they had lived, before the move. I also wanted to start an archive of the people affected by dams in Brazil, not only to acknowledge their own history (as Susan Meiselas did, particularly regarding her work with the Kurds, on the website she built for the project—see **Chapter Two**, p. 86) and to recognize them as a political group, but also for keepsake purposes (as Anthony Luvera also first aimed regarding the people who have experienced homelessness in London, when the images made by the attendees of his workshops at *Crisis* started to build up—see **Appendix 6**). I also thought about the use Meiselas made of different types of imagery to assemble works about how some people and places have been represented—in that case, the Dani and the Kurds (Fig. 2.1, 2.2, and 3.7). Then I decided to appropriate this collection of images from participant’s personal archives into my methods too. The same was true for my subsequent decision to use drawings: once this research is about participants’ perspectives and the landscape of losses brought by the dam scheme, it seemed to me that drawings made by my collaborators could be a suitable representation process to expose these two points at the same time. Then, when appropriate, I asked participants to draw, as it happened with participants of the project Élio, Maria Zilda, and João Evangelista.

Élio was one of the founders of the Santo Antônio hamlet (settlement that was cleared for the Belo Monte dam worksite). Apart from outlining his struggle to carry on being a fisherman<sup>60</sup>, Élio’s testimonial also addressed other themes that ultimately stand for the range and degree of impacts dams can cause.

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<sup>60</sup> A longer excerpt from Élio’s interview is found in **Appendix 5**.

“[...]

*Marilene Ribeiro (myself, researcher) – I'd like you to tell me what Santo Antônio was like, before the news and how you learnt of the news [about the Belo Monte dam project].*

*Élio - Santo Antônio, before the news, was a community where everybody wanted to live there. Do you know why? It's not because we had the Money. It is because the people of Santo Antônio were happy. Even without money we were happy, everyone was happy. There were 67 families living there, each had their work. There were 28 fishermen affiliated with the fishing colony, they fished directly, and there were the rest of the people of Santo Antônio that weren't fishermen, but that fished indirectly in the winter, while in the summer they didn't fish and other people did, lot owners, and others worked on the farm and also lived in Santo Antônio. [...] We had fish, we had turtle for us to eat, we had the yellow-spotted turtle, we had the armadillo, the paca, the deer, we had everything.*

*Researcher - So, there was a forest there?*

*Élio - There was a forest surrounding the area, we would hunt, everybody would kill their game, a deer, then we would share, a piece for each.*

*Researcher - Divided between whom?*

*Élio - Everyone who lived near each other, each one took a little bit, those closest. [...] And that's how we used to live, you know. So we took pleasure in living in Santo Antônio. Our [football] team played well! When we entered the field ... We know that our football team was the best football team in [the region of] Altamira, Belo Monte [village], you know? We have tournament trophies, championship trophies, we have it all. [...] Our soccer field, as we could not make one and did not have the money, we paid with 8 chickens. The guy with the machine, he said, 'you guys get some chickens for me.' Afterwards, we finished it with hoes, as a group. All the time we took care of it [the field] as a group: everyone would go and then spend the day there skimming the field, arranging everything. Our community was very united. [...] So when we heard about Belo Monte [dam] we did not believe it, we did not believe Belo Monte was coming ... it was not really the Belo Monte, it was the Kararaô. [...] When the first demonstration took place in Altamira, when the natives showed that they were there, that the indigenous individual [Tuíra] put the machete in the engineer's neck, that day I was there, you know, that was where the fighting began, but at the time that the people started that fight, there was no alternative, it had already been decided that the project would be carried out, you know, and soon Belo Monte would come. [...]*

*Researcher - And what has the area [Santo Antônio hamlet] become?*

*Élio - It has become a construction site. Actually, it's a parking lot there, you know, it's not*

*even a construction site, because they did not make a building, they took the bush and put the stone, that hard stone, which is for the truck not to get bogged down, because only those trucks go there. Where our [football] field was, they kind of put a cement there, you know, for those trucks, loaded, for waiting in line, right, and then there's a truck park, where our village was, where the community was. [...]"*

Élio's story is about how the dam seized his Santo Antônio hamlet and, along with the village, how his life as well as his local community's integrity have been destroyed<sup>61</sup>. As I wanted to see the site previously occupied by the Santo Antônio hamlet to have a better understanding of what Élio told me, we arranged for us to go to where it used to be. The cemetery and the school were still there, amidst the flat cleared land and some lorries, tankers, and tractors. Even without the permission of the company (which is now the owner of the site), I managed to take some photographs, as I understood that images of that current harsh place that still contained traces of its history, along with Élio's testimonial and portrait, could assist potential viewers of this work to perceive the consequences of the dam not only for Élio but probably for all inhabitants of Santo Antônio: a cleared memory landscape (Fig. 5.1).

FIGURE 5.1. Belo Monte dam complex project's parking area in 2016 (previously Santo Antônio hamlet). Partial view (below) and details of Santo Antônio's former cemetery (following page).



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<sup>61</sup> A longer excerpt from Élio's interview can be found in **Appendix 5**.



Note location of the cemetery (previous page - red arrow) and Élio on the left in the image at the top right (explanation in the text).

ORIGINAL IN COLOUR

© Marilene Ribeiro 2016

Curiously, after listening to Élio's testimonial, while observing the white stakes of the *Consórcio Construtor Belo Monte* (CCBM)<sup>62</sup> at every grave (Fig. 5.1 – top-right and bottom), I could not help thinking that the developers had appropriated even the dead<sup>63</sup>.

While we walked around in the area previously occupied by the Santo Antônio hamlet, Élio explained to me where the football field used to be, where his house used to be, and everything else that was important to him. I tried to picture the spatial arrangement of the Santo Antônio hamlet. This raised the opportunity of further investigations on how image-making processes could help not only me but also potential viewers to grasp the losses Élio signposted. As the disassembly of a community is something intangible and hardly visualised via ordinary research tools, I tried to find a way to bring this up more consistently. I also

<sup>62</sup> The consortium in charge of the Belo Monte dam works, see **Chapter Four**.

<sup>63</sup> Even aware that these stakes in fact consisted of a technical method of “marking” the graves that had been exhumed to signpost where the human remains were, when found, and had been already moved to a new site, before the alteration in the area started.

thought about Jim Goldberg’s approach of having his subjects physically write and/or draw onto the photographs he had taken of them to give his subjects their own personal voices and a renewed sense of authenticity (Fig. 2.6 and 3.8). Then, using my photographs of the developer’s car park as paper for Élio to draw on, I invited him to make a sketch of this place as it had been (Fig. 5.2).

FIGURE 5.2. Drawing by Élio depicts the structure of the Santo Antônio hamlet and the Santo Antônio stream overlaid on photographs that portrait the current view of the site.



*During the making of the drawing:*

*“[...] Marilene Ribeiro (myself, researcher) – Was here the place where people used to seat to watch the football match?*

*Élio – It was. [...] So, here was the community of Santo Antônio. It was more or less like this model here. This path that followed the river, everyone who lived in this community passed this way; so, this way, it has a drop of sweat, a trace of everyone who lived there. [...] So, this sweat was spilled here, in this place that we are looking at today and it is a rock mound so trucks don’t sink. So, this is a very big difference from where we lived, what we built, and what we see today: the community of Santo Antônio. We can only regret it, [for] we had such a beautiful work, and then we see it destroyed, in a way that can’t even compare to anything.”*

ORIGINAL IN COLOUR

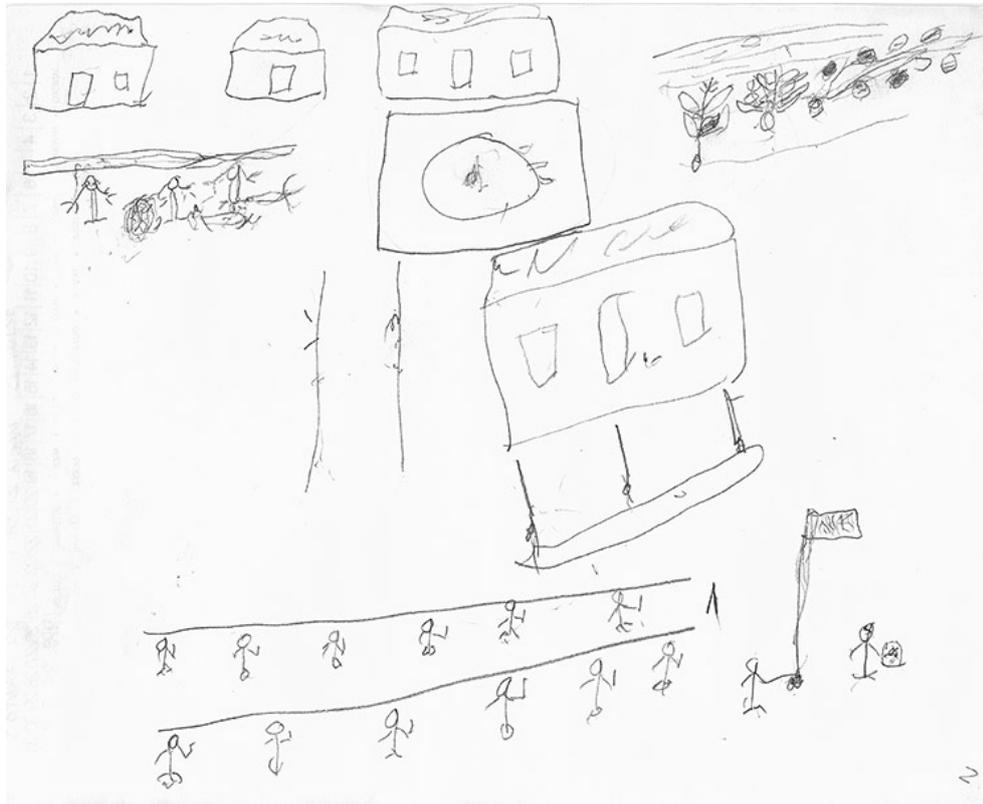
© Élio Alves and Marilene Ribeiro 2016

At the same time, watching Élio draw over that dull image of a parking area was for me like witnessing an act of insurrection against the dam industry’s sovereignty: something like *“I do not accept this view (or this plan?) you have imposed on me. Here is how this site actually is.”* Because I assume that in Élio’s mind (as well as for other inhabitants of the Santo Antônio too) this is how it will always look in the end.

I also had the opportunity of having Maria Zilda, former inhabitant of Juacema (the settlement erased by the reservoir of the Sobradinho dam—see **Chapter Three**), to set the picture with regard to the daily life of one of the villages that were submerged by the Sobradinho dam forty years ago. By suggesting this activity, I aimed to draw out and substantiate what was lost due

to the dam, from her personal standpoint – “[...] *Maria Zilda* – I think, from the drawing, you get the idea of how it [life in Juacema] was. [...]” (Fig. 5.3).

FIGURE 5.3. Drawing by Maria Zilda depicting Juacema hamlet’s daily life.



Top left – Maria Zilda’s (2<sup>nd</sup> left to right) dwelling, and Maria Zilda’s grandfather (left) in front of a basket full of fish. Beside the basket (at its right-hand side), Maria Zilda and another woman do the laundry by the river (three lines together above these three people) on laundry boards.  
 Top centre – Maria Zilda’s aunt’s (3<sup>rd</sup> left to right) dwelling with yard (note people playing a game similar to “Ring a Ring o’ Roses” in the yard – big circle form with small dark circle in the middle)  
 Top right – crops along the river plain (corn, bean, and watermelon)  
 Centre left – two lines of people for the *quadrilha* (barn dance-like routine)  
 Centre right – Maria Zilda’s grandfather’s dwelling with porch  
 Bottom left – community’s procession with candles  
 Bottom right – the raising of the flag and man holding a cake for the community’s auction (right-hand side)

© Maria Zilda Alves dos Santos 2015

Parallel to this, I expected that the act of conceiving a tangible image of her own memory (as she drew) could also enable Maria Zilda to have a fresher assessment of the consequences of the dam in her life. As already presented in **Chapter Three** (p. 122), as Maria Zilda recalls—“[...] Here, his [Maria Zilda’s grandfather’s] house, here, had a porch, like my porch here, a very high

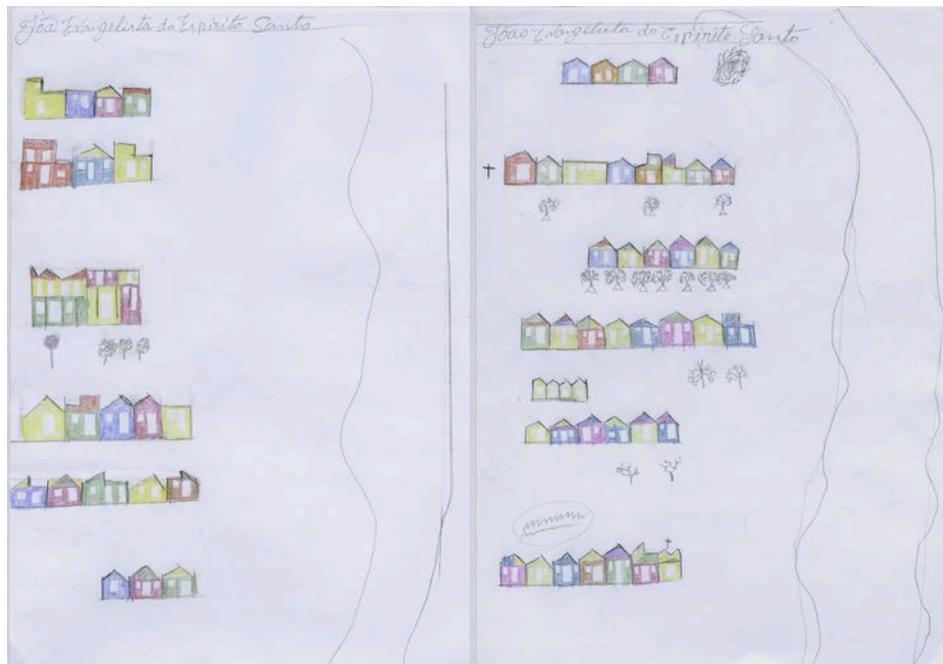
*pavement - it seems that I see it! [...]*”—and introduces me to local folk songs<sup>64</sup> and traditional performances, she mentions how full of movement and life the hamlet was, whereas the site where she has lived since the move (*Poço do Juá*, which is situated in the middle of the *Caatinga*), apart from being scarce in water, gives her the sensation of solitude, as it consists of a handful of houses scattered amidst the dry landscape. This process altogether reflects on her idea for her portrait, and, in a way that resembles, but is also distinguished from Meiselas’ and Goldberg’s ways of working (as I add written reflections on my encounter with Maria Zilda and her portrait, which we worked together on, to her drawing to construct the narrative), I stitch pieces that concern my “subject’s” own perspective together, hoping that the audience is able to perceive what Maria Zilda and I want to tell about her life in the face of the Sobradinho dam.

During my stay with João Evangelista (for João Evangelista’s portrait, see Fig. 2.4a), I noticed he appreciated drawing, then, another opportunity of understanding the losses via this form of representation that is quite personal arose. I asked him if he recalled and (if so) could draw some of the villages that were submerged by the Sobradinho dam, including his own one, Alto do Melão (Fig. 5.4). Interestingly, João decides to show not only the dwellings, but also the local landscape (like trees, mountains, and the São Francisco River). Beyond his portrait and testimonial, João’s drawing makes those erased places re-emerge for the audience’s interpretation about the impact of the dam in the region.

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<sup>64</sup> Folk songs from places that were affected by the dams covered in this research, which I recorded, can be accessed in **Appendix 7**.

FIGURE 5.4. Drawing by João Evangelista depicting some settlements submerged by the Sobradinho dam in 1978.



Alto do Melão is depicted as the third village from top to bottom, in the right column. Left column (top to bottom) – Fazenda das Pedras, Tamanduá, Jatobá, Fazenda Nova, and Cajueiro. Right column (top to bottom) – Serrote, Boqueirão, Alto do Melão, Saco da Arara, Xique-xique, and Encaibro. Wavy lines on the right-hand side of both papers – São Francisco River. ORIGINAL IN COLOUR

© João Evangelista do Espírito Santo 2015

Villages, hamlets, and traditions are part of the landscape that is wiped out. I take the drawings by Élio, Maria Zilda, and João Evangelista as sensitive demonstrations of how diverse, rich, and vivid the riparian environment that is emptied by the dam is. Along with their respective portraits, these drawings help me to strengthen their stories and, hopefully, to deliver to the viewer the nature of the losses caused by dams (which has risen from the researcher-researched encounter).

Like the drawings, the inclusion of vernacular pictures<sup>65</sup> in my methods has also helped me to bring up, shape, and present the subjective nature of the harms led by hydro projects, once juxtaposed with other material. I take as examples Élio's and Maria Niva's personal archives.

<sup>65</sup> Which, as previously mentioned, hold sentimental properties and quite personal perspectives.

Élio's photographs from Santo Antônio hamlet are a visual embodiment of what he had spoken about: the intangible bonds between Santo Antônio inhabitants as well as their communion with the water course. Note that these are not images that depict a holiday trip but rather the pattern of riverside dwellers' everyday life (Fig 5.5).

FIGURE 5.5. Daily life in Santo Antônio hamlet.



Left - Santo Antônio's football team at their field, 1992 (Élio as the goal keeper). Right - Fishermen from Santo Antônio and their families. Xingu River, 1992. (Élio as the third, right to left).



Fishermen and their families. Xingu River, 1992 (Élio as the third, left to right).



Élio's daughters and son by the Xingu River, 1992.



Élio and wife by the Xingu River, 1992.



Élio in his backyard in Santo Antônio hamlet, 2002 (Élio's place in the background).



Santo Antônio's dwellers playing in the water. Xingu River, 1992.

Note the clipboard deliberately included in the photographs taken, as a form to acknowledge that this is part of a method of inquiry.

Gathered from Élio's personal archive in 2016.

Originals as photographic prints.

ORIGINAL IN COLOUR

© Élio Alves das Silva 1992 and 2002

Like a puzzle, as I use them as one of the components of the narrative, i.e. once presented along with Élio's explanation about his lived experience, his ideas for his own portrait, his co-directed portrait, his drawing, and also some photographs of the area I took myself (like those of the Santo Antônio's cemetery), I intend the whole picture of the harms the Belo Monte dam has inflicted upon Élio becomes more accessible to potential viewers of the work. As discussed before (see **Chapter Two** and **Three**), Susan Meiselas also opted for this strategy of assembling a multi-layered visual narrative when facing a complex story to tell, i.e. the ones of the Dani and the Kurds.

Maria Niva's archive, in its turn, helps me to perceive and, then, to set out a more "concrete view" of the drastic "change" (as Maria Niva herself named her feeling regarding the Sobradinho dam<sup>66</sup>) the area under the influence of the dam scheme is subjected to. The Sobradinho dam was expected to submerge four major towns: Casa Nova, Remanso, Pilão Arcado, and Sento Sé. Therefore, four new towns, called by the same names of their to-be-submerged twins, were built to resettle their respective inhabitants. Unlike the other three, the water did not reach Pilão Arcado town in the end (yet the town can be accessed by boat only, after the dam), and what was not demolished before the mass move still remains. As

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<sup>66</sup> For the portrait of Maria Niva, see Fig. 5.12.

another usual scene that happens in these cases of “eviction”, some dwellers refused to move until the very last minute<sup>67</sup>, and, for the case of "Old" Pilão Arcado town (as it is called), these families, ten altogether, still lived there. During my field work I managed to go to Old Pilão Arcado. As the boat anchors, the phantom town welcomes me. Unlike how it was before the dam (when the town had access to electricity), energy in Old Pilão Arcado is created either via burning oil or small solar panels. No more hospital, no more school, no more market, not even the main road was spared from neglect. The site was abandoned, as there was no interest in supporting "two" towns—as participant Maria Niva explains to me later on. As one of the teachers of Old Pilão Arcado, at the time of the move she officially proposed to both the Chesf<sup>68</sup> and the mayor to conserve the old town, even if this would be done for touristic purposes—as the local architecture was beautiful—but she was told that there were no funds for such a venture. As I speak to Manoel Alves dos Santos, one of those who still live there, I try to imagine the shift he and his peers have experienced: from citizens who had access to all manner of services a town can offer to human beings living isolated in a forgotten place. On the day after, back to “New” Pilão Arcado, when I eventually get to meet Maria Niva (the teacher) and she shows me her personal archive containing dozens of images of Old Pilão Arcado, I can understand the losses that people from Pilão Arcado have undergone, both in terms of architecture and particularly in terms of community and social life (Fig. 5.6, 5.7, and 5.8).

FIGURE 5.6. “Old” Pilão Arcado town before the Sobradinho dam. Various dates.



<sup>67</sup> Indeed, several interviewees from my fieldwork in the Sobradinho dam area told me that some people had to be rescued by helicopter, as they had denied leaving their homes until the water rose up and they found themselves caught on islands.

<sup>68</sup> The company in charge of the Sobradinho dam project.



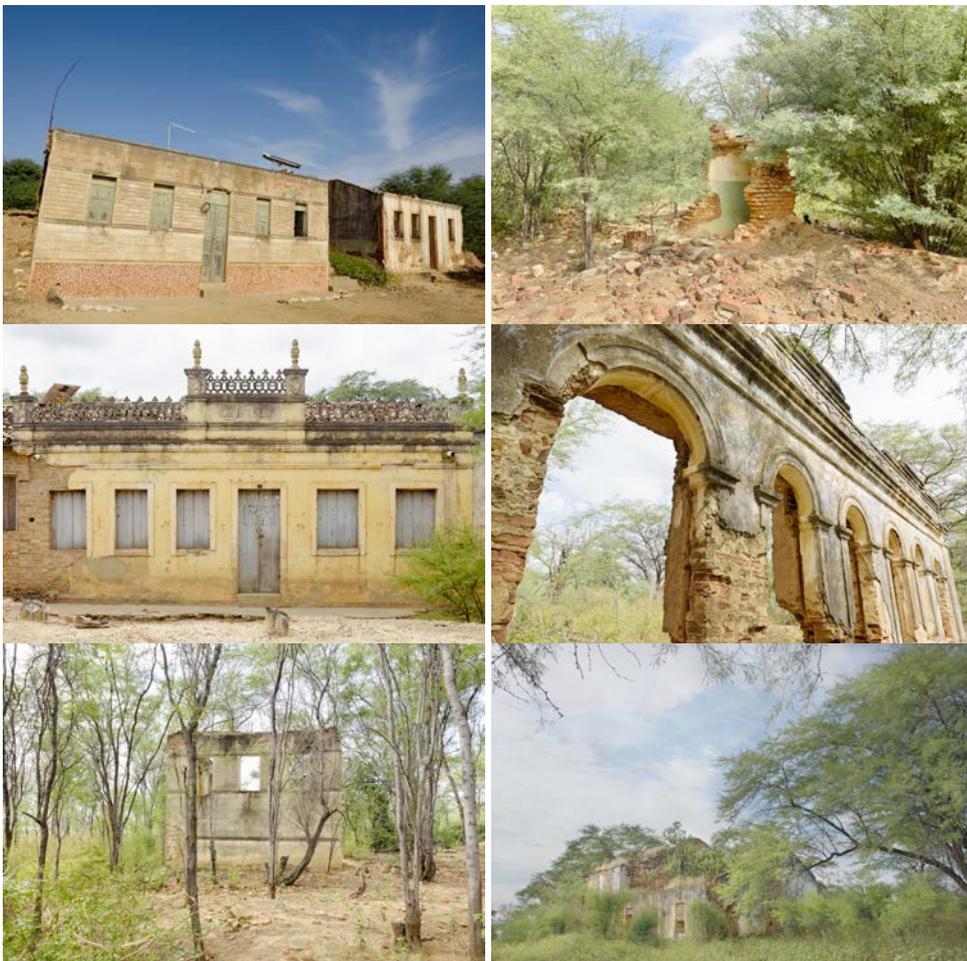
Top to bottom/left to right: Envelope containing Maria Niva's archive (English translation: 26 photos of the New town. 24 photos of the Old Pilão Arcado. Note: Handle with care. These photos are part of my personal and professional life journey.); Performance with hoops—Brazil's Independence Day street parade, 1976; Maria Niva (in a yellow dress) makes a speech on Brazil's Independence Day, school, 1976; Performance with musical instruments—Brazil's Independence Day street parade, 1976; Students marching, Brazil's Independence Day street parade, 1976; Entrance of the school and students singing Brazil's anthem (town's gymnasium in the background), undated; Culture's street parade: the Africans and the Scottish, undated; Culture's street parade: representation of the slaves, undated; Church (outside view): dwellers gathering for the transport of the church's statues from the "Old" to the "New" town (procession), 1977; Church (inside view): priest João on the altar, 1972; Church (inside view): Elementary School Graduation Ceremony, tutors and students on the altar (Niva at the centre, top row, black hair), 1973; Graduation Ceremony, toast: Niva, Niva's husband (Fernando), family friend and graduate Guaracira, 1973; back of the previous photograph (To teacher Niva and Fernando one

remembrance of my Graduation. From your friend, Guaracira Queiroz Lima. 23-12-73); Pilão Arcado's vantage point: Niva (woman standing at the left), Fernando (behind her), Niva's sister holding Niva's daughter, and friends, 1973; back of the next photograph (23<sup>rd</sup> of June 1973: a remembrance of the times we spent together at the Pilão Arcado's high school. Niva carries on with her job of educating. [Illegible]. Peace. Happiness.); Primary school graduates at the school's courtyard, 1972; photograph taken from Pilão Arcado's vantage point overlooks the dwellings, the Church, and the São Francisco river, 1972.

Re-photographed from Maria Niva's personal archive in 2015. Originals as paper envelope (top left) and photographic prints (all the rest). ORIGINAL IN COLOUR

© Maria Niva Lima da Silva 1970s.

FIGURE 5.7. "Old" Pilão Arcado town. 2015.





Left to right / top to bottom: Current dwelling of Manoel Alves dos Santos (façade), Remains of a house located on the main road, Façade of a house in the main road, Remains of a building's arch, Town hall, Church (outside view), Current dwelling of Manoel (inside view), and Church (inside view—nave).  
ORIGINAL IN COLOUR

© Marilene Ribeiro 2015

FIGURE 5.8. “New” Pilão Arcado town. 2015. Detail of one of the dwellings the company in charge of the Sobradinho hydro project built to resettle inhabitants of “Old” Pilão Arcado.



Note the details of the façades of “Old” Pilão (Fig. 5.7) compared to the houses of the “New” Pilão (Fig. 5.8, previous page). ORIGINAL IN COLOUR

© Marilene Ribeiro 2015

Photography has long been regarded as the device to document transformation—historically, fast urban changes cities like Paris and Rio de Janeiro experienced in the second half of the nineteenth century, and São Paulo in the first half of the twentieth century (Ferrez and Ferrez, 1984; Kossoy, 2001; Kossoy, 2002a). By appropriating this ordinary, basic, use of photography and putting side-by-side Maria Niva’s archive and my own photographs of Old and New Pilão Arcado towns, along with the textual explanation (presented above) that interconnects them, I assemble one more side effect of infrastructure projects of this kind that are usually difficult to be assessed via traditional measuring tools but that could be brought out via participant Maria Niva’s and my own experiences and our imagery made together.

Still regarding practical challenges and their influence on my practice, my fieldwork involved journeys to remote places in three different geographical sites (for a glance of the scope of this project, the total distance covered, considering main local towns, was 5,613 km, whereas the mean distance amidst them was 2,850 km<sup>69</sup>) that feature three distinct cultures as well as different expressions of the Portuguese language. Besides this, these three regions have endured the issue of large dam plans within their area in three different points in time (the Sobradinho dam took place during the 1970s, the Belo Monte dam has just started to operate and it is still under construction, and the Garabi-Panambi dams complex was originally planned to take place in the next few years<sup>70</sup>). Consequently, even working towards my major aims and following my broad pre-determined method, which was the semi-structured interview followed by the photo shoot co-directed by every participant and myself, I had to adapt my approach according to what I named as “site-based” and “subject-based” adjustments. These adjustments consisted of absorbing the specifics of each place, context, and also each family’s way of life, instead of trying to impose upon them all the same frame I had established previously. In other words, despite having an original work plan in mind, I also tried to fit my approach to the local context and to learn from this as well.

In the Sobradinho dam region, I noticed that returning for the photo shoot the day after the interview had better results than proceeding with the interview and the photo shoot in the

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<sup>69</sup> See also map as Fig. i, **Methodology**, p. 39.

<sup>70</sup> See **Chapter Four** for details.

same day, as I assume this gave the interviewee time to ‘digest’ the reflections raised by the interview and then think properly about her/his role in the photo shoot. I also presume it contributed to the reinforcement of bonds between the interviewee’s family and myself, as on my second visit I was no longer taken as a “total stranger”. From then on, I tried to apply this approach as much as possible: interviewing the subject on day one and returning for the collaborative photo shoot on day two. In contrast, in the Garabi-Panambi dam complex region this approach could barely be applied, since the distance between the houses to be visited made this kind of day-after return impractical. Besides, most of the interviewees of the Garabi-Panambi dam region and their families had hard daily duties, and, consequently, could not dedicate as much time to the project as those from the Sobradinho dam region. Apart from this, in Southern Brazil it is commonplace to sit with your friends and neighbours and spend hours chatting and drinking tea in a communal *chimarrão* (a special mug used to drink local tea), so the limited time available for them to participate in the project had to accommodate this tradition too. I faced this challenge and responded to it by proposing that the families set their preferred time length for our work together, taking into consideration the overall plan of work I presented to them in advance. At the beginning, I was concerned about the negative results that this restriction of time could generate in our relationship as well as in the photographic work. However, fortunately they appreciated the experience and we ended up staying together much longer than what was arranged in advance. At the end, spontaneous comments such as those made by Maria Inês Taube Schröpfer (below) and Cirlei Heming Dawies<sup>71</sup> (**Chapter Three**, p. 130), participants of the Garabi-Panambi fieldwork, indicated that I was achieving my aims, that my visit to this region was also capable of building significant bonds between myself and the families of participants, provoking powerful testimonies as well as performances before the camera.

When I was leaving her place, after we had been working together on her own portrait, Maria Inês Taube Schröpfer remarked: *“It was really good. I did appreciate our time together, our exchange of experiences. Thank you.”*

During her interview, Maria Inês stated that she has felt “tied” (Fig. 5.9), since she received the news about the proposed Garabi dam to be built in that region within the next few years: her family do not want to spend money to improve their farm facilities or even their own house any more, now they are uncertain of what the future holds, and whether or not the company

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<sup>71</sup> Cirlei’s performance before the camera was discussed in **Chapter Three**.

in charge of the resettlement will pay for these improvements. Her family also do not know if they should look for a new home. In spite of this, they do not want to leave the area that once belonged to her and her husband's ancestors, the place they share with the birds (they grow fruit trees for local birds to use and feed from, too). She has felt tied, forbidden to decide to stay, to make plans, to draw her future, or to guide her own life since 2011.

FIGURE 5.9. Portrait of Maria Inês.



Maria Inês feeling tied before the Garabi dam project, which threatens to submerge her ancestral home.  
Object chosen: rope.

Location chosen: her place (house and garden with fruit trees).

ORIGINAL IN COLOUR

© Maria Inês Taube Schröpfer and Marilene Ribeiro 2016

Back in 2015, when I was starting to organise my fieldwork in the Garabi-Pabambi dam complex area, I got to know that the Panambi dam project had been temporarily suspended due to a preliminary judicial decision concerning the lawsuit cited in **Chapter Four** (p. 195). This fact forced me to consider what would be the next stage of my research, considering that the Garabi-Panambi dam complex project may not happen and I had selected it as one of my case studies because I wanted to include the narrative of the to-be-affected people's perspectives of what life was like "before the dam" was built, so as to investigate the impact of the whole process. As these mega projects, from their incipient drafts to completion,

incorporate a number of changes and delays (a characteristic also outlined in **Chapter Four**) I decided that a momentary suspension might not actually prevent the dam being built at any time in the future. Furthermore, the atmosphere of uncertainty and speculation that hits any potential area under threat of a dam-to-be (an important matter that is integral to dam campaigns) might stand in the Garabi-Panambi dam area regardless of the official holdback of the project; consequently, the sense of precariousness that dominates areas at risk could be explored in my practice. It was then decided that I would carry on with the initial plan and I headed to the area that would be potentially affected by the Garabi and the Panambi hydropower stations. Once more, considering Schneider and Wright's (as well as Marcus') open-end approach as a cornerstone for successful research in the Arts and Humanities, I experimented to develop my methods: apart from discussing at length with participants this subject of uncertainty and imminent threat (i.e. what they expected to see, and what they expected to lose or miss if the dam were to go ahead), I took an instant camera to my fieldwork in the Garabi-Panambi region in order to ask participants to also photograph what they do not want to miss or forget, besides co-directing their own portraits. I wanted to include representations of the damages likely to happen, in case the government was eventually allowed to fulfil its plan for the Garabi-Panambi dam complex. My decision to use instant film was also driven by my desire to give something back to the participants (one of the reasons that made Sharon Lockhart use Polaroid film in her *Teatro Amazonas: Apeú-Salvador Portraits* series too), but also to create with them something that could hold an emotional value, something that they could keep as a memory, that could remind them of what is important and what the damages of the Garabi and Panambi dams could, potentially, be, strengthening the impulse of participants to keep fighting. At the same time, I thought that these images could also help me build my case for the dire social and environmental consequences of such dams, hence I asked participants to take two pictures (one a duplicate): one they would keep for themselves and the other I would bring back to England for my work.

Marinês Nicolli, small farmer and inhabitant of the rural area of Linha do Rio/Porto Xavier, whose property would be partially submerged by the Garabi reservoir, explains that, if the Garabi dam eventually takes place, its reservoir will probably change the local weather and the fog, which currently only conceals the sun during winter mornings, might remain throughout the entire day. When asked about what she does not want to lose, she replies: "*The sun. I don't want to live without seeing or feeling the sunshine.*" Marinês Nicolli then photographed and kept a representation of the sun she does not want to lose (Fig. 5.10).

FIGURE. 5.10. Photograph by Marinês Nicolli representing what she does not want to lose: the sun.



English translation:  
*The view of the sun*  
by Marinês Nicolli. 18/02/2016.  
Original as instant film.  
ORIGINAL IN COLOUR

© Marinês Nicolli dos Santos 2016

Apart from the undeniable joy that the sunshine brings (as mentioned above by Marinês Nicolli) and the sun-related health benefits, for people like her, who depend on the sun to grow their own food, losing the sun represents famine as well. Photographing the sun as something that someone might “lose” as a consequence of a political and economic action led by international market dealers and policy-makers has an impact per se and should be reason enough for the Garabi dam to be considered unfeasible.

Still regarding the attribute of photography as a means capable of revealing immaterial matters and my use of it for the purposes of this work (to access and present the negative impacts of dams, which I believe mainly involve subjective costs), there is the experience I had with Ailton. Ailton is a small farmer whose property would be submerged if the Panambi dam is constructed.

“[...]

*Ailton – Talking about losses, beyond material things, we’ve also got the immaterial matters. For instance, here, where I live, I’ve got a special spot where I appreciate taking a rest from labour, from where I overlook the site where the Uruguay [River] bends: a stunning scenery! I consider it a painting – there are paintings that worth millions [of pounds], don’t they? – I’ve got a painting of this sort for free to look at everyday! Then, I ask you: ‘will the Eletrobras [the governmental energy agency that proposes the Panambi dam<sup>72</sup>] compensate me this?’ What about the value of this that I contemplate? What about the sentimental value, the moral value of this?*

*Marilene Ribeiro (myself, researcher) - What do you feel when you are at this special spot?*

*Ailton – I feel I’m in peace, I feel good – the same thing you might feel when you watch a good film, or when you go to a concert that you appreciate. The very same thing you might feel when you perceive something that fulfils you. And, I think that seizing this is not fair.*

*Researcher – Why did you choose that spot?*

*Ailton – Because of its beauty. When the water is not that high, it reveals the rocks, the sarandis [species of bush that lives in the water, by the riverbank], and this conveys a personal beauty to me, it’s something that I myself perceive – it might be like when you contemplate the seaside. And this view will be over [if the dam is built]. The river will get changed. They will modify nature. And, when one changes what nature has conceived, one modifies everything else.*

*Researcher – What do you think the river will be like?*

*Ailton – I picture it as a large lake, stagnant water, dead water. This is what I visualize. And this is how it is like in other places, like where they built the Itaipu<sup>73</sup>. This is what the river was turned into, in the end. [...] I think many fish species wouldn’t survive, because they can’t live in stagnant water. As wouldn’t do many species of trees, because trees we see here, by the riverside, they belong to here, they don’t belong to other areas. If someone covers this area with water and tries to re-plant these plants we find here – by the riverside – by the hills, he won’t succeed because these plants can’t live there [by the hills]. [...] I’d summarize dam as still life. Dam is a still life! [...] I think dam doesn’t cover in*

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<sup>72</sup> See **Chapter Four** for details.

<sup>73</sup> The second biggest hydroelectric facility in the world, also located in Southern Brazil (at the border between Brazil and Paraguay). The Itaipu flooded one of the most powerful waterfalls in the world: the *Sete Quedas* falls. The *Sete Quedas* falls featured twice the volume of water of the Niagara Falls (situated on the border between the United States and Canada).

*water the earth and what stands over it only. It also submerges our emotions, our affection, it submerges more than a simple patch of land. [...]*

When asked about what he does not want to forget, if the Panambi dam is eventually raised, Ailton replies: *“this river, beautiful as it currently is”*. As I have done with Marinês Nicolli and had proposed to do with all other participants from my fieldwork in the Garabi-Panambi dam complex area, I asked Ailton if he could photograph, using the instant camera, this “thing” he does not want to forget: the “painting” he contemplates every day (Fig. 5.11).

FIGURE 5.11. *Curva da corredeira do rio Uruguai (The Uruguay River’s bend rapid)* by Ailton (aka Mito). 2016.



Note Ailton’s place at the bottom-right corner.

Original as instant film.

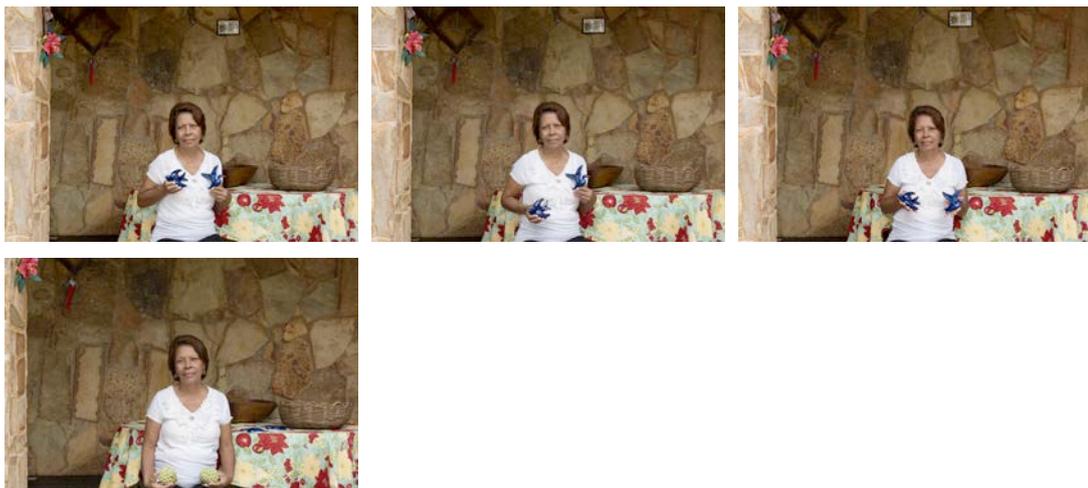
ORIGINAL IN COLOUR

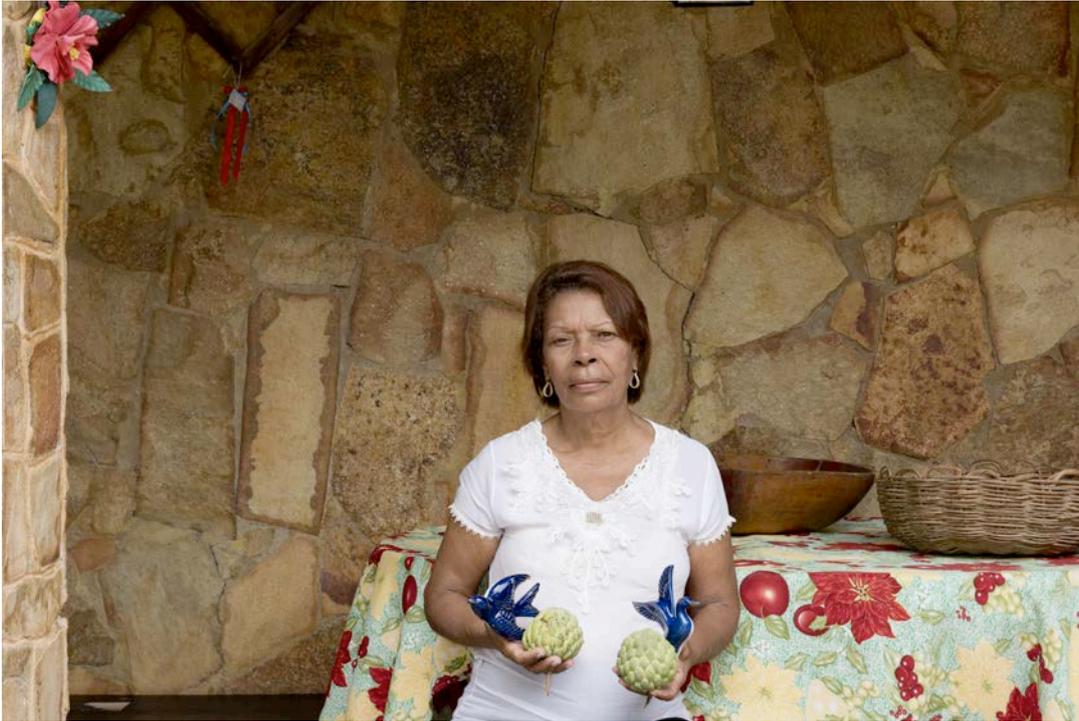
© Ailton Carvalho dos Santos 2016

Considering that these quite personal and sensitive matters (the sunshine, the pleasure, and the beauty) were captured and transformed into tangible things (the physical pictures that I re-photographed and showed here, which both Ailton and Marinês Nicolli were also able to keep a copy of), I understand these objects strongly embody and, once contextualized, communicate the dimensions of what is at stake when it comes to the impoundment of a river. I then proceed with my appropriation of further layers—in this case, the instant films produced by my collaborators—to assemble the picture of the costs of hydropower.

Moving to a different topic, yet still dealing with Question I, specifically with regard to the photo shoot itself, sometimes it was hard to encourage some participants to interfere in the very first photograph I took of them, as I presumably they thought it was not sensible to interfere in someone else’s professional skills which you do not have “qualification” for, i.e. there was no point in guiding a photographer on the best way to photograph, when you (as a participant) are not a photographer. Apart from this, I noticed that some of them had never had the opportunity to choose or to have a carefully considered portrait made of themselves before. Consequently, they tended to feel satisfied with that very first portrait they could see on the display of my digital camera. However, as soon as I convinced them to actually participate, they seemed to appreciate the “game” (the development of an approach as to how they could be in an image and how to explore possibilities in this) and the dialogue started to happen. It was very exciting for me to listen and discuss the ideas they came up with as the shoot was carried out, for instance (see **Chapter Two**, p. 93-94, 96-97, and **Chapter Three**, p. 121, 123-124, for examples). Apart from directing me to a more pertinent way to present their personal story (by repositioning objects and people, and also by changing the way I framed the scene), participants also seemed keen to attempt various aesthetics and experiences of self-representation—i.e. experiences of directing the way important symbols and people are presented to the Other (i.e. to me and to the potential viewers of the images)—like the teacher Maria Niva, from Pilão Arcado town (Fig. 5.12).

FIGURE 5.12. Sequence of portraits of Maria Niva.





Maria Niva's feeling: change

Object chosen: porcelain-made swallow and duck (a heritage from her mother—from the time she still lived in Old Pilão Arcado town)

Location chosen: her current place's porch.

Note how Maria Niva keeps changing the position of the porcelain-made birds along the shoot and also suggests we add the *fruta-do-conde* (fruit) to her portrait: "*let's add the fruta-do-conde, because it's a thing from the land.*"

ORIGINAL IN COLOUR

© Maria Niva Lima and Marilene Ribeiro 2015

Another interesting possibility that arose during the encounters and which I absorbed into the practice was the desire of participants to use apparatus (i.e. the camera) to perform and to map sites that are important to them. Should this behaviour be taken as a commitment of my subjects with their own feelings and (in the end) also with my proposal, here "materialized" by means of their actions?

Comparing to Lockhart's method described in **Chapter Two** and its resultant images (Fig. 2.8), I conclude that the more one, the photographer, makes room for subject's active participation in her/his own portrait, the deeper one goes into the possibilities of representation through photography and portraiture.

Apart from João Evangelista's, Maria Dalva's, and Maria Inês' suggested performances (see Figs. 2.4a, ii, and 5.9 respectively), participant Lúcia Birk de Brum, in her turn, opts for

reconstructing every part of the school to which she dedicated her life (Fig. 5.13). The building is now abandoned and rotten, but still bears its former shape: the principal's office, the toilets, the aisle, the refectory, the classroom. As Lúcia and I walk around the old school, she revisits her memories, re-igniting in her own mind the importance that each of these sites has to her. This area will be submerged if the Panambi dam takes place. As she does not want to lose the concrete representation of her history, in case the water comes, she maps and catalogues it for posterity through the photographs she suggests we make together. During our discussions, Lúcia and I agreed that her portraits would carry more significance if we covered "micro sites" (i.e. the aisle, refectory, and classroom) of her chosen location (the school) instead of running the whole photo shoot using the same single background within the school area (i.e. keeping her in the same single micro site throughout the shoot). In fact, she began to propose this between lines within our initial discussion and I just "formalized" her proposal. Hence, these "micro sites" could be arranged as a triptych instead of (as per my original proposal) fitting Lúcia's portrait into one single background selected by her (Fig. 5.13), that eventually communicated Lucia's story more effectively.

FIGURE 5.13. Sequence of portraits of Lúcia.





Lúcia's feelings: preoccupation, sorrow, and anguish.

Object chosen: statue of *Nossa Senhora da Aparecida*, which accompanied her in the classroom during her career as a teacher.

Location chosen: school where she worked, in the Canal Torto village (which will face submersion if the Panambi dam is built).

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© Lúcia Birk de Brum and Marilene Ribeiro 2016

Bearing in mind the possibility of strengthening the storytelling by adding images from participants' personal archives to the narrative, I gathered some pictures from Lúcia that depict how the school used to be before being closed, in 1996 (Fig. 5.14). I believe these snapshots consist of a strong testimony of the immaterial value every corner of that now decaying building might hold for her and decided that they had to be included in Lucia's story along with her portrait in order to provide a better picture of her anguish regarding the possibility of having that place (i.e. her own history) submerged.

FIGURE 5.14. Photographs depicting the school of Canal Torto village in the 1980s.



Original building, in 1980 (top left), and after refurbishment, in 1985 (top right).  
 Lúcia and students on Easter Day, 1982, outside (bottom left) and inside (bottom right) the classroom.  
 Top right: Lúcia is depicted in the centre, in the middle row, holding a child (her daughter) and wearing a red and white blouse.  
 Bottom (both): Lúcia can be spotted as the only adult portrayed.  
 Gathered from Lúcia's personal archive. Originals as prints on photographic paper.

ORIGINAL IN COLOUR

Photographer unknown

Carrying on with the process of evolving my methods inspired by the possibilities that have arisen during my fieldwork, as encouraged by Marcus (2010) and Schneider and Wright (2010, 2013), my original idea (and the one applied to the portraits from the Sobradinho dam

fieldwork) was for the first shot to be set out by myself. Then, from the second shot onwards, the sitter would be entitled to make his/her own changes based on this first shot. However, during my fieldwork in the Garabi-Panambi dam complex region, I also realized that I could experiment with the intervention of the sitter even in the very first image of the shoot, instead of directing my subject initially and then asking for his/her changes in the next ones. For instance, before we started the photo shoot, when the sitter asked me: *“how do I have (or do you suggest/want me) to present myself and (or) my chosen object in this portrait?”*, I replied: *“How do you want to present yourself and the object you chose to the viewer?”* or *“How do you imagine yourself and your chosen object in this portrait (to be seen by the Other, the one who will get to know you and your story by means of this portrait)?”*. This co-direction that began in the first set of sequences from the Garabi-Panambi fieldwork and continued throughout my fieldwork in the Belo Monte dam area further progressed the process of hybridization of perspectives, ideas, and knowledge. With this development, the practice has evolved and become even more significant to me in relation to both the process and my aims.

One last thing I consider mentioning concerning extra layers I decided to include in my methods based on my understanding of the relationship our society raises with images (as landscapes of affection, memory, as information, “document”, and History) was video recording. As I noted that participants’ testimonials were quite powerful and touching (apart from featuring the distinguished accents from these three regions of Brazil, what identity the geographic origin and cultural background of the groups surveyed too), I decided this precious material should also be documented in a way that could be compiled for future uses and archival purposes. Then, I also recorded the songs they sang to me and, whenever possible, filmed some landscapes and interviews, thinking about a potential video I could work on in the future. Once more, intending to push the boundaries of the medium of photography and to add new layers that could enrich the storytelling, I conceived the video as a sound and moving image piece that could aggregate impact, if exhibited in the same space as the portraits and their attached textual “captions”, as an installation. I managed to script a short video (entitled *Costs*), which I believe that, apart from depicting the richness of Brazilian culture, riverine environment, and history, unveils the immateriality of the costs of hydropower in a more sensitive fashion (as, once more, it does not focus on the traditional pattern found in documentary films—which largely relies on straightforward testimonies by interviewees about destruction and violence, for instance—but rather refers to the drawbacks of the dams indirectly, via the sequence of audio and image arranged together). I decided that the script for this video should follow this more lyrical path, as I understand that this approach could

communicate the intangible issues to the audience more effectively. I noted that the video could both complement and strengthen the message brought out by the jointly constructed portraits by means of moving image and sound, then, I opted for not featuring any particular face in the video (in contrast to most documentary films), as I did not want the viewer to focus on any specific “character” when watching the video but rather to invite the audience to engage with the stories themselves, the sounds of the voices, the sounds and the atmosphere of the river as well as the dramatic transformation that this environment and lives have been subjected to by the time the dam works happen. My selection of footage and dialogues was, then, based on the situations in which the impacts caused by dams could emerge in a more emotive way; for example, when participants (i.e. my collaborators) draw, sing, or speak about their feelings and their interpretations of their lived experience to me. Also, the pace of the video, and the blacked out and muted takes intend to immerse the viewer in the narrative, enabling her/him to reflect on the intensity of the harm suffered. The idea for the video *Costs* came as a consequence of what the participants of this project (i.e. my collaborators) made me reflect about, as something that flourished from my encounter with them.

### **5.3 Question II – Revealing the intangible**

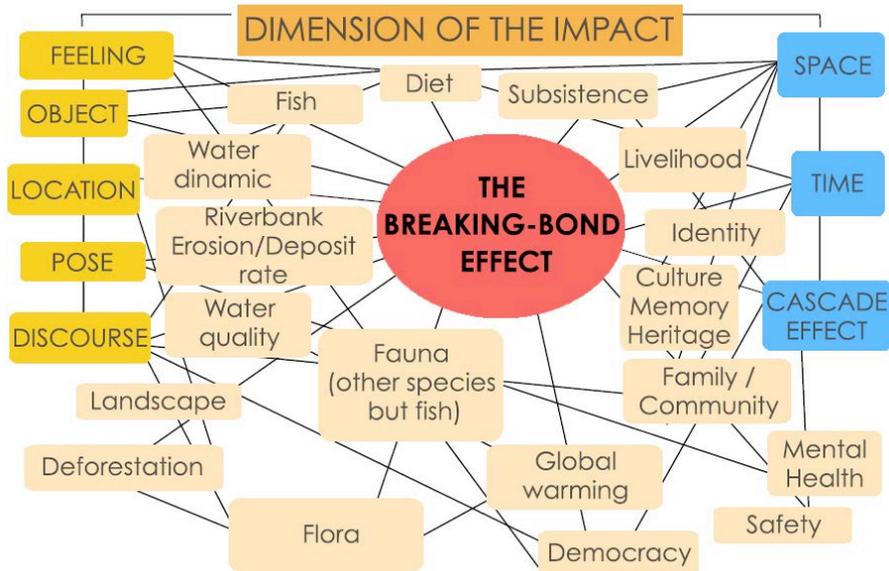
The images generated by this research evolved from all sorts of things that flowed between my collaborators and I, triggered by participants’ discourses during and after their interview, their feelings, and ideas/suggestions for and during the shoot, including the selection of the location for their portrait and the object that would represent their feelings<sup>74</sup> (for examples see p. 229-230 and 236-238: Maria inês’ and Lúcia’s stories; **Chapter Two**, p. 93-97: Hilarino, João Evangelista, and Eliezé; **Chapter Three**, p. 121-130, 159-166, 174-175: Marinês, Maria Zilda, Maria Dalva, Cirlei, Gumercino, Nelci, Maria Rosa, and Maria Eliete). Then, the actual issues concerning the dam building were revealed as the process of image-making unfolded.

These elements cited above (i.e. discourse, feeling, location/object chosen, performance for the camera, etc.) will then function as axes from which I construct the visual narrative, anchor and draw my points, arguments, and conclusions as summarized in Fig. 5.15.

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<sup>74</sup> For details on the methods I used regarding the interview and the photo shoot, see **Methodology**.

FIGURE 5.15. Diagram addressing the sources (dark yellow boxes) used in this research to access and assess the negative impacts of hydropower (pale orange and blue boxes) as well as some of the connections\* between these parameters (black lines). Red circle highlights researcher's conclusion (blue boxes and red circle will be dealt with in the **Conclusions**).



This is my own diagram and I constructed it based on what I've discovered from my research (i.e. from researcher-researched encounters and bibliography consulted).

\*Connections displayed in this figure are examples of the actual numerous connections between these parameters (I opted for presenting only some of them in order to make the links visible to the reader, as adding all of them here would make it problematic for the reader to follow the tracks, and the image would become illegible, due to the amount of threads/lines that cross each other).

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I shall start by citing how my 97 participants (84 families altogether) said they feel regarding the respective dam projects<sup>75</sup>: desperation, destruction, suffering, loss, emptiness, indignation, rebelliousness, outrage, sorrow, wound, bitterness, resentment, anguish, feeling powerless, fear, feeling guilty (about not being able to save his community and the river), humiliation, feeling that he has not been treated like a human being should be, "pain in the heart", "The End", "something beyond any extension", "all bad feelings", "unnamed", "it wrings my heart", "feeling tied", "deep pain", anguish, hatred, anger, "it makes me sleepless", "the End Times", dismantlement, horror, dependency, heart-breaking, passion (about the place he had to leave), "lack" (of identity, support, occupation, food, subsistence), feeling overlooked,

<sup>75</sup> In cases of repetition (i.e. when more than one participant uses the same term to describe the feeling she/he has about the dam), the name of the feeling is cited just once.

resentment, pain, “memory”, anger, enragement, revolt, “feeling that her people’s history has being forgotten”, preoccupation, “feeling that he was treated with contempt”, insult, uncertainty, discourage, grief, “I feel nothing... I’d better forget it... it’d have been better if they hadn’t built the dam”, hope but at the same time feeling hopeless, opportunity but also loss and sorrow. From these inner states one can start to imagine the impact the dam has caused in these people’s lives (even in sites where it has not been built yet, like in the area of the Garabi-Panambi dam complex) and how intangible these wounds can be.

Like the feelings, the images and testimonials I gathered in my fieldwork revealed the sorts of (immaterial) things that are disassembled and ruined by dams. Organising these “things” into categories (which were created and named based on what each participant stressed as important to her/him during our encounter) helped me to understand the scope of the damages inflicted by hydropower schemes. I realised that grouping those stories based on these categories (which I called *territories*) instead of sticking only to their original geographic site of production<sup>76</sup> could aid the addressees of this work in having a more refined and profound perception of the losses too. Notably, this pattern of losses tends to repeat when it comes to hydro schemes, regardless of the geographic space and time in which the hydropower project takes place. I present here some sequences of portraits<sup>77</sup> along with their respective details concerning the collaborator’s name, feeling, and object and location chosen for the reader to note how the story of one collaborator can complement and reinforce that which is brought by the next one, providing a deeper understanding of the nature and dimension of the losses. These losses relate to the parameters depicted in the pale orange boxes of the diagram (Fig. 5.15). Ultimately, they have to do with beauty, nature, subsistence, identity, belonging, heritage, legacy, memory, culture, silencing, and war, so I named each category of damage (each *territory*) following this approach (Fig. 5.16).

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<sup>76</sup> i.e. Sobradinho, Belo Monte, or Garabi-Panambi dam area.

<sup>77</sup> All of the 84 portraits jointly constructed with participants can be accessed in **Appendix 9**. Long excerpts from the interviews translated to English can be found in **Appendix 5**.

FIGURE 5.16. Territories of losses and some portraits that reveal them.  
(all images below: ORIGINAL IN COLOUR)

Territory of Nature –

Portrait of Camila





*"(...) Ah, they say: 'we're going to replant, it's all going to be fine.' But how long will it take for the tree to grow to the same size it was when they cut it down to build the [Panambi hydroelectric] plant? They don't talk about that value, they don't even mention it. That's how it starts! The animals' habitat will be affected; how long will it take them to adapt to a new one? But many won't even make it that far, they'll stay where they are and die there. There's all of that to think about! [...] Nature... Will what God has given us be destroyed? 'To g-e-n-e-r-a-t-e energy!' But there's other ways of generating energy. Why don't they work on those instead? They want everything the easiest, most practical, way for them. They don't give a thought to the environment or the local population. That's what I think, you know? That's it. (...)"*

Camila's feelings: loss and sorrow (for all the life that will be sacrificed due to the dam), but she also cites opportunity (to take her parents to the urban area)

"Object" chosen: her parakeets

Location chosen: the *Inácio* brook (which will vanish into the water if the Panambi dam is built)

Previous page - top: Camila and her mother arrange Camila's parakeets for the shoot.

Previous page - bottom: Portrait of Camila – third shoot.

Above: Portrait of Camila - last shot.

© Camila Grzeca and Marilene Ribeiro 2016

## Portrait of Liane



*"(...) Researcher - I want you to choose a thing to represent your pain, Liane, and also a place for your portrait.*

*Liane - It has to be close to the Uruguay River. Because you can recover your house, do it up again, but the river...you won't ever get back. So it has to be somewhere close to the river. The way it is now, you won't get it back.*

*R - What do you mean, 'the way it is now?'*

*L - If they build the dam, the Uruguay River is finished. I can't even imagine what it'll look like, with all the trees gone and all... now there are so many, it's so beautiful. But when they build the [Panambi] dam ...if they build it...we won't even want to go there anymore. [...] Here there are rapids, we can go and bathe in the river, but we won't be able to anymore, because they're going to clear all the vegetation. For us, it won't ever be the same. And who knows where they're going to put us, where we're going to live! Who knows if we'll still be able to come to the river and see what it's like! Perhaps we will, but it'll be with sadness, because our little corner of the world will have been abandoned, flooded, and all because of the dams. (...)"*

Liane's feeling: strong pain

"Object" chosen: one of her piglets

Location chosen: the Uruguay riverside (overlooking the river)

© Liane Mombach and Marilene Ribeiro 2016

## Portrait of José Nunes



*"(...) What's it like today, the island where I was born and my father and I lived in? The one with all the trees, the rubber trees? It's deserted. They [employees of Norte Energia] chopped down the trees and buried everything. What they didn't bury, they burnt. When I pass in the boat, I see it. It's just a desert. (...)"*

José's feelings: indignation and sorrow

Object chosen: portrait of his father, who was a rubber tapper and, like José, appreciated the place where they lived: Trindade Island

Location chosen: *Trindade* Island (currently situated within the reservoir of the Belo Monte dam)

© José Nunes and Marilene Ribeiro 2016

See also Portrait of Maria Eliete in **Chapter Three**.

Portrait of Cláudia (polyptych)



*“From now on, we depend on Norte Energia<sup>78</sup> for us to have water.”*

Cláudia’s feeling: loss

Object chosen: oar and boat

Location chosen: stretch of the Xingu’s Big bend situated some yards upstream from her place, where moving by boat (the mode of transport inhabitants from that area use to sell and buy goods, and reach school and health care) is no longer possible due to the low level of the river water, as the Pimental dam, situated upstream, diverts the Xingu River’s waters towards the Belo Monte dam. Since the dam building, the couple have had to shovel the riverbed to carry on their journeys to and from their home.

© Cláudia Gonçalves and Marilene Ribeiro 2016

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<sup>78</sup> The company in charge of the Belo Monte dam complex, which decides when and how much water the spillway will release downstream of the Pimental dam.

## Portrait of Valdenice



Valdenice's feeling regarding the Sobradinho dam: dependency

Object chosen: water tanker (Valdenice stresses that, after moving from the riparian Juacema village to the São Gonçalo da Serra hamlet, which is situated in the middle of the *Caatinga*, her family had to endure the scarcity of water and isolation, as there was no means of transport to reach the nearest town, where they could find basic services like health care and school, except by bicycle. She says the most discouraging and sad thing was to depend on the water tanker to have access to something vital—water—something they used to have in abundance on their doorstep)

Location chosen: site where the water tank was parked

© Valdenice Ferreira and Marilene Ribeiro 2015

## Portrait of Ermy



Ermy's feelings regarding the Sobradinho dam: bitterness, resentment

Object chosen: engine that pumps water from the reservoir of the Sobradinho dam along roughly 2 miles towards his current dwelling, in Algodões Novo hamlet

Location chosen: site where the water is pumped to Ermy's place

© Ermy Souza and Marilene Ribeiro 2015

## Portrait of Altenice



Altenice's feeling regarding the Sobradinho dam: sorrow

Object chosen: clay crock (Altenice tells me about the move: her family, friends, and relatives had to literally cross a mountain on foot towards their new site, Poço do Angico. This took them about 30 days. In order to get drinking water they needed to walk back to the river. Once there, they filled clay crocks with it and travelled all the way back towards their new place of living)

Location chosen: her current backyard (notably, the site where Altenice has lived since the move, Poço do Angico, still does not have electricity)

© Altenice Cruz and Marilene Ribeiro 2015

## Portrait of Nivaldo



Nivaldo's feeling regarding the Sobradinho dam: horror (Nivaldo tells that, amongst all the hard things he had to face when forced to leave the riverside, the worst was hunger)

Object chosen: empty food pot

Location chosen: the entrance of his current kitchen (notably, the site where Nivaldo has lived since the move, Mergueira, still does not have electricity)

© Nivaldo dos Santos and Marilene Ribeiro 2015

## Portrait of Juvêncio



Juvêncio's feeling regarding the Sobradinho dam: sorrow (as everything he plants dies in the place he moved to, Piçarrão, mainly because of the scarcity of water)

Object chosen: one of the plants he tried to grow (coconut tree) but that did not survive the harshness of the local environment

Location chosen: his current backyard

© Juvêncio Rocha and Marilene Ribeiro 2015

## Portrait of Laudelina



Laudelina's feeling regarding the Sobradinho dam: "lack" (lack of work, lack of food, lack of making a living, lack of reference points of belonging, lack of dignity—all she experienced once displaced from the Boqueirão hamlet due to the Sobradinho dam)

Object chosen: the tree (*manguba*) she brought from Boqueirão (which her father had sown)

Location chosen: her current backyard

© Laudelina Ferreira and Marilene Ribeiro 2015

## Portrait of Claudinei



Claudinei is a 42-year-old carpenter. He also goes fishing to feed his family. If the Panambi dam is built, he may struggle to make a living, as his workplace will vanish into the water and this stretch of the Uruguay River (which is situated literally at his backyard), once turned into a reservoir, will not be a Common anymore but private property: consequently, he might not be entitled to go fishing in this area anymore. Furthermore, as he moves out, he will have to work out how to get new customers for his hand crafted wooden products. Claudinei and his wife, Seloni, suggest we jointly construct his portrait by blending these two perspectives.

Claudinei's feelings: sorrow and loss

Object chosen: fish

Location chose: his workspace

Top left: Claudinei's wife, Seloni, sets up the stage for the shoot.

Top right: portrait of Claudinei - first shot.

Bottom: portrait of Claudinei - last shot.

© Claudinei Zuehl and Marilene Ribeiro 2016

## Portrait of Raimundo



Due to the changes the Belo Monte dam has caused in the local environment, Raimundo explains that he can no longer sustain his own occupation as a fisherman, as he cannot find enough fish to sell (sometimes, not even to feed his family, as fish that can still be caught seem to be ill). Raimundo says he is about to abandon his vocation, because it has become unsustainable after the dam.

Raimundo's feeling: sorrow

Object chosen: framed picture of the last fish Raimundo caught by the confluence of the Santo Antônio stream and the Xingu River, before he left the Santo Antônio hamlet

Location chosen: the Santo Antônio stream (currently reduced to mud, as its source was situated within the Belo Monte dam work site, according to participants Raimundo and Élio)

From left to right: Valdenira (Raimundo's wife), Raimundinho (one of Raimundo's sons), Vanessa (one of Raimundo's daughters), and Raimundo.

© Raimundo Martins and Marilene Ribeiro 2016

See also Portraits of Hilarino and João Evangelista in **Chapter Two**.

Portrait of Geovan



*“(...) I see my portrait in the river... I belong there. Regarding the object you asked me to choose, I wish I could take the façade of my house... my place is under the waters of the Belo Monte dam now. (...)”*

Geovan’s feelings: rebelliousness, hatred, outrage, anguish, dismantlement, and sorrow

Object chosen: door (to represent the façade of his former house in Itapiranga Island, currently submerged by the reservoir of the Belo Monte dam complex)

Location chosen: the Xingu River

© Geovan Carvalho Martins and Marilene Ribeiro 2016

## Portrait of Reinoldo



*"(...) Everyday I go down to the [Uruguay] River, twice a day. I get in my canoe, boat around – when it's hot, I jump into the water and bath. It's beautiful. Then, I wonder: 'will they finish this all?' The river means a lot to me. It's a nature that I will never leave my mind. The Uruguay River: there are many types of it. I can't explain this. Its bends, rapids – when it's about to rain, the rapids make a different noise. [If I have to leave this place] I would remember this. How many times we have swum from one edge to the other: crossing the river swimming [...] I see a very beautiful image there. I see nature, fish jumping – sometimes a beautiful fish jumps and you're there to see this. There are birds, toucans. In the morning, sabiá and canarinho [species of bird], many species of bird, come and sing. Where else are you gonna see this? In places where there are caged birds? I'm against caging birds. Totally against it. [...] It hurts being born and bred in a place and, one day, everything is under the water. You don't even know where you place is anymore, because in the [vast] water [landscape] you're not able to distinguish where things are situated. You won't be capable of spotting your former place – whether it was located here or there. This is gonna stick in our minds forever: what we used to be and... what are we now? What nature used to be and... where is nature now? It was destroyed. (...)"*

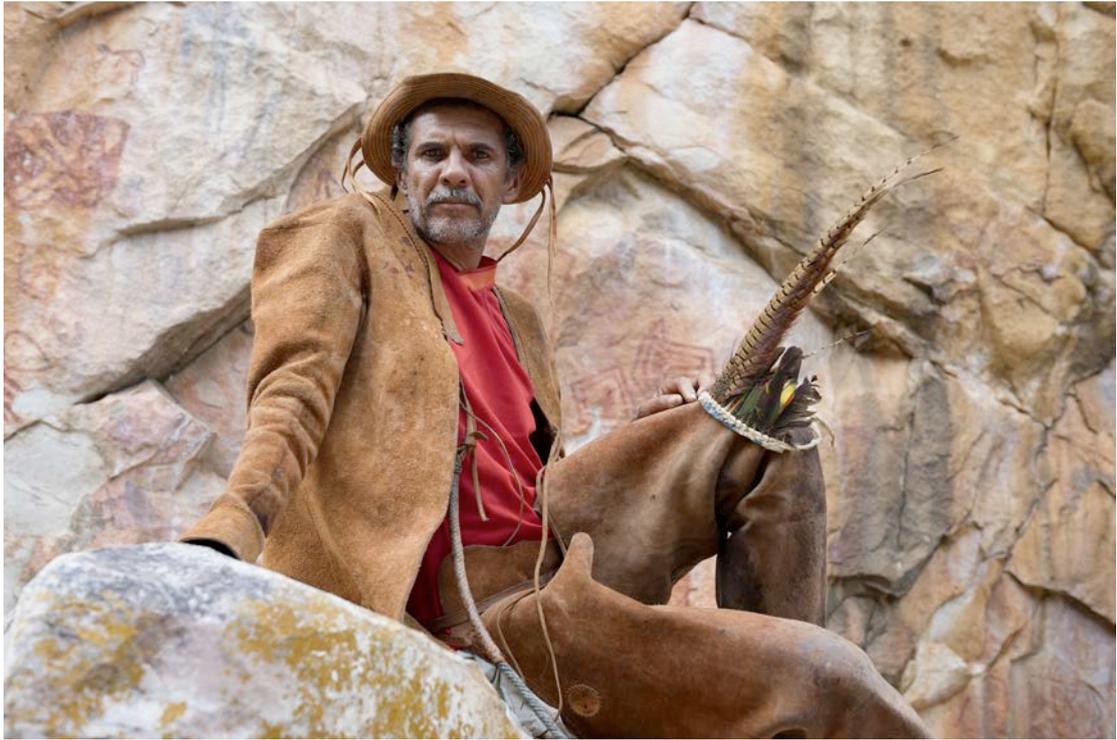
Reinoldo's feeling: "it wrings my heart"

Object chosen: water from the Uruguay River

Location chosen: his living room (Reinoldo stresses that the place where he stands in his portrait would be underwater if the Panambi dam is constructed)

© Reinoldo Roque Köche and Marilene Ribeiro 2016

## Portrait of Antônio de Carvalho



*"(...) I've got a feeling... [Antônio stops speaking, keeps in silence for a moment, and eventually breaks into tears] ... We had to leave my grandfather there [in his former place of living, Juacema hamlet<sup>79</sup>]... [weeping]... It was his will to be buried in Juacema. If we [Antônio and his family] knew that the Sobradinho [dam] would happen, we'd have never let him be buried there. We could do nothing about this but to leave him back. (...)"*

Antônio's feeling: *"no name... it's too much..."* (regarding having to let his grandfather's remains be submerged in Juacema)

Object chosen: feather headdress and local cultural outfit (to represent himself and his ancestors, his roots)

Location chosen: stone featuring rock art (to represent his ancestors, the link between the land and the man)

© Antônio de Carvalho and Marilene Ribeiro 2015

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<sup>79</sup> Antônio's grandfather's remains were left to be submerged, as he was buried in Juacema hamlet that was located within the area that later on became the reservoir of the Sobradinho dam.

## Portrait of Luiz



*"(...) The Uruguay River, for us, represents the Mother! We here, our family, we have taken the water of the Uruguay River several times; we survived with water from the Uruguay River. In times of drought, when we didn't have the artesian well, we didn't have a water network, we drank the water from the Uruguay River. For us, for the animals, for everything, right? And, besides life, the river [has] the roots of each riverine person. The value of the property, it is insignificant in view of the value people give to their roots, their family history. My father passed away at ninety-and-a-half, and for me, this [land] is his figure here. I feel the responsibility of keeping this alive [...] I wish my daughter could live through that. I wish one did not cut off this right from her to still live through this: what her father lived through, what her grandfather lived through. (...)"*

Luiz's feeling: *"all bad feelings"*

Object chosen: manual seeder (which belongs to Luiz's family. He mentions that this was the way his father used to work in the old days)

Location chosen: his family's pasture gorge overlooking the Uruguay River

© Luiz Webery and Marilene Ribeiro 2016

Portrait of Marinês Nicolli



*"I'm concerned about the future of my sons. About their memories in future times. About the memories they won't be able to have, because, when the Garabi dam works take place they won't be entitled to follow in our footsteps, they won't be entitled to live in this place where we have lived anymore."*

Marinês Nicolli's feeling: sorrow

"Object" chosen: her sons

Location chosen: her bedroom/living room

© Marinês Nicolli dos Santos and Marilene Ribeiro 2016

## Portrait of Jair Drost



*“(…) Researcher – you were talking about you feeling sad, when it comes to the Panambi dam project, right? I’d like you to think about a “thing” that could represent your “sorrow”. You don’t need to reply to me at once, you can think about this and come out with your response later, it’s fine. As we’re gonna work on your portrait, I’d like this “sorrow” you told me about depicted in this photograph too. This thing you’re gonna choose doesn’t need to make sense to me, Marilene, it needs to make sense to you, Jair, only. We will ultimately call this thing “sorrow”, in this portrait.*

*Jair - I know already: earth! I don’t even need to think. It’s the soil, the soil of my family’s land.*

*R – Deal. We’re gonna use the soil then. I’d like you also choose a location for you portrait with this earth, a place that’s important for you, for the story you told me.*

*J – It’s gonna be myself only or can the whole family pose in it?*

*R – In the portrait, you mean?*

*J – Yep.*

*R – The way you feel that best tells your story to those who don’t know it. (…)”*

Jair Drost’s feeling: sorrow

Object chosen: local soil (to represent the roots between Jair, his family, and the place where they live)

Location chosen: his family’s place (which they inherited from Ilone’s parents, and they have been neighbours ever since)

From left to right: Jair, Leonardo (Jair and Ilone’s son), Ilone (Jair’s wife), Ilone’s brother, Élia (Ilone’s mother), Delvino (Ilone’s father)

© Jair Drost and Marilene Ribeiro 2016

## Portrait of Maria Helena, Maria Dalva, and Larissa



Maria Helena has followed in her father's footsteps: her family had hosted the festivities of the St. Joseph Day for about one century. Every 19<sup>th</sup> of March inhabitants gathered in her family's island for boat procession, baptism, and wedding services, and also to pray, sing, and dance. Maria Helena recalls that her family provided home-made "fireworks" and a feast to guests. Locals also decorated the boats and the site with handcrafts. When the Belo Monte dam project started, dwellers who inhabited local islands (like Maria Helena's family) had to move and, as Maria Helena states, this tradition faded. Maria Helena comments she wished her granddaughter could carry on with this tradition as she herself has done since her father passed away.

Maria Helena's feeling: sorrow

Object chosen by Maria Helena: statue of St. Joseph

Object chosen by Maria Dalva: one of the dead leaves (and also her wedding dress —she got married on Pivela Island)

Object chosen by Larissa: local soil

Location chosen: dead plantation of acai berry in their former backyard in Pivela Island (currently partially submerged by the reservoir of the Belo Monte dam complex)

Top to bottom/left to right (previous page): location, 1<sup>st</sup> shot, 2<sup>nd</sup> shot, 4<sup>th</sup> shot, last shot.

© Maria Helena Almeida, Maria Dalva Almeida, Larissa Almeida and Marilene Ribeiro 2016

## Territory of Protest and War

### Portrait of Cláudio Curuaia



"[I'm choosing money notes] *To represent the corruption that exists within these ventures, because the State deflects money and politicians corrupt themselves and accept bribes for these ventures to happen or use the money from those works for their own benefit. In addition, these large enterprises only destroy the river, nature, and families. The development of a place is not something for just 2, 3 years—and then leaving Altamira the way it is today, worse than it was before the work started—it's supposed to be long-lasting. Here in Altamira, the only long-lasting effects are crime, robberies, and many unfulfilled conditions [the socio-environmental conditions required to be accomplished for the hydropower project to be approved as well as for the plant to be allowed to operate—see **Chapter Four** and **Appendix 1**], because Norte Energia claims it doesn't have money to fulfil the conditions. So, where is all the money they had for the project?"*

Cláudio's feelings: sorrow (about the impacts the dam inflicted upon nature and people from Altamira city and the surroundings) and revolt (about how the dam project exists to enable corruption, and to benefit big companies and politicians)

Location chosen: Arapujá Island (to represent the destruction of nature by the dam—Arapujá Island was a symbol of beauty for Altamira's dwellers: it stands in the middle of the Xingu River, in front of Altamira's harbour. Like the dozen other local islands, Arapujá was logged and burnt as part of the procedures of the Belo Monte dam)

Object chosen: money notes

Previous page (top to bottom/left to right): 1<sup>st</sup> shot, Cláudio and I set the stage for the next shot, 3<sup>rd</sup> shot.

© Cláudio Curuaia and Marilene Ribeiro 2016

#### Portrait of Leonardo (Aronor)





Despite having fought the Belo Monte dam since its very early stages. Aronor, like several participants in the area, is furious about not having been given the chance to defend, in fair combat, what he considers to be of high value. Like many others, he is also desperate about the desolated sight he has before his eyes. However, he is still fighting and says he will carry on doing so, even if he eventually has no choice but to use actual weapons.

*“(…) Researcher - And why did you pose like that in the picture?”*

*Aronor - Those poses there, in my portrait, they are because I see that the time will come when we will need to use [weapons] and stay in that same position. It’s a thing we do not want, but that we will be forced to do, because they are making us do it, because we will not give up our rights, we will not die, as they say, as poor people. We have to seek our rights so that we can survive. Because it is not our custom to ask anything from anyone, to suffer. Our custom is to work to get our money. How are we going to work now? We have no land, we have no river, we have no more fish, [and, on the top of that,] many, many farmers have destroyed our Brazil nut trees.”*

Aronor’s feelings: rebelliousness and desperation

Location chosen by Aronor: by the *sumaúma* tree (traditional communities believe the *sumaúma* tree has special powers and protects the inhabitants of the forest, including other trees—it is considered “the mother of all other trees”)

Object chosen by Aronor: borduna (indigenous war club) and bow he made himself (as taught by his grandmother—also a Yudjá/Juruna)

Previous page: 1<sup>st</sup> shot (left) and 4<sup>th</sup> shot (right)

Above: last shot.

© Leonardo Batista (Aronor) and Marilene Ribeiro 2016

See also portraits of Eliezé, in **Chapter Two**, Gumercino, Nelci, and Maria Rosa, in **Chapter Three**, and Maria Inês and Juma, in this Chapter.

As it precisely situates and integrates all the intangibles involved in hydropower projects that have been explored and highlighted via the image-making processes applied in this research (and also provides a glimpse on how powerful were my collaborators' testimonials), I present a long excerpt of my interview with Juma Xipaia<sup>80</sup> along with her portrait (Fig. 5.17), an image that developed from the things she showed me during our dialogue, like all other portraits of this research.

Juma is the chief of the Tukamã village (*aldeia* Tukamã - Xipaya Indigenous Reserve) and vice chair of the District Council of Indigenous Health (CONDISI). The Xipaya Indigenous Reserve is located about 700 km upstream of the Pimental dam (four or more days of boat journey upstream of the Xingu River and its tributary, the Iri River) and has been also afflicted by the Belo Monte dam complex project.

"[...]

*A long time in this process, when I started to follow this discussion, this fight over the Belo Monte, against the Belo Monte especially, I was very young, I was 15 years old, so I was learning about this world, so for me was a lot of suffering, because I was not only talking about the Xingu, I was not talking about a forest, I was talking about myself, I was talking about who I am, I was talking about my people, I was talking about my future. So this was always very strong for me, because it was my life, it was all I had and all I have until today and what I need, I was talking about my home.*

[...]

*Marilene Ribeiro (myself, researcher) - Do you think the hydroelectric power plant has any effect on nature for you Xipaya?*

*Juma - Like what?*

*Researcher - The effect you think it can have. If the Belo Monte dam had any effect on the Xipaya, on nature?*

*Juma - It had a lot of effects, still has and still will. Negative ones! Because we know that we can have development, we can have health, we can have education, we can have access to the media, we can have access to everything without destroying what is ours. We did not need Belo Monte to have what we have today, because many of the things that are being done within the PBA [Basic Environmental Plan] are called public policies, which is the government's obligation, there is no need to build a hydroelectric plant for the*

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<sup>80</sup> A longer excerpt from Juma's interview can be found in **Appendix 5**.

government to comply with its obligation, for the State to do its duties; there is no reason for this, Belo Monte does not justify how to bring development to the region, to improve life and bring energy—that they call ‘clean’. There is no reason for this. We have other sources of energy, we have other sources of development and I see Belo Monte not only as energy, but mainly as an enterprise that sucks our wealth, that sucks our whole life and that destroys everything that people fought for so many years to preserve and that Brazil and the government forgot about. It fact, it didn’t forget, it left the Amazon, the North, quiet, for a while, while it destroyed the rest of Brazil and today it comes here, after so many years, destroying everything, relocating the people, disrespecting the people that have lived here for so long, that have fought and preserved this territory, all for the interest of a few, mainly for capitalism. [...] Many think that we hamper the government, that we hinder development, on the contrary, we do not have to destroy our nature to consume, we do not have to kill our mother to continue living, we live in harmony with her, we live according to what she gives us and we lived so well that we are alive to this day. There is no need to deforest or kill or relocate or end people’s identity, peoples life, the history of a whole people to develop, and we understand this very well. We do not accept this inhuman process that the government has conducted until now, we believe and do and work in a way that respects each other’s space and, especially, nature.

[...]

*Researcher - And when you think of the Xingu and Belo Monte, what do you feel?*

*Juma - I feel alive, I feel like continuing to struggle every day, I feel compelled to do something, I feel it is my duty.*

*Researcher - And when you think about what Belo Monte did to the Xingu, what do you feel?*

*Juma - I feel revolt, I feel anger, I feel rage, I feel the worst feelings that a person can feel. Because for a few moments in my life I almost stopped believing, I almost gave up this fight, because they wanted us to understand and do that, right? But every time I look at the Xingu and see that beauty, and even dammed it remains alive, beautiful, green and that this island in front of us, the Arapujá [Island], is fighting for its existence, no matter how many trees have been cut, they are [re]sprouting, re-born, there is hope, right? This is like saying, ‘Hey, fight! The fight is not over yet, we are only in the middle of it’, got it? So, looking at the Xingu is being born again every day, I have this privilege of being born again every day when I look and especially when I bathe in the Xingu, then the fight does not end, right? So my dreams, my strength, they are not over. [...]”*

FIGURE 5.17. Portrait of Juma.



Juma's feelings: revolt, rage, anger, the worst feelings a person can feel; but, when she thinks of the subject of the damming process, i.e. the Xingu River, she feels life and energy to carry on fighting for it and for her people's (the Xipaya) rights.

Location chosen: Xingu River's rocky margin (special spot where she said she used to go to find peace and to strengthen herself during the hardest times of the fight against the Belo Monte dam, from 2007 to 2013)

Object chosen: notebook given by her mother, which she uses to write down information and thoughts she considers important in her struggle for her people

ORIGINAL IN COLOUR

© Juma Xipaia and Marilene Ribeiro 2016

Once looked at from this new shape: of pictorial "territories of losses", which I hope reveal (by means of the photographic process used in this research) the breadth of the impacts dams have caused in a more intelligible form, one can note that we are actually saying that dams (as objects that have been built by those in power in societies) ignore Human Rights and the Rights of Nature (as discussed in **Chapter Three**).

In 2000, the World Commission on Dams (WCD, 2000a:11-12) had already stressed that the fashion for dam projects that had been spreading around the world had systematically impoverished people and made them suffer. Over a decade later it was officially acknowledged that the building of dams (in the way it still runs) has in fact infringed Human Rights (CDDPH,

2010:13, Zen, 2014)<sup>81</sup>. Moreover, the physical existence of this photographic project, as both thesis and exhibition, reclaims space for “invisible” stories to emerge and be noticed: invisible stories from the minorities, invisible stories from countries which the history of photography has omitted (as Spanish artist and academic Joan Fontcuberta has emphasized – Fontcuberta, 2002:16).

Still concerning the matters of “invisibility” and “absences”, I argue that, once stitched together, the narratives constructed via researcher-researched encounters and shaped as visual representations come up with a “new” standard of knowledge, a rule that somehow transgresses the dominant and “officially acknowledged” mode of perceiving, validating, and measuring matters, i.e. the Cartesian-related methods. These methods have been historically created in standard centres of knowledge (which have been located in either Europe or the United States), consequently, the knowledge these centres generate is impregnated with ways of thinking and understanding that are characteristic to Europeans and Americans, de-considering, for instance, African, Andean, and Amazonian people’s logic and reasoning. This “standard” knowledge has grounded processes of policy and decision making, as well as national and international agreements, and, what this PhD research does is to bring up another perspective for this “officially acknowledged” reasoning (through the jointly visual and textual stories that are delivered to the viewers of the work). I claim that this practice-based work is inserted into what the Portuguese sociologist Boaventura de Sousa Santos has advocated for: a sociology of the “Emergences” (Santos, 2007). As an individual who was born in a colonialist country (i.e. Portugal), which has been, at the same time, a nation subjected to the rules of more powerful countries, like France and England, and a scholar who has as his subject of studies colonies (Mozambique, South Africa, Brazil, Colombia, and India, to name but a few), as well as who has been trained in a Western potency—i.e. in the United States (as he precisely situates himself within this sphere of visions and power), Santos has argued that the way hegemonic groups manage to keep themselves in power is by creating “Absences”. According to him, these “Absences” are the denial of forms of knowledge certain groups

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<sup>81</sup> Notably the following topics: 1) the right to information and participation; 2) the right to freedom of peaceful assembly, and association; 3) the right to freedom of opinion and expression; 4) the right to work; 5) the right to a standard of living adequate for the health and well-being of herself/himself and of her/his family; 6) the right to adequate housing; 7) the right to education; 8) the right to a healthy environment; 9) the right to health; 10) the right to continuous improvement of living conditions; 11) the right to fair dealing, isonomic treatment, according to transparent and collectively agreed criteria; 12) the right to freedom of movement; 13) the right to preserve traditional practices and livelihood, material and immaterial matters; 14) the right of indigenous, *quilombola* and traditional people; 15) the right of special protection for vulnerable groups; 16) the right of access to justice and of a reasonable duration of judicial proceedings; 17) the right to full reparation of losses and also to compensation for previous losses; 18) the right to keep and protect family and community bonds.

produce to exist as such—as the former are supposed to not reach the “requirements” for being accepted as “valid”. As these “requirements” are selected and named by these hegemonic groups, the perspectives generated and put into practice by these other groups are taken as inefficient, antiquated, sheer local, unproductive, or even inferior, i.e. officially speaking, they do not exist. Santos has claimed that these forms of knowledge from the fringes of History (e.g. women’s perspectives regarding some subjects or small farmers’ solutions to some problems) need to emerge and settle on the same table where these already “valid” (named by Santos as also Western, imperialist, and patriarchal) rules have been set. He calls for sociologists to study this sociology of the “Absences” and work towards a sociology of the “Emergences”, that may bring these forms of knowledge into discussion too and ultimately contribute to a future scene where diversity (e.g. the blend of academic and non-academic knowledges to find solutions for contemporary issues) can play a practical role in the improvement of our world. Like Eduardo Gudynas, regarding the rights of Nature (addressed in **Chapter Three**), Santos is not rejecting the “standard knowledge”, but claiming that this needs to be blended to “non-orthodox” perspectives too. In other words, I understand this PhD research has contributed to turn these invisible or overlooked perspectives (“Absences”)—i.e. concerning the assessment of the costs of hydropower through a non-monetary fashion—into objects for consideration and discussion like monetary values have been, and that this is achieved via the images and texts I stitch together in this research, which aims to draw attention to these matters.

Another point that needs to be clear is that the arguments presented regarding the visual storytelling assembled here do not intend to present riverside dwellers as victims, which is not how I or they see themselves. We see them(selves) as citizens who demand that their rights, worldviews, and values should be respected and allowed to thrive, as citizens whose citizenship has been denied for the dams to take place, as citizens who show us what wealth is about in the end. It is also important to stress that this work does not intend to bring up a romantic and naïve view about a "paradise", but to be consistent with what participants have emphasised as being important to them: simple (not easy) livelihood, but abundant in life and fulfilling in autonomy, access to food, water, leisure, culture, and exchanges with the natural world—which they acknowledge being a part of, and so respect and cherish it. From these narratives my collaborators and I assembled together (based on their knowledge, thoughts, and feelings, interwoven with my own ones), we can criticise development in the way it has been conceptualised, accepted, and driven in national and international agreements. We can discuss that this concept urges to be changed, as it is built upon mercantilist and colonialist

worldviews, as it is based on "the Market" and "the Capital". We can also discuss where alternatives to this development should go through, as emphasized by Gudynas (see **Chapter Three**, p. 177-179), and also by Santos (2007). I have weaved all these negative points my collaborators have guided me through to showcase how wide and intense are the range of matters that collapse as the process of damming a river is carried out, as the main goal of this thesis is to assess the costs of hydropower driven by riverside dwellers' perspectives and shape these costs in a more "perceivable" fashion, i.e. using visual communication for that purpose. By opting for a more widely spoken and widely understood language as one of the axes of this work, i.e. photography, I aim for this information, accessed and assembled with my collaborators, to reach people regardless their original background, social position, or training. Moreover, photography today has this ubiquitous characteristic, that is, it can permeate and co-exist in different places and environments (from journals to public city spaces, from walls to the Internet), which can facilitate the dissemination of the knowledge produced by this research to very different audiences.

By making arguments accessible to the reader/viewer by means of the visual narrative constructed and presented, this research intends to turn "Absences" into "Presences", to bring up what has been silenced and/or overlooked into the arena of "development" and "growth" in order to push forward these concepts and their implications within and between countries. It moves the discussions within the energy and the climate change agendas towards a point that involves the reformulation of our notions of wealth and welfare, as I (like many others, e.g. economist, member of the New York Academy of Sciences, and Alternative Nobel Prize recipient Manfred Max-Neef; researcher Eduardo Gudynas; and journalist and political theorist Raúl Zibechi) believe that these notions cannot be driven by Gross Domestic Product and percentage of roads paved, for instance. If we do not change our perceptions of wealth and welfare, we, as nations and also as the whole Earth, will fail in enabling citizens to dignity, health, autonomy, and wellbeing as well as in preserving species, genetic diversity, ecological processes, and beauty.

#### **5.4 Question III – Participants and the civil contract of photography**

As I have demonstrated in this chapter and discussed in **Chapters Two** and **Three**, this work consists of an in-depth exploration of both the medium (i.e. photography), and the negotiations that it facilitates. Consequently, reflections on how the protagonists of the act of

Photography (i.e. the subject, the photographer, and the viewer) might respond are a critical part of this study, even if inferential. As I will present in the next paragraphs, the reader will notice that most of this “interaction” has to do with the comprehension people have of the medium—in other words, it is related to the significance of photography in our society. It also concerns the *civil contract* between the photographer, the subject, and the viewer that Ariella Azoulay has advocated for (Azoulay, 2008, 2012).

Considering my proposal of co-working with people I had never met before, one of the questions that has troubled me was: why should these people accept taking part in a project that requires them to speak about their feelings and thoughts to a stranger (i.e. me) as well as to engage in shaping these feelings and thoughts in the form of images to be presented to someone else? My reflections on this have guided me towards two potential paths: i) it is a project that aims to expose the overlooked, the silenced, the usurped, as outlined in **Chapter Three**; ii) it is a project that acknowledges their existence as individuals and as citizens too, as it is a project that is embedded in their collective as well as in their personal stories and environment, summing up, it is a project about themselves (not to forget that it is about my own existence too, as I am the one who approaches them, comes up with the “theme”, operates the camera, and puts the information together, like in this thesis). Keeping both these points in mind (i.e. this state of “underestimating, silencing, and seizing” and the intrinsic autobiographic and biographic characteristics of the work) enabled me to conjecture reasons for my potential collaborators to become in fact my collaborators and embrace my proposal of transposing experiences into images. Beyond this, the genuine reasons for this collaboration with the participants of this project to succeed may remain unreachable to me, as they live in the participants’ own thoughts. Conjectures aside and speaking about attitudes, participants and their families not only engaged in the interview and in the making of the portrait but were also keen to show me special places, objects, documents, and photographs they kept. I feel compelled to describe here some situations that exemplify how participants and their families not only agreed to be part of the project but took seriously this commitment to jointly construct a visual narrative that would expose the damages inflicted by the dams based on their personal experiences.

Delcilene and Maria das Graças (Delcilene’s mother), participants from my fieldwork in the Belo Monte dam area, chose to be portrayed at their former place of living—Cashew Island. The island, as can be inferred from its name, was full of cashew trees, especially at Maria das Graças and Delcilene’s backyard. It featured sandbanks (“beaches”) too, where the family

enjoyed their free time. Cashew Island, along with dozens of others, was partially submerged as the reservoir of the Belo Monte hydropower plant complex started to be filled.

They choose to be portrayed at Cashew Island because, as Delcilene highlights, *“Our island, our sand beaches, our trees, our home... all has gone.”* and Maria das Graças complements: *“Because the islands, the trees, they all died, everything is dead. It looks like a backwood in the backlands [sertão]. Right? The ones where you only see stumps, which we see on the news [on] Sunday. It's the same thing.”*

According to Delcilene and Maria das Graças, the whole region where they were born and bred is no longer recognizable:

*“[...]*

*Girl, just, as the saying goes, when you look, it's just sadness, right. When we went there the first time [after the reservoir filling event], we arrived at the middle of the river channel, in Paratizinho, near Daniel's place [a site where a person named Daniel used to live], I looked to one side then to the other, and said, 'That's the way, but it's not through here.' I sat there on the bench, [along with] her [Delcilene] at the stern of the boat, then I said, 'Neném [Delcilene's nickname] – I told her – where are we, dear God?' And she said 'Mama, even I don't know.' Then when we spotted the hill, I said, 'That hill, is it Arundina's hill, right?' Then the pilot said, 'It is, Maria. That's [where] Alta beach used to be' – there was a bush at the tip of Alta beach; that was when I recognized it, that the tip was a beach, where that farm was – there was a beach right at the beginning, at the tip – but the rest I didn't recognize at all. She [Delcilene] said, 'Mother, that island was the island we lived on [Cashew Island]'. I said, 'No, girl,' she said, 'Yes, Mother,' because I still could see the island. [...]"*

However, they are concerned that I do not believe in what they say, because, according to them, the consortium in charge of the Belo Monte hydro project (the Norte Energia) has disseminated a different “reality” about the local environment’s “health” and the affected people’s “wellbeing”.

*“[...]*

*Maria das Graças - Even so, that's it: sometimes you [myself] can say, 'Ah, no, it's because many were angry with Norte Energia and do the interviews saying that no one*

liked it and such.’ It is good to go there to look, to see and say, ‘See, [Maria Das Graças] wasn’t lying, look at the impact that the Norte Energia caused.’ [...] Our story, the story which we tell, is not the same as [theirs].”<sup>82</sup>

Maria das Graças and Delcilene decide we can use the image-making process to tell this “other” story. They choose to be portrayed on Cashew Island because they want me (and the potential viewers of this work) to see with my own eyes that it is possible to raise the “sertão” in the middle of an infinitude of water (Fig. 5.18).

FIGURE 5.18. Sequence of portraits of Maria das Graças and Delcilene.



<sup>82</sup> Maria das Graças’ remark on the way the consortium in charge of the dam project has broadcasted the situation of the affected people. According to her and her daughter, Delcilene, these people, including Maria das Graças herself, have been treated as “rubbish” by the Norte Energia, which has denied them the right to another plot of land. Maria das Graças recalls the dialog she had with the staff of the compensation programme: “I said, ‘I do not accept this. I won’t be able to resettle my life with R\$12,400 only!’ [about £3,000—the amount of money the company was offering for her to leave the place she was born and has lived ever since] and she [Magda] replied, ‘You have two options: accept our offer or rather remain here to be taken by the water.’” Also, according to Maria das Graças, the consortium affirms in its reports that the local environment is well and dwellers who had to move due to the Belo Monte hydro complex project have received proper support and found themselves in a better life condition now than before the project had started, which, for Maria, is not the same thing she and other displaced people have in fact experienced.



Delcilene's feelings: sorrow and humiliation

Maria das Graças' feeling: sorrow

Object chosen by Delcilene to represent her feeling: cashews (to represent the abundance in the region)

Object chosen by Maria das Graças (Delcilene's mother): sand (to represent the sand beaches)

Location chosen by both: their former backyard in Cashew Island (currently partly submerged by the Belo Monte dam).

Note dead cashew trees still standing in the background. ORIGINAL IN COLOUR

© Maria das Graças da Silva, Delcilene Gomes da Silva, and Marilene Ribeiro 2016

The second example I use in this section happened when Maria Rosa's family and I were canoeing towards the island where her mother used to live, before being displaced by the Belo Monte dam, in order to work on their portrait (for details on Maria Rosa's portrait, please see **Chapter Three**, p. 164-166). On our way, as we canoed around the island where Maria Rosa and her sisters and brothers were born and bred, Inocência Island, whose trunks of the partially submerged trees still stood, but all pale and dead, I started to photograph that desolate view (Fig. 5.19). When I stopped photographing for an instant, after having already taken dozens of photographs of that subject, Maria Rosa's brother asked me to: "keep photographing!". This phrase instantaneously sounded to me like: "we need people to see this! Record and show those who live far from here what we are witnessing and enduring here."—or, to put it in Maria Rosa's words, "show people what is the 'truth' about the dam" (see **Chapter Three**, p. 165).

FIGURE 5.19. Inocência Island. Reservoir of the Belo Monte dam. November 2016.



Note that the use of colour photography also enables the articulation of a discourse about life and death, as the photographs above present themselves drained of colour, as if drained of “blood”, drained of life (which translates to what participants and I perceived in the local landscape at the time).

ORIGINAL IN COLOUR

© Marilene Ribeiro 2016

This situation made me reflect on the power photography still holds in people’s imagination: as a weapon or a scream. Then, I decided to explore this use in the work too (see Fig. 5.19 above). Even aware of the critiques on the uses of photography as testimony and proof, one cannot deny that photographs demand we (the audience) look at them and react to (or interact with?) them. Just by looking on social media one will notice how the image, especially photography, is broadly recognised by its users (and also by the conceivers of network interfaces like Instagram and Facebook, for instance) as a powerful means to reach and trigger “action” in its viewers (even if this “action” primarily consists of just an ordinary “like button” being pressed). I will come back to this discussion after including participant Luiz Webery’s thoughts in my arguments, further on.

Reflecting on Maria Rosa’s brother’s reaction in face of the opportunity of having what his family had endured noticed, documented, and disseminated (“like reportage images”, as I see this event unfolding in his mind, once riverside dwellers do not have as much contact with the environment of the arts as they have with TV and newspaper reportages), I imagine how oppressive and psychologically aggressive it can be to witness and live “*in silence*” (as Élio, another collaborator, remarked) all the destruction participants have described to me. During

my time together with my collaborators, I noted their appreciation about being heard and having their arguments, knowledge, and claims taken seriously, as the rule had been to either ignore or repress them. Moreover, the proposal of not only talking about their intimate feelings regarding the dam but taking their personal experiences further and engaging in the actual production of something (in this case, a visual narrative) that could somehow showcase what they considered important might have functioned as a channel for these constricted demands to burst and flow. I believe this research brought up this open (despite being technically considered a “framed”) space for them to shape and express what they wanted to. Even aware that this act of producing meaning via image-making consists of a negotiation between every sitter and me, and, ultimately, between both of us and the viewer, I cannot deny that it worked as a stage for protest, catharsis, as well as for riverside dwellers to revisit and re-appropriate their own roots, values, memories, and history (and this all also affected my perceptions and inferences on photography, rivers, wealth, and politics, amongst other subjects too). I realised this needed to be said, regardless of any theoretical criticism<sup>83</sup> I could be subjected to. I hope some collaborators’ statements may situate the reader regarding my decision to put myself in this vulnerable position:

*“Thank you, Marilene, for giving us self-esteem, for redeeming our history, for lighting up things that were fading inside us, for making us remember what we should never forget.”*  
(Isabel, also quoted in **Chapter Three**, p. 131)

*“[...] I thank you for the opportunity of being able to express, for being able to speak. Because I think it’s important that everyone gets to know about our opinion, the rest of the world gets to know it. It’s important that they know that we are not ordinary numbers, we are human beings.”* (Ailton)

*“[...] I told my daughter that this year has barely started but I feel fulfilled already because of this work we have made.”* (Lúcia)

*“[...] Sometimes we wanna spit out all that is stuck inside but there isn’t anybody to listen to. Then, I’d like to thank you too. It was very good to speak and show.”* (Maria Rosa)

*“[...] I also say thank you, because, as I said, talking about this brings some relief to us, it*

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<sup>83</sup> Critiques rooted in the discourse of photography being mistakenly taken as social assistance for the disempowered victims, as Sontag (2003) has once put.

*eases our pain... talking about it helps raise awareness about our situation, about the suffering we have been enduring. Your coming right here, before us, eyeing this, allows you to believe in us. If you weren't here, you may have said 'Oh, no! I don't believe this is happening!' – seeing is believing.” (Aronor)*

*“I’m giving you a hug that will last for the eternity. [long hug] I’ve got no words to describe what you’re doing for us: spreading these images. Images which the world doesn’t see. Because for the world we do not exist.” (Jaime)*

I have to acknowledge that this feedback, apart from what I mentioned above, also cause a feeling of anxiety in myself about the likeliness of an appropriate dissemination of this work actually happening, as I am aware that there are many factors at play that do not depend entirely on my efforts. Yet, I am doing my best to fulfil our expectations.

Luis Webery’s speech and perception of the practice also highlighted some interesting points that enrich the debates within the fields of photography, collaboration, and politics. Luiz is a small farmer who lives by the Uruguay River (for portrait of Luiz, see **section 5.3**, p. 260) and whose property, which he inherited from his father, will be submerged by the Garabi dam, if the project happens.

*[...]*

*Marilene Ribeiro (myself, researcher) - And the Uruguay River belongs to whom, do you think?*

*Luiz- To all. To all. I am a Catholic, I am a Christian, I believe in a creating God and, as it is a work of nature, it is a divine work, I think everyone has the right to enjoy the river. I do not think this is a question of privatising the river for big monopolies, big companies, big capital. I think it is the gift from God, it is from nature, let the human being, let the people, live it. We grow up fishing, eating fish from the river, surviving from here, we have leisure times at the river, so many people coming and we have always kept the doors open to the people that use it. So, let the river continue being for all. Let it be a matter of life and not of death. The dam will only bring death. Profit for the few and loss for many. [...] What I'm sure of is that I'll be fighting for the rights of future affected people, if this is going to happen [the Garabi dam], for the life of the river, so that we can prevent this dam construction, certainly, I will be one more in the fight, in the defence of the Uruguay River. This I'm sure! I cannot defend the Uruguay River just*

*in word, if we have to go to the fight, I'm one more that will go, for sure. [...] We are certain that we can also be compensated with your work, due to the simple fact that you are presenting this in universities and that it is also making other people aware of the problem that we are experiencing, it is already very gratifying for us because alone we are nobody, we need the help of each other, we need the sum of the effort. We know the power of unity, and more than ever, we need this: that people can join us in this struggle against the big capital, against big companies that want to monopolize the river. We know that the river does not belong to us alone. We know that it is not our cause alone, and that it is not a problem only for us, of the Uruguay River, we know that a bigger project is symbolized around it<sup>84</sup>, because the great capital that wants to crush us here also has an interest in other places. And we count on this support, with the people's solidarity who can also support us, defending the Uruguay River, that it continues to be alive, continues being ours, continues being of all and that we can continue being, as long as God gives us life, being able to be residents, to be residents of these places, here. May the river continue to generate life, being alive, and generating life."*

Like many other participants of this project, Luiz openly acknowledges we (he and I) are doing a joint work and that he hopes this collective work will have an effect on its potential viewers, especially because he believes that the "community of thinkers" (i.e. the academic world) and the general public will have access to our arguments (i.e. the arguments riverside dwellers and I jointly assembled and presented in the form of visual storytelling). Luiz does not see himself as a victim but as a human being who is fighting for rights, as does he perceive this project as a medium for his goals (i.e. that people understand riverside dwellers' points and eventually do not build the Garabi dam) and for citizenship too (i.e. for him to be listened to and have his demands fulfilled, like any other citizen).

Reflecting on the role Luiz sees for himself, myself, this work, and its viewers in the political arena demand me to come back to Martha Rosler's writings (which has already been a subject for some considerations in **Chapter Three**). Even though Rosler's thoughts dates from the 1980s/early 2000, her points remain true for some art critics<sup>85</sup> and that's why I opted for

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<sup>84</sup> My emphasis: underlined.

<sup>85</sup> As noted by the former director of the Cultural Reporting and Criticism Program of the New York University, Susie Linfield, in her book chapter *A Little History of Photography Criticism: or Why Do Photography Critics hate Photography?*: "[...] But if fewer essays like Sekula's and Rosler's are written now, it is in part because their ideas have been absorbed and accepted by so many in the academy, the art journals, the museums, and the galleries; as

bringing this subject into discussion here. Rosler (1981, 2001) deprives both the photographed person and the viewer of any attitude; she nullifies these two fundamental players in the act of Photography (taken as an event that, above all, aims communication) by taking them as passive and/or blasé. Regarding the photographed person, according to Rosler, she/he is a mere prey of the photographer's lens, a victim of both the "system" and the photographer. Concerning viewers, Rosler classifies them into two groups: those who, by looking at images/stories of someone else's "pain", will either: i) be thankful for not themselves being the "victim" (and that this event is taking place far away from them—the viewer), or ii) make a flash donation to a charity or Non-Governmental Organisation that supports the depicted cause in order to feel "relieved" and come back to their comfortable routines (for further discussion on this topic, see **Chapter Three**, p. 137-138). She does not acknowledge that there is a third one (the group I consider myself part of, as viewer; even before becoming a photographer): the one comprised of people who are in fact absorbing these images/stories and, from this imagery experience, taking action (even if the first action is to get to know and start to reflect about the theme). This third group is the one that can gather and bring up the *dissensus* of Rancière. This is the group that has made things change when it comes to History too. As this PhD concerns not only human beings but also other species as well as the ecosystem, I provide a simple, but not irrelevant, example on how images can ignite changes in one individual and this can resonate in the re-shaping of political agendas and society: one of the founders of an activist group in a small city (who I personally know) declared she became vegan after knowing how livestock were treated until slaughtered, via "*disturbing pictures*" (as she puts it) she accessed on Facebook in 2012. Ever since, she founded the group and it has gained various achievements concerning public policies in her district. This can sound silly when compared to the world's big issues (like the war in Syria, for example), nonetheless it demonstrates how images can operate in our society and how every one of us can eventually make the difference and not be only passive "spectators" of pictures and stories that unfold before our eyes.

In his essay *The emancipated spectator* (Rancière, 2007), Jacques Rancière elaborates the influence performative arts (he uses the theatre) have as nourishers of knowledge for viewers,

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*theorist W. J. T. Mitchell has written, 'reflexive critical iconoclasm... governs intellectual discourse today.' Thus, in more recent publications, one bumps up against casual phrases like 'the now discredited authenticity once attributed to photography,' as if the question of photography's truth-value has been tossed without regret into the dust bin of history. Even worse are the ways that these ideas have seeped into the general public, encouraging a careless contempt toward documentary photographs. Since such images are cesspools of manipulation and exploitation: why look? It has become all too easy to avert one's eyes; indeed, to do so is considered a virtue. [...]' (Linfield, 2012:9)*

as providers of material for the viewer to absorb, interpret, and, then, construct and play her/his own story/performance further on. Rancière believes that, via this path, performative arts transform the society in which we live (Rancière, 2007:277 and 280). For Rancière, the spectator is not a static, passive thing. Rather, he/she is an avid learner and practitioner who, from what she/he grasps from the performance he/she watches, also makes work (her/his own story/performance to deliver to others). Rancière's reasoning could also be applied to photography, and I apply it here, as photography is also a performative act within the field of the arts.

Rosler argues that, if the oppressor is the "system", then we are all "victims" and there is no point in "raising awareness" about the issue if nothing can objectively be done about it (Rosler, 2001:223). As exemplified above, I affirm that there is something that can be done and, like everything else that has faced changes regarding legislation and public opinion (like slavery, for instance), this will start from the "awareness" and individual reflections about an issue someone (e.g. journalists) has addressed to someone else (e.g. newspaper readers).

In the end, I doubt whether Rosler really believes photography has no power before its viewers, as she writes in the end of her article *Post-documentary, post-photography?* – (almost) entirely focused on criticising documentary photography and proving that photography cannot ultimately change anything:

*"[...] So, why continue to defend documentary? The short answer is, because we need it, and because it likely will to continue with or without art world theorizing. As the division widens between rich and poor in the United States and elsewhere (and as art practices are institutionalized and academicized), there is less and less serious analysis of the lives of those on the wrong side of the great divide. My understanding of postmodernism does not extend to the idea of a world with no coherent explanation of differential social power or advocacy of ways to right the imbalance. Explanation and advocacy are still viable in relation to photography, as in purely word-based journalism. Documentary's best course, it seems to me, is to provide a balance between observing the situation of others and expressing one's own point of view – which ought to include some form of analytic framework identifying social causes and proposing remedies<sup>86</sup>. In pursuit of this,*

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<sup>86</sup> My emphasis: underlined.

*documentary will continue to negotiate between sensationalism on the one hand and instrumentalism on the other.” (Rosler, 2001:240)*

Controversies aside, I am tempted to say that Rosler’s final considerations in her paper (underlined above) tally with what my research has sought, i.e. I blend my views with the ones of riverside dwellers (my subjects) in order to provide a more profound scene regarding the negative impact of dams, its complexity, its scope, its roots, and also to signpost a path for the “solution”<sup>87</sup> of this contentious matter—i.e. energy.

Somehow related to Rosler’s critique, in 2003 American writer Susan Sontag (whose production grounds much of Photographic theory) argued that only people who could effectively alleviate or learn from someone else’s experience of suffering should be allowed to look at images that depict pain. The rest of the viewers would consist of *voyeurs*—as they could not truly imagine what it is like, as that pain would not concern them (Sontag, 2003). I argue that images that speak out conditions that cannot be accepted must continue to be addressed to (and reach) all of us, as we all can learn from them. Even if they are unpleasant to look at, they reclaim their word and make it bold to all who in fact should not allow such situations to be kept veiled: all of us. And I go further and state that each one of us cannot only learn from those visual stories but contribute to the alleviation of such unacceptable suffering too, i.e. can contribute to changes in agendas, as illustrated above and in **Chapter Three** (along with my considerations on the “responsibilities” of the viewer, according to Azoulay’s civil contract of photography, also in **Chapter Three**). Like Azoulay, photographer Jo Spence believed that “*photography should be informative*”<sup>88</sup>, i.e. she believed in photography as a political and emancipatory act, in the power of the image in the articulation of our society (Palmer, 2017:90). I also add Susie Linfield’s (see footnote n<sup>o</sup> 85, for an introduction of Linfield) and Anthony Luvera’s perspectives to strengthen my arguments on this subject.

*“[...] And it is the camera – the still camera, the film camera, the video camera, and now the digital camera – that has done so much to globalize our consciences; it is the camera that brought us the twentieth century’s bad news. Today it is, quite simply, impossible to say, “I did not know”: photographs have robbed us of the alibi of ignorance. We know of suffering in far-flung parts of the world in ways that our forebears never could, and the*

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<sup>87</sup> Which has to do with the shift in the perception and assessment of wealth, wellbeing, nature, and development, as explained in **Chapter Three**.

<sup>88</sup> Statement that stands out on the biography page of the official website dedicated to her work: <http://www.jospence.org/biography.html>

*images we see – in some place, under some conditions – demand not just our interest but our response. [...]*” (Linfield, 2012:46)

*“(...) [on his collaborative work with people who have experienced homelessness in different parts of the UK, which the *Assisted Self-Portraits* series are a part of] *Certainly part of the intention was to shake up negative preconceptions of homelessness. In my broader practice, I’m interested in thinking about the role of photography in culture shifting, in kind of being part of redefining consciousness about issues, topics, people, and places.*” (Luvera, 2017)<sup>89</sup>*

Together, Azoulay, Spence, Linfield, and Luvera understand photography as an agency for knowledge and change and, as such, photographers should keep on making them and everyone should look at them too.

In this regard, Chilean artist Alfredo Jaar, whose body of work is strongly political and provocative, asserts that it is the duty of the artist to seek to better understand how things operate in our society and use the artwork (in his case, the visual art work) to show this to the audience. When speaking about our capacity, as human beings, of understanding things better by means of stimuli (which includes image-based stimuli) that reach us, he states:

*“[...] We are, after all, the result of all the stimuli we receive. The more stimuli we receive, the more complete our vision. How can I comprehend anything if I only know half of the story? Perhaps the true enemy of our intellect is apathy. Indifference. As we defeat our apathy, we expand our search and discover places, mental places, intellectual places where we have never been, that we didn’t even know existed. [...]*” (Alfredo Jaar, *Untitled (handshake)*, 1985)

Jaar focuses his speech on artists (and I think of myself, as I was motivated to do this PhD because of a previous awareness I had about the negative impact of dams, which happened as a result of various stimuli I received, amongst them, images too), but I consider his reasoning extends to all of us—who, in the era of digital images, mobile phone cameras, and online communication, are all makers and viewers in the end.

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<sup>89</sup> For the entire interview I undertook with Anthony Luvera, see **Appendix 6**.

### 5.5 Question IV – The viewers’ “take” on the work

If I believe in the role of photography in advocacy and knowledge, and in the beholder as also a protagonist of the act of Photography (in consonance with Jaar’s, Azoulay’s, Linfield’s, Luvera’s and Spence’s discourses): as a result, when conceiving and arranging narratives, I needed to consider what impact this work might have on viewers.

Supported by my considerations on the potential effect of this work on “spectators”, according to Rancière’s view outlined in the previous section of this Chapter, my expectations are that this work can somehow touch and be absorbed by those who come to see it; who, in their turn, can perhaps resonate it with their own experienced nuances, extending its reach to others too. Bearing this in mind, there is also a concern on my part (as cited in the previous section too) that the work, in the end, goes unnoticed and does not have the effect on people I hope it does. Aware that reactions to a visual arts work are quite personal, thus these still incipient experiences cannot underpin any formal assessment of the actual effect this visual narrative might have in the broader public, I considered using some feedback from small numbers of people who already had access to this work in different situations, as I believe this can help to explore its potential impact on the audience. Most of these responses have been positive, with people saying how important it is to raise awareness of unrecognised issues, and how effective the imagery presented was as a means to this end (e.g. one student started using this work as an example of the purpose of photography). A Brazilian designer and lecturer admitted that she had not realised just how negative the impact of dams could be and decided to join this project by offering to help me with the design of the book containing this research; working with local assistants got them involved with the issue in their own area, and a producer texted praise of the video *Costs*, while two other viewers commented: *“it gives voice to those people who had their lives changed, it takes the point of the environment, the fauna... I’m deeply moved by it...”* and *“the important thing about this work to me is that it makes us think about how much we do not know about rivers and how we have overlooked them.”*

Will these testimonials of viewers be turned into any practical action against the impoundment of rivers? Probably not. However, their perceptions of dams, hydro schemes, and the “green and sustainable” have somehow been shaken and, as public opinion about a given subject is revised, this can ultimately lead to an actual change in the future—even if its original link with images is hard to track, as reminded Meiselas (see **Chapter Three**, p. 140).

## **5.6 Question V – Assembling the narrative**

Once before the mass of information, images<sup>90</sup>, feelings, and sensations I have collected together with participants (and also experienced myself) along my field works, as well as considering the data built up from the literature I have consulted, I had to find a way to make the work communicate in a powerful and effective way what I had proposed it to do: what hydropower schemes have meant for those who have lived both with the riverine environment and the effects of the dams; where the costs of hydropower lie in. Carefully analysing my material and also reflecting on Susan Meiselas', Jim Goldberg's, Anthony Luvera's, and Sharon Lockhart's approaches already discussed throughout this thesis, I understood that, as the negative impacts of dams usually operate in a multi-layered and complex fashion, (and, to tell complex stories, one sometimes needs to explore perspectives that go beyond that of the photographer solely producing images himself/herself, as Meiselas, Goldberg, and Luvera have done in their works), I should use the myriad of "sources" I gained to present this practice-based work.

Weaving parts of my collaborators' speech (as well as some of my own sensibilities about our encounter) together with their portrait (which they conceived and co-directed based on their own experiences regarding the dam project) and any further material, if any, when available<sup>91</sup> (like vernacular image, drawing, instant film, advertisement piece, map, or my own photographs), could potentially make these wounds accessible to the audience. The text (which would consist of a mix of the sitter's and my own discourses, e.g. excerpts from the interview along with my own reflections on our collaboration) would provide to the viewers the ground from which the portrait they look at emerged as well as the context for other images depicted within the same piece (which, in their turn, would expand the beholder's understanding about the whole story portrayed). These components containing relevant information about every "subject" (portrait, text, and instant film, for instance) would be arranged as storyboard-like panels (Fig. 5.20), where each piece of each (complementary) story would be assembled to form a strong narrative.

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<sup>90</sup> Altogether this research generated 12,950 photographs and 153 hours of recorded files (video and audio recordings).

<sup>91</sup> As I have already demonstrated not only previously in this chapter but also in **Chapter Three**.

FIGURE 5.20. Storyboard-like panel for Marinês Nicolli's (a), João Evangelista's (b), and Luiz's (c) stories. Panel design.



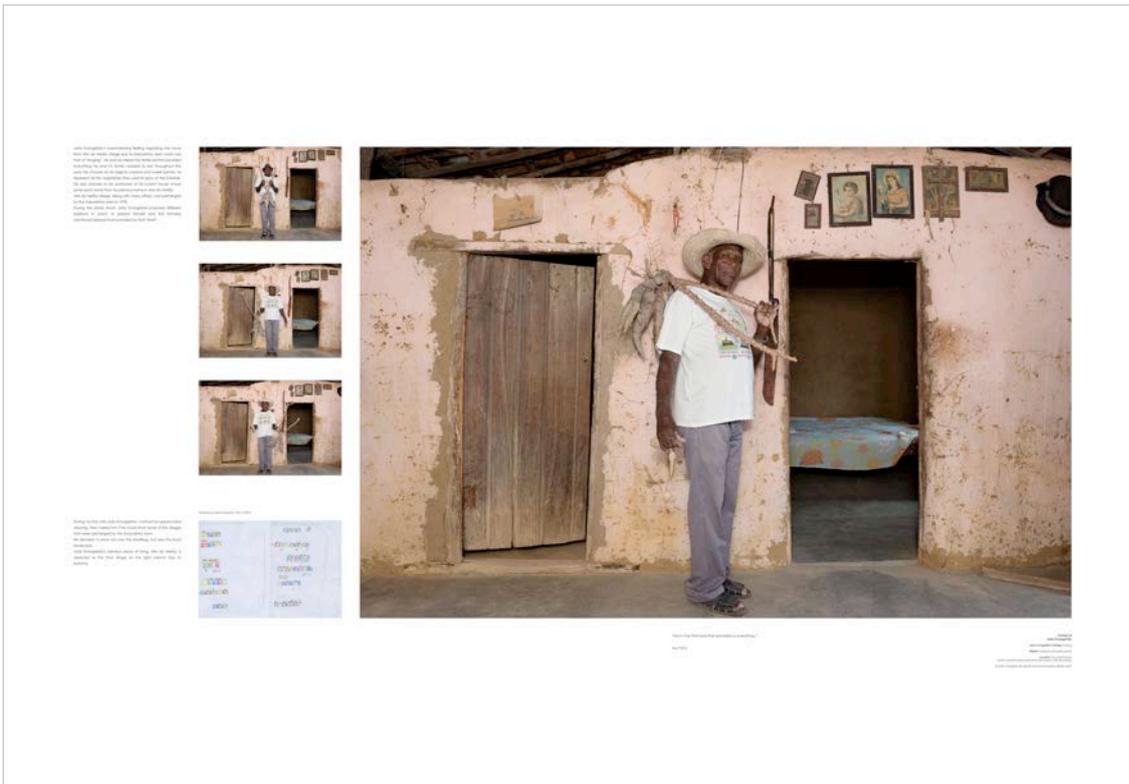
(a) This piece consists of the portrait of Marinês Nicolli juxtaposed with the photograph she took (*The vision of the sun*—instant film), along with an excerpt from her interview, where she speaks about the impact the Garabi dam might have on her and her children's lives (at the centre-bottom) and textual explanation on the rationale behind her decision to photograph the sun (left).

For Marinês Nicolli's story, see p. 231-232 and 261.

The full-scale version of the panel was presented in the viva show.

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(b) This piece sets out the sequence of portraits of João Evangelista, as, at some point in the shoot, he proposed to perform as coming in from the harvest (his focus for his portrait was to highlight the fertile soil he and his family have lost since they moved from the riverside due to the Sobradinho dam). Through his drawing, João Evangelista also makes accessible to us, viewers, his memory of his former place of living and how he perceived the landscape along the riverbank, before the dam. Both his portrait and his drawing speak about matters that are missed, erased by the dam; then both drawing and photographs are presented in the same piece, along with the explanatory text.

For João Evangelista's story, see p. 220-221, and **Chapter Two**, p. 97.

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© João Evangelista do Espírito Santo and Marilene Ribeiro 2018



(c) This piece presents Luiz's portrait and, as his discourse (text below his portrait) is strongly embedded in the matters of heritage and legacy, vernacular images retrieved from his personal archive (which portray the attachment of Luiz's history to the riverine environment and the land) are juxtaposed to it. For Luiz's story, see p. 260 and 279-280.

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The use of text to insure the audience has access to the context within where to “read” the images that are presented to them is not a singularity of this PhD project but rather a strategy largely employed by documentarians over time, e.g. Walker Evans (*Let us now praise famous men*, 1941), Alfredo Jaar (*The eyes of Gutete Emerita*, 1996), Mathieu Asselin (*Monsanto – a photographic investigation*, 2017), and, particularly, Susan Meiselas in her works I surveyed in this thesis: *Kurdistan - in the shadow of History* (1998/2008) and *Encounters with the Dani* (2003). This reliance on accompanying words in documentary photography as a way to carefully frame the work to its viewers is noted by acclaimed writer Mary Warner Marien (Marien, 2010:420-422), whose focus of work has been documentary photography: “Photographs were not expected to stand on their own, presumably communicating to viewers in a universal visual language.” (Marien, 2010:421).

Also, when relevant, the sequence of images a given participant and I worked on alongside the

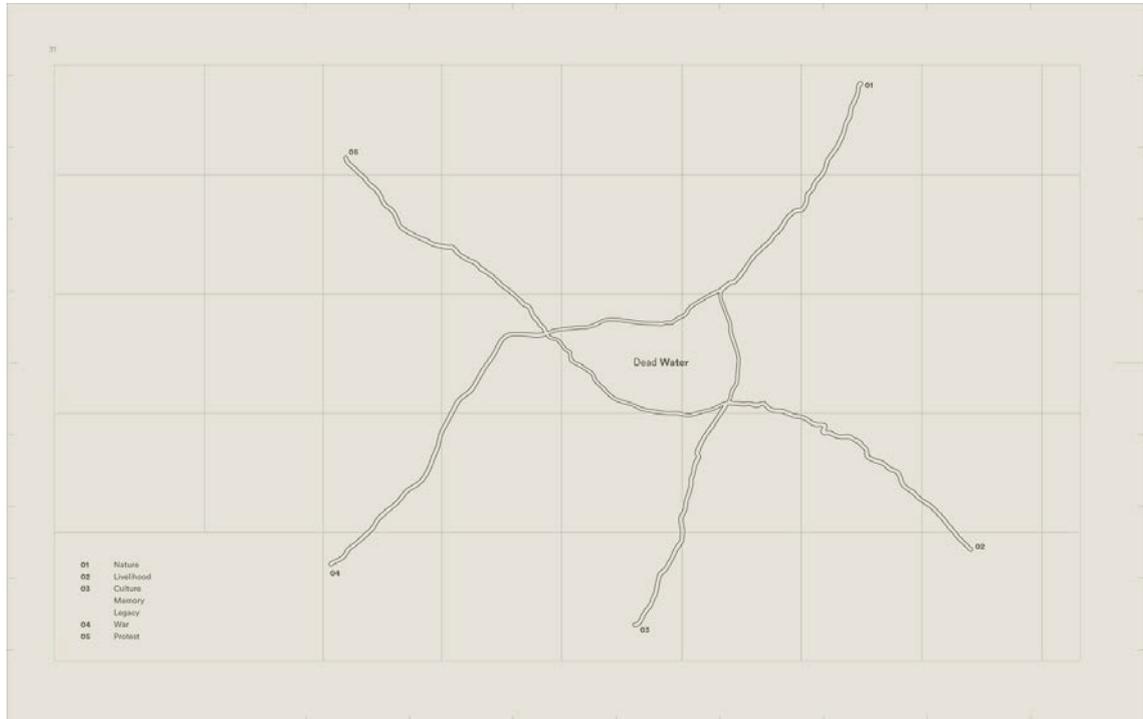
photo shoot is acknowledged in this display design (something like what Lockhart set up and presented viewers in her *Apeú-Salvador Portraits* series), as I believe that, as viewers access the entire sequence, they can perceive how the concept for that given portrait as well as the photographer-photographed person relationship evolved along the “event of photography” (see Fig. 5.20b, and Fig. 5.22).

Thinking about all the precious material this PhD had generated (both in terms of image, testimonial, knowledge, history, and archive) and that it consisted of a substantial amount, I considered organising a photobook, as this could also be a suitable way to make the work achieve its aims. Apart from being able to include and present more information to the beholder, and at a pace driven by the latter, books do not have the same space and time constraints as an exhibition in a physical site—a book can reach any country at any time. A book proposes longevity for the project in a way that an exhibition cannot. On the other hand, physical exhibition sites enable possibilities of scale, architecture design, and print quality to be explored. Then the photobook and the exhibition would hold complementary functions in involving the viewer in the story that is told in this work.

The design for the book has been also a challenge, especially because the amount of text to fit in is substantial (as I am dealing with a complex subject of inquiry, as stated above and also set out in **Chapters One, Two, Three, and Four**) and there are numerous possibilities to interrelate the visual and textual information gathered. Likewise the short video *Costs* (see p. 240-241), the book also aimed to be more lyrical. Concerning the book, two core decisions were then made:

- 1) dividing the book into chapters that would correspond to every “territory” revealed by the researcher-researched encounters and explored in the portraits jointly made (see p. 243-266). This made more sense to me than organising it according to the geographical sites covered, as these named “territories” ultimately stand for the intangible costs of hydropower – what this research proposes to access, explore, and present – and are also interconnected (Fig. 5.21);

FIGURE 5.21. Book chapters – Map of the Territories of Losses. Book dummy for book. Page spread.



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Design © Ana Luisa Menezes 2018

- 2) grouping information as individual dossiers that contain, each, all the relevant information regarding a given collaborator (which followed the same rationale previously presented for the pieces for exhibition purposes), then every participant featured in the book would have a space for her/his story to be developed and resolved (Fig. 5.22). As the reader accesses sitters' perspectives on the dam via their dossiers, one after another, her/his understanding of each aspect of it (e.g. loss of subsistence, disruption of ecological processes, family and community bonds, destruction of the sense of identity and belonging, silencing and infringements of rights, war) scale and the actual dimension of the impacts of hydropower can be revealed.

FIGURE 5.22. Nelci's dossier in a folder-like format. Book dummy for book. Fifteen sequential pages including dossier cover (below – top) and last page (p. 294, bottom, page spread).



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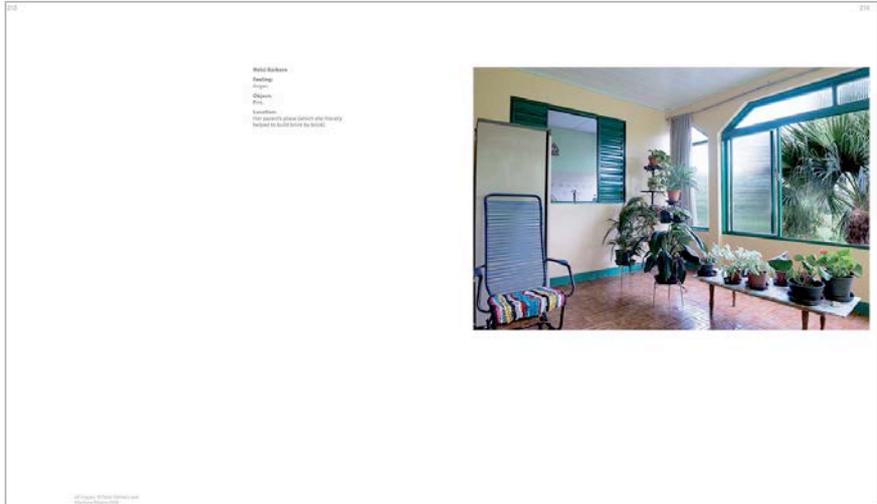
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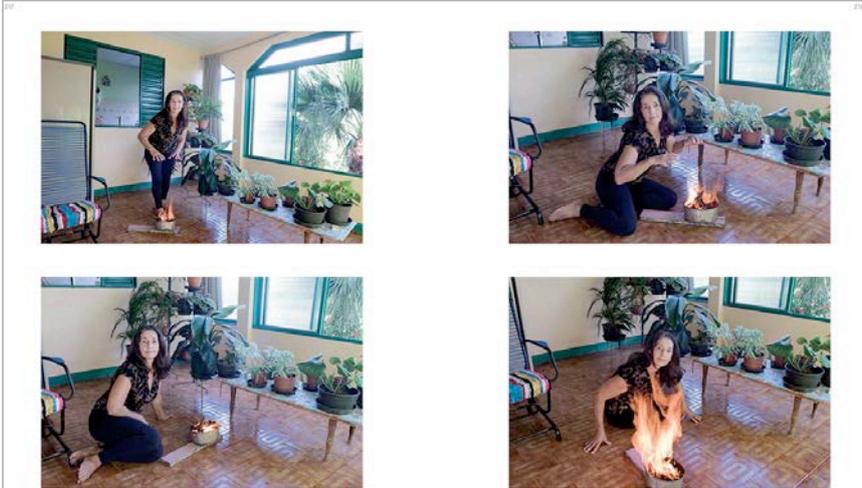
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grown up, have studied fine in Porto Luana. We're made bricks, a society, the church - any kind of society you feel the tearing this. So, taking us out from here is actually killing us. I can't imagine myself in another place. (...) They (those in charge of the Garabi dam project) don't understand that it's not about monetary things! What's at stake is the effective bonds of an entire community with each other and also with the city. (...) To give you an example: I helped to build this house. I handled the bricks, I worked on the cement mix, I arranged the bricks with cement on them. Can you imagine what it would be like watching the water cover this great field, perform the movement of the water-rising with her hands, it's painful, it's quite complicated. Got me? (...) **Maureen: What else do you foresee being covered by the water?** Nêcio: The nature! (giggles) This is another point that worries me. We told we need to protect the environment. How much of the environment this (the dam) will destroy? It's not just about human or material things, the environment will also be damaged. If trees are important to us, where are most of them? It's spoken about the relevance of the riparian woodlands, of the conservation areas. What for, then? Are just riparian woodlands those who need to protect them? In the cities, no, no (head shake). It seems no one needs riparian vegetation, or conservation areas, or whatever there. Why do we have to protect the riparian banks if they will come and clear the area when the dam is being constructed? Because, you know, this is also part of what will be affected. My father's property is basically all trees - and all the animals that roam within it. The riparian is full of animals. They will all die with this. Surely the wild. Where else will they find shelter? Some might manage. In the last flood we had here many wild animals died - the flood that happen due to the opening of the sluice gates of the Itá dam (which is situated upstream). (...) The Itá dam is already affecting us. Because, when they decide to release the water at the its reservoir, they just do it. They don't care about what is downstream. How do you imagine we felt when the water was reaching our gate and we were at here, inside the house? It's just what: 'those one sluice gate... Do you get me? (...) **Maureen: And in this dam, the sea which they opened the sluice gates, far from here?** Nêcio: It is, it is in Santa Catarina (over 300 km upstream-Porto Luana). (...) For those who will listen to this 'reportage', for the God sake, this is our place do not do this (the Garabi/Riverine dam complex project)! This will destroy a lot! This will destroy lives, and lives, and lives! Those who realize this material, look at it carefully, analyze it with care. (...) This thing of dams does destroy life! Regarding the IBAMA (the government agency that regulates and inspect issues concerning the environment in Brazil) - we (Brazilian dwellers) can't cut one single tree. What about when the dam comes? What will they do with all these trees? Or will those trees stay and get cut into the water? Will they manage to rescue all these wild animals that live by the riverbank? Or will those animals die? If one catches a snake-like catfish or a snake-like fish today this gets a R\$ 5,000 (roughly \$1,200) fine. If they build this dam, will the animals still be able to breathe? Do animals need running water to live. (...) It's a great concern, this dam. There are also many other communities around here. I have no idea on how our life will be like. I'm against it and will fight so that this doesn't happen, I wanna die here. (...) I've said this before to me, hearing this place it's a question of death! Got it? I think I would be the last person to leave, because I don't imagine myself in anywhere else, you know? This sounds terrible, doesn't it? I can't even think about this, because this gets to me (sweating). (...) This is a subject that wounds us, it's a very complex matter, it's quite terrible. This shakes deep inside us, it destabilizes us. I feel you - this destabilizes our structure. I'm not saying this randomly. Not at all. This is at feelings. (...) **Maureen: How do you feel about Garabi dam, Nêcio?** Nêcio: Hard to tell... Really angry! I couldn't imagine what I would be capable of doing. If they decide to run the dam works close to here, I feel you - they won't build this dam because what they put up on the daylight would put down by the night. **Maureen: Is there anything that could represent this anger?** Nêcio: (singing or whistling) (...) I would fill barrels with petrol, set fire to them and throw them. Not going? I guess this is my wild side, you know? That's why I (generally) replied: 'No! Filling barrels with petrol, setting fire, throwing them... Explosion... and every man for himself. If they do not have any money spare me, why should I have it for them? Anger destroys, doesn't it? (singing reflected) **Maureen: How would you like to be portrayed with this fire to tell your story?**





As Nelci mention in her interview (text) her feeling of anxiety about any aeroplane she sees flying over her place, wondering if this is the company resuming the Garabi project, I considered it appropriate to add to Nelci's dossier the flight map the latter had, in fact, previously used to survey that area of the Uruguay River, as this was part of her story and feelings about the Garabi dam. For other details on Nelci's story, see **Chapter Three**, p. 161-164.

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Images of the book dummy in its full length can be found in the DVD attached to the back cover of this thesis (**Appendix 10**).

For the viva show, the narrative was constructed by means of an installation which aimed not only to set out the process of gathering and assembling pieces, and exchanging experiences that consisted this research but also to put in dialogue all these pieces of the “puzzle” so that the visitor could “read” the story of the impact of the dams. The installation comprised nine storyboard-like panels, the material gathered from the field work (like the actual drawings, poem, videos and instant films shot by participants, advertise piece from the developer, etc.), a map portraying the geographic sites of the three hydro schemes surveyed, fact sheet which provided basic information concerning the three dam projects, the book dummy, and the short-video *Costs*. The panels featured 110 x 160 cm each and were arranged on the wall in a sequence that was guided by both the *Territories of Losses*, the aesthetics (i.e. the balance of colours and shapes of every portrait), and the atmosphere that involved the making of the portraits (ranging from more straightforward statements, to more sentimental testimonials regarding family, identity, belonging and subsistence, and catharsis and protest). One of the panels does not feature a person but a landscape (one of the islands that were submerged as a consequence of the damming of the river downstream): this panel was positioned as all the other eight ones—which depict the participants (i.e. the affected communities)—had to face it, had to face the desolate landscape, the unbearable consequence of the dam. This panel also works as a bridge between the space where the video *Costs* (which is mainly focused on the landscape) is screened and the space where the portraits (which concentrate on the people) are set out. The objects cited above were set up on plinths, enabling the visitor to see the actual/concrete material (drawing, instant film, poem, etc.) that were used to shape the narrative, and bringing about information that complements the stories presented on the panels and/or in the video *Costs*. The video *Costs* was set up so that the sound could travel through the entire exhibition space and echoes the riverine voices and sounds amidst all other material shown—i.e. the storyboard-like panels, drawings, etc. (Fig. 5.23).

FIGURE 5.23. Images from the viva show. Installation view.



More images can be found in **Appendix 10**.

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Once completed, what I believe to be the most challenging point (and many times the most frustrating one) with regard to every art/photographic work, particularly those ones which aim to tackle big social, political, or environmental issues and “demand action”, have to be faced: how to make this work reach the audience<sup>92</sup>. Even though I am aware that this is a stage that extends beyond the timeframe for this PhD, I considered making some points about it, as it is an important matter in my practice.

### **5.7 Question VI – Getting the work out in the world**

I have assembled together with my collaborators stories that intend not only to set up a visual narrative on the negative impacts of hydroelectric power but also to engage those affected concerning their role as voices for these concealed tensions to surface as well as voices that reclaim Human Rights and the Rights of Nature, and challenge our understanding of dams and the global energy policy agenda. As such, it is imperative that this work gains at least some public recognition. In their book dedicated to reflecting on and discussing research in the field of Photography, photographers and researchers Anna Fox and Natasha Caruana stress the importance of making the photographic work reach the audience so that the research can have actual impact, *“as methods of communication and dissemination of ideas play an important role in conveying new knowledge and debate”* (Fox and Caruana, 2012:143). Notably, as this PhD work involves many subjects that cross each other (energy policies, international affairs, economy, development, public opinion, natural resources, river systems, biology conservation, social sciences, etc.), I understand that, more than reaching a broader audience, it requires strategies to make it available to “multiple” audiences, as Anthony Luvera<sup>93</sup> (2017) explains, when talking about his collaborative works:

*“[...] When we’re talking about audiences for a work that is socially-engaged, I think it’s really important to be quite specific around thinking, well: there are policy-makers? There are people involved in influencing debates and thinking around the issue? There is the everyday public? And people within the everyday public come from different parts of society, we come from different parts of the city, or the country. [...] I think that, for me, it’s not so much about broad audiences, it’s about multiple audiences: thinking about very specific places for the work to be seeing in a way that will enable many different types of*

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<sup>92</sup> Issue that Martha Rosler had also stressed, back in 2001, and, despite the advantage of the Internet, is still considered a bottleneck for social documentary photography.

<sup>93</sup> For the entire interview I undertook with Anthony Luvera, see **Appendix 6**.

*individuals and people from different sections or places within the society to think about the work.”*

In this respect, I intend to find ways, and look for opportunities, that can make this work accessible to as broad an audience (and “multiple”, as Luvera has noted) as possible, then, reaching groups with distinct backgrounds, even outside the art, social movement, and biological science communities. By also being open to possibilities other than that of formal spaces of exhibition (but also not denying the latter, as I am focused on multiple audiences, as already addressed), I believe the work might eventually be seen (and “heard”). Crucially, above seeking for diverse upfronts to spread the outcomes of this project, ethical and moral principles guide my decisions of where to go, as this is the sort of work that cannot be exhibited in or promoted by venues and institutions associated with the dam building industry. I make sure that every possibility that rises (and might rise in the future) is carefully thought about as well as subsequently discussed with the MAB<sup>94</sup> before carrying on, I see in this initiative I had myself a way to prevent that the work can be misleading, to protect participants from exploitation, and to respect my own ideologies too.

Although I am far from considering this enough and aware that much more needs to be done in order for the public to get to know this project, so far this PhD work has been awarded the CNPq PhD scholarship (2014), the Royal Photographic Society Awards (2014), has been shortlisted for the Marilyn Stafford FotoReportage Award (2017), and selected for the Circuito Penedo de Cinema (2018). It has been featured in the Royal Photographic Society Journal (2015), in the World Social Forum – Preparatory Meeting (2016), on the Photoworks website (2016), in the Lishui International Photography Festival (2016), in the Somatic Shifts: The Body and Beyond in Creative and Critical Research – Research Student Conference and Exhibition (2017), in the Fast Forward2: International Network Researching Women in Photography (2017), and in the Alternative World Water Forum (2018). Amnesty International’s headquarters in London hosted some storyboard-like panels and an artist talk on this project, in July. Some of the interviews and literature review done for this research will also be part of the text book *Voices of Latin America*, to be published by January 2019. Dialogue with Greenpeace for this project to be disseminated in its channels as well as negotiations with institutions based in the major city of the Sobradinho dam area for an exhibition and event on

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<sup>94</sup> Which has historically worked collectively against the dam industry and for those affected by these ventures and which has supported this PhD research since its early stages, as my wish (as already explained in **Chapters One and Two**).

this work to take place are also on course. After completion, I hope to gain more exposure for the work, so as to raise awareness further.

Still concerning the subject of getting the work out in the public realm and taking the outcomes of this PhD beyond, I aim to go back to the local communities that took part in this project. I want local families not only to experience the outcomes of our cooperative work—and to have access to what other communities that also participated in this work produced—but also to discuss their impressions and feelings regarding this PhD project. Once there, I also intend that we collectively assemble proposals that push decision-makers and society as a whole towards an agenda that in fact engages with environmental conservation and human rights. Parallel to this, I will be also looking for means to publish the book, to exhibit the work in different spaces, and to raise funds to build an online platform that can host the project, making all the material generated by this practice-based research available to the wider public and functioning as an archive too. Besides this, I make the material built via this PhD research available for the MAB and other social movements and institutions that supported this project, like the *Xingu Vivo para Sempre* Movement (MXVPS) and the *Instituto Socioambiental* (ISA), to use it for their own aims (which ultimately tally with what motivated me to undertake this PhD).

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## **Conclusions and Contributions to Knowledge**

*"(...) I would rather risk failing in trying to share this information with my audience instead of condemning to the invisibility these realities. (...)"*

(Alfredo Jaar, 2013, min 29:51)

## Conclusions

Throughout this thesis, I have demonstrated that the methods applied in this practice-based research worked as a powerful way to build up knowledge and create a socially relevant and visually effective work. As practitioners of the field of photography Susan Meiselas, Anthony Luvera, Jim Goldberg, and Sharon Lockhart have signposted, by means of their groundbreaking approaches in face of the traditional methods of documentary practices, modes of working that embrace collaboration with the subject portrayed and welcome other material apart from the photographs made by the photographer her/himself to assemble the story to be told can have a strong effect in visual storytelling. As stressed by scholars from Social Sciences, like anthropologist Carolyn Fluehr-Lobban (2008), collaboration with the “subject” (in this case, the subjects depicted in the photographs made) can better retrieve and shape information about the theme the researcher seeks to understand and articulate to her/his interlocutors. This thesis has managed to highlight how involving in the process of making those whose stories the photographer aims to tell can contribute to a more consistent, ethical, and reliable outcome. By engaging the photographer and the photographed person in a joint work to construct images that aim to articulate to their viewers the sorts of impacts dams have caused, particularly those related to things that monetary and/or objective means cannot tackle, this research has also reinforced the political attributes of photography and its capacity of functioning as a mediator to communicate intangible matters.

The resultant photographs are poignant because they are embedded in both the aesthetics and the “political”. That is, the trained photographer employs her knowledge on how to best use the apparatus to properly put in dialogue and arrange the components within the frame, and, at the same time, the sitter/collaborator and the photographer jointly articulate how to make use of representation to transmit their perceptions (which, in the end, concern both the structures of power in society and the reformulation of concepts like those of development, wealth, and wellbeing, i.e. concern Racière’s *dissensus*). Consequently, as discussed in **Chapter Three**, the mode in which these portraits are generated reinforces and testifies David Levi Strauss’ (2003), Ariella Azoulay’s (2008, 2012), and Jacques Rancière’s (2004, 2010) arguments that the aesthetics and the political are entities inherent of (and intertwined in) every artwork: they have to be considered together when the work is being scrutinized, instead of being regarded as exclusive matters, which is what art critics have tended to do.

From the considerations above, this thesis also demonstrates that a collaborative practice that engages in hybridizing photographer's and her "subjects'" perspectives within the act of photography—creating, negotiating, and shaping together the (staged) image to be photographed, enabling photographer and sitter to build upon each other's knowledge, exchange emotions, interfere in, and improve each one's labour during the process of image-making—can generate an original documentary work. This research introduces a way of telling a story that is distinct from that of traditional documentary practices or even that of documentary photography projects that are rooted in *participatory* methods (as defined in the **Methodology**).

Bringing to the foreground the active role of the depicted subject in the act of photography (not as a victim but as a citizen who refuses her/his voice being silenced by what Azoulay and Rancière refer to as "the regime") and also reflecting on the commitment of the viewer, once before a photograph, this practice-based research has affirmed the political attributes of photography as well as its relevance in how we, society, understand things.

Also, the wounds caused by the hydro scheme are not straight forwardly addressed in these staged portraits made by the photographer and the sitter, rather, the audience needs to interact with other material that stands along with these jointly-made photographs (like their accompanying text) to get to know what these dam projects involve, then the portraits resonate deeply. Consequently, this thesis also highlights the importance of other material that accompanies a photograph (like text and other imagery) in signposting the context in which the image should be read: particularly concerning the relevance of the accompanying text in the interpretation of a given image, as also emphasised by American writers Mary Warner Marien (Marien, 2010) and Rebecca Solnit (Solnit, 2010).

As addressed in **Chapter Five** (p. 289), Marien (2010:420-422) acknowledges the employment of text by practitioners as a strategy to provide a frame within which the audience should consider the work before them (and photographer Susan Meiselas has extensively used this in her works). Rebecca Solnit (2010) also recognises the power the text attached to the photograph holds in this act of communication, yet, to alert how captions can guide the image-reader towards a misleading interpretation about the subject portrayed. To this regard, Abigail Solomon-Godeau (1991:179-180, 183) and Martha Rosler (1981:162-163 and 183, 2001:217 and 228) also express their concern about how the environment/site where the visual work is

displayed interferes in (and can, eventually, distort) its interpretation by the viewer. This is a point that needs to be carefully considered in the next stage of this PhD project (i.e. dissemination of the work produced) to not only attempt to prevent the work from being undermined/misshaped but also to perceive sites and opportunities that, considering what these given venues represent to society, can add to and strengthen the information my collaborators and I are attempting to share with our audience.

This research has also revealed the scope of the damages caused by hydro projects, not only in terms of their intensity, types, and relevance, but also with regard to the capacity these harms have to resonate through time and geographic space. According to my collaborators' testimonials, the negative impacts of hydropower plants can reach as far as 700 km upstream and 400 km downstream of the site where the dam is built. These negative effects can also hit the affected population/area decades before the dam in fact starts to be built and last as long as 40 years after it. Moreover, these negative impacts can ramify and be amplified via a cascade effect, spiralling out of control and eventually leading to further disastrous "side effects". These impacts through time, geographic space, and via cascade effect are acknowledged in the diagram I built for this thesis as the blue boxes (Fig. 5.15, **Chapter Five**, p. 242). As these are complex phenomena that demand a laborious reasoning and/or long sequence of events to explain them (particularly those driven by the cascade effect), the groundwork for these findings, which is, again, based on what my encounters with my collaborators have disclosed, is presented as **Appendix 8 – Demonstration of the scope of the damage caused by hydropower plant projects through Time, Space and via Cascade Effect**. These findings emphasise the pressing necessity for policy and decision makers to take seriously both the locals' perspectives and scientific publications in the areas of biology, ecology, geography, and social sciences (which have also demonstrated how harmful hydro power projects have been and can be in future), instead of having their decisions mainly underpinned by political and economic interests.

Also, from what my collaborators have expressed, along with my own experiences, readings, analyses, and reflections on my practice, I articulate an inference regarding rivers and dams which I present as part of my conclusions as: *free-flowing rivers as biological and social networks and the breaking-bond effect of dams*.

Every human group that lives in close contact with the natural world perceives the space they occupy as a microcosm comprised of themselves, other living beings that co-habit this site,

legends and local beliefs, the tides, seasons, earth, water, rocks, and senses (Viveiro de Castro, 1996, 2012; Gudynas, 2015:142). Notably in the Andean (Gudynas, *ibid*) and in the Amazon (Viveiros de Castro, *ibid*) regions, all these things can swap places, e.g. a jaguar can be a man and a man can be a jaguar, a human being can be turned into a plant, the running water can have human's temper. Participant Élio's words provide a flavour on this peculiar reasoning:

*"[...] The times I got to the river and it was angry, I knew it was annoyed and, then, it was not hard for me to wait until it was calm, easy again. [...] to say to me, 'the river, I cannot go in there, but I'll go in anyway'. No way! [I know] it's its time, it's angry now. So, if we analyze things, nature is us, because you know, I'm not willing or well every day. [...]"*

For the people who dwell on the riverbanks of the Xingu, for instance, the Xingu River is not a water channel: it is an entity, something like a deity but, at the same time, something of which they are part too.

Another more complex example comprises the belief some Amazonian groups have in the giant water lily actually being an indigenous woman who drowned in the river when she was trying to grab the moon (which was actually reflected on the water). These people look at the plant on the water and do not see a plant, but rather a peer that lives in the water.

Hence, for traditional communities that live alongside the rivers, the whole space they move through and inhabit is understood as themselves (take participant Juma Xipaia's words in her interview too – **Chapter Five**, p. 267). Consequently, when a dam blocks the river and forces these people to deal with a drastically different landscape (either because they have had to move or because the dam has severely altered the ecosystem they are still living in), it actually destabilises this cosmos.

Furthermore, one might note that the case of dams and hydropower is not about interfering with a piece of land that is strictly located somewhere, but rather disrupting a continuum, which is something that cannot be constricted or limited within any space but ultimately to the entire Earth (as, in the end, all rivers are connected to the sea). This continuum responds to the movement of physical and chemical substances (e.g. sand and nitrogen), and for the movement and adaptations of aquatic and terrestrial species (i.e. for genetic diversity and evolutionary processes too). As this complex body (the river) flows, it intrinsically sustains all these fluxes and connections (some examples are shown in the pale orange boxes linked by

black lines in the diagram built for this thesis, Fig. 5.15, **Chapter Five**, p. 242). Fragmenting this body causes all these other things (which are supported by it) to eventually collapse, as my participants have pointed out throughout this work via their discourse, feelings, object, and location chosen for their portrait and also through their performances to the camera. I argue that, via the knowledge brought out through my collaborators during our joint labour, this research shows that free-flowing rivers actually function as biological and social networks. Consequently, interrupting its natural flow (as dams do) rips up all the bonds this dynamic body sustains. This, in turn, destabilises the whole structure and eventually leads to the mass destruction my collaborators have engaged in demonstrating through the visual storytelling I propose as this PhD work.

Based on this reasoning, I argue that the damage hydropower inflicts on the whole environment<sup>95</sup> reaches such magnitude because it operates via what I name “*the breaking-bond effect*” (displayed as the red circle in the diagram, Fig. 5.15). This could be described as an effect that is able to disrupt; to tear out the intangible threads that link the complex systems that the river sustains. To illustrate this I will start with the system that comprises the community of fish: this system is linked to subsistence living (i.e. a healthy community of fish will make food—fish—available for riverside dwellers). Getting food from the river and also witnessing fish alive in the river, these dwellers perceive the river as source of life, i.e. the river will be that river, for these people, only if it features fish and these people interacting there. If the river can no longer either provide fish or feature these people there, it is not a river anymore, according to these peoples’ understanding of what a river is (according to the reasoning in their community). The damming of a river breaks the link between the running water and the fish, which leads to the death of fish, which breaks the link between fish and these local fishermen families, which destroys these people’s river, which breaks the link between their understanding of what the river is and their understanding of their own self, and so they find themselves without their key references of identity.

As a network, it is impracticable to describe the beginning and the end of this process of ruptures triggered by the dam, because, as stated (and roughly illustrated in the diagram), they are interconnected and ramified. Nonetheless, my collaborators, through their experiences, guided me towards this new, more holistic form of understanding rivers and the impacts of dams.

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<sup>95</sup> Considering the environment as a composite that involves, apart from other things, abiotic characteristics and species, including human beings, as well as interactions between these components.

As such, the outcomes of this PhD research demand the “peripheral”<sup>96</sup> knowledge to be considered to be as valuable as the academic, scientific, Cartesian way of producing “arguments”. This “peripheral knowledge” is a knowledge that urges other worldviews to be included in the process of policy and decision making, it is a knowledge that seeks for intangible matters to be measured with a different scale instead of the one that is applied to measure monetary things; it is a knowledge that calls for free-flowing rivers to be treated as a continuum living body wherein life and culture flourish and are perpetuated through it, as subjects of right that need to remain flowing for the complex and precious net they sustain to continue.

### **Original contributions to knowledge**

Demonstrating the negative impacts of dams/hydropower has been considered a bottleneck in the fields of ecology, social sciences, and energy policies due to the intangible nature of many of its components. In 2001, when the Northern Irish writer Patrick McCully published the second edition of his classic book, *Silenced rivers: the ecology and politics of large dams*, he described how policy-makers were unable to consider some losses that a dam could trigger when they were not related to things that could be objectively measured (McCully, 2001:79). Thirteen years later, when providing an analysis on the impacts of dams, with special interest in the effect of these ventures in China, Pu Wang and colleagues (Wang et al., 2014) came back to this problem concerning intangible matters (which they classified as belonging to either the *embodied* or the *relational wealth*, as outlined in **Chapter One**):

*“[...] Material wealth is easy to understand, and therefore its loss is most often equitably compensated, or even overcompensated. But embodied wealth and relational wealth are generally affected in indirect manners, and thus they are more difficult to recognize [...]”*  
(Wang et al., 2014:94)

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<sup>96</sup> Named here as peripheral in order to stress that this knowledge rises from the periphery and not from the centre, i.e. not from standard centres of knowledge, which have been historically located in either Europe or the United States, as noted by Boris Kosoy (2002c), Joan Fontcuberta (2002), and Boaventura de Souza Santos (2007). Consequently, the knowledge this “centre” generates is impregnated with ways of thinking and understanding that concern people from the USA and Europe only, not considering, for instance, African, Andean, and Amazonian people’s logic and reasoning.

The approach I chose to tackle this complex and contentious issue enabled me to disclose, dissect, and hopefully make the essence and magnitude of the costs of hydropower more intelligible and “tangible” to both specialists and non-specialists. This approach was inspired by studies on transdisciplinarity (whose overview was made accessible by Jay Hillel Bernstein – Bernstein, 2015) and also guided by my willingness to explore new possibilities within documentary practices. By working through a visual narrative jointly constructed with those who have first-hand, personal, experience of both rivers and hydro projects, I hope this PhD makes the implications of these ventures for the whole environment (understood as the riverine ecosystem including the people who inhabit it as one of its components) more accessible to people as well as the role of these infrastructure schemes in the spheres of power and, ultimately, in geopolitics. Despite being focused on Brazil, reflections raised through this practice-based research may be expanded to other countries that have also underpinned their agendas on hydropower and dams (like India and China) and enrich debates on energy policies, development, wealth, wellbeing, and climate change.

This research also responds to and takes further the claims by scholars like Arnd Schneider and Christopher Wright (Schneider and Wright, 2010, 2013 – as set out in **Chapter Two**) for practices that explore in more depth the possibilities for anthropological and artistic tools to work together in order to produce stronger works in both the fields of the Arts and Anthropology.

This PhD comes up with an innovative practical approach concerning the way of telling stories through visual means. It not only engages the researched (subjects of the images) in the process of making but also blends the roles of photographer and subject, challenging traditional documentary photography practices (as defined in the **Introduction**). Moreover, this research, by means of visual storytelling, presents a new way to understand and consider socio-political and environmental issues: from the perspective of those who have a profound knowledge about the subject of inquiry, yet whose voices have been undermined and/or neglected.

As stated at the beginning of this thesis, dams have a long-term relationship with society, prosperity, and destruction; hence, debates around the costs and benefits of them might continue. What this thesis attempts to add into this discussion, instead, concerns a more fundamental matter, that related to the understanding of what are rivers.

That said, I hope this research can contribute to the debate around documentary photography as well as to art practices in the twenty-first century. In the field of the Arts, I argue this practice-based research reaffirms collaborative processes as new shapes in which art also manifests, as this photography-based work addresses and intervenes in the arena where society plays, through a true and mutual engagement of the photographer and the “community” this work embraces: riverine people.

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## Appendices

### APPENDIX 1

#### Structure of the environmental regulatory framework for hydropower plant projects in Brazil

According to the Brazilian law and regulations, any activity that might interfere in an area, pollute, or use natural resources must have its negative environmental and social impacts examined by a governmental agency (Law n°. 6938/1981). Every hydropower plant project that might generate more than 10 MW (installed capacity) must go through a process of environmental assessment that will evaluate its negative impacts for the purpose of approving it or not (CONAMA resolution n°. 001/1986). The Brazilian Institute of Environment and Renewable Natural Resources (*Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis* – IBAMA) is the governmental body that leads this process when the hydroelectric station features more than 300 MW of installed capacity and eventually signs out or denies the licenses applicant requested (CONAMA resolution n°. 237/1997). This framework comprises four stages as follows:

1) Studies and public consultation (application for the process of licenses) – Applicant submits the initial proposal which, among other parameters, specifies location-to-be and type of activity(ies) involved. IBAMA creates a Reference Term (*Termo de Referência*) based on the specificities of this initial proposal in order to guide applicant through the studies of viability she/he/it may develop. From the Reference Term, the applicant sets up a complete Environmental Impact Study (*Estudo de Impacto Ambiental* – EIA) in the area that will be potentially affected, as well as holds a public consultation, wherein the proposed project and its consequent impacts are presented and discussed with citizens. During the public consultation people may manifest their wills regarding the project to the proponent’s spokesperson(s) as well as to the IBAMA, and this must be taken as a relevant point for the IBAMA’s decision to issue or not the first license – i.e. the Provisional Environmental License (*Licença Prévia*);

2) *Licença Prévia* (Provisional Environmental License) – this is the License that acknowledges the feasibility of the presented project and demands applicant to elaborate and set out for assessment a detailed plan of compensation and mitigation actions – the Basic Environmental Plan (*Plano Básico Ambiental* - PBA) – based on the negative impacts outlined in the EIA. Applicant is also demanded to undertake mitigation and compensation actions that will prepare the area under influence of the project to the works – as these actions are mandatory for the next stage to be approved and they are referred as “socio-environmental conditions” or “socio-environmental

provisions” (*condicionantes socioambientais*) for the next stage to take place (in this case, for the License for Installation). This license can be valid to up until 5 years and must be followed by the License for Installation;

3) *Licença de Instalação* (License for Installation) – this is the License that acknowledges the PBA presented and authorizes applicant to build the hydropower plant as well as proceed other dam-related works, like opening roads and assembling facilities for workers. This license is only approved whether applicant accomplished the compensation and mitigations action agreed to be implemented in the meantime between the approval of the PBA by the IBAMA and the request for the License for Installation (what is referred, as mentioned above, as the conditions – *condicionantes* - for the License for Installation to be signed). This license can be valid to up until 6 years and must be followed by the License for Operation;

4) *Licença de Operação* (License for Operation) – this is the License that authorizes applicant to shut the dam sluices gates, fill the reservoir, and generate energy. This license is only approved whether applicant accomplished the compensation and mitigations action agreed to be implemented in the meantime between the approval of the PBA by the IBAMA and the request for the License for Operation (what is also referred as the conditions – *condicionantes* – for the License for Operation to be signed). This license can be valid to up until 10 years and can also be renewed, as named in the initial contract (as usually hydropower plants have contracts of about thirty years for operation), after a new assessment is carried out by the IBAMA.

Each one of these licenses can be suspended or cancelled at any time if the applicant (e.g. the company or developer): (i) does not accomplish the mitigation/compensation actions agreed (the “socio-environmental conditions” - *condicionantes socioambientais*), (ii) omits/misleads information required for the process of assessment (e.g. on its Environmental Impact Study and/or on its subsequent monitoring reports), (iii) if the project, at any point, starts to present noticeable risks for either the environment or human health.

The National Water Agency (*Agência Nacional de Águas* - ANA) must be also consulted and authorize the use of the natural resource – i.e. the use of the water – for the purpose of generating energy in a initial stage of this process of licenses (Law n<sup>o</sup>. 9984/2000; MMA, 2009:54).

In case the proposed project involves areas inhabited by indigenous people, the National Indian Foundation (*Fundação Nacional do Índio* – FUNAI), Brazilian governmental agency that carries out policies which concern indigenous people affairs and welfare, also leads this process of assessment, discussion and approval (MMA, 2009:55).

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## **APPENDIX 2**

### **Declaration of Curitiba:**

#### **Affirming the Right to Life and Livelihood of People Affected by Dams**

Approved at the First International Meeting of People Affected by Dams, Curitiba, Brazil

March 14, 1997

We, the people from 20 countries gathered in Curitiba, Brazil, representing organizations of dam-affected people and of opponents of destructive dams, have shared our experiences of the losses we have suffered and the threats we face because of dams. Although our experiences reflect our diverse cultural, social, political and environmental realities, our struggles are one.

Our struggles are one because everywhere dams force people from their homes, submerge fertile farmlands, forests and sacred places, destroy fisheries and supplies of clean water, and cause the social and cultural disintegration and economic impoverishment of our communities.

Our struggles are one because everywhere there is a wide gulf between the economic and social benefits promised by dam builders and the reality of what has happened after dam construction. Dams have almost always cost more than was projected, even before including environmental and social costs. Dams have produced less electricity and irrigated less land than was promised. They have made floods even more destructive. Dams have benefited large landholders, agribusiness corporations and speculators. They have dispossessed small farmers; rural workers; fishers; tribal, indigenous and traditional communities.

Our struggles are one because we are fighting against similar powerful interests, the same international lenders, the same multilateral and bilateral aid and credit agencies, the same dam construction and equipment companies, the same engineering and environmental consultants, and the same corporations involved in heavily subsidized energy-intensive industries.

Our struggles are one because everywhere the people who suffer most from dams are excluded from decision-making. Decisions are instead taken by technocrats, politicians and business elites who increase their own power and wealth through building dams.

Our common struggles convince us that it is both necessary and possible to bring an end to the era of destructive dams. It is also both necessary and possible to implement alternative ways of providing energy and managing our freshwaters which are equitable, sustainable and effective.

For this to happen, we demand genuine democracy which includes public participation and transparency in the development and implementation of energy and water policies, along with the decentralization of political power and empowerment of local communities. We must reduce inequality

through measures including equitable access to land. We also insist on the inalienable rights of communities to control and manage their water, land, forests and other resources and the right of every person to a healthy environment.

We must advance to a society where human beings and nature are no longer reduced to the logic of the market where the only value is that of commodities and the only goal profits. We must advance to a society which respects diversity, and which is based on equitable and just relations between people, regions and nations.

Our shared experiences have led us to agree the following:

1. We recognize and endorse the principles of the 1992 'NGO and Social Movements Declaration of Rio de Janeiro' and the 1994 'Manibeli Declaration' on World Bank funding of large dams.
2. We will oppose the construction of any dam which has not been approved by the affected people after an informed and participative decision-making process.
3. We demand that governments, international agencies and investors implement an immediate moratorium on the building of large dams until:
  - a) There is a halt to all forms of violence and intimidation against people affected by dams and organizations opposing dams.
  - b) Reparations, including the provision of adequate land, housing and social infrastructure, be negotiated with the millions of people whose livelihoods have already suffered because of dams.
  - c) Actions are taken to restore environments damaged by dams - even when this requires the removal of the dams.
  - d) Territorial rights of indigenous, tribal, semi-tribal and traditional populations affected by dams are fully respected through providing them with territories which allow them to regain their previous cultural and economic conditions - this again may require the removal of the dams.
  - e) An international independent commission is established to conduct a comprehensive review of all large dams financed or otherwise supported by international aid and credit agencies, and its policy conclusions implemented. The establishment and procedures of the review must be subject to the approval and monitoring of representatives of the international movement of people affected by dams.
  - f) Each national and regional agency which has financed or otherwise supported the building of large dams have commissioned independent comprehensive reviews of each large dam project they have funded and implemented the policy conclusions of the reviews. The reviews must be carried out with the participation of representatives of the affected people's organizations.
  - g) Policies on energy and freshwater are implemented which encourage the use of sustainable and appropriate technologies and management practices, using the

contributions of both modern science and traditional knowledge. These policies need also to discourage waste and overconsumption and guarantee equitable access to these basic needs.

4. The process of privatization which is being imposed on countries in many parts of the world by multilateral institutions is increasing social, economic and political exclusion and injustice. We do not accept the claims that this process is a solution to corruption, inefficiency and other problems in the power and water sectors where these are under the control of the state. Our priority is democratic and effective public control and regulation of entities which provide electricity and water in a way which guarantees the needs and desires of people.
5. Over the years, we have shown our growing power. We have occupied dam sites and offices, marched in our villages and cities, refused to leave our lands even though we have faced intimidation, violence and drowning. We have unmasked the corruption, lies and false promises of the dam industry. Nationally and internationally we have worked in solidarity with others fighting against destructive development projects, and together with those fighting for human rights, social justice, and an end to environmental destruction.

We are strong, diverse and united and our cause is just. We have stopped destructive dams and have forced dam builders to respect our rights. We have stopped dams in the past, and we will stop more in the future.

We commit ourselves to intensifying the fight against destructive dams. From the villages of India, Brazil and Lesotho to the boardrooms of Washington, Tokyo and London, we will force dam builders to accept our demands.

To reinforce our movement we will build and strengthen regional and international networks. To symbolise our growing unity, we declare that 14 March, the Brazilian Day of Struggles Against Dams, will from now on become the International Day of Action Against Dams and for Rivers, Water, and Life.

Águas para a vida, não para a morte!

¡Aguas para la vida, no para la muerte!

Water for life, not for death!

## **APPENDIX 3**

### **Research Ethics Committee's Letter of Approval and Informed Consent Form**

#### **Research Ethics Committee's Letter of Approval**

Marilene Cardoso Ribeiro

7<sup>th</sup> October 2015

Dear Marilene

#### **Re: Research Ethics Application**

Thank you for submitting your updated application for research ethics approval.

I can now confirm that your application for research ethics approval has been considered and approved.

The Research Ethics Committee members considered your ethical self-evaluation for your proposed project and confirmed that the rationale and informed consent of the participants are well detailed and meet the criteria for approval.

Overall attention to the Code of Practice has been carried out with due care and attention and does not, in itself, raise any substantive concerns.

The Committee advises that as your project involves the handling of personal data it is essential that you familiarise yourself with the 8 Principles of the Data Protection Act.

Please study the information at the following link which sets out the key definitions in the Act, and explains what they mean, and shows how they often relate to each other.  
[http://www.ico.gov.uk/for\\_organisations/data\\_protection/the\\_guide/principle\\_1.aspx](http://www.ico.gov.uk/for_organisations/data_protection/the_guide/principle_1.aspx)

You should discuss with your supervisor the logistics of securely generating, storing and processing data both electronically and in hardcopy to ensure there is no breach of the Data Protection Act.

If you require any further information please don't hesitate to contact me.

Yours sincerely,

Nino Nizharadze (presently on maternity leave)  
Research + Enterprise Manager (Staff Research)  
Professor Trevor Keeble  
Direct telephone: 01634 888662  
Email: [tkeeble@ucreative.ac.uk](mailto:tkeeble@ucreative.ac.uk)

## **Informed Consent Form**

English Translation  
(Sobradinho dam area)



**This is a direct translation from the original Informed Consent, which is in the Portuguese language. I will not be using an English version in my research, except for the appendices of my thesis.**

### **Informed Consent Form for inhabitants of the Sobradinho dam area**

**Name of Investigator: Marilene Cardoso Ribeiro**

**Name of Organization: University for the Creative Arts – Farnham, UK**

**Name of Sponsor: Conselho Nacional de Desenvolvimento Científico e Tecnológico – CNPq/Brazil**

**Name of Project: *A photography-based inquiry into the impact of dams in Brazil***

**This Informed Consent Form has two parts:**

- **Information Sheet (to share information about the study with you)**
- **Certificate of Consent (for signatures if you choose to participate)**

**You will be given a copy of the full Informed Consent Form**

#### **PART I: Information Sheet**

##### **Introduction:**

**I am Marilene Ribeiro and I am from Belo Horizonte (Minas Gerais state). I have worked with subjects involving environment and people and my interests are grounded in not only understanding things and inquiring society's points of view but also contributing for species conservation and people welfare. I am currently doing a research which might help decision makers and society as whole resize the negative impact of hydroelectricity. In this research I will talk to and photograph inhabitants of communities which were affected by the construction of dams for hydropower plants purposes, in Brazil. Then, this research depends on community dwellers participation and engagement, since the former will just be able to happen if people who have gone through the situation of compulsory displacement share one's experience and thoughts with us. You are also eligible to participate even if it was not you but your antecessors who have experimented such situation.**

**Photography will be used for this research because it is a good and strong way to present ideas to a wide audience, even those coming from different backgrounds and ideals.**

**You will be encouraged to contribute to this research from the beginning to the end, in ways you think are more suitable to communicate your thoughts. You can be as creative as you wish.**

**If you come across any word you do not understand, please ask me to stop as we go through the information and I will take time to explain.**

**If you have questions later, you can ask them of me or of another person of our team.**

##### **Purpose:**

Hydroelectricity has been mistakenly accepted as a “green energy” source regardless its harmful and irreversible consequences for both nature and human beings. However, the majority of world population simply ignores this fact. Government, infrastructure engineering companies and mass media fail to support the interests of both ecologists and people afflicted by the dam construction process.

Thus I have proposed a research by means of participatory portraiture, i.e. guided by both local people and the local environment, since practices involving immediate affected people might expose a fairer dimension of the impact of dams.

At the end, I expect to produce a written material discussing about the historic context of hydroelectricity in Brazil, the relationship between its socio-environmental impacts and our encounters, how photography and collaborative practice was used empower these subjects. Information, recorded audio, and images may also take part of exhibitions, magazines, journals, conferences and seminars, aiming to raise awareness on the negative impact of dams. All of these will be available for you to check out, use and comment on. All this material will also be available for the *Movement of People Affected by Dams* (MAB) uses.

#### Selection of Participants:

I wish to talk to as many dwellers as who want to speak about their/their antecessors’ experience of displacement for the construction of Sobradinho’s dam to take place. That is the reason for you to be chosen to participate of this study.

If you know someone else under such situation who might want to talk about it, you can also invite him/her to join us.

#### Voluntary Participation:

Participation in this study is voluntary, in other words, you can choose to say no.

#### Procedure:

You will be invited to sit for a portrait. For such portrait you will be asked to present an object which represents a remembrance of being displaced from your/your family former place of living due to the construction of Sobradinho’s dam. You will also be asked to choose the location(s) you wish such photo shoot takes place. Your relatives (son/daughter/mother/father/grandmother/grandfather/cousins/nephew/niece, etc..) and also your friends can be depicted with you (or on your behalf) in your portrait, if you wish for.

When you are ready, you will be photographed by the researcher and, after this very first shot, you will be asked to direct the next ones until you think the picture on the DSLR camera digital display is consistent enough to your idea of yourself, to your personal history as well as to the importance given to the object(s) you have chosen. During this process, we appreciate your explanation about your choices of angles, facial expressions, family and/or objects and/or background arrangements. You can talk to us about this or, if you prefer, you can draw, make notes, diagrams, sketches or whatever you think is helpful for clarifying your thoughts to us. We will keep these interventions of yours and we may record our dialogs in order to be analysed as part of the research process, afterwards.

You will be invited to take part of all processes of analysis, when you will be encouraged to make suggestions as well as to participate of the decisions made by researcher team, in a collaborative basis.

At anytime, you can claim for your photographs, interventions and dialog recording.

#### Duration:

We are asking you to take part of a photo shoot that will take about 1.30 hour of your time. We can do this outside of work hours. You will freely choose the location, how you will be dressed for the shoot as well as the way you wish to be portrayed. There is also some information concerning your family’s displacement for Sobradinho’s dam to take place we wish you to share with us (your point of view and your/your relatives’ remembrances, the impact it had in your lives). Such sharing of information will be conducted as an informal chat instead, and it may be as long as you wish for.

#### Risks and Discomforts:

Since this research deals with issues concerning Brazilian government policies as well as community beliefs, there is a risk that you may feel uncomfortable talking about some topics. However, we do not wish for this to happen. You must know that you do not have to answer any question or take part in the discussion if you feel some questions are too personal or if talking about them makes you uncomfortable.

**Benefits:**

The immediate and direct benefit to you will be: having your family, remembrance objects, and place of living documented in a photograph form.

But, more than it, your participation is likely to help us present participatory photography as a tool for dimensioning negative impacts of the construction of dams, for promoting alternative energy policies in Brazil than hydroelectricity as well as for providing a collaborative archive of images and written material from the afflicted by dams environment, in Brazil.

**Reimbursements:**

You will not be provided with any payment to take part in the research. However, all photographs and information related to this research will be available for you.

**Confidentiality:**

As a participatory research in photography, data are expected to be widely broadcasted. Then, if you wish to keep any information confidential (something that had been photographed, discussed or said during the encounter with the researcher), please, ask to the research team to do it so, at anytime.

**Sharing of Research Findings:**

At the end of the study, we will be sharing what we have learnt with the participants and with the community. We will do this by meeting first with the participants and then with the larger community. If we both agree that it is the case, photographs displaying you may be attributed to you by name. All material produced during this research (photographs, interventions, notes, recorded statements) may be presented in conferences, seminars, talks, journals, newspapers, exhibitions, magazines, trustworthy webpages (e.g. University's webpage, the *Movement of People Affected by Dams* webpage, researcher personal webpage, Biotrópicos Institute's webpage, The Royal Photographic Society's webpage). All photographs and the written thesis/papers will also be available to all participants and communities surveyed. They can share the former with their families if they wish. We will also publish the results in order that other interested people may learn from our research. Researcher will be available to talk about her finds and present this research material whenever either community or the *Movement of People Affected by Dams* wishes.

**Use of likeness:**

According to Personality Rights Law, no photograph, video or audio depicting a person can be used against her/his own will.

Then, once accepting to participate of this research, you agree you give your permission for present and future uses of the images/audio depicting you by researcher, University for the Creative Arts and the *Movement of People Affected by Dams*, as long as it does not expose you in a negative way. You also agree you are aware that the presentation forms named in this form does not have any infringement of copyright, right of publicity or any other claim related to the Likeness (collectively, "Claims").

Such uses include presenting your image/audio in conferences, seminars, talks, journals, newspapers, exhibitions, magazines, and trustworthy webpages (e.g. University for the Creative Arts' webpage, the *Movement of People Affected by Dams* webpage, researcher personal webpage, Biotrópicos Institute's webpage, The Royal Photographic Society's webpage).

You are also aware that you will not be provided with any payment regarding above-mentioned uses. If, at any time, the research material is used for profitable purposes, you will be contacted for authorization in advance of the use. In this special case you will also be informed of the amount that

may be forwarded to you or to the *Movement of People Affected by Dams* (generally 25% of the total amount granted).

**Right to refuse or withdraw:**

This consent is voluntary. You may choose not taking part of this study. Choosing to participate or not will not affect you directly and indirectly. You may stop participating of the research at any time that you or wish without losing any of your rights here. Then, you can say No if you wish to, now or latter.

Do you know that you can ask me questions later, if you wish to?

**Who to Contact:**

Then, if you have any questions you may ask them now or later, even after the study has started. If you wish to ask questions later, you may contact any of the following:

- Marta: martaquilombola@hotmail.com - 0055 74 88263482

- Marilene: mcardosoribeiro@gmail.com - 0044 7778808804

This proposal has been reviewed and approved by University for the Creative Arts' Ethics Committee, which is a committee whose task it is to make sure that research participants are protected from harm. If you wish to find about more about the University for the Creative Arts' Ethics Committee, contact: Tracy Crowther (e-mail: [tcrowther@ucreative.ac.uk](mailto:tcrowther@ucreative.ac.uk)) 00441227 817342 - ext: 7342.

**PART II: Certificate of Consent**

**Certificate of Consent:**

I have been invited to participate in this research study which will involve me being portrayed by researcher as well as taking part of research-related analyses, written papers, catalogues and exhibitions. I have been also informed that none of the above presentation will expose me in a negative way. I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions that I have asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study. I understand I can withdraw at any time and all records of my participation will be destroyed.

Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_  
Day/month/year

**If illiterate:**

I have witnessed the accurate reading of the consent form to the potential participant, and the individual has had the opportunity to ask questions. I confirm that the individual has given consent freely.

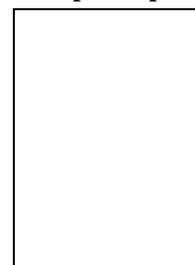
Name of witness \_\_\_\_\_

AND

Thumb print of participant

Signature of witness \_\_\_\_\_

Date \_\_\_\_\_  
Day/month/year



**Statement by the researcher/person taking consent:**

**I have accurately read out the information sheet to the potential participant, and to the best of my ability made sure that the participant understands that the following will be done:**

- 1. He/she will take part of a photo shoot;**
- 2. Such photo shoot is part of an inquiry on the social and environmental negative impacts regarding the construction of dams in Brazil;**
- 3. Photographs, interventions, testimonials, and comments resulted from this encounter will be used as material for this research and its ends;**
- 4. He/she is encouraged to participate as well as discuss about any topic he/she wishes at anytime with research team.**

**I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.**

**A copy of this Informed Consent Form has been provided to the participant.**

**Name of Researcher** \_\_\_\_\_

**Signature of researcher** \_\_\_\_\_

**Date** \_\_\_\_\_  
Day/month/year

Original in Portuguese

1) Sobradinho dam area



**Termo de Consentimento Livre e Esclarecido**  
Para habitantes da região da barragem de Sobradinho

**Nome da pesquisadora: Marilene Cardoso Ribeiro**

**Nome da Instituição de Ensino: University for the Creative Arts – Farnham, Reino Unido**

**Nome do financiador: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Brasil**

**Nome do Projeto: *A photography-based inquiry into the impact of dams in Brazil (Uma investigação fotográfica sobre o impacto de barragens no Brasil)***

**Este termo de consentimento livre e esclarecido tem duas partes:**

- **Parte I: Informações (para compartilhar informações sobre este estudo com você)**
- **Parte II: Certificado (para assinaturas, se você aceitar participar desta pesquisa)**

**Você ficará com uma cópia deste documento e a pesquisadora com outra.**

**PARTE I: INFORMAÇÕES**

**Introdução:**

Eu sou Marilene Cardoso Ribeiro e trabalho com assuntos que envolvem a relação entre as pessoas e o meio-ambiente. Meu interesse é contribuir para o bem-estar do ser humano e para a preservação das outras espécies e da natureza.

Minha atual pesquisa pode ajudar os tomadores de decisão e a sociedade como um todo a redimensionar os impactos negativos da hidroeletricidade. Nesta minha pesquisa, eu irei fotografar e conversar com os moradores de comunidades que foram afetados pela construção de represas para usinas hidrelétricas, no Brasil. Então, este estudo depende muito da participação e engajamento desses moradores, pois a pesquisa somente acontecerá se as famílias que tiveram de se mudar por causa da represa compartilharem suas experiências, pensamentos e sentimentos conosco.

Você pode participar dessa pesquisa mesmo que tenham sido seus pais e/ou avós que vivenciaram com maior intensidade essa situação.

Usaremos a fotografia nesta pesquisa porque acreditamos que ela é uma maneira eficiente e poderosa de apresentar conhecimento e ideias para muitas pessoas, independente da sua nacionalidade, idioma, educação e ideologia.

Você será encorajado a contribuir com esta pesquisa, desde início até o final, da maneira que você considere ser a mais adequada para comunicar seus pensamentos (você pode ser tão criativo quanto desejar).

Se, em qualquer momento, você se deparar com alguma palavra ou expressão que você não entenda ou tenha dúvida, por favor, peça que eu pare e pergunte-me. Será um prazer esclarecer isso para você.

Se você tiver qualquer pergunta para fazer, mesmo depois de assinar este documento, você também pode fazê-la para um membro da nossa equipe, a qualquer momento.

**Justificativa e objetivos:**

A hidroeletricidade tem sido equivocadamente aceita como uma “fonte limpa” de energia, mesmo com suas consequências danosas e irreversíveis para a natureza e os seres humanos. A maioria da população mundial simplesmente ignora esses efeitos negativos das barragens para hidrelétricas e os meios de comunicação, os governantes, as empresas de engenharia e as empreiteiras não são capazes de

fornecer essas informações nem de suprir as demandas dos ecólogos, ecologistas e atingidos por barragens.

Por causa disso, eu propus esta pesquisa, que será um trabalho guiado tanto pelas pessoas que vivenciaram e vivenciam os efeitos da construção dessas barragens quanto pelo ambiente que as cerca. Eu acredito que assim poderei apresentar os impactos das barragens para hidrelétricas de forma mais justa.

Ao final desta pesquisa, eu espero produzir material tanto escrito quanto visual discutindo sobre: o contexto histórico da hidroeletricidade; a relação entre os impactos socio-ambientais das barragens para hidrelétrica e este nosso encontro; como a fotografia e a colaboração podem ser usadas para fortalecer os argumentos relativos ao assunto “impacto de barragens”.

Todas as informações, gravações de vídeo e de áudio e fotografias desta pesquisa também podem fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham o objetivo de conscientizar as pessoas sobre os impactos negativos da construção dessas barragens.

Essas informações também estarão disponíveis para o Movimento dos Atingidos por Barragens e você conferirem, utilizarem e comentarem.

### **Seleção dos participantes:**

Nós gostaríamos de conversar com tantos moradores quanto os que desejarem falar sobre suas experiências em relação a ter de se mudar para que a represa de Sobradinho fosse construída e essa é a razão para você ter sido escolhido para participar deste estudo.

Caso você conheça outras pessoas que também passaram por essa situação, você também pode convidá-las e pedir que elas nos procurem.

### **Participação voluntária:**

A participação neste estudo é voluntária, ou seja, você não receberá nenhuma quantia em dinheiro para participar.

### **Procedimentos:**

Você será convidado para posar para um retrato. Para tal, nós pediremos que você escolha um objeto que represente seu(s) sentimento(s) relativo à mudança no seu local de moradia, que aconteceu com a construção da barragem de Sobradinho. Nós também pediremos a você que escolha um local que você achar representativo desse sentimento, para fazermos o seu retrato. Seus parentes (filhos, companheira(o), pais, avós, primos, tios, etc..) e seus amigos também podem aparecer neste retrato, junto contigo ou no seu lugar, se você desejar.

Quando você estiver pronto(a), você será fotografado(a) pela pesquisadora e, após essa primeira fotografia, a pesquisadora pedirá que você dirija os próximos retratos de você próprio até o momento que você considere que o retrato feito está da maneira que você julga ser a que melhor represente você, sua história pessoal e a importância desse objeto escolhido por você. Você poderá verificar cada fotografia feita, olhando o display da câmera da pesquisadora. Suas explicações sobre as escolhas que você fizer relativas a: distância, expressão facial, objeto escolhido, maneira de apresentá-lo na fotografia, inclusão ou não de familiares/amigos, etc.. serão muito bem-vindas. Essas suas explicações podem ser faladas ou desenhadas ou esquematizadas ou escritas num papel ou exteriorizadas de outra forma que você julgar a melhor para expressar seus sentimentos. Nós também usaremos essas suas explicações como nosso material de pesquisa. Nós também gravaremos depoimentos seus, se você desejar falar um pouco mais sobre esse(s) seu(s) sentimento(s) relativo à mudança no seu local de moradia, que aconteceu com a construção da barragem de Sobradinho.

Você será convidado a participar também das etapas posteriores da pesquisa (seleção de imagens, discussão dos achados, etc..) de uma maneira colaborativa.

A qualquer momento, você pode solicitar cópia das fotografias, dos vídeos e áudios que contemplam você, bem como das informações que você forneceu por escrito e/ou desenho/esquema.

### **Duração:**

Como explicado acima, você fará parte de um ensaio fotográfico. Esse ensaio durará cerca de uma hora e meia (noventa minutos). Você escolherá o local, o horário, o que você usará para tal ensaio (roupas, acessórios, etc..) e como quer aparecer nos retratos que faremos de você, junto com você.

Como também mencionado acima, nós gostaríamos que você compartilhasse conosco seu ponto de vista, suas opiniões, suas lembranças e/ou as lembranças de seus familiares sobre a mudança que você e seus familiares vivenciaram como consequência da construção ds barragem de Sobradinho. Essa nossa conversa pode durar o tempo que você desejar.

**Riscos e desconfortos:**

Como esta é uma pesquisa que lida com temas relacionados a políticas públicas e também a pensamentos comunitários que podem ser divergentes; então, pode ser que você se sinta desconfortável para falar de certos assuntos, mesmo com todo o esforço da nossa equipe para que isso não aconteça. Você pode se negar a responder uma pergunta ou a falar sobre um assunto específico que surja durante nosso encontro, caso essa pergunta ou esse assunto não deixe você à vontade.

**Benefícios:**

Os benefícios imediatos e diretos para você serão: receber fotografias feitas de você, da sua família, do(s) objeto(s) de valor sentimental para você e do local onde você vive. Além disso, os resultados dessa pesquisa podem ser importantes para mostrar os efeitos negativos da hidroeletricidade e estimular busca por novas políticas energéticas no Brasil. Todo este material da pesquisa funcionará também como arquivo da história das pessoas atingidas por barragens, no Brasil.

**Remuneração:**

Tratando-se de participação voluntária, você não receberá nenhum tipo de pagamento em dinheiro pela sua participação nesta pesquisa. No entanto, todas as fotografias vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você.

**Confidencialidade:**

Como se trata de uma pesquisa de fotografia e colaboração, pretendemos divulgar amplamente todos os dados coletados. Portanto, caso você deseje que qualquer informação desse nosso encontro seja confidencial, por favor, peça à nossa equipe que não a divulgaremos (manteremos o sigilo).

**Divulgação dos materiais e resultados desta pesquisa:**

No final desta pesquisa, nós compartilharemos o que aprendemos com os participantes, num primeiro momento, e, após isso, com a comunidade em geral, não só no Brasil, como em outros países também.

Como você vai participar da pesquisa, você concorda que as fotografias nas quais você aparece citarão também seu nome como colaborador. Todo o material que nossa equipe ou você produzir durante esse nosso encontro (fotografias, desenhos, notas, coisas escritas, gravações de som e/ou vídeo) poderá ser apresentado em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, da Sociedade Real de Fotografia da Inglaterra - *The Royal Photographic Society*).

Todas as fotografias vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você, sua comunidade e o Movimento dos Atingidos por Barragens.

Se as comunidades participantes e/ou o Movimento dos Atingidos por Barragens desejarem, a pesquisadora poderá apresentar os resultados dessa pesquisa na sua comunidade.

**Direito de imagem:**

Participando desta pesquisa, você autoriza que pesquisadora, seus assistentes, a universidade e o Movimento dos Atingidos por Barragens usem as imagens nas quais você apareça e/ou as gravações da sua voz, desde que não isso não exponha você de maneira negativa. Os usos possíveis são sem fins lucrativos e com a finalidade de, por exemplo: apresentação da sua imagem e/ou voz em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, da Sociedade Real de Fotografia da Inglaterra - *The Royal Photographic Society*). Você não receberá nenhum pagamento em dinheiro por tais usos.

**Direito de negar ou desistir:**

Sua participação é livre e voluntária, ou seja, você não é obrigado a participar desse estudo e você pode deixar de participar desta pesquisa a qualquer momento, sem que isso prejudique você.

**Com quem entrar em contato:**

Se você tiver alguma pergunta ou dúvida, em qualquer momento, mesmo depois que a pesquisa já tenha começado, você pode entrar em contato com:

- Marta: martaquilombola@hotmail.com - 74 88263482

- Marilene: mcardosoribeiro@gmail.com - 0044 7778808804

Esta pesquisa foi revisada e aprovada pelo comitê de ética em pesquisa da *University for the Creative Arts* – esse comitê tem a função de certificar que os participantes da pesquisa estão protegidos de qualquer problema.

Se você desejar saber mais sobre esse comitê de ética em pesquisa, por favor, entre em contato com: Tracy Crowther (e-mail: [tcrowther@ucreative.ac.uk](mailto:tcrowther@ucreative.ac.uk)) 00441227 817342 - ext: 7342.

## PARTE II: CERTIFICADO

### Certificado do Consentimento do Participante:

Eu fui convidado para participar nesta pesquisa onde o pesquisador e/ou seus(s) assistente(s) gravarão meus depoimentos, farão fotografias de minha pessoa, de meus familiares e de meus lugares de moradia e convívio social, coletarão informações por mim escritas e/ou desenhadas. Estou ciente de que todo esse material será dado de pesquisa e poderá fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham como objetivo de conscientizar as pessoas sobre os impactos negativos da construção de barragens para hidrelétricas.

Eu também fui informado que as formas de divulgação da pesquisa acima mencionadas não irão me expor de maneira negativa.

Eu li todas as informações acima ou elas foram lidas para mim. Eu tive a oportunidade de esclarecer todas as minhas dúvidas de maneira satisfatória.

Sei que, em qualquer momento, poderei solicitar novas informações e motivar minha decisão, se assim o desejar.

Eu entendo que eu posso desistir de participar desta pesquisa a qualquer momento e que, se esse for meu desejo, todas as informações, imagens e gravações relativas à minha pessoa serão destruídas.

Declaro que concordo em participar desse estudo e que recebi uma cópia deste Termo de Consentimento Livre e Esclarecido.

#### Contatos do participante:

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

- endereço: \_\_\_\_\_

Nome do participante \_\_\_\_\_

Assinatura do participante \_\_\_\_\_

Data \_\_\_\_\_  
dia/mês/ano

#### Se não alfabetizado:

Eu testemunhei a leitura deste documento para o participante e que as explicações dadas ao participante foram satisfatórias. Confirmando que o participante teve a oportunidade de esclarecer suas dúvidas. Confirmando que o participante deu seu consentimento livremente. Declaro que o participante concordou em participar desse estudo e que recebeu uma cópia deste Termo de Consentimento Livre e Esclarecido.

Nome da testemunha \_\_\_\_\_

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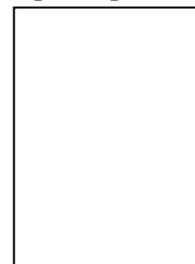
Impressão digital do  
participante

#### Contatos da testemunha:

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

Assinatura da testemunha \_\_\_\_\_

Data \_\_\_\_\_  
dia/mês/ano



**Declaração da pesquisadora ou da pessoa responsável:**

Eu declaro que li com acurácia todas as informações deste documento para o participante e que certifiquei-me de que o participante entendeu que:

1. Ele/ela fará parte de um ensaio fotográfico, como modelo e co-produtor;
2. As fotografias de tal ensaio fotográfico são parte de uma investigação sobre os impactos socio-ambientais negativos da construção de barragens para hidrelétricas, no Brasil;
3. Fotografias, intervenções, declarações e comentários dos participantes serão usados como material para esta pesquisa e seus fins;
4. Ele/ela será encorajado a participar bem como discutir sobre os assuntos que desejar, a qualquer momento, com a equipe desta pesquisa.

Eu declaro que o participante teve a oportunidade de esclarecer suas dúvidas e que o participante aceitou fazer parte desta pesquisa de maneira livre e voluntária.

Uma cópia deste documento foi entregue ao participante.

**Nome da pesquisadora (ou da pessoa responsável):** \_\_\_\_\_

**Assinatura da pesquisadora (ou da pessoa responsável)** \_\_\_\_\_

**Data** \_\_\_\_\_  
**dia/mês/ano**

**Termo de Consentimento Livre e Esclarecido**  
Para habitantes da região a ser atingida por Garabi-Panambi

**Nome da pesquisadora: Marilene Cardoso Ribeiro**

**Nome da Instituição de Ensino: University for the Creative Arts – Farnham, Reino Unido**

**Nome do financiador: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Brasil**

**Nome do Projeto: *A a photography-based inquiry into the impact of dams in Brazil (Uma investigação fotográfica sobre o impacto de barragens no Brasil)***

**Este termo de consentimento livre e esclarecido tem duas partes:**

- **Parte I: Informações (para compartilhar informações sobre este estudo com você)**
- **Parte II: Certificado (para assinaturas, se você aceitar participar desta pesquisa)**

**Você ficará com uma cópia deste documento e a pesquisadora com outra.**

## **PARTE I: INFORMAÇÕES**

### **Introdução:**

Eu sou Marilene Cardoso Ribeiro e trabalho com assuntos que envolvem a relação entre as pessoas e o meio-ambiente. Meu interesse é contribuir para o bem-estar do ser humano e para a preservação das outras espécies e da natureza.

Minha atual pesquisa pode ajudar os tomadores de decisão e a sociedade como um todo a redimensionar os impactos negativos da hidroeleticidade. Nesta minha pesquisa, eu irei fotografar e conversar com os moradores de comunidades que foram ou podem ser afetados pela construção de represas para usinas hidrelétricas, no Brasil. Então, este estudo depende muito da participação e engajamento desses moradores, pois a pesquisa somente acontecerá se as famílias que tiveram (ou terão) de se mudar por causa da represa compartilharem suas experiências, pensamentos e sentimentos conosco.

Usaremos a fotografia nesta pesquisa porque acreditamos que ela é uma maneira eficiente e poderosa de apresentar conhecimento e ideias para muitas pessoas, independente da sua nacionalidade, idioma, educação e ideologia.

Você será encorajado a contribuir com esta pesquisa, desde início até o final, da maneira que você considere ser a mais adequada para comunicar seus pensamentos (você pode ser tão criativo quanto desejar).

Se, em qualquer momento, você se deparar com alguma palavra ou expressão que você não entenda ou tenha dúvida, por favor, peça que eu pare e pergunte-me. Será um prazer esclarecer isso para você.

Se você tiver qualquer pergunta para fazer, mesmo depois de assinar este documento, você também pode fazê-la para um membro da nossa equipe, a qualquer momento.

### **Justificativa e objetivos:**

A hidroeleticidade tem sido equivocadamente aceita como uma “fonte limpa” de energia, mesmo com suas consequências danosas e irreversíveis para a natureza e os seres humanos. A maioria da população mundial simplesmente ignora esses efeitos negativos das barragens para hidrelétricas e os meios de comunicação, os governantes, as empresas de engenharia e as empreiteiras não são capazes de fornecer essas informações nem de suprir as demandas dos ecólogos, ecologistas e atingidos por barragens.

Por causa disso, eu propus esta pesquisa, que será um trabalho guiado tanto pelas pessoas que vivenciaram e vivenciam os efeitos da construção dessas barragens quanto pelo ambiente que as

cerca. Eu acredito que assim poderei apresentar os impactos das barragens para hidrelétricas de forma mais justa.

Ao final desta pesquisa, eu espero produzir material tanto escrito quanto visual discutindo sobre: o contexto histórico da hidroeletricidade; a relação entre os impactos socio-ambientais das barragens para hidrelétrica e este nosso encontro; como a fotografia e a colaboração podem ser usadas para fortalecer os argumentos relativos ao assunto “impacto de barragens”.

Todas as informações, gravações de vídeo e de áudio e fotografias desta pesquisa também podem fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham o objetivo de conscientizar as pessoas sobre os impactos negativos da construção dessas barragens.

Essas informações também estarão disponíveis para o Movimento dos Atingidos por Barragens e você conferirem, utilizarem e comentarem.

### **Seleção dos participantes:**

Nós gostaríamos de conversar com tantos moradores quanto os que desejarem falar sobre suas experiências em relação à possibilidade de ter de se mudar para que as represas de Garabi/Panambi sejam construída e essa é a razão para você ter sido escolhido para participar deste estudo.

Caso você conheça outras pessoas que também passam por essa situação, você também pode convidá-las e pedir que elas nos procurem.

### **Participação voluntária:**

A participação neste estudo é voluntária, ou seja, você não receberá nenhuma quantia em dinheiro para participar.

### **Procedimentos:**

Você será convidado para posar para um retrato. Para tal, nós pediremos que você escolha algum objeto que represente seu(s) sentimento(s) relativo às mudanças que já estão acontecendo ou acontecerão na sua vida por causa das barragens de Garabi/Panambi. Nós também pediremos a você que escolha um local que você achar representativo desse sentimento, para fazermos o seu retrato. Seus parentes (filhos, companheira(o), pais, avós, primos, tios, etc..) e seus amigos também podem aparecer neste retrato, junto contigo ou no seu lugar, se você desejar.

Quando você estiver pronto(a), você será fotografado(a) pela pesquisadora e, após essa primeira fotografia, a pesquisadora pedirá que você dirija os próximos retratos de você próprio até o momento que você considere que o retrato feito está da maneira que você julga ser a que melhor represente você, sua história pessoal e a importância desse objeto escolhido por você. Você poderá verificar cada fotografia feita, olhando o display da câmera da pesquisadora. Suas explicações sobre as escolhas que você fizer relativas a: distância, expressão facial, objeto escolhido, maneira de apresentá-lo na fotografia, inclusão ou não de familiares/amigos, etc.. serão muito bem-vindas. Essas suas explicações podem ser faladas ou desenhadas ou esquematizadas ou escritas num papel ou exteriorizadas de outra forma que você julgar a melhor para expressar seus sentimentos. Nós também usaremos essas suas explicações como nosso material de pesquisa. Nós também gravaremos depoimentos seus, se você desejar falar um pouco mais sobre esse(s) seu(s) sentimento(s) relativo às essas mudanças causadas pelas barragens de Garabi/Panambi.

Você será convidado a participar também das etapas posteriores da pesquisa (seleção de imagens, discussão dos achados, etc..) de uma maneira colaborativa.

A qualquer momento, você pode solicitar cópia das fotografias, dos vídeos e áudios que contemplam você, bem como das informações que você forneceu por escrito e/ou desenho/esquema.

### **Duração:**

Como explicado acima, você fará parte de um ensaio fotográfico. Esse ensaio durará cerca de uma hora e meia (noventa minutos). Você escolherá o local, o horário, o que você usará para tal ensaio (roupas, acessórios, etc..) e como quer aparecer nos retratos que faremos de você, junto com você.

Como também mencionado acima, nós gostaríamos que você compartilhasse conosco seu ponto de vista, suas opiniões, suas lembranças e/ou as lembranças de seus familiar, ou seja, sua história. Essa nossa conversa pode durar o tempo que você desejar.

### **Riscos e desconfortos:**

Como esta é uma pesquisa que lida com temas relacionados a políticas públicas e também a pensamentos comunitários que podem ser divergentes; então, pode ser que você se sinta desconfortável

para falar de certos assuntos, mesmo com todo o esforço da nossa equipe para que isso não aconteça. Você pode se negar a responder uma pergunta ou a falar sobre um assunto específico que surja durante nosso encontro, caso essa pergunta ou esse assunto não deixe você à vontade.

**Benefícios:**

Os benefícios imediatos e diretos para você serão: receber fotografias feitas de você, da sua família, do(s) objeto(s) de valor sentimental para você e do local onde você vive. Além disso, os resultados dessa pesquisa podem ser importantes para mostrar os efeitos negativos da hidroeletricidade e estimular busca por novas políticas energéticas no Brasil. Todo este material da pesquisa funcionará também como arquivo da história das pessoas atingidas por barragens, no Brasil.

**Remuneração:**

Tratando-se de participação voluntária, você não receberá nenhum tipo de pagamento em dinheiro pela sua participação nesta pesquisa. No entanto, todas as fotografias, vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você.

**Confidencialidade:**

Como se trata de uma pesquisa de fotografia e colaboração, pretendemos divulgar amplamente todos os dados coletados. Portanto, caso você deseje que qualquer informação desse nosso encontro seja confidencial, por favor, peça à nossa equipe que não a divulgaremos (manteremos o sigilo).

**Divulgação dos materiais e resultados desta pesquisa:**

No final desta pesquisa, nós compartilharemos o que aprendemos com os participantes, num primeiro momento, e, após isso, com a comunidade em geral, não só no Brasil, como em outros países também.

Como você vai participar da pesquisa, você concorda que as fotografias nas quais você aparece citarão também seu nome como colaborador. Todo o material que nossa equipe ou você produzir durante esse nosso encontro (fotografias, desenhos, notas, coisas escritas, gravações de som e/ou vídeo) poderá ser apresentado em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, da Sociedade Real de Fotografia da Inglaterra - *The Royal Photographic Society*).

Todas as fotografias, vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você, sua comunidade e o Movimento dos Atingidos por Barragens.

Se as comunidades participantes e/ou o Movimento dos Atingidos por Barragens desejarem, a pesquisadora poderá apresentar os resultados dessa pesquisa na sua comunidade.

**Direito de imagem:**

Participando desta pesquisa, você autoriza que pesquisadora, seus assistentes, a universidade e o Movimento dos Atingidos por Barragens usem as imagens nas quais você apareça e/ou as gravações da sua voz, desde que não isso não exponha você de maneira negativa. Os usos possíveis são sem fins lucrativos e com a finalidade de, por exemplo: apresentação da sua imagem e/ou voz em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, da Sociedade Real de Fotografia da Inglaterra - *The Royal Photographic Society*). Você não receberá nenhum pagamento em dinheiro por tais usos.

**Direito de negar ou desistir:**

Sua participação é livre e voluntária, ou seja, você não é obrigado a participar desse estudo e você pode deixar de participar desta pesquisa a qualquer momento, sem que isso prejudique você.

E, caso você não queira mais participar, todo o material que você nos forneceu (fotografias, entrevista, etc..) será destruído.

**Com quem entrar em contato:**

Se você tiver alguma pergunta ou dúvida, em qualquer momento, mesmo depois que a pesquisa já tenha começado, você pode entrar em contato com:

- Neudicléia: (055) 96141245

- Marilene: mcardosoribeiro@gmail.com - 0044 7778808804

Esta pesquisa foi revisada e aprovada pelo comitê de ética em pesquisa da *University for the Creative Arts* – esse comitê tem a função de certificar que os participantes da pesquisa estão protegidos de qualquer problema.

Se você deseja saber mais sobre esse comitê de ética em pesquisa, por favor, entre em contato com: Tracy Crowther (e-mail: [tcrowther@ucreative.ac.uk](mailto:tcrowther@ucreative.ac.uk)) 00441227 817342 - ext: 7342.

## PARTE II: CERTIFICADO

### Certificado do Consentimento do Participante:

Eu fui convidado para participar nesta pesquisa onde o pesquisador e/ou seus(s) assistente(s) gravarão meus depoimentos, farão fotografias de minha pessoa, de meus familiares e de meus lugares de moradia e convívio social, coletarão informações por mim escritas e/ou desenhadas. Estou ciente de que todo esse material será dado de pesquisa e poderá fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham como objetivo de conscientizar as pessoas sobre os impactos negativos da construção de barragens para hidrelétricas.

Eu também fui informado que as formas de divulgação da pesquisa acima mencionadas não irão me expor de maneira negativa.

Eu li todas as informações acima ou elas foram lidas para mim. Eu tive a oportunidade de esclarecer todas as minhas dúvidas de maneira satisfatória.

Sei que, em qualquer momento, poderei solicitar novas informações e motivar minha decisão, se assim o desejar.

Eu entendo que eu posso desistir de participar desta pesquisa a qualquer momento e que, se esse for meu desejo, todas as informações, imagens e gravações relativas à minha pessoa serão destruídas.

Declaro que concordo em participar desse estudo e que recebi uma cópia deste Termo de Consentimento Livre e Esclarecido.

#### Contatos do participante:

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

- endereço: \_\_\_\_\_

Nome do participante \_\_\_\_\_

Assinatura do participante \_\_\_\_\_

Data \_\_\_\_\_  
dia/mês/ano

#### Se não alfabetizado:

Eu testemunhei a leitura deste documento para o participante e que as explicações dadas ao participante foram satisfatórias. Confirmo que o participante teve a oportunidade de esclarecer suas dúvidas. Confirmo que o participante deu seu consentimento livremente. Declaro que o participante concordou em participar desse estudo e que recebeu uma cópia deste Termo de Consentimento Livre e Esclarecido.

Nome da testemunha \_\_\_\_\_ E

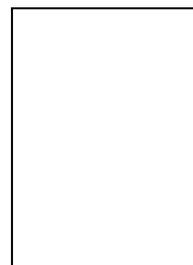
Impressão digital do  
participante

#### Contatos da testemunha:

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

Assinatura da testemunha \_\_\_\_\_

Data \_\_\_\_\_  
dia/mês/ano



**Declaração da pesquisadora ou da pessoa responsável:**

Eu declaro que li com acurácia todas as informações deste documento para o participante e que certifiquei-me de que o participante entendeu que:

1. Ele/ela fará parte de um ensaio fotográfico, como modelo e co-produtor;
2. As fotografias de tal ensaio fotográfico são parte de uma investigação sobre os impactos socio-ambientais negativos da construção de barragens para hidrelétricas, no Brasil;
3. Fotografias, intervenções, declarações e comentários dos participantes serão usados como material para esta pesquisa e seus fins;
4. Ele/ela será encorajado a participar bem como discutir sobre os assuntos que desejar, a qualquer momento, com a equipe desta pesquisa.

Eu declaro que o participante teve a oportunidade de esclarecer suas dúvidas e que o participante aceitou fazer parte desta pesquisa de maneira livre e voluntária.

Uma cópia deste documento foi entregue ao participante.

**Nome da pesquisadora (ou da pessoa responsável):** \_\_\_\_\_

**Assinatura da pesquisadora (ou da pessoa responsável)** \_\_\_\_\_

**Data** \_\_\_\_\_  
**dia/mês/ano**

**Termo de Consentimento Livre e Esclarecido**  
Para habitantes da região da barragem de Belo Monte/Altamira

**Nome da pesquisadora: Marilene Cardoso Ribeiro**

**Nome da Instituição de Ensino: University for the Creative Arts – Farnham, Reino Unido**

**Nome do financiador: Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) - Brasil**

**Nome do Projeto: *A photography-based inquiry into the impact of dams in Brazil (Uma investigação fotográfica sobre o impacto de barragens no Brasil)***

**Este termo de consentimento livre e esclarecido tem duas partes:**

- **Parte I: Informações (para compartilhar informações sobre este estudo com você)**
- **Parte II: Certificado (para assinaturas, se você aceitar participar desta pesquisa)**

**Você ficará com uma cópia deste documento e a pesquisadora com outra.**

## **PARTE I: INFORMAÇÕES**

### **Introdução:**

Eu sou Marilene Cardoso Ribeiro e trabalho com assuntos que envolvem a relação entre as pessoas e o meio-ambiente. Meu interesse é contribuir para o bem-estar do ser humano e para a preservação das outras espécies e da natureza.

Minha atual pesquisa pode ajudar os tomadores de decisão e a sociedade como um todo a redimensionar os impactos negativos da hidroeletricidade. Nesta minha pesquisa, eu irei fotografar e conversar com os moradores de comunidades que foram ou podem ser afetados pela construção de represas para usinas hidrelétricas, no Brasil. Então, este estudo depende muito da participação e engajamento desses moradores, pois a pesquisa somente acontecerá se as famílias que tiveram ou terão de se mudar por causa da represa compartilharem suas experiências, pensamentos e sentimentos conosco.

Você pode participar dessa pesquisa mesmo que tenham sido seus pais e/ou avós que vivenciaram com maior intensidade essa situação.

Usaremos a fotografia nesta pesquisa porque acreditamos que ela é uma maneira eficiente e poderosa de apresentar conhecimento e ideias para muitas pessoas, independente da sua nacionalidade, idioma, educação e ideologia.

Você será encorajado a contribuir com esta pesquisa, desde início até o final, da maneira que você considere ser a mais adequada para comunicar seus pensamentos (você pode ser tão criativo quanto desejar).

Se, em qualquer momento, você se deparar com alguma palavra ou expressão que você não entenda ou tenha dúvida, por favor, peça que eu pare e pergunte-me. Será um prazer esclarecer isso para você.

Se você tiver qualquer pergunta para fazer, mesmo depois de assinar este documento, você também pode fazê-la para um membro da nossa equipe, a qualquer momento.

### **Justificativa e objetivos:**

A hidroeletricidade tem sido equivocadamente aceita como uma “fonte limpa” de energia, mesmo com suas consequências danosas e irreversíveis para a natureza e os seres humanos. A maioria da população mundial simplesmente ignora esses efeitos negativos das barragens para hidrelétricas e os meios de comunicação, os governantes, as empresas de engenharia e as empreiteiras não são capazes de fornecer essas informações nem de suprir as demandas dos ecólogos, ecologistas e atingidos por

barragens.

Por causa disso, eu propus esta pesquisa, que será um trabalho guiado tanto pelas pessoas que vivenciaram e vivenciam os efeitos da construção dessas barragens quanto pelo ambiente que as cerca. Eu acredito que assim poderei apresentar os impactos das barragens para hidrelétricas de forma mais justa.

Ao final desta pesquisa, eu espero produzir material tanto escrito quanto visual discutindo sobre: o contexto histórico da hidroeletricidade; a relação entre os impactos socioambientais das barragens para hidrelétrica e este nosso encontro; como a fotografia e a colaboração podem ser usadas para fortalecer os argumentos relativos ao assunto “impacto de barragens”.

Todas as informações, gravações de vídeo e de áudio e fotografias desta pesquisa também podem fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham o objetivo de conscientizar as pessoas sobre os impactos negativos da construção dessas barragens.

Essas informações também estarão disponíveis para o *Movimento dos Atingidos por Barragens - MAB*, o *Instituto Socioambiental – ISA*, o *Movimento Xingu Vivo para Sempre - MXVPS* e você conferirem, utilizarem e comentarem.

### **Seleção dos participantes:**

Nós gostaríamos de conversar com tantos moradores quanto os que desejarem falar sobre suas experiências em relação a ter de se mudar para que a represa de Belo Monte/Altamira fosse construída e essa é a razão para você ter sido escolhido para participar deste estudo.

Caso você conheça outras pessoas que também passaram por essa situação, você também pode convidá-las e pedir que elas nos procurem.

### **Participação voluntária:**

A participação neste estudo é voluntária, ou seja, você não receberá nenhuma quantia em dinheiro para participar.

### **Procedimentos:**

Você será convidado para posar para um retrato. Para tal, nós pediremos que você escolha um objeto que represente seu(s) sentimento(s) relativo à mudança no seu local de moradia que aconteceu ou poderá acontecer com a construção da barragem de Belo Monte/Altamira. Nós também pediremos a você que escolha um local que você achar representativo desse sentimento, para fazermos o seu retrato. Seus parentes (filhos, companheira(o), pais, avós, primos, tios, etc..) e seus amigos também podem aparecer neste retrato, junto contigo ou no seu lugar, se você desejar.

Quando você estiver pronto(a), você será fotografado(a) pela pesquisadora e, após essa primeira fotografia, a pesquisadora pedirá que você dirija os próximos retratos de você próprio até o momento que você considere que o retrato feito está da maneira que você julga ser a que melhor represente você, sua história pessoal e a importância desse objeto escolhido por você. Você poderá verificar cada fotografia feita, olhando o display da câmera da pesquisadora. Suas explicações sobre as escolhas que você fizer relativas a: distância, expressão facial, objeto escolhido, maneira de apresentá-lo na fotografia, inclusão ou não de familiares/amigos, etc.. serão muito bem-vindas. Essas suas explicações podem ser faladas, desenhadas, esquematizadas, escritas num papel ou exteriorizadas de outra forma que você julgar a melhor para expressar seus sentimentos. Nós também usaremos essas suas explicações como nosso material de pesquisa. Nós também gravaremos depoimentos seus, se você desejar falar um pouco mais sobre esse(s) seu(s) sentimento(s) relativo à mudança no seu local de moradia que aconteceu ou poderá acontecer devido à construção da barragem de Belo Monte/Altamira.

Você será convidado a participar também das etapas posteriores da pesquisa (seleção de imagens, discussão dos achados, etc..) de uma maneira colaborativa.

A qualquer momento, você pode solicitar cópia das fotografias, dos vídeos e áudios que contemplam você, bem como das informações que você forneceu por escrito e/ou desenho/esquema.

### **Duração:**

Como explicado acima, você fará parte de um ensaio fotográfico. Esse ensaio durará cerca de uma hora e meia (noventa minutos). Você escolherá o local, o horário, o que você usará para tal ensaio (roupas, acessórios, etc..) e como quer aparecer nos retratos que faremos de você, junto com você.

Como também mencionado acima, nós gostaríamos que você compartilhasse conosco seu ponto de vista, suas opiniões, suas lembranças e/ou as lembranças de seus familiares sobre a mudança que você

e seus familiares vivenciaram ou podem vivenciar como consequência da construção da barragem de Belo Monte/Altamira. Essa nossa conversa pode durar o tempo que você desejar.

**Riscos e desconfortos:**

Como esta é uma pesquisa que lida com temas relacionados a políticas públicas e também a pensamentos comunitários que podem ser divergentes; então, pode ser que você se sinta desconfortável para falar de certos assuntos, mesmo com todo o esforço da nossa equipe para que isso não aconteça. Você pode se negar a responder uma pergunta ou a falar sobre um assunto específico que surja durante nosso encontro, caso essa pergunta ou esse assunto não deixe você à vontade.

**Benefícios:**

Os benefícios imediatos e diretos para você serão: receber fotografias feitas de você, da sua família, do(s) objeto(s) de valor sentimental para você e do local onde você vive. Além disso, os resultados dessa pesquisa podem ser importantes para mostrar os efeitos negativos da hidroeletricidade e estimular busca por novas políticas energéticas no Brasil. Todo este material da pesquisa funcionará também como arquivo da história das pessoas atingidas por barragens, no Brasil.

**Remuneração:**

Tratando-se de participação voluntária, você não receberá nenhum tipo de pagamento em dinheiro pela sua participação nesta pesquisa. No entanto, todas as fotografias vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você.

**Confidencialidade:**

Como se trata de uma pesquisa de fotografia e colaboração, pretendemos divulgar amplamente todos os dados coletados. Portanto, caso você deseje que qualquer informação desse nosso encontro seja confidencial, por favor, peça à nossa equipe que não a divulgaremos (manteremos o sigilo).

**Divulgação dos materiais e resultados desta pesquisa:**

No final desta pesquisa, nós compartilharemos o que aprendemos com os participantes, num primeiro momento, e, após isso, com a comunidade em geral, não só no Brasil, como em outros países também.

Como você vai participar da pesquisa, você concorda que as fotografias nas quais você aparece citarão também seu nome como colaborador. Todo o material que nossa equipe ou você produzir durante esse nosso encontro (fotografias, desenhos, notas, coisas escritas, gravações de som e/ou vídeo) poderá ser apresentado em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, do Instituto Socioambiental – ISA, do Movimento Xingu Vivo para Sempre, da Sociedade Real de Fotografia da Inglaterra - *The Royal Photographic Society*).

Todas as fotografias vídeos, sons e informações relacionadas a esta pesquisa que contemplem você e/ou sua família estarão disponíveis para você, sua comunidade e o Movimento dos Atingidos por Barragens.

Se as comunidades participantes e/ou o Movimento dos Atingidos por Barragens desejarem, a pesquisadora poderá apresentar os resultados dessa pesquisa na sua comunidade.

**Direito de imagem:**

Participando desta pesquisa, você autoriza que pesquisadora, seus assistentes, a universidade, o Movimento dos Atingidos por Barragens, o ISA e o Movimento Xingu Vivo para Sempre usem as imagens nas quais você apareça e/ou as gravações da sua voz, desde que não isso não exponha você de maneira negativa. Os usos possíveis são sem fins lucrativos e com a finalidade de, por exemplo: apresentação da sua imagem e/ou voz em conferências, encontros, seminários, jornais, revistas, exposições e em páginas seguras de Internet (como as páginas da Universidade, da pesquisadora e seus assistentes, do Movimento dos Atingidos por Barragens, do Instituto Biotrópicos, do ISA, do Movimento Xingu Vivo para Sempre, da Sociedade Real de Fotografia da Inglaterra – *The Royal Photographic Society*). Você não receberá nenhum pagamento em dinheiro por tais usos.

**Direito de negar ou desistir:**

Sua participação é livre e voluntária, ou seja, você não é obrigado a participar desse estudo e você pode deixar de participar desta pesquisa a qualquer momento, sem que isso prejudique você.

**Com quem entrar em contato:**

Se você tiver alguma pergunta ou dúvida, em qualquer momento, mesmo depois que a pesquisa já tenha começado, você pode entrar em contato com:

- Elisa: elisaestronioli@gmail.com / 93 992234531

- Marilene: mcardosoribeiro@gmail.com / +44(0)7778808804

Esta pesquisa foi revisada e aprovada pelo comitê de ética em pesquisa da *University for the Creative Arts* – esse comitê tem a função de certificar que os participantes da pesquisa estão protegidos de qualquer problema.

Se você desejar saber mais sobre esse comitê de ética em pesquisa, por favor, entre em contato com: Tracy Crowther (e-mail: [tcrowther@ucreative.ac.uk](mailto:tcrowther@ucreative.ac.uk)) +44(0)1227 817342 - ext: 7342.

**PARTE II: CERTIFICADO****Certificado do Consentimento do Participante:**

Eu fui convidado para participar nesta pesquisa onde o pesquisador e/ou seus(s) assistente(s) gravarão meus depoimentos, farão fotografias de minha pessoa, de meus familiares e de meus lugares de moradia e convívio social, coletarão informações por mim escritas e/ou desenhadas. Estou ciente de que todo esse material será dado de pesquisa e poderá fazer parte de encontros, conferências, congressos, palestras, oficinas, revistas, artigos, jornais, exposições e outras apresentações que tenham como objetivo de conscientizar as pessoas sobre os impactos negativos da construção de barragens para hidrelétricas.

Eu também fui informado que as formas de divulgação da pesquisa acima mencionadas não irão me expor de maneira negativa.

Eu li todas as informações acima ou elas foram lidas para mim. Eu tive a oportunidade de esclarecer todas as minhas dúvidas de maneira satisfatória.

Sei que, em qualquer momento, poderei solicitar novas informações e motivar minha decisão, se assim o desejar.

Eu entendo que eu posso desistir de participar desta pesquisa a qualquer momento e que, se esse for meu desejo, todas as informações, imagens e gravações relativas à minha pessoa serão destruídas.

Declaro que concordo em participar desse estudo e que recebi uma cópia deste Termo de Consentimento Livre e Esclarecido.

**Contatos do participante:**

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

- endereço: \_\_\_\_\_

Nome do participante \_\_\_\_\_

Assinatura do participante \_\_\_\_\_

Data \_\_\_\_\_

dia/mês/ano

**Se não alfabetizado:**

Eu testemunhei a leitura deste documento para o participante e que as explicações dadas ao participante foram satisfatórias. Confirmando que o participante teve a oportunidade de esclarecer suas dúvidas. Confirmando que o participante deu seu consentimento livremente. Declaro que o participante concordou em participar desse estudo e que recebeu uma cópia deste Termo de Consentimento Livre e Esclarecido.

Nome da testemunha \_\_\_\_\_ E

**Impressão digital do  
participante**

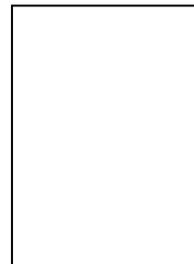
**Contatos da testemunha:**

- telefone: \_\_\_\_\_ e-mail: \_\_\_\_\_

Assinatura da testemunha \_\_\_\_\_

Data \_\_\_\_\_

dia/mês/ano



**Declaração da pesquisadora ou da pessoa responsável:**

Eu declaro que li com acurácia todas as informações deste documento para o participante e que certifiquei-me de que o participante entendeu que:

1. Ele/ela fará parte de um ensaio fotográfico, como modelo e co-produtor;
2. As fotografias de tal ensaio fotográfico são parte de uma investigação sobre os impactos socioambientais negativos da construção de barragens para hidrelétricas, no Brasil;
3. Fotografias, intervenções, declarações e comentários dos participantes serão usados como material para esta pesquisa e seus fins;
4. Ele/ela será encorajado a participar bem como discutir sobre os assuntos que desejar, a qualquer momento, com a equipe desta pesquisa.

Eu declaro que o participante teve a oportunidade de esclarecer suas dúvidas e que o participante aceitou fazer parte desta pesquisa de maneira livre e voluntária.

Uma cópia deste documento foi entregue ao participante.

Nome da pesquisadora (ou da pessoa responsável): \_\_\_\_\_

Assinatura da pesquisadora (ou da pessoa responsável) \_\_\_\_\_

Data \_\_\_\_\_

dia/mês/ano

## APPENDIX 4

### Script for the semi-structured interviews

#### Sobradinho dam area

1. What happened to make you move?
2. How do you feel about this you have just told me?
3. Is there a particular 'thing' that could represent your feelings, for us to use it to 'make' a photograph depicting you along with this feeling you have?
4. How would you like to be portrayed in a photograph with this 'thing' to tell your story/express these feelings?
5. What is nature in your opinion?
6. Do you think nature might have been affected by the Sobradinho dam project or not?
7. Why? (and, if so, How?)

#### Garabi-Panambi dam complex area

1. Do you think Garabi (or Panambi, depending on where the interviewee currently lives) dam project is affecting your life up until now or not?
2. Why? (and, if so, How?)
3. If not: Do you think Garabi (or Panambi) dam project might affect your life in the future? Why? (and, If so, How?)
4. How do you feel about this you have just told me?
5. Is there a particular 'thing' that could represent your feelings, for us to use it to 'make' a photograph depicting you along with this feeling you have?
6. How would you like to be portrayed in a photograph with this 'thing' to tell your story/express these feelings?
7. What is nature in your opinion?
8. Do you think nature might have been affected by the Garabi (or Panambi) dam project up until now or not? (If not: and in the future?)
9. Why? (and, if so, How?)
10. What is your imaginary future regarding this entire situation?
11. Where do you imagine you will be living in the future?
12. What do you not want to lose? (OR miss? – in terms of both material and immaterial stuff)

13. What do you not want to forget?

**Belo Monte dam complex area**

1. What happened to make you move? (or, for those who are still in their usual place of living, what happened to your life regarding the Belo Monte dam project?)
2. How do you feel about this you have just told me?
3. Is there a particular 'thing' that could represent your feelings, for us to use it to 'make' a photograph depicting you along with this feeling you have?
4. How would you like to be portrayed in a photograph with this 'thing' to tell your story/express these feelings?
5. What is nature in your opinion?
6. Do you think nature might have been affected by the Belo Monte dam project or not?
7. Why? (and, if so, How?)

## APPENDIX 5

### Excerpts of interviews with participants (collaborators)

#### translated to English

Audio recorded (some interviews also video recorded)

Original language: Portuguese

Interviewer: Marilene Ribeiro (researcher)

Transcribed by Karina Ribeiro

Translated to English by Diego Satyro, Edgar Refinetti, Paula Coppio, Marilene Ribeiro, Rachel Ann Davis, and Tom Gatehouse

**Interviewee:** Élio Alves da Silva, 61 years old, fisherman and former community leader of the currently cleared Santo Antônio hamlet

**Date:** 05.10.2016

**Location:** Km 23, Altamira

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Marilene Ribeiro (researcher) – Where do you used to live before moving to here, Élio?

Élio Alves – Before living at [km] 23, I lived in the Santo Antônio hamlet, which was located at km 50 on the *Transamazônica* Highway, which runs from Altamira [city] to Marabá [city]. I lived 32 years in that community, I was one of its founders. Then, the arrival of the Norte Energia [and the CCBM], which came to build the Belo Monte, made me come to live here at km 23 - which, in fact, is not my dream, it was not my dream to live far from the river, because I am a fisherman and I will never change my identity because I am a fisherman and I like what I do. Today I work, it is very difficult for me to work because I have to move from km 23 to km 50. In this case, I have to travel 73 km by car and then I have to go 6 km more, until I get to where the boat is to get to work. So, it's very difficult, it's a very big sacrifice, sometimes maybe it doesn't even pay, but since I don't have another option, I'm forced to do that, right, and so I've been leading my life like this until now. I don't know how it's going to be going from now on, but until then I'm able to do it, I don't even know until when I'll be able to do this.

MR – You have to do this every week?

EA – Every week.

MR – How long is it from here to the edge of the river, where you start fishing?

EA – It's a 5-hour trip to get here, at the spot on which I'll dive.

MR – And, when you lived in Santo Antônio, how long did it take from your house to the boat?

EA – [Laughter] 10 minutes from my house, I would reach the boat walking. [...]

MR – I'd like you to tell me what Santo Antônio was like, before the news and how you learnt of the news [about the Belo Monte dam project].

EA - Santo Antônio, before the news, was a community where everybody wanted to live there. Do you know why? It's not because we had the Money. It is because the people of Santo Antônio were happy. Even without money we were happy, everyone was happy. There were 67 families living there, each had their work. There were 28 fishermen affiliated with the fishing colony, they fished directly, and there were the rest of the people of Santo Antônio that weren't fishermen, but that fished indirectly in the winter, while in the summer they didn't fish, and other people did, lot owners, and others worked on the farm and also lived in Santo Antônio. Our community was very united, we were a very united people. We called meetings, people participated, you know. I was a president of the association, of the community, but it wasn't only me speaking, I gave my opinion and listened to people, so the whole community manifested itself, spoke, gave opinions, and with this we were good at surviving, you know, people agreed between themselves. So when we heard about Belo Monte [dam] we did not believe it, we did not believe Belo Monte was coming ... it was not really the Belo Monte, it was the Kararaô. [...] When the first demonstration took place in Altamira, when the natives showed that they were there, that the indigenous individual [Tuíra] put the machete in the engineer's neck, that day I was there, you know, that was where the fighting began, but at the time that the people started that fight, there was no alternative, it had already been decided that the project would be carried out, you know, and soon Belo Monte would come. [...]

Our people, from our region, it was not only the people of Santo Antônio, no, everyone was ruined. People who did well were those who were already well, people who owned a big farm, who had lots of big cacao plantations, these people did well. But riverside dwellers and fishermen, no; everyone lost and we of Santo Antônio, we lost much more, because we lost our work, we lost our bond of friendship, we lost our home, we lost everything, you know? [...]

MR – Where are all these people, today, from Santo Antônio? How many families?

EA – 67 families.

MR – Where are they today?

EA – A part is in the municipality of Anapu, a part in the municipality of Senador José Porfírio, a part in the municipality of Vitória do Xingu, a part in the municipality of Altamira, a part in the municipality of Brasil Novo and the rest, I don't know. I know there were people who went to Maranhão. What if I told you that I do not know where each one lives? I left here to go to the side road of Anapu, where part of them lives now, I only managed to get up to km 14 because there was no car to go forwards, then I had to go back. I visited only 3 families and I had to go back—I wanted visit everyone and I couldn't. So, my plan was to visit these people from time to time, but I don't even have an old bike to do that, so I can't do it, I can't get to where they are. I know the region, more or less, if I entered the side road I would get to where they are, because I know they are there, but ... [...] That's my concern, child, you know, that I don't know how the lives of these people are, that I don't know where they live, I don't know what their lives are like, when I lived in Santo Antônio I knew about the lives of each one. Because then our community was like that, if so-and-so was not alright, the community would gather up and help. So now I keep thinking, sometimes I lie down at night and I sleep thinking, 'Well', I wonder how so-and-so is?

You know? 'How is Miss Maria, Helena, how's their life now? That I don't have a clue about how it is. 'How's the situation with those guys? Do they have adequate food? Are they able to buying gas?', So that sometimes worries me. I know it's not up to me to live that, but I live it, you know, I live this concern, not just with my children, right, so I have my concern, I worry about my children, they are all grown up, but never cease to be children to me, so I have this very great concern with the people that I don't know where they are, we lived together for many years, together, it was thirty-something years together like that, so for us to split up like this, everybody disappearing, you don't know where the person is, how they live their lives, that's very difficult, you know. And they did it, you know. So it was very difficult for us, like this. We know that our football team was the best football team in [the region of] Altamira, Belo Monte [village], you know? We managed to win 72 trophies—that is something no team, not even in Altamira, could do, I do not know of a team that has that much trophies and we managed to win those trophies, 72 of them. We have tournament trophies, championship trophies, we have it all. [...] Our soccer field, as we could not make one and did not have the money, we paid with chickens. The guy with the machine, he said, 'you, guys, get some chickens for me.' We paid for the field with 8 chickens. Afterwards, we finished it with hoes, as a group. All the time we took care of it [the field] as a group: everyone would go - we would take *farofa* [type of food] in the morning - and then spend the day there skimming the field, arranging everything.

MR – Each one went to a diferente place, then?

EA – Each one went to a diferente place.

MR – And why did people go to Santo Antônio? What was good there?

EA – Everything was good, the only thing I did not have was money, but it was a good place to fish, a good place to live, it had [river] beaches. The beaches! You should have seen our beach: everybody wanted to do beach birthdays, because our beach was excellent, there was place to create gardens, to plant cassava, banana, rice, corn; so things were much easier for us there. We had fish, we had turtle for us to eat, we had *tracajá*, we had the armadillo, the *paca*, the deer, we had everything.

MR – So, there was a forest there?

EA – There was a forest surrounding the area, we would hunt, everybody would kill their game, a deer, then we would share, a piece for each. I would kill a deer, I would keep a quarter, the rest was divided between everyone, I would kill a *paca*, I would take a quarter back home.

MR – Divided between whom?

EA – Everyone who lived near each other, each one took a little bit, those closest. So, suddenly, I was there at home, I had not even thought about it, and a quarter of a *paca* arrived that someone had killed. And that's how we used to live, you know. So we took pleasure in living in Santo Antônio. Our [football] team played well! When we entered the field ...

MR – And what has the area [Santo Antônio Hamlet] become?

EA – It has become a construction site. Actually it's a parking lot there, you know, it's not even a construction site, because they did not make a building, they took the bush and put the stone, that hard stone, which is for the truck not to get bogged down, because only those trucks go there. Where our

[football] field was, they kind of put a cement there, you know, for those trucks, loaded, for waiting in line, right, and then there's a truck park, where our village was, where the community was. [...]

MR – Élio, you were telling me about when the [Belo Monte dam] building work came, you told the story of the caiman and the turtle, right? Could you please tell it again. You said there was a forest there [in Santo Antônio hamlet].

EA – On one side of the village—in front of the village, on the other side and on, yet, the other side, when it was wintertime [rainy season], water came in, there were two big *igapós* [alluvial woodlands], you know, and it was a kind of nursery, where the fish laid their eggs (...) where there are fish, well, it catches the attention of everything, right? It got the attention of otters, lots and lots of otters, and, when the water went down, caimans—they like to stay in ponds. When they [workes of who were building the dam] started detonating dynamite to bust the whole stone—and the load of dynamite was very heavy, it shuddered the house, cracked the wall of the house, cracked the wall of masonry houses, the dog that was lying in the middle of the street, when they detonated the dynamite and the earth trembled, the dog would keep circling over and over, getting up and running, like he was crazy. Then I saw: at 1 p.m. in the afternoon, I was there, and the caiman was jus there, walking in the middle of the hot sun, in the middle of the soccer field [of the Santo Antônio hamlet], it was in the field, just walking by! Why was it there? It was stunned with so much dynamite explosions that it got lost, went crazy, instead of following the water, no, it followed the bush, you know, it went to the middle of the field. I saw that caiman walking there at one o'clock in the afternoon, away from the stream, more than 300 m away from the stream! So, the caiman, it was completely baffled! I also saw *tracajá* [yellow-spotted Amazon river turtle] walking in the dust. Because they created roads everywhere, carts, water trucks everywhere and there was dust and I saw a *tracajá* passing through the dust, walking in the dust. So why did that creature have to get out of the water, out of his pond, to go through dust? Something was troubling us and we discovered that it was the dynamite. When I was in the river at 6 o'clock in the morning, that was the time they detonated, a sirene was heard, that hurt our heads, hurt our hearts, hurt our souls, we listened to that siren, it went one for 3 minutes, when it was going to stop we felt the earth tremble, the canoe I was on, in the water, it trembled, so the fish were leaving... little fish, big, big fish, they all went away soon and the little fish jumped out of the water, they were all crazy jumping out of the water, in the river, that was far away [from where the dynamite were placed] and I told the people, 'In a few days we're not gonna have a single fish here to eat'. [...]

To build the dam so much was destroyed, you have no idea, you have no idea how much life was destroyed to make this dam, you know. Well, I mean life is not killing a person, you know, it's a defenseless animal, a sloth, an armadillo, a *paca* [small mammal]... the fish, you know, fish were our life source, the people of Altamira eat fish, and the people of Altamira today do not have any more fish, you know. Our fish were all destroyed. I have a stepchild, when I married his mother, she already had him, Clemildo, he worked there [at the consortium—CCBM—that built the dam], in a cargo truck that transports tons of material, and one day an employee said, 'Clemildo, go down by the river to get some cargo', he was on the other side of the river, there in the quarry. He went down [the river]. Do you know

what it was that he had to carry? 14 tons of dead fish, no, 16 tons of dead fish. The guy came with the cargo and threw it all in, 'You can take it.' He [Clemildo] came to Altamira, and the hole was already dug, 'You can throw it there,' so Clemildo dumped the cargo there. Then the machine came and buried it all. He came to Altamira, he was working at the company for 3 years and a few months, going on 4 years, and he said, 'I quit'. Then the guy said, 'But what, Clemildo, what's happening?', and Clemildo answered, 'No, no, I cannot bear to see you destroy the thing my [step]father allowed me to grow up with, I cannot bear it.' He came to Altamira, quit, they negotiated with him, they did not pay him what he was due, he negotiated with his rights behind him, he got a cargo truck and he works for a firm that is now constructing a mall here in the square and did not go back to that consortium any more. [crying] Because it hurt his conscience, you know, he knew I raised them at the expense of fish, and then he had to load an entire dead fish truck to be buried. That was not reported in any newspaper. Then, another 14 tons were buried, that's when the IBAMA fined Norte Energia. That fine only appeared for a week in the newspaper, and then, no one else talked about it anymore, you know. There were 30 tons of fish in two truckloads, we know this, not counting the times documentaries were made, that people showed the water white with dead fish, it was not shown that, inside the lake [reservoir], [Antônia] Melo knows this, there's a bunch of people working in there [crying sobs] to get dying fish to be buried. You know, this is under the covers, you know, just like the consortium, just like the company building this dam killed hundreds of people who did not appear in the newspapers, everybody knows it. The newspapers did not show it. We had a colleague who managed to get inside the first demonstration that happened, 7 workers died, 3 showed up [were officially declared as dead due to the dam works], you know. They had an avalanche of cement, 30 workers died, 5 showed up, you know. So, there are hundreds of people under that concrete, the newspapers can't show this, if the dam stops, and the project is the government's, it can't stop, you know, our life is dispensable, [crying] our life is worthless to them, but the project cannot stop. Because the project is worth much more than the life of a citizen, the project is worth much more than an entire forest destroyed, the project is worth much more than a river being killed and the project is worth much more than the city of Altamira, which is a city that I was proud to say I lived in and now am sad to say that I live in. So the government project is worth much more than this [crying]. [...]

MR – Thinking about all that you saw and lived, the community, nature, what you have inside you in relation to all this situation that happened because of the dam? If you were to give a name, what would it be?

EA – I think the name I would have to give it is destruction, you know, it's ... Because, after doing a whole survey of it all, do a summary of what happened, what's left? What's left of it? I'm not putting anything in the mayor's head, or the councilman's, the businessman's, I'm putting it inside my head, what's left for me? You know, nothing is left for me. Just as there is Élio, there are many Manoel, Antônio, Zé, that lived the same life I did, what's left for those people? Mrs. Maria, Mrs. Raimunda, that fished, you know, Mrs. Socorro, what's left for them? What's left for us? Nothing's left. So, what happened? It was destroyed, you know? So my summary, the name I have to give this, is destruction, it

destroyed our life, destroyed nature, destroyed the life of the fish, destroyed the lives of animals, you know, so the whole thing, for me, is called destruction, it's the only thing I have left to say, that we were destroyed along with that [...] So, we went along with that, you know, our life went away, along with the life of these fish, the life of this caiman, the life of this *tracajá*, because they lived in nature and we lived in nature, you know. It was destroyed and so were we. [...] So our life went away with all of that, you know? For those who have feelings [weeping], for those who value what nature is, we went away with it, there is no way we can deny it and say 'I don't care what is happening', there is no way. We infiltrate ourselves in this, we feel this pain, we feel this revolt that and can't do anything, we have to witness it, we have to swallow it, sometimes, shut up, because when we talk, we get punished, we are condemned, we are persecuted, you know? [...] you have to follow this, [because] we can't say anything, we can't go ahead and make a demonstration [because] I might be promptly arrested, you know? [...]

If one said, 'Élio, I want you to go from here to Rio de Janeiro, to live in the best apartment in Rio de Janeiro, to have everything from a helicopter to go to the beach ...'. No. I would prefer to live on the edge of the Xingu [River], in a straw shack, but I would look at the Xingu, sit on the edge and breathe my pure air that I used to breathe there, that little wind that comes over the water, I knew I could throw my hook, I could get my fish that I wanted to eat and I knew that it was not contaminated, that it was clean, it was healthy, and then I would go in the Xingu, I would take my bath knowing that I was bathing in clean water, you know, I saw the little *piabas* [species of fish] playing there and I had the same happiness as them—I did not live there, but I was, I was part of that story... I had the greatest pleasures during the time that I enjoyed the Xingu, I survived at its expense. [It] never charged me anything, nothing in return, only respect. That's what I lived. That right there. [...]

This is how we used to live, we used to live off fish. I'm a guy that thinks that this I'm living now is not my world, you know, I'm in a different world, that's why I do not feel well here. People come here, 'Élio, you have a nice place'... I do, but this here for me, this here is not worth a lot, you know, that for me, what matters to me isn't money, material things, what matters to me is to live well, is to have joy, you know.... what matters to me is to have friends, know, have friends, make friends, make friendships, have people on my side. I've lost that, even battling so hard I can't reverse this, you know [weeping], and I lost that, I lost my friends, I lost the friendship links that I had, I lost my job, I have not lost my life, nor hope, nor the courage to fight, you know. I'm still steady, I keep doing what I can do, you know, I keep fighting, I keep on battling on, I keep on surviving, one way or another I'm still here. [...] I'm a fisherman, I don't have a river anymore for me to fish. I had everything in my hands, but it was not me who threw it away, you know, it was a project from this dirty government that took this away from me, not only from me, but from several people, thousands of fishermen who are in the same situation as me, without their ... you know how to get where they are living now, right? You've seen their situation up close. So this situation is not just mine, it is that of several people. [...]

I had a dream—I do not know if a fisherman's life, a fisherman's profession, is a beautiful thing, but for me, I was proud to be a fisherman, I'm proud to say this, I wanted to take my children, my grandchildren, wanted to take them along with me, you know? Because it's something that you do with

honesty, it's a thing that you do from your heart, it's a thing that you respect nature. I learnt to respect the river the way it is, I learnt to understand the river the way it is, I learnt about the nature that lives around the river, I learnt to respect all this and so the river never failed me. Always when I get to the river, there's my fish for me, my fish for me to eat, my fish for me to sell, for me to survive. The problem is how distant I am now from it, you know, and the whole problem is that I could not defend the river either, because our river is being killed, our river is dying and we cannot do much. [...]

The times I got to the river and it was angry, I knew it was annoyed and, then, it was not hard for me to wait until it was calm, easy again. Sometimes I would take a nap, and then, when I woke up, the river would be calm, I would go in, and I would never feel bad for the river to come in and beg for help. Sometimes it happened, it happened once, but it was a rainstorm that came suddenly, it took me by surprise. But to say to me, 'the river, I cannot go in there, but I'll go in anyway'. No way! [I know] It's its time, it's angry now. So if we analyze things, nature is us, because you know, I'm not willing or well every day. [...]

So, the Xingu River was my father for me, my everything like that, you know, it gave me everything good [sigh]. Everything you can receive from a friend I received from the Xingu River, as well as survival, joy, willingness to live, joy to live, everything by its side, along with it, living the Xingu River. And I am proud to say that I am a fisherman I know what this is. Because Luana and Janaina [other researchers who did their researches in the area too] ask me, 'Élio, why do you know so much about the river? Why do you know all this? You know which bird that sings on the bank of the river. Why?'. When I was in fishing, I was not just waiting for the fish to hit my net, no, I was listening and analyzing everything and learning, you know? Sometimes I got lost in the fog, in June, when the river is lowering, every morning there's a fog, the river covers up. Once I was crossing the fence, I could not see from where you are, What did I do? I'd stop the canoe. I could not see anything, any side that I looked at I couldn't go to, I would listen to the bird sing, I would mark, 'Where the bird is singing is the riverbank' and then I would mark that course and I would go out there, so I would follow the song of the bird for me to get out of the fog and all this I went on learning. [...] I never studied because I did not have the chance, you know? I've never have a chance to sit in a classroom to study, so I sometimes complain about it, because it's something like, 'Well, I could have studied, now I could be a guy with a degree in so and so ...'. I have a degree, I have a degree in life. I know what life is, I know what it is to live life, I know what it is to respect you, I know what it is to respect a child, I know what it is to respect an old man. [...] When people hear me talk, sometimes they get up and applaud me, you know? I have often been applauded standing up in the lectures I gave, which is a source of pride to me. [...]

MR – Do you have any feelings about this all that you told me about, Élio?

EA – I do, I have a feeling ... sometimes I have a feeling of guilt, that I think I have not done enough to save the river, to rid my community a little more. So my sense of guilt for my part in my community, so I thought that if I had a little more experience, and I had started a little earlier in the fight, maybe I had been able to take Santo Antônio to another place just like we wanted, my sense of guilt is this, so for me, for not having been able to go to another place, so everyone could be together today, and the rest I

do not feel. I feel a lot of revolt, a lot of hatred, well, you know, I know, we're so small, you know, our value is so minimal, I don't know, our speech is not worth a lot, then, at the same time I have to agree with the situation that I live in today, I have to agree with it because then I have to put myself in what I am, I have to put myself in the position that I am, I can't put myself in a position that I am not, because I'm not going to get anything. So, I stand like a fisherman, I introduce myself, I identify myself at every place I go, you know, my identity is my fisherman's license, I have my identity, as a Brazilian, as a Brazilian citizen, but as a worker, my profession is fishing, I'm a fisherman and my license walks with me, even if I'm worth nothing else but it's with me, and that will never change, you know, wherever I go I'll be a fisherman. I can go to work as anything, I don't want to, you know, but my identity is not going to change, no, because it's something I do and I like, you know. I loved fishing, I loved it, being in the river, sleeping there at night after fishing, I loved it. So, I don't regret choosing this profession at all. I think I did the right thing, because the best thing in your life is when you do what you like, you do it with love it all goes well and I think I chose it, you know, I chose to be a fisherman and everything worked out, I raised my family, you know, I am what I am, I'm not going to change. I will continue to be this, I hope one day that I can move from here, but to a place I can keep doing my fishing, whether diving, in a canoe, or using a net, or hook, because if you put me where there's fish, we're never going to run out of dinner, because I know how to catch them, I know how to fish them, I've learnt to fish them. So, for me, that's not going to change, I'm going to take this story of my life for the rest of my life. If I meet you in a few years, I'm going to tell you the same story, it won't change, no. I have the pleasure of telling this to people, and pride too. So to do something that I liked so much to do, with such dignity, with so much respect, with so much, you know, so much pleasure in doing it, it was very good for me, it was good for me, it was good for my learning, the school that I didn't have the right to have, I had in the river. Knowledge, you know, like that, I'll pilot any kind of boat, I'll don't play with water, I'll be a diver, I'll go down, I've been down [in the river] 50 m, but I'll don't play with water, I know I respect the water, because we have to respect it, so I feel good like this, you know. I feel almost fulfilled. Well, you know, there's something missing, but if I were by the Xingu [River], I am sure that I would feel fulfilled now. [...]

**Interviewee:** Leonardo Batista (aka Aronor), 57 years old, fisherman, Yudjá/Juruna ethnic group

**Date:** 14.10.2016

**Location:** Collective Urban Resettlement Jatobá (RUC Jatobá), Altamira

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Marilene Ribeiro (researcher) – Leonardo, in what region were you born?

Leonardo Batista – I was born south of the Volta Grande do Xingu [Xingu's Big Bend] area, in a place called Araruna Island. Going towards the Amazon River, not so far from the first large waterfalls, almost near the community of Belo Monte, passing Belo Monte [village]. I was born there in 1959. There, when I was still child, still living with my parents and my brothers, I used to work with Brazilian nut, fish and

the rubber trees. I was about eight years old when my father came to the region of Paratizão [upstream of Volta Grande]. Back then we made a living basically from the rubber trees and the fish. The Brazilian nut harvest season runs in winter, that's when we used to go down the area to harvest the nuts.

Later, as a grown up, I started working as a cowboy on a farm, and during weekends I used to go fishing on the river. I had two sources of incomes: the farm salary and also, at that time, the money from the fish, which I made with the help of my wife. There were many times when we did not have to touch the farm's monthly payment, which was paid on the first day of the month, that's because the income from the fishing itself would be enough to buy all the things we needed. That's how our lives were before the [Belo Monte] dam.

MR – Then, what happened?

LB – In 2011, with the beginning of the Belo Monte dam construction, everybody was forced to leave, those living on the island as well as those living along the riverbanks. Some were indemnified, but only the ones who had land ownership, a land title and all, were entitled to a small indemnification. The rest was left in the same situation I was. [...]

We had to leave Paratizão because the Norte Energia [consortium in charge of the Belo Monte dam project] employees came to us saying that they would indemnify everyone at the area; then, my boss decided to terminate my contract, given that he himself would also be compensated. They [Norte Energia's officials] claimed that there wouldn't be a problem, and that my boss could pay me, and later on they would indemnify him. And so he did. And since I was no longer a farm employee, there was no way I could stay there and carry things myself back and forth, nor leave my boat at the river's edge, right? When I worked with my boss, I had a tractor with a cart, and everything I needed to carry my belongings around. And since I was no longer part of the farm staff, my former boss no longer had to let me make use of the tractor and cart to carry things. I then went to the riverside area, a little river beach in a little island near my brother's home and to my daughter's house in Altamira, here at the riverside, near the Porto das Carroças, located by the Ernesto Acioly road. After that we became residents at RUC [Collective Urban Resettlement] Jatobá, in the Altamira surroundings, without our support location at Altamira's city centre, on the banks of the Xingu River.

Beginning on November 24<sup>th</sup>, 2015, with the signing of the License for Operation<sup>1</sup> for the hydroelectric plant at Belo Monte, the reservoir started to be filled. And the river's level went so high that it covered the islands where we used to stay, to keep our boats, and even to fish. It was all under the water. We could no longer work as fishermen, because we no longer had a place to go fishing and dock our boats; where to keep our coolers or set up our tent and our belongings. We couldn't go fishing and stay there inside our boats all the time, right? That's why it got really hard for us living there, at the 'beiradão'—that's how we call the riverside here. Prior the dam it did not matter if we lived on the mainland, or if we lived on a beach, or on an island, even on the top of a rock formation we could. We knew that, if we would set up a little house on a beach there, during wintertime, early November, December, January and February, the little house would be under the water; but after February, March on, our dwell would

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<sup>1</sup> See Appendix 1 for details.

be there again. Now, it's been difficult, we know we no longer will have it back, right? I do not know what to do with my life. The place we raised our families, lived our whole lives ... All gone. [...]

The islands, the beaches, the river, the water, the fish, we always worked hard to take good care and preserve the area. As part of the head of a group of indigenous fishermen, we have always discussed in meetings and with IBAMA [Brazilian Institute for the Environment and Renewable Natural Resources], which was our environmental preservation partner. However, what was the purpose of working so hard protecting the area? [starts to cry] ... Our outrage, our distress, it is so strong [sobbing] that we cannot bear it! It is the despair of our lives, it is a lot of suffering, it's helpless, no one is able to hold it, because of the love that we have for what we took care of and preserved, [still weeping]; It's very stressful for us to explain it, to remember it. I always tell people that going back to the river bank, to our river, where we used to live, it is like putting the photo of our mother, our father on the wall, we are able to look at them, but aware they are not longer alive. It's too sad! It's too painful! It's a painful thing for us, who raised our families there, led a happy life, and now we get to live here! It's a difficult thing that I've always been talking about. I do not understand what kind of government would do this to us. I saw an interview with President Dilma [Rousseff], during her term of office, at the end of 2013; she was talking about Belo Monte, here in our city [Altamira]. If I am not mistaken, it was on December 30<sup>th</sup>, 2013, I saw it during the Jornal Nacional [Brazilian primetime news program aired by Rede Globo Network]. She said that Belo Monte came to the city of Altamira bringing improvement to the city and to the people of Altamira, and respecting individual rights, specially the rights of the indigenous people. No one is noticing it here! What we see is the violation of the rights and lack of respect! This is very sad for us. Especially, for the native people. In the times we used to use our own weapons, I mean my uncles, my grandparents, my brothers did, we had our rights secured, and we were respected. But, we surrendered, right? We allow it to become craftsmanship toys - arrows, burduna [indigenous cudgel], bow and arrow. When these weapons were used, we were respected. But we gave it up... For we are obedient, we obey the law and believe in justice; so Justice should also do something for our rights. Because I do not believe that Belo Monte has so much power to be doing what it is doing with us here in our city of Altamira. I do not blame the DPU, that is, the Union's Public Defender; I do not blame the local Federal Public Prosecutor's Office in Altamira, because I see their performance, Dr. Thaís's [Thaís Santi] and the DPU personnel fight for us. Justice is on our side, but Norte Energia shows no respect for anyone, for IBAMA to begin with! It arrived here not as company, but as a harsh law that nobody can break; things must always be the way they [Norte Energia] want! We are not objects, an object is something you take and place it wherever you want it. We, human beings, have the right to choose what we believe is best for our lives and this must be respected.

It's indeed very painful; but people need to speak up, tell the truth and charge the authorities for their rights. We are Brazilian citizens, we have the right to claim for our rights. Since they will not give us back the life we've had, at least a little something to make it easier, because everything we were working for, taking care of was for our future. What is the future? The future is our child, our grandchild, the islands that we preserved, the rubber trees that we used to work with; there was food for the fish, and also the

fruits from the islands. They ruined everything! We lost everything: we lost the island, we lost the fish, we lost our rights and it's like you see it here, it's the way they [Norte Energia and Consórcio Construtor Belo Monte–CCBM] want it! [...]

Picking up the poor creatures and throwing them negligently, at the riverside: 'Oh, no, your little piece of land is this one, from here to there, you with your family, you get clothes to your children, we're going to give wood and other construction material and you will build your own house...'. No! 'Hey, guys! Everyone here had a house! You [Norte Energia and CCBM] did knock them down!' We don't need a house, we need our river back. So, they are the ones with the obligation to build the houses for those relocated. 'We are going to place a deposit totalling R\$5,000.00 in your bank account, paid in 6 installments. You will take R\$900.00 [about £225.00] a month, okay?' What can one get with R\$900.00 a month? To me this is a crime! Indeed it's a crime! This could call for legal action! We know that!

MR – Aronor, Just to have an idea, how much money did you used to make with the fishing activity per month?

LB – Our monthly income coming from fishing was about R\$3,000.00 [around £760.00], Sometimes a little bit more. This was the average amount we used to make with our fish here.

MR – Now you are here at the RUC [Collective Urban Resettlement, built by Norte Energia in order to resettle displaced families by the construction of the Belo Monte Hydroelectric Power Plant, located 4 km from the Xingu riverbank], correct?

LB – Yes, and fishing here is no longer possible. Even if I lived on the riverbank, It would not be possible, because our fish is gone. Until last year, 2015, in the summer, I used to go fishing with my wife and son. We used to bring about 50 kg of fish and a hundred and plus kilos of *acari*, a thick-skinned catfish, which is a favorite in the region. We used to sell all the fish. There were many times when we sold all the *acari* but not the 50 kg of other varieties of fish, given its huge popularity. In fact, the *acari* was one of the first species to have their population affected by the Xingu River changes due to the construction of the walls of the Pimental and Belo Monte sites. Nowadays, if you catch 5 kg, no one wants them, because the *acaris* are dying, they got sick; they are bottom-feeders, and eat basically the moss that grows on the riverbed. They need fast-flowing currents, but our river is gone, it turned into a lake. Since the water is no longer flowing, the moss and the stones where they dwell are all covered in mud.

The flux of water from the current used to wash the mud away from the river rocks, leaving behind only the moss, which was their source of food. Now, given the deforestation of the islands, all the dirt turns into mud that gets stuck between the rocks. The *acaris* now eat the mud and get intoxicated. In fact, they are dying! They are not fit for eating. You can catch them with your bare hands, in dry soil! Between one and two o'clock in the afternoon you can find them attached to pieces of wood, for they cannot find rocks to hide under. They now live in shallow waters, and suffer with the sun heat as well. The fish were the first ones to feel the effects in our region. They used to live between the rocks, and many perish. Many aquarium species, like the zebra pleco, are all dying too. They don't give up their habitat. They don't go away. They stay and die. That's the case with the *acari*. What could be happening to the other fishes? No one knows. Besides the sludge contamination, lots of lianas [tropical woody

vines], which are known to be poisonous, have died. Actually, lots of dead trees can also be poisoning the water. We really don't know what is going to happen with the fishes. Some species like *curimatá*, *aribuia*, *trairão* [giant trahira] and the spotted sorubim are lake fishes, and they might remain in this region. The giant trahira does not feed on mud, but it might manage to live in the lake. Maybe the sorubim also... they might remain in our region. We are not sure. The other species like the freshwater pompano, the white pacu, the kumakuma, the *piau*, they will all be gone! They do not feed on mud, neither on other smaller fishes like the peacock bass and the hake; they feed on fruits, flowers, leaves that will no longer exist. What was left in the islands after the deforestation is dead now. Fruits like *landi*, guava, rubber tree fruit, *guabiroba*, *sarão*, *jacitara* were all fish food. They used to eat the flowers of the *samaúna* [tree], or kapok tree. They will no longer have them. They are going to perish just like the *acarís*. Maybe they will go somewhere else that would give them conditions to survive. Things are over here in our lake [the reservoir of the Belo Monte dam complex]. The fish we used to catch at Parati [area close to Paratizão], located some 40 minutes by power-boat from where I lived, they may be found now only in distant places that will require a day and a half to get there. That if you get lucky! Here they can no longer be found. It's a real change to us.

There is a fish that can only be found here in our Xingu river, which is the *pacu de seringa*. Why is it called like this? Because it feeds exclusively on the flower and the fruit of the rubber tree and from the snails – also called *búzios*. These were the first ones that disappeared, because the snails that lived on the riverbanks were buried by the mud and could not survive. The rubber trees were only found in the islands. The ones left after the deforestation perished, flooded by the water. In addition to the rubber trees, there are also other trees: the gozozeira, abiu, whose fruit and flowers are eaten by the fish.

The *pacu*, white *pacu*, *pacu de seringa*, *cadete*, *caranha* – also known as pink *pacu* – the *jatuarana*, also called *matrixã*, all of these fish survived on the fruit of these trees and will no longer make it as the trees no longer exist. That's our situation here, that's the way our lives turn out to be. We have experienced all that and we know it because we were born and raised in the river. The people from Energia Norte may have their theory, but we have our praxis.

MR – Since when it became difficult to find the fish?

LB – Since the dam started. But even more difficult since November 24<sup>th</sup>, 2015, when the river turned into a lake; we no longer have a river. Our river, our islands, our beaches, they're all gone.

MR – What about the other animals that feed from the fruits as well?

LB – Guan and hoatzin, they are also suffering in these drowned islands. Because hoatzins, they feed on leaves and there are no leaves left for them to eat. They are so weak that they are falling from the branches into the water. Whether no one rescues them, they die, drowned. Likewise iguanas are dying. They have not layered eggs this year. They lay their eggs in the beach sand and there are no beaches left<sup>2</sup>. Where else could they deposit their eggs? Not to mention our turtles, our *trajacás* [yellow-spotted Amazon turtle], we have no idea where they went. We lost what we used to help preserve. 'Oh, it

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<sup>2</sup> As the water of the Xingu River rose upstream the dam, sandbanks, which are typical of the Xingu river, vanished into the reservoir.

[hunting *tracajás*] was banned by the IBAMA, right?', 'Yeap.' Catching a *tracacá* to feed our families was prohibited here in Altamira. Was it preservation? Yes, it was. And we understood it very well. And our outrage is that we tried so hard, we really protected it, so that they [the dam] could come and put an end to it! Why we were taking so much care? Where are our rights regarding the future? Future in which we invested, that we preserved for our families? What about now?

For us, indigenous people, all things from nature are really important. We take good care of all that nature has given to us, we preserve them out of love. We love all it offers us. All is important for us: the *tracajá*, the red-footed tortoise, and the turtle. We were born knowing how to take care of it.

IBAMA's president met us on November 5th, 2015, here at Altamira. She talked to us and promised that all that was included in the social environmental provisions would be in effect before the operation License for Operation were issued. That was November 5<sup>th</sup>, 2015. By the 24<sup>th</sup> she granted this License and what had been accomplished? Nothing! Nothing! Many times when we go to a meeting and we get stressed with them, they accuse us of being disrespectful; but they have to respect us in order to be respected, and that's it. We had to put up with a lot, and we suffer with outrage.

We used to get to the Ernesto Acioly road right at the riverside, where we lived, and we never paid one cent to get a ride. Nowadays, if we do not have R\$50 or R\$60 we don't go from here, the RUC, to the riverside, and neither the way back. That's difficult! Where have they thrown us? Having no rights whatsoever, having no right to choose. And it took lots of arguing because they were not even willing to provide us with the resettlement. There are many families living with their things scattered in the corners, two, three families in a single house. It's contempt, something that we can't stand.

MR – Why did you move to Ernesto Acioly road?

LB – We moved because we had no other option. You couldn't build a shack on the stretch of solid ground. They placed a warning stating that you should not occupy the area for which they had paid compensation. In 2011, no one could build a shack on the islands. It wasn't allowed. Even if we had a shack, we would have to leave, because all the islands would be flooded. All of them. We would have to leave, one way or another, like that saying 'take it or leave it'. We came here [to RUC Jatobá] by force. It was just like leaving a turtle in the mountain and throwing a tortoise in a lagoon. That's what happened to us. We are not from here, we are from the riverside, born and raised. How will we go back? How will we live? What would we do for a living? How will we feed our families? How about our rights? This is contempt, a violation to the human rights. It's not enough to simply tell us 'you will have your land back, somewhere beside the river'. No. We led a happy life, we were independent, we had food, we were able to afford what we needed. We had no need to rely on FUNAI [National Indian Foundation – government body that deals with indigenous people's affairs and welfare] for anything.

MR – You said that the people that built the dam showed no respect for human rights. Do you think they showed respect for nature?

LB – No, they disrespected everything. Everything! Take the islands, for instance, when we saw those machines on the islands, clearing the woods, it felt as if they were taking a piece of us. If they respected nature, they wouldn't do that, right? How many beaches, where turtles nested, were destroyed then?

How many stone caves, where zebra plecos and other fishes used to dwell, were covered with dirt? All finished. They had no respect for anyone, not for the human beings, not even for nature. That's something I'm not afraid to say, I've never being afraid to say the truth: if they don't love nature, if they don't respect nature, at least they should show respect for the human feelings. They have no compassion! I told them: we care, we look after and we preserve for love, unlike them, that just use and destroy for money. It's very sad. We appeal to other governments, non-Brazilian governments, we need help, because we know nothing about help coming from Brazil. [...]

The Norte Energia and the CCBM are acting how they see fit, regardless of the directions of the IBAMA in Altamira. They don't obey IBAMA, or the Federal Public Prosecutor's Office, or the DPU, or no one! Everything happens as they want, and I don't know why. Up until now, no one seems capable of embargoing them. If we get together and claim our rights, we are treated as criminals, repelled by the police or by the National Public Security Force. No! We are claiming for a right, they cannot do that to us, we are not asking anything of Norte Energia. They said that their purpose is to build the dam, not to make anyone rich. Rich? We also haven't been working and protecting [the region] all our lives waiting for them to end it all. We didn't need electricity from Belo Monte [dam]. We lived in the margin, we had our generators, we could buy gas, we had our fishing, our jobs, our TV, without the need of a dam to destroy our river. In sum, Norte Energia has too much power here. If the Brazilian government has this debt and wants to deal the whole country for dams, that's not our fault, it's theirs. They should have more responsibility with what they are doing with the people here. Not just with this dam, but with all the dams.

Why is there no authority, no tribunal that can grant an injunction stopping the Belo Monte project? At least while they meet the [socio-environmental] conditions. This [the project] does not stop! They just say it will, we know they are birds of a feather. Will the government fine the government? Never! They believe that we are illiterate, native Brazilians. We are aware that it's just a story: while they claim that it's stopped, the work is actually going on. I was there [at Norte Energia] working for six months and I never saw it stop, for nothing. It works 24-7. It's baloney! I cannot believe that Norte Energia has so much power! If we propose a meeting, they say that they are not the government. If they aren't, who are they? That is a question that leaves us hopeless, right?

MR – Who do you think 'they' can be?

LB – We know that Norte Energia is the government. We know. They deny it, but it is a government owned company. And these fake fines, we know they are fake. Let me tell you, what does 16 million [reais] represent to Norte Energia? We know they are receiving billions [the Belo Monte project currently costs 30 billions reais]. It's peanuts. 20 million, or rather 16 million, for them, it's peanuts. And where from is this money coming? Of what is ours. From here. And how about our rights? Where are they? There are not! Not even our parents down there, in Paquiçamba [Indigenous Reserve]... If you visit there, Manuel Juruna [former leader of Paquiçamba village] is my cousin, Agostinho [leader of Miratu village] is my cousin, Leandro, of the Arara people, he is my wife's uncle. All that is upsetting, when we see our parents' situation, trading rights for 'trinkets'. Rights cannot be traded, rights cannot be bought,

rights are rights. CCBM and Norte Energia built some roads and gave trucks, bass boats and houses to the native Brazilians. They say that these are the indigenous people rights. To trade rights for this?! No! These are not our rights, these are the duties of the government. We live in an area that just has this 'Indian Reserve' name, but its real owner is the government. Regardless of the dam, these are duties of the government.

For them [Norte Energia dn CCBM] it is a trade. 'Since we paid, we have the right to do this.' No, it's an injustice. They didn't pay anyone. Just like I said at my brother Dario's. He lived for almost forty years and brought up a family there, an orchard: açai palm, mango tree, nance, cupuaçu. They planted everything. It's said that they were compensated in R\$57,000 [about £14,000], for leaving the island that would be submerged by Belo Monte. I told him, 'brother, I know this is not of my business, but if I had, they wouldn't make me leave the island. And if they did, they would have to give me sufficient means so that I wouldn't need to work anymore. Because you had planted all that, you had taken care of all that.' They took the poor wretch from there and brought him here, to the RUC Jatobá, after Paratizão. They gave him a stretch of land and now he has to take care of himself there. It's not something you should do with a human being. 'You are here, do your best.'

Just like the guy of ATM TV [the local TV] said, we are prisoners [here in the city], we live inside our houses, guarded by bars, while the criminals live outside, free. That is what we would like: if someone came here and saw the situation of the riverside people, the indigenous people, the people of Altamira, what have become of our city. Why? Because of the dam, that destroyed us. In return, Norte Energia and CCBM want to 'improve our life'. How are they going to improve our lives? They finished us! There is no way to rebuild our lives, because you can't bring back what you took from us. No way. In case anything bad happened to us, we could rely on our river. And now? Now, it's no use they saying 'I will take you back beside the river, I'm going to build a house, I will...' And our living conditions? What's going to happen?

MR – You were telling me that what they took from you cannot be brought back. Can you give me an example of these things?

LB – All right, I'll make it clear. Our beach, it was our recreation. In June, period of vacation, that [river] beach was a joy for our family, to go there, to sleep there, to fish, to eat [what we fished], to bathe in a rapid. That streaming water... so beautiful, a marvel from nature. Our islands, they had such good shadows, where you could put hammocks, to see, to feel the wind of nature, to hear the birds singing. This is part of what they destroyed. How are they going to bring it back? You saw the beach that they build in posto 6? You saw the beach they created in Márcio Honório? It's a bog. They think it's awesome. What they call beauty we consider sadness.

MR – What is beauty to you?

LB – Beauty, for us, was the nature, what nature gives us. The birds singing, the green leaves on the trees, the clean running water of a river, a healthy fish. All of this conveys beauty, nature's creation, what keeps the nature alive. That's beauty!

It's no use to tell us that Altamira is beautiful now, that the dam is beautiful. Maybe for them. Altamira turned to sadness! To us, it's sadness, a very sad story. In 2012, when we occupied the cofferdam, quite close to where the dam is, I showed the Ciro Island to my son, Leonel, and I told him, 'son, can you see that island? That's history. Your grandmother lived over six years there... and it will disappear.' Nowadays, you get around there and you cannot know where it is. He is going to say to his son, 'son, according to your grandfather, there was an island around here, where your great grandmother lived. But this island no one will ever see again.' That's it. A sad and dreadful story in our lives.

MR – You think that this is another thing that can't be brought back?

LB – No, there's no bringing it back. Well, there would be, if our relatives, who live downstream, were taken away, and one placed bombs in that dam and ended with all of it, then our river would live again. Just like I say: 'our river, it isn't dead. I don't consider it dead. It's paralyzed, stopped, a part of it, paralytic.' It's like—knock the wood!—you've got a stroke and, you, who used to run, play football, start to use a wheelchair: you're not dead but you haven't got that energy you used to have. That's how we see our river: stuck, paralyzed, asking for help and... [starts to cry]... [silence]... unfortunately, there's no one to help... Unfortunately... that's how we feel it. It's very sad, one despairs, one cries, not out of joy, but out of sorrow. What could we do?... Up until now, we haven't seen any demonstration of our rights. What horrifies us is that when we look for our rights, police repels us as if we were criminals. I keep asking myself: 'God, in which country are we?' Some times I don't believe that we are in Brazil, such a democratic country and... is this happening to us? Many times we try to find out where we are, because we don't know anymore.

MR – You were telling me there was a community festivity every year?

LB – Yes, the São José Community Party. It was an old festivity, thrown by the late Zé Maria Preto. Every March 19<sup>th</sup>, there was the festivity. The name of the community was also São José. Every March 19<sup>th</sup>, local people used to go there. They used to come here, in Altamira, to take the priest. Arriving there, there was a mass. After the mass, they used to celebrate baptisms and weddings. We brought the priest back later on. Then we danced *forró*. But it was not exclusively on March 19<sup>th</sup>. Oh, no. We used to go there every three months. On March 19<sup>th</sup>, I used to ask them: when do we get to throw a party again? What day? Which month? And we would make arrangements to go there again, and to have the priest baptize and sometimes marry some locals. When there were no baptisms or weddings, we just prayed and come back home. And then the party would break up. June was holiday time. So everybody here, close to Altamira, used to visit there, an opportunity for organizing another party.

MR – When did Saint Joseph's community festivity start?

LB – Oh, it is a very old tradition. It's really old. I was eight-year-old when I got to the area of the Parati River, and this party was already going on. The late Zé Maria Preto already used to celebrating São José's Day. There is a long history. When he died, his daughter became the host. She wouldn't let the celebration die, for she'd inherited the genes from her old man. Whenever the Holy Week would fall in March, the festivity was re-scheduled to May - Either on March 19<sup>th</sup> or on May 1<sup>st</sup>. When the Holy Week was too long and not during Lent, we would end up celebrating it on March 19<sup>th</sup>. It lasted for so many

years, but ended in 2011. Things were getting rough back then. The festivity came to an end. And so did the community. A lot of people went away in 2011. They got some compensation and moved out. Some of them came here, to Altamira, others went to Brazil Novo [Altamira's neighboring town], or to Ramal do Coco or even to Kilometer 27. People spread across the area. It is like when you have a rice field and a flock of *chico pretos* [a species of bird] pecking at your crop. If you fire your pistol, the birds flit around in the field. That is how things happened here. You cannot get together anymore. In Odorico, there was a soccer field. So people had soccer tournaments right there, where they lived. Going down towards the Paratizão River, there was also a soccer field on the so-called Zé Maria Preto's Island. We played soccer and held parties on the island. We used to get together all the time, but these people disappeared. They disappeared from our family. Even their neighbors don't know their surroundings. We never got in touch again. It is now different, when you bump into one of them... Laurindo, for instance, who was from Arroz Cruz, a place close to the area where they built the dam, is currently in Vitória [Vitória do Xingu] and so on. There are others who now live near the banks of the Iriri River, up to RESEX [Reserva Extrativista–Extractive Reserve], far, far away. That reflects the way we are now: distant from each other. Since 2011, when they started installing the dam, everybody has gotten different, more worried, knowing about what might happen. There was already the Tucuruí dam, so we could exam the situation. Back in 2012 I went to visit the [Tucuruí] dam. I looked at it. I walked around there, talked to some families, faced the locals' situation and I knew from that point that our story would not be different. However we didn't think our situation would be this critical, did we? Because the Norte Energia used to tell us one thing: 'now, this is different'. They used to say that the *ribeirinhos* [people who live near the riverbanks] would still be close to the river. We would be entitled to bring our relatives to live nearby, to choose the neighbor we wanted to live next to us. This was just a story told by them... You see the situation we are in: my mother-in-law lives up to Bela Vista, almost 4 kilometers from RUC Jatobá. My son is in Belo Monte. How about us? Where are we? We are almost 4 kilometers away from the river! We were told we would live close to the banks, because we are *ribeirinhos*, we are fishermen. At the end of the day, we ended up here... We knew that nothing good would be expecting us, no one ever expected something good from this dam. Farmers and tradesmen placed value on this dam, because they would make large sums of money. Currently I see a lot of tradesmen failing and farmers lamenting. I used to tell them 'I feel pity for you because I may suffer along with you, but you still don't know this'. Now they are facing the consequences!

MR – Did you actually see the islands being cleared or drowning?

LB – I remember the first of them, the Taboca Island; then Maravilha Island, Forno Island, João de Barro Island. These are far down. Going up to this area, where Paratizinho and Paratizão [areas] meet, there are Lei Island, my friend Iran's island, the one where my grandma lived–named Negona Island, Alaíde island, Ramiro island—which is Maçaranduba Island—also known by others as Cinésio's Island, the other island where my aunt Miúda lived, and Haroldo Island, Orlando Island, Mangueira Island and Capacete Island – which is, in fact, the Arapujá Island. These are in the area near Paratizinho and Paratizão, and the other four going down from here in the area nearby the dam: Taboca Island, Maravilha Island, Forno

Island, João Barro Island; and nine islands up here stretching from Paratizinho and Paratizão to Arapujá [Island], in a total of thirteen islands. No! Fourteen islands, fourteen! Because there is an island very close, where there were cocoa fields. It was also cleared. Fourteen islands. From all of them, there is nothing. Everything made of wood was cut off. There is nothing left. We sort of believed that only the islands that were nearest to the dam would be deforested. But they [Norte Energia] came here and deforested the other nine islands, such as they did on Arapujá Island [which is in front of Altamira's quay]. They didn't deforest just everything in Arapujá Island, because it sits in front of the city [Altamira]. As I said 'when they get to Arapujá—known by the locals as the Helmet Island—we might see how far they go'. They completely cleared one side of the island. But they didn't finish it off, because they were under everyone's nose. So they left that side. However, why leaving that side? They should've deforested everything, because the trees will eventually die [due to the dam].

MR – How were those islands cleared?

LB – By machinery, they used heavy equipment such as tractors and excavators. Those machines dug in and removed any piece of wood. It was able to cut any length of timber and then drag it. They also cut some with saws and piled up the timber on the island coast. Then they loaded it on the ferry that then transported it to the dry land. From this point, they took it to somewhere unknown to me. They set fire to the discarded wood. They had it all: machinery, trucks, everything they needed was available on those islands. That was one thing we never saw coming before, but unfortunately we did. They face no hindrances. It was the easiest thing in the world. Now, to build a road for us, oh, no, they cannot do it! Planting cassava or beans, anything indeed, requires a license from IBAMA [Brazil's environment regulation agency], otherwise we get a fine.

I never took a picture of that [of the islands being cleared], because I didn't have the camera. That thing happened before our very eyes. They deforested the islands. We saw it all. It was not a story, it was true. What did they do? Why did they do it? Why did IBAMA let them do it? It's a complicated story. We don't fully understand it...

MR – You were telling me they cut the biggest trees without any constraints and burned the smallest ones?

LB – That's right. They piled the trees up, sorted them out and set fire to them.

MR – Do you remember what kind of tree there was in those islands?

LB - On those islands there were specimens of *samaúma*, rubber trees, *abiu* trees, *camurim*, *piranheira*, Brazilian firetrees, *pequiarana* among others. They were all fruit trees, and the fish fed on them. So did the rubber trees. The rubber was part of our lives and promoted the sustainability we needed. We took great care of them and they are all gone. All those islands had all those types of wood.

MR – And these tree trunks are as thick as this size? [I provide an idea of diameter using my hands]

LB – No way! They were mostly hard woods, really thick trunks. The rubber tree isn't exactly thick, but it can reach a length of up to 3, 4 meters [circumference]. I mean, those are the thin ones, because some get really broad. The *melancieira*!!! God forbid! *Samaúna* reaches a width of 12 meters. They are large! *Ibiurana*, *faveira*, *golozeira* go on the same way. All of them are massive. They cut them as they were

mowing the lawn. They went to one of these islands and operated five, six, seven machines like that one [Aronor points out to an bulldozer parked up on the street]. It all happened within a month. They devastated these islands, for they had plenty of machines. It was like a plague. I told my boys and my wife, 'my dear, there is a passage in the Bible, in the Apocalypse, which says that in the end grasshoppers would come and would destroy everything. The grasshoppers are these machines. Bastards! They came here with their machines to destroy everything we had. This all we saw.

LB – You know, Belo Monte came to our city and likewise Norte Energia—which is a public company—it said, 'Go there and do it! Come what may, whoever dies, just go there and do it'. That's what we noticed, because when you claim your rights, when you file a lawsuit, you get an 'in progress' as an answer, because this process is really, really slow. Now, as far as Norte Energia, it's not like that. So there you go. In 2011 they started to build the dam and it's already in operation now. What were the conditions imposed? Are they fulfilled? No, they're not. You know, that's just the beginning. On November 24<sup>th</sup>, it will be one year since our river was dammed. Within one year, the Xingu River will not be opened again. No. It will still be a dammed river. What will it be like, within five, ten years? Our situation is already difficult. It will get worse if we don't take action. I get seriously worried about this situation, but we see that the time will come, when everyone will be ready to fight. We must fight. Because we won't let them infringe our rights that way. We are well aware of our rights. We don't want to fight, but we have to do it. It's a lack of respect! When we claim our rights, they call the police to kick us out there. What kind of justice is that? To me, this is not justice, it's injustice, because we are out there only to claim our rights, claiming what is ours. We are not asking the government for anything, we only want what is ours.

MR – When you think about all the things that you saw, the things that happened, what you experienced because of the Belo Monte dam, how do you feel? What goes on inside of you?

LB – Wherever we go, we have no rights at all. That's how we feel. We have some resentment over something we never expected, never. What we do feel is this: our rights were denied; they showed us a lack of respect. You know, this growing resentment gives us a feeling of despair. As you can see, we must cry to pour out our hearts. It's good when we find someone who listens to us, so that we can pour this thing out. We are desperate. The resentment, the indignation is really high, our rights were denied. Something was taken from us and, to make things worse, they keep laughing at us.

MR – And how do you feel regarding the environment in which you were raised?

LB – Absolutely! We have strong feelings about nature being equally hurt! So we feel sorry about it. When we enter the jungle, when we go to the river, when we see those trees being cut down [due to the dam], they are also suffering, just like us. I am sure nature is suffering the same way we are.

MR – And, Aronor, if you had to define nature, what is it to you?

LB – The word nature... To me, nature is, I don't know how to put it, because I am... well, people say "an illiterate person", but nature also means our life. Our life is nature. To us, nature is living together, it is the love we have for the jungle, for the river, for the water, for the fishes, for the animals, for everything, for the land. That's nature: the love we feel for everything.

MR – What does the Xingu River mean to you?

LB – It is a mother. To us, the Xingu River has always been a mother we used to hug and where we could find an exit. Most times, I think, sometimes, I dream about having our mother back. There's nothing difficult to God. I still dream about this. Once or twice I dreamed about contemplating our mighty river, watching our relatives looking happy. I wish it were all true. But who knows? Is it difficult? No, it's not. To God nothing is impossible, folks.

MR – What your dream was like?

Aronor – I have this dream where all the dams burst. I'm worried about my relatives who live downstream, but nothing bad happens to them, nothing at all. The wall of the dam breaks on both sides, it crumbles to pieces and comes crashing down into the water, but we're shouting, happy to see our beach, our river, everything the way it used to be. I've had that same dream twice now. When I see and hear it breaking – it's such a loud noise – I see the water [from the reservoir] dry up suddenly. So we run over to see and it's just the noise of the current flowing down. In the dream, we see everything get carried downriver: lorries, everything, it all gets washed downstream, destroyed, and then I remember my relatives. I say 'my God, what about them?' But then, suddenly – because in dreams everything happens quickly, right? – we're all together, happy, hugging each other, and we can see our environment alive again, our river, beach, fish and everything. And who knows, maybe one day we'll see it for real?

There are times when we get desperate, but we need to think positively. We cannot focus on the bad stuff, because being surrounded by bad things is enough. We must breathe and ask God for better days, for good things to come, giving that, since 2011, we have seen only bad things coming our way.

MR – I want to thank you, Aronor...

LB – You're welcome.

MR – Thank you for your words, for your memories, for the things that you have said. If there is something that I haven't asked you, but it matters to you, you can talk about it now.

LB – No, there is not. I think I said all I needed to say. I also say thank you, because, as I said, talking about this brings some relief, it eases our pain... talking about it helps raise awareness about our situation, about the suffering we have been enduring. Your coming right here, before us, eyeing this, allows you to believe in us. If you weren't here, you may have said 'Oh, no! I don't believe this is happening!'—seeing is believing.

**Interviewee:** Maria Eliete Felix Juruna, 37 years old, teacher, Yudjá/Juruna ethnic group

**Date:** 06.11.2016

**Location:** Paquiçamba village (Paquiçamba Indigenous Reserve)

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Marilene Ribeiro (researcher) – Were you born here, Eliete?

Maria Eiete – Yes, I was born here.

MR – And who is your father?

ME – My father is Manuel Pereira Juruna.

MR – What is his role in the community?

ME – My father is the leader of our village. He is the oldest person in our village. Yet, nowadays my brother, Marino, is taking this role, my father has passed this role on him.

MR – And what's your role in the village?

ME – I'm a teacher. I run the elementary school–classes for the children. I also take part in the projects of the community.

MR – Was your father also born here?

ME – He was born not exactly in this site, but in a place quite close to here, by Jeriquá, where the villages used to be located at, in the old times.

MR – Then, you've been always in this region, by the Xingu riverside?

ME – Yes. Always.

MR – How did you get to know about the [Belo Monte] dam?

ME – I first heard about this dam a long time ago. I was still a child when the protests began. My father took part. People said they were going to build a dam called Kararaô, that the land would be flooded. But then it seemed it wouldn't be built. About 30 years went by without a decision. Around 2010 more people started arriving in the area. The FUNAI [National Indian Foundation] came and told us it would be bringing in a team to conduct an assessment because the dam was going ahead. My father said to us, 'It won't happen. They've been saying it will go ahead for ages, but it never happens.' 'Really?', I replied, 'It looks to me like a lot of people are coming here...' But he said: 'No. It won't happen.' Things continued like that, with people appearing from time to time to do assessments, study the [wild] animals and the fish. When we realized, it was already happening. [...] FUNAI said, 'now we need to listen to you [to the indigenous groups that lived within the area to be affected by the Belo Monte project], we need to know the way you want this to happen'. So, the political thing started: Norte Energia [the consortium in charge of the Belo Monte dam project] affirmed things would become better for us with the dam; but there were some groups who tried to warn us about what would come next, they said they had experience with this thing of dams and what Norte Energia was offering to us would not last.

'What will happen?', we asked. 'Will the river run dry?' Then Norte Energia replied, 'if the river runs dry, we'll build a road for you. You'll be able to come and go by car. Things will be much better.' People began to believe that things really would improve. [...]

It was all very easy for them. When Norte Energia officials arrived, only one or two, maybe three families had motorboats. So they started offering us boats. We'd never seen anything like that. People took what they were offering. It was great! The water level was high enough to use the river. But now, though we still have the boats, they're not much use because the water level is too low. You need small boats now [to navigate the stretch of the river of the Volta Grande do Xingu]. In the year it all started, in my opinion, they gave presents to the indigenous to keep them quiet: speedboats, community cars,

roads, improvements, all kinds of things. They made it all easy. In that first year, everybody was happy! But really the company just wanted to get on with the work and keep the indigenous peoples quiet. [...]

When the meeting with the company representatives was held in the village, the entire community took part. Even if the meeting was in Altamira, we would get organised and all headed to the Casa do Índio [the indigenous centre, located in Altamira city], where people from the different indigenous ethnic groups gathered for the meeting. If each group took 10 or 15 people, there would be a big crowd and the company representatives were unable to make their case. Someone might say: 'the project is fine', but then someone else would always get up and argue the other way. The discussion would go round and round. This all stopped because Norte Energia decided to start negotiating with people individually. They said, 'we're going to hear what so-and-so has to say' or 'we're going to listen to each leader in turn' or 'we'll go to see such-and-such a leader, in their village. This way, we can each say what we have to say. At the moment, we're having trouble making you understand that the [Belo Monte] project really will be a good thing.' As far as I'm concerned, we were screwed from that point. Because it's different: having a meeting with the community is one thing, but talking to just one or two people at a time undermines the group. Their people have been trained to talk to you, to make you think how they want you to. And that's exactly what happened. They started to meet each group separately and then each leader in turn. That's how we ended up losing control. [...]

Our leaders, the *caciques*, were always older people. They decided everything. My father was one of them. They couldn't read or write, they couldn't understand the technical terms that Norte Energia used. So, what happened? After being approached individually, they said that Belo Monte would be good for us. Norte Energia realized it was on to something and started to manipulate them. They even persuaded them to sign documents. The leaders, including my father, told the community, 'this is going to benefit us', and the community believed them: 'if the leaders say it's good, considering they've looked after us their whole lives, then it's going to be great!'. It was people from outside [e.g. from CIMI, ISA, and MXVPS], who were more aware of what was going on, who warned us about the dam. My opinion, as just one member of the community, a teacher, didn't count for much in comparison with that of an older leader. [...]

Our people used to live together in just one village. Now we have three, because people were upset they weren't being listened to, their opinion were not being taken into account. It used just to be Paquiçamba. Now we have Miratu, Paquiçamba and Furo Seco. The same thing happened to other groups, like the Xikrin. Their village has also split into many ever since. So, Norte Energia would speak to these new villages' leaders and give its 'presents' to them too. That wasn't so bad after all, was it? They got a boat to go fishing, they could get on with their lives. And what about a road into the village? They could learn to drive. They would have their own community car, a wagon to go into town. The villagers couldn't even ride a bicycle. Suddenly, they started driving trucks, or boats with a 90 or 120 [horsepower] motor! [...]

What happened after they built the road? More accidents. It became easier for people to come here. It was easier to bring drink in [the Indigenous Reserve]. Easier to bring anything in! Things might seem

attractive, but they can also come with a lot of problems. By the time the indigenous people woke up, it was too late. [...]

MR – Did your father mention what they [Norte Energia officials] spoke about in these one-to-one meetings?

ME – When they started talking to people individually, my father didn't take any further part. He was involved at the start, but said, 'I can't do it.' He was very open with us, 'I don't understand it. I can't read, there's so much we have to read, but I can't read, my daughter, it's no use.' Then, he asked my brother to participate of these meetings.

MR – And did your brother mention anything about these meetings?

ME – He said that Belo Monte would improve the village's situation. He said that Norte Energia had promised a health centre and a school. There would be qualified staff, doctors, new housing. But we [the community] asked, 'what about the river? What are we going to live on?' He replied, 'they will see to it...we'll have plots of land to plant cacao, they'll help us set it up. We'll be fine.' We used to have small plots, which provided enough food for us. It was great! The boys fished in the river and sold the fish. There was no need to chop any trees down. The plots were small but big enough to make sure we didn't have to do any shopping in town. Not now.

MR – And how are things going now?

ME – You can see now that we have a tractor in the community, making new plots. Planting cacao is new to us. Nobody has any experience of working with cacao or poultry. Things have been going badly for four years because the cacao dies. We plant more and that dies as well. We don't know what to do. Because we've no longer been fishing because the river level is too low now, then we don't have many fish left. If we carry on fishing soon there will be no more fish, not even for us to eat. They [the officials responsible for income restoration projects for indigenous groups affected by Belo Monte] say that they will provide technical support. We now have plantations and asked them to provide a tractor. When they come at the right time, it's fine. But they sometimes get everything wrong, send all the wrong things, or send the tractor too late. We sit there waiting for it and end up complaining to them. We've had years when we haven't grown anything. Because everything has its own precise timing when it comes to crops, right? And we know that. [...]

MR – What do you eat in these years you don't manage to grow anything?

ME – Cassava we're still able to harvest, it's more resistant. Other things, like corn, watermelon, other things, we didn't manage because sometimes they send the seeds to us at the wrong time, they arrive late. Cocoa trees are always dying, we haven't managed to see them growing yet.

MR – Does your brother have any thought about this?

ME – He now understands that, although the road might have been a good thing, it also did a lot of harm. I used to feel relaxed because the community's young people used to stay here. They used to take the boat to go into town accompanied by their mother or father. Not now. They buy their own motorbike. When we think they're in the community, at home in bed, they're somewhere in town, or in a local bar, drinking with other young people. It happened with my nephew recently. His mother and I

went to a meeting with Norte Energia in Altamira and he stayed here—at least we thought he did. But actually he was in town with a motorbike—and he was underage. Someone rang us to say he was at the police station. I said, ‘that’s not possible! He was in the village. How come he’s there now?’ That could never have happened before. With the road, we’ve lost control over our young people. The road also brought poachers. They wait for nightfall and then come to hunt. I bumped into one. It used to be more difficult for poachers to get close to the village. They would hunt further away. It’s not practical to go all the way into the forest. But the road has made their life easier. We also have a problem with fishermen who trespass on indigenous reserve to fish. The game is going to move further away and even if it doesn’t disappear, I think that things will soon be difficult now that the road goes through indigenous land. If we have no way of monitoring, no way of controlling who comes to hunt, then over time, it will become difficult. We depend on hunting and fishing for our food. [...]

MR – What kind of animals do you use to seeing around here, in this woodland?

ME – There are pecari, *catitu* [another species of wild pig], *paca*, tapir, deer, there are many of them. There are monkeys –*guariba*, capuchin, *soim* monkey, the big monkey too, the *mão-de-ouro*. Sloth, tortoise.

MR – And jaguar? Have you seen jaguars?

ME – Yes. There are them all, the black, the red, and the spotted jaguar. Also, the wild cat, the black one and the *maracajá*.

I’ve explained this to my brother, if we carry on growing cacao in big plots, we’ll have to chop down more trees every year. What will happen then? There will soon be no animals to hunt and the forest will be destroyed. We can’t go and fish in the river. There are no fish because the river is dammed and the water level is low. Cutting down more forest for plantations would mean we have completely lost control. We lost the river, now we’re losing the forest. One thing leads to another. [...]

I mean, the landscape now is already completely different of that one it used to be. I feel sad when I start thinking that I won’t see this landscape again, that my young son, who is three years old, will only be able to see what the landscape was like by looking at photos, videos and films. I feel hopeless, desperate when I think about it. I try not to, but it’s impossible, because it’s happening right in front of me every day. There have already been a lot of changes this year. Every year, we go to the beach [on the river]. I don’t know what has happened to the *tracajás* [yellow-spotted Amazon river turtles]. They didn’t lay their eggs on the beach. Everybody said: ‘whatever happened to the turtles?’ Things have changed incredibly quickly. There are very few eggs. This is the first year that we’ve seen that happen. My father is 76 and he says he’s never seen so few eggs as this year. [...]

MR – You were speaking about the deforestation in your area and about how the [Xingu] river has changed. How was the river before [the dam]?

ME – The [Xingu] river, by this time of the year, before [the dam]... Wow! It would be full of water. November, December, it would be really full of water. If I close my eyes and think back to how things were in Xingu... a lot of water; strong currents, at this time of year. It could be dangerous. I’ve seen the river really high. We had to be very careful when we went swimming. Not now. It’s dried up. There’s a

big difference. Now it's the same as it is in the summer, June, July: lacking in water. Yesterday we got in the river to fish. My father-in-law looked at the fruit falling on the sandbanks [instead of into the water] and said, 'do you remember? It was by this time of the year that we would catch the *couro seco* [species of fish]'. He carried on, 'in the morning we would catch the *pacu branco*. By noon we would catch the *pacu*—which is the *pacu preto*. Below the same fruit tree... and, now... all these fruit falling on the sandbank... fish will...' The fish we eat most here is the *pacu branco*. I think there will be none left in a few years because it only feeds on fruit. The guavas, *golosas*, camu camu and all the other fruit fell on dry land this season. There were no floodwaters for the fish to swim into and the last guava will also fall on dry land. This year the *pacu branco* have already been very thin. They're hardly even worth eating. [...] We picked the fruit that hadn't fallen into the river. We used to have to go with the boat to place nets on these sites, but this time we were on foot. [...]

Now we barely use the river to get into town [Altamira]. It takes too long now. We used to do it in four hours but now it takes nine or ten. [...]

The river is going to stay low. Things would be different if only a few people were fishing, but people from town are coming to fish, so at some point they'll run out. That's the situation. You might think I'd be happier now, I have a better school. No. I'm not happy, because the school they built won't replace the livelihoods that have been destroyed. No chance! We might be able to hold classes there, but before we held classes all over the place, underneath the trees and so on. It was fine. [...]

I felt sad the other day. My father almost cried. He had gone fishing and brought in a big catch. He was happy, but then I went over to speak to him. 'Dad,' I said, 'you know you shouldn't be so happy, because you can't carry on fishing like that.' 'Why?' he asked. 'The fishing isn't as good as you think,' I said. 'It's only because the river is so low and the fish have accumulated there, in that pool.' He'd caught over a hundred fish in his net. 'When you go back there, there will be fewer and fewer fish because the water level won't be high enough for them to reproduce. For now, there are still fish, so it's logical that it seems like there are lots at the moment!' He said, 'you mean I won't be able to fish again?' I said, 'not like this. You'll have to stop.' He looked downcast, almost cried and said, 'What am I going to do for the rest of my life? I've fished all my life. I raised you by fishing and selling what I caught. Now you're telling me that next year I might not be able to catch so many fish?' I said, 'that's what I think. Maybe before next year. Maybe this year! You won't be bringing in fish like this.' He looked very sad. My father fishes every day. That's what he likes doing. He sets out in the early morning and brings back enough for everyone [the 25 families of the village] and sells the rest. [...]

MR – I'm wondering here about the water level you spoke about. When they release the water from the dam, upstream, does the water level rise quickly or slowly down here?

ME – It rises abruptly. One time, the reservoir was very full and they released a lot of water all at once. Some of our boats were swept away. My father was fishing on the river and he had to get back quickly. I don't know how he managed it. It was dangerous. My husband was with my father—they fish at night. They were laying their nets and the river suddenly rose. They had big trouble getting back to the village. When they arrived, several boats that were moored on the riverbank had been swept away. We lost a

lot of things. When morning came, I was in town, I had gone to school at the weekend. My husband rang to tell me what had happened. He told me to go and ask Norte Energia what was going on. When I got there, they said they had already sent someone to the village. Because they realized the damage they had done. They came here to see what had been lost and said they would replace everything. However, they didn't buy quality things. Anyone who lost anything thought that what we had lost was better, though Norte Energia tried to convince us otherwise. There was that fatality at Miratu. I know this kind of thing can happen, but I think Norte Energia was to blame. The people lost their compressor [from a kind of breathing device used by local divers to dive and catch the aquarium soecies of *acarí*] when the big wave came down the river. When Norte Energia replaced what had been lost, they bought the wrong tube. My brother never used the tube they bought. The residents complained as soon as they received the things. They said, 'this is the wrong tube for fishing.' Norte Energia said, 'but this is what we've bought. This is all we've got. The other one is more expensive.' They always went for the cheapest option and we couldn't do anything about it because we're poor. But we know that diving in that way is dangerous, and Jarliel, [a fisherman from Miratu] died when diving with the compressor. When I rang [people from Miratu] and asked, 'what happened?' They said, 'the tube broke.', 'the one you complained about?', 'yes, the one we said was no use.' They knew all right. [...]

The river is like a stranger to us now. I think about the boys who go diving. The currents are different now. One day the water level is low. The next day, the dam releases water and that changes everything. People think they know the river. Not anymore. The currents have changed and it has become dangerous. [...]

MR – You spoke about the event you went a couple of weeks ago. What was it about, Eliete?

ME – Yes. It was for us to discuss the dams. From here, it was me, Jarliel—the guy who died, and other people from other ethnic groups. Various groups went. We met in Palmas [capital of the state of Tocantins] and we all gave a statement. Everyone had something to say. There were those who were facing the beginning of the process of the dam building, there were those who had experienced the dam in the past, and there were us, who are in the middle of the process. Listening to the others, it seemed like what was happening at Paquiçamba was happening elsewhere. I have visited very poor communities and it was sad to see them because wherever they put up a dam, the people in the area are poor. There were a series of statements. As I listened to those statements I thought, 'it's the same as the [Belo Monte] project on the Xingu! The same thing is happening! There's absolutely no difference at all! Different groups, different people, same story. They [those in charge of the other projects of dams] are telling them the same things they told us.' It's logical that they will do the same thing they did to us. They will listen and then speak to each group separately, each leader separately until they get what they want. Our role was to warn people about this strategy. I don't blame our leaders; their people have been very well trained to persuade you that this is a good thing. Our leaders only have experience of dealing with their own people. They've never dealt with anything like this before and so it's very difficult. [...]

I remember, I used to go to the collective meetings with Norte Energia, at the beginning [of the Belo Monte project]. Norte Energia used to say, 'what have these people ever given you?'—meaning the people from the indigenous movement, the CIMI [Indigenous Missionary Council] and I don't know who else [like people from the social movement Xingu Vivo para Sempre—MXVPS, and the Instituto Socioambiental—ISA], 'what have they ever done for you? Nothing! They only want to hold things up. Have they ever given you any boats? No? I don't think so!' True, they didn't give us anything. But neither did they take anything from us.

**Interviewee:** Juma Xipaia, 24 years old, leader of the Tukamã village (Xipaya Indigenous Reserve) and vice-president of the District Council of Indigenous Health - CONDISI

**Date:** 27.10.2016

**Location:** Altamira city

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Juma Xipaia – I'm from the Tukamã village, from the Xipaya people. Now I am chief, it will be 10 months since I took over the position of the leader of my village. The village lies on the Iriri River, which is tributary of the Xingu River. It is towards Mato Grosso [state], going up[stream].

Marilene Ribeiro (researcher) – And from the Pimental dam [the main dam of the Belo Monte dam complex] to your village, on the motorboat, how long, do you reckon?

JX – It depends on the season of the year. Because, if it's winter, it's going to take about two and a half days that way. If it's summer, if you leave Altamira directly, 3, 4 days or more. It depends on the load, the pilot and the unforeseen conditions on the way, because at that time it is very dry, right?

MR – So it's really far.

JX – It's really far. It is one of the most distant villages.

MR – And what size is it? Does your land have boundaries?

JX – It does. 178 thousand hectares of land.

MR – How many families live there?

JX – 21 families.

MR – And when did you hear about Belo Monte?

JX – Well, I heard about it from a young age, not Belo Monte, but Kararaô, right?—that was what we heard about. Belo Monte, more precisely, was in 2007. I came here to Altamira in 2005, at the end of 2005, in December, so I did not hear of it before. Now, from 2007 onwards, that's when we heard about Belo Monte, we already had Eletronorte here, which today is called Norte Energia; so that was what we heard about more intensely and we began to understand what it really is, what Belo Monte was, right?—that it was the dam. Until then, you only heard about it and did not know what it was.

MR – And who gave you the news?

JX – We learned about it from the movement, the Xingu Vivo [Xingu Vivo para Sempre Movement–MXVPS], which I approached. I began attending meetings as well, but before me, there were other people already participating, other Indigenous people, of course, who had been following this fight since I was a child. Because we know that this Belo Monte [dam] is very old, but wanted to know more clearly, to know the size of the venture, the impact that this would bring, participating in the Xingu Vivo meetings and traveling to other places, like Brasília, Rio de Janeiro; and other people coming here from ISA, from other movements, from other organizations, explaining, explaining what Belo Monte was to us: a large hydroelectric plant, the third largest in the world, and explaining its impacts. The size was a surprise, we never imagined that it would be so big. So it was from 2007 that we began hearing things more intensely, and really think, ‘no, will this really happen?’ Because, before, I heard only talk and thought it was something that would never happen. But, suddenly, it arrived.

MR – And how did those stories get to the [Tukamã] village?

JX – The stories arrived by means of people, like peddler, when they came to sell their products, to buy Brazil nuts, it was through them that the information, news on Kararaô [dam], arrived. And since there was a *garimpo* [gold prospection site] inside the IL [Indigenous Reserve] Kuruaya, which was operating at the time, there were a lot of people around, so that information ended up arriving. Only we didn’t know—as I said earlier. It seemed like it was something that was never going to happen, ‘Ah, no, it’s only people talking’ and, as I was saying, from 2007 on, the talk intensified, it was no longer Kararaô but Belo Monte [dam]. We even thought it was another venture, but we came to understand that it was the same enterprise only that it had just changed its name, right, that it had changed its name and that we came to know the whole structure of the enterprise, the impact it would have on the region, and we got involved in this discussion. I was 15 years old at the time, when I started to attend the Xingu Vivo meetings and traveled and went to really see what a hydroelectric power plant was. It was much more than we’d heard of, especially when it came to the impact.

MR – Today, almost 10 years later, that the venture is almost completed, what do you perceive as its effect on you, there in Iriri [at the Tukamã village]?

JX – The effect we felt from the beginning, even before the damming process, when tractors placed the land strip to divert the river [the *ensecadeira*], we already felt this impact. Not indirectly, but directly. When the process started, from 2007, that was already reaching people here, in the [Altamira] city, right? So, everything was changing overnight, and with that, there was already a first impact: the arrival of many people here and, with that, diseases. Because we [people from the village] would come to the city, it turned out that some viruses we would get here were different, we didn’t have them here, we were not used to them, we didn’t have the antibodies [for these new viruses], we ended up acquiring and taking them into the villages and these were diseases, influenzas. Yes. It was one of the first impacts we suffered. So there was this situation. Other than that, there was another, even greater situation, which was the demobilization of the indigenous movement that was being created at the time. Because we heard about Kararaô—then Belo Monte, that it was being planned, an attempt of an indigenous organization started. It was to fight for the rights, for the defence of our territories and to this process

to be participatory too, for us to know what was happening. Because we are living here in this space, which it is being occupied, where this is being discussed, where the third largest enterprise in the world is being built and we are not being heard, right? So that was one of the biggest direct impacts, because there was no free and prior consultation—as stated in the Brazilian Constitution—to the indigenous peoples to be affected by this venture. So that was one of the first impacts, that we felt right away, because we were not heard at all and we wanted this right to be respected. So we started an organization, a movement, trying to be heard, trying to participate in this discussion and, of course, that was denied. Then, a whole process of leadership coercion began, and a rift within this little indigenous movement that was starting to thrive happened. That was another impact: the division of the peoples. Today we see them re-approaching each other, but at that time, more precisely in 2007, 2008, 2009, until 2010, there was a process of division, that is, dividing to conquer. And that's what they [the consortium responsible for the hydroelectric project] did. Because we knew and heard speeches like, 'look, you have a great power in your hands, Belo Monte, will only happen if the natives want to.' I'm tired of hearing this. And it does not depend on the indigenous natives either, because how are we going to prevent a process, an enterprise, something so big, so serious and full of impacts if we do not know about the entire process, if we are not a part of it? So it was difficult to say anything, because it was too much information in a short time. Then, what happened: immediately after that came the call, the Emergency Plan [PEPTI<sup>3</sup>], which then made this process of rift even worse, because it [the goods] went to each village separately, and each village had a different process of treatment; so, many village leaders began to fight for self-interests and not for the ones of their communities. Then the process of split and conflict, especially within communities, intensified [with the PEPTI]. These were some of the most direct impacts within the communities: disrupting many of them and setting a precedent for the the opening of new villages, which was another impact that we are still suffering from now.

MR – Did the Xipaya suffer this issue concerning the split?

JX – No, no. In the Xipaya Reserve we only have two villages: Tukamã and Tukayá. Tukamã, which is older—which is where I am a part of, I am the leader, and Tukayá, which is newer, but not because of Belo Monte, it was already there [by the time the Belo Monte project started]— just its acknowledgment as a village that came later, but that [split into two villages within the Xipaya Indigenous Reserve] was prior to Belo Monte. But in other Indigenous Reserves there were significant village creations and we know it was because of the Emergency Plan [PEPTI], where many leaders wanted to self-benefit. I think not only self-benefit, I think that's the wrong word, but this whole process, it was not explained, there was no accompaniment with us Indians, so it opened a precedent for several things [to happen]. So, each one wanted his own—not generalizing, small isolated groups and that's it... And there were other conflicts because people, many did not agree [that the Belo Monte project would happen]—usually the older ones, whereas others agreed. Then, 'since you don't agree with me, let's split [our people into two villages].' It was not only regarding material goods, as many say, with this issue of the Emergency Plan, there were other issues, including that of the movement, to say that some wanted to fight against the

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<sup>3</sup> See Chapter Four for details on the PEPTI.

venture, whereas others wanted to accept this process [the Belo Monte project], and even others did not want to take part in this discussion, they just wanted to continue in their villages, leading life peacefully. Then there were these cracks. Yet, much today is confused, people say 'ah, many villages were divided only by the issue [due to the Emergency Plan]', but it was not only that reason that made communities to split. This issue of the Emergency Plan was one of the impacts that caused the division of the village, but there are so many other issues that even we don't know about. [...]

Today we are 51 villages altogether here in the region. So it's a lot. And each one, no matter how many of the same people are they, has different needs and conflicts that also generated this division, not necessarily because of the Emergency Plan. Because of this, the criminalization of the indigenous peoples—which is very serious and happened because of Belo Monte—still persists, mainly due to the issue of the Emergency Plan, 'ah! Indigenous people today, each one wants to his or her village a motorboat, a car, to sell, because natives, today, don't walk anymore...' All this criminalization, and even threats, coercion—in fact, so many things—are part of a violation to our rights. So people used much of the Emergency Plan to criminalize and generalize the indigenous peoples, unaware of the real facts that caused such splits, which sometimes had to do with other internal conflicts, often, not on account of Belo Monte—although most were. So, we have to look at the situation more carefully. Today, I can see this clearer. At that moment, I couldn't, because it was so much going on at the same time, it was so much information and, especially, demonstrations to be conducted; so we could not stop and think, analyse, understand. And, on the top of this, I myself was in a very tense moment. Today I can make that observation, I can see this and understand this process of the division of the communities, while 2, 3 years ago I could not. So, there is a lot more inside, which is part of what we are learning and discovering every day, and realizing that it was not only because of the Emergency Plan, that it was not only because of Belo Monte, but because of this process as a whole.

MR – You told me that the Indigenous peoples were also threatened.

JX – Yes.

MR – By whom and why?

JX – Well, this is a very delicate subject, because we know that you cannot accuse anyone without proof, but you know that there were, and that there is still, this thing of the threats. [...] We don't know directly what threats, but we know that they existed and were really serious. At that time, I was still here [in Altamira] and I followed the case of Zé Carlos, from Terra Wangã [village], from the [Arara people] of Volta Grande, the Arara do Maia. At the time, he had to walk around with a bodyguard, even if this was only for coming and going from his village. He started to no longer attend meetings and demonstrations. He had to get away from everything. We don't know the real reason—also because of security reasons, we only know that he turned away from everything. Up until then, he used to be one of the most active leaders, strong, the one that really spoke up. We noticed the change. Of course, he would not walk away like that, out of the blue, and would not also walk around with people doing his security, bodyguards, if nothing was happening, such as threats, right? So we don't know the real reasons, but know he moved away from everything. Now, recently, he's coming back a little more, but

very different from what [he] was before. Then there were other cases as well that other individuals had to stop [to get involved in the struggle] a little. So, there was this demobilization inside the movement and, we know, this is a delicate situation. I see this as a minefield which we have to know where to step, and, especially, who we're dealing with, so it's a bit tense, right? But it was these and also other things that I would not like to talk about.

MR – You were telling me about the flus from the people who came to [Altamira] city. Did these flus exist in the area before Belo Monte?

JX – There were cases of the flu, but nothing compared to what we have today. Now, recently, we had more than a hundred children hospitalized both in the municipal hospital and in the regional hospital, where the most serious cases go, and then, the H1N1 influenza came to the villages. Then, on the Iriri route, there was one death, three deaths on the Xingu route, and on the Bacajá route, 14. All children, all with this strong flu that we did not know about. Our drugs used to have an effect. For this type of flu that we have today our medications are almost nothing, they have no more effect. [Because] They are other viruses and we do not know how to deal with them. So, of course, it was because of the arrival of other people. Because even today, within the villages, there are a very large number of workers—in the school building, the BHU [the Basic Health Unit] and other buildings within the villages that people are constructing, there are workers who are not indigenous, right? And some of them are not vaccinated, despite the recommendation and the fact that it is stated in their contract that every employee should be vaccinated. But we know that there are people inside, who come to the villages, who have not taken any kind of vaccine.

MR – And these people who went to work in the villages, they went because of the BEP [Basic Environmental Plan<sup>4</sup> of the Belo Monte project], or not?

JX – Yes, it is because of the BEP, which stated as part of its actions subjects concerning the indigenous health program—which included the construction of the BHU [Basic Health Unit], right?—and the indigenous education, which included the building of the school. This was one of the [socioenvironmental] conditions of the BEP: providing infrastructure within the villages.

MR – So these people [workers] got into the village by means of the companies that were nominated by Norte Energia to accomplish these [socioenvironmental] conditions.

JX – Yes. Outsourced companies were contracted to carry out the actions of the programs within the villages, construction of schools, houses, canteen, aviaries, everything regarding construction within the scope of that project [the BEP]. People are hired, outsourced contractors are hired to carry out these activities, that is construction inside the villages, in high amounts, right? But there is a contract that has several requirements to be fulfilled, one of them is the issue of vaccines, but in addition to these hired people, in addition to the workers, there is the motorboat pilot, the boatmen, who usually do not receive the vaccine. So, one thing are the workers that the company hires to build the facilities, but then it will hire another type of service, which is part of the logistics, which will transport that material, so it will hire a logistics service and will not consider those who work for that [transport] service do be made

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<sup>4</sup> See Appendix 1 for details.

as company workers, right? So these workers [who build] get vaccine. Those who do the logistics, who transport, who will do the unloading inside the villages, it is not known if they are vaccinated.

MR – And can you remember if this health issue was very clear: the change, before and during [these works]?

JX – Very clear! It was early 2011—that was when I had to leave Altamira. In the beginning of 2011, I was writing a draft of the project that was going to go to the [Tukamã] village, which was about the traditional medicinal plants of the Xipaya people, and in one of the texts that I was writing, I wrote about the issue of food too, of the eating disorders that would happen. Like an anticipation, a prediction of what would happen. Because observing this whole process, even before the Emergency Plan—where tons and tons of industrialized food went into the villages, I, knowing that this part of consumption would be done without any kind of nutritional monitoring, many of these foods went into the villages already with their best before dates already expired, tons and tons, a lot of soda, canned and spiced goods, I already knew that this would have effects in the future, we were going to have a reaction that would not be good. So, in my text, I had already made this clear: that we would have many cases of influenza, low immunity, obesity, cholesterol, diabetes and even cancer. And this I have accompanied directly within my village, I do not need to give references or examples of other people, I already see the difference in my village. My mother is a nursing technician and I, since I was a child, have followed her work, even before she was a nursing technician. So I know of the drastic change that has taken place and what is happening inside the villages and I see this mainly within my village... stomach problems, even cancer problems, cancer cases much more than 2, even more than that already inside my own village and other things, flu and malaria. Today there are so many other diseases, that we do not even know their names, or their cause. Didn't know in fact. They are due to this wrong diet, this consumption of industrialized foods, even expired items. These types of disease are already emerging and many we do not know from where, right? We know that it is because of this whole process, which did not have follow-ups. There are cases that I feel really sorry for the person, cases I have now witnessed within other villages. Not only because of the food issue, but the issue of garbage in the villages. The company [Norte Energia] brings into these packaged goods and this does not have an exit process, a specific treatment for the destination of these wastes, which also cause other types of diseases. So, the change is clear and has only progressed more to the bad side. And the number of beds inside the hospitals did not increase, the number of villages increased, diseases became diversified, what we once had as a mild flu, as a malaria, today we are dealing with this flu syndrome—which we recently had an outbreak, I told you about the amount of deaths we had—, cancer, hypertension, cholesterol, diabetes, gastritis, ulcers, gallstone, a variety of diseases that we had never even heard of, right? And the health system, the health policy aimed at the indigenous peoples remained the same as before, resources did not increase, the number of beds in hospitals also did not increase according to the increase of the population [of Altamira], not only indigenous, but of the city itself, then the demand increased and the resources, even the assistance we had at the time, in 2010, from about 5, 6 years ago, continued the same, it did not

follow this process of building up diseases, the emergence of new viruses. So, today we have this difficulty in meeting all the demands, all the needs of the villages.

MR – Just for me to understand: these canned foods, this change in diet happened because of Belo Monte?

JX – Not only because of Belo Monte. I think it's important to report that not only because of Belo Monte. These foods were consumed before, not all, but most were already consumed. However, with the arrival of Belo Monte and the 'Emergency Plan era'—which is how we call it, there was a more direct and easy access to this type of food, these foods arrived into the village, understand? We consumed 1, 2, 3 cans of oil, milk, or something else; suddenly, everything started to come not in units but in tons, in bales, in boxes, in...

MR – Why?

JX – It was the Emergency Plan. There were requisitions, they [Norte Energia] said, 'ah, what does the village want?', [and the village leader replied] 'that's what it wants'. they [the leaders] made the list and they sent it to Norte Energia, then Norte Energia would make the purchase and deliver all this food to the villages. So it was not the indigenous peoples who bought things in the supermarket, but rather the food came to them inside the villages and in very large amounts and, as I told you, without any kind of monitoring and inspection and with expired foods—what was consumed in the same way, and not everyone saw that.

MR – And why did indigenous leaders make these lists with these things?

JX – Because it was what was offered. This process, which also includes cooptation, in my point of view... it become part of the Emergency Plan, which was... a kind of, like, how do you say? ... not of... I think the clearest word would be this: cooptation, buying interests, 'let's give the community whatever it asks for to ask, [because] we get what we want there [i.e. make the hydroelectric project happen]'. So, I see the Emergency Plan like this, from the food, from the sugar to the motorboat engine. So, this aroused interest in the opening of new villages and even this was used to say 'look, Belo Monte will be good. What we didn't have before, we have now.' So, everything was very easy. We know that this region here is complex, it is a region of difficult access. Then, in an eye blink, tons of food arrive... If large amounts of motorboats, boat engines arrive, who wouldn't want that? Now you have to pay attention to how that comes and what impact this will cause, and, especially, what interest is there in supplying all these products, these materials, these objects, what does that lead to in the villages, right? So, there was this process of the Emergency Plan. I see this 'lead' given to the communities as very intentional, which did not only generate the impacts, the process of division, conflict, but that will also generate mainly long-term problems that we are going to see even more of in the future. I think what we are going through today is still very little of what will happen, of what is yet to come, although it will simply be the reaction of this whole process that was conducted inadequately, absurdly, disrespectfully, coercively and without any kind of follow-up to the indigenous communities. [...]

Today we can see the impacts that this part of the Emergency Plan has had, especially regarding the intentional way this was done.

MR – So, you were speaking about the Emergency Plan, that it would be a way to meet the immediate needs, but that, in the end, it was simply another way to break up and cause problems that will drag on longer.

JX – Yes.

MR – You said that, before the Emergency Plan, you consumed industrialized products, but in small amounts.

JX – Yes.

MR – What was the basis of your diet before?

JX – It was not that amount, and access was not as easy as it is today. Because our food was always based on hunting, fishing, what the forest provided us with; nuts, cacao, cassava, and corn... it was based largely on this traditional food. [...] Right now, I just remembered, we were on the Xingu route, where all the villages—not only on the Xingu route—have so much tooth problems. Many are losing all their teeth. This is serious and we do not have a dentist, we have been without dental assistance for more than a year, even within the villages themselves.

MR – Had this ever happened before this access to...?

JX – Not that much. We know that this is because of food, especially soda, sugars, that this happens. As there was this increase [in the intake of sugar], of course, if you do not have a control, if you do not have prevention, there will be an increase in other types of disease and especially the teeth situation, right?

MR – And your village, which is situated 2 days away...

JX – Or more.

MR – Or more, from the dam, do you think this has also happened...?

JX – Yes. Because the Emergency Plan didn't cover a certain village or route, this industrialized food and other products we spoke about, they went to all villages. The problem we have in different villages, we can see that it is practically the same. I realized now, on this last work trip I did, and note that I've only been on the Iriri route, on the Xingu route so far—I already know about the Iriri route because it is the route of my village. There are still two other routes: Bacajá and Volta Grande; but by the reports, by the demands that we receive from the villages, we also see that this problem is also happening on the other routes, this situation of oral health. What changes is the severity of each case, but this problem is happening in all villages and we have witnessed cases of total teeth loss, from children to the elderly! This was already present, of course, we had problems before, I'm not saying that it was only because of Belo Monte; but Belo Monte contributed to this increase, and if this is not prevented, if there is no control, the situation gets more and more severe, which is now the situation that we are dealing with. It's been one month that I've been vice president of CONDISI, the new coordinator has been on the job for three months now, so we're running this process of assessment and care in all the villages. So I might find out a lot more until the end of the year, the beginning of next year... if you ask me the same question in a year time, or next month, I might have a lot more to tell you, right? Because I have even not been on all the routes, or all the villages, and I've already seen this need, this urgency. I paid attention to this and talked to the villagers. That was 1, 2 years ago, 5 years ago, right? They responded,

'no, we did not use to suffer so much, we had our home-made medicines. But now, no home-made remedy is working, it's not enough to make the pain go away.' [...] So, this issue of oral health, this issue of invasion within the territories, coercion, cooptation of leaders, unfortunately we will still have a lot more problems in the long run. Unfortunately, I see that everything is a process, it is not easy, it is delicate, it is difficult. Every time I would go back to Altamira—[because] there was a time when I had to leave my village—I had a very bad feeling, because I could see a change that was being imposed, that was disrespectful, that violated, that took away all hope and that could change the life of a people, of the people in general. So every time I would go back from Altamira to my village, I saw one thing, or two, three things, a different impact from the one I already knew that was going on by the time I left the village towards Altamira. So every time I would come back to the village, I saw something new and it was never a good thing, it was bad and it made me think more and more, 'How far will this continue and what will become of our future?'

MR – And invasions?

JX – Yes, invasions intensified a lot! Not only territorial invasions, but mainly fluvial, because, as the demand, the population increased, consumption also increased, consumption of fish. Since the amount of fish is not the same as in the past, the mortality rate is very high now, and that is still the case here today at Xingu's Big Bend, because of all this chemistry, these things that are used, these explosives that are used, so they [the fishermen] go up[stream] the Xingu, go up [towards] the Iriri [River], in search of fish. And where is the largest amount of fish? Inside the Indigenous Reserves, inside indigenous territories. Take the Xipaya Indigenous Reserve as an example: today, we have an impressive invasion of fishermen both by day and by night. We are now building our territory management plan for the Xipaya Indigenous Reserve and we are having a difficult dialogue with the neighbors, because they insist on fishing to be able to supply the market here [in Altamira city], to supply the consumption here. So we're trying to care for and preserve everything for ourselves, for future generations and there's this whole situation that goes into that part of the invasion. So the invasion is not only territorial, it is also fluvial and it has been remarkably intensified lately. So this is one of the main concerns, because here in the surroundings [of Altamira] we have fish, but it has become scarce. And where is the cradle [fish nursery], where is the abundance? In indigenous territories. Many resources are already scarce, so they go to the other lands, where the fish are. There are indigenous territories, indigenous reserves that are suffering even more than us, regarding this hunting and fishing situation.

MR – You mean, worse than the Xipaya?

JX – Than the Xipaya and sites near Altamira area too. So, they go looking where there is a lot of fish.

MR – They who?

JX – The fishermen, the companies, the local business, to supply the market here [in Altamira]. They are searching for where the fish are, right?

MR – Before Belo Monte, did they use to go up there?

JX – Yes, but not that often. We would inspect our [area] ... talked to them and dialogue usually lead to agreements that sorted the problem. This no longer works today. Today they come in, especially at

night, which is when we don't have this surveillance process. So, the trend is that this problem will only intensify, unfortunately. But it has decreased, just a little, because many workers left [the Belo Monte worksite], the Belo Monte peak passed, so, of course, it is pertinent to say that there has been a decrease in this demand. However, we know that now, with this issue of Belo Sun [the gold mining megaproject proposed by the Canadian company Belo Sun to take place in the Xingu's Big Bend area], this is coming back again. There are people coming in and they have already entered our territory, they know where they are, they will not stop going there, the fishermen and all these people, [because], in addition to fishermen, there are also middlemen, with interests behind their actions.

MR – And why doesn't dialogue solve the problem anymore?

JX – Because the interest, mainly economic, is much greater now, it speaks louder. So, the interest in meeting the needs here [in Altamira] and, especially, in meeting their own interests, makes them go anywhere, they enter territories they are not allowed into. They fish because people are paying a lot more [for the fish], then it is worth taking the chance to get what you want, right? 1 kg of fish here is absurdly costly, so they go and get the fish where it is abundant, they don't care, they don't measure efforts to do so.

MR – And you think that this has to do with the decrease in the amount of fish here, or not?

JX – Of course! It has everything to do with this. The fishing has increased because of the fish mortality events that are happening. Because we know that down there [close to the dam], it was in 2012, September 2012, we saw the immense amount of fish, snakes, caimans, rays, all dead. All of them! Up[stream], too, at the Iriri [River]. Now we're seeing it here too. There is so much! We see fish dying ... One of these days, I was talking to a Xikrin relative who lives in [the Trincadeira] Barajá [Indigenous Reeserve]. He said, 'oh, Juma, You might have loads of eggs up there now! Now the *tracajás* might be laying lots of eggs there, at your land, right? There's a lot of *tracajá* there for you, they must all be fat.' And I said, 'no, on the contrary: there was the first rain of August and I was there in the village. On the day after we went to the beach [and] no *tracajá* trail on the beach was seen'. Four years ago, it was all trampled, we could not even track where they were coming or going from because there were so many trails. Today I did not see a single *tracajá* trail on the beach. And it rained! And then, the boys were able to catch 40 *tracajá*, and we let them go, because when they killed 3 of them, when we put them on the fire to roast, they tasted like mud, they were so thin that we pitied them. Many of the eggs were still very small, did not grow and were different. So what did we do? We took pictures of them, I took photos and we placed them again by the river, because we could not eat them. That was very strange and it was something that we had never seen before. He said, 'Juma, it's the same thing that's happening on the Xingu route; so I thought it was because of the land strip placed by tractors to divert the river, I thought it was just here at the [Xingu's] Big Bend'. I said, 'No.' So, you see the same impact people from the Big Bend is seeing, they say the impact is different, but we see that it is not! The *tracajá* left here to go there [to the Iriri River]? It could have done that, but that's almost impossible, if they would all immigrate that distance in such a short period. Then the impact also reached there [Juma's

village, on the Iriri River] and there are so many other impacts that in the short term we can't see, observe, but...

MR – And you said you have never seen this.

JX – We have never seen this.

MR – Do you think hydropower is clean energy?

JX – Definitely not! Energy that kills, endeavour that kills, that violates rights, that does not respect both life, history and the people that live in the area: it will never be clean! Hydropower is energy made of blood, sorrow, rage, it is energy built against people's will, it is corrupt energy. It can never be clean! It is obtained over needs, over our history... against our will, it is done in an imposed way, so it is never clean, right? Because there are other processes of obtaining energy, we know that Brazil is very rich in everything, then there are other forms of energy without doing so in this devastating, inhumane way that the government keeps insisting on doing. Disrespectful and wanting mainly to decimate the indigenous people who live here, so it will never be clean. [Because] it is built with our blood, it is built on our territory and without our support, without our participation and we will never be an accessory to this and, especially, we would never want to participate in a process like this, that takes life, that wants to destroy the future, especially that of our future generation... cutting our vein. The river is our life, it is the vein of our body, the forest is our mother. So how can we agree to something that kills us, something that takes away our comfort, something that directly attacks our land, our mother—which gives us food, sustenance, that guarantees us a clean and healthy future. So we cannot accept and cannot believe that this is clean. It's many things, except clean energy!

MR – Do you think the hydroelectric power plant has any effect on nature for you Xipaya?

JX – Like what?

MR – The effect you think it can have. If, the Belo Monte dam had any effect on the Xipaya, on nature?

JX – It had a lot of effects, still has and still will. Negative ones! Because we know that we can have development, we can have health, we can have education, we can have access to the media, we can have access to everything without destroying what is ours. We did not need Belo Monte to have what we have today, because many of the things that are being done within the BEP [Basic Environmental Plan] are called public policies, which is the government's obligation, there is no need to build a hydroelectric plant for the government to comply with its obligation, for the State to do its duties; there is no reason for this, Belo Monte does not justify how to bring development to the region, to improve life and bring energy—that they call 'clean'. There is no reason for this. We have other sources of energy, we have other sources of development and I see Belo Monte not only as energy, but mainly as an enterprise that sucks our wealth, that sucks our whole life and that destroys everything that people fought for so many years to preserve and that Brazil and the government forgot about. In fact, it didn't forget, it left the Amazon, the North, quiet, for a while, while it destroyed the rest of Brazil and today it comes here, after so many years, destroying everything, relocating the people, disrespecting the people that have lived here for so long, that have fought and preserved this territory, all for the interest of a few, mainly for capitalism. So I saw, when I began to understand, to participate in all this, I saw: the

Amazon, it was not 'forgotten' purposely, it is being stored for future uses! And it is not going to be used for our interest but for the interest of a small group, the interest of a government that does not respect and that has never respected the true owners and inhabitants of this land, us, the indigenous peoples. And today, we are not just on the front line, we want to participate, we are participating in the discussions, we want to make proposals as well, because we, as many think, like some of the ministers, like the government, think that we hamper the government, that we hinder development, on the contrary, we do not have to destroy our nature to consume, we do not have to kill our mother to continue living, we live in harmony with her, we live according to what she gives us and we lived so well that we are alive to this day. So, we work in harmony and respecting each other's space. There is no need to deforest or kill or relocate or end people's identity, peoples life, the history of a whole people to develop, and we understand this very well. We do not accept this inhuman process that the government has conducted until now, we believe, and do, and work in a way that respects each other's space and, especially, nature. So, we are now participating more and more in this situation of the Belo Monte, we do not conduct any more demonstrations, but we are strengthening our association, we are working with our projects, wanting to be part of this discussion and to really work, understand this process and not only be used like we have been used for so long.

MR – Speaking of nature, you spoke of the mother and the river, of the vein. Do you think Belo Monte affected that?

JX – Everything! The Xingu [River] no longer runs like before, it was cut in half. It's as if you have your arm and one cuts it. That's what happened to the Xingu! And the amount of trees that I saw being buried in the Belo Monte construction sites! They have a graveyard of trees inside those Belo Monte plant beds. This reflects not only in the view, like we have here, that there was an island in the past which they knocked down for nothing and that it's now is being born again. These other trees, how many other assaults they have done on nature! Many of all these atrocities that they have done are irreversible and there is a lot of damage. And that impact, it not only will come to us, who are indigenous, it will come to humanity in general. So when we fight for the defence of territory, for nature, for our standing trees, so that the river can run free as it has always run, it is not only for our interest, it is not only for our existence, but for the common good, for everyone. And this is what society needs to understand. We indigenous peoples do not only defend our territories, we do not only fight for land, we fight for the continuity of our future generations and for our very existence and not only for the very existence of indigenous peoples, but for our human existence. That is what the others need to understand, that our struggle is not only for us, indigenous peoples, the lands that we have preserved until today, it is not only to say that we have a piece of land and that it is ours, it is because we know that we need it to preserve it, [because] we know that it is necessary to maintain life, health and tranquility to have our food for the future. [...]

A long time in this process, when I started to follow this discussion, this fight over the Belo Monte, against the Belo Monte especially, I was very young, I was 15 years old, so I was learning about this world. So, for me, this was a lot of suffering, because I was not only talking about the Xingu, I was not

talking about a forest, I was talking about myself, I was talking about who I am, I was talking about my people, I was talking about my future. So this was always very strong for me, because it was my life, it was all I had and all I have until today and what I need, I was talking about my home. So it was a very painful process throughout these years, to witness all these crimes, all these violations of this struggle that many times we thought—and I thought—that unfortunately this fight would not result in anything. Not today. I had a moment that I had to leave because I could not cope with it, I practically felt myself handcuffed in seeing everything that was happening in this absurd way and, the little that you would do, sometimes, did not have the effect you expected it to have. So it made me very frustrated, I had to leave because of security too, and assuring that I had done my best, but my community, my people wanted it in another way, so I preferred to leave. So I told my community that if and when they wanted my help—that everything I did and that I do is for my people—I would come back. And now, I'm here, I left the village in 2005, December 2005. I stayed here in Altamira studying, until the beginning of 2011. In 2011, I had to go to Manaus, [because of] this whole situation with Belo Monte: the conflicts, everything became an unsustainable thing and I left, went to Manaus, went to work at COIAB, at the Coordination of the Indigenous Organizations of the Brazilian Amazon. I stayed there until 2012. Then I returned here [to Altamira]. And I could not stay here because I felt bad, every time I talked about going back to Altamira, I thought about this subject of Belo Monte and just by thinking about Belo Monte I felt a pain in my stomach, I felt something, an anguish so big that I did not know how to live with it. So it was wiser to get out of here than to live and not be able to do anything, to witness all this disaster, all these absurd things that were happening at the time and that I did not know how to cope and live with. So I decided to live my life and decided to study. Then I left for Belém [the capital of the Pará state] and stayed there until 2015. Then I left for Italy, as part of a programme of exchanges between universities. I stayed there from July to December—that was when my people called me, when I got the news. So I was totally a non-believer, I did not want to come back, because I could not live with it, I was very frustrated with all this situation, with everything I had witnessed and knew that we Indians had to manifest, I had to do something. So, it was difficult for me to do that, which is why I decided to move away, and when my people called me, I did not think twice, I came back [back to the village]. I came back because it's my life, it's what I love. And that moment that I left was eventually good, [because] I learned a lot, I could look out there and understand that it was not that the relatives accepted the situation, it was that no option was given to them to understand what that was. We were not consulted, right? So all this made me think, and I had to come back here. Back, now and see all this, I no longer see the look of Juma a year ago, which to me was sadness, I was sorry. Today, no. Today I feel the strength, today I know how important it is here, how important I am, and all of us, the people here, are important in this struggle and that we need to unite, that we cannot stop believing. Regardless of all this difficulty, regardless of all these violations, regardless of what we are still going to live through, we have to believe, we cannot give up what is ours, we do not have to accept this process, this venture, just because the government wants us to. So now I'm too happy just to look at Xingu, to know that it did not die, that regardless of having impounded it, they did not kill it, it's still alive, because it's alive inside me, it runs inside me and

that makes me wake up every day and go and fight and win, and fight and fight, to guarantee the future of our children. There is nothing in the world that pays, there is no better place in the world for me than here. So today I feel invigorated, that period was good to learn. Now we are in a new moment and I believe that we will do many things, that Belo Monte did not end our dreams, Belo Monte is one of the barriers that we have encountered over the years of our existence, but it will be a great lesson for us and we still have to do much more and it is not Belo Monte that will keep us silent.

MR- And when you think of the Xingu and Belo Monte, what do you feel?

JX - I feel alive, I feel like continuing to struggle every day, I feel compelled to do something, I feel it is my duty.

MR - And when you think about what Belo Monte did to the Xingu, what do you feel?

JX - I feel revolt, I feel anger, I feel rage, I feel the worst feelings that a person can feel. Because for a few moments in my life I almost stopped believing, I almost gave up this fight, because they wanted us to understand and do that, right? But every time I look at the Xingu and see that beauty, and even dammed it remains alive, beautiful, green and that this island in front of us, the Arapujá [Island], is fighting for its existence, no matter how many trees have been cut, they are [re]sprouting, re-born, there is hope, right? This is like saying, 'Hey, fight! The fight is not over yet, we are only in the middle of it', got it? So, looking at the Xingu is being born again every day, I have this privilege of being born again every day when I look and especially when I bathe in the Xingu, then the fight does not end, right? So my dreams, my strength, they are not over. [...]

And so it will continue, I'll come, others will come, so many others will come, Juma, [Antônia] Melo, Marcelo, Zé Carlos, so many other leaders that will come, chiefs and many others that will continue this fight, year after year. And the Xingu, regardless of being dammed, it will remain alive, especially inside us, that this is the most important thing.

MR – I'd like to thank you, Juma. If there is anything that I haven't asked but you want to speak about...

JX – No. For now, I don't think so. Sometimes people think that Belo Monte is a fait accompli and it is not. It may even leave, but Belo Monte is not alone. I always say, 'the worst is yet to come and we have to prepare for it.' I am not being pessimistic, but realistic, due to all these problems that are happening, a time will come that a reaction will happen and we have to be prepared, the fight against Belo Monte is not over. [...]

And today I live this: that, after 5 years of BEP [Basic Environmental Plan], you enter the villages and you ask, 'what has been done here?'. Little has been done considering the amount of resources that has already been spent. It is nothing compared to what we have today in our villages. Today, the leaders and the chiefs have to stay here in the [Altamira] city, fighting at the company doors. Going to Norte Enegría's office, going one way, going another and nobody there does anything. The companies do the projects, everything by default within the villages. So we stopped the PAPRI, which is the Productive Activities Program, which is one of the most important programs within the BEP. That is why it is one of the indigenous conditions, that everything is being done in a way that does not respect the needs and specificities of each people, generalizing the projects and, especially, that they were not built with the

communities, which is even more outrageous, in other words, communities today have to open the doors of their villages for companies to come in and do what they want. That is inadmissible! So I am in this process now, of 5 years of BEP, that nothing has been done, and this has to be quoted in meeting with Norte Energia, with FUNAI, resorting to the Public Ministry, fighting. And I'm not going to do that, I'm not going to stay in this dog and cat game and I'm the mouse in the middle, that at one moment it is Norte Energia, and at another moment it is the company. Instead, we stopped our activities. We said, 'no. We want to detail the project done in our community according to our needs.' So, now I'm in this stage. So it is now said: 'stop what was done wrong here and, from here onwards, we will discuss everything, let's work together, we want to participate.' Up to now, we have not been heard. From now on, we will no longer be discussing the past, because we already know, we have already learned a lot and are learning more and more—how many wrong things happened. Now, let's discuss from now on, taking all that has happened wrongfully in the past, now we will build and plan our future. So I am at this stage of planning, that is, to stop, not to do things under pressure but rather according to the needs of my people.

**Interviewee:** Cláudio Curuaia, 43 years old, president of the Native Kuruaya Indigenous Association (Associação Indígena Nativa Kuruaya – Inkuri)

**Date:** 26.10.2016

**Location:** Altamira city

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Cláudio Curuaia – I want you to say that we ask that other countries protect the indigenous people, the riverside dwellers, who do not support this kind of enterprise: the hydroelectric dams that come to destroy the river and the natural landscape, the forest. Because everyone will suffer the consequences. We are already suffering. That countries should try to generate another type of energy, not the energy that destroys both the environment and people, which is what we are living in Altamira [city] today. [...] [I'm choosing money notes in my portrait] To represent the corruption that exists within these ventures, because the State deflects money and politicians corrupt themselves and accept bribes for these ventures to happen or use the money from those works for their own benefit. In addition, these large enterprises only destroy the river, nature, and families. The development of a place is not something for just 2, 3 years—and then leaving Altamira the way it is today, worse than it was before the work started—it's supposed to be long-lasting. Here in Altamira, the only long-lasting effects are crime, robberies, and many unfulfilled conditions<sup>5</sup>, because Norte Energia claims it doesn't have money to fulfil the conditions. So, where is all the money they had for the project?

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<sup>5</sup> The socio-environmental conditions required to be accomplished for the hydropower project to be approved as well as for the plant to be allowed to operate—see **Chapter Four** and **Appendix 1**.

**Interviewee:** Valdemar Wociekoski Gregório, 65 years old, fisherman and town's public officer

**Date:** 20.02.2016

**Location:** Garruchos town

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Marilene Ribeiro (researcher) - Would the water [of the reservoir of Garabi dam] rise up to here [Valdemar's place], Valdemar?

Valdemar Wociekoski - Yes, it would. My place would vanish [if the Garabi dam is built].

MR – Would you need to move then?

VW – Yes. I would have to leave. It's a shame. I live quite close to the riverbank. This natural beauty I overlook from here everyday when I wake up: this will be over. I will see water, but it's gonna be a different water, not this running water, this clean water. It will be another kind of water.

MR – How do you imagine this other kind of water would be like?

VW – The Uruguay River, it carries downstream the litter that reaches it along its way. If they build the [Garabi] dam, all this litter would be accumulated within its reservoir, there won't be any flow for this litter to dilute and move on. Then, this lake [the reservoir of the Garabi dam] will be turned into a big storage of rubbish. Apart from this, as the water will become stagnant, I mean, it will no longer be running water, it might be infested by algae and mosquitos too. [...]

And, thinking about fish, and animals: where will all these animals that are used to living within this stretch of the river go? [...] Once one species is gone, it's gone! 'Ah, we're gonna deliver juvenile stages of these species into the river. We're gonna bring fish back.' Fish like the *dourado* [endangered and rheophilic species of fish] need rapids to live and breed. Will they survive into that stagnant water? No! They belong to other kind of water. And what about the insects? Who will save the grasshoppers? 'Ah, but grasshoppers have no value.' They do! If grasshopper is part of nature, it's because it has its value. 'Ah, but this little tree is just a climber.' But this climber is part of nature, if it wasn't part of it, it wouldn't be 'standing' there. If it arose there, it's part of it. And it's pointless trying to re-plant this climber anywhere else but at the riverside, because, as one moves from the riverbank, the soil becomes different, there is the riverbank soil and there is the other soil. They are not the same, then this plant won't grow in this new site far from the original riverside. And there is also that thing of the Environmental Impact Assessment: this exists for the developer to present a beautiful report only! When someone decides to sign the license out, 'The construction of the dam is authorized.', it's over! Let monkeys, snakes, fish die! 'Ah, you don't want to leave your place? Ok. You can insist on staying until the day the dam sluices gates get shut.', 'You didn't want to move, didn't accepted the proposal? You're stubborn? Tomorrow the water will knock on your door.' [...]

'We found blue-skin toads in the region. We reported 15 individuals altogether.' When the water rises, what does happen with these 15 toads? Where are theses 15 toads? 'We managed to catch 5. We missed the other 10.' Will this impede the dam to be built? No. They [the toads] vanished. They [the toads] didn't stop the dam to happen. They vanished but the project carries on. [...]

We haven't got many things. Our town is small. However, this is all we have, this is what we have managed to make, and we love this place. We like our Garruchos, even if it's tiny. We appreciate our land, our customs, our livelihood. 'Ah, but Garruchos is so tiny, São Paulo city is much bigger!' It doesn't matter. For us this place here is the world. [...]

And what will they do with fishermen and riverside dwellers? Will we have free access to this water or will it rather be surveilled and we won't be able to access the river? I'm concerned about this and no one informs us anything about this. 'Fishermen will get a compensation.' What compensation? Fisherman needs fish and fish need the Uruguay River's running water. Blocking this water from running free, it's changing completely the ecosystem! 'We're gonna compensate fishermen.' This is a lie! How can one compensate the seizing of the running water? Fishermen have learnt how to go fishing, nothing else. What will they do?

MR – Can you imagine how your live would be, whether you had to move from here?

VW – I would miss the Uruguay River, going fishing, my mates, the sunrise... It won't be the same. This beautiful sunset framed by this riverine vegetation will disappear. By the way, I've got a nice picture I took when thinking exactly about this. I was talking to another fisherman – at the time, we were canoeing upstream and the sun was rising – 'Let's take a picture for us to save this image, because soon we won't be able to see this image anymore. The dam will seize everything'. [sigh] For those who know the place, appreciate it, like it, and love it, it's really sad... it's really sad. This natural beauty: the river bends, rapids, shadows, trees, rocks, that very *guabiroba* tree where we're use to waiting by, because its fruits attract the *pintado-amarelo* [fish species]. This all will be over, in the name of the d-e-v-e-l-o-p-m-e-n-t, in the name of the progress. That's how it works. That's how happened in other places and that's how it's gonna happen with Garruchos. It's really sad... Imagining that this all will be over. [...]

Beautiful is this this natural [water]: this one that, as you canoe, you need to work out how to stay in the boat, there is a floating log coming, then a whirl, then a bend, then a rock... This is beautiful! But that flat, steady water... nothing is happening... That is a 'no'. I don't know if we will get used to it... [sigh] I'm not a person who builds fortunes, piles money. No money will bring me back this image. This longing, regarding what I used to do, and that will no longer exist, this is gonna kill me.

Will it be painful when it starts [the dam works], if it starts. This will be painful. I will have to say to my neighbour 'I'm leaving.' [sigh] And, another mate, in a glimpse of happiness, 'I can take the windows of my place with me! They told me I can take them off and take them with me!' Yes, I can. But I can't take the walls. When I take the windows off, put them in the lorry, and start the move with the windows, I will realize, 'what did I take off these windows for? Where I'm gonna put these windows? What about the walls? What about the rest? The rest I left there.' [...]

All of us will be affected. The richer, the poorer, the literate, the illiterate. All will suffer. And we are in the hands of a group that will manipulate us, they will set the rules of this game, not us. We will have to obey them. [...]

I hope you come back to say to me 'the dam won't be built!' or 'the dam was postponed, it won't be needed.' I hope you make the same route and say 'Listen, what we asked for was heard.'

**Interviewee:** Ailton Carvalho (aka Mito), 47 years old, small farmer

**Date:** 04.02.2016

**Location:** Lajeado Marrocas, Novo Machado

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Ailton Carvalho – Talking about losses, beyond material things, we’ve also got the immaterial matters. For instance, here, where I live, I’ve got a special spot where I appreciate taking a rest from labour, from where I overlook the site where the Uruguay [River] bends: a stunning scenery. I consider it a painting – there are paintings that worth millions [of pounds], don’t they? – I’ve got a painting of this sort for free to look at everyday! Then, I ask you: ‘will the Eletrobras [the governmental energy agency that proposes the Panambi dam] compensate me this? What about the value of this that I contemplate? What about the sentimental value, the moral value of this?’

Marilene Ribeiro (researcher) - What do you feel when you are at this special spot?

AC – I feel I’m in peace, I feel good – the same thing you might feel when you watch a good film, or when you go to a concert that you appreciate. The very same thing you might feel when you perceive something that fulfils you. And, I think that seizing this is not fair.

MR – Why did you choose that spot?

AC – Because of its beauty. When the water is not that high, it reveals the rocks, the *sarandis* [species of bush that lives in the water, by the riverbank], and this conveys a personal beauty to me, it’s something that I myself perceive – it might be like when you contemplate the seaside. And this view will be over [if the dam is built]. The river will get changed. They will modify nature. And, when one changes what nature has conceived, one modifies everything else.

MR – What do you think the river will be like?

AC – I picture it as a large lake, stagnant water, dead water. This is what I visualize. And this is how it is like in other places, like where they built the Itaipu. This is what the river was turned into, in the end. [...] I think many fish species wouldn’t survive, because they can’t live in stagnant water. As wouldn’t do many species of trees, because trees we see here, by the riverside, they belong to here, they don’t belong to other areas. If someone covers this area with water and tries to re-plant these plants we find here – by the riverside – by the hills, he won’t succeed because these plants can’t live there [by the hills]. [...] I’d summarize dam as still life. Dam is a still life! [...] I think dam doesn’t cover in water the earth and what stands over it only. It also submerges our emotions, our affection, it submerges more than a simple patch of land. [...]

MR – In case the Panambi dam is built, what you do not want to lose, Ailton?

AC – I wouldn’t like to lose my occupation [as a small farmer]. I wouldn’t like to lose the thing in which I’ve got proficiency, which I’ve mastered. This is what I’ve learnt how to do, this is what I’ve got the expertise in. This is what I like to be. [...]

Then, there are many things one might take into consideration. I can't see anything good regarding dams. I think the only ones who will take advantage from them are developers and big companies. Besides this, honestly, it's about money into politician's pockets. [...] I don't know, it seems the law exists to serve the interests of big companies, transnational corporations only. They don't care about us. For them we are not human beings, we're numbers only! [...]

MR – When you think of this situation, because of the [Panambi] dam, what does rise inside you?

AC – A feeling of powerlessness, a feeling of being dominated... Because nowadays we're living another moment, it's told we're living in a democratic regimen. But, I ask you 'where is this democracy? What democracy is this, if our opinion doesn't have any value?' The Eletrobras [governmental agency in charge of national energy affairs] has sent its staff down here. In the meetings, they have said, 'we want to know people's opinion, if people is against or in favour of the dam.' Then, another thing comes to my mind: why do they want to know my opinion, if they're not gonna respect it, if what I'm saying now won't be taken into consideration? What for does the Eletrobras want my opinion? [...]

MR – I'd like to thank you, Ailton, for your participation, for your time, and for your beautiful words.

AC – I thank you for the opportunity of being able to express, for being able to speak. Because I think it's important that everyone gets to know about our opinion, the rest of the world gets to know it. It's important that they know that we are not ordinary numbers, we are human beings.

**Interviewee:** Camila Grzeca, 23 years old, biologist

**Date:** 24.02.2016

**Location:** Porto Mauá town

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Camila Grzeca - People put cut some trees down in our area, I don't deny it, but nothing compared to what will happen whether the [Panambi] dam takes place: it will be a disaster! Picture it! The fauna and flora... What will remain?! What will happen to them?! Nature... Will what God has given us be destroyed? 'To g-e-n-e-r-a-t-e energy!' But there's other ways of generating energy. Why don't they work on those instead? They want everything the easiest, most practical way for them. They don't give a thought to the environment or the local population. That's what I think, you know? That's it.

Marilene Ribeiro (researcher) – Do you think there is a value for this you've just described?

CG – You mean a sentimental value?

MR – Any kind of value you can think about.

CG – Not money, I don't think so, but affectionate-ish! We were given the environment, the forest, all of it for free! God didn't charge us anything for it. Why does man then go and destroy it? Because of interest. Ah, they say: 'we're going to replant, it's all going to be fine.' But how long will it take for the tree to grow to the same size it was when they cut it down to build the [Panambi hydroelectric power] plant? They don't talk about that value, they don't even mention it. That's how it starts! The animals'

habitat will be affected; how long will it take them to adapt to a new one? But many won't even make it that far, they'll stay where they are and die there. There's all of that to think about! [...]

MR – Do you think there is a way to compensate these losses, concerning the animals, as you said?

CG – Nothing can compensate the loss of a life, can't it? And these animals have got their lives. And they may pay [the construction of the Panambi dam] with their lives. No money compensates this. [...]

**Interviewee:** Cláudia Maria Gonçalves da Silva, 44 years old, small farmer

**Date:** 13.10.2016

**Location:** Sítio Terra Bacabal, Vitória do Xingu

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Marilene Ribeiro (researcher) – Is there anything else you would like to say, something you haven't said yet?

Cláudia Gonçalves – Yes, I want to speak about the animals. One day, my husband and I were canoeing towards Altamira city and, upstream the dam, we spotted one of those islands damaged by the company in charge of the [dam] project – they had ripped off this island's trees, however three massive trees still remained there. It was because we didn't have any mobile phone or camera with us at the time, otherwise we would have videoed this: you should have seen how many *guaribas* [species of capuchin monkey] were on one single tree, asking for help. They told us there would be staff rescuing animals from these to-be-cleared islands, but certainly this staff didn't rescue all of them because my husband and I saw marmoset and sloth corpses floating downstream, and also some drowning into that lake [reservoir]. My husband and I even managed to catch one and put it by the lakeside. You tell me, how would they rescue those animals on these islands' trees? They couldn't catch them, because the trees were massive. I think they probably cut the trees down and, as these trees fell, animals that survived this might be caught. I spent hours just looking at those *guaribas* on that tree. How could they get fruit, as there wasn't any for them there? Was there anyone bringing fruits for them? Would they [the *guaribas*] work out to come down to drink water? This all shakes in our mind. This [Belo Monte dam] was an impact that hit everything. Also this year [2016], when the time for fish to mate and lay eggs began, they [fish] crowded by the dam wall. As they banged against the dam wall, they got injured and many died. They [the Norte Energia's staff] collected tons of rotten fish along the Xingu [river] and buried them in the islands. These sites were turned into a cemetery of fish. [...]

Because, the Xingu River, in the same way it is life, it also provides life. For me, it is my life, this riverbank, this nature, this river is my own life. [...] I'm part of this nature. [...]

**Interviewee:** Raimunda Gomes da Silva, 57 years old, small farmer and fisherwoman

**Date:** 08.10.2016

**Location: Altamira city**

**Fieldwork: BELO MONTE DAM COMPLEX**

[...]

Raimunda Gomes – Animals were the ones that suffered more in this story. For instance, animals that inhabited the islands, those ones they [Norte Energia's staff] didn't rescue. Because they tell they rescued them but they didn't. We know this is a lie. Hoatzin they didn't rescue, they left these hoatzin in their home islands, where there was no food available anymore – because hoatzins, they do not move from one island to the other, they spend their lifetime in the very place they are born; then, they are dying in those drowned islands. *Caris* [common local species of fish] either. *Caris* are all ill, dying too. Their mouths are severely injured, because *caris* eat moss that builds up on the river rocks [it scratches the moss from the rock using its mouth and teeth]. Since the water was no longer crystalline as it used to be—it started to look muddy, moss has been replaced by the mud and *caris* have had nothing left to eat but this mud. Usually one can't catch *cari* with his/her bare hands, because this fish is clever and fast. Nowadays everyone manages to do this, because, on the top of this, *caris* have also gotten blind.

Marilene Ribeiro (researcher) – Why have they gotten blind?

RG – Because of the turbid water. Xingu River used to have a completely transparent water. As its water became cloudy, all that particles suspended into the water damaged fish eyes, which were not adapted to this.

MR– When did fish start to be like this?

RG – Since they held the river back. And they killed tons of fish. They infested the islands of the Xingu River with dead fish, buried. [...]

If you ask me about a dream, [I would reply] 'destroying the statue of Lady Justice'—that one that is blindfolded. I mean Justice needs to have glass-made eyes, it has to keep its eyes wide open in order to SEE! This stands in front of the Brazilian Supreme Court, doesn't it?

**Interviewee:** Maria Rosa Pessoa Piedade, 48 years old, small farmer

**Date:** 02.11.2016

**Location:** Altamira city

**Fieldwork:** BELO MONTE DAM COMPLEX

[...]

Maria Rosa – I used to live in Palhau, on the right bank of the Xingu River. I was born in the same area, on an island. We're ten brothers and sisters and we were all born and raised there. Our mother too, she's 79 now. We worked the land and fished, and my father tapped rubber from the trees on the island. We protected the islands so that nobody would cut down the forest or start fires to clear space for fishing camps, my father did all he could to stop that. There were a few islands—Palhau, Inocência, Ilha Grande—which had rubber trees. My father took care of them all. But it wasn't just the rubber trees that were important for us, everything was.

Marilene Ribeiro (researcher) – Do you remember how was the landscape where you used to live?

MaRo – It's like... It's all here in my mind but... describing it... All I can say is: everything was as wild as nature has left it to us. [...] There were lots of beaches and rapids. That's where we did all our fishing and relaxed. It was all precious to us and now it's gone.

We had to leave in 2013, but we still miss it. It was where we grew up; we loved that place and they made us leave. We didn't want to go. We left the way Norte Energia wanted. If it were up to us, we'd still be there. [...]

We planted cacao and had pasture for cattle. There were cassava and corn. All this we planted and lived off, with fishing as the main thing. [...]

It's not that we can't survive, it's that we miss what we had before. We feel it a lot because we can't just go down to the river to bathe anymore, it's too far away. Fishing too is difficult now. Fish is expensive to buy and, before, we just fished when we needed to. There was no need to buy. Everything has become more difficult. [...]

They said it would be very good, that the compensation would be generous. They listed everything we had in their logbook. But they logged everything three times, and each time they logged less, taking things out which they said were no longer included. [...]

The first valuation of our property was a million *reais* [around £250,000], which is what we had thought. In the end, we received just R\$200,000 [around £50,000]. What could we do? We had to accept it. We lost our land, our things, our cattle and everything, and the money they gave us wasn't even enough for us to buy a new plot. Then someone lent us some land, which is what we survive on today. In the place where we wanted to live, the land was being sold for R\$400,000, R\$500,000, and even more. Up to a million. How could we buy land there with the money from the compensation? We couldn't. Then, our compensation went down and down. That's why I say that they changed a lot. They started out paying R\$26 for each cacao tree, but it went down. To my mother, who lived nearby, they paid R\$53, but to us [Maria Rosa and her husband] they ended up paying us just R\$12 a tree! It varied a lot from one person to another.

MR – Were your cacao trees younger or did they produce less fruit per tree than you mother's ones?

MaRo – No. They were all the same age as my mother's ones and produced basically the same too.

And the worst thing is that they threatened us! They said, 'either you do it our way, or we'll let the courts decide, in which case you'll have to wait 10 or 20 years, if you even get anything at all. Accept our offer or take us to court, but you'll need a lawyer to help you pursue any compensation yourselves as we'll have nothing more to do with it.' [...]

We waited four years, waiting, taking documents to copy and verify at the notary's office. Each time, an [Norte Energia's] official would say, 'no, these documents are out of date. You have to do it all again.' Then, we would have to do the whole process with the documents again. [...]

They said we couldn't work our land any longer. If we did, then Norte Energia might not register it for compensation. Later, they said, 'you didn't work the land because you didn't want to, who said you couldn't?' When we said, 'it was so-and-so', they said, 'So-and-so no longer works in the company and

we don't know if that's true. You should be working the land. You didn't work because you didn't want to. That's it. End of discussion.' They said we couldn't plant or buy more animals [livestock], but nor could we leave to work somewhere else. If we did, we'd be marked down as having abandoned our land. Spending time away from our land meant we didn't need it for a living and so we wouldn't get any compensation. So we had to stay, selling what we had to eat and survive, as they wouldn't let us work the land.

At first, when Norte Energia started compensating people, they took the houses apart, separating the timber and everything else, and took it all away. They put it all in trucks and took it to these people's new homes. But by the end [of the process of compensation], we were the ones who had to pay someone else to dismantle our house and organise things. We had to pay for everything. It wasn't possible to take everything at once, because we had to arrange things at our new home and then go back. But when we got back, in the meantime Norte Energia had dug a hole and buried everything we'd left behind! There was nothing left, it was all buried. They helped the first people move, but not the rest of us. We lost everything we had returned to collect! They told us they were just obeying orders, but they never gave us a definite time to leave. They told us to take what we could. Before, they'd given people a deadline and would move their belongings in time. In our case, they didn't give us a deadline and didn't help with the move. We had to do everything ourselves, that's why it took such a long time [for Maria Rosa's family to pack and take everything out from their place]. [...]

I'm still very bitter because of what happened to my father, who had a heart condition, amongst other health problems. Once he heard about the dam, he wouldn't stop talking about it. He didn't want to leave his home and abandon his things. He was very worried. His health deteriorated and eventually he died. It still shocks me because I think, if all this hadn't happened, if the dam hadn't gone ahead, he'd still be with us. I used to spend the day with him, talking, trying to take his mind off things, but he didn't stop talking about it, he didn't want to leave. He said he'd do anything to stay. He didn't want people to destroy what he'd worked so hard to preserve. He had a great love for the rubber trees because tapping rubber was how he had supported his children, all ten of them. [...]

I have six brothers who were river pilots, travelling on the river, carrying local people from Ressaca [village, situated at the *Volta Grande do Xingu*–Xingu's Big Bend] to here in Altamira [city]. It was their work. Nowadays, none of them work anymore. It's all finished. We didn't study. We worked for ourselves. What could they do? They had to leave everything to work somewhere else. Some have been even working prospecting for gold illegally, risking their lives, because their old job has gone. They never received anything for this. Norte Energia said they'd be compensated for their work, but up to now, they've received nothing. [...]

In the area of the *Volta Grande* [downstream the dam, where the river discharge was impounded to 20% of its original water flow as a result of the damming upstream], Norte Energia promised to dig a well, pipe the water and all, but they didn't do it. People are drinking the water that comes downriver from the reservoir because they have no choice, even though they might get ill at any time, as many already have. [...]

My mother lived peacefully in the rural area, raising her animals, bathing in the river, going anywhere she liked. Nowadays she lives in a house with the door locked, behind barred windows. She can't go out because crime has really been increasing in the Altamira area. Locked up, stifled, in a place like this! [...] And also, many people Norte Energia said wouldn't be affected were in the end, but they've ignored them, denying it's happened. [...]

They never tell the truth! We're at the centre of it, we see what's really going on, but it never gets out. They cover it up! It's only the good stuff that gets reported. We see it whenever it's on [popular TV current affairs programme] *Fantástico*—they only show the housing they built, just the good stuff!

MR – From your point of view, what is the truth? For you.

MaRo – The truth would be to show everything that people are going through here: hunger, suffering. What they show doesn't exist! The area they cleared, which they left just the way they wanted, they don't show! ... We see that nature...so many islands...the boy just told me that the islands are dying! [...] We've seen the [wild] animals suffer a lot, including the fish who lost their natural habitat. They had to move on. They lived in clean, flowing water. Now they're in stagnant water and many of them have died. [...]

The forest provided many things, like food for the fish that swam near the island. The fish we catch now are thinner because their old source of food isn't there anymore. Norte Energia stripped the vegetation, not just from most of the islands nearby, but from the riverbanks too, so now the fish have nothing to eat. [...]

When they were clearing the islands, there was nowhere for [wild] animals to escape to, as the islands are surrounded by water and tractors that were doing the job kept moving back and forth along the site. As those animals attempted to flee, those tractors moved and killed them. Other ones ended up falling off into the water and drowned. We also spotted skinny capuchin monkeys and marmosets on the branches of trees that hadn't anything for them to eat. They were suffering there. They [the company in charge of the dam project] wouldn't showcase this. They simply don't show. *Agouti*, *armadillo*, *cutia* [small mammal], they hide themselves into the ground, into hollow trunks. As tractors dug, moved around, they crushed these animals. Because it's not just about knocking trees down, they also move with the earth. [...] Those [wild animals] that escaped and were rescued were brought in to be treated and then released elsewhere, so they say. Except we don't know if they really did that, do we? [...]

They were knocking the trees down and we were also here watching that all. They knocked the trees down, collected injured animals and brought them in – inside boxes and we witnessed that all. All of that was painful for us.

MR – What did they use to knock the trees down?

MaRo – Machines. Many of them. Tractors and other many machines. They took them to our place and used them to knock the trees down, to dig and bury things... and we watched that all. [...]

We feel a lot of anger, and resentment. If we could change things... It's as my husband always says: if we knew who Norte Energia is, then we could go there and strangle them [laughs]. But we don't know who's who. When we go there [to Norte Energia's office in Altamira city], we might find a lawyer, or an

official. When we ask, the answer is always, 'Oh, they're in Brasília.' We never know who is in charge for us to speak to. [...]

I don't understand why Belo Monte [hydro project] was approved, as nobody wanted it – apart from local business owners, who thought they would become rich with all the crowd that would come to Altamira [city]. Local traders thought they'd do great business out of the dam. But it wasn't like that. They really lost out because the dam people brought everything in from outside. When permission was granted to build the dam, the traders were happy, thinking they'd sell a lot. But today they're trying to sell it all on the cheap. So it wasn't good business for the people of Altamira; the people who made money out of it are from other states. Most of the food, and all the tools came in from outside. Only a little was bought here in the Altamira region. The lorries came here [to Altamira region] sealed and went directly to the Norte Energia canteen. [...]

MR – Do you think that the Belo Monte dam has been good for someone?

MaRo – I'm not sure... I think it's been good just for them [those who conceived and have run and fostered the Belo Monte project].

Jaime [Maria Rosa's husband, in the background] – For those who don't belong to here for sure! Only for them. For them and for those to whom they will sell the energy generated by Belo Monte, for the big ones based in other countries—those who are just looking for profit—these people are living good life, they are not enduring what we have gone through here—for them, Belo Monte is wonderful! But for us...

MR – Do you think the energy from Belo Monte has been or can be a good deal for the environment or the people of the Xingu?

MaRo – I don't think so. Belo Monte has not been and won't be good either for nature, animals, or anyone but for them, the foreigners, for those who will rule its energy. [...]

I think that there's no point in saying 'I've got money, I've got a car, I've got this, I've got that.' If you don't feel good, if you don't have the life you had before, it doesn't matter if you have a nice house. You might be stuck inside, with nowhere to go, because if you go out, then a criminal might kill you, or something might happen to you. If you have some money, you live with threats. These kids [whose families moved from the riverside due to the dam] got into crime as soon as they came to the [Altamira] city, because most of them have had no education. They kill because they're ignorant, they didn't know what city life was like. Many older people who came [from the riverside to] here [to Altamira] have died as well. A lot, really. So I tell you there's no money that's worth the life we had before. [...]

MR – I'd like to really thank you for all you've said and also for your and your family's engagement with this project, Rosa.

MaRo – Sometimes we wanna spit out all that is stuck inside but there isn't anybody to listen to. Then, I'd like to thank you too. It was very good to speak and show.

**Interviewees:** Cirlei Dawies, 53 years old, and Nilson Dawies, 62 years old, both small farmers

**Date:** 23.02.2016

**Location: Itajubá, Porto Mauá**

**Fieldwork: GARABI-PANAMBI DAM COMPLEX**

[...]

Cirlei Dawies – It's hard... when we go for a trip, we leave, but we know we're coming back. What a holy gift is to come back. However, if we have to move due to Panambi [dam], it's gonna be for good. It's no return. Everything we now see here will vanish! Only that stagnant water will remain... [...] Animals, trees, plants, these are all precious to us otherwise Nilson [Cirlei's husband] and I wouldn't have planted trees, you wouldn't have seen so many animals around here. These have a high value to us. Furthermore, our history lies in our land, in our community, and this history will be erased. Nilson was born and raised where we are stepping on right now. I was born and raised in this community too. No money will compensate this altogether. Impossible! No money will replace the relationship we've got with this patch of land. If we keep silent here, we hear the birds singing. If there are birds, it's because there are also trees, there is also food. This will all vanish. Not to mention the fish and the river itself. My husband is not a professional fisherman, but he catches fish to feed us. We have started to get prepared to leave because we're aware that when it comes to the government, power, money, it's not our will that is at stake, it's the government's will, the government's interests that rule decisions instead. We haven't heard of any single dam that has been fully stopped up to now. It takes time, but sooner or later they build it. Then, we've been trying to get prepared to not get ill by the time it eventually comes... [weeping]... it's hard... sometimes it's hard to stand it... We need to be prepared in order to not get ill, because getting ill will make things worse. We need to be prepared to face it. But, as Nique [her husband's nickname] says, 'we think we are prepared to... When the time to pack what you can and leave comes, it won't be easy...' because the things we love here, we can't pack: our land, our little corner of the world, our plants, our animals. Even if we try hard to get prepared, when the time comes, we won't be prepared at all. It's sort of a thief breaking through your place: 'make your move otherwise I kill you', in this case: 'make your move otherwise you drown'. We hope Panambi doesn't happen... [...]

Marilene Ribeiro (researcher) – What you don't want to lose, if the Panambi dam is built?

Nilson Dawies – Going to bed and waking up listening to the river, that melody of its rapids: we'd never want to lose this! [...] Sometimes I 'grow' trees instead of using that space to for a crop just because this fulfils me. I don't make any money with that tree, however I appreciate looking at it, I consider it the most beautiful thing. [...]

ND – You know, ye've got a bomb in our hands. Up to now, nobody can tell if it will explode or not... But the fact is: this bomb is connected to our minds and hearts.

**Interviewee:** Nelci Bárbaro, 53 years old, teacher (retired)

**Date:** 11.02.2016

**Location:** Linha Uruguai Sul, Porto Lucena

## **Fieldwork: GARABI-PANAMBI DAM COMPLEX**

[...]

Marilene Ribeiro (researcher) – You were saying that people here don't know yet if the Garabi dam will become true or not.

Nelci Bárbaro – Exactly.

MR – Do you think the [Garabi] dam is having any effect on your life, I mean, even before it starts to be built, or not yet?

NB – Absolutely! It has been affecting me for a long time. I mean, every time I see an airplane flying over here, I get apprehensive, because there were many airplanes flying around here in the past. They [those who were undertaking the studies for the dam] set microchips in the area, so they had a pre-determined direction for them to fly. This was for studies. But they never informed people about what was going on. There wasn't a project to make people start getting prepared to this [to the dam]. When this [the news about the dam] comes, it is thrown at you without warn. At the time of the Church for the Youth [Catholic Church's activities led by adolescents from the community], I took part in, I helped to destroy the stakes of the dam. But [regarding these stakes], this is all preliminary, they never inform you up to where the water level will raise to. Today is one number, tomorrow is another. If you go online to look up the Garabi dam, you will see. Everything is like... cloudy, do you get me? [...]

Ah, I forgot one detail! They were so unscrupulous that they paid a wage to some locals inform the water level [of the river] to them. Can you believe this?

MR – The owner of the property, you mean?

NB – Not necessarily. Not necessarily. I mean, they could place a stake in my property and I could not accept their proposal [to inform them the water level]. In this case, they would find someone else to do this. They paid that person monthly for him/her to inform the level in a daily basis.

MR – This happened in the 1970s?

NB – Around that. One of our neighbors was in charge of informing them the level, but nobody knew this. If you go to the Banrisul's staff's campsite now, you won't find any single stake: they all were pulled off.

MR – Why?

NB – Due to revolt, perhaps, because no one wants the dam. The majority of the people doesn't want it. I believe that it's the minority, those misinformed, that want it. Because they get deluded with the indemnification. I'd like them to listen to someone who had already been affected by a dam, no matter the size of the dam, they to get informed by these individuals if they were in fact well compensated. Just the first ones [to make the agreement with the company in charge of the dam project] get a good indemnification. [...]

MR – And how people's lives are affected?

NB – They are affected in all senses.

MR – Now, I mean.

NB – Now? Psychologically! We are psychologically shaken. Because you don't know what's going on, so your mind keeps working on and on, it doesn't stop, it doesn't rest, it doesn't sleep. So, you wonder: 'what will happen to me if the dam takes place?' Get me? Nowadays we are affected psychologically. There were many meeting here in the community with the Eletrosul [a subsidiary of the Eletrobras, the government agency that deals with the country's energy policies], but they don't explain a thing. They come with those maps, speaking beautifully and want you to sign out the minutes. I mean, signing the minutes without the minutes wrote down on that paper! This is horrendous. They did this with us. Isn't this a psychological pressure? If I'm signing the minutes, I need to know what is written there, even because, in a minute, one can write what one feels like, in the end. [...]

MR – I asked if you could imagine where you might be living if you eventually have to leave here due to the Garabi dam.

NB – I can't imagine myself in another place. For me it's death! Because we were born, we have grown up, have studied here in Porto Lucena. We've made friends, a society, the church – any kind of society you feel like naming this. So, taking us out from here is actually killing us. I can't imagine myself in another place. [...]

They [those in charge of the Garabi dam project] don't understand that it's not about monetary things! What is at stake is the affective bonds of an entire community with each other and also with this site. [...]

To give you an example: I helped to build this house. I handled the bricks, I worked on the cement mix, I arranged the bricks with cement on them. Can you imagine what it would be like watching the water cover this place [Nelci performs the movement of the water raising with her hands]. It's painful. It's quite complicated. Get me? [...]

MR – What else do you foresee being covered [by the water]?

NB – The nature! [gaped] This is another point that worries me. It's told we need to protect the environment. How much of the environment this [the dam] will destroy? It's not just about human or material things, the environment will also be damaged. If trees are important to us: where are most of them? It's spoken about the relevance of the riparian woodlands, of the conservation areas. What for, then? Are just riverside dwellers those who need to protect them? In the cities: no, no [head shake]; it seems no one needs riparian vegetation, or conservation areas, or whatever there. Why do we have to protect the riverbanks if they will come and clear the area when the dam is being constructed? Because, you know, this is also part of what will be affected. My father's property is basically all trees – and all the animals that roam within it. The riverbank is full of armadillos. They will all die with this. Surely they will. Where else will they find shelter? Some might manage. In the last flood we had here many wild animals died – the flood that happened due to the opening of the sluices gates of the Itá dam [which is situated upstream]. [...]

The Itá dam is already affecting us. Because, when they decide to release the water of its reservoir, they just do it. They don't care about what is downstream. How do you imagine we felt when the water

was reaching our patio and we were all here, inside the house? We just wished: 'close one sluice gate...'  
Do you get me? [...]

MR – And is this dam, the one which they opened the sluices gates, far from her?

NB – It is. It's in Santa Catarina [over 300 km upstream Porto Lucena]. [...]

This thing of dams does destroy life! Regarding the IBAMA [the government agency that regulates and inspect issues concerning the environment in Brazil]: we [riverside dwellers] can't cut one single tree. What about when the dam comes? What will they do with all these trees? Or will these trees stay and get rotten into the water? Will they manage to rescue all these wild animals that live by the riverside? Or will these animals die? If one catches a surubim catfish or a dourado fish today: this gets a R\$ 5,000 [roughly £1,250] fine. If they build this dam, will the *dourado* still be able to breed? *Dourados* need running water to live. [...]

For those who will listen to this 'reportage', for the God sake, this is our plea: do not do this [the Garabi-Panambi dam complex project]! This will destroy a lot! This will destroy lives, and lives, and lives! Those who receive this material, look at it carefully, analyse it with care. [...]

It's a great concern, this dam. There are also many other communities around here. I have no idea on how our life will be like. I'm against it and will fight so that this doesn't happen. I wanna die here. [...]

I've said this before: to me, leaving this place it's a question of death! Get it? I think I would be the last person to leave. Because I don't imagine myself in anywhere else, you know? This sounds tenebrous, doesn't it? I can't even think about this, because this gets to me [weeping]. [...]

This is a subject that wounds us. It's a very complex matter. It's quite tenebrous. This shakes deep inside us. It destabilizes us. I tell you: this destabilizes our structure. I'm not saying this randomly. Not at all. This is all feelings. [...]

MR – How do you feel about Garabi dam, Nelci?

NB - Hard to tell... Really angry! I couldn't imagine what I would be capable of doing. If they decide to run the dam works close to here, I tell you: they won't build this dam because what they put up on the daylight I would put down by the night.

MR - Is there anything that could represent this anger?

NB - [staring at me] Fire! [...]

I would fill barrels with petrol, set fire to them and throw them. Not joking! I guess this is my wild side, you know? That's why I promptly replied: 'fire'. Filling barrels with petrol, setting fire, throwing them... Explosion!... and every man for himself. If they do not have any mercy on me, why should I have it on them? Anger destroys, doesn't it? [remains reflective]

MR - How would you like to be portrayed with this fire to tell your story?

[Nelci shows me how through her performance in the photo shoot]

**Interviewee:** Geovan Carvalho Martins, 36 years old, fisherman

**Date:** 21.10.2016

**Location: Altamira**

**Fieldwork: BELO MONTE DAM COMPLEX**

[...]

Geovan Carvalho – It happened when they opened the canal in order to make the water flow [from the river channel] towards the Belo Monte [hydropower] plant. So when they opened the canal gates, in order to force the water to run through it, they caused fish to die, the view along this canal was... it was a sea of dead fish... I wish you had seen this. They worked as three boats together, sailing along the canal just to collect these carcasses. It was so many carcasses, loads of them<sup>6</sup>.

Marilene Ribeiro (researcher) - And were you at this site at this time?

GC – I was there, because I was working for the company [the Norte Energia] at that time, monitoring the parameters of the water in the area, then, I could see everything. When other workers came and said, ‘Man, this morning only more than one ton of fish has died. Until noon only’, I did not believe it. As we reached the area we could see that it was true... It was a lot of carcasses, so many, so many! So, I’m telling you this because I saw it with my very eyes. And it wasn’t just me who saw this, there were more people who saw this too. I just don’t tell you that all the fish in the river died at that time because what God has made cannot be over easily like this. [...]

MR – Bearing in mind all you’ve told me, what do you feel about this all, Geovan?

GC – Mate, when I think... I feel myself dismantled... this is an anguish... I can’t even describe this... it’s hatred, outrage, sorrow. ‘Cause everything God has gifted us with – those wonders: you look to one side, it’s over, you turn to the other, it’s over, you turn to a third one, it’s even worse! This all causes us anguish. I myself feel uneasy from everything I experienced... my island, gone, fish, gone, everything is falling apart. This is all anguish. This is what I feel. It’s this indeed. [...] It really hurts, it hurts here, inside here [he taps his chest close to the position of his heart]: everything you had lived, everything you had seen being torn apart, being finished like this... this hurts. It’s because we need to stand that we’re still standing, because this is a wound indeed. We’ve got many fishermen who are in need today. [...]

MR – Then, I’d like you to choose a place for your portrait and also an ‘object’ or anything you think that could represent this feeling you told me about.

GC – I see my portrait in the river... I belong there. Regarding the object you asked me to choose, I wish I could take the façade of my house... my place is under the waters of the Belo Monte dam now. [...]

**Interviewee:** Reinaldo Roque Köche (aka Nenê), 57 years old, small farmer

**Date:** 28.01.2016

**Location:** Barra do Santo Cristo, Alecrim

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

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<sup>6</sup> On the 15 April 2016 the IBAMA officially acknowledges the mortality of 16.2 tons of fish between 27 November 2015 and 25 February 2016 due to physical trauma led by the water whirlwind along the canal and the spillways, once they were opened for the water to run through (IBAMA, 2016), and issues a fine of R\$27.3 million (about £7 million) to Norte Energia.

[...]

Reinoldo Roque – Everyday I go down to the [Uruguay] river, twice a day. I get in my canoe, canoe around. When it's hot, I jump into the water and bath. It's beautiful. Then, I wonder: 'will they finish this all?' The river means a lot to me. It's a nature that I will never leave my mind. The Uruguay River: there are many types of it. I can't explain this. Its bends, rapids – when it's about to rain, the rapids make a different noise. [If I have to leave this place] I would remember this. How many times we have swum from one edge to the other: crossing the river swimming [...] I see a very beautiful image there. I see nature, fish jumping – sometimes a beautiful fish jumps and you're there to see this. There are birds, toucans. In the morning, *sabiá* and *canarinho* [species of bird], many species of bird, come and sing. Where else are you gonna see this? In places where there are caged birds? I'm against caging birds. Totally against this. [...] It hurts being born and bred in a place and, one day, everything is under the water. You don't even know where is you place anymore, because in the [vast] water [landscape] you're not able to distinguish where things are situated. You won't be capable of spotting your former place of living – if it was located here or there. This is gonna stick in our minds forever: what we used to be and... what are we now? What nature used to be and... where is nature now? It was destroyed. [...]

**Interviewee:** Luiz Webery, 42 years old, small farmer

**Date:** 09.02.2016

**Location:** Linha Uruguai Norte, Porto Lucena

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Marilene Ribeiro (researcher) - And did they [agencies that lead the Garabi-Panambi dam complex project] tell you about why they were building these dams?

Luiz Webery - That's what I said before, their meetings are always very technical. There, they present a whole national energy demand, which, for us, for the agriculturist, for the riverside community, is not enough, it does not convince us. The Uruguay River, for us, represents the Mother! We here, our family, we have taken the water of the Uruguay River several times; we survived with water from the Uruguay River. In times of drought, when we didn't have the artesian well, we didn't have a water network, we drank the water from the Uruguay River. For us, for the animals, for everything, right? And, besides life, the river [has] the roots of each riverine person. The value of the property, it is insignificant in view of the value people give to their roots, their family history. My father passed away at ninety-and-a-half, and for me, this is his figure here. I feel the responsibility of keeping this alive, knowing that my father set up a family of twelve children on seven-and-a-half acres of land. So, there is no value that will pay me for this land. To say that, tomorrow or later, we're going to have to be expelled by a company that will fill this area with water, because there is a lack of energy in the big cities! It does not convince us, it does not console us. [...]

MR – Luiz, you were talking about something very important: this meaning thing, of what it is that the Uruguay River symbolizes for you. If the dam were to be built, how would it look like, that symbol, that river meaning?

LW – Oh my God! I would not know how to describe it... I lost my father, two years ago now. Of course the cemetery, for us, is always a place of sadness, of feeling, we go there to visit the family. I believe that a possible dam on the Uruguay River, for us, here, would have almost the same meaning: a dead thing. Because a whole story that you lived through as a child, a teenager, here, all the friends we made, the holiday reunions, the end of year reunions, because we meet the people that we grew up with here, to play a little football at the river gorge, to take a river bath ... to know that it will never exist again ... Honestly, I think ... it would not have a denomination other than a graveyard. [...]

When there was a longer drought, here, in our port, there is a very large smooth rock slab; so the whole neighborhood came here to do laundry. There was a line of women to their waists in water, each on her board, on her rock, washing clothes. Some of them spread [the clothes] right there, so [that] they could dry, until they finished ... and the children [were] there, taking a [river] bath. It is something that we, at the time, had no way to video, how to record, [due to] the poverty situation at the time and there was no also technological evolution, like now; but, in our memory, that does not go away. Here's the rock slab, then, when the river rises a little, we jump off the rock slab into the water. There was our football game, in the gorge, and then, when we were all sweaty, we went into the river to take a bath. People lined up to leap into the river. We would soak the rock slab with water from cans to make slides. That was very, very fun for us and... it is inexplicable, this thing! Some things you do not record, but they are recorded forever in the memory of the people. I wish my daughter could live through that. I wish one did not cut off this right from her, to still live through this: what her father lived through, what her grandfather lived through. [...]

We have for tradition, here, day 02, now, it has passed, of February, it is the day of Nossa Senhora dos Navegantes [Our Lady of the Navigators]. So, it is a way for us to honor the Mother of the Waters, we cross the Uruguay River swimming. So we put a boat on the water, someone goes ahead, for safety, if someone feels unwell... because, age is coming and makes a difference, right? And we put our arm and cross the river swimming, in a way to pay homage to the Mother of Water. [...]

MR – If the dam were to come, how would this river, which you spoke of as a mother, how would it be affected?

LW – My God! Here, right in front of where we live, there is an island, the Grande Island. At the time, when we were children, there were three residents on the island, all families who grew up with ten, twelve children. My father always said—my father planted a lot of manioc, potato, here—that he [Luiz's father] traded [his products] for fish with the lord of that island. Even because there was no electricity, at that time, we had no way to store meat and other products. Then, every day he [Luiz's father] brought fish and [the lord of the island] took manioc and potatoes. This is the sense of the river being the mother, too. She [the river] is living. And, once the river ceases to be running water, it ... [Luiz huffs]... This is unprecedented! ... I have had the opportunity to get to know some built dams. It's totally

different; it's totally inhuman what is done with the river! I would not imagine seeing the Uruguay [River] one day like this. I did not want that! I do not want it! [...]

MR - You said you got to know other dams. Have you ever spoken to other people who have been stricken in the past?

LW - I have. I have had the opportunity to visit in a resettlement [site] of some people who opted for resettling after the dam. And this is something that causes me great fear, because, in the resettlement I have been to, of the 30 families from that place, I think there are only about 10 families left. People desert it, they leave, because, first, they are removed from their root-place, they have their neighbors, they have their history, they have a whole constructed history—they are removed from and are thrown in another place. This other place, people cannot always go to a place with easy access to the city, with easy access to commerce, with a structure. Even the weather changes everything, right? So people do not stay. It's no use, people do not get used to it. There is the issue of relatives, the family that is much more important than the financial value of the localized structure, right?

MR- Those people who do not get used to it, do not they get used to the places they're meant to be resettled in? Or where they went on their own?

LW - Where the company negotiates areas along with the public agencies and such [i.e. the resettlement site that aims to 're-home' this people].

MR - Do you think, from the experience you had, that [these resettlement sites] display less structure than people had before, when they were in the [river] gorge?

LW - Not because of the structure itself. I see that the sentimental value, the historical value of people is greater than the financial value of structures. I would not trade the humility of my house here, in the river gorge, for a well-structured house in the city. I wouldn't get used to it, it's not right, I'm not going to sleep well, I'm not going to wake up well there. I like it here, I live here, this is where my father grew up, I created a whole family here. This is where we played with our brothers. Here, each tree stand displays its history for the family; each pasture gorge has its history. So it goes beyond this financial value. That is why not all families in a resettlement resist.

MR - Do you remember what dam?

LW - They came from the Dona Francisca dam, near the central part of the state [Rio Grande do Sul state], near Santa Maria. The people came from there and were put near Santa Maria - that would be around 200, 300 km away from where they lived. Hence, they were displaced and the absolute majority of families did not fit it. They did not adapt, they did not live, they did not get used to their new place. They sold it for insignificant values and left. This has not worked. [...] [If they rather] Go to the city... And [the riverine people], what are they going to do in the city? What job will they have? How will they survive? Will they eat the value they received from for the property [the indemnity]? Which is very quick to happen, that. In addition to that, many people go into depression, people do not resist, people panic, go into shock about it. [...]

MR – And the Uruguay River belongs to whom, do you think?

LW – To all. To all. I am a Catholic, I am a Christian, I believe in a creating God and, as it is a work of nature, it is a divine work, I think everyone has the right to enjoy the river. I do not think this is a question of privatising the river for big monopolies, big companies, big capital. I think it is the gift from God, it is from nature, let the human being, let the people, live it. We grow up fishing, eating fish from the river, surviving from here, we have leisure times at the river, so many people coming and we have always kept the doors open to the people that use it. So, let the river continue being for all. Let it be a matter of life and not of death. The dam will only bring death. Profit for the few and loss for many. [...] What I'm sure of is that I'll be fighting for the rights of future affected people, if this [Garabi dam] is going to happen, for the life of the river, so that we can prevent this dam construction, certainly, I will be one more in the fight, in the defence of the Uruguay River. This I'm sure! I cannot defend the Uruguay River just in word, if we have to go to the fight, I'm one more that will go, for sure. [...] We are certain that we can also be compensated with your work, due to the simple fact that you are presenting this in universities and that it is also making other people aware of the problem that we are experiencing, it is already very gratifying for us because alone we are nobody, we need the help of each other, we need the sum of the effort. We know the power of unity, and more than ever, we need this: that people can join us in this struggle against the big capital, against big companies that want to monopolize the river. We know that the river does not belong to us alone. We know that it is not our cause alone, and that it is not a problem only for us, of the Uruguay River, we know that a bigger project is symbolized around it, because the great capital that wants to crush us here also has an interest in other places. And we count on this support, with the people's solidarity who can also support us, defending the Uruguay River, that it continues to be alive, continues being ours, continues being of all and that we can continue being, as long as God gives us life, being able to be residents, to be residents of these places, here. May the river continue to generate life, being alive, and generating life.

**Interviewee:** Lúcia Birk de Brum, 63 years old, teacher (retired)

**Date:** 18.01.2016

**Location:** Poço Preto, Alecrim

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Lúcia Birk - For us, here in the countryside, a school is not a school – where one goes to works. It's like our home, because we dedicate our entire life to it. When you've got any spare time, you go there to straighten up things. In the big cities this kind of relationship doesn't exist. We [the community of Canal Torto] constructed his building ourselves. My husband cooked to the workers.

Marilene Ribeiro (researcher) – And will this school be affected [by the dam]?

LB – Yes, it will. This school will be underwater. It will be erased from the map. Water will swallow [the community of] Canal Torto. This is what will happen if the dam is built: it will vanish. Straightforwardly, Canal Torto will no longer exist.

Here, amidst these bushes, there was a pavement where we would raise the flag. I had 9 students. There was no cleaner. Behind there, there was a laundry tub and a wire where I would place washed cloths and rugs. The pavement there was all red, beautiful. We [the members of the community] rubbed it. Everything was very tidy. The courtyard was also beautiful. We mowed the lawn. Here, two meters ahead the pavement there was the garden with roses and all other kinds of flowers: daisies, gerbera. We all planted these flowers, and would replace them at every couple of years.

MR – And what was here?

LB – Here was the kitchen. And, there, the boys, and, there, the girls loo. Here, in the middle, we would set the table for the students to have their meal.

MR – When did it close?

LB – In 1996. Twenty years ago. Thinking that this is the place where my life started, my first job as a teacher... and, now, finding it in this shape... it's really sad. But, until the day one single brick still remains, I wanna carry on coming back here. [...]

I did a devotion to Nossa Senhora Aparecida – this statue here, which has accompanied me in these thirty-six years – asking that the dam doesn't come true. Every time I remember this dam and look to everything that will disappear because of it, I pray to God: I know, Lord, you're the owner of nature and it is not our will but yours that may prevail, but we do appreciate if the dam doesn't happen, then we all can live the rest of our lives here, at our little corner of the world, where we feel good, where we're happy, where we've got all, all the wealth.

**Interviewee:** Ronaldo Praiczik, 36 years old, pharmacist

**Date:** 20.02.2016

**Location:** Garruchos town

**Fieldwork:** GARABI-PANAMBI DAM COMPLEX

[...]

Ronaldo Praiczik – People have waited for Garabi [dam project] since 1970 or some time around it. I remember when I was a child, back then we heard: “Garabi is coming, Garabi is coming”. There was a sheer beautiful island in the [Uruguay] river – and this island is still there – where my family used to spend the holidays. Then, at that time, my cousins as I had this thing regarding Garabi: “we're gonna lose the island! This is gonna vanish! What are we gonna do?!” Over time this subject [the Garabi project] eventually was put out of the agenda. But, two years ago it seems it resurrected. Then, everyone has been apprehensive: we don't know if Garabi will in fact happen or not. We don't know if the town [Garruchos] will stay here, the part that doesn't get submerged, or if they will rather reconstruct the whole town at another site. The information that reaches us here is poor, and, we don't even know at what length this information is really reliable... They say, “Well, this is an extremely big project, it is huge”. All right, but, where are we situated within this massive project? As the main

affected community, it was expected that we had, at least, access to information, and this we haven't had! [...]

The positive thing Garabi could bring to Garruchos would be the building of a new town, supplied with sewer, sanitation, a hospital, paved roads. Because here, if we want to put up a new lamppost, we need dynamite to do so, we [Garruchos] are settled on a large rock slab. This is what Garabi could make for Garruchos. But we don't have any guarantee, they don't give us any guarantee about this. And this scares us. They only say, 'there are plans for this'. Well, plans can be changed. [...]

We invest time, money, work, we like where we live. I don't know if I would like to move from here. If they could come to enable us a better quality of life, because here in Garruchos, we see, life can be tough: we know many dwellings where there is no toilet in, or, if there is any, the sewage is disposed on the streets. So, we think about this all, if this venture is coming, then it should at least contribute to improve our town. At the same time, we also know that, actually, this is something that the government should provide us with, yet, governors and mayors keep postponing things, waiting for the dam to sort these things out. So, will we carry on waiting thirty years more for these matters to be solved? I don't see another solution for Garruchos... The budget to asphalt this 65-kilometer road, which is the only access we have to transport ourselves from here to other places, is astronomic! There won't be any politician who will face and do this. We know how things are, when it comes to politics. Here we are 3,000 citizens altogether, that is, we are 3,000 voters. It seems that the budget for this asphalt is something around R\$80 million [roughly £20 million]. With this amount of money a politician can enlarge a road in Porto Alegre [the capital of the state] and "reach" 100,000 citizens, that is, voters. Will this politician spend such money to link the "nowhere", which is Santo Antônio [the closest city to Garruchos], to the "nothing", which is Garruchos? Of course not! Then, we will carry on bumping the health care service vehicle transporting pregnant women in labour to the hospital, and also our private cars. This when it's not raining. Because, when it rains, we become isled here! So, that's why I think that the only solution would be Garabi [dam], but not in the way it's been set, forced down our throat. [...]

It's about these improvements that we don't have any guarantee: if these things will in fact become true with the dam. Mainly because we've seen dams being built in the middle of the jungle! If these guys can build a dam in the middle of the jungle, they will circulate through this unmade rocky road easy-peasy. The company in charge of the dam works will not care about having this road asphalted. And we will have to carry on without this... and we will also have to carry on without many other things.

**Interviewee:** Espedito José dos Santos, 68 years old, small farmer (retired)

**Date:** 23.04.2015

**Location:** Sobradinho town

**Fieldwork:** SOBRADINHO DAM

[...]

Espedito Santos – An uncle of mine told me that his parents, I mean, his grandparents used to say that the river São Francisco would one day be turned into a sequence of separate pools. ‘How so, dad?’ he would say, ‘How could it possibly be made into pools?’ ‘I don’t know. But one day, the river São Francisco will be turned into separate pools,’ his father repeated. ‘But how?’ the boy would insist. ‘Man is going to control the river,’ his father replied. ‘Man is going to dam the river.’ ‘But if they dam the river,’ the boy would say, ‘it will burst!’ ‘It won’t burst,’ his father replied, ‘because man has the means for everything.’ [...]

My occupation, back there, was the one of agriculturist. I had to leave my beloved river, the place called Juacema, I’ve still got passion for that place, where we had plants, beans, potato, cassava, sugarcane, muscovado sugar—by this time of the year it would be time to mill the sugarcane. Then, we’ve lost this all.

Marilene Ribeiro (researcher) – Why did you lose it?

ES – Because of the Chesf [the company in charge of the Sobradinho dam project]. Chesf is a governmental company, right? It arrived there [in Juacema] and deceived us, speaking beautifully, speaking about money, and everyone was deluded by it. When we realized, the Chesf had already conquered the area, we found ourselves conquered. [...]

Then, when they [those in charge of the Sobradinho dam works] finished drying there [part of the São Francisco River], then he said, ‘Now, we’re going to up the river’. Then, they closed the sluices, allowing just a tiny amount of water to pass through the turbines, and, then, the water rose up [upstream]. So, what did they kill? They killed *peba*, bees—there were a lot on this riverbank, they died in the water—*preá*, *cordoniza*, right? We had everything on this riverbank, on those islands, everything was there and they all died in the water, drowned, and we had them no more. Even the bees were gone—we had a lot of *mandaçaia*, today there aren’t any. Did you understand how they held in the river? [...]

Many fish died due to the turbines [of the Sobradinho dam]. There were fish corpses floating everywhere downstream [the dam]. The [São Francisco] river became white with dead fish. *Curimatá*, *dourado*, *piau*, *curvina* [species of fish], they were all gone. [...]

By the [São Francisco] riverside we used to have *juá* trees, *jatobá* trees, [so big] that, to manage to spot a vulture in the sky, one needed to really bend back his/her neck. There was the *ingá* tree – which is a water’s plant; there was the *marizeiro* – which is a water’s plant; there was the *muquém* – which is a water’s plant; there was the *juá* tree—loads!—and, nowadays this is all over, they are all there, erased inside that reservoir. [...]

[Speaking in a passionate tone] I’ve got passion, passion for Juacema! I’ve already told my wife that, if the lake [the reservoir of the Sobradinho dam] dries out, I’m the first one to go back to the São Francisco riverside—to farm. She asked, ‘but where?’ I said, ‘in our land, where we used to live, in Juacema.’ [...]

**Interviewee:** Antônio de Carvalho, 47 years old, small farmer

**Date: 21.04.2015**

**Location: São Gonçalo da Serra, Sobradinho**

**Fieldwork: SOBRADINHO DAM**

[...]

Antônio Carvalho – We used to have here *pirá, surubim, matrixã, curimatá, mandi-lagoa, mandi-bagre, capadinho, pocomã*, piranha beba, red piranha, *piau-cabeçudo, piau-de-cheiro* [fish species], are you bearing with me? *Sarapó-cobra*, dog fish, *piaba-sardinha, pacu* [fish species]. Our [São Francisco] river used to have all this richness – considering the ones we knew only! We no longer know what is fish. [...] I've got a feeling... [Antônio stops speaking, keeps in silence for a moment, and eventually breaks into tears] ... We had to leave my grandfather there [in his former place of living, Juacema hamlet<sup>7</sup>]... [weeping]... It was his will to be buried in Juacema. If we [Antônio and his family] knew that the Sobradinho [dam] would happen, we'd have never let him be buried there. We could do nothing about this but to leave him back. [...]

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<sup>7</sup> Antônio's grandfather's remains were left to be submerged, as he was buried in Juacema, hamlet that was located within the area that later on became the reservoir of the Sobradinho dam.

## APPENDIX 6

### Interviews with Susan Meiselas and Anthony Luvera

#### Interview with Susan Meiselas by email, 27<sup>th</sup> August 2017

Dear Susan,

I am discussing your ground-breaking works *Kurdistan – in the shadow of History* and *Encounters with the Dani – stories from the Baliem Valley* as case studies in my thesis, specially focusing on the way you assemble the stories you want to tell.

I consider your answers will be crucial to clarify and strengthen many points I make along my discussions.

#### QUESTION 1:

Marilene Ribeiro – What made you interested in your subjects? How did the idea start?

Susan Meiselas – In each case the starting point is different, but they all involve following my curiosity about something I either read or hear about. The ‘idea’ of how to frame the work evolves, the concept for the work follows the encounter itself.

#### QUESTION 2:

MR – How do you work out what it is that you want to achieve with the work?

SM – It can take a very long time before I see the ‘framework’ for the work, each is again different. Following or reflecting on a historical process is different than immersing in a space and living culture (such as with *Carnival Strippers* or *A Room of Their Own*).

#### QUESTION 3:

MR – Was one of your aims to dismiss or question views of the mass media, policy makers, or even history? Why?

SM – I would not say ‘dismiss’, but certainly question and sometimes challenge the views expressed in the ‘media’—though that is a very broad statement, and I certainly value the work many people do to observe and report on history. Most often they are forced to only focus on immediate ‘news’ and as I have often said, I saw these moments as an historical process to contextualize further. Too often

journalists don't have the time they need – opportunities to stay or return places for the perspective of time they would most benefit from.

QUESTION 4:

MR – In both projects (Kurdistan – In the Shadow of History and Encounters with the Dani – stories from the Baliem Valley) what made you bring together material from different sources in the final work and set up it chronologically?

SM – It was clear to me in both cases that to understand the present, one had to know more about the past, something I could not photograph myself, but I could collect images by those who were witnesses and recorded their reflections and then create an object that captured a multi-vocal approach.

QUESTION 5:

MR – Why have you used such a different way of working to the so-called traditional documentary approach?

SM – I was not doing this work to simply be 'different' I saw it as a potential solution to the problem I perceived and wanted to explore new ways of expanding the narrative than my own photographs alone could do. I've also worked with sound, text, video to complement my photographic work, so archival research became an organic part of my process as well.

QUESTION 6:

MR – What effect did you want the work to have and did it do this?

SM – Most important for both bodies of work is that it was created collaboratively with a community of scholars, practitioners and the photographed subjects as well. I was most interested in the value it would potentially have for them, to have access and see themselves as they were represented historically by others.

QUESTION 7:

MR – How did you build the confidence for your subjects to explain or talk about their experiences and situation? Maybe give an example?

SM – Sharing insights or experiences is always a slow process over time, there is no way to judge how long it might take. Each relationship is unique. Explaining what you are doing is not enough, they need to see it. Sharing the photographs you've either taken or collected is important, along with how their words might be used. Some people want to know more, many give you free hand and others prefer not

to participate. All of which is fine to have clarity and keep moving toward what you imagine. Sometimes people have even said they regretted not contributing when they see what has been made.

QUESTION 8:

MR – Can you describe the nature of the collaboration that you had with your subjects and why you wanted this collaboration?

SM – Again, each situation has been different. In Kurdistan, I was able to work closely with an Iraqi Kurd with whom I traveled in and out of villages, visiting many families, he either knew directly or knew of. He was deeply interested in learning more about his own history and was excited to facilitate these exchanges in the field. Unfortunately he was limited to only working in N Iraq and could not travel with me to Iran, Turkey or Europe. The scholars network was a totally distinct circle, and meeting one would lead me to another, knowing who was specialized.

With the *Dani project*, I was unable to return and travel in Irian Jaya to search for materials. I did go to archives in Holland, both personal and collections, where I then followed leads and interviewed as well as resourced a great deal through the networks I could connect to online. (That was impossible in the 90s with the Kurdistan project).

QUESTION 9:

MR – Do you think your subjects might have taken your proposal as way to address their messages to those far from their reach? Why?

SM – No idea.

QUESTION 10:

MR – How did your subjects influence the way you understood, made and edited the work?

SM – The whole project relied on my ‘subjects’ as partners in the Kurdish project. Sometimes they proposed new material to search for or individuals/families to meet. My schedule of travel was always flexible so it could respond to their suggestions. As the work grew, I used a series of ‘scrapbooks’ to show the accumulating materials and many scholars and others used post-it notes to respond to what they saw. The final editing was mine, along with the advice I had from key scholars, especially Martin van Bruinessen.

With *Dani*, I mostly think the networks were contributing but were unable to see what I was making, beyond the individual pages that referred to their work. I could send PDFs but did not have the

opportunity to meet with them and show them the entire project as it was evolving as I did with the Kurdish diaspora.

QUESTION 11:

MR – Are there any specific exchanges that you had with them that motivated your way of making/editing the work? Could you describe them or maybe give an example?

SM – On first showing of some of some early travelers diaries and published memoirs, there were some members of the Kurdish community who were astounded to read that they were referred to as 'savages'. They did not want those references reproduced and only after extensive conversation did they agree that it was important for future Kurdish generations to have the raw material to read how they had been represented in the past.

QUESTION 12:

MR – Is there any way of measuring the impact of work like yours and, if yes, how have you managed this?

SM – Not in real 'metrics'. Of course there is the fact that the book sold out within a relatively short time and a second edition was in demand and published with a 10 year update. That made it possible for the region to receive 5000 books for local libraries and schools. The value of that is immeasurable. I only know that the Kurdish community itself has valued the contribution and then other scholars in fields such as anthropology, cultural studies and art history have since written about its importance as a distinctive approach to 'visual history' (ie see *In History*, Elizabeth Edwards).

QUESTION 13:

MR - Do you think photography has any power in changing things? Why?

SM – Photography can influence how we see, think, understand and perhaps at times engage or act. We simply cannot always measure or trace how it works on our minds and actions.

QUESTION 14:

MR – After you have been working on long-term projects with these groups and individuals, what is your understanding of their past and what is your hope for their future?

SM – My hope is that they will be better appreciated as a distinct culture with a complex history. The future depends on many forces at play.

Thank you for your outstanding contribution to my research,

Marilene Ribeiro.

**Interview with Anthony Luvera by Skype, 28<sup>th</sup> June 2017**

Transcript –

Marilene Ribeiro (researcher) – I’m specially interested in your *Assisted Self-Portraits* series. Just for me to make sure about some details as well as some dates: is it still ongoing, Anthony?

Anthony Luvera - Yes.

MR – Because I saw that you worked with different groups in different cities.

AL – I firstly worked with people that experienced homeless in 2002. At that time I was really sort of interested in working with people to see what they might photograph, and if they would be interested in sharing their images with me for exhibition, or publication – I didn’t really have any sort of specific plans at that time, but, one day, perhaps, I thought, that it would be great to create an exhibition. Stepping back one moment, the way that I became to work with people who have experienced homeless really came out of an invitation that I received from someone who was working for a homeless charity organisation called *Crisis*. *Crisis* produces a very big shelter event for homeless people in London over the Christmas period called *Crisis Open Christmas*. They said to me “you should come along to this event and take pictures. It looks amazing, it will be really amazing for a photographer to make pictures, there will be over a thousand people and it looks extraordinary”. I felt very uncomfortable with this sort of straightforward documentary approach, in going to a big warehouse with a lot of people, hearing very, sort of, you know, places in their lives that might be difficult or challenging, and making pictures of them. I said “thanks, but, no, thanks”. I was speaking a bit to S. Allec, and I said “you know, I prefer to see what people I met would photograph”. And I left it at that. Few months later, I was working for Kodak on their single-use cameras, so I was able to source a really large donation of disposable cameras and processing vouchers, and I proposed to this person that I knew at *Crisis* and to the director of *Crisis* that I would come to the following *Crisis Open Christmas* – and that would have been in 2002 - to volunteer but to also let people know that I would like to produce a photography project, and that I would host a workshop every Friday afternoon at a location in Spitalfields. So I did that: I went there in the following of the *Crisis Open Christmas*, and I volunteered, and I helped down, I did all kind of things, and when it was appropriate, I told people I met that I was going to do this thing and if they were interested, to come along and meet with me. And I kept my expectations pretty low, a lot of the people I met had complex in terms of the situations going on in their lives. And I thought “if I get five or six people that would be great”. But actually quite a lot of people came in that first session - around ninety or so. It was a Friday afternoon, it was between 2 o’clock and 5 o’clock, and people would kind of come in at any time and have a cup of tea, and I would tell them about this idea that I had - which was really rather simple: I wanted to see what people would

photograph. Of course this is [was] before mobile phone technology and access to image-making devices – it was not as widespread as it is now. I think that had two effects, really: 1) the idea of offering a free camera was novel and appreciated and, 2) people in general, perhaps, were less used to seeing everyday images in the way that we are now – I think [now] we are so surrounded by photographs of all kinds of moments. So, it was kind of, I suppose, a uniqueness that was being offered. These workshops continued for about two years – it must have been. One of the participants, a guy called Christian, came into one of the workshops with a business card for a woman called Victoria Jones, and she was working at the Whitechapel at the time, I'm not sure exactly what the department is called, but it's like the participation, or education, or community outrage department... And she suggested that we tried to find a way to show this work with the Whitechapel, when I met with her, and I thought really carefully about that, it seemed like a really good opportunity but it also seemed like a sort of a strange context for the first time these images would be showed, you know: in galleries, public galleries, like the Whitechapel – which I think are fantastic, of course, and have a really important part of cultural life of the city and of the country, but they largely tend to primarily speak to one kind of audience, or to very sort of few sorts of audiences, that are largely white, middle class, have some kind of social agency, and a largely kind of a ware of the social inequities that impact upon people that might lead to homelessness. I said “ thanks, but, no, thanks”. I left it at that, continued with the workshops, providing people with cameras, taking the cameras in, getting them developed, taking in the photographs, talking with people about the photographs, and getting to know people. A few months later, Victoria called me and she said that she had finished her job at the Whitechapel and had taken at new job up at the London Underground, on the Art in Underground Programme – at the time it was called *Platform for Arts*, but it was subsequently called *Art in the Underground* – and would I like to show the work in the underground? – because I've spoken to her about my misgiving about galleries spaces and galleries' programmes, not that I'm completely against galleries, of course, but at that time I was really careful about the context. She said “We can organise an exhibition across the tube stations”, and that seems perfect to me in terms of reaching many different kinds of audiences in an unexpected way. It just chained with the ideas that I was interested in – and I'm still interested – in relation to documentary and representation. But I felt that, at that time, it would be rather strange for me to just come and pick a very small number of photographs because I worked with about two hundred people and each individual had very specific and particular stories they wanted to tell or ideas they wanted to explore using the cameras. I wanted to find a way to make pictures of the individuals but I wanted to, somehow, react against the traditional documentary or portraiture exercise of me holding a camera and pointing at someone. So I asked for a bit of time and support from the *Art in the Underground*, and I also got a sponsorship from Calumet, the photography retail & hire company, as well as another one called the Pro Centre, which is Hasselblad. So I was able to access any equipment in their rental desks for a period of about a year or so. That was really valuable, because what I ended up by doing was using 35mm, medium format, large format, digital, analogue, lots of different types of technical arrangements of equipment. One particular participant, a guy called Phillip Robinson, was interested in working with me

– he is a fantastic photographer! At that time, Phil and I experimented with all the equipment and what I wanted to do was to try to find a way of using the equipment that I could facilitate someone who had little or no knowledge of photography to be able to create a self-portrait. So Phillip and I experimented with lots different sort of equipment. Eventually I decided upon this: a 5x4 field camera on a tripod with a hand handle cable release, we used ready-load and quick-load film, which were film stocks at that time produced by Fuji and Kodak, so that you don't have to use dark slides, the sheet film was like a cardboard sleeve, so this meant it was very light-weight, as well as a hand handle flash. That's how the beginning of the *Assisted Self-Portraits* happened. And, then, in preparation for that exhibition on the Undergrounds, I invited participants who were interested to create these assisted self-portraits with me and then we produced an exhibition across twelve stations in zones 1 and 2 – that must have been around 2005 and 2006. We kind of went up, came down, and went up again. I think it was twelve participants or eleven participants had their *Assisted Self-Portraits* and a small selection of their photographs. So that's how the *Assisted Self-Portraits* began and the first showing of these assisted self-portraits happened in that way.

MR – Then, did the *Assisted Self-Portraits* start around 2004?

AL – The *Assisted Self-Portraits*, I guess it would have begun... God! I'm a bit fuzzy at time...

MR – It is just for me to have an idea. It developed from this workshop you had with these people?

AL – Exactly. So these assisted self-portraits really stand out of the early workshops and the technical experimentation, which lasted about a year or maybe a bit longer, with Phil Robinson... So, in fact, some of these assisted self-portraits might be dated or would have been created before that exhibition. Subsequently, while I was still continuing to work in London, I also worked in Belfast, then in Colchester, and then in Brighton. In each place I used the assisted self-portrait methodology in the same or in a similar way. So in Belfast, when I was creating Residency, I was very keen to develop these assisted self-portraits with participants in Belfast but to really kind of acknowledge the landscape more, which was why there was a shift from a vertical to a horizontal format. But, in terms of the actual production, these assisted self-portraits production happens over a period of sessions. I work with the participant, show him how to use the equipment, we create several exposures, using Polaroids as well, I get the film developed, take it to them, we look at it, we think about what is working well, what can be improved, we do it again. Similarly we repeat this as many times as it's possible given the time availability of the participant, myself, and the budget. In Colchester, which happened after Belfast, I was working on a project that was part of a commission by a social history museum, where the display of objects is very much the kind of, you know, at the core of what social history museums do, so I was really keen to think about the sort of possessions or the belongings that people own and that are important to them, and to see if there was ways to incorporate those in the assisted self-portrait images. That was still working

with film, that was still an analogue process. When I began to work in Brighton, the analogue film was very scarce and no longer really available to me, so I shifted the equipment from 5x4 field camera to digital medium format camera attached to a laptop, using Face On software, on location. That kind of posed a number of challenges for me in terms of accessing equipment, testing equipment, taking that equipment on location, but it also offered a number of opportunities around enabling the participant to reflect on the images that were created in that session, for decisions to be made between us a lot more easily, also it kind of enabled me to work with participants and the equipment on location in a way that was just different, I suppose, because it is different... the operation of the camera... the whole thing is kind of different. It worked just as well as, if not better, in some ways, as an exercise of co-creation.

MR – You said that when you were invited to go for this Underground exhibition, then you started to think about having portraits. Am I right?

AL - Yes.

MR – Before this, you had photographs made by these people using disposable cameras, like Kodak [ones].

AL – Correct.

MR – Basically you’ve got their perspectives on the environment they were and the way they wanted to show this to other people, I imagine, to you, at first instance, but, of course, to other people as well.

AL – Right.

#### QUESTION 1:

MR – The proposal you made to them “Let’s work on photographs. Let me see what you want to photograph”: do you think they accepted this [proposal] because they thought somehow it could be a way for them to reach people?

AL – Look, when I first invited people to meet with me, to take cameras away, and photograph their experiences and the things they were interested in, I think that the participants were so many different people, there were many different reasons behind why people wanted to engage with that. Some people were interested in having a way to create photographs of friends, families, special places, and good times for their own keepsake and memories, some of those people didn’t want me to use the pictures and didn’t allow me to keep the negatives, and that was fine, some people took the cameras and never came back with them, other people had very specific ideas about... just very specific ideas, for

instance, there was one guy called Gypsy and he was sleeping in a cardboard box on the steps of the Royal Academy [of Arts] at the time. Pretty much all of the cameras he used was just to photograph cardboard boxes, either the ones he was sleeping in or ones he saw on the street. After a couple of months of just a number of these cameras filled with pictures of cardboard boxes, I was, like, “Well, Gypsy, why do you only photograph cardboard boxes?”, and he said “Well, you know, I wake up, I’m inside the box. I get out of my box and I’ve got to find somewhere to hide my box, and when I come back to find my box, if it is not there, I’ve got to find another box and I get back into the box by the end of the day”. So, for him, it was very much a way of communicating something about his lived experience at that time. Another man I worked with, called Ruben, he was from Georgia in the former USSR [the Union of Soviet Socialist Republics], left there when it was still a soviet state, travelled across Europe seeking asylum in a number of different countries. He had this kind of experience for a number of years of living unstably, living homeless in a number of European countries. He eventually took himself to New York, he travelled to New York on a shipping container, lived on the streets in New York for a couple of years, and travelled from New York to Ireland, again, on a shipping container, and, then, from Ireland, smuggled himself by ferry and train to London, when I met him – it must have been about 2004. He immediately said “I’m gonna photograph the London...” for him the real experience of London, as I suppose he thought it might be, he spoke about having this sort of expectation that London would be this place with “streets paved with gold”, to sort of use the cliché expression – which was the one he actually used. Actually what he found was that living in London was a lot harder and harsher than he ever could possibly imagine; so he wanted to sort of show that. It’s very difficult to make a generalisation about what drove all of the participants to take cameras away, there are lots of different stories...

MR – Thank you. You said you were invited to photograph the event [the *Crisis Open Christmas*], at the beginning, and you said “No. I think it’s not the kind of thing I’d feel like happy of doing”...

AL – Yes.

#### QUESTION 2:

MR – But, then, you said that this idea of working with them [people who had experienced homelessness] and having them to photograph what they wanted came to your mind and that’s why you started this idea of the workshop, because you wanted them to be in the photographs as well, in the photographic process. What was your aim, at that time? What made you to come up with this idea? Your motivation.

AL – I was suspicious, I am still, in some respects, but I also have a great deal of respect. At the time I was aware of the kind of critiques that could be applied to documentary photography, particularly by the lights of writers and artists such as Martha Rosler, Andy Grundberg, Solomon-Godeau, Allan Sekula, a

number of these people who were writing in the 1980s and 1990s about the problems of speaking on behalf of other people, about the problems of making photographs of people who are less able than you are in society – Martha Rosler’s work, in particular her *The Bowery in two inadequate descriptive systems* and the piece of writing that accompanies that, called *In, Around, and Afterthoughts: on documentary photography*, and another piece of writing that she did, or wrote, called *Post-documentary, post-photography?* You know, these kinds of writings I was exposed to on my undergraduate studies in the early to mid 90s, in Australia, where I’m originally from. You know, I was taught by photographers whose practice is very much rooted in the documentary tradition. I suppose that when I came to that conversation, a lot of that stuff was in the back of my mind and my immediate instinct was to not photograph homeless people. I’ve never wanted to photograph homeless people before. I really was sort of speaking a little bit off-hand, sort of saying, you know, “I don’t want to do it but I’d prefer to see what they would photograph”. I was aware of a few projects that had happened around that time where the photographer or artist would offer cameras to their subjects. At that time I didn’t know about the work of Wendy Ewald. It wasn’t until actually Anna Fox told me about the work of Wendy Ewald, years later, when I was doing my MA studies at LCC [London College of Communication]. I was certainly aware of the work of someone like Jim Goldberg and his *Raised by Wolves* book, and the kind of the use of photography, the kind of approach to documentary photography that he had developed at that time was very much a kind of personal, subjective kind of approach, issuing any kind of essence of trying to say something objectively. But he also, at the same time, asks the subjects to take part in films, in sound recordings, in writing, in hand-writing, letters, other material, a lot of sort of things. So I was kind of aware of those critiques on documentary and practices like Jim Goldberg’s. I think it was partly me just making that off-hand remark and partly being in the position of, few months later, being able to access the disposable cameras – that really got the work off the ground. I have to say that I never began this work thinking I would still be working with it nearly twenty years later, I didn’t begin it thinking “Oh, I’ll have an exhibition on the Underground” – I think in anyone’s career, you could be strategic and intentional as you want to be, but, at the same time, there will be these circumstances that arise that you don’t necessarily have control over or could necessarily predict, and you kind of make the most of them and you try to connect the dots.

### QUESTION 3:

MR – When all of this came together, as you said: the disposable cameras opportunity, and you had this previous experience with the *Crisis*, you got all this background in your mind. When you conceived the workshop and the *Assisted Self-Portraits*, was one of your aims to dismiss or, at least, to question the views of mass media and policy-makers regarding the situation of the homeless, and who were the homeless?

AL – Yes. Certainly. I was very interested, and I’m still very interested, in the way other people are represented – when I say other people, I mean people who are overly spoken for, or who are

disempowered, or who are excluded from mainstream representation, or, if that inclusion in mainstream representation is present, it is somehow overlaid with the agenda of the particular context in which it is situated in: it might be mass media, it might be entertainment, it might be the work of NGOs, it might be charities. I am, and was, very interested in that sort of visual trope, if you like, and certainly part of the intention was to shake up negative preconceptions of homelessness. In my broader practice, I'm interested in thinking about the role of photography in culture shifting, in kind of being part of redefining consciousness about issues, topics, people, and places.

#### QUESTION 4:

MR – As you mentioned, I'd like to ask you this tricky question. You talked about the shift, the shake, and the power of photography. Do you think photography has any power in changing things?

AL – I think photography and photographs can have very powerful effects on people – I know that they certainly have on me. There would be moments in History where the use of a particular image has a really extraordinary effect on the political, social, cultural moments, that is something that is very well documented, and very well written and thought about, you know... I forgot the name... there is the photographer who created the image of the man falling from the Twin Towers, for instance... There are key images that emerged from, let's say, the Vietnam War or from the refugee crisis – [the image] with the small boy washed up on the beach. Some of that imagery that came out of the recent Grenfell Tower's tragedy I think [they] will be burnt on people's consciousness in relation to debates around homelessness and social housing. So, I do think that photographs play a very important role in mediating information about events, people, and places.

#### QUESTION 5:

MR – Regarding this as well, you said that one of your aims was to address this kind of different approach and perspective on the experience of being a homeless, not just from your own perspective – I know that your own perspective is in your work somehow, in the assisted self-portraits, because you were there. Having this in mind, how do you describe the nature of collaboration you had with your subjects, or with the people you worked with?

AL – Look, I'm an artist who primarily works with photographs made by other people or by using photographs or sound recordings or other material that is co-created with participants. I don't really use the word "subjects" or beam them in some senses as the subjects of the work, I'm more interested in thinking about the people I work with as participants, because I always try to find ways, as a socially-engaged artist, to enable the participants to take an active role in the creation of the material that says something about their lives. I don't believe for a second that, in doing so, this somehow gives an unmediated view on their experiences. It doesn't, but I hope what it does is that it kind of includes the

subjectivity of the participants alongside on my own to pay a more complex, or a nuance, or a different kind of picture that might be ordinarily associated with the individuals that take part in the work.

#### QUESTION 6:

MR – It's a silly question, because you've just said this, but if you want to complete your reasoning with this question: how did your collaborators influence the way you understood, you made, and you edited the work?

AL – Ok. These are three big questions in one question. The idea of them making, the understanding, and the editing are huge kind of things, all being connected. So, I've explained to you something of the process of creating the *Assisted Self-Portraits* and the creation of the photographs by participants. The editing process comes out of a dialogue, a conversation with participants around what they are happy for me to use and what they would like me not to use. In thinking about the presentation of the work: when *Residency* was created at *Belfast Exposed*, the intention was always that there would be an exhibition at the Belfast Exposed gallery, so a lot of the conversation with participants around the editing of the work was about "how do we make a selection of photographs from this big body of photographs created by participants?". That would somehow say something about our work together, that would say something about their experiences of Belfast, and I would say something about the experience about Belfast itself. Within that, I hosted big workshops where all of the photographs made by participants were laid out, participants and I had big conversations of a number of days around what images could be used, what images couldn't be used. I remember one particular time: there was one participant called Maggie, who was really keen to put pictures of her children in the exhibition. I felt very uncomfortable about that, because, although she was the legal guardian and had every right to give permission for photographs of her children to be used in particular ways, that kind of opened up a conversation with Maggie around the ethics of using images of children, or of her children being in an exhibition which is associated with homelessness, what it would be like for them, when they grow up and discover these images of themselves, and how they would feel about that... so that was all kind of conversations that fed in the editing process. The body of work I made in Brighton it's called *Assembly*. A big part of *Assembly* is the sound recordings that were created by myself and by participants. Alongside photographs made by participants, alongside the production of the assisted self-portraits, I also asked participants to take away digital sound recorders to record their experiences of Brighton and I also used digital sound recording equipment to record the process of making the assisted self-portraits, in the actual making of the photographs but also in the editing and selection of the images afterwards as well. Alongside that, I also worked with the community choir to sing and record our singing. So all those different sound elements are woven together in a sound scape that is placed in the gallery space alongside the presentation of the assisted self-portraits and photographs by participants and myself and the documentation of us working together. In those sound recordings, I think what you can hear is something more of the nature of the conversations that happen with participants.

#### QUESTION 7:

MR – What was your audience, or you audiences, when you conceived the work?

AL – It's a very good question. Well, as I was saying earlier, when I was first thinking about showing some of the work and I felt that doing it in association with a public gallery wouldn't necessarily reach as broadly and, too, a range of audiences as I thought it could, and, then, showing the work on the Underground [London's tube stations] felt like a way of reaching more people and different kinds of people. When I showed the work *Residency*, in Belfast, part of the residency there was to show the work in a gallery and to also publish a book. Having said that, the *Belfast Exposed* gallery is very kind of embedded in the communities of Belfast in a way that is quite unique for a photography gallery and that comes out of the way in which that gallery and organisation was founded – and also it's not a commercial gallery. The work in Colchester were showing in outdoor public spaces: a great big cloth fabric assisted self-portrait hanged from the tree, on the fence post railings, on doors, placed in public parks, again, that was thinking about this idea of the audience has been something that is multiple and something that is, in some ways, unpredictable, and so it becomes a very difficult thing to prescribe, but, at the same time, you know, when you put photographs on a platform on the Underground – I can't remember the exact figures, right now, but they were incredibly large... something like... I don't know... – hundreds of thousands of people pass these posters all the time, if even just like 5% of those people actually stop and pay attention, it's a really large audience. Alongside the work with homeless people, I've also worked with other people: children, people who have experienced mental health issues, people who have addiction issues, people who are identified as queer. In particular with the work made with LGBT+ people in Brighton, it's called *Not going shopping*, the posters that were created, the collaborative portraits that were created, were placed on the sides of buildings in thirty sites across the city. Again, thinking that it would be good for the work to be seeing by as many people as possible, that would be a kind of an invasion of the public space, a kind of a reclamation of the places in which people are ordinarily excluded from, or marginalised from. For me, the idea of audience is something I think it's really important to be considered, and also I think it's important to be really specific about it as well. When we're talking about audiences for a work that is socially-engaged, I think it's really important to be quite specific around thinking, well: there are policy-makers? There are people involved in influencing debates and thinking around the issue? There is the everyday public? And people within the everyday public come from different parts of society, we come from different parts of the city, or the country. Again, when I create the work, a really important part of my practice is writing in public speaking about the work as a way for me to reflect on the kind of methodologies I use, and the context in which I create work and exhibit the work, but also to try to connect the work with other discourses. So, for the work with homeless people, I've taken part in forums for urbanism, or for social policy, or for social anthropology, or for the intersection between art and anthropology – it's all kinds of ways in which audiences can be thought of in relation to the work. Does that make sense?

MR – Totally, totally. You're talking about the broadest audience, and what you've just said has completely to do with the power of photography we're talking about... before... – in changing things. You said, like, if even 5% ...

AL – I think that, for me, it's not so much about broad audiences, it's about multiple audiences: thinking about very specific places for the work to be seen in a way that will enable many different types of individuals and people from different sections or places within the society to think about the work.

QUESTION 8:

MR – When you're conceiving the work, editing it, and thinking about the way you're going to show this, in terms of public space – the thing that you've just said – what effect do you want the work to have, like, your aims. Do you think it did [you accomplish your aims] this, in the end?

AL – In some ways, there is a couple of things that come to my mind in relation to this question. There is the actual physical locations of the work; so, with *Not going shopping*, when that work was displayed in Brighton, and then Bristol, and in Malmö, and Copenhagen, the collaborative portraits were showed on the sides of buildings in very prominently kind of pedestrianized places, but then also we created community newspapers that were distributed freely to the residences and places of business around where those portraits were showed, across the streets of Brighton and Hove, Copenhagen and Malmö, and more recently in London, at the London Art Fair. I'm thinking really carefully about what presentation strategies... how that can also support the work in terms of the inquiry into issues of access to ownership and power. But also, specifically with the *Assisted Self-Portrait*, when I show the work, ideally I like to show it so as the photograph depicts the individual as life-size, or slightly bigger or as close to as possible, and it is hanged just above eye level, as you have this sense of looking up at the subject and the subject looking down at you, as a way to sort of reverse the gaze that is normally applied to homeless people.

MR – To switch the gaze a bit...

AL – Yes.

MR – Once more, about the way that mass media, policy-makers, and society as a whole see this situation of homelessness...

AL – Absolutely. And also: how often, when you are walking down the street and someone is sleeping rough, and they are on the underground, you look down at them? People look down at homeless people

both intellectually and socially, but also physically as well. It was just about thinking about how that can be reversed in some way.

QUESTION 9:

MR – How did you build the confidence with your collaborators for them to talk about their experiences and situations? Because, at the beginning, you're a stranger [to them]?

AL – For me, it's not about building confidence. I'm not responsible, I don't hold the power to build anyone else's confidence. So, I don't think about it like that. I just think about it in a way which is quite simple like getting to know people. For me, the individuals that I work with are just like anyone else that I meet and deal with in the everyday life, except that they are also the... you know, I'm working with them with a very specific intention to create work about their lives. So I will just be as open and honest as I possibly can be, to sort of say why I'm there, what I hope to do, and what might happen with the work... Just get to know people, and if people are interested in taking part, then, that's great, if they are not, that's fine too, if they change their mind, that's also fine. So, for me, it's not about me building confidence, but it's about me working with people to get to know them, getting their trust. It's about personal relationships, in the same thing it would be said in many different parts of our life, in the way we work with people or when we get to know people. It's really straightforward to me: if I wanted to create work about your life, I would ask you to get involved in using photography, sounds and other sources of representational media, and I would explain to you exactly what it is that I want to do, and you would have to say "yes" or "no". If you say "yes", that's great, I would move carrying on with this conversation. If you say "no", I would say "thanks. Don't worry about it".

QUESTION 10:

MR – Are you still in contact with your subjects?

AL – Many of them, yes. I began this work a long time ago, before social media and before people would be able to connect to each other as easily as they are now. So, some of those individuals, we found each other again or we've retained communication throughout, people that I've worked with since the advancement of social media, we've been able to retain an ongoing relationship much more easily. It really depends on the individual, but it also depends on how... Like, for instance, in the process of creating the new body of work in Belfast, called *Let us eat cake* – I'm working with queer people living in Northern Ireland to look at their experience of queer rights in Northern Ireland and the sort of the role of the queer community through the times of the troubles and today. Then, using a private Facebook group is a really important part of that work, because I'm not in Belfast all the time. There is a daily conversation that happens between me and participants, which wouldn't have been possible before social media. When I was creating *Not going shopping*, similarly, closed Facebook groups were really important in order for me to open up the process of decision-making in between us, in face-to-face

meetings, but also to, since that work has finished, and been exhibited and published, whenever new opportunities come up for it, then I let people know through the Facebook group, to either invite them along, or to see if they don't mind if the work is shown in that particular way, or to send them material related to the show. Again, for me this is a really human basic thing: you get to know people and relationships have a natural conclusion, you still stay in touch with people, or maybe you don't. It's really straightforward.

MR – Are there people you're still contact privately, exchanging messages, calls? I mean, people that you met along time ago, like in 2004...

AL – Absolutely. So, Phil Robinson, the guy that worked with me to create the *Assisted Self-Portraits*, we are very much connected – I could telephone him now, if I wanted to – certainly, through Instagram, through Tweeter, through Facebook, messages get exchanged. And there are a number of people, for instance, participant called Jeff Hubbard, from the London work, now continues to host the photography workshops at *Crisis*, which I do not, I stepped away around 2007 or 2008, when I began to get more and more busy making *Residency* in Belfast. We've still sent messages to each other. When I had the exhibition of *Assembly* in Brighton, there was a panel discussion about the work, I invited Jeff to come and take part in that panel, to talk about his experience as a participant but to also talk about his work as a photographer and photographer educator now.

QUESTION 11:

MR – What is your main aim, or main aims, with the work?

AL – As we were sort of saying earlier, it's very much about hopefully challenging preconceptions of homelessness, about these lived experiences of homeless people, and about the perspectives of homeless people. I think that was one of the main aims that underpin the *Assisted Self-Portraits* for sure.

QUESTION 12:

MR – Do you think there is any way of measuring the impact of your work or works like yours. And, if you think that there is a way of measuring the impact, how have you managed this?

AL – This is a really good question. A lot of the work that I create is often supported by public funding, through something like The Arts Council, or public funding through The Big Lottery, or through Heritage Lottery Funds, or through the Out of Reach Educational Department, or even the Curatorial Programming of a gallery, which also might need to report into public funding's spending. So, things like evaluations are often attached to the spending of the money in this sort of situations and at the heart of this sort of evaluations are questions that are designed around trying to measure impact and it often

talked about in relation to benefits, outcomes, targets, often these things are spoken about in terms of improving self-esteem, bettering people's lives, enabling access, promoting diversity, and all these sorts of things. In one hand, if one is to try to measure impact through those lenses, I'm sure that it can be done and it has been done to a large extent. But I think, for me, in terms of measuring impact, I'm more interested in that question being directed to the participants. I don't feel that it's my place to say "well, inviting a participant to take part in this work has impacted upon their lives in these ways". One else should actually ask them: "How has it impacted upon your life?" Is it even appropriate to ask them that question? I'm less interested in trying to undertake my practice to provide social benefits and more interested in using my practice as away to involve people who have been overly spoken for to talk about their experiences.

MR – It's really tricky. The tool to measure it is not the right tool, isn't it?

AL – Yes. And often those tools are kind of designed to serve as an instrumental purpose which is to affirm the relationship between the recipient of the funding and the funder; then, often the real learning that could be expressed is kind of sublimated by this kind of agenda that affirms this funding relationship.

#### QUESTION 13:

MR – After you have been working in long-term projects with these groups and individuals, what is your understanding of their past and what is your hope for their future?

AL – Particularly in relation to people who have experienced homeless, I'm less interested in finding out why they are homeless than what I am in speaking to them about the themes in their immediate experience and their hopes for their future. It's a bit different when I work with queer people, like on the work I'm making now, *Let us eat cake*: I am interested in finding out about people's past, I want to know about what was like people to come up in Northern Ireland in 1980s and 1990s. It's sort of a different body of work, working with different groups of people, different concerns, intentions, I suppose. Particularly in relation to the work with homeless people, I'm not interested in sort of including a biography about why someone is in a situation they are in, I'm more interested in finding out what they think about representation, what their experience of photography is, what their experience as been described as a homeless means to them at that particular time.

MR – Do you have a different political view after working with them?

AL – Not really. If I would to describe my sort of politics: my politics has always been left-leaning, it's always been socialist, it's always been along those kind of lines. I wouldn't say that working with participants has changed my politics, it certainly made me more aware of the politics that impacts upon

their lives. No, I would say that it's changed my politics at all. If anything, it has probably fortified my political view.

MR – Thank you so much, Anthony.

AL – You're welcome.

## APPENDIX 7

### Folk songs previously performed in settlements affected by the dams covered in this research (recorded and gathered)

Transcribed by Karina Ribeiro and Marilene Ribeiro

Translated to English by Marilene Ribeiro and Rachel Ann Davis

One of the folk songs from Juacema hamlet (Sobradinho dam area) performed by participant Maria Zilda:

*“Bananeira chora  
Ela chora que eu vou-me embora  
Ei-há  
Bananeira chora  
Ela chora que eu vou-me embora  
Ei-há (...)”*

(Poço do Juá, Brazil, April 12 2015)

English translation:

*“Banana tree cries  
It cries ‘cause I’m leaving  
Ei-há  
Banana tree cries  
It cries ‘cause I’m leaving  
Ei-há (...)”*

Note that, coincidentally, this lyrics is about a tree that cries because someone is leaving – i.e. it illustrates not only a relation between a human being and plant but presents the plant as being able to express human feelings. It also tells about the pain involved in this separation, as it might have happened at the time of the move.

Some traditional songs from Grande Island (Sobradinho dam area) performed by participant Maria das Dores (“Dorinha”), her husband Nezinho and her granddaughter Gildejane:

BATUQUE DE REIS SONGS:

*“A onça na gameleira  
Sentada no areial  
Se apegue com a Mãe de Deus  
Que a onça não come, não  
Se apegue  
Olha a onça!”*

*A onça na gameleira  
Sentada no areial  
Se apegue com a Mãe de Deus  
Que a onça não come, não  
Se apegue  
Olha a onça!  
É a pintada  
Olha a onça!  
É a sussarana  
Olha a onça!”*

(Brejo de Dentro, Brazil – May 15, 2015)

English translation:

*“The jaguar by the gameleira tree  
Seated on the sandbank  
Pray to the Mother of God  
Then the jaguar won't eat you  
Pray!  
Mind the jaguar!  
The jaguar by the gameleira tree  
Seated on the sandbank  
Pray to the Mother of God  
Then the jaguar won't eat you  
Pray! Mind the jaguar!  
It's the spotted one  
Mind the jaguar!  
It's the red one  
Mind the jaguar!”*

*“O bezouro serra o pau  
E o bagaço cai no chão  
O bezouro serra o pau  
E o bagaço cai no chão  
Ô, se quiser me dar, me dê  
Que eu, pedir, não peço, não  
Ô, se quiser me dar, me dê  
Que eu, pedir, não peço, não.”*

English translation:

*“The beetle saws the timber  
And the bark falls on the ground  
The beetle saws the timber  
And the bark falls on the ground  
Ô, if you want to give it to me, do it  
'Cause I'm not going to ask you for  
Ô, if you want to give it to me, do it  
'Cause I'm not going to ask you for.”*

*“Amei, amei  
Deixei de amar,*

*A semana faz seis dias  
Eu morro de trabalhar.  
Eu morro de trabalhar  
Pra sustentar minha mulher  
O pago que ela me deu  
Foi dizer que não me quer.”*

English translation:

*“I loved, I loved  
I quit loving  
The week has six days  
In which I work hard  
I work hard  
To feed my wife  
What she has given me back  
Is saying that she doesn’t want me.”*

*“Ô, fica aqui mulher  
Que vou `a serra sambar  
Se o samba lá estiver bom  
Eu volto e venho te buscar.”*

English translation:

*“Ô, stay here, woman  
I’m going to the hill to dance  
If the dance is good there  
I’ll come back to take you there”*

Notably, like the lyrics of the song from the former Juacema hamlet, recalled by Maria Zilda, traditional folk songs from the Grande Island also absorb elements from the natural world, like jaguar and beetle, which are taken as part of riverine people’s “cosmos”.

Folk songs from Fazenda das Pedras hamlet (Sobradinho dam area) performed by participant Isabel Aniceto:

*“Tu já dançou, oh, piranha?  
Tô na dança, oh, piranha  
Tu já dançou, oh, piranha?  
Tô na dança, oh, piranha  
Bote a mão na cabeça, oh, piranha  
Tira, bota na cintura, oh, piranha  
Dá um jeitinho no corpo, oh, piranha  
Dá uma umbigada no outro, oh, piranha.”*

(Sobradinho town, Brazil – April 22, 2015)

English translation:

*"Have you ever danced, oh, piranha?  
I'm in the dance, oh, piranha  
Have you ever danced, oh, piranha?  
I'm in the dance, oh, piranha  
Put your hand on your head, oh, piranha  
Take it, put it on your waist, oh, piranha  
Straighten your body, oh, piranha  
Belly bump the other one, oh, piranha"*

*"Tomara ja me casar  
Ô, iá-ia  
Para ter minha casinha  
Ô, iá-ia  
Para minha mãe dizer  
Ô, iá-ia  
Eu já casei minha filhinha  
Ô indara-ra-rá"*

English translation:

*"Hopefully I'll get married  
Ô, iá-ia  
Then I'll have my place  
Ô, iá-ia  
Then my mother can say  
Ô, iá-ia  
I've already had my daughter married"*

*"Alevanta, alevanta, menina  
Seu namorado chegou  
Ôdi-ô ê, Mãe d'Água  
Ôdi-ô ê, Mãe d'Água  
Menino, se quer ir, vamos  
Não se ponha a imaginar  
Quem imagina toma medo  
Quem tem medo não vai lá.  
Ôdi-ô ê, Mãe d'Água  
Ôdi-ô ê, Mãe d'Água"*

English translation:

*"Stand up, stand up, girl  
Your boyfriend has arrived  
Ôdi-ô ê, Mother of the Water  
Ôdi-ô ê, Mother of the Water  
Boy, if you want to go there, let's go  
Do not start to picture it  
Those who picture it get afraid of it  
Those who are afraid of it don't go there  
Ôdi-ô ê, Mother of the Water"*

*Ôdi-ô ê, Mother of the Water”*

Hymn of Saint Joseph (Hino de São José) from the celebrations of the Saint Joseph Day (Dia de São José) in Paratizão (Belo Monte dam area) performed by Teodora (friend of participant Maria Helena Almeida):

*“São José, meu pai querido  
Não recuses proteção  
Quando meu corpo, abatido  
Da morte sentir a mão  
Vem cuidadoso  
Quando eu morrer  
Pai carinhoso, me defender  
Pai carinhoso, me defender”*

(Altamira city, Brazil – November 03, 2016)

English translation:

*“Saint Joseph, my dear father  
Do not refuse protection  
When my body is down  
Feel the hand of death  
Come carefully  
When I die  
Affectionate father, defend me  
Affectionate father, defend me.”*

## **APPENDIX 8**

### **Demonstration of the scope of the damage caused by hydropower plant projects through Time, Space and via Cascade Effect**

The analysis of data from my fieldwork juxtaposed to the literature available on the theme has pointed that the negative impacts of dams/hydropower resonate in geographic space and time more significantly than considered by the proponents of these enterprises and decision makers (WCD, 2000). In addition, such endeavors function as igniters of a sequence of events that culminates with disastrous consequences not anticipated by the actors mentioned above—which I understand as a cascade effect triggered by the hydroelectric project. In this Appendix I present the breadth of the damages led by dams (in both space, time, and via the cascade effect) based on what this practice-based research has disclosed.

#### **Space**

As shown throughout this thesis, data from my fieldwork indicate that impacts are clearly perceived by traditional communities 400 km downstream (for the Uruguay River) and 700 km upstream (for the Xingu River) of the dam.

The Foz do Chapecó Hydroelectric Power Plant is situated on the Uruguay River, 400 km (average) upstream of the current residence of the families that participated in my fieldwork in the Garabi-Panambi dam complex area. Altogether, 13% of these families complained about issues that have happened since Foz do Chapecó started to operate (back in 2010). This includes: deterioration of the water quality (appearance, turbidity, odor, dissolved oxygen, color), fish mortality, unpredictable variations in the river discharge, and more frequent flash floods (also detached from the rainy season and featuring higher water volume than those reported before the construction of this dam). Apart from the danger of floods in themselves, this has had negative consequences for fishing and farming in this area too. Even when there is no rain forecast for the region where participants live, sudden flooding can occur in the area, in case the water level in the reservoir of the Foz do Chapecó dam (and also in the reservoir of the dam situated upstream it, the Itá dam) abruptly rises due to rainfall far upper in the Uruguay River basin, urging the operators of the hydropower plant to open the floodgates and release a considerable volume of water downstream.

“[...]”

*Marilene Ribeiro (myself, researcher) – Do you think nature has been affected here, in the region, even before the Panambi dam works start, or not?*

*Alberto – To me, here, in our region, the river has been already affected, because there are already dams up[stream]. For instance: if you were in the river yesterday, you, yesterday, would see it with a kind of water. Today—without any rain, without anything [extraordinary happening]!—you see one meter more of water there, which is the water that was released by the dams upstream. And this is a water that stinks. It's not a 'natural' water. It's a water that was impounded there [in the reservoirs of the dams] and remained there who knows how many days. And now this stagnant water comes [flowing downstream]. And now it has become the river's 'custom' to behave like this: three, four times a week, it goes down a meter, goes up a meter, gets half-a-meter down, gets half-a-meter up, and keeps varying its level between these values. [...] For me, who have been living here for 40 years: before this, one could go fishing any day of the week that he would catch fish. Not today. Today, you have to wait for a strong rainfall, for the river to get water from the rain, for you to catch something, because when it's just this water that comes from the dams, you don't manage to catch anything, because the fish does not move in this water, it remains quiet, still. Nowadays, it only moves, swims, when the rainwater feeds the river. You can go fishing there today if you want, but, I tell you, you won't manage to catch anything. [...] It [the Uruguay River] used to be a healthy river. Not today. Today, there are days when you go there and it stinks, it is smelly. It's not a clean water, a healthy water. It's a rotten water. This is what we see now here, on the Uruguay [River]. [...] It used to be a more yellowish water—very large rivers, as is the Uruguay River, use to having this type of [yellowish] water. Today, there are times that the water looks green! Times when it's not raining, it comes down here green. [...]" (Alberto José Spohr, interviewed on January 20, 2016)*

The downsides of the dam far upstream from it (which were revealed in my fieldwork in the Belo Monte dam/Xingu River area) will be detailed further on in this Appendix.

These findings not only reinforce the up-to-date thinking that the area under influence of hydroelectric power projects should not be limited exclusively to the perimeter of the proposed work and the region upstream of the dam, but rather include the downstream stretch as well (Xie et al., 2007; Richter et al., 2010; Akira, 2015; Assahira et al., 2017). These findings also inform that the area under the influence of this kind of endeavour can extend, in fact, to hundreds of kilometers both downstream and upstream of the damming point. If the spatial resonance of the negative impacts along the watershed demonstrated in this research was to be considered in the process of weighing the costs and benefits of hydroelectricity, these infrastructure projects would likely be classified as unfeasible.

## Time

Data from my fieldwork in the Garabi-Panambi complex and in the Sobradinho dam areas indicate that the temporal window of the negative impacts of dams is of decades, both before and after the beginning of its actual building.

The Garabi-Panambi hydro complex has generated negative effects in the region under its influence for at least 30 years (when it was first announced as the Garabi and the Roncador dams), even with no guarantees to date that this project will actually take place one day. Since the Brazilian government has included the Garabi-Panambi project in the second stage of its Growth Acceleration Program (*Programa de Aceleração do Crescimento 2 – PAC 2*) (Ministério do Planejamento, 2013), i.e. seven years ago, a new wave of psychological problems<sup>8</sup>, real estate speculation, changes in residents' plans regarding improvements in their own properties, possible deforestation of Permanent Protected Areas (PPAs) and local Legal Reserves (LRs), monetary depreciation of properties, and financing cuts for proposals in areas which would be flooded by these two dams have been rekindled in the region. Hence, experiences from my second fieldwork (i.e. Garabi-Panambi dam complex) disclosed this scenario of social, environmental and economic "losses" that is installed before the beginning of the physical existence of the dam: what I named "the impact before the impact"—i.e., the damage caused by large infrastructure projects, such as dams, is already underway even before their Environmental Impact Studies (EIAs) are designed and undertaken. Notably, this concept (of the "impact before the impact") is not intended to be restricted to the Garabi-Panambi dam complex case, as the rule for proposals of dams, from its announcement to the work completion, is to drag on for more than a decade, as exemplified by Ponseti and López-Pujol (2006:152-157), for the Three Gorges project on the Yangtze River, in China, and by McCully (2001:v-vii and 299-302) and Sahoo et al. (2014:888) in relation to the Sadar Sarovar Project on the Narmada River, in India. The same history of prolonged tension for decades was the case for the Belo Monte hydropower complex project, whose conflicts and uncertainties began as far as the 1980s, whereas its actual works concretely occurred twenty years later, in 2011 (ISA, 2013:9-10; Fearnside, 2017).

At the same time, experiences from my fieldwork in the Sobradinho dam area demonstrated that, even after 40 years following the hydropower plant construction, its negative effects are still felt, either emotionally or with regard to access to water, impairment in livelihoods, social isolation, loss of identity, memory and community references, loss of biological richness and abundance (concerning both fauna and flora), and the deterioration of the water quality upstream the dam<sup>9</sup>.

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<sup>8</sup> 89% of the participants in this fieldwork cried at some point of either the interview or the photo shoot. All families from this area who took part in this research stated they have been psychologically affected since they knew about the project of the Garabi or the Panambi dams. Statements like "*I haven't slept properly since I heard about this project [i.e. about seven years ago].*", "*My neighbor [or my husband, etc.] has been taking antidepressant since this news about the dam hit us.*" came up repeatedly during my encounters with participants.

<sup>9</sup> All participants from the Sobradinho dam area mentioned that the effects of the Sobradinho dam are still currently felt. 50% of my collaborators from this fieldwork cried at some point of my stay with them.

Studies performed by limnologists Martins and colleagues (2011) and Medeiros and colleagues (2014) concluded that the dams along the São Francisco river (including the Sobradinho dam) eliminated the seasonal and interannual flood pulses near the mouth of the river, leading to stagnation of the salt wedge in its estuary. These effects, accumulated for decades, have prevented aquatic species from moving according to the salinity gradient at this river-sea transition site. As these species have no longer moved horizontally along the water column, fishing in this area downstream of these complex of hydroelectric dams has been impaired (Martins et al., 2011:1059-1060). Also according to researchers Máira Benchimol and Carlos Peres (2015), the Balbina hydropower plant (also situated in the Biome Amazonia, likewise the Belo Monte dam complex, and built in the late 1980s on the Uatumã River) led to the extinction of 70% of medium and large size vertebrates (among mammals, birds and reptiles) that had previously inhabited a continuous area that was turned into isolated islands after the filling of its reservoir. The authors highlight that the results of their study are alarming and urge that the long-term impacts of hydroelectric projects be included and considered in the process of assessment of these projects.

Based on the information revealed through my first fieldwork (i.e. Sobradinho dam) and named above, as well as supported by the papers just cited, I wonder if these effects triggered by the dam would impoverish the environment (biologically, physically, and culturally speaking) "*ad infinitum*", as they interfere in complex systems (i.e. the dismantling of traditional communities, the disappearance of cultural manifestations based on orality, as well as of areas that are considered sacred, the geographic isolation of animal and vegetal populations, the blocking of routes species use for migration or dispersion, local extinctions, alterations in the morphology of the watercourse, destabilization of the margins downstream the dam, and alterations in the salinity of the estuary zones and in the dynamics of the coastal areas near the mouth of the river) with their long-lasting consequences.

### **Cascade effect**

Analysis from the encounters I had with my collaborators (i.e. riverside dwellers participants of this PhD research) also pointed to a third category that presents the magnitude of the impacts caused by hydroelectric power plants not only over time (duration) or geographic space (extension). Such "effects" are, in fact, the result of a chain of events whose trigger is directly related to the dam project. Sometimes these "effects" are even difficult to predict at the time the Environmental Impact Study (EIS) is designed and run, and the first license (i.e. the Provisional Environmental License - *Licença Prévia*) is signed out. I refer to this third sphere as the "Cascade Effect" (which intersects with the Space and Time spheres, but in a slightly more elaborate way). I provide below some examples of how the cascade effect works, triggering scenarios difficult to control or repair.

The License for Installation granted to the Belo Monte hydro project by IBAMA in 2011 (License for Installation 795/2011) authorized the suppression of 26,252.95 ha of Amazon forest (of which 5,575.54 ha - about 20% - were located in Permanent Protected Areas - PPAs), in other words, the loss of this forest area was acknowledged as part of the direct impacts of the Belo Monte construction (COHID/CGENE/DILIC/IBAMA, 2012:53). As the Belo Monte works began, in 2011, the wood market warmed up and illegal deforestation within the area under influence of this dam exploded. Between 2011 and 2012, the Imazon (agency that supervises deforestation in the Amazon) estimated that illegal logging within the area under influence of the Belo Monte dam complex increased from 20,000ha/year to 70,000ha/year (Monteiro et al., 2013; Doblas, 2015:12); i.e. 50,000 ha more than what was expected for that region. Thus, in the first year of the dam works alone (excluding the plot deforested in the same year for its work's own purposes), the area "indirectly" deforested by the Belo Monte project reached twice what was legally authorized by the IBAMA for its eight years of construction. Although aware of the potential indirect deforestation that could be driven by the project, the entrepreneurs ignored the precautionary principle that rules environmental laws and not only failed to elaborate data concerning this in their Environmental Impact Study (that could guide the design of strategies which would avoid or mitigate this deforestation), but also did not propose or run specific actions to stop this<sup>10</sup> (COHID/CGENE/DILIC/IBAMA, 2010:10; FGV, 2016:175). As a result, after the beginning of the Belo Monte works, illegal loggers, in an attempt to supply this extra demand for wood, intensified invasions to Conservation Units and Indigenous Reserves (Monteiro et al., 2013; ISA, 2016). The Cachoeira Seca Indigenous Reserve (Arara people)—which has a history of recent first contact with non-indigenous people, in 1987 (Arara Front of Attraction/FUNAI)—is located approximately 600 km upstream of the Belo Monte dam complex and has been sacked by loggers since 2011. Between 2014 and 2015 alone, 43,000 ha of rainforest disappeared within this Indigenous Reserve (ISA, 2016); and, throughout these years, these invaders have moved closer to the village. Thus, illegal deforestation in Pará state—a fact historically worrying in this region—has been kindled by the hydro power project, with consequent reduction of carbon sequestration areas (i.e. forests) and potential future influences on global warming. The Arara, like all other Amazonian peoples, require the woodlands standing for their subsistence—it is from the forest that they obtain fruits, game (meat), medicine, and material to build their houses and to produce artifacts. Moreover, their way of life and their beliefs are linked to the existence of the forest (Viveiros de Castro, 1995:262). Parallel to this, according to participants from the fieldwork in the Belo

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<sup>10</sup> "The presented modeling only indicates that the deforested area will increase, but not where the major axes of deforestation will occur. The temporal projections presented indicated that, for a better evaluation, spatialisation of the deforested area in the AII [Area under Indirect Influence] of the venture is necessary. In order to assess the projections presented in the PBA [Basic Environmental Plan], at least the following are necessary: - analysis of future scenarios, with and without the dam, modeling of migratory flows, levels and types of occupation, increasing demand for natural resources, among others, and based on this, present deforestation forecasts in the region for the upcoming decades; - that the deforested area is spatialized in the municipalities of the AII of the enterprise; and - that the mitigating actions proposed for the endeavour are directed to each site, according to the different evolution axes of the identified deforestation." (COHID/CGENE/DILIC/ IBAMA, 2010:10)

Monte dam area and Leonardo Moura (pers. comm.), loggers, when acting within this Indigenous Reserves, threaten villagers they encounter on their way, what has forced these indigenous individual to avoid sites where they have traditionally collected Brazil nuts, for example, affecting these people's way of life, subsistence, and safety. The action of the loggers also ends up driving away the fauna that, due to the noise of the machines and disturbance in the area caused by the fall of the trees, and consequential loss of habitat, ends up disappearing from these patches.

In this regard, the FUNAI warned the developer in 2009 (at the time of the assessment of the Belo Monte dam project in order to grant it or not the Povisional License):

*"Deforestation and consequent loss of terrestrial habitats may have chain effects on wildlife populations, but may also lead to degradation of water resources, affecting fish populations. Both of these impacts may affect the dietary basis of indigenous people's food, which depends on fishing and hunting." (CMAM/CGPIMA – FUNAI, 2009:21).*

At the same time, the developer's ultimate action to resettle those affected by the Belo Monte dam within the Permanent Protected Areas that remained after the reservoir filling (pers. obs.) contributed to an increase in the deforestation of areas of extreme importance to the river basin. This relocation of affected people within these sites (initially not intended for housing or cultivation but for the preservation of gene flow corridors and the integrity of the river banks) happened due to the difficulty of the entrepreneur in obtaining a regularized area for the resettlement of the riverine population near the river<sup>11</sup>, as the latter claimed the right to the "double dwelling", i.e. to continue having an address in the urban zone (where they trade their products and have access to services like school and health care) and another in the rural area, near the banks of the water body (where they fish, grow vegetables, and collect native fruit and nuts).

Thus, the "hydropower project" event triggers a series of events that, with the analysis of participants' testimonials (intercepted with the complementary information presented herein), can be categorized as: "effect on deforestation", "effect on landscape", "effect on fauna", "effect on security", "effect on subsistence" and "effect on global warming". Would there be a numerical value that could demonstrate the magnitude of the loss the Arara have experienced? Would there be a number or chart that could represent what it means for an indigenous person not to be able to move within her/his own land or to witness to the impoverishment of her/his environment and people? Would there be a table that specifies the cost to the planet of losing areas of extreme biological importance<sup>12</sup> (in the short, medium, and long terms)?

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<sup>11</sup> Antônia Melo (pers. comm.)

<sup>12</sup> For that reason homologated as *Conservation Units—CUs (Unidades de Conservação—UCs)* or *Permanent Protected Areas—PPAs (Áreas de Preservação Permanente—APPs)*.

Sometimes, actions that originally aimed to alleviate the wounds inflicted by the dam end up (via the cascade effect) multiplying the latter, and, consequently, worsening the situation. Specifically regarding the chaos the PEPTI<sup>13</sup> (programme conceived to protect Indigenous Reserves located within the area under influence of the Belo Monte dam from harms the project could cause on these communities) ultimately triggered, participant Juma Xipaia<sup>14</sup> reports the drastic and abrupt change in health indicators of her village (the Tukamã village, situated within the Xipaya Indigenous Reserve, 700 km upstream the Belo Monte dam complex), as a consequence of the modification in the diet experienced by her people with the monthly arrival of "*bales of sweets, soft drinks and filled biscuits*" from 2011 to 2012 (as part of what eventually became the PEPTI). According to Juma, the incidences of cavities and hypertension in her village have increased significantly, compared to values prior to 2011. Once more, the event "hydropower plant" produces an unpredictable negative effect via a sequence of intricately linked circumstances.

Another example of how the negative impacts of dams turns larger than what originally expected, via the cascade effect, is the case portrayed by my collaborators João and Jucélia, also from my fieldwork in the Belo Monte area.

João is a 75 year-old retired extractivist who spent his life as a rubber tapper in the Xingu River basin. After his retirement, João moved to the Jardim Independente I neighborhood in Altamira—city located 40 km upstream of the Pimental dam (the main dam of the Belo Monte hydro complex), where he currently lives. In March 2016, three months after the closing of the sluices gates of the Pimental dam (which followed the authorization by the IBAMA for the Belo Monte hydro complex to start to operate), "*clean, transparent water, like that from springs*" began to sprout from the floor of his house and backyard. The event lasted three uninterrupted months (coinciding with the rainy season in the region) and João and his family had to live in a house flooded daily, walking in water (whose level reached 13 cm above ground level), giving away furniture and raising the essentials with bricks: bed, stove, dining table, and refrigerator. As a consequence of the constantly soaked soil, the cassava that João had planted for his subsistence rotted and the land in his backyard eventually rendered unusable for this purpose. João has lived in the same house for 13 years and said he had never witnessed such a fact. He does not want to continue living there, but does not have the financial means to move to another location. During his photo shoot, João and his daughter, Marivete, decide to simulate the routine that lasted more than 90 days: stacking bricks and suspending the dining table... and no cassava for dinner (Fig. iii).

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<sup>13</sup> For details on this programme (the PEPTI) designed and run by the company in charge of the Belo Monte dam complex project, please see p. 201-203.

<sup>14</sup> Collaborator from my fieldwork in the Belo Monte dam area, chief of the Tukamã village/Xipaya Indigenous Reserve and vice chair of the District Council of Indigenous Health.

FIGURE iii. Sequence of portraits of João.



João's feelings: feeling wounded, feeling that the company in charge of the dam project has not treated him like a human being should be

Object chosen: bricks

Location chosen: his kitchen

ORIGINAL IN COLOUR

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Jucélia, in her turn, was born in Altamira city and used to live in the neighborhood of Colina, on the same street as four of her nine brothers. All her brothers, except for herself and her husband, owned their own house. With the announcement of the approval of the Belo Monte project and the consequent increase in demand for housing in the city, the monthly price that Jucélia and her husband, Ederson, paid for her housing rose from R\$200.00 (about £50) to R\$600.00 (roughly £150) in just 2

months. According Jucélia and Ederson, each month, the owner raised the price by R\$200.00 and said that if the couple did not accept the amount, there would be another person interested who could pay the stipulated price (even if above the value market for that property). The couple said that when the value reached R\$600.00/month, they could no longer pay and moved to a second home, also in the Colina neighborhood, which began to suffer the same price adjustment. Unable to pay the cost of R\$600.00 per month for rent, the couple decided to move to Jardim Independente I. Shortly after, news came via Jucélia's brothers that the two houses in Colina had been rented, each, for R\$1,200.00/month (about £300/month), to people related to the Belo Monte dam works. During the interview, Jucélia says that she is very sad because she has been forced to separate from her brothers, and she stresses they have always lived their lives together. As taxi prices have also increased greatly due to the same reason (i.e. the speculation the Belo Monte project triggered) and the city of Altamira is lacking in public transportation, she and the brothers cannot see each other often, since Independente I is about 7 km from Colina. The couple comments that they have already quarreled and split twice, because Jucélia did not accept living far from her brothers. In March 2016, Jucélia, Ederson and their daughter, Natally, like João's family, also had to endure the abnormal floods at Independent I. As a chosen object for their portrait, Jucélia selects part of the bed set that her sister had given her, and the photograph is taken in front of her current address (a stilt built by her brother and husband at Independent I): subject to water invasion and away from her brothers (Fig. iv).

FIGURE iv. Portrait of Jucélia and Ederson.



Jucélia's feeling: sorrow

Ederson's feeling: suffering

Object chosen by Jucélia: pillow case (part of the bed set that her sister had given her)

Object chosen by Ederson: drill (one of the tools Jucélia's brother and he used to build the couple's new home at Independente I)

Location chosen: Jucélia and Ederson's place (main entrance located at the left) ORIGINAL IN COLOUR

© Jucélia Silva, Ederson Soares and Marilene Ribeiro 2016

Monitoring carried out by the National Water Agency (ANA) and IBAMA proved that this above described phenomenon is the result of the elevation of the water table located under the Jardim Independente I (DPU, 2016). However, the Norte Energia claims that this is in fact a suspended aquifer fed by rainwater and not connected to the main Xingu River's water table; therefore, it could not undergo changes in its level as a consequence of the downstream dam at the Pimental site (Norte Energia, 2016). The spatial and temporal proximity between these two events (the damming of the Xingu River and abnormal elevation of the groundwater table at Jardim Independente I, which is located within the area under direct influence of the Belo Monte hydropower complex) makes it difficult to support the argument that there would be no relation of cause-effect relationship between them, even if this connection develops along paths that are difficult to be mapped to date (such connections would probably develop following a similar model to the examples discussed above—via the cascade effect). It is known that dam construction modifies the force vectors on tectonic plates and changes the flow and distribution of groundwater and that, in the specific case of the Belo Monte dam complex, could generate serious consequences, as described by Sevá Filho (2005), in the book *Tenotã-Mõ - Alert on the consequences of hydroelectric projects in the Xingu River (Tenotã-Mõ – Alertas sobre as consequências dos projetos hidrelétricos no rio Xingu)*:

*"(...) Large structures and dams also often cause seismic events or earthquakes, and, in the case of the Belo Monte and Babaquara dams, which would form on a crystalline rock bed with natural fractures and caves, there is also an increased risk of excess water accumulation to land located in neighboring basins<sup>15</sup>—(also called percolation) which also happens usually through dam walls and lateral dykes, of which there are thirty at the Belo Monte dam and many more, tens of kilometers long at the Babaquara dam. (...)" (Sevá Filho, 2005:25)*

In 2009, 38 scholars and independent researchers volunteered to technically analyze the Environmental Impact Study (EIS) of the Belo Monte dam complex project. This material was published as the *Panel of experts - critical analysis of the Environmental Impact Study of the Belo Monte hydroelectric power plant (Painel de especialistas - análise crítica do Estudo de Impacto Ambiental do Aproveitamento Hidrelétrico de Belo Monte - Santos and Hernandez, 2009)*. This multidisciplinary study concluded that the methodologies applied by the EIS executor (in this case, the Leme Engineering, the Engevix, the Intertechne, and the Themag) were superficial and insufficient to point out and quantify the potential impacts to which the region would be subjected in a future scenario, should the enterprise be consolidated. Specifically regarding the possible changes to the water table, Jorge Molina (Molina, 2009 apud Santos and Hernandez, 2009), an engineer and hydrologist at the Hydraulic and Hydrology Institute of the Universidad Mayor de San Andrés/Bolivia and one of the authors of this publication,

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<sup>15</sup> My emphasis: underlined.

observes:

*"EIS inconsistencies and weaknesses: (a) The EIS reports do not contain essential data for the assessment of the reliability of the backwater study, among them: the roughness coefficients estimated in the measurement and those used in the dam calculations, the criteria for interpolation of sections, among others. A model should have been employed to evaluate this; b) There is a lack of a better description of the new seasonal dynamics imposed by the reservoir and the effects on the water table, at least in the area near Altamira; c) No evaluation of the area affected by the elevation of the water table was conducted<sup>16</sup>. [...] Another omission is that there is no evaluation of the area reached by the increased levels of the water table, even if it probably corresponds to that of alluviums."* (Molina, 2009:100 and 102, apud Santos and Hernandez, 2009)

To date, Norte Energia denies any relationship between the water outcropping at Independente I homes, three months after the closure of the sluices gates of the Belo Monte dam complex (MAB, 2017; Elisa Estronioli, pers. comm.). Jucélia's and João's families (as well as the other 500 families who live in Jardim Independente I) have not received any support or recognition by the entrepreneur as being affected by the Belo Monte venture. Perhaps Jucélia and João will never be part of the statistics of the impacts caused by dams, however, their lives and their relation with their environment have been transformed by the hydropower plant.

Considerations drawn by Molina (apud Santos and Hernandez, 2009) and other participants of the *Panel of Experts* regarding the lack of technical rigor in the Belo Monte's EIS (see above and Santos and Hernandez, 2009:23-60) allows me draw another point that cannot not be overlooked when it comes to the negative impacts of hydropower (as it contributes to the amplification of the damages caused by dams, usually via the cascade effect): the attempt of the entrepreneur/developer to deceive the system of licensing, by presenting technical reports (such as the EIS and monitoring reports) biased in their favor, containing insufficient information, and vague or distorted data—as attested not only by the authors of the above publication, but also by the Technical Chamber of Monitoring of Condensers of the Belo Monte Hydroelectric Plant (CT-5) (FGV, 2016:175-176), by the Federal Public Prosecutor's Office (MPF, 2016:35-37), and by the IBAMA (2016). Interestingly, all participants of this research mentioned that the company responsible for the respective hydro projects omitted data or provided them information that was not true, at some point. On 15 April 2016, the IBAMA charged the Norte Energia for the death of 54,623 fish specimens (16.2 tons) of the native Xingu River fauna that happened from 27 November 2015 (three days after the beginning of the Belo Monte dam complex reservoir filling) to 25 February 2016, "*because of mechanical shocks and other injuries, due to possible design and operational failures.*" (IBAMA Notice of Infringement 9061077-E – IBAMA, 2016:423). In this regard, the Federal Public Prosecutor's Office points out that the potential lethality of the water column turbulence

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<sup>16</sup> My emphasis: underlined.

in the spillways and the canal/bypass to the fish, with the start of the hydropower plant operation, had not even been included in the EIS presented by the developer (MPF, 2016:36). Also according to IBAMA (2016): "[IBAMA] instituted a R\$510 thousand fine addressed to the Norte Energia for discovering that this consortium provided false information about the number of workers it employed in the rescue of aquatic fauna" (one of the mitigation actions foreseen in the Belo Monte's Basic Environmental Plan—PBA—and that would rescue fish individuals that were trapped in water pockets, after the decreasing the water flow in the Xingu's Big Bend and dyke areas). As of May 2017, the Norte Energia had received 33 fines issued by the IBAMA concerning the Belo Monte hydropower complex (totaling R\$83.6 million—about £20 million), most of them due to non-compliance with the environmental licensing requirements (G1 PA, 2017), as participant Cláudio Curuaia highlighted in his interview. Despite these penalties, which have been happening since the beginning of the Belo Monte dam construction, the negative impacts continue to resonate, as I have demonstrated throughout this writing.

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## APPENDIX 9

### Portraits

#### Portrait of Antônio Alves



SOBRADINHO DAM

Antônio's feeling: grief

Object: image of *São Cosme e Damião*, which belonged to his parents

Location: porch of his current place

© Antônio Alves and Marilene Ribeiro 2015

#### Portrait of Isabel



SOBRADINHO DAM

Isabel's feeling: dismantlement

Object: iron that belonged to her mother and they used to use at their previous home

Location: living room of her current place of living

© Isabel Aniceto and Marilene Ribeiro 2015

### Portrait of Ermita



SOBRADINHO DAM

Ermita's feeling: suffering  
Object: suitcase she used to use when she travelled  
Location: porch of her current home

© Ermita Freire and Marilene Ribeiro 2015

### Portrait of Valdemar Neves



SOBRADINHO DAM

Valdemar's feeling: loss  
Object: his mother's ID and his father's wallet  
Location: his current house  
(previously his father's place. Valdemar's father built himself this house when his family moved to Brejo de Dentro due to the dam)

© Valdemar Neves and Marilene Ribeiro 2015

### Portrait of Almira



SOBRADINHO DAM

Almira's feeling: sorrow  
Object: her current house  
(her family did not have  
a proper house when they moved:  
she lived under a mango tree  
for three months, after the move)  
Location: living room

© Almira Ferreira dos Santos and Marilene Ribeiro 2015

### Portrait of Maria Zilda



SOBRADINHO DAM

Maria Zilda's feeling: sorrow  
"Object": one of her goats (one of those she bottle-fed)  
Location: living room of her current home, in Poço do Juá

© Maria Zilda Alves dos Santos and Marilene Ribeiro 2015

### Portrait of Nisson



SOBRADINHO DAM

Nisson's feeling: sorrow

Object: accordion

Location: São Francisco riverbank, downstream the dam

© Nisson Vieira de Brito and Marilene Ribeiro 2015

### Portrait of Albertina



SOBRADINHO DAM

Albertina's feeling: fear

Object: blessed towels and Bible

Location: backyard of her current place

(she suggested her grandchildren were photographed with her)

© Albertina Maria Santos da Fé and Marilene Ribeiro 2015

Portrait of Maria Dalva



SOBRADINHO DAM

Maria Dalva's feeling: "memory"  
Object: her wedding dress  
Location: living room of her current place of living

© Maria Dalva dos Santos Neri and Marilene Ribeiro 2015

Portrait of Valdenice



SOBRADINHO DAM

Valdenice's feeling: dependency  
Object: water tanker  
Location: site where the water tank was parked

© Valdenice Ferreira and Marilene Ribeiro 2015

### Portrait of Marcelina



SOBRADINHO DAM

Marcelina's feeling: resignation

Object: lorry (vehicle that transported people, animals, and displaced people's belongings during the move)

Location: veranda of her current place of living

© Marcelina dos Santos Silva and Marilene Ribeiro 2015

### Portrait of Gumercino



SOBRADINHO DAM

Gumercino's feelings: outrage, indignation, and rebelliousness

Object: solar panel and water tank

Location: his backyard (where he straightens up the solar panel and the water tank in the trunk to take them to the place he grows the cassavas)

© Gumercino da Silva Anjos and Marilene Ribeiro 2015

Portrait of Vilberto



SOBRADINHO DAM

Vilberto's feeling: "I feel nothing... I'd better forget it... It'd have been better if they hadn't built the dam"

Object: fishing net

Location: his boat, by the São Francisco River

© Vilberto Alves Neri and Marilene Ribeiro 2015

Portrait of Antônio de Carvalho



SOBRADINHO DAM

Antônio's feeling: "no name... it's too much..."

Object: feather headdress and local cultural outfit (to represent himself and his ancestors, his roots)

Location: stone featuring rock art (to represent his ancestors, the link between the land and the man)

© Antônio de Carvalho and Marilene Ribeiro 2015

### Portrait of Francisco



SOBRADINHO DAM

Francisco's feeling: preoccupation (regarding the amount of people who would immigrate to the area where his family lived)  
Object: drawer his wife brought from Tatauí village, where she lived  
Location: his current house  
(Francisco suggested his granddaughter was photographed beside him, to represent his wife's family, because his wife was not at their place at the time the shoot was taken)

© Francisco Zeferino da Costa and Marilene Ribeiro 2015

### Portrait of José and Maria Francisca



SOBRADINHO DAM

Maria Francisca's and José's feeling: longing  
Object chosen by Maria Francisca: São Francisco River  
(as she has drawn it because they now live far from the riverside)  
Object chosen by José: farming tools  
Location chosen by the couple: porch of their current house

© Maria Francisca dos Santos, José da Silva Oliveira, and Marilene Ribeiro 2015



### Portrait of Espedito



SOBRADINHO DAM

Espedito's feeling: passion (for his former place of living, Juacema)

"Object": his wife, Vanilda

Location: the couple's current backyard

© Espedito José dos Santos and Marilene Ribeiro 2015

### Portrait of Laudelina



SOBRADINHO DAM

Laudelina's feeling: "lack" (lack of work, lack of food, lack of making a living, lack of reference points of belonging, lack of dignity)

Object: the tree (*manguba*) she brought from Boqueirão (which her father had sown)

Location: her current backyard

© Laudelina Ferreira and Marilene Ribeiro 2015

### Portrait of Maria Niva



SOBRADINHO DAM

Maria Niva's feeling: change  
Object: porcelain-made swallow and duck  
(which she inherited from her mother—from the time they both still lived in Old Pilão Arcado town), and *fruta-do-conde*  
Location: porch of her current home

© Maria Niva Lima and Marilene Ribeiro 2015

### Portrait of Eliezé



SOBRADINHO DAM

Eliezé's feeling: indignation and rebelliousness  
Object: lamp bulb  
Location: by the "dead water" (reservoir of the Sobradinho dam)

© Eliezé dos Santos Souza and Marilene Ribeiro 2015

### Portrait of Ermy



SOBRADINHO DAM

Ermy's feelings: bitterness, resentment  
Object: engine that pumps water from the reservoir of the Sobradinho dam towards his current dwelling  
Location: site where the water is pumped from

© Ermy Souza and Marilene Ribeiro 2015

### Portrait of José Vitorino



SOBRADINHO DAM

José Vitorino's feelings: bitterness, resentment, longing  
Object: his daughter's slide viewers (containing pictures from his former place of living, Boqueirão)  
Location: porch of his current place (he suggested his grandson was photographed with him)

© José Vitorino dos Anjos Sobrinho and Marilene Ribeiro 2015

### Portrait of João Evangelista

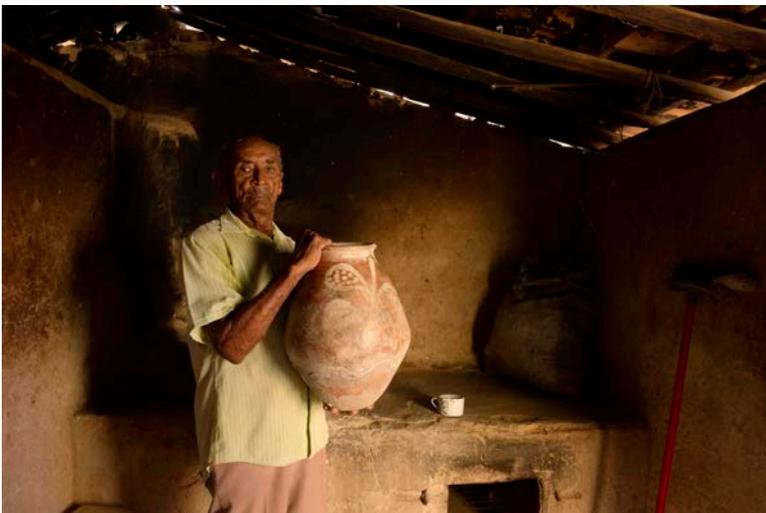


SOBRADINHO DAM

João Evangelista's feeling: longing  
Object: cassava and sweet potato  
Location: his current home  
(which contains some parts of his old house in Alto do Melão)

© João Evangelista do Espírito Santo and Marilene Ribeiro 2015

### Portrait of Hilarino



SOBRADINHO DAM

Hilarino's feeling: sorrow  
Object: crock his family used to collect and store  
drinking water, when they moved to their new home  
Location: hut he had to build for his family to live in after  
the enforced move

© Hilarino Nunes dos Anjos and Marilene Ribeiro 2015

### Portrait of Júlia



SOBRADINHO DAM

Júlia's feeling: sorrow

Object: sewing machine she brought from her previous home,  
in Fazenda Nova

Location: living room of her current home

© Júlia Castro Almeida and Marilene Ribeiro 2015

### Portrait of Raimunda Campos



SOBRADINHO DAM

Raimunda's feeling: longing

Object: some fruits (to represent how healthy people used to be  
by the riverside, as they grew and ate fruit and vegetables without  
having to rely on herbicides-insecticides, because land  
by the riverside was fertile enough)

Location: outside of current house

© Raimunda de Souza Campos and Marilene Ribeiro 2015

### Portrait of Odelita and Januário



SOBRADINHO DAM

Odelita's feeling: sorrow

Januário's feelings: sorrow and loss

"Object" chosen by Odelita: her granddaughter (on behalf of Odelita's daughter: to represent the isolation between Odelita' and her daughter that was caused by the move)

Object chosen by Januário: plastic-made flower (to represent the loss, in terms of crops, he has had)

Location: veranda of their current place

© Odelita dos Santos Souza, Januário José de Souza, and Marilene Ribeiro 2015

### Portrait of Maria dos Santos



SOBRADINHO DAM

Maria dos Santos' feeling: suffering

Object: portrait of her husband

Location: living room of her current place

© Maria dos Santos Costa and Marilene Ribeiro 2015

Portrait of João Martins



SOBRADINHO DAM

João Martins' feeling: feeling of being overlooked  
Object: old, broken, and "neglected" bench  
Location: backyard of his current place of living

© João Martins Cardoso and Marilene Ribeiro 2015

Portrait of Maria das Dores



SOBRADINHO DAM

Maria das Dores' feeling: "the End Times"  
Object: image of San Francis, which belonged to her father  
(to represent faith)  
Location: her current house  
(she suggested her husband was photographed with her)

© Maria das Dores Campos and Marilene Ribeiro 2015

### Portrait of Marisa



SOBRADINHO DAM

Marisa's feeling: "feeling that her people's history has being forgotten"  
Object: device used to do lacework (one of the pieces of the museum)  
Location: *Museu do Sertão* – museum she founded to keep the memory of Old Remanso town alive  
(Marisa Lúcia Santana Nascimento – aka Marisa Muniz)

© Marisa Muniz and Marilene Ribeiro 2015

### Portrait of Altenice



SOBRADINHO DAM

Altenice's feeling: sorrow  
Object: crock her family has used to collect and store water  
Location: her current backyard, in Poço do Angico

© Altenice Cruz and Marilene Ribeiro 2015

### Portrait of Nivaldo



SOBRADINHO DAM

Nivaldo's feeling: horror  
Object: empty food pot  
Location: the entrance of his current kitchen

© Nivaldo dos Santos and Marilene Ribeiro 2015

### Portrait of Ornelina



SOBRADINHO DAM

Ornelina's feeling: sorrow  
Object: image of *Nossa Senhora do Perpétuo Socorro* (that belonged to her mother; also used in some festivities in her previous home, Saco da Arara)  
Location: living room of her current place of living, in Piçarrão

© Ornelina de Souza and Marilene Ribeiro 2015

### Portrait of Juvêncio



SOBRADINHO DAM

Juvêncio's feeling: sorrow (as everything he plants dies in the place he moved to, Piçarrão, mainly due to the scarcity of water)

Object: dead coconut tree

Location: his current backyard

© Juvêncio Rocha and Marilene Ribeiro 2015

### Portrait of Plínio



SOBRADINHO DAM

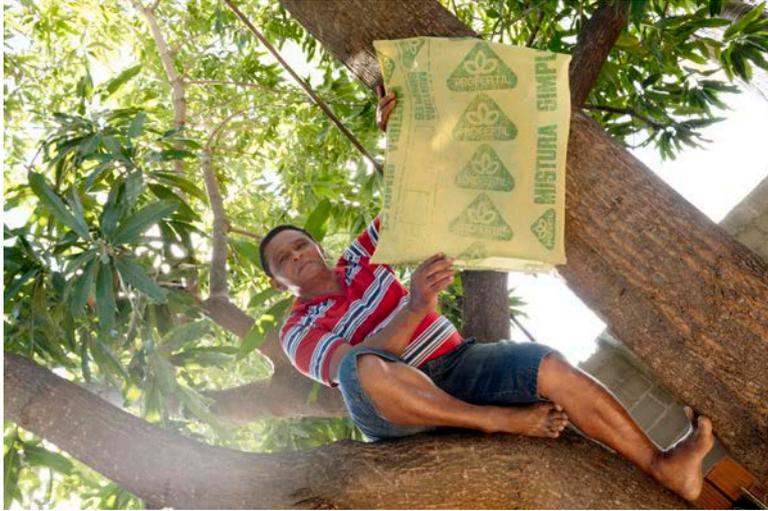
Plínio's feelings: bitterness, resentment, sorrow

Object: onions (as his family used to make a living growing onions in their previous place of living, Urucé)

Location: outside of his current house

© Plínio Davi dos Santos and Marilene Ribeiro 2015

### Portrait of Nelito



SOBRADINHO DAM

Nelito's feeling: heartbrokenness  
Object: pack of fertilizer for plants and mango tree he brought from Xique-Xique hamlet, as a memory of his family's life there  
Location: backyard of his current place

© Nelito dos Santos Barros and Marilene Ribeiro 2015

### Portrait of Natalina and José



GARABI-PANAMBI DAM COMPLEX

José's feelings: sorrow, powerlessness  
Natalina's feelings: indignation, rebelliousness  
Object chosen by Natalina: device they use to fish  
Object chosen by José: guitar  
Location: Santo Cristo riverbank  
(where he composes his songs and they enjoy their free time)

© Natalina Filipowicz, José Filipowicz, and Marilene Ribeiro 2016

### Portrait of Alberto



GARABI-PANAMBI DAM COMPLEX

Alberto's feeling: "the End"

Object: his wedding ring

Location: porch of his current house (by the Uruguay River)

© Alberto José Spohr and Marilene Ribeiro 2016

### Portrait of Silvina and Aldino



GARABI-PANAMBI DAM COMPLEX

Silvina's feeling: desperation

Aldino's feeling: "no name"

Object chosen by Silvina: corn (to represent what the couple grows)

Object chosen by Aldino: soybean (to represent what the couple grow)

Location: living room of their current home

© Silvina Schmitt, Aldino Schmitt, and Marilene Ribeiro 2016

Portrait of Maurício



GARABI-PANAMBI DAM COMPLEX

Maurício's feeling: deep pain

Object: image of his property (which he inherited from his father)

Location: porch of his house

© Maurício Hahn and Marilene Ribeiro 2016

Portrait of Liane



GARABI-PANAMBI DAM COMPLEX

Liane's feeling: strong pain

"Object": one of her piglets

Location: the Uruguay riverside (overlooking the river)

© Liane Mombach and Marilene Ribeiro 2016

Portrait of Clarisse and Gilberto



GARABI-PANAMBI / DAM COMPLEX

Clarisse's and Gilberto's feeling: sorrow  
Object chosen by Clarisse: dead plant  
Object chosen by Gilberto: local soil  
Location: garden of their current place (where Gilberto was born)

© Clarice Jahns, Gilberto Jahns, and Marilene Ribeiro 2016

Portrait of Anacleto



GARABI-PANAMBI / DAM COMPLEX

Anacleto's feeling: "it wrings my heart"  
Object: fruits he grows at his backyard  
Location: backyard of his current place

© Anacleto José Ristoff and Marilene Ribeiro 2016

Portrait of Reinoldo



GARABI-PANAMBI DAM COMPLEX

Reinoldo's feeling: "it wrings my heart"  
Object: water from the Uruguay River  
Location: his living room  
(which will be underwater if the Panambi dam is built)

© Reinoldo Roque Köche and Marilene Ribeiro 2016

Portrait of Jair Drost



GARABI-PANAMBI DAM COMPLEX

Jair Drost's feeling: sorrow  
Object: local soil  
(to represent the roots between Jair, his family,  
and the place where they live)  
Location: his family's place  
(which they inherited from Ilone's (his wife) parents,  
and they have been neighbours ever since)

© Jair Drost and Marilene Ribeiro 2016

### Portrait of Ailton



GARABI-PANAMBI DAM COMPLEX

Ailton's feeling: powerlessness

"Object": his occupation

Location: his family's barn (where the tobacco harvested is dried)  
(Ailton's wife beside him)

© Ailton Carvalho dos Santos and Marilene Ribeiro 2016

### Portrait of Claudinei



GARABI-PANAMBI DAM COMPLEX

Claudinei's feelings: sorrow and loss

Object: fish

Location: his workspace

© Claudinei Zuehl and Marilene Ribeiro 2016

### Portrait of Pedro



GARABI-PANAMBI DAM COMPLEX

Pedro's feelings: sorrow

Object: balls of bocce game

Location: Três Pedras' (his community's) chapel and community centre

© Pedro Dalla Costa and Marilene Ribeiro 2016

### Portrait of Marisa and Jair



GARABI-PANAMBI DAM COMPLEX

Marisa's feeling: pain

Jair's feeling: preoccupation

Object: cattle the couple raises

Location: their current place of living

© Marisa Bohn, Jair José Kuhn, and Marilene Ribeiro 2016

### Portrait of Iranir and Ademar



GARABI-PANAMBI DAM COMPLEX

Iranir's feeling: anguish

Ademar's feelings: rebelliousness

Object chosen by Iranir: *chimarrão* (traditional communal tea mug)

Object chosen by Ademar: booklet on hydro dams on the Uruguay River

Location: Uruguay riverbank

© Iranir Kratz Olsson, Ademar Olsson, and Marilene Ribeiro 2016

### Portrait of Nelci



GARABI-PANAMBI DAM COMPLEX

Nelci's feeling: anger

Object: fire

Location: her parents' place (which she literally helped to build brick by brick)

© Nelci Bárbaro and Marilene Ribeiro 2016

### Portrait of Marinês



GARABI-PANAMBI DAM COMPLEX

Marinês' feeling: outrage and rebelliousness  
"Object": the dance with her husband (Dalmir)  
Location: living room of their current place of living  
(which will also disappear if the Garabi dam takes place)

© Marinês Bernardi Fink and Marilene Ribeiro 2016

### Portrait of Egídio



GARABI-PANAMBI DAM COMPLEX

Egídio's feeling: rebelliousness  
Object: seedling  
(to represent the trees his family has planted at their plot of land)  
Location: his family's plantation

© Egídio Zambelli and Marilene Ribeiro 2016

### Portrait of Luiz



GARABI-PANAMBI DAM COMPLEX

Luiz's feeling: "all bad feelings"

Object: manual seeder (which belongs to Luiz's family)

Location: his family's pasture gorge overlooking the Uruguay River

© Luiz Webery and Marilene Ribeiro 2016

### Portrait of Maria Inês



GARABI-PANAMBI DAM COMPLEX

Maria Inês' feeling: "tied"

Object: rope

Location: her place (house and garden with fruit trees)

© Maria Inês Taube Schröpfer and Marilene Ribeiro 2016

### Portrait of Ramão



GARABI-PANAMBI DAM COMPLEX

Ramão's feelings: doubt, emptiness, uncertainty  
Object: organic products he and his family make from sugar cane  
Location: site where they built to process the sugar cane

© Ramão Santos Cerri and Marilene Ribeiro 2016

### Portrait of Marinês Nicolli



GARABI-PANAMBI DAM COMPLEX

Marinês Nicolli's feeling: sorrow  
"Object": her sons  
Location: her bedroom/living room

© Marinês Nicolli dos Santos and Marilene Ribeiro 2016

Portrait of Valdemar Wociekoski



GARABI-PANAMBI DAM COMPLEX

Valdemar's feeling: sorrow  
Object: plastic bag (to represent fish that will no longer be found in the Uruguay River but litter instead, if the Garabi dam is built)  
Location: stretch of the Uruguay River close to his place

© Valdemar Wociekoski Gregório and Marilene Ribeiro 2016

Portrait of Ronaldo



GARABI-PANAMBI DAM COMPLEX

Ronaldo's feeling: hope and hopelessness  
Object: road that links the place where he lives (Garruchos) to its closest town ("the nowhere to the nothing")  
Location: road that links Garruchos to its closest town

© Ronaldo Praiczik and Marilene Ribeiro 2016

### Portrait of Eurice



GARABI-PANAMBI DAM COMPLEX

Eurice's feeling: sorrow and uncertainty  
Object: her son's toy (miniature of a car)  
Location: garden of her current place of living

© Eurice Klein and Marilene Ribeiro 2016

### Portrait of Cirlei and Nilson



GARABI-PANAMBI DAM COMPLEX

Cirlei's and Nilson's feeling: sorrow  
Object: trees  
Location: tunnel of trees at the main entrance of their property

© Cirlei Heming Dawies, Nilson Roque Dawies, and Marilene Ribeiro 2016

### Portrait of Vilson



GARABI-PANAMBI DAM COMPLEX

Vilson's feeling: sorrow

"Object": the absence of people gathering at the place where they usually get together

Location: site where annual Celebration of the Nossa Senhora dos Navegantes' Day takes place

© Vilson Winkler and Marilene Ribeiro 2016

### Portrait of Rejane



GARABI-PANAMBI DAM COMPLEX

Rejane's feeling: sorrow

Object: tool they use at her family's dairy farm

Location: stable

© Rejane Kegler Dallabona and Marilene Ribeiro 2016

### Portrait of Helena



GARABI-PANAMBI DAM COMPLEX

Helena's feeling: loss

Object: stone from the Uruguay River she collected and kept

Location: main entrance of her house

© Helena Kalb Furlanetto and Marilene Ribeiro 2016

### Portrait of Lúcia



GARABI-PANAMBI DAM COMPLEX

Lúcia's feelings: preoccupation, sorrow, anguish

Object: statue of *Nossa Senhora da Aparecida*, which accompanied her in the classroom during her career as a teacher

Location: school where she worked, in the Canal Torto village (which will face submergence if the Panambi dam is built)

© Lúcia Birk de Brum and Marilene Ribeiro 2016

### Portrait of Camila



GARABI-PANAIBI DAM COMPLEX

Camila's feelings: loss and sorrow  
(for all the life that will be sacrificed due to the dam)  
but she also cites opportunity (to take her parents to the urban area)  
"Object": her parakeets  
Location: the Inácio brook (located 50 m apart from her place and  
which will vanish underwater if the Panambi dam is built)

© Camila Grzeza and Marilene Ribeiro 2016

### Portrait of Élio



BELO MONTE DAM COMPLEX

Élio's feelings: destruction, rebelliousness, outrage  
(about having to "witness" all the destruction  
without being allowed to do anything to stop it),  
guilt (about not being able to save his community and the river)  
Object: the dredge that dredged Murici Island (his usual fishing site)  
Location: the Xingu River overlooking the site where  
the Murici Island used to be, close to the Belo Monte dam wall

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### Portrait of João



BELO MONTE DAM COMPLEX

João's feelings: feeling wounded,  
feeling that the company in charge  
of the dam project has not treated him  
like a human being should be  
Object: bricks  
Location: his kitchen

© João Pinto Filho and Marilene Ribeiro 2016

### Portrait of Vanilda



BELO MONTE DAM COMPLEX

Vanilda's feelings: bitterness, rebelliousness  
Object: fishing net  
Location: slab on the Xingu River by her house

© Vanilda Feitosa Araújo and Marilene Ribeiro 2016

### Portrait of Cláudia



BELO MONTE DAM COMPLEX

Cláudia's feeling: loss

Object: oar and boat

Location: stretch of the Xingu's Big bend situated some yards upstream of her place, where moving by boat is no longer possible due to the low level of the river water, as the Pimental dam, situated upstream, diverts the Xingu River's waters towards the Belo Monte dam.

© Cláudia Gonçalves and Marilene Ribeiro 2016

### Portrait of Jucélia and Ederson



BELO MONTE DAM COMPLEX

Jucélia's feeling: sorrow

Ederson's feeling: suffering

Object chosen by Jucélia: pillow case  
(part of the bed set that her sister had given her)

Object chosen by Ederson: drill (one of the tools Jucélia's brother and he used to build the couple's new home at Independente I)

Location: Jucélia and Ederson's place (main entrance located at the left)

© Jucélia Silva, Ederson Soares, and Marilene Ribeiro 2016

### Portrait of Raimunda Gomes



BELO MONTE DAM COMPLEX

*I'm ready to fight*

(caption conceived by Raimunda for her own portrait)

Raimunda's feeling: desperation, tied to the past

Object: wooden stick

Location: site where her house used to stand, in Barriguda's Island  
(Raimunda's dwelling was burnt. Note the four corners of it as four half-buried fragments of coal)

© Raimunda Gomes and Marilene Ribeiro 2016

### Portrait of Leonardo



BELO MONTE DAM COMPLEX

Leonardo's feelings: rebelliousness and desperation

Object: borduna (indigenous war club) and bow he made himself  
(as taught by his grandmother—also a Yudjá/Juruna)

Location: by the *sumaúma* tree

© Leonardo Batista and Marilene Ribeiro 2016

### Portrait of Geovan



BELO MONTE DAM COMPLEX

Geovan's feelings: rebelliousness, hatred, outrage, anguish, dismantlement, sorrow

Object: door (to represent the façade of his former house on Itapiranga Island, currently submerged by the reservoir of the dam)

Location: the Xingu River

© Geovan Carvalho Martins and Marilene Ribeiro 2016

### Portrait of José Nunes



BELO MONTE DAM COMPLEX

José's feelings: indignation and sorrow

Object: portrait of his father, who was a rubber tapper and, like José, appreciated the place where they lived: Trindade Island

Location: Trindade Island  
(currently situated within the reservoir of the dam)

© José Nunes and Marilene Ribeiro 2016

Portrait of Maria Helena, Maria Dalva, and Larissa



BELO MONTE DAM COMPLEX

Maria Helena's feeling: sorrow  
Object chosen by Maria Helena: statue of St. Joseph  
Object chosen by Maria Dalva: one of the dead leaves  
(and also her wedding dress—she got married on Pivela Island)  
Object chosen by Larissa: local soil  
Location: dead plantation of acai berry in their former backyard  
on Pivela Island (currently partially submerged by the reservoir of the dam)

© Maria Helena Almeida, Maria Dalva Almeida, Larissa Almeida, and Marilene Ribeiro 2016

Portrait of Cláudio Curuaia



BELO MONTE DAM COMPLEX

Cláudio's feelings: sorrow (about the impacts the dam inflicted upon nature and people from Altamira city and the surroundings) and revolt (about how the dam project exists to enable corruption, and to benefit big companies and politicians)  
Object: money notes  
Location: Arapujá Island

© Cláudio Curuaia and Marilene Ribeiro 2016

### Portrait of Juma



BELO MONTE DAM COMPLEX

Juma's feelings: revolt, rage, anger, the worst feelings a person can feel; but, when she thinks of the subject of the damming process, i.e. the Xingu River, she feels life and energy to carry on fighting for it and for her people's (the Xipaya) rights.  
Object: notebook given by her mother  
Location: Xingu River's rocky margin

© Juma Xipaia and Marilene Ribeiro 2016

### Portrait of Maria das Graças and Delcilene



BELO MONTE DAM COMPLEX

Delcilene's feelings: sorrow and humiliation  
Maria das Graças' feeling: sorrow  
Object chosen by Delcilene: cashews  
Object chosen by Maria das Graças (Delcilene's mother): sand  
Location: their former backyard in Cashew Island (currently partly submerged by the dam)

© Maria das Graças da Silva, Delcilene Gomes da Silva, and Marilene Ribeiro 2016

### Portrait of Raimundo



BELO MONTE DAM COMPLEX

Raimundo's feeling: sorrow

Object: framed picture of the last fish Raimundo caught by the confluence of the Santo Antônio stream and the Xingu River, before he left the Santo Antônio hamlet

Location: the Santo Antônio stream after the dam works (Raimundo's wife and two of their kids also depicted)

© Raimundo Martins and Marilene Ribeiro 2016

### Portrait of Maria Eliete



BELO MONTE DAM COMPLEX

Maria Eliete's feelings: desperation and sorrow

Object: native trees whose fruit can no longer fall in the water and feed fish which depend on them to survive

Location: the dam-led exposed riverbank of the Xingu River, where the Paquiçamba Indigenous Reserve (Eliete's home) is located

© Maria Eliete Felix Juruna and Marilene Ribeiro 2016

Portrait of Maria Rosa's family



BELO MONTE DAM COMPLEX

*By using the same method we apply to get our food,  
the Norte Energia silences its affected people.*  
(caption conceived by Maria Rosa's family for their portrait)

Maria Rosa's feeling: rage

Object: fishing net

Location: her mother's former plot of land,  
currently partially submerged by the dam

© Maria Rosa Pessoa Piedade and Marilene Ribeiro 2016