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**Toward Popular Environmental Education in  
Marginalized Watershed Communities: The Case Study of São Paulo**

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Date: August 10, 2007

A Major Paper submitted to the Faculty of  
Environmental Studies in partial fulfillment  
of the requirements for the degree of  
Master in Environmental Studies,  
York University, Ontario, Canada

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## ACKNOWLEDGMENTS

I am very grateful for all of the support, love and encouragement that I have received during this long and fulfilling process of completing my Master in Environmental Studies. The completion of this final paper could not have taken place without the ongoing and unconditional love of many individuals dear to me. First, I would like to thank my supervisor Chris Cavanagh, who has become a dear friend, for suggesting that I apply to FES, for introducing me to popular education with great passion for and dedication to popular grassroots resistance in and through education; for continuously being available to chat about ideas, questions and doubts; and for reminding me that heartbreak is a necessary part of activism. Thank you to Prof. Sherene Razack for teaching two of the most fulfilling classes of my studies; for suggesting that I examine my journal entries from my volunteer experience in Brazil, 2005, and for her valuable feedback on my papers.

Thanks to Prof. Ellie Perkins and Andrea Moraes, of the Sister Watersheds project, for the opportunity to learn about watershed issues in Toronto with the Black Creek during my Graduate Assistantship in 2006, and with the Pirajussara and Piracicaba watersheds in São Paulo during my exchange and research experience in Brazil in 2007. It has been a pleasure working with you both! Thank you for believing in me and for being open to including a discussion of race and environment in this project. My experience in Brazil was an unforgettable and profound part of my growth as a person and educator thanks to a very talented, passionate and humble team of popular educators in São Paulo: Débora Teixeira, Bruno Calvacante, Bárbara Carvalho, Luiz Gustavo, Mariana Ferraz Duarte and Pâmela Yuri Morimoto. Thank you also to those involved in

the wider Sister Watersheds project: Líviam Cordeiro Beduschi, Beth Teixeira, Mírian Dualibi, Pedro Jacobi. And thanks to my schoolmates and friends Laura Antoniazzi, Fabiana Barbi and Thea Standarski for many unforgettable moments in Toronto and São Paulo and thanks to Débora Lima and Fabiane Bastos for their valuable ideas and assistance with our workshops in Toronto. I owe much of my development as a researcher to Prof. Gislene Santos, for her dedication to racial justice in Brazil and for her warmth and keen intellect in guiding me at the University of São Paulo. Thank you to Leon Santos Padial for many inspiring conversations and for your perseverance and dedication to antiracism in Brazil.

I first became interested in Brazilian Studies with friends who have become like a second family, of the Afro-Brazilian percussion troupe, Nunca Antes Baque de Maracatu. It has been great fun and an invaluable challenge while learning the music, culture and ritual. I am so grateful to each and every one of you: Aline Morales, Alex Bordokas, Luanda and Kevin Jones, Alejandra and Anna Maria Higuera, Hanae Baruchel, Angelica Reyes Fraga, Michelle Bird, Adriana Machado, Kátia Albuquerque, Cícera da Silva, Dylan Passmore, Marcelo, Humberto, Hilario and Luciano Porto-Gonçalves, Annie Lacaille, Ian Alexander, Linda Brown, Lyba Spring, Prithi Narayanan, Jarita Barry, Therese Joyce, Sai Rupa, Rian Scott, Ed Ford, Raphi Roter, Cris Glória, Nathalie Barbier, Ann Cummings, Vinícius Barbosa do Lago, Rafaela Lopes Pacola, Ricardo Rafael Faria, Suzanne, Greg da Silva, Mariana Palhares, Rodrigo and Fink Jr.

And to my dear friends: thank you for your insight, honesty and for always being a positive light in my life. I am so lucky to have such amazing friends: Sutton Eaves,

Jonathan Spicer, Johanna Reynolds, Janelle Joseph, Ana Paula Passaes Galdino and Ramann Patara.

I completed this project with the spiritual, intellectual and emotional support of my companion and life partner, Rafael Freire Santos. Thank you for believing in me, for your patience, unconditional love and encouragement, for your sharp wit and critical eye, and for keeping me grounded, every step of the way.

My family has been an incredible foundational support throughout my studies. Thank you to my sister and best friend, Amanda, for always making time to talk and for being open-minded and non-judgmental, to my grandparents for being a consistent and beautiful presence in my life, and finally to my parents, Antoinette and Ercole, for being profound role models, for raising me to think critically; for pushing me to do my best and for loving me always.

## **ABSTRACT**

It is rare to find a critical discussion of race in literature about Brazilian urban environmental degradation and water pollution. Most of the literature discusses what to do with the “problem” of the periphery neighbourhoods – called favelas – whose residents are often represented as polluters of the rivers near to which they live and as occupiers of ‘environmentally risky’ territory. In Brazil, it is common to encounter environmental education projects that incorporate a debate on economic inequalities and environment, but without mention of colonialism or race subjection. Using the case study of São Paulo, this paper shows how racism has been historically spatialized through the material production of the favela, as well as through its discursive production in

mainstream media and literature. That environmental injustices taking place in racialized communities are officially accepted makes it crucial to problematize this hegemonic violence in educational spaces. I argue for the discussion of race, interconnected with class and gender, in environmental education. Paulo Freire's principles of a pedagogy of the oppressed are critical to a discussion about the meaning of an anti-colonial pedagogy and thus, of the practice of anti-colonial environmental education.

## **FOREWORD**

This Major Research Paper is a core component of my Master in Environmental Studies. My decision to undertake this masters program resulted after a volunteer experience in Fortaleza, Brazil, in 2005, through which I realized that I needed to deepen my understanding of transnational relations and the consequent race, gender, class, environmental and political-historical relations embedded in what initially seemed to be simply a voyage to teach English, basic computer skills and arts and crafts to low-income Brazilians. But I soon perceived that something bigger was going on – that my presence was complicated by an extensive history of colonialism and oppression in Brazil, in which I was not aware that I was/am implicated when I decided to make the trip. It was only after reading Eduardo Galeano's work and discussing some of these questions with my friend and (now) supervisor, Chris Cavanagh, and while studying at York University that I began to figure out how to articulate a deeper analysis of my actions, thoughts and assumptions of my experience and also connect them to my (new) passions for environmental justice and popular education.

My interest in working with residents of low-income watershed communities was sparked in the fall of 2005, when I began working as a Graduate Assistant with the Sister Watersheds project at York University, with Andrea Moraes and Ellie Perkins. I began learning about the Black Creek watershed, as well as the Pirajussara and Piracicamirim watersheds in São Paulo. At the same time, I took courses in popular education, women's studies and political science and I began to see the links between race, gender, class and the environment and the possibilities of using popular education for social change. In the winter term, I took Sherene Razack's course, Race and Knowledge Production, at the Ontario Institute for Studies in Education, University of Toronto, where I studied as a visiting graduate student. The essay that I wrote for this class – which examined my journal entries from my volunteer experience in Brazil – totally changed the way that I think about myself as an educator and what it means to have white privilege. The class gave me the tools to analyze my actions, thoughts and assumptions using a critical anti-colonial framework. I used these tools in the research that I undertook with Johanna Reynolds, who joined me as a fellow graduate assistant with Sister Watersheds; in my course on critical theories of international development; as well as in a popular education pilot project that involved mural-making with students of the ACE (Advanced-Credit learning Experience) program at York University.

Summer 2006 was an exceptional time to practice my skills as a popular educator. I worked as a facilitator at an intensive international human rights training program (IH RTP) with Equitas, for three weeks in June – an experience that thoroughly broadened my knowledge of human rights situations around the world, but also allowed me to reflect on how to engage students on a critical, yet emotional, level. I met many talented

and inspiring educators here and learned a great deal about making workshops relevant to participants' experience. After the IHRTP, I returned to Toronto to work with Johanna and Brazilian volunteers Débora Lima, Fabiane Bastos and Laura Antoniazzi, to plan and facilitate popular environmental education workshops with children in Black Creek West, as part of the Sister Watersheds project. These enriching encounters were tied together first, through another of Professor Razack's courses, Race, Space and Citizenship, which more directly led me to articulate exactly what I wanted to write about in this major research paper; and secondly, through my research experience in Brazil which solidified my passion for popular education as a tool for environmental-social change.

These past two years at the Faculty of Environmental Studies have been integral to my growth as a person and my development as an educator, researcher and student. This major research paper has helped me gain an in-depth understanding of my **area of concentration – Education and resistance for marginalized youth/adults** and has therefore fulfilled the requirements of the MES degree. Specifically, this major project intersects with the following learning objectives, as detailed in my plan of study: 1.1: To understand the historical roots of exploitation and spatial marginalization of racialized Brazilians; 1.2: To understand the socioeconomic and spatial marginalization of racialized Brazilians *today* in relation to the environment in their communities; 2.2: To explore popular education and political mobilization around watershed issues in Brazil, because marginalized people in Brazil are most affected by water contamination and other water safety issues; 3.1: To understand and participate in processes of critical self-reflection as an educator, researcher and learner; and 3.2: To learn about the training of



environmental educators in civil society organizations in Brazil and the methodologies and pedagogies used in the activities they plan with communities.

Looking back at the events that led me to where I am now – writing the final words to my major research paper – I smile. I am very grateful to have had the opportunity to embark on this great journey to contribute my research that I hope will be useful for other academics, activists and citizens concerned with education for social-environmental justice. I know that my work is not over – I still have many questions that I hope to explore in future projects. But for now, I am glad. Claudia Sara De Simone, Aug/07

## **INTRODUCTION**

On a typical summer day, the Pirajussara River in São Paulo is still; the only ripples produced by plastic bags and pop bottles that float along its edges. The smell of the river resembles the stench of sewage, which is quite accurate as much of the river's pollution comes from untreated sewage that pours directly into the river. I often passed the river thinking that it would take decades to recuperate it. But one day, I saw what could be possible.

The Pirajussara River spills into a larger river called Pinheiros that runs through the city of São Paulo, along the northeast side of the University of São Paulo campus. While crossing the bridge on my way to school one day, I saw something that I would have never imagined. There, at the bay of the river, were three things bobbing, splashing and making ripples in the water. I could not make them out initially, and I was confused. They were dark brown, like the colour of the water. But they weren't garbage. I looked ahead of me to see a group of people leaning over the bridge, pointing, smiling and

looking at these ‘things’. It looked like they were enjoying themselves, like they paused to take in a beautiful landscape. I stopped to ask them what they were looking at (as no one ever stops to look at the river). Indeed, what I saw was a beautiful sight – this was why I was confused. I did not think it was possible to see the river as beautiful. And so the ‘things’ - which could not have been garbage - were animals playing. They are called *capivaras* - large rodents that live at the edge of the river.

‘How could it be? How could anything survive in that water?’ I asked myself. It turns out that capivaras use water as a destination of refuge and not as a means of survival. They do not feed from water; therefore can tolerate high levels of pollution and have managed to survive on the bay of this river.

What if the river could be home to the animals, plants and insects that make up a healthy ecosystem; that attract families to stop to take a look, play or have a picnic on its bay? These are some of the questions and dreams we discussed in our popular environmental education (EE) workshops with women community health workers of the district of Campo Limpo, São Paulo, part of the Pirajussara watershed region. The Sister Watersheds team of educators, with whom I participated, led the workshops.

In Campo Limpo (ironically meaning “clean field”), makeshift homes line many bays of the Pirajussara River, where communities of Brazilians have lived for years. Some homes are built on stilts on top of the river. These communities – most of which are favelas – are often built on abandoned land that is considered to have high risk of floods and disease because of water contaminants. Favelas are a consequence of the ongoing and historically rooted environmental, racial, economic and territorial inequalities of Brazilians.

I begin with the above story because it tells a great deal about perception. It is an introduction to my initial perceptions of the environment in São Paulo, difference of location, power relations, subjectivity and imaginations of what social-environmental change is possible. Self-reflexivity is a core part of my development process as an educator and researcher. In the following paragraphs, I introduce my core research questions.

I argue for an anti-colonial pedagogy in environmental education. As the natural environment does not exist in a vacuum, we cannot talk about environmental concerns, ‘problems’ and inequalities without asking why racialized and dispossessed Brazilians have been (and continue to be) the principle sufferers of environmental injustice.<sup>1</sup> While the links between racialized communities and environmental degradation may seem obvious to some, this has been a topic of little discussion in academic literature. In this paper, I reveal these interconnections, as well as discuss the possibilities for an anti-colonial environmental education.

Environmental education has traditionally been about garbage disposal, recycling and hygiene – directed at low-income communities, oftentimes blaming them for the environmental ‘problems’ in their communities – without critically engaging in discussion about historical inequalities suffered by Indigenous peoples and peoples of the

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<sup>1</sup> Brazilians whom are most affected by environmental degradation overwhelmingly live in favelas, often without infrastructure for water and sewage treatment. Environmental degradation in these communities is often discussed in terms of class difference – see for example, Jacobi, Pedro. (1994) “Households and Environment in the city of São Paulo; problems, perceptions and solutions.” *Environment and Urbanization*, Vol. 6(2), pp. 87-110. Without undermining the importance of an analysis of class, in the following sections I explain the necessity of looking at environmental degradation in terms of race, following Denise Ferreira da Silva’s point on the favela being a racialized space, the terrain of illegality, and thus the space where injustice is permitted and contained.

African diaspora. In Brazil, for example, a great deal of effort has been made to deny and mask Afro-Brazilian history. I argue that this hegemonic denial works to make it extremely difficult to, not only discuss how Afro-Brazilian history has everything to do with the environment (and vice versa), but to make the case about why we should be questioning the production of current environmental inequalities in relation to racialized communities.

In this paper, I look at how Paulo Freire's (1979) principles for a pedagogy of the oppressed are useful to my argument for an anti-colonial pedagogy. I discuss why terminology such as *antiracist* is important, and what it means to use antiracist pedagogy. I also interrogate my own subject position during the planning and facilitation of environmental education workshops with community health workers (*agentes de saúde*) in Campo Limpo, São Paulo. In Chapter Two of this study, I present a review of the literature and my case study. Chapter Three looks at knowledge production in the history of urban inequality in Brazil and in São Paulo, in particular; while in Chapter Four I talk about my process of self-reflexivity during this research experience. I conclude with final recommendations and further research questions.

## **CHAPTER ONE: Methodology**

In this chapter, I present the main theoretical framework I use to support my argument for a popular environmental education in low-income communities. The integration of popular education as a pedagogical approach to environmental education and the discussion of environmental issues is a relatively new development, especially since the work of dian marino (1997) as well as with the work of educators at non-

governmental organizations in Latin America such as Ecoar Institute for Citizenship. Popular education is a collective learning process: “It is not something that is separate from everyday life,” writes Deborah Barndt.<sup>2</sup> In contrast with traditional educational models, popular education aims at the development of critical thinking, analysis and reflection about the social-historical-environmental-political-economic contexts of everyday experience, “strengthening their ability to organize to change it [and] participate actively and consciously in the democratic process.”<sup>3</sup> Popular education has deep roots in Latin American, as well as in African countries. It was originally used with illiterate people and peasants, but has been used as a learning tool (and process) with any oppressed sector interested in changing their situation. By extension, all popular education is by nature anti-colonial. The concept, anti-colonial, challenges that the colonial encounter has ended. Colonial relations continue to exist and anti-colonial education refers to a way of teaching and learning that challenges and disrupts colonial structures, oppression in general and the colonial tendencies (through pedagogy and representation) that are present in most school systems (in formerly colonized/ colonizer nations), in the way they are run and in the content presented. For instance, Paulo Freire (1979) refers to dominant approaches to education as “banking style” of teaching – the teacher is considered to be an expert and the students are thought to be and treated as if they are empty “banks” into which the educator’s “knowledge” must be deposited.<sup>4</sup>

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<sup>2</sup> Barndt, Deborah. (1991) *To Change This House: Popular Education Under the Sandinistas*. Toronto: Between the Lines, pp. 15.

<sup>3</sup> Ibid, pp. 16.

<sup>4</sup> Freire, Paulo. (1979) *Pedagogy of the Oppressed*, 30<sup>th</sup> Edition. New York: Continuum, pp. 71-86.

In a conversation with Arlo Kempf, George Sefa Dei (2006) talks about the meaning of decolonization in response to leaders who “design futures for marginalized peoples. This is the colonizing tendency, for some to design the future of others.”<sup>5</sup> He says: “[Decolonization is] more than just simply looking at things in terms of discourse, it also has to do with the way certain conversations and certain texts have become commonsensical thoughts and commonsensical expressions. These need to be subverted and revealed for what they are.”<sup>6</sup> Taking an approach that disrupts colonial narratives is the only way education can be anti-colonial, and in turn, transformative. The discussion of history is crucial here, to understand the specific ways that “certain voices have become dominant” and in order to question and subvert the normalization of oppression.<sup>7</sup> Dei and Kempf argue for a historical perspective that questions why the voices of the oppressed are absent from mainstream history and to bring these voices into the conversation, “not just as additional voices, but as a counter force.”<sup>8</sup>

Bell hooks (1994) reminds us that dominant systems of education are based on Bourgeois values, and have been based on such values throughout history.<sup>9</sup> “All knowledge is forged in histories that are played out in the field of social antagonisms.” It is essential that EE be critical of interlocking systems of domination such as globalization, patriarchy, white supremacy, bureaucratic government and mainstream

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<sup>5</sup> Dei, George Sefa and Kempf, Arlo. (2006) “Katrina, Cronulla Beach and France on Fire: An Anti-Colonial Critique of Empire in 2006”. *Journal of Contemporary Issues in Education*. 1(2), pp. 12.

<sup>6</sup> Ibid, pp. 13.

<sup>7</sup> Ibid, pp. 17.

<sup>8</sup> Ibid, pp. 17.

<sup>9</sup> hooks 1994, pp. 178-189.

media.<sup>10</sup> Part of “education as the practice of freedom”<sup>11</sup> entails rethinking ways of knowing, a deconstruction of old epistemologies and critiquing ‘common sense’ ideas, which are productive as a way of ingrain the ideas and beliefs of the dominant culture that “necessarily promotes addiction to lying and denial.”<sup>12</sup> Education as the practice of freedom “denies that we are abstract, isolated, independent, and unattached to the world; it also denies that the world exists as a reality apart from us.”<sup>13</sup>

Similarly, Paulo Freire (1979) is one of the pioneering authors on anti-colonial education, but without calling it that. He used the concepts of *conscientização* and praxis in his literacy education practices, and which, are fundamental to realizing a pedagogy of the oppressed. *Conscientização* is the Portuguese term for the process of becoming conscious. It is more than simply identifying one’s situation; it has to do with becoming critical and politicized. “Politicization necessarily combines this process (the naming of experience) with critical understanding of the concrete material reality that lays the groundwork for the personal experience [and entails] understanding that groundwork and what must be done to transform it.”<sup>14</sup> The material reality, writes hooks (1989), has to do with structures of domination and how they function. Consistently linking individual experience to collective experience leads to *conscientização*. Following hooks and Freire, I argue that *conscientização* is a fundamental part of the process and a key goal of anti-colonial education. Resistance to old colonial practices and behaviours can take place

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<sup>10</sup> O’Sullivan 1999, pp. 257 and hooks 1994, pp. 39-43

<sup>11</sup> Freire, Paulo, cited in hooks, bell. (1989) *Talking Back: Thinking Feminist, Thinking Black*. Toronto: Between the Lines.

<sup>12</sup> hooks, bell. (1997) *Teaching to Transgress*, pp. 28.

<sup>13</sup> Ibid. pp. 22

<sup>14</sup> Ibid. pp. 108.

only if the people (*o povo*)<sup>15</sup> are conscious of, but also critical of, their realities. How does one become critical of her reality, of her life situation? Freire used the word praxis<sup>16</sup> to describe the spiral process of action-reflection-action that is the crux of popular education. Everyone participating in educational activities is embarking on a process of acting, reflecting, acting and reflecting and so on. The point here is to make reflection a key part of learning – as critical thinking must take place before, during and after we take action, in order for transformation to take place (on a community or wider scale). Deborah Barndt's Naming the Moment project<sup>17</sup> is an example of transformation through a collective process that involves identifying participants, naming the issues, assessing the forces (for and against the particular cause) and planning for action. And so transformation does not only take place as a result of our collective actions (ie: community transformation), but also as a result of our individual contemplation and reflection (self-transformation). Personal growth is highly valued and an essential part of popular education.

In this project, the meaning of 'environment' that I use encompasses social, political, economic, educational and natural environments. That these environments are segregated along racial lines<sup>18</sup> speaks to the importance of broadening a dialogue of environment. The definition of environmental education that I use in this paper, therefore,

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<sup>15</sup> The Brazilian Portuguese term, *o povo*, can be literally translated to mean "the people"; signifying the masses, the majority of the population. In Brazil, this term signifies the working class or the poor, which makes up the majority of the population.

<sup>16</sup> Freire borrows the term praxis from Antonio Gramsci See: Gramsci, A. (2003). In Hoare Q., Smith G. N. (Eds.), *Selections from the Prison Notebooks* (2nd ed.). New York: International Publishers.

<sup>17</sup> Barndt, Deborah. (1989) *Naming the Moment: Political Analysis for Action*. Toronto: Jesuit Centre for Social Faith and Justice.

<sup>18</sup> Razack 1998: 88-89; Goldberg 1993: 169; da Silva 2001; Perry 2004.



refers to popular environmental education – education in which the principles and pedagogy of popular education are used to discuss environment(s).

Traditional or normalized environmental education is narrowly focused on conserving the natural environment. In her thesis from the Ontario Institute for Studies in Education, University of Toronto, Cheryl K. Lousley (1998) writes that this definition is a liberal one that ignores the over-consumption of resources and over-production of waste by Western countries, thereby masking how we are all implicated in the process of creating an unsustainable and unequal world. Normalized EE addresses what individuals can do to ‘help the environment’ (that is presented as being separate from social, political, economic and global relations). The “save the earth” rhetoric of mainstream EE “mythologizes the causes of environmental crisis into a moral, rather than a political issue.”<sup>19</sup> That environmental crisis is oftentimes blamed on the immorality of residents who live in the vicinity of the crisis is not a new practice. In fact, the belief that filth, disorder and ignorance are bred in ‘poor’ and racialized communities and thus leads to environmental degradation is a belief rooted in the history of colonialism and later, eugenics.<sup>20</sup>

The term empowerment has been used in the past to describe a key goal of critical or popular education. Empowerment referred to the participants’ increased ability to feel like they hold power over – or have more control of – their lives. The modern usage of the term began in the civil rights movement, followed by the women’s movement, which sought political empowerment for its participants. But empowerment is a complicated term, as it implies that power is something that one gives to people deemed to be

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<sup>19</sup> Lousley 1998: 131-132.

<sup>20</sup> Dei 2004: 42

oppressed. These descriptions are something that we see in much of the development and popular education literature that refer to objectives such as “to empower” a certain group of people.<sup>21</sup> Rather than restate the well-known discussion about why the term empowerment is problematic, I would like to instead interrogate my approach to knowledge production with the community health workers. In undertaking an initial exercise to historicize the creation of favelas, I intended to examine power relations that have become normalized in Brazil.

As mentioned, a key part of this research requires the historicization of inequality in São Paulo. The history of favela formation (and thus of the outrageous environmental conditions in these neighbourhoods) is intrinsically linked to the historical disavowal of the labour of peoples of colour, and also to the denial that centuries of (and continued) violence against Indigenous and Afro-descendent peoples in Brazil is inextricably linked to racism – perceptions that these groups are inferior to white people due to skin tone and physical characteristics. I use the term environmental racism in my work to describe the experiences of racialized communities suffering from environmental problems that are overlooked, ignored and strategically hidden from view (through the urban planning process, and in mainstream news coverage). When the environmental problems in favelas appear in academic literature or mainstream news, residents are represented as being

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<sup>21</sup> See, for example, Chambers, Robert. (1994) “The Origins and Practice of Participatory Rural Appraisal (PRA): Analysis of Experience.” *World Development*. Vol. 22(7). From the critical pedagogy perspective, see: Ellsworth, Elizabeth. (1992). “Why Doesn’t this Feel Empowering? Working Through the Repressive Myths of Critical Pedagogy”; in *Feminism and Critical Pedagogy*, Luke, Carmen and Gore, Jennifer. New York: Routledge; and Lather, Patti. (1989) “Post-Critical Pedagogies: A Feminist Reading,” in *Feminisms & Critical Pedagogy* (Luke, Carmen and Jennifer Gore, eds.). New York: Routledge, pp. 120-137.

naturally dirty and backward and thus incapable of cleaning up the mess that is framed as their creation.

As a constant learner, observer and participant in discussions, it was necessary for me to sift through these experiences, dissect them and think about how I am implicated in this work. I was not an innocent bystander. Self-reflexivity was a great part of this process of conducting research as an outsider – an educated, white Canadian woman. Keeping a journal was part of the popular education process of praxis, which helps one figure out how one is implicated in one's work – a crucial element to understanding the power relations that are involved in such (potentially colonial) encounters.

Power relations are historically formed; all groups are involved in such relations and “there is always resistance, power being exercised in a multi-directional fashion on both dominant and dominated groups in part through a process of ‘self-formation or autocolonization.’”<sup>22</sup> Individuals, therefore, are seen as subjects, meaning that they are ‘subjugated to’.

Individuals take up or identify with particular subject positions structured through relations of power and made available through different discourses. For Foucault, discourse comprises ‘the whole system of representation. Discourse goes much further than language. It includes all the ways in which knowledge is represented at a particular time’ (Woodward, 2002, pp. 89).<sup>23</sup>

In other words, individual subjectivity is constituted through discourse, what Heron (2005) writes, “is part of a wider network of power relations in which persons are being positioned at any given point, and these discourses may contradict one another.

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<sup>22</sup> Dreyfus & Rabinow, 1982, pp. 186, cited in Heron, Barbara. (2005) “Self-reflection in Critical Social Work.” *Reflective Practice*. Vol. 6, No. 3, August 2005, pp. 347.

<sup>23</sup> Heron, pp. 347.

Subjectivity is, thus, unavoidably multiple and contradictory.”<sup>24</sup> However, interpreting the subject as constituted does not deny human agency.<sup>25</sup>

In his work on the ethics of the self, Foucault (1997) discusses “self-writing”<sup>26</sup> as the documentation of our selves throughout our life experiences and requires that we pause to write down what has already taken place, our interpretations of events, to ask questions and to use writing as a sort of meditation. The purpose is the shaping of the self. In Chapter Four, I look at the ways in which my experience with popular education in São Paulo – and writing about it – has shaped my subjectivity. Foucault discusses how individuals from ancient Greco-Roman culture went to great extents to take *care* of themselves. The relevant point here is that taking *care* of our selves (in terms of personal growth, spiritually, mentally, as well as physically) is essential to the betterment of society as a whole. Foucault’s historical studies show that the practice of the self (or *caring* for our selves) – for which reflection is a key exercise – is a way to practice freedom. The documentation of our critical thoughts becomes a way to keep ourselves in check, to notice what is going on for us at any given moment and to make decisions to change our actions with the goal of self and social transformation.

How one is to ‘govern oneself,’ is one of Foucault’s central questions and one that is important to my work as a popular environmental educator. Barbara Heron (2005) summarizes Foucault’s idea:

The moral imperative that individuals experience is captured...in what [Foucault] called *rapport a soi*, the kind of relationship one

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<sup>24</sup> Ibid, pp. 347.

<sup>25</sup> Butler, Judith. 1995, pp. 12-13, cited in Heron, Barbara. (2005) “Self-reflection in Critical Social Work.” *Reflective Practice*. Vol. 6, No. 3, August 2005, pp. 348.

<sup>26</sup> Foucault, Michel. (1997) “Self Writing”, in *Ethics: Essential Works of Foucault 1954-1984, Vol. 1*. (Paul Rabinow – Series Ed.). New York: The New York Press, pp. 207-222.

ought to have with oneself (Barrett, 1991). In this vein, Foucault (1997) conceptualized technologies of self, the ways in which individuals effect: ‘... by their own means, or with the help of others, a certain number of operations on their own bodies and souls, thoughts, conduct, and way of being, so as to transform themselves in order to attain a certain state of happiness, purity, wisdom, perfection, or immortality (Foucault, 1997, p. 224).’ Moves to secure one’s self-perception as innocent, or to obscure one’s participation in subtle or uncomfortable aspects of power relations would comprise such technologies of self.<sup>27</sup>

My concern with the critical EE workshops I initiated has to do with the ways in which I exhibited and represented power relations and the extent to which I facilitated discussion about this. Did I adequately reflect on my actions and how can the reflection process be different if a Foucauldian analysis were to be used as a starting point? How would my construction of subjectivity be different? What would I change – in this process of self-reflexivity – for a future project?

Heron (2004) argues, “The possibility of resisting the reproduction of dominant power relations rests on an analysis of one’s subjectivity and subject positions”.<sup>28</sup> She complicates the use of the category of ‘social location’ in an effort to show that ‘subject position’ is a more specific means of referring to positions of power. To briefly summarize, Heron writes that ‘social location’ implies fixed, inert social positions as a way of acknowledging whiteness, or white privilege.<sup>29</sup> However, simply acknowledging one’s privilege is by no means a way of disrupting it. The reassertion of privilege by those in positions of dominance reasserts the marginalization of “those on the other side of the privilege coin”.<sup>30</sup> Repeating the privilege/non-privilege dichotomy, in order to

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<sup>27</sup> Heron, pp. 348.

<sup>28</sup> Heron, pp. 341

<sup>29</sup> Heron 2004, pp. 344.

<sup>30</sup> Ibid., pp. 344.

analyze it has been problematized by theorists who are concerned that, through analysis, the oppression in question is actually being repeated.<sup>31</sup> The main point is that the concept of ‘social location’ risks allowing one who names privilege to take a position of double comfort: the comfort of demonstrating critical awareness and the comfort of not needing to act to undo privilege.<sup>32</sup>

‘Subject position’, on the other hand, refers more specifically to relations of power. It not only acknowledges privilege without fixing it, but also invites us to look at the historical power relations embedded in privilege and how we are invested in such relations through our actions. This point is particularly interesting to me, as it is most challenging to self-reflect on how I am invested in the popular environmental education with the residents of the Pirajussara Watershed region. It is crucial that I ask: Do I enjoy working with marginalized youth because ‘they’ remind me of my own privilege (ie: I am not like ‘them’)? Why do I think that I am ‘helping them’? Why do I assume ‘they need help’ and for that matter, how come I authorize myself to the task? Such questions can point me in the direction of Edward Said’s (1978, 1994) concept of Orientalism, a historical analysis of Western countries that constructs the East (read Third World *Other*) as poor, uneducated and dependent on Westerners in order to position the West as wealthy, educated saviours. These concerns are further interrogated in the following section in which I begin by describing my experience with popular environmental education in São Paulo, followed by a detailed account and analysis of the particular workshops I planned and facilitated.

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<sup>31</sup> Young 1990, 2004; Cooper 2005.

<sup>32</sup> Heron 2004, pp. 344.

## **CHAPTER TWO: Case Study of Environmental Education Workshops in the Pirajussara Watershed region<sup>33</sup>**

### Part 1: An overview of my research experience in São Paulo

From January to June 2007, I participated as an exchange student and researcher with the Sister Watersheds project in São Paulo. I mainly participated in the planning and implementation of popular education activities that took place in the communities located in the Pirajussara Watershed.<sup>34</sup> This watershed was one of three that covers a university campus and on which the Sister Watersheds project focused. The communities in which I participated included health workers (*agentes de saúde*) from two different community health posts (*postos de saúde*), Mitsutami and Arrastão, in the neighbourhood of Campo Limpo; youth from the Campo Limpo public school, Vera Fusca Borba; and youth from the community organization, Zumaluma, in the favela *Inferninho* (Little Hell), Santa Tereza, municipality of Embu das Artes.

The environmental education workshops with each of these groups focused on water, more specifically the Pirajussara River and watershed system.<sup>35</sup> We gave workshops with the community health workers for two and a half hours every two weeks at the community centre CEU (Centro de Educacional Unificado) Campo Limpo. The workshops always began with an icebreaker activity, followed by one or two

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<sup>33</sup> For a map of the Pirajussara watershed, see Appendix 1.

<sup>34</sup> Other research-based activities in which I participated include attending congresses about the environment, environmental education and critical race studies; community events such as those for International Water Day, Environment Week, Earth Day; as well as meetings within Sister Watersheds that focused on topics such as gender and the environment. I also presented my research at a meeting with the Sister Watersheds staff; as well as at the 32<sup>nd</sup> Annual Caribbean Studies Association Conference in Salvador, Bahia.

<sup>35</sup> Please see workshop looms in the appendix section of this paper.

participatory activities to develop and deepen a discussion about the theme of the day.<sup>36</sup> I participated in each of the planning meetings, in which we collectively planned and discussed workshops for the following week. I was present for each of the sessions and facilitated and co-facilitated at least one activity each day. As part of my research interest, we dedicated two and a half workshops to the theme: The role of Afro-Brazilian history in favela formation. I will discuss these workshops in detail in the following pages, as well as in Chapter Four on self-reflexivity.

With all of the workshops, but most evidently with the community health workers, we had to adjust the sessions as they took place, and re-worked the long-term agenda because sometimes we spent more than one workshop discussing a particular theme. It was also clear after the first few workshops, that the women were hungry at 10 a.m., shortly after the workshops began. So, we decided as a group to allot the first 10-15 minutes for breakfast. The food would be left out during the workshops for people to help themselves. Every week, people volunteered to bring in food and drinks to share. We encouraged everyone to bring in healthy and inexpensive snacks in which we used parts of fruits and vegetables that we usually throw out. Examples included lime-ade made with whole lime, broccoli-stem pie and banana and orange cakes, using the whole fruits.

We also used food as a means of sharing experiences and learning with the youth at Vera Fusca Borba public school. In one workshop, we related the themes of healthy eating with the environment. We made smoothies and fresh fruit juices and talked about

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<sup>36</sup> The community health workers chose the themes in the first few workshops, using the activities, Wall of Tears and Tree of Dreams. These activities allowed the women to express the environmental concerns that were most important in their communities, as well as their vision for a better, more sustainable environment. After these activities, the group of educators at Sister Watersheds (including me) developed an agenda of workshops for the rest of the semester.



the health benefits of the ingredients and about composting the fruit peels afterward. In a later workshop, we revisited the topic of composting and described how to make a cardboard compost bin at home/school. The following workshops would lead up to making a compost bin for the school, though I will not participate in these, as they will take place after my field experience.

The group of youth at the Afro-centric community organization, Zumaluma, on the other hand, was made up of older youth, the majority of which were men, aged 20 to 29. I visited this group for the last two months of my field experience. I accompanied Sister Watersheds interns Bruno Calvacante and Luiz Gustavo for their weekly two-hour meetings with the youth at the community house. The meetings were informal and basically involved reading and discussing a chapter of a book about Agenda 21 – an environmental plan of action decided at the 1992 Earth Summit in Rio de Janeiro – in Embu das Artes. The group was very participatory and inquisitive and the educators could explain and clarify concepts along the way, with an air of openness, appreciation and respect for the experiences lived by the meeting participants.

While I observed and participated in the above workshops, I initiated the planning and implementation of two and a half workshops with the community health workers. These involved an attempt to take a historical-holistic approach to environmental issues in their communities. I did this through activities in which we discussed the formation of favelas in São Paulo (and Brazil in general) since the abolition of slavery in 1888. The theme was relevant to our particular group because the women had raised various concerns and questions about urbanization in São Paulo. Many of the women asked why the Pirajussara River was extremely polluted and seemingly without government support

in low-income areas (such as favelas); while it was hidden from view (canalized) in wealthy neighbourhoods. This question was extremely profound and telling. The answers are layered and complex. The neighbourhoods of Butantã and Morumbi are wealthy because the people are rich, the women replied. I wanted to talk about why, I wanted to explore the history; to explore what I knew was a deeper issue – that neither wealthy neighbourhoods nor favelas form naturally. I wanted to facilitate activities that critically explored the formation of favelas, and in turn, the historical events and hegemonic power relations that led “[certain] people [to] have no choice”.<sup>37</sup> My objective was to discuss current social-environmental struggles through a historical lens in order to better understand what is happening in the Pirajussara watershed, with the longterm goal of social-environmental transformation. Upon planning and implementing the workshops, I believed that I could facilitate a discussion about the historical power relations that led to the current struggles and resistance of Afro-descendants. The following section describes this workshop process.

## Part Two: Experimenting with popular environmental education workshops

We used the image of a tree to chart hegemonic power relations and favela formation in São Paulo. This workshop was held in collaboration with Leon Santos Padial, a friend and student of public policy at the University of São Paulo; as well as with my colleagues from Sister Watersheds, Débora Teixeira and Luiz Gustavo.

For the workshop, I wanted to delve into some of the women’s comments that I had recorded while taking notes during the workshops. So, I came up with an activity that

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<sup>37</sup> Comment made by a community health worker during the workshop on April 9, 2007.

incorporated the use of their comments in order to discuss the social-environmental history in Brazil after abolition.<sup>38</sup> The activity was called, Tracing the Formation of Favelas. The activity sequence went something like this: I copied out participants' comments onto pieces of construction paper that I cut out to look like bunches of leaves. On other pieces of paper, I wrote out some highlights of the results of an informal survey on perceptions of the river in the women's communities, a quote from Chief Seattle<sup>39</sup> (from a previous workshop activity), and some general comments from workshop discussions. To begin this activity, I gave participants a piece of paper with a comment, and asked them to read their comment before laying it on the ground. Once all of the pieces of paper (leaves) were on the ground, I asked: Now, what do these comments have to do with each other? I wanted to have a discussion about how social inequalities are linked to environmental inequalities and how these are historical (and that it is not natural that dispossessed and racialized Brazilians live in environmentally degraded, unsanitary and economically poor conditions). I asked the community health workers to use masking tape to link the comments to one another. One by one, the women began to suggest that the issues were related. The nine comments that I used are the following:

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<sup>38</sup> Before implementing this workshop series, I spent over three months observing the workshops led by Débora, getting to know the community health workers and their experiences, and also participating in the planning and implementation of activities. This time allowed me to get a sense of the realities of people who live in Campo Limpo; to take notes and conceptualize a workshop about the historicization of a theme that had already been raised. Urbanization and river canalization were the themes of the workshops leading up to those on the history of favelas; so the timing of my workshop series made sense.

<sup>39</sup> I am aware of the debate about the sources for the well-known speech attributed to Chief Seattle. See, for example, Kaiser, Rudolph. (1987) "Chief Seattle's Speech(es): American Origins and European Reception," in Swann, Brian and Krupat, Arnold, eds. *Recovering the Word: Essays on Native American Literature*. Berkeley: University of California Press, pp. 497-536.

1. In our research, nine out of eleven people responded that they want to see the removal of the populations that live by the river.
2. “To canalize the river serves to take the river away from our view, to hide the river” – workshop participant
3. “When there are many people, our environment becomes dirtier” – workshop participant
4. “Morumbi and Butantã are wealthy neighbourhoods; there is more green space, more frequent garbage collection and more access to information” – workshop participant
5. Women are more affected by environmental problems – my comment
6. “All things are connected” - Chief Seattle.
7. Good health conditions – theme of past workshop
8. “I don’t like to live by the river, but I don’t have the means to move” – workshop participant.
9. Exposure to environmental risks – theme of past workshop

I tried to use a variety of comments that showed aspects of the women’s process of *conscientização*. Some of these comments show that the women are very aware of the social and economic inequalities against which they struggle. There are others that are more general and could be elaborated. The comment about the research results, for example, show that there seems to be a disconnection between the women’s struggle for land rights and their fight for environmental preservation and sustainability in their communities. I was especially curious about the women’s thought-process behind this result. I thought that it was important to use these workshops to ask questions and have a discussion about what was going on for these women and also what would be their imaginations of a sustainable community. For instance, if the people living near the river were forced off the land, where would they go? How would they support themselves in

this new place? Would moving really make their situations better? How do you prevent new families from building homes at the foot of the river?

There was a lot that I was trying to discuss and connect using this activity. The first part involved making connections between the social-environmental inequalities mentioned, because when I reviewed my notes from the workshops, it became evident to me that the women were talking about hegemonic power relations without calling them that. The second part involved beginning to think about what led these inequalities to continue to take place. A key final question was an open-ended one: Now that we are more aware of how these inequalities came to be, what can we do *now*?

Returning to the first part of the activity when we made connections among the comments, eventually the women created a web of masking tape lines that linked all of the above topics and/or comments. I asked them to talk about why they thought the topics were related. Then I asked, to what are all of these topics connected? From where do they derive? I tried to avoid simplifying the processes of colonization and slavery, or saying simply that urbanization and favela formation are directly derived from these processes. To ensure that we all had a general basis about Brazilian history, we used a timeline to contextualize the key events that took place up to the present date. The women had the keywords of events on cards that they set out in the order that they thought they belonged on the timeline. Then we reviewed it to see if the order was correct. I gave an outline of the events and called on Leon to assist with historical details. For a variety of reasons that I will discuss in Chapter Four, I thought that it was best for a Brazilian who knows Afro-

Brazilian history very well to give a brief presentation about it.<sup>40</sup> In the first workshop of the series, Leon gave a short lecture about Afro-Brazilian history – from colonization, slavery and abolition, up until the Getúlio Vargas dictatorship of the 1930s-40s.

In the second workshop, we reviewed the timeline, followed by a continuation of Leon's presentation of history. He discussed the current influence of the myth of racial democracy in Brazil – the nationally disseminated story that racism does not exist because everyone is mixed-race. We invited the community health workers to think of and write down keywords that they thought were the roots of the Tree of Favela Formation (or of social-environmental inequalities), based on Leon's talk. We then assembled the "roots" at the bottom of the tree and people had a chance to talk about their ideas in the larger group. Finally, I asked the group, what was the point of discussing history? To which I responded (because no one else did) that my intention was to better understand how the current situation did not happen naturally or suddenly – but rather was a long and complicated process constituted by unequal power relations – in order to help us think about how to transform our realities now.

### Part Three: Interpreting and evaluating the workshops

There are a variety of critical observations that I make from this workshop process. I use the education theorists that influenced my planning and implementation of the workshops to discuss my analysis of what took place during this process. The main authors to which I will refer are: Paulo Freire (1979), bell hooks (1994) and dian marino (1997). Using their writings, I evaluate and interpret my process of using an educational

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<sup>40</sup> Leon's presentation took place with everyone sitting in chairs in a circle (including him). We had an open format so that people could ask questions during his presentation.

space to discuss and show the interconnections among the environment, colonialism, hegemony, racism, sexism, urbanization and segregation;<sup>41</sup> and to contextualize current power relations.

Dian marino's writing on hegemony is useful to think about how power relations are present in these workshops and in society as a whole. While during the activity I used the women's quotes from previous workshops – with the intention of beginning with the women's experiences, as Freire advocated and demonstrated – I seemed to gloss over any critical thought-process that could have taken place in response to the quotes. We discussed why the topics were related instead of pacing the discussion to allot time for individual and collective interpretation of the quotes.<sup>42</sup> These phrases that made up the interconnected branches of the tree needed to be interpreted and discussed, as they demonstrated consent<sup>43</sup> and pointed to aspects of hegemony that the women were still trying to name and understand. As we could not identify these quotes as consensual, we did not have a chance to think about the cracks in our consent, to find new ways of

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<sup>41</sup> By segregation, I mean segregation along racial lines, racial marginalization. In Goldberg's (1993) book chapter, "Polluting the body politic: Race and urban location," he argues that the key elements of the Group Areas Act of 1950 apartheid South Africa, are manifested in North America and Europe, in "the practice of reinventing ghettos (whether formally or informally) and its peripheral dislocation – and thus reproduction – of the racially marginalized" (pp.192). See also: Vargas, João H. Costa. (2005) "Apartheid brasileiro: Raça e segregação residencial no Rio de Janeiro", *Revista de Antropologia*, Vol. 48(1), São Paulo: Universidade de São Paulo.

<sup>42</sup> This was partly because of time constraints, but also partly because I considered it more important to "get to the point" of talking about Afro-Brazilian history and making connections between various oppressions. I saw the quotes as problematic and worthy of explanation – and possibly as examples of internalized oppression or of consent, to use Gramsci's language. However, I did not think we had enough time to dissect the quotes and get a solid understanding of the basics of Afro-Brazilian history. This omission can be interpreted as one way that my work reflected dominant educational models.

<sup>43</sup> marino, dian. (1997) *Wild Garden: Art, Education and the Culture of Resistance*. Toronto: Between the Lines, pp. 23.

seeing, thinking and envisioning. My idea was to use the time at the end of the activity to think about the daily acts of resistance in which the women engage.

How I framed the activity as an outside facilitator demonstrated the unintentional hegemonic approach that was at times present in my style as well as in the content presented. The opposition between the women's framing of their situation and how I framed the story is also particularly interesting. I wanted to talk about Afro-Brazilian history, which was a relatively new realm of study for me, but one which was very personal and emotional for the participants. And the discussion of favela formation as a problem might have been a contentious approach. My intention was to connect the different inequalities or injustices that the women had already mentioned, but how do I do this without "othering" these women – talking about their situation and country's history as someone who hasn't even lived it in the way they have? Was this the best way to approach a discussion to historicize environmental, and thus housing, inequalities?

I must acknowledge that I was not *simply* facilitating – I was not an innocent or a neutral participant in these workshops. However, without explicitly naming my subject position, my position of privilege, I inadvertently presented myself as being innocent – rather than as a conscious participant of discourses of development. I think a first step to challenging my tendency to be oppressive is accepting that I will never be one hundred per cent anti-oppressive and also accepting that I can never be innocent or neutral. Deep down I have known this for a long time. I think that I feel discomfort when I do not know whether or how to explicitly acknowledge my inability to be innocent. As noted above there is always a reason for choosing the knowledge that we choose to produce and disseminate. And as a myriad of writers on critical pedagogy remind us: there is no



position of innocence on which to stand in any of our actions, especially when facilitating classes.<sup>44</sup> As Sherene Razack (1998) writes, “No one is off the hook since we can all claim to stand as oppressor and oppressed in relation to someone else.”<sup>45</sup> The question is, “How can I disrupt such relations?”

Starhawk (1987) writes of some excellent questions to ask our selves when self-reflecting. Her questions on compliance, manipulation, rebellion and withdrawal are sources I will revisit over and over again throughout my practice. Through these four actions, she encourages us to begin a dialogue with ourselves, to get to know how it is that we give in to systems of domination and oppression.

As popular educators have written time and time again; and essential to an anti-oppressive approach is naming ourselves. That is, it is a good idea for the facilitator to talk about how she is implicated in, for instance, transnational relations whereby “the flow of ideas, labour and capital that marks the financialization of the globe.”<sup>46</sup>

“Education as the practice of freedom” demands that the facilitator put forward an “engaged pedagogy”.<sup>47</sup> That the facilitator undertakes a process of self-actualization is critical to engaging students, to see them as whole beings. Inspired by Freire, bell hooks writes of the importance of engaging with students through *conscientização* and praxis.

She shares the following advice:

I do not expect students to take any risks that I would not take, to share in a way that I would not share. When professors bring narratives of their experiences into classroom discussions it eliminates the possibility that we

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<sup>44</sup> See Freire 2004; Razack 1998; hooks 1994; Graveline 1998; Marino 1997.

<sup>45</sup> Razack, Sherene. (1998), pp. 47.

<sup>46</sup> Razack, Sherene. (2000) “Your Place or Mine? Transnational Feminist Collaboration”, in Calliste, Agnes and Dei, George J. Sefa. (2000) *Anti-Racist Feminism: Critical Race and Gender Studies*. Halifax: Fernwood Publishing, pp. 39.

<sup>47</sup> hooks 1994, pp. 13.

can function as all-knowing, silent interrogators. It is often productive if professors take the first risk, linking confessional narratives to academic discussions...<sup>48</sup>

While trust, respect and comfort level can be established when educators share emotions and personal experiences in a class setting, it is also important for them to be open to understanding backgrounds that are unfamiliar. Maria Lugones (1990) writes that traveling to the “worlds” of others – being empathic toward and loving others– is essential to becoming better educators: “Traveling to someone’s ‘world’ is a way of identifying with them...because by traveling to their world we can understand *what is it to be them* and *what it is to be ourselves in their eyes*. Only when we have traveled to each other’s “worlds” are we fully subjects to each other.”<sup>49</sup> Getting to know fellow learners’ worlds, histories and backgrounds is a way of engaging with them and participating in a more holistic, critical representation of them and our selves – a process that is essential to knowledge production.

### **CHAPTER THREE: Knowledge Production and Historicizing the Environment in São Paulo**

My workshop series was created to discuss the historical links between colonialism, environment and segregation in São Paulo. Nevertheless, I believe it is essential to discuss the effects of history to more critically understand the environmental situation in this city. This chapter includes an exploration of the concept of whiteness<sup>50</sup> –

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<sup>48</sup> hooks 1994, pp. 21.

<sup>49</sup> Lugones 1990, pp. 401.

<sup>50</sup> Ghassan Hage (2000) argues that whiteness is not an essentialized racial category, but is a valuable capital in claiming one’s power to produce knowledge through activities such as ‘helping’ Third World populations. Whiteness is a fantasy, as “no one can be

which entails a discussion of white supremacy<sup>51</sup> – in the urban and environmental planning of the city of São Paulo. I show how nationally and historically ingrained perceptions of black bodies as degenerate and naturally unclean have worked to sustain segregation in this city where current environmental injustices are most outrageous and urgent in racialized and dispossessed communities.

Urban environmental degradation, especially water pollution, is a pressing topic in academic circles where intellectuals propose solutions for São Paulo's contaminated rivers and streams. It is also a topic of dire importance to the communities who live by the rivers – most of which are favelas comprised of economically dispossessed and racialized Brazilians. Favelas are communities built on abandoned land located in the least desirable urban areas – by train tracks, in areas that frequently flood and on steep hills. Municipal governments consider them to be illegal settlements<sup>52</sup> that are threatening to the natural environment.

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fully White...It is a field of accumulating Whiteness. It is by feeling qualified to yearn for such a position that people become identified as White" (Hage 2000: 58). The roots of whiteness come from colonization and those identified as White hold, what Edward Said (1993) writes is "the power to narrate, or to block other narratives from forming and emerging [which] is very important to culture and imperialism, and constitutes one of the main connections between them" (cited in Razack 2000: 182).

<sup>51</sup> Charles Mills writes that it is a mistake to believe that because *formal* white supremacy (such as colonialism and African slavery) or *de facto* white supremacy (juridical segregation) no longer exist, that white supremacy is long past (Mills 1998: 102). As the system changes, different racial organizations of labour, dominant cultural representations, and evolving legal standings arise (Mills 1998: 101). Recent history shows how white supremacy is still the system that guides hegemonic relations locally, nationally and globally. That abolition in the Americas took place just over a century ago and that segregation (the U.S. and South Africa, for example) is a "postwar phenomena, would ensure that it would continue to affect the new world for a long time to come simply through institutional momentum and unconscious attitudinal lag" (Mills 1998: 102).

<sup>52</sup> Torres, Haroldo da Gama, et al. (2003) "Pobreza e espaço: padrões de segregação em São Paulo." *Estudos Avançados*. São Paulo: Vol. 17: 47, pp. 1.

São Paulo has become known as the city of dual-development. The central areas boom with luxurious high-rises, Rodeo-Drive-like boutiques and manicured gardens; while improvised housing swells at the city's peripheries, where sewage flows directly into open rivers. The rivers are literally erased from view in wealthy areas and are starkly present and foul-smelling in racialized spaces; to the extent that the local government and environmental groups describe these areas as 'environmentally risky,' meaning that they are regions where trees, plants, water and animals are in danger of becoming polluted or extinct or where inhabitants are in danger of physical harm due to the contaminated environment. In mainstream print media, favelas are represented as filthy, thereby conflating the meaning of pollution with degeneracy and filth. They are also known as 'squatter' communities, as many are built on privately-owned or public land that do not meet "established planning standards."<sup>53</sup> By deeming favelas illegal, white elites ignore the historical reasons for the displacement, health problems and deaths of racialized and dispossessed Brazilians. This dominant narrative classifies residents as *preferring to live in illegal spaces and as belonging in these spaces*.

Although the favelas suffer a lack of infrastructure and many are located on the edges of urban rivers or streams, the residents are represented and produced as being *naturally* dirty and as the origins of environmental degradation. The classification of dispossessed black communities as illegal is a function of white elites' desire to know themselves and the spaces they frequent as legitimate, clean and modern. In this chapter, I firstly discuss the history of favelas, before I review the literature and show how concepts such as terra nullius and eugenics have been used to create the favela. I will

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<sup>53</sup> Jacobi, Pedro. (2004) "The Challenges of Multistakeholder Management of the watersheds of São Paulo." *Environment and Urbanization*, Vol. 16: 2, pp. 199.

show the material construction of these communities using my own research before I conclude.

Following Edward Said's (1993) urge for us to historicize inequalities, I want to talk about the history of favela formation. Favelas did not form naturally - their formation is directly linked to the accumulation of white plantation owners' wealth produced through African slave labour in Brazil for almost 400 years. Early forms of favelas took shape immediately after abolition where plantations of sugarcane (and later coffee) were of high concentration – in what are today the cities of Rio de Janeiro, São Paulo and Recife – when freed slaves became systematically and institutionally excluded from settling in white spaces.

There was no formal segregation in Brazil as there was in South Africa and the United States; nevertheless the law was fundamental to ensuring that blacks had little to no access to land. The Law of Lands was created in 1850, after direct colonization and 38 years before abolition. It stated that land could only be obtained through purchase. It facilitated the reifying of racialized space because it was nearly impossible for blacks to buy land – as the disavowal of black labour meant that work relations did not change. Lourdes Carril (2006) explains that in 1866, São Paulo passed legislation (called the Code of Municipal Bearings) that established an ambiguous space for the urban poor - small houses to share with many families – all constructed in rows in the periphery of downtown.<sup>54</sup> Downtown São Paulo began to form contrasting cities: white elitist neighbourhoods – that were regulated and that received government investment for infrastructure; and the shadow city in which lived racialized and economically

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<sup>54</sup> Carril, Lourdes. (2006) *Quilombo, Favela e Periferia*. São Paulo: AnnaBlume, pp. 78.

dispossessed Brazilians, without infrastructure, and located in the peripheries.

In the 1940s and 1950s, as downtown São Paulo expanded, the urban poor were forced off land in the name of capitalist expansion. In turn, these groups migrated to the peripheries further from downtown. At this time, the main form of housing for the urban poor were *cortiços* - large shacks in which many families lived with shared bathrooms and kitchens without infrastructure for water or sewage treatment.<sup>55</sup> These housing conditions were the beginnings of the favelas that exist today.

Although the municipality of São Paulo, as other Brazilian municipal governments, may invest money in a few favela communities for urbanization projects,<sup>56</sup> more than 1.3 million people (13 per cent of the population) in 1994, did not have access to the canalized sewage system, according to the Brazilian Institute for Geography and Statistics (IBGE). In the richest city in the country, the inequalities are reflected in access to basic sanitation.<sup>57</sup> With a population of about 18 million people, it is estimated that there are 2,100 favelas downtown and in greater São Paulo.<sup>58</sup> Many of these communities are built on watersheds – the geographic area drained by rivers and creeks. All of the creeks and small rivers in greater São Paulo spill into the Tietê and Pinheiros Rivers that run through the city; the Tietê being one of the most polluted urban rivers in the world

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<sup>55</sup> Torres, et al. 8.

<sup>56</sup> See, for example, Municipality of São Paulo. “Secretary for Housing Programs improve 67, 105 families of favelas and irregular settlements.” March 21, 2006. Retrieved on Dec. 1, 2006.

<http://www6.prefeitura.sp.gov.br/noticias/sec/habitacao/2006/03/0006>

<sup>57</sup> “Mais de 1,3 milhão de pessoas não têm saneamento na Capital”. Viviana Raymundi. Diário de São Paulo, 23 março 2004.

<sup>58</sup> Marques, Eduardo. (2003) “Favelas no Município de São Paulo: estimativas de população para os anos 1991, 1996, 2000.”

[http://www.centrodametropole.org.br/pdf/anpur2003\\_RBEUR.pdf](http://www.centrodametropole.org.br/pdf/anpur2003_RBEUR.pdf)

due to insufficient wastewater treatment.<sup>59</sup> Why is it that the rivers in the neighbourhoods of dispossessed Brazilians resemble, as one resident calls it, an open sewer? As part of the objective of this project, I attempt to make connections between the historical inequalities – manifested in various forms – suffered by racialized and dispossessed Brazilians. I concentrate on what I refer to as environmental racism, which refers to the environmental injustices taking place in racialized communities. The most obvious example that I discuss in this paper is the state of the Pirajussara River in favelas. Though the municipal governments of São Paulo and Embu das Artes, as well as São Paulo mainstream media, give a variety of reasons for the pollution (and toxicity) of water in these communities, I argue that something deeper is going on in order for the injustice to continue. I look at how hegemony contributes to the sustenance of environmental racism, but I also interrogate how hegemonic power relations rely on colonialism, white supremacy, patriarchy and imaginations of an ideal place – in this case, (middle-upper class, white) Brazil – that ultimately, and necessarily, excludes dispossessed black Brazilians.

Brazilian scholar Denise Ferreira da Silva (2001) discusses the meaning of blackness in modern Brazil, noting that hegemonic race subjection “has been informed by the notion of miscegenation, whose primary effect has been to construct black and *mestiço* Brazilians as pathological social subjects, and their bodies and the urban spaces they inhabit as signifiers of illegality.”<sup>60</sup> Racism is central to the formation of favelas

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<sup>59</sup> Johnsson, Rosa Maria Formiga and Kemper, Karin Erika. (2005) “Institutional and Policy Analysis of River Basin Management – The Alto-Tietê River Basin, São Paulo, Brazil.” World Bank Policy Research Working Paper.

<sup>60</sup> Silva, pp. 423, emphasis in original.

because perceptions of favelas are informed by the principles of those acting on them - white elites who benefit from race-based exclusion.<sup>61</sup>

David Goldberg (1993) asserts that slums in South Africa and the United States have been juridically, materially and symbolically constructed in terms of racialized discourse. Sanitation was the official reaction to the plague which spread among the urban poor at the turn of the century in South Africa; though it became - “a general social metaphor for the pollution by blacks of urban space...The idea of sanitation and public health was invoked at first to remove blacks to separate locations at the city limits and then as the principle for sustaining permanent segregation.”<sup>62</sup> At the turn of the 20<sup>th</sup> century in Brazil, the fear of tuberculosis swept across the nation. Blacks were expelled to city peripheries, as the medical literature told a story of disease and lack of hygiene among dispossessed black communities – that indeed, the environment in which blacks lived was more susceptible to tuberculosis. In 1918, Brazilian eugenicist Belisário Penna argued that immorality was the reason for the prevalence of disease among Afro-descendants.<sup>63</sup> Similar principles were sustained into the 1940s, when the director of the Tuberculosis Sanatorium in Belo Horizonte wrote that black Brazilians have not managed to acquire the same immunity to tuberculosis, as did whites.<sup>64</sup> The reaction of the medical community at this time was to keep black bodies away from white space. And so racialized communities in cities such as São Paulo began to be bulldozed and displaced to

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<sup>61</sup> Silva, pp. 424.

<sup>62</sup> Goldberg, David. (1993) “Polluting the body politic: Race and urban location,” in *Racist Culture*. Cambridge, UK: Blackwell, pp. 73-74, emphasis in original.

<sup>63</sup> Sheppard, Dalila de Sousa. “A literatura médica brasileira sobre a peste branca: 1870-1940”. *História, Ciências, Saúde*. Vol. VIII (1), pp. 179.

<sup>64</sup> *Ibid.* pp. 182.



the peripheries, in the name of sanitation and public health. Discourses of cleanliness, sanitation and public health imply and require the removal of black bodies.

In the official story of European colonization, white settlers claimed to be legally entitled to the land.<sup>65</sup> The concept of *terra nullius* is relevant here and refers to the perception that land desired by developers is empty, uninhabited, or occupied by uncivilized Others (who cannot develop it) or who are “simply in the way.”<sup>66</sup> The land is treated as if it were empty - the people who live there are merely part of the landscape, part of the pollution and contamination that needs to be cleared and gentrified. The narrative casts white settlers as principal developers of the land, and thus they became “the original inhabitants and the group most entitled to the fruits of citizenship. A quintessential feature of white settler mythologies is, therefore, the disavowal of conquest, genocide, slavery, and the exploitation of the labour of peoples of colour.”<sup>67</sup>

The colonization narrative is replayed today as white elites take over occupied urban space. They deny that they are replicating colonial relations. The denial permits inequalities to thrive, responsibility to be sidestepped and contrapuntal learning to be nearly impossible. Contrapuntal learning or reading refers to understanding and acknowledging that particular events result from other specific historical events; for instance, “that a colonial sugar plantation is seen as important to the process of maintaining a particular style of life in England...the point is that contrapuntal reading must take account of both processes, that of imperialism and that of resistance to it, which can be done by extending our reading of the texts [or class discussions] to include

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<sup>65</sup> Razack, Sherene. (2001) *Race, Space and the Law: Unmapping a White Settler Society*. Toronto: Between the Lines, pp. 3.

<sup>66</sup> Ibid, pp. 3.

<sup>67</sup> Ibid, pp. 2.

what was once forcibly excluded.”<sup>68</sup> In her article about the razing and forgetting of Africville, in Nova Scotia, Canada, Jennifer Nelson (2001) argues that hegemonic narratives are “foundational to the construction of knowledge of black communities...They function to form a knowledge base which comes to be seen, in the dominant white community, as one of objective fact gleaned from impartial research and observation”<sup>69</sup>

Nelson (2001) reminds us that whiteness is inherent to the practice of spatial marginalization. Silva (2001) argues that the white body, and the spaces associated with whiteness have historically been constructed to signify the origins of universal justice, against which “blackness, and the place of residence of black people, has been produced as *natural* (pre-conceptual and pre-historical) signs of social pathology.”<sup>70</sup>

One way of producing hegemonic knowledge about racialized individuals and spaces is to homogenize them. They are presented, as Goldberg (1993) notes, as “a generic image without identity: the place of crime, of social disorder, dirt, disease; of teenage pregnancy, prostitution, pimps, and drug dependency; the worthless and shiftless...”<sup>71</sup> Similarly, an article in a São Paulo daily newspaper reads:

In a city in which large spaces are rare, people install themselves along expressways, on land with juridical problems, in areas of risk and on public land. Quality of life is of little concern. The availability of land and its proximity to main streets that facilitate access to work determine the favela resident’s choice [to live in these areas]...few are concerned about

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<sup>68</sup> Said, Edward. (1993) *Culture and Imperialism*. New York: Vintage, pp. 66-67.

<sup>69</sup> Nelson, Jennifer Jill. (2001) *The Operation of Whiteness and Forgetting in Africville: A Geography of Racism*. Unpublished PhD dissertation. Toronto: University of Toronto, pp. 70.

<sup>70</sup> Silva, pp. 426, emphasis in original.

<sup>71</sup> Goldberg, pp. 80

noise and pollution...the state tends to ignore the basic necessities of favela populations, because they occupy clandestine areas.<sup>72</sup>

In 2004, another article claimed that the areas that suffer from a lack of sanitation are also the most violent, while the inverse can be seen in the most sanitized spaces (here the article lists the names of middle-upper class white neighbourhoods). The conclusion was that “the lack of basic sanitation is directly linked to poor quality of life.”<sup>73</sup> In her discussion about white middle-class perceptions of favelas as spaces of violence, Silva (2001) writes that police terror in these communities is hidden by a perverse logic that assumes that since favelas are produced as being outside the terrain of legality, “residents are also placed there and therefore rightful victims of police terror...its raced character is made perverse and elusive because the poor is a category that combines the effects of class and race subjection, thereby hiding both.”<sup>74</sup> Carril (2006) argues that the historical violence against Afro-Brazilians derives from a society that practiced eugenics<sup>75</sup> as

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<sup>72</sup> Cingapura exclui barracos às margens de vias.” Alecsandra Zapparoli. 22 março 1998, O Estado de São Paulo.

<sup>73</sup> “Bairros carentes são mais violentos”. Jaqueline Falcão, Diário de São Paulo, 23 março 2004

<sup>74</sup> Silva 2001, pp.

<sup>75</sup> The term *eugenics* is attributed to Francis Galton (1822-1911) and can be defined as: the study of people through social control that can better or weaken the ‘racial’ qualities of future generations - physically or mentally. In 1865, Galton published the book, *Heredity, Talent and Genius*, defending the idea that intelligence is predominantly hereditary and not the fruit of environmental action. In 1908, in London, the Eugenics Society was founded, the first organization to defend eugenics as an organized and ostensive form. Similar societies proliferated in various European and American countries. The Paulista Eugenics Society, the first of Brazil, was founded in 1918. Taken from: Costa, T, et al. “Naturalização e medicalização do corpo feminino: o controle social por meio da reprodução”. *Interface: Comunicação, Saúde, Educação*, v. 10, no. 20, pp. 367.

political-philosophical principles, so it is this “oppression and discrimination against Afro-descendants that has been practiced as if it were a natural, commonsense process.”<sup>76</sup>

What does eugenics have to do with the formation of favelas? The European Eugenics Movement, by which Brazilian scientists and politicians were influenced, gained momentum at the turn of the 20<sup>th</sup> Century, with hegemonic support of the classification of people of colour as genetically, intellectually and morally inferior to white people. As in Europe, the aim of the eugenics movement in Brazil in the first half of the century was to prevent the degeneration of the white ‘race’. Brazilian anthropologist Raimundo Nina Rodrigues argued that ‘nonwhite’ Brazilians should not even be held to the same legal standards in criminal proceedings due to blacks’ and *mestiços*’ ‘mental inferiority’.<sup>77</sup> Blacks were considered to dilute or weaken the Brazilian genetic pool and the fear of miscegenation furthered the impetus for segregation. Mapping space perceived to be degenerate was one way to classify the hygienic from the unhygienic, or rather white from racialized individuals.

In her article, “Re-Mapping Subjectivity: Cartographic Vision and the Limits of Politics”, Kathleen Kirby (1998) discusses how power is not only categorized spatially, but it can be deciphered by looking at who divides and claims space; or rather who maps territory. She looks at the figure of the Cartesian (or Mapping) Subject, who she describes as the colonial who maps territory and decides what takes place in territories, as though he were entitled to the land, as though people did not inhabit the terrain before he arrived.

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<sup>76</sup> Carril, Lourdes. (2006) *Quilombo, Favela e Periferia*. São Paulo: AnnaBlume, pp. 16.

<sup>77</sup> See Dávila, Jerry. (2003) *Diploma of Whiteness: Race and Social Policy in Brazil, 1917-1945*. Durham and London: Duke University Press, pp. 28; and Silva, Denise Ferreira da. (2001) “Towards a Critique of the Socio-logos of Justice: The Analytics of Raciality and the Production of Universality,” in *Social Identities*. Vol. 7: 3, pp. 438.

He has been “held responsible for the atrocities of imperialism, the subjugation of women and the psychological illnesses of Western individuals...the Enlightenment individual founded itself at the expense of others, especially Third World populations and women.”<sup>78</sup> The formation of the Cartesian Subject is inextricably tied to space, as without boundaries, individuals cannot know what is around them, *who is where* and therefore cannot dominate. Kirby’s Cartesian Subject resembles the ‘modern’ Brazilian subject. The making of favelas is dependent on national mythologies about the Brazilian Subject (the modern individual/‘ideal’ Brazilian). The ideal Brazilian is white, male, middle-class, and a physically strong and hard worker who takes pride in national activities such as football, samba and carnival – he is overshadowed by the racial Other who is rendered transparent - and therefore unseeable, ignorable and forgettable. The Brazilian national subject was/is produced as the antithesis to favela residents who must be distinguishable so as to be avoided and controlled – much the same as the Cartesian Subject used mapping to emplace Other bodies.

Environments are not only classified by an ecosystem approach that looks at terrain, vegetation or water quality. Environments are also distinguished by who inhabits them. What constitutes legitimate space in Brazil has to do with perceptions of what constitutes legitimate human beings and by extension ‘illegitimate’ human beings. Medical discourse in the second half of the 19<sup>th</sup> century painted cities as dangerous spaces of sickness and vices<sup>79</sup> - these discourses influenced imaginations of Brazilian

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<sup>78</sup> Kirby, Kathleen. (1998) “Re-Mapping Subjectivity: Cartographic Vision and the Limits of Politics,” in *Body Space*, London: Routledge, pp. 25.

<sup>79</sup> Lima, Nísia Trindade, Hochman, Gilberto. *Condenado pela raça, absolvido pela medicina: O Brasil descoberto pelo movimento sanitário da Primeira República*. In: Maio, Marcos Chor, Santos, Ricardo Ventura (Orgs.). *Raça, ciência e sociedade*. Rio de

national identity that was of concern to elites at the turn of the century. During the Getúlio Vargas regime of the 1930s-40s, the ideal national subject was finally articulated through propaganda campaigns. The denial and erasure of Afro-Brazilian history was crucial to elites' construction of Brazil as a modern and wealthy economic player in world trade, as well as in culture and art. A modern Brazil could not exist if most of its population were black, since blackness is associated with primitiveness and degeneracy. And so white elites in power invented national whitening campaigns (a process called *branqueamento*) in which Brazilians were encouraged to procreate with partners of lighter skin tones than themselves.

Eugenics became the founding rationale for the informal segregation of racialized Brazilians. Their subaltern conditions were considered to be “an effect of their *race difference*...” Blackness, while located within the boundaries of universality, would consistently signify that which belongs to its outside.<sup>80</sup> *Civilized man* was the point of departure against which to compare black bodies. As white elites were deeply concerned with the significance of the white body as clean, moral and modern, they took great care in ensuring that white spaces reflected how they perceived their bodies. Nancy Stepan (1991) writes that after the Second World War, “the variant of eugenics identified with public hygiene and compatible with racial mixing and the myth of racial democracy gained support; extreme reproductive eugenics, or Nazi-style race hygiene, did not.”<sup>81</sup> As I have attempted to show, it was the discourse of public hygiene and separating bodies

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Janeiro: Fiocruz, Centro Cultural Banco do Brasil, 1996. 252p.

<sup>80</sup> Ibid, pp. 426.

<sup>81</sup> Stepan, Nancy. (1991) “National Identities and Racial Formations,” in *The Hour of Eugenics: Race, Gender and Nation in Latin America*. Ithaca and London: Cornell University Press, pp. 168.

deemed to be susceptible to disease that influenced urban segregation in São Paulo. White elites' ideas of an ideal national subject underpinned the process of coming to know certain Brazilians as being important – and thus as *belonging* in spaces associated with whiteness.

Since whitening the Brazilian population did not work as planned (or as fantasized), perhaps the most advantageous way to deal with racialized bodies was to keep them away from 'civilized' space. The physical borders of favelas in São Paulo act as barriers – they include steep stairways, bridges, rivers and streams, expressways and the ends of long avenues. Sherene Razack (2002) writes that, “The subject who maps his space and thereby knows and controls it is also the imperial man claiming the territories of others for his own; the inventor of *terra nullius*. The Cartesian or the mapping subject achieves his sense of self through keeping at bay and in place any who would threaten his sense of mastery.”<sup>82</sup>

The official solution to the “problem” of favelas include bulldozing them and dis/re-locating inhabitants to different parts of the city, often far away from work and affordable amenities. I want to suggest that the construction of blackness (and the place of residence of racialized Brazilians) as signifying the domain of social degeneracy and illegality enables environmental problems otherwise considered unjust and unacceptable to thrive.

Two key points emerge from this assertion. First, the environmental problems in favelas are not dealt with structurally (but rather only in reaction to floods, for example). The second is one that I have already asserted: that the thriving of environmental

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<sup>82</sup> Razack, pp. 12.

degradation materially and symbolically constructs the favela as a place of filth. Let's look at the numbers again. In 2004, 1.3 million São Paulo residents did not have access to the canalized sewage system.<sup>83</sup> Considering all of Brazil, almost half of the population in 2005 did not have their sewage collected, and more than 70 % did not have their wastewater treated.<sup>84</sup> What shall we make of these statistics? My point in this paper is to argue for the discussion of such outrageous and unjust environmental circumstances in environmental education settings, as it is crucial to approach environmental education in an interdisciplinary and holistic way to critically think about how participants' life experiences fit into this bigger picture and begin to think about how to change it. This was what I was trying to do in the workshops I led about favela formation and Afro-Brazilian history. The process of urbanization and favela formation are not sudden and unplanned processes, as they are discussed in mainstream media. The role of popular environmental education, in this sense, is to question and deconstruct 'common sense' imaginations of dispossessed peoples (and their relations to the environment) symbolically produced by various media forms and materially produced through government policies (or lack thereof).

I do not mean or want to talk about popular education as salvation in comparison with dominant forms of education. It must be problematized as well – there will always be unequal power relations in the world and the educational setting is a space in which this can manifest. However, the popular education 'classroom' was created out of the need for a space to question and critically examine such power relations and (hidden)

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<sup>83</sup> "Mais de 1,3 milhão de pessoas não têm saneamento na Capital". Viviana Raymundi. *Diário de São Paulo*, 23 março 2004

<sup>84</sup> "Metade dos Brasileiros não tem esgoto coletado". *Folha de São Paulo*. Fernando Canzian. 6 março 2005.



agendas through praxis. In the following section, I examine my work as a popular educator and participatory researcher with the Sister Watersheds project in São Paulo. I look at subjectivity and how I am implicated in my own work, through a process of self-reflexivity.

#### **CHAPTER FOUR: Analyzing my Self in the EE process in Campo Limpo**

Examining subjectivity has a lot to do with representation. How did I represent myself? How did I represent/frame the questions/problems I wanted to examine in the workshops? In what ways am I implicated in my work? What did I choose to talk about, what am I omitting and why? *Conscientização* is essential to the process of self-reflexivity. They are both continuous processes that rely on one another. Self-reflexivity is part of the process of *conscientização* and thus of praxis. For this examination, Foucault's discussion on the care of the self is relevant.

The care of the self, how Foucault talks about it, encompasses various parts. One aspect involves knowing oneself<sup>85</sup> – digging and sifting through one's thoughts, emotions and history, exploring all parts of one's self. Another aspect involves taking care of the soul. I interpret this as attending to one's spirit. Meditation, journaling, ritual and prayer can be practices of taking care of the self/soul/spirit.<sup>86</sup> I think of it as focusing on being better people – however we understand that – in order to *be* better people and cultivate a

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<sup>85</sup> Foucault, Michel. (1997) *Ethics: Subjectivity and Truth*. "The Hermeneutic of the Subject," pp. 94.

<sup>86</sup> It is unclear whether Foucault would use the words self, spirit and soul interchangeably, though I argue that they are interconnected – caring for one means attending to all. On page 95 he writes: "We may say that in all of ancient philosophy, the care of the self was considered both a duty and a technique, a basic obligation and a set of carefully worked-out procedures." In this sense, we can include reading, writing, critical discussion, physical exercise and gardening as practices of caring for the self.

better world. The philosophy and practice of care of the self is inextricably linked to popular education. The critical thinking and discussion, the “unlearning” of oppressive thoughts and actions, the “self-cultivation” through self-reflexivity and the collective work – the partnerships and unions – created and developed through common goals of self and community emancipation are all part of *caring* for the self. That individuals are important to a possible better world is not forgotten, but social change has always relied on the union of individuals – the collective force of *o povo*. Teachers, leaders, facilitators and guides have been important to this process, to learn with and support the oppressed, rather than empower or emancipate them, as no one can *do* these actions *to* others.<sup>87</sup>

And so in my experience with developing and executing workshops with community leaders in low-income communities in São Paulo, I did not hope to empower them, but to initiate a discussion about the impact of history on daily life. This was of course a daily life and a history that I have not lived though I have ‘studied’ them to a degree, I do not have the life experience. But I still believed that I would be useful to an educational process that could lead to social transformation, whether small or large-scale. This was the intention with which I entered the exchange experience with the Sister Watersheds team in São Paulo.

I believed that I could be useful in the sense that my training, experience and passion for popular education would be assets to working with this group of women. I had already done extensive analysis and self-critique about another teaching experience I

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<sup>87</sup> I want to acknowledge that a challenge to writing this paper is my word choice and the way that I talk about workshop participants. In an effort to avoid “othering” individuals or groups, I realize that this is complicated and therefore not completely possible, partly due to language, but also due to historical and cultural discourses in which I am implicated. See Said, Edward. (1978) *Orientalism*. New York: Vintage, Introduction and Chapter 1.

had in Brazil in 2005, therefore I thought that I would approach this opportunity with critical eyes and avoid acting like a colonial figure that replicates colonial relations. But the situation goes deeper than merely avoiding “acting colonial”, or in other words, acting in an oppressive way sometimes without realizing it.

Capitalism requires a society that relies on an underclass, a population that is excluded economically, socially and racially from the dominant (white, middle-class) group. As someone who has grown up in a middle-class family with white privilege, and somewhere down the line of my Roman Catholic upbringing, I have learned that part of my responsibility, as a human being, is to help people I deem to be “in need”. My presence in Brazil had a historical significance that was deeply obscured and more complicated than my individual behaviour as an educated, white Canadian woman. What comes to mind are the many questions around what Razack (2000) calls “politics of saving” whereby white Western women feel that they must save their sisters of colour in the South from the savage and barbaric tendencies of *their* countries and *their* men.<sup>88</sup>

Just as white women in the nineteenth century facilitated imperialism through the assumption of the role of saviour of less fortunate women, so too white women in the twentieth century, in the academy and in the female professions [social work and teaching], can also gain a ‘toehold on respectability’, that is the politics of a public role, through the same hierarchical relations and the politics of saving.

We must struggle to avoid saving and being saved, writes Razack (2000), but we must also think more strategically “about what it means in practice to disrupt the hierarchies in which we are caught.”<sup>89</sup>

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<sup>88</sup> Razack 2000, pp. 45.

<sup>89</sup> Ibid, pp. 47.

Part of the wider picture of what informed my presence in Brazil is the discourse of development, that requires that projects of Northern countries be self-described using an “us-them” language that – “we” go down to “their country” to help and develop “them”. This is often coded in words such as “partnerships” and “exchanges”, which is not necessarily untrue, as I would most certainly call my experience with Sister Watersheds an exchange of information and experience. However, my experience must be interrogated for what I imagined myself to be undertaking, rather than simply taking my experience as individual truth.

Joan Scott (1992) argues that a major problem with talking about one’s “experience” is that it is oftentimes taken as uncontestable, individual truth, without recognizing that experience comes from histories of difference.<sup>90</sup> She writes that it is problematic to uncritically take one’s account of what she or he has lived without referring to and examining different histories.

Making visible the experience of a different group exposes the existence of repressive mechanisms, but not their inner workings or logics; we know that difference exists, but we don’t understand it as constituted relationally. For that we need to attend to the historical processes that, through discourse, position subjects and produce their experiences. It is not individuals who have experience, but subjects who are constituted through experience. Experience in this definition then becomes not the origin of our explanation, not the authoritative (because seen or felt) evidence that grounds what is known, but rather that which we seek to explain, that about which knowledge is produced.<sup>91</sup>

In other words, Scott calls for educators and facilitators to historicize experience, to show that indeed the experience-sharers are subjects with specific social-political histories about which dominant knowledge has been produced. Experience, therefore, is

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<sup>90</sup> Scott, Joan W. (1992) “Experience” in *Feminists Theorize the Political*, Butler, Judith and Scott, Joan W. New York: Routledge, pp.24.

<sup>91</sup> Ibid., pp. 25-26.

not something that solely comes from the inside, the emotional, the subjective. It is part of bigger historical pictures. Instead of talking about experience as something people have, Scott argues for us to “ask how conceptions of selves (of subjects and their identities) are produced.”<sup>92</sup> Without broadening a discussion of experience, categories such as black, white, man, woman, heterosexual, homosexual, become naturalized.

How could I have discussed my subject position and personal experiences through a historical lens? Although I did not directly acknowledge my own subject position in the workshops, I believe that there was an element of loving perception – as María Lugones (1990) calls it – in the way that I interacted with the women participants, but also by facilitating workshops aimed at historicizing the experience of participants. As I discussed in chapter 2, identifying with and loving fellow human beings, especially in educational settings, is a way to transform educational experiences. Lugones (1990) calls this “world” travel, of which loving perception is integral. Certainly more time could have been allotted to talking about historical details and the relevance of history in everyday experience – perhaps by adding another workshop or two – and I could have integrated a discussion of how I am implicated in the participants’ history. Although I felt that the way I treated the women facilitated the workshops demonstrated loving perception, talking about how I am (and how my country, Western countries more generally, are) implicated in the history of the Brazilian *povo* could have been a way for me to articulate my own subject position and more actively participate in the workshops.

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<sup>92</sup> Ibid., pp. 27.

## **CHAPTER FIVE: Recommendations and Future Research Questions**

The learning process with popular environmental educators in São Paulo, as part of the Sister Watersheds research project, was a profound and very memorable one, filled with moments of joy, doubt, surprise and deep reflection. I am very grateful to have had the opportunity to work with such talented and inspiring individuals. Overall, I am thoroughly impressed with the dedication of and educational approach taken by the educators in the Pirajussara watershed region. Nevertheless, I would like to offer recommendations overall for a project such as this one; for environmental education in low-income communities (led by outside educators); as well as for exchange students and researchers embarking on an experience similar to mine. My aim in this chapter is to discuss what I think could have been improved in this project overall; as well as crucial elements that were missing in the articulation of the objectives of the project, of its structure, as well as in the practice of the workshops taking place in the watershed communities. Finally, I would like to point to future research questions that would enrich my own research.

The Sister Watersheds project in the city of São Paulo had two core components – a research team of the University of São Paulo and a team of educators that facilitated workshops with the community. The first group conducted surveys, wrote articles and disseminated information at the academic level. The latter worked directly with community members in an effort to fulfill the capacity-building objective of the project. The two groups would occasionally meet to exchange information, to give updates on what each was doing, and to attend events about environmental education. However, a

more intimate connection could have resulted from a partnership that was supposed to strengthen the relationship between the university and surrounding community.

There was one workshop with the community health workers in which we presented the research group's results from a survey about public perception of the Pirajussara River. We used the same questions to do a mini oral survey with the group of 11 women in order to spark a discussion around the question: To canalize or not to canalize the Pirajussara? This was a relevant point of departure that led to a fruitful unraveling of questions and opinions about sustainability and the consequences of canalizing the river. It was a wonderful example of how to incorporate the academic work in popular environment education. Also, most of the educators are interns with Sister Watersheds and students of the University of São Paulo (USP) who are writing about their community workshop experiences for school projects. However, I still wonder whether the community members felt in any way connected to the university community. We consistently heard positive feedback from participants, though it is unclear whether the communities participating in the project felt like they were part of a university-community project apart from knowing that the facilitators were USP students. I think that there could have been more effort expended to strengthen this connection – perhaps to take field trips to use university facilities such as libraries or visit the part of the Pirajussara River that runs through the university campus.

In the same vein, members of the Sister Watersheds research group rarely visited the community meetings or workshops. The gesture confirmed the historical and elitist distance that universities have had from the community. The Sister Watersheds project was supposed to attend to and disrupt such hierarchical relations, though I do not think

this took place on the level it could have. I would have liked to see more involvement on the part of the academics of the project to know the work on a firsthand basis to be able to work together to strengthen it. It would have also facilitated a more critical, holistic and complex discussion of the environmental concerns of the community in the articles to be published about the environmental degradation in these very communities. In a field of knowledge production such as academia, I think that it is essential for writers to take time to get to know the community they are writing about and look for the complex historical power relations that have constructed the environmental, social, economic realities of that community. We cannot build sustainable environments without working to build sustainable livelihoods; and this includes a clear denunciation of violence, racism, sexism and all discrimination and oppression.

That the project had an exchange program as a core means of information exchange was an excellent learning experience for all of those involved. It is a direct way for individuals to collectively reflect on experiences in their own countries through the new knowledge and experience acquired abroad. And the foreigners visiting either Brazil or Canada most definitely add valuable ideas for activities and pedagogy on the ground in the visiting country, according to the feedback I received from colleagues in Brazil. But I also speak from my very positive experience with co-facilitating popular environmental education workshops with children in Black Creek West, summer 2006, with assistance from dedicated Brazilian exchange students. The environmental education workshops of the Sister Watersheds project – as well as the research activities of students – was highly strengthened due to this exchange component.



I was the first Canadian exchange student to fully participate in the planning and implementation of workshops with the project in São Paulo. With a great belief in the importance of self-reflexivity in educational processes, but especially as an outsider in this specific encounter, my journal writing was an essential component of my learning process, but also of this major paper. I would recommend that all future exchange students keep a record of their experiences and critical reflections, as part of their learning process and growth as a student and researcher.

In São Paulo, I did not encounter educators that regularly reflected on paper. At the weekly meetings, we sometimes talked about concerns from previous workshops, but we rarely allotted enough time to collective reflection. Individual and then collective reflection would have added a more critical dimension to our work as educators and in a future project it would be a valuable element to include in the project objectives.

As all projects are incomplete and have room for improvement, I also recognize that this major paper does not discuss all of the concerns that I have come across during my study experience. There are many more questions that would deepen this research. In the following section, would like to discuss a few elements worth further study.

A crucial element that I have not discussed in the detail and depth it deserves, is a gender analysis of the popular environmental education workshops in which I participated. This paper dedicates a great deal of space to race analysis, without however, looking at the nuanced connections between gender, class and race – and how these interlocking systems of oppression manifest in popular environmental education settings, and in the wider community or global historical setting.

Another dimension of interest is looking at the history of environmental education in Brazil specifically. When did environmental education begin? What are its roots – why did it begin and by whom? What content was covered? What were the ideologies behind the dissemination of this information? My interest here stems from Mark Harrison's (1999) book, *Climates and Constitutions*, in which he discusses how environmental education was directly linked to discourses of 'moral betterment' and hygiene in colonial India. In hopes of improving the Indian 'stock', British colonials taught their ideas of morality, hygiene and disease prevention, while in the same breath talking about how to preserve the natural environment. I am very curious to know whether such practices took place in Brazil and if so, to trace their history and critically examine what this means for environmental education in Brazil today and in the future.

An ecological perspective would have also added a complimentary aspect to this paper. More of an in-depth examination of the ecology of the Pirajussara watershed and a geographical explanation of the state of the watershed and river in the various neighbourhoods through which it flows would be a necessary element to further study of environmental education in this watershed region.

Many more questions must be asked about popular environmental education taking place in favelas, in relation to the material and symbolic production of the favela in mainstream media and academic literature. On the question of resistance from within favelas, I want to point to a group of youth hip-hop artists/environmentalists – called *Diagnóstico*, part of the community organization Zumaluma in Embu das Artes. The youth write and perform songs about the environment in their neighbourhoods in relation to the struggles of Afro-Brazilians. They also hold weekly meetings to plan the

transformation of their communities to create sustainable living spaces. Their plans include diagnosing the environment, cleaning up the river, garbage removal, installing garbage/recycling bins, and selling the recycled material to support children's groups; as well as building a stage for performances by local hip-hop collectives. Zumaluma's space includes a computer lab and a library with books on struggles from within the African Diaspora as well as environmental movements. Most certainly there are other examples of groups disrupting dominant narratives of favelas. They are the living examples of ongoing resistance of Afro-Brazilians who (re)produce knowledge about urban space, community, history and citizenship.

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## APPENDIX 1 – The geographic location of the Pirajussara watershed

### Localização da bacia hidrográfica do Ribeirão Pirajussara

