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# A Green Peace

How Implementing a Peace Ecology Paradigm in Post-Conflict Situations  
can create an Atmosphere where Positive Peace may Blossom

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*Unless someone like you cares a whole awful lot,  
nothing is going to get better. It's not.*

- Dr. Seuss, *The Lorax*



## Abstract

Positive peace has not yet been achieved worldwide. The closest version of ‘peace’ one can see is a negative sort that is full of different forms of violence. If we want to see positive peace, structural ecological violence must be addressed. This thesis takes the premise that the natural environment is the missing key to peace. I argue that taking an environmental perspective to current peace practices is a crucial step towards realizing peace.

A healthy environment has been acknowledged as being a necessary component to peace, yet it is often overlooked in the empirical side of Peace Studies. There is little empirical ‘evidence’ accepted in the peace field or international community to demonstrate the benefits of environmental peacebuilding. The environmental policy paradigm – which I argue is the current international order – is flawed in ways that prevent the complete consideration of the environment, let alone its consideration as an actor for peace. Environmental peacebuilding represents a shift in thinking about how the environment relates to the peace and conflict field because instead of relating the environment to conflict as it has traditionally been, it is now being related to peace.

Representative of this step forward, this thesis asks how the environment can be an actor for peace. In order to consider the environment as an ‘actor’ rather than a ‘concept,’ I take an ecocentric approach and work under the peace ecology paradigm. To show the application of this philosophy, I examine post-Genocide Rwanda as an instrumental case study followed by deductive thematic analysis of the data as per the main principles of peace ecology (interconnectedness, bioregionalism, place, and sustainability). This research brings to light the agency of the environment in current peace practices as well as calls for further respect of the environment as an actor for peace.

**KEY WORDS:** Ecocentrism, Environmental peacebuilding, Peace ecology, Positive peace, Rwanda

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## Abbreviations

ANT	Actor-Network Theory
CAGM	Campaign Against Genocide Memorial
CAPR	Collectif des artisans de paix et la réconciliation
COPORWA	Communauté des potiers du Rwanda
CPL	Children's Peace Library
EPP	Environmental Policy Paradigm
FONERWA	Rwanda Green Fund
GER	Global Initiative for Environment and Reconciliation
HDI	Health Development Index
IRDP	Institute of Research and Dialogue for Peace
KGM	Kigali Genocide Memorial
NGO	Non-Governmental Organization
RDRC	Rwanda Demobilization and Reintegration Commission
REMA	Rwanda Environment Management Authority
RPF	Rwandan Patriotic Front
SDG	Sustainable Development Goals
ST	Shelter Them
UN	United Nations
UNEP	United Nations Environment Programme

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## Introduction Chapter



*Figure 1: The Hiroshima Peace Park*

Everyone has a different imagination of what peace looks like in their minds. For me, peace is very well represented by the Hiroshima Peace Park. It is a beautiful place imbued with meaning because it has seen horrific violence and still recovered itself. Now it is a powerful reminder for everyone who experiences this park that if we are to have peace, we need to learn from the past and allow the future to thrive by living in ecological balance. It represents the interconnection between humans and the environment as well as our common wish for peace.

Humans share an indispensable and symbiotic relationship with the environment, although human-made climate change – through land degradation, biodiversity loss, and pollution to our air, land, and water – is creating a climatic and environmental crisis (UNEP, 2019). Environmental degradation is responsible for a quarter of all human deaths worldwide every year (Neira, et al., 2016). Peace actors critically examine the world order and its power structures with the goal of promoting peace through addressing violent conflict (Brauchler, 2018). Growing global concerns about rising ecological violence has given cause for peace scholars to seriously [re]consider the role the environment plays, and could potentially play, in peace processes and conflict transformation (Kyrou, 2007). According to Galtung (1969), positive peace equals social justice, which means there is an absence of all forms of violence. Positive peace needs ecological balance. Work in the intersection of peace and environment, such as this project, can bring this fact to the forefront of peace studies. Positive peace has not been achieved worldwide, the closest version of ‘peace’ that can be seen is a negative sort that is full of different forms of violence. If violence is, as Galtung explains it,

avoidable threats to basic needs, and one of the five basic needs is ecological balance, then it is fair to say that the environment needs to be considered in order to achieve positive peace (Kyrou, 2007).

This thesis takes the premise that the environment *is* the missing key to peace. By environment, I mean the part of the earth with which we, as human and other species, interact (Ulfsax, 2013). Drawing upon the work of Bruno Latour and his take on Lovelock and Margulis' Gaia theory (Latour & Lenton, 2018), I take an actor-centric perspective on the environment. By this, I mean I am concerned with how and where the environment exhibits agency: in terms of how it is discussed by humans; how it is endowed with power in the peace process; and how this discourse and these endowments enable it to act and be acted upon in a way that has a positive impact for the peace process in post-conflict situations. Through a case study of ongoing peace initiatives in Rwanda, my thesis examines the role of the environment in peace. Specifically, through working with actors who deal with different avenues of peace and the environment, I query whether the environment is, or else can be, considered an actor – and how. Thus, taking an environmental perspective to current peace practices is a key step towards realizing peace.

### Problem Statement

The problem in the grander scheme is that there is no real 'proof' that environmental peacebuilding can or does lead to and support peace in immediate post-conflict situations. There is little, if any, empirical 'evidence' accepted in the peace field or international community to demonstrate this. The current environmental policy paradigm<sup>1</sup> is a liberal way of thinking and doing. It focuses on individual freedoms and tolerance of all different ideas of what constitutes the best way of life. Likewise, socially constructed political borders, capitalist policies, and consumerist manners born of globalization prevent the proper consideration of the environment. Environmental issues have temporal and spatial inconsistencies and so this administrative fragmentation of the several different structures the West has created makes environmental issues almost impossible to address (Carter, 2007; Gray, 2000).

Based on the literature that is reviewed, it is clear that a healthy environment has been acknowledged as being a necessary component to peace, yet it is often overlooked in the empirical side of peace and conflict fields. Encouragingly, there are several ideas on how to overcome this impasse. The trouble lies with the application of those ideas. This research shows how we can do that.

### Research Objective and Questions

Moving on from the assertion that the environment needs to be respected for there to be peace in the world, I ask how can the environment, in its own right, bring about peace? The overarching question guiding my thesis work is as follows: *how can the environment be an actor for peace?*

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<sup>1</sup> A paradigm is "a world view that is defined by distinct elements including epistemology (how we know what we know), ontology (nature of reality), axiology (values) and methodology (the process of research)" (Buckley, 2017, p. 427). The paradigm of environment policy to which I refer is the way we consider the environment on an international scale.

Looking at the case of post-Genocide Rwanda, which has arguably become one of the more developed and environmentally aware countries in Africa, my follow up research questions situate my main research question in the case study. I ask these questions to help identify the agency of the environment in Rwanda's peace development, as I explain in my Methodology Chapter. These sub-questions include:

- a) How has the environment played a role in the overall peace initiatives in Rwanda?
- b) How have views of the environment changed over the years in relation to the stabilizing peace in Rwanda?
- c) Of the environmental peacebuilding initiatives currently in place in Rwanda, why are they happening now and what could have been different if they had been implemented earlier in the peace process?
- d) How has the environment itself changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what could its future look like?

Within the realm of the Rwandan case, I want to see if the environment is, or can potentially be, considered as an actor within the peace ecology paradigm as I describe and present it.

### Motivation

Because positive peace has not been achieved worldwide and the environment is not considered a priority in peacebuilding, it is important that more work focusing on this intersection of peace and the environment is done. Climate change and war are major social problems effecting the entire world and have been going on for generations. Despite much study on how to abolish war and protect our climate, we have not yet achieved positive results. A new approach is thus called for, such as an approach that is built on the understanding that peace and the environment are necessarily considered together. Unfortunately, they are continued to be considered in opposition despite the new methods, theories, trends, and developments unfolding in our everchanging world.

This is because there is not enough relevant theory on this topic. By that I mean that the theory we have is theoretical and hard to implement in real life. Therefore, the theories need to be put into practice, but since this cannot be done in the Western states who operate under the liberal paradigm, the theories need to be amended. As a master's student, I am not looking to develop of a new theory. Rather, I intend for the information my research provides to contribute to the development of environmental peacebuilding theory by furthering the understanding of how peace ecology can be adapted in practice.

On a more personal note, I benefit from this work because it has given me the opportunity to explore and defend one of my strongest convictions in life, that the environment is a missing piece to peace. Just as Sandra Bullock's *Miss Congeniality*<sup>2</sup> thought the one most important thing our society needs is harsher punishments for parole violators, my caveat to world peace is a healthy environment.

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<sup>2</sup> From the 2000 comedy movie, *Miss Congeniality*, directed by Donald Petrie.

As a student of peace, I know that harsher punishments for criminals is not always the best approach to peace. Rather, I believe the connection we share with the environment is the force that can unite us all. Seeing the northern lights for the first time at the beginning of my studies in Northern Norway was awe-inspiring and filled me with such joy and positivity that I have strived to maintain throughout my studies. I have been called too hopeful, too optimistic, too idealistic, and too positive for my ideas to be considered realistic, but I truly believe that focusing on the positive shows us the way – try looking at a rainbow without smiling. My privileged life has given me the good fortune to be able to take a personal interest in the health of the environment, and I intend to do what I can to give back to the world that has given me so much. If Stan had asked me, I would have answered a healthy environment...and then of course world peace!

### Scope of Research

In terms of what information is beyond the scope of my project, I want to make it clear that I am not looking at how to solve the environmental degradation happening right now and why that would lead to peace. I am not looking into how the environment leads to or is otherwise related to conflict because that has already been relatively well established. Nor is this thesis about how the environment is a victim of conflict, as the acknowledgement of human- or conflict-induced environmental degradation has not gotten us closer to sustainable peace. Instead, through this research, I intend to show how the environment must be considered as a key actor to create positive peace. There are many reasons why the environment is not currently considered in peace processes. Now I intend to focus on the possibilities of what a holistic integration with the environment can do for world peace.

### Outline of Thesis

In order to answer these research questions and address the problem outlined in this introduction about the lacking role the environment has been attributed and how that is negatively affecting our peace, I am going to use my data collected during fieldwork in Rwanda to show the benefits of peace ecology in action. I lay out some of the relevant literature relating the environment to conflict and then the environment to peace in the next chapter. This better describes the current situation in which we find ourselves – namely that the current environmental policy paradigm prevents us from achieving positive peace that we are nevertheless attempting. Afterwards, I explain my theoretical approach, which considers the environment as an actor that allows me to explain how an ecocentric epistemology is one way to consider the environment's agency when it comes to peace as outlined by the peace ecology paradigm. I outline my methodology in the following chapter, since an ecocentric approach following the peace ecology paradigm is a path less traveled. Once all of this is established, I analyze my data in the chapter where I present my findings. This data analysis is followed by a discussion on the meaning of what I have learned from the research. The thesis ends with a short conclusion to summarize my work.

## Literature Review Chapter

Peace Studies is anthropocentric; focused on addressing human problems through human structures. Without giving it much credence, the field does acknowledge a relationship between humans and the environment and thus literature can be found linking the seemingly two different fields of Peace Studies and Environmental Studies. As I have stated, my research is based on the understanding that the environment is a key actor for peace, but unfortunately there is little relevant literature that directly supports my belief. Positively contributing to this intersection is something my research aims to do. Instead, literature on the environment in our field of study is generally divisible into two main themes, namely: linking the environment to conflict and linking the environment to peace.<sup>3</sup>

While my research is focusing on the missing link between the environment and peace, my literature review begins by acknowledging the relationship between the environment and conflict because it is here we find the underlying problems that negatively frame the potential of the environment as an actor for peace in our international system and disallow its due consideration. Once this is established, I move into the literature on potential solutions, by which I mean approaches to considering the environment in peace. At the close of the chapter, I identify the limitations of the literature and explain how my research is working to further build on the information already accepted in academia to embrace alternative ideals like ecocentrism and nonhuman agency in order to answer my research question of *how the environment can be an actor for peace*.

### Environment and Conflict – the Problem

The literature presented in this section represents the problem with the mainstream way of thinking and doing in relation to the environment, something I refer to as the environmental policy paradigm (EPP). The EPP is an analogy for “the eco-centred lobby, which argues that contemporary environmental problems are explained in part by the failure of modern society to acknowledge the intrinsic value of the natural world” (O'Brien, et al., 2007, p. 217). It is one way to describe the current systems of structures that humans have constructed to organize our social world that make it impossible for us to reintegrate into the environmental mindset. I say reintegrate because before today’s Western-based international system was established, there were peoples whose lifestyles synergized with their environments (del Mar, 2012). In this section, I highlight how tenets of negative peace – which include structural and direct violence against the environment – have shaped how the world has come to organize itself. Thus, the link between the environment and conflict is inherently a negative one that cannot lead us to positive world peace.

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<sup>3</sup> Interestingly, this is a similar case with environmental literature; it does not cover the cultural significances of our connection with nature. Rather, “the field has historically divided itself between scholars who study how humans shaped the environment ... and historians who focus on particular environmental movements” (del Mar, 2012, p. 4). This is one of the gaps in the literature that my thesis addresses by doing research on this intersection, that literature in both fields is not connected enough to each other.



## Negative Peace Foundations

The international system's view of the environment comes from Christian elites who feared the power of nature as something greater than their god that they could not control and so claimed as a separate thing that was available solely for human use (del Mar, 2012, p. 7). This separation they created was later supported by Cartesian dualism and was the first of further divisionism to be constructed in society. Divisionism has negative effects on the environment because of the 'othering' process that has led the environment to be the ultimate subaltern.<sup>4</sup> 'Othering' is "a process whereby individuals and groups are treated and marked as different and inferior from the dominant social group" (Griffin, 2017). While it is commonly considered in Peace Studies in relation to identity theory, when referring to the environment 'anthropocentrism' can be an operationalization of this process. Lynn (1998) explains that:

*Anthropocentrism constitutes 'others' by creating dualistic categories of persons and things that are arrayed into rigid value hierarchies... Anthropocentrism provides criteria for classifying animals and some humans as holding lesser or no moral value, eliminating their membership in 'our' moral community, and erasing our moral obligations to those so excluded (p. 236).*

Preservationism, which is the setting aside of specific areas of land that are considered particularly beautiful or otherwise special by (usually rich Caucasian) people (del Mar, 2012), is an example of this othering process of the environment. Interestingly, modern environmentalists call for the preservation of natural spaces as a way to combat the environmental crisis we face. The act is unfortunately imbued with components of individualism and classism that tie the practice of preservation to a negative consideration of the environment as del Mar (2012) explains. First, it was the rich Western elites who began the call for preservation of certain natural areas because they loved nature as this exotic 'Other Place' to which they could escape the structural (i.e. capitalistic) violence of every life. Second, in keeping with this one-sided view of what the environment should be and the Western tradition of domination, Westerners "also tried to excise Indigenous peoples, whose long-standing presence in places...violated Caucasian expectations of wilderness" (p. 28). Third, the practice of the rich leaving cities to go into nature to heal and reconnect with themselves led to pollution and degradation of these environments.<sup>5</sup>

Early scientists, who were unlike today's ecologists but would travel with colonial expeditions for scientific purposes, echoed the sentiment that the environment was available for human control for human betterment, as their "discovering, describing, and cataloguing of the world's flora and fauna represented Europeans' growing sense of mastery over the natural world" (del Mar, 2012, p. 9). As

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<sup>4</sup> While Richmond does not use this term in relation to the environment, my understanding of the 'subaltern' came from his (2018) *Peace and the Foundations of Political Order*.

<sup>5</sup> This romanticized version of nature also had some positive effects, as it shows how nature has healing properties (even though environmental therapy is not explored with any real vigour until quite recently). It also led to today's practice of nature tourism which can have positive effects for environmental peacebuilding (as we will explore the example of Rwanda's gorilla tourism).



explained by Lynn (1998) and these examples, anthropocentric othering takes away the inherent value of nonhumans through the process of organizing, classifying, arranging, and marginalizing. The environment was further stripped of agency and power in the name of humanity's quest of dominance, prosperity, and growth.

These developmental practices added to the passivity of the environment today's nationalistic world. The West rewrote the narrative of the environment to no longer be the provider of basic human needs like food and shelter, but as pretty building blocks that could be put together at will. For example, there was originally a political function to gardens, as it was "suggested that a monarch who could so successfully control nature should also control his nation" (del Mar, 2012, p. 10). This way of thinking kept humans separate and above the environment and removed environmental concerns from being forthright intrinsic concerns. While reworking wild landscapes into tourist destinations that are fought to be preserved may have helped with connecting to the environment and thus getting people to act to save it, in reality this allowed for the personification of the environment which in turn led to nature lovers not thinking of it as being intrinsically important;<sup>6</sup> "in people's beliefs and imaginations, animals became thoroughly familiar, lost their agency, the capacity to follow their own scripts, to have a life beyond the pale of human understanding" (del Mar, 2012, p. 38).

### Using the Environment

Utilitarianism is now the main way the international system considers the environment because of the hierarchy that dualism created between humans and the environment. As humans can alter the environment, they have and now use it for their purposes, which mostly revolve around upwards development. Utilitarianism equates value with utility and, according to Katz (1979), works against environmental protection because this perspective looks only to satisfy immediate human needs. It does not consider the needs of an ecosystem or the environment more broadly nor does it consider meeting those needs in a sustainable manner. A look at European colonial and expansionist history shows how ecological violence was a tool for their displays of nationalism.

Brock (1991), outlines clearly in this passage how European-led destruction of the environment for immediate gain and hard power established the groundwork for the current and continued devaluation and unappreciation of the environment:

*Forests have played an important role in enhancing the armament process in Europe, and in the European conquest of the world: timber was cut in huge amounts, with grave ecological consequences, to build the military fleets with which the Europeans fought each other which later on were used to protect the economic penetration of overseas territories. In turn, the resources brought back from these territories helped to spur the process of capital accumulation which formed the basis for the establishment of the 'industrial system' (p. 409).*

This domination of natural resources is akin to Western colonization of peoples. In relation to environmental issues, European imperialists "justified their domination of colonial peoples and places

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<sup>6</sup> Often referred to as the "Bambi syndrome" after the famous Disney movie *Bambi* (Purser, et al., 1995, p. 1058).

by arguing that their rule ensured more productive and sustainable practices” (del Mar, 2012, p. 22). While there is plenty of literature explaining the connection between colonialism and legacies of environmental degradation, it was more difficult to find literature in the peace field that specifically outlines Europe’s domination of the environment as akin to the domination of people and cultures. Interestingly, Kirkpatrick and Faragó’s (2015) book *Animals in Irish Literature and Culture*, is an examination on “the colonial use of force to subdue and contain [animals]” (p. 1) and explains how Animal Studies can shed light on issues such as racism, classism, globalization, and colonialism.<sup>7</sup>

Further, commonly referred to as resource-based conflict, violence over the environment and environmental issues is abundant around the world and has been throughout history (Brock, 1991). As countries develop, the growing need for resources coupled with the scarce amount and difficulty to access places the environment at the centre of conflicts. In his book, Klare (2002) highlights examples of oil conflicts in the Middle East, water conflicts around the Nile, and raw material sales like wood and minerals funding violent forces in Southeast Asia and Africa as representative examples of main conflicts in the world today (Cooper, 2001). Hence, the environment’s continued connection to conflict, either as a victim or cause.

According to research done by UNEP (2009), the environment can be a victim to conflicts either directly or indirectly through institutional impacts. Institutional impacts that victimize the environment come about as “conflict causes a disruption of state institutions, initiatives, and mechanisms of policy coordination, which in turn creates space for poor management, lack of investment, illegality, and the collapse of positive environmental practices” (Mrema, et al., 2009, p. 15). When considered in this light, the environment can be seen as a tool for human actors to undermine peace processes. Natural resources can garner a significant income, and individuals or groups whose access to these revenues is threatened by the establishment of peace can attempt to undermine the peace process. Likewise, political reintegration and reconciliation can similarly be threatened because access to and control of natural resources reinforce political and social divisions (Matthew, et al., 2009). The environment being used to undermine peace processes leads to increased environmental violence because it is therefor not addressed in peace processes. Hence, the international system thus ensures that environmental considerations are strictly utilitarian and in line with the fragmented structural design dictated by the security system.

Our use of the environment for our own ends thus keeps it trapped as close kin to conflicts. United Nations Environment Programme (UNEP) research has concluded that “the exploitation of natural resources and related environmental stresses can be implicated in all phases of the conflict cycle” (Matthew, et al., 2009, p. 8). Further, Lorentzen and Turpin (1996) explain that “current

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<sup>7</sup> Both Animal Studies and Environmental Studies provide interesting insight as to the comparison between keeping pets and keeping slaves. Del Mar (2012), for examples, describes “this denatured and contrived relationship with animals – as pets, fictional protagonists, and zoo residents – was accompanied by a continued concern over how people treated certain animals” (p. 30). Peter Singer has also thoroughly philosophized on animal ethics since his seminal work *Animal Liberation* (1975).

environment, development, and military conflicts reflect this legacy of colonialism as the North continues exploiting the South's resources, enforcing its will through world financial institutions and militaries, and leaving massive environmental destruction in its wake" (p. 2). The exploitation done in these colonized countries – of the people and the environment – for the development of the Western powers contributes to the uneven development present in the world today as well as debate over the responsibility regarding whose fault the climate crisis is and whose responsibility it is to address it. In short, the authors explain how "worldwide environmental problems are linked directly to the implementation of mainstream development models" (Lorentzen & Turpin, 1996, p. 2). These mainstream development models being the ones which contributed the passivity of environmental agency

This passivity contributes to the incrementalism of today's environmental efforts because the environment is such a subaltern that it is considered only as a support aid. There are many demands on states and their resources so oftentimes governments "prioritize more immediate human needs over broader, longer-term environmental protection measures" (Lewis, 2012, p. 39).<sup>8</sup> This is especially true in conflict and post-conflict situations. Since the ENMOD Convention,<sup>9</sup> there has been a growing body of international agreements that aim to protect the environment in times of conflict. However, the environment in itself is never at the top of the conflicting parties' priority list. It is generally only because of rising public awareness of environmental degradation that environmental protection is even somewhat considered in times of conflict, even though the needs of the natural world and those of armed conflicts and national security are often complementary (Reyhani, 2006). The negative environmental impacts of war are extensive, long-lasting, and inevitable (Austin & Bruch, 2000). Yet the environment is still being victimized without proper attention and awareness as a sort of ultimate subaltern so efforts to address it are minimal.

International environment law, a seemingly holistic transboundary mechanism to address ecological violence, is not an effective mechanism to protect the environment or tackle this poor colonial legacy as it also considers the environment in a utilitarian manner. The international community and international systems are ineffective at holding states accountable for environmental degradation during armed conflict (Mrema, et al., 2009). There are several reasons for this, but in the end, it boils down to an issue of scope (Lewis, 2012). It is states' job to ensure environmental protection in their jurisdiction (Reyhani, 2006), however the environment always happens to be outside of states' jurisdiction with the way our systems are organized. Environmental problems are not confined to political (human-made) boundaries as the cause and effect of actions over time,

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<sup>8</sup> This is also why most environmental activists are richer, western Caucasians coming from developed countries where most of their basic needs are met, because only then do humans tend to start concerning themselves with issues other than themselves like the environment (Lewis, 2012; del Mar, 2012). I myself fit this description as an economically secure Caucasian from Canada studying in Norway.

<sup>9</sup> The *Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques* entered into force in October 1978.

especially developmental ones, are difficult to determine (Lewis, 2012, p. 45). With the way the current international legal system is constructed, it is impossible to have a right to a healthy environment because of the temporal and geographic dimensions environmental protection would require (Shelton, 2006). Shelton (2006) explains that it would be possible to include a sort of right to a healthy environment in our system if we significantly expanded the territorial scope of state obligations, but overall thinks it is too much of a hurdle to jump because of our firm roots of individual state sovereignty. International law as a representative mechanism of the international system is too anthropocentric and only allows for utilitarian considerations of the environment. That is why I am doing this research to present options on how to better consider the environment.

### Our Problem with the Environment

Today's environmental policy is seen as technocratic, which means that negative environmental consequences are seen as by-products of necessary economic and technological growth. Elliot (1996) argues that "the impact is not just an environmental impact; these are not just technical or scientific problems requiring technical or scientific solutions. They arise out of particular economic, social, and political structures – in particular an emphasis on industrialization and the pursuit of economic security through growth – and they have economic, social, and political consequences" (p. 14). Environmental issues are transboundary, so if we are individually thinking on a small scale and only about what is best for us, the environment cannot be addressed.

Gray (2000) explains how liberalism (the political system of individualism born from divisionism) is all supportive of individual freedoms which means it is tolerant of all the different beliefs and traditions and cannot act against practices that work against the environment for fear of being culturally insensitive. Milfont (2012) explains:

*The contemporary increase in globalization and migration, have resulted in a growing need to understand human-environment interactions across national cultures. Tackling environmental problems requires a cooperative effort from decision makers worldwide, but their decisions to cooperate with or defect from any such wider effort will be made according to the values and behavioral patterns dominant in each national culture (p. 182).*

He goes on to explain how this means that every state has a unique 'culturally patterned' method of dealing with the environment, with societies and even individuals which are also able to treat the environment as they find appropriate. He adds that "the stronger the cultural emphasis on masculinity and power distance, the less people will be concerned about environmental issues" (p. 184). As a whole, the international system is enshrined in these sexist and power-hungry values. Milfont's work explains that individualist cultural values, as opposed to collectivist orientations, relate poorly to environmental consciousness. Administrative fragmentation (the divided structures in government) make environmental issues difficult to address because the government is unable to pursue issues holistically, the temporal and spatial variability of environmental issues in today's political system results in reductionist views of environmental care (Crumley, 2006). Thus, showing how divisionism

is a cherished value in humanity because it makes things easier to look at, examine, compare, evaluate, and control. Thus, action-oriented literature on possible solutions to address this issue are limited because of the authority of state sovereignty and there is a need for research such as mine that look at issues holistically.

Mainstream development has less to do with expansionism of territory as it did in the past, but rather expansionism of wealth and technology. The economic order of capitalism makes people consumerists and thereby ignore the environment. As O'Brien et al. (2007) explain:

*Countries often pay only lip service to environmental protection, since it is often in direct conflict with economic development, which is the goal of governments and civil society. When compared with starvation, environmental protection may be lacking in importance, yet once the problems of a poor economy have been overcome, environmental protection may re-emerge and achieve a higher level of importance (p.205).*

They speak in relation to developing countries following the lead of the developed regarding how they too should progress, and argue for the case that developing countries are in a uniquely good position to create and follow a better – more sustainable – development plan, if only the international system would make room for it. Much like I am using this thesis to call for earlier integration of the environment into post-conflict peace initiatives, they hold that “environmental management systems and policy must be incorporated at a much earlier stage to achieve a more symbiotic parallel development path” (O'Brien, et al., 2007, p. 216). Del Mar (2012) does well to further explain this phenomenon of capitalism as emasculating nature and making it passive.

Further to this development model, is the inherent militarism of the international system. We have explored how war harms the environment, but even without the direct violence, conflict structures, especially the military, have indirect and extensive negative impacts on the environment. This further cements the link between conflict and the environment. According to Barnett (2016), the military “may indeed be the single largest institutional source of environmental degradation in the world” (p. 240) both in times of peace and war. Instrumentally, armed forces work against environmental protection and positive peace, as they are only designed for the cessation of direct violence (negative peace). The Western processes of development through war brought about the standard for ignoring the environment. That is, the system of military intervention and foreign aid ignores the environment that civilians live in in favour of focusing on hard security (which was also initially the case post-Genocide in Rwanda). Clearly, the mindset of the international community is based on negative peace, not positive peace. So, the international system of today cannot address the environment crisis or stop environmental degradation because it is inherent to the system.

Nationalism is the embodiment of this system. It is a movement that stresses one's pride in their country's natural features and enforces the idea of preserving certain natural areas identified as part of the nation's identity. This identifies and enforces a paradox between conservation – which means destroying useful parts of the environment – and preservation – which means idolizing certain natural

environmental areas in a way that benefits humans (del Mar, 2012). This paradox is a large part of what grew to be the environmental policy paradigm in which we find ourselves today.

In summary, it is clear from the literature that there is a well-established link between our international conflict society and the environment as a tool to support it. The international system we have today cannot achieve world peace free from environmental degradation because ecological violence is inherent to the system. Yet, the peacebuilding initiatives international actors impose post-conflict are based on this Western way of thinking. It would follow that after this realization peace actors would carry this link with the environment into the field of peace. Yet these actors are not so influenced by this connection, since those in power tend to stick to the status quo (Brauch, 2018). That being said, there are many opportunities for the connection between peace and the environment that are being acted upon. To this, I hope to show how the integration of the environment from the beginning of post-conflict peace processes could work because of the opportunity and incentive of these societies to change. The next section of the literature review focuses on that connection in the process of getting us closer to my claim that the environment is an overlooked actor for peace.

### Environment and Peace – the Solution

The literature on the topic of environment and conflict, paints a clear picture on how the international system has been built on the notion of negative peace. In order to begin to outline a solution that leads us to positive peace, literature from outside of this mainstream literature is reviewed. To achieve social justice, the environment – something bigger than each of us individuals – must be attended. Since the environmental crisis is too big of an issue for the current global architecture to address our paradigm of thought must change. We need to adopt a new way of thinking that includes the environment if we are to get environmental justice, which would be the first step towards global justice. Within the literature about the connection between peace and the environment, I found three themes that I now present.

#### Alternative Views of the Environment

The Green Movement<sup>10</sup> was a time of prosperity and rising awareness of global issues, where youth in the affluent West protested for a counterculture of peace and environmental activism. Rachel Carson's (1962) book *Silent Spring* is often cited as an initiative factor to the movement (Barnett, 2016), as she managed to make the public aware of the environmental impacts of human activities by showing us how far removed we had become from the environment by taking everything it provided for granted without understanding how it came to be. This was the first instance where radical groups forced governments to take environmental issues seriously and address it head on, which was a shift from the historically incremental consideration of environmental issues common throughout the world. Non-governmental organizations (NGOs) who were to grow into powerful international NGOs

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<sup>10</sup> See Carter (2007) and del Mar (2012) for more insight into the Green Movement.



like Greenpeace<sup>11</sup> formed and strengthened this grassroots bottom-up green movement in a more organized and radical way to pressure higher powers to take the environment seriously. The Conference on the Human Environment in 1972 was the first instance the environment was brought to the international relations table (Barnett, 2016). After which, as international activities increasingly began to look more closely at the link between environment and conflict, the concepts of ‘sustainable development’ and ‘environmental security’<sup>12</sup> were introduced with the 1987 World Commission on Environment and Development report *Our Common Future* (O'Brien, et al., 2007).

O'Brien et al. (2007) explain how the concept of ‘sustainable development’ – calling for meeting present developmental needs as well as future environmental needs – was realized as a compromise between economical development and environmental protection and is generally hailed as the answer to environment and peace concerns. This conceptualization allowed, for the first time, “direction for the subsequent inclusion of environmental considerations into broader areas of policy-decision making” (O'Brien, et al., 2007, p. 203), which, as we have seen in the previous literature section, is not generally allowed for in our international system. From the beginning of this popularization of environmental consideration, lobbyists argued that “project-specific environmental protection lacked the strategic input to attain sustainable development” (O'Brien, et al., 2007, p. 203) and called for “a reconsideration of the models and guidelines for environmental policies and economic development” (O'Brien, et al., 2007, p. 204).

Unfortunately, there is little incentive and, as we have seen, opportunity for developed countries to foster such models. As a result, developing and post-conflict countries are being pressured by the need to integrate into this increasingly globalized world and “follow the economic development patterns that had been used many years earlier by the developed western economies” (O'Brien, et al., 2007, p. 204), despite the proven ill effects. Our international system is built on the concept of negative peace, as the literature so far reviewed has outlined. However, post-conflict societies have an opportunity to correct that by implementing these models that these authors argue would be better for high-income developing countries (for example).

There is currently little literature on environmental integration into post-conflict peace processes, possibly because “developing nations have been perceived as less willing and able to support sustainable development, since they are often more concerned with the eradication of poverty and the provision of basic human needs in the immediate short term” (O'Brien, et al., 2007, p. 204). Available literature that puts environmental activism into practice for peace efforts is only in relation to the

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<sup>11</sup> Greenpeace formed in 1969 in Canada as a radical environmental group. Today it is one of the most influential activist organization in the field of Environment and Peace (Greenpeace International, 2020).

<sup>12</sup> According to Dalby (2008), environmental degradation causes political instability and conflict, which is why ‘environmental security’ came to be an issue. This securitization of environmental issues simply led to existing national security structures to absorb this new threat. However, Barnett (2016) explains that due to the fact that environmental concerns are different to traditional national security threats, this just strengthened the already present structures that cannot address the underlying issue of environmental degradation because it is an existential threat.

West.<sup>13</sup> Hence, part of my research aim is to see how post-conflict societies outside of the well-developed West can integrate the environment as an actor into their peace development initiatives.

One way we are looking towards getting close to sustainable education is through peace education,<sup>14</sup> in which sustainable development and environmental education are central goals and understood to be key elements of comprehensive peace (Bajaj & Chiu, 2009). Peace education developed as a response to the issues I outlined in the *Environment and Conflict* section and as Peace Studies is responding to the call to be more holistic in face of the unprecedented speed of global change. Education is a key tool to achieve the harmonization and respect of the environment's link to peace. However, peace education focuses on the importance of starting this education with children. While looking to the future is a good way to counter violence, there must be implementation of these practices for those currently in power. This is another literature gap my thesis looks to address; how we can effectively enact structural change immediately post-conflict.

Bajaj and Chiu (2009) bring forth the Western support for the initiative to increase knowledge and support for the relationship between the environment and peace, particularly driven by the United Nations.<sup>15</sup> For the international system to commit to the environmental link to peace, it needs to expand its literature base and rework its structures to be more holistic and able to include lived experience as valued knowledge. Hence, I outline literature about the environment and peace from a multitude of complementary perspectives.

### *Indigenous Perspective*

The Indigenous perspective is, generally, holistic in nature, as it “is concerned with the groundedness (or otherwise) of an individual as an entity related to and indivisible from the rest of the world” (Mika, 2015, p. 1136). Mika (2015) examines Western philosophy from an Indigenous perspective and finds that while the West “suffers... when faced with the unknowable” (p. 1136) because it looks for the Truth, Indigenous philosophy tends towards positioning the self. Different to the Western practice of ‘othering,’ this perspective allows for focus on relationships, which I understand to be key for my thesis. Unfortunately, our current international structuring is too fragmented to encourage this perspective.

Other Indigenous authors such as Bajaj and Chiu (2009) and Mistry and Berardi (2016) call for transdisciplinary and multi-perspective holistic approaches towards the intersection of peace and the environment as their readings often transition between Western, Indigenous, and scientific approaches and methods to tackling environment and peace. The common conclusion is that there is a value and a necessity to include all forms of knowledge and perspectives on issues pertaining to the environment and peace, but the international structure in place does not support the cooperation of these different

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<sup>13</sup> For example, the literature on the Green Movement and major NGOs are Western based.

<sup>14</sup> Peace education is the child of peace studies and can broadly be defined as “the educational policy, planning, pedagogy, and practice that develops awareness, skills, and values toward peace” (Bajaj & Chiu, 2009, p. 442).

<sup>15</sup> They highlight the UN's Decade for Sustainable Development.

institutions. Mistry and Berardi (2016) are more concrete in their examples of the international structure impeding the positive contributions of Indigenous knowledge, as they explain how fluid Indigenous knowledge is while mainstream scientific knowledge is not. Beckford et al.'s (2010) work highlights the Walpole Island and the rest of Canada as the exemplar case of how well the holistic Indigenous educational approach can be incorporated and the benefits the cooperation of knowledge has already been.

This leads to the conclusion that there is widespread agreement over many fields of the environment, specifically a holistic, Indigenous consideration of the environment, is key to peace. Gomes (2018) outlines how an Indigenous peace ecology paradigm can offer solutions to the environmental and peace crisis we find ourselves in by shifting from “an anthropocentric to an eco-centric perception of nature, from hyper-individualism to a community-focus responsibility, from a competitive outlook to everything to one that is focused on empathy, cooperation, sharing and altruism, and from a growth-fetish to a needs-based regenerative lifestyle” (p. 150).

### *Feminist Perspective*

The feminist perspective is important to consider when considering the environment because of the gendering of the environmental crisis. One of the issues preventing the consideration of the environment in the international sphere is akin to why women are often the most negatively affected by environmental degradation. In fact, ecofeminism emerged as part of the radical environmentalism movement and they argue that “misogyny and hatred of nature share a common, masculine root, namely western civilization’s mania for domination of the natural and the feminine” (del Mar, 2012, p. xix).

Relating back to the anthropocentric ‘othering’ process explored in the previous literature section, Elliot (1996) explains how “this gendering derives from the public/private dichotomy which is a basic dualism within both the patriarchy and liberalism which have defined intra-state decision-making and inter-state politics. Women's marginalization into the private sphere means that they are often more closely connected with day-to-day ecosystem management. They are, therefore, more likely to be detrimentally affected by the impact of environmental degradation” (p. 13). This explains why women’s opinions are not valued when it comes to security, and even more so when it is environmental security because, as we have seen, military concerns take much higher precedence of interest.

Elliot continues by explaining some of the ways that environmental degradation affects women more significantly than men, particularly through the Northern development plans imposed in the South. Echoing O’Brien et al. (2007), she explains how the “narrow model of development is responsible for environmental degradation... The result of much development activity in the economic South – imposed or encouraged through a Northern-inspired growth ideology and based on export-oriented industries and an influx of First World capital – has been a degradation and unbalancing of local ecosystem” (Elliot, 1996, pp. 16-17). This is especially representative of what the international

community pushes in post-conflict peace practices. As a result, in this research project I study the role we have given the environment in a similar fashion to the way that feminists study the patriarchy in terms of challenging the EPP.

### Environmental Peacebuilding

Part of the problem outlined with traditional and theoretical Peace Studies literature is its focus on the environment's connection to conflict. In reality, the environment is more often a means through which conflicting parties can cooperate in the name of peace (Carius, 2007). Environmental peacebuilding is an approach to peacebuilding where the main view centres on environmental cooperation as the basic starting point to transforming relationships between parties (Dresse, et al., 2019). It has three approaches; preventing conflicts directly related to the environment, using environmental cooperation as a platform for dialogue for parties already in conflict, and – the most relevant one for my project – promoting lasting peace through sustainable development (Carius, Environmental Peacebuilding, 2006).

That being said, another perspective on environmental peacebuilding focuses more on resource risk management. According to Krampe (2017), this perspective “recognizes that resource-induced instability may arise after intrastate conflict [and thus stresses] the need to mitigate instability by implementing environmental cooperation initiatives” (p. 2). This approach to environmental peacebuilding addresses more immediate post-conflict concerns and is consistent with the approach taken in my work. The environment, being intrinsically connected to every actor and sector that deals with peacebuilding efforts, through the method of environmental peacebuilding could be a perfectly unifying force in centralizing every actor's goals around the common concern for peace.

In its brief history, environmental peacebuilding is thought of as an appropriate method of peacebuilding for environmental-based conflicts. The 2009 UNEP report *From Conflict to Peacebuilding: The role of natural resources and the environment*, explains:

*Fewer than a quarter of peace negotiations aiming to resolve conflicts linked to natural resources have addressed resource management mechanisms. The recognition that environmental issues can contribute to violent conflict underscores their potential significance as pathways for cooperation, transformation, and the consolidation of peace in war-torn societies. Natural resources and the environment can contribute to peacebuilding through economic development and the generation of employment, while cooperation over the management of shared natural resources provides new opportunities for peacebuilding. These factors, however, must be taken into consideration from the outset... Integrating environment and natural resources into peacebuilding is no longer an option – it is a security imperative (p. 5).*

While the imperative of including the environment in post-environment conflict peace initiatives is noted, it is not often enough put into practice nor noted as necessary for peacebuilding after conflicts not directly relating to environmental issues. Hence, my research is focusing on integrating environmental peacebuilding in post-Genocide Rwanda – a markedly anthropogenic conflict. The need for integration of the environment into all peacebuilding efforts can be defended as worsening

security situations in post-conflict situations are even more concerning than the death and injury tolls of people due to direct acts of violence (Hoeffler & Reynal-Querol, 2003). These security concerns include poor health, depleted and destroyed resources, and unsafe and unclean environments, which can all be traced to environmental degradation. The UNEP report continues with a few recommendations on how to go about achieving this integration including to “address natural resources and the environment as part of the peacemaking and peacekeeping process” (Matthew, et al., 2009, p. 28), including natural resources and environment issues into integrated peacebuilding strategies, and capitalizing on the potential for environmental cooperation to contribute to peacebuilding.

This integration can be seen in many different ways at many different stages of peace, as we have seen the environment being integrated at all stages of the conflict cycle. Pre-conflict, we can see the initiation of peace parks being used as deterring factors for escalation of conflict (Brock, 1991). Environmental therapy is a branch of environmental medicine that treats ailments caused by environmental factors and believes the individual cannot be treated as separate from their environment (Gale Encyclopadia of Alternative Medicine, n.d.). Treatment of Gulf War syndrome is one direct realization of environmental therapy in a post-conflict situation. Further, there is the practice of nature therapy, which psychologists widely agree show results that spending time in natural environments decreases stress for people who have been traumatized (Berger & McLeod, 2006). Studies have shown that environmental crime-prevention strategies can be effective by helping ex-criminals better connect to their surroundings and not want to commit crimes again (Mair & Mair, 2003). These are just a few of examples beginning to be explored in peace and conflict studies that hint to the environment having agency. Although they are not part of the common discourse in the field and have not significantly been applied on the international level, they support and encourage my line of thinking that the environment can be an actor for peace.

### Ecology and Resilience

In continuing with the necessity to include multiple and alternative perspectives of the environment’s link to peace in order to help us achieve world peace, the scientific field of ecology needs to be considered because it stretches the capacity of the environment much further than traditional peace scholars give it credit. Ecology is the scientific field of study that “emphasize[s] the relationship between elements of an environment that had been studied or approach discretely. Ecologists understood forests, for example, as a complex organism whose various parts...acted in concert with and relation to each other” (del Mar, 2012, p. xix). Arne Naess took this field even further by developing deep ecology, which argues that “humans must be understood as part of, rather than separate from, the rest of nature. Deep ecology argues and implies that conventional environmental movements and philosophies are shallow by comparison inasmuch as they accept western civilization’s dualistic assumption of a human/nature divide and therefore cannot get at the

roots of why modern humans exploit the nonhuman world” (del Mar, 2012, p. xviii). In fact, peace ecology – the main theory used in this research – also partially grew from ecology.

The links between Peace Studies and Ecology run deeper than just peace ecology, as the oft used term ‘resilience’ is originally an ecological concept.<sup>16</sup> Similar to human resilience, ecological resilience is the capacity of an ecosystem to respond to disturbances and recover quickly to continue its cycle (Levin, 2015). Ecologists understand that we cannot use natural resources faster than they are available, similar to early conservationists who realized that regulation was needed to ensure the continued growth of Western development (del Mar, 2012; Milfont, 2012). This resilience affects the speed of post-conflict peace processes because the environment determines what resources are available. Every environmental system is an ecological system and if the natural rules are not followed and resources are used faster than the rate of recovery, peace as well as everything else will be negatively affected (Latour & Lenton, 2018).

Ecology provides us with undisputable scientific evidence for definitions of nature, natural resources, ecosystems, and the environment. Understanding these rules and using them in tandem with the idealism that motivates peace efforts is the cultural paradigm shift that I embody throughout my research, as Latour and Lenton (2018) explain. Ecological resilience is tested in times of armed conflict, we have already gone over how the environment is negatively affected during times of violence, but these natural processes can show us a path to sustainable peace if we follow the rules of nature. This thesis aims to show how Rwanda did and could have followed these rules, in order to understand more broadly how the environment can be an actor for peace.

### Limitations of the Literature

Based on the existing literature it is clear that a healthy environment has been acknowledged as being a necessary component to peace and that it can be a useful tool in peacebuilding, yet it is often overlooked in the empirical side of peace. We have seen that there are idealistic ideas on integrating the environment into the peace field, yet they are not fully embodied by Peace Studies actors. This counter-intuitive gap between what the literature is confident stating and what it is only beginning to imply is the limitation that drives my research. The ever-evolving field of Peace Studies as well as the negative social implications brought about by climate change, make now the perfect occasion to bring the environment to the forefront of peace consideration. I intend to show how the environment must be considered as a key actor to create positive peace.

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<sup>16</sup> I learned this from an interview about ecological resilience with UiT The Arctic University of Norway Professor Jinmei Liu on February 3, 2020.



## Theoretical Framework Chapter

Based on the literature reviewed, it is clear that a healthy environment is a necessary component to peace, yet it is often overlooked in the empirical side of peace and conflict fields and so that knowledge is not put to use. The reason for this lack of action is less clear, yet the fact that interpretations of such basic concepts of peace and the environment are still being questioned makes it hard for abstract theories to take root and grow. My research question, in asking how the environment can act for peace, brings to light these two concepts and thus an explanation is needed in my thesis in order for the work to be taken seriously. Here I define what I mean by peace and by environment. In doing this, I create an understanding for a different way of conceptualizing these terms and their potential within my narrative. Once this clarification is complete, I explain how this work operationalizes the environment in a way that enables it to act and have agency. After which, peace ecology and other relevant theories are explored before I finally outline my plan to operationalize these models of thought with my case study in a way that answers the call of support for my claim that the environment is the missing key to peace.

### What is Peace?

For the purposes of my work, I understand peace as a positive and sustainable peace, not simply the absence of violence, as that understanding is not long term and would not address ecological violence. Peace is defined as social justice, where there is an absence of all forms of violence (Galtung, 1969). Galtung himself outlined ecological balance as a necessity to have positive peace. The previous Literature Review Chapter introduced us to the contribution Christianity made to the EPP, and Galtung expands on this in his explanation of cultural violence and lack of ecological balance. In claiming humans above other elements of the environment, Christian religion perpetuates speciesism and ecocide<sup>17</sup> (Galtung, 1969, p. 202). There is an ecocide-genocide nexus<sup>18</sup> (Crook, et al., 2018) that adds a level of interest to the study of Rwanda's post-Genocide peace efforts in that "the degree of attention paid to ecocide and genocide reflects the distribution and control of knowledge and power" (p. 300). My research can help bring this fact to the forefront of peace studies. From this, it is clear that a healthy environment is necessary to reach and sustain peace. We are all aware that positive peace has not yet been achieved worldwide, and I am arguing that one reason for that is because the environment is not adequately and properly considered in peace.

### What is Environment?

As I have already made clear, this thesis takes the premise that the environment is the missing key to peace and therefore examines this claim further by researching how it goes about acting for peace. According to a 2009 report by UNEP, the environment is "the sum of all external conditions

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<sup>17</sup> Ecocide is "the extensive damage to, destruction of or loss of ecosystem(s) of a given territory, whether by human agency or by other causes, to such an extent that peaceful enjoyment by the inhabitants of that territory has been severely diminished" (Crook, et al., 2018, p. 303).

<sup>18</sup> Crook et al. (2018) explain the ecocide-genocide nexus as how ecological violence can lead to genocide and how genocide can lead to environmental degradation.

affecting the life, development and survival of an organism. In the context of this report, environment refers to the physical conditions that affect natural resources (climate, geology, hazards) and the ecosystem services that sustain them (e.g. carbon, nutrient and hydrological cycles)” (Matthew, et al., 2009, p. 7). In an attempt to keep my views of the environment from being romanticized, naïve, or anthropomorphized,<sup>19</sup> I follow this straightforward understanding.

However, this explanation of environment is lacking, as it does not encompass the idea of environment-as-actor that this research is trying to outline. More than just exploring the concepts of peace and environment, I am asking how the environment acts for peace. As we have seen in the Literature Review Chapter, the environment is usually considered as a static concept or idea, rather than as an agent with agency. To overcome this gap and support my idea of environment-as-actor, I explore different ideological considerations of the environment to see how it can be understood to have agency. I turn first to actor-network theory, which is an eloquent challenge to what it means to be an actor, before I add ecocentrism to the considered definition to create a more holistic understanding of the potential agency of the environment.

## How does the Environment Act?

### Actor-Network Theory

Bruno Latour’s actor-network theory (ANT) is an approach for managing theoretical and methodological understandings of the human-nonhuman divide. According to Latour’s *Reassembling the Social* (2005), ANT is not a theory per-se, but rather a method to consider the world through ever changing relationship networks. It is a constructivist approach that builds upon the idea that these relationships are the only real thing and everything outside of those relationships is made up. By putting the importance on the relationships that create social situations, this theory gives equal weight to humans and nonhumans in that they are both necessary and important to create them. Callon (2001), who explains the role of science and technology in aiding to overcome this division, illustrates the social situation of driving as being the sum total effort of every single part of the car that helps the driver drive; “[e]ach of the human and nonhuman elements comprising it participates in a collective action, which the user must mobilize every time he or she takes the wheel of his or her automobile” (p. 63). This approach challenges the dominant essentialist explanations of the world order. Latour (1996) explains his use of the term ‘actant’ as “anything provided it is granted to be the source of an action” (p. 373). He goes on to complain that “the anthropocentrism and sociocentrism is so strong in social sciences” (p. 373), but by giving credence to nonhumans for the role they play in creating the networks of the world, ANT overcomes the othering divisionism inherent to the international system.

I have presented the case that the environment is an important yet abstract concept in Peace Studies that is undertheorized in terms of illuminating its potential in positive peace. In fact, Peace Studies “has yet to fully embrace environmentalism among its many transdisciplinary

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<sup>19</sup> Anthropomorphism is “the practice of imputing human characteristics and motives to non-humans” (del Mar, 2012, p. xvii).

explorations...by and large the field has developed upon considerations of more anthropocentric matters” (Amster, 2015, p. 15). Nonhumans are not given much consideration in the social sciences at large, however there are conceptions which my project uses that present different frameworks on how we can overcome this divide. Basically, “ANT presents a coherent methodology for incorporating nonhumans into social scientific accounts. Central, in this regard, is the consistent claim that nonhumans have agency and are actors – and the corresponding attention that is given by the position to unpacking the meaning and sense of those terms” (Sayes, 2013, p. 135). I am using ANT in this research to better explain what I mean by the environment being an actor and to elucidate how it can exhibit agency, something which again does not exist in Peace Studies.

Before introducing the concept of actor, I first explain what is meant by nonhuman, as the environment (my actor) is a nonhuman. ‘Nonhuman’ in the ANT framework is a relatively wide-encompassing term of things, places, and objects, and is more easily explained by what is expressly not included; nonhumans are not “humans, entities that are entirely symbolic in nature, entities that are supernatural, [or] entities that exists at such a scale that they are literally composed of humans and nonhumans” (Sayes, 2013, p. 136). With that in mind, it is important to clarify my use of the environment as a nonhuman actor. As the environment is so vast, it might be clearer to consider the actor to which I refer as the elements – rivers, trees, soil, etc. – that together make up the environment. When I say the environment is an actor for peace, I rather mean the elements that make up the environment act in unison, as the environment, to help achieve peace.

In terms of understanding what an ‘actor’ is, this methodology offers interesting perspective as “ANT does not define the term ‘actor’. Instead it plays with it” (Mol, 2010, p. 257). ANT explores not necessarily how actors act, but rather the effects of actors’ actions because it holds that this is what proves them to be actors. Actions have effects on others – other people and other things. It gives credence to the idea that humans are not the only actors in society. Other nonhumans act too, which can be seen by their effects as if those nonhuman actors were not present there would be a change in the system. This proves their agency. For example, a blizzard causing an airport to cancel its flights for the day. Sayes (2013) writes that: “one need only ask of an entity ‘[d]oes it make a difference in the course of some other agent’s action or not? Is there some trial that allows someone to detect this difference?’ If we can answer yes to these two questions, then we have an actor that *is* exercising agency – whether this actor is nonhuman or otherwise” (p. 141). I appreciate this minimal understanding of agency because it allows us (human researchers) to not have to put our version of acting unto others. Explored in the Literature Review Chapter was the idea of anthropomorphism and how its continued practice has contributed to the passivity of the environment. So, by minimalizing our understanding of ‘acting’ it opens up the possibility of seeing agency.

An actor acts, but how much credit is given to an actor when it is part of a network where one actor claims the fame? All too often, in the social sciences we give more credence to human actors than nonhumans. Was it the blizzard’s actions that caused the flights to be canceled, or the human

airport worker who made the call to the pilots that caused the flights to be cancelled? It could have been the planes themselves, as they do not have the ability to fly in such arduous conditions. This is what I have found to be true in my studies of post-conflict peace processes; that human agents and human-made systems get the credit for re-establishing and maintaining peace, even though they could not have done it without elements of the environment. As previously mentioned, ANT is not a theory and so alone does not allow us to mobilize the idea of the environment acting. It is rather a good “starting point for providing a proper rendition of the complexity of the associations we form with others and with nonhumans” (Sayes, 2013, p. 145). Building upon this understanding of ANT and its conceptualizations along with other theories regarding environmental agency allows the gap in the literature on environment and peace connections to be filled.

### Ecocentrism

ANT has provided the conceptual framework to question assumptions on environmental agency in a way that most social scientists can understand (if not agree with) but alone is not enough to bring my position forward. Building on the ideas introduced through ANT of nonhumans expressing agency has actually brought me quite close to a post-humanist approach. Post-humanism is a non-anthropocentric way of looking at the world that challenges traditional fragmented (dualistic) thinking of humans as different and above Others. It challenges how we presume agency and instead offers that agency is issued through systems in which humans participate. The human participation in these networks is no more or less than others because humans are a part of and thus dependent on them, as they are on and of the environment (Bolter, 2016; Keeling & Lehman, 2018). Akin to ANT, post-humanist theory posits that actions lead to affects, the effects of which demonstrate agency. Humans are not special; they are simply a part of the ecosystem. However, I do not want to fully associate my work with a post-humanist approach because I want my work to echo the more native views of ecocentrism. I understand that this is the current direction of Peace Studies, but I think there are lessons to be learned from already established modes of thought on the subject. That is partly why I introduced Indigenous perspectives on the environment, because there are overlooked answers there that, if we can access and understand, bring down the dam separating the environment and peace.

Ecocentrism is the epistemology most closely supporting my positionality of this thesis. This epistemology is not particularly common in the highly anthropocentric discourse of Peace Studies, nor is the inclusion of nonhuman actors, but as I am looking at the intersectionality of peace and the environment, it is most appropriate (Steverson, 1994; Kortenkamp & Moore, 2001). Gray et al. (2018) have provided us with a great and simple definition of ecocentrism, where it “sees the ecosphere – comprising all Earth’s ecosystems, atmosphere, water and land – as the matrix which birthed all life and as life’s sole source of sustenance. It is a world view that recognizes intrinsic value in ecosystems and the biological and physical elements that they comprise, as well as in the ecological processes that spatially and temporally connect them” (p. 130). It encourages us to start from a place that is not centered on humans and create an environment that can be good for all.

Ecocentrism offers a holistic representation of the world. Berkes and Berkes (2009) explain how Indigenous knowledge has been able to grow holistically “by considering a large number of variables qualitatively” (p. 7) while Western academia is constricted by its hyper focus on a small amount of divided and organized variables. We have seen from the previous chapter that anthropocentric understandings are an underlying cause of environmental degradation because the inherent value of the environment is not comprehended, and thus natural elements are simply used as humans see fit. According to Purser et al.’s (1995) research, an ecosystem is “any entity or natural unit that includes living and nonliving parts interacting to produce a stable system in which the exchange of materials between the living and nonliving parts follows circular paths” (p. 1070), and so ecocentrism purports that organisms – including humans as they are components of the world ecosystem – cannot be studied separately from their interaction with the rest of the ecosystem as a whole.

By following an ecocentric mindset, my use of the term ‘community’ is not simply one made up of the humans in the area, but every natural element that make up that local ecosystem. This is in contrast to the divisive way modern liberal states conduct their thinking. Ecocentrism is informed by ecology (Purser, et al., 1995), so my use of peace ecology as an empirical theory follows this approach. This ideology is similar to many Indigenous groups’ interpretations of the world; Cajete (1994) explains:

*The accumulated knowledge of the remaining Indigenous groups around the world represents a body of ancient thoughts experience and actions that must be honoured and preserved as a vital storehouse of environmental wisdom. This environmental understanding can form the basis for evolving the cosmological re-orientation so desperately needed. Modern societies must recapture the ecologically sustainable orientation that has long been absent from its psychological, social and spiritual consciousness (p. 77).*

These understandings are present and have been for years, the trouble lies with their application. This research is aiming to show how we can do just that through an overarching framework of peace ecology. With the introduction of ANT and ecocentrism, we now have a natural path for considering the environment and its agency.

## Peace Ecology

According to Kyrou (2007) who introduced the framework, peace ecology is:

*A worldview approach to environmental peacemaking. It holistically makes the case for the long-term benefits of an environmental consciousness combined with a peace consciousness instead of an unguided effort at tracing the circumstantial, and amorphous ‘peace revenues’ from individual environmental projects. Peace Ecology creates conceptual space for looking at the peacebuilding potential of environmental practices and projects regardless of whether they are driven by problem solving or by a worldview; whether they focus on some task at hand or on human consciousness” (p. 79).*

Peace ecology was introduced as the answer to the division between Peace and Environment Studies, as well as a response to the incremental advances to environmental peacebuilding we saw evident in the history of *Peace and Environment* section of the Literature Review Chapter. Peace ecology “is

built on key concepts such as bioregionalism, place, sustainability, and interconnectedness and leads to a new definition of environmental peacemaking, and a new methodological approach to identifying and measuring resources for the transformation of conflict and violence, located at the intersection of peace and ecology” (Ulfsax, 2013, p. 88). The goal is to enable “a better understanding, of the inherent capacities of the environment to inform and sustain peace” (Kyrou, 2007). Environmental peacebuilding – the main theory including the environment in peace studies and one discussed previously – is one application of peace ecology. In fact, environmental peacebuilding came first as a concept. It was due to its shortcomings – namely that there was no unifying or underlying way of looking at and thus evaluating environmental peacebuilding methods (because it was either peace scholars or environmental scholars) – that the axiology of peace ecology was created. So, peace ecology is the paradigm from which to consider the intersection of the environment and peace in a truly synergistic way.

I have already expressed that the problem which I am trying to address is that there is no empirical evidence supporting the claim that the environment can be an actor for peace. This is also true of peace ecology. This theory is quite theoretical, and so my research project has operationalized peace ecology to show how it can be in practice, with the example of post-Genocide Rwanda. We have seen how environmental peacebuilding represented a shift in thinking about the environment, as it is now being related to peace instead of its traditional connection to conflict. Cooperation over common environmental concerns and resources presents a win-win solution, which is a contributor to peace rather than the zero-sum logic of conflict (Dresse, et al., 2019, p. 99). My project aims to build on this line of thinking by attributing more agency to the environment in these peace processes by considering the environment as an actor through the framework offered by peace ecology.

### My Approach

My approach to this research on environmental agency in post-genocide Rwanda attempts to advance the peace ecology theory. I have defined peace in positive terms and the environment as a broad but understandable actor. With ANT I explained how I understand the environment to act from an ecocentric point of view. Due to my ecocentric epistemology, I do not have the problem that most peace scholars have with the hierarchy of humans over nonhumans and am using this differing perspective to explore underexplored methods of achieving peace. I want world peace, but strongly believe that it cannot happen without due consideration of and unity with the environment. With all of these considerations, I am now prepared to adapt the theory of peace ecology and put it into practice in order to carry out my research project and answer my research questions:

- a) How has the environment played a role in the overall peace initiatives in Rwanda?

I ask this question to identify the effects of the environment’s actions, which ANT explains will show how the nonhuman environment is an actor.

- b) How have views of the environment changed over the years in relation to the stabilizing peace in Rwanda?

Changing views of the environment is indicative of evolving understandings of the role it plays, which is important for the implementation and support of a peace ecology paradigm.

- c) Of the environmental peacebuilding initiatives currently in place in Rwanda, why are they happening now and what could have been different if they had been implemented earlier in the peace process?

This is important to be able to consider the potential effects of an ecocentric approach to peace initiatives and compare with traditional peace processes.

- d) How has the environment itself changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what could its future look like?

A changing environment shows ecological resilience, which is an indicator for peace as a healthy environment means less ecological violence.

I am aware of the fact that I am pulling from many different theories and methodologies to come to this theoretical framework, and that this is done for two reasons. First, that Peace Studies is growing as a transdisciplinary field and so should encourage this holistic take. Second, I cannot find one singular framework that encompasses my personal worldview. Due to this peace ecology paradigm where the environment is considered to have agency being so abstract and underrepresented in the peace field, there are several gaps in the literature. So, it is my goal to show the application of this philosophy to answer my research question of *how the environment can be an actor for peace* through a real example.



## Methodology Chapter

The environment's role in peace, and more specifically its role through the peace ecology paradigm as outlined in the previous chapter, is the focus of this research. Little literary support showcasing the role that the environment plays in peace processes, especially in peace processes for conflicts unrelated to environmental issues. The research questions guiding my work revolve around my central question asking *how can the environment be an actor for peace?* I explore this through and with the case of the environment in Rwanda throughout their development of peace since the 1994 Genocide against Tutsi.<sup>20</sup> The sub-research questions I pose are as follows:

- a) How has the environment played a role in the overall peace initiatives in Rwanda?
- b) How have views of the environment changed over the years in relation to the stabilizing peace in Rwanda?
- c) Of the environmental peacebuilding initiatives currently in place in Rwanda, why are they happening now and what could have been different if they had been implemented earlier in the peace process?
- d) How has the environment itself changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what could its future look like?

These questions have helped me operationalize my theoretical approach of environment-as-actor. In the previous chapter, I explained how I use this research to further support the peace ecology paradigm. In this chapter I explain my methodological approach to carrying out my research. I begin by outlining my methodological approach, which is a multi-methods instrumental case study. This is followed by an explanation of my chosen study area. Afterwards, I explain my data collection strategies. I take a triangulated approach<sup>21</sup> using participant observation, interviews, and document analysis. Once the data sources are identified and explained, I outline my deductive thematic approach to analysis. To conclude this chapter, I refer to personal concerns and perspectives as a researcher with regards to ethics, reflexivity, and challenges with carrying out this research.

### Methodological Approach

As my literature review indicates, my approach is transdisciplinary. It has to be, as it is my aim to help realize sustainable peace and according to Brauch's (2018, pp. 175-6) research, holistic thinking enables transformation and change. My research addresses the need for both.

For my research, I have chosen to undertake an instrumental case study, which includes multi-methods. An instrumental case study according to Grandy (2012) insists that the case "itself is secondary to understanding a particular phenomenon (p. 474). This is distinct from an intrinsic case study, in which a particular case guides the researcher's purpose for study which would be to explore more about the case itself. As an instrumental case study, the purpose of my research is to add to the

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<sup>20</sup> How the Genocide against Tutsi came to be is outside of the scope of this research project.

<sup>21</sup> Triangulation involves integrating two or more separate yet complimentary data on the same topic into data analysis (Almalki, 2016; Liamputtong, 2019).

literature in support of more firmly establishing the peace ecology paradigm with empirical support. The peace initiative in Rwanda since the Genocide against Tutsi and its intricacies are not what is important for this work, rather, they are the setting to illustrate where and how a peace ecology perspective can be realized. I went into the fieldwork looking to “provide insight into an issue or to redraw a generalization” (Stake, 1994, p. 137), with the issue being peace ecology and the generalization being the environment’s agency in peace. This is not to diminish the Rwandan case as inherently important. Rather, it is chosen for its ability to illustrate. Below I further explain how the Rwandan case study is ideal for these purposes.

Due to my positionality calling for more transdisciplinarity, a multi-method approach is the best fit for considering my data in this research project since following one single methodological approach enforces divisions in academia (Almalki, 2016). We have seen the strengths of transdisciplinary research and views through my Literature Review Chapter section on the peace and environment connection as well as through the argumentation for my theoretical approach. Likewise, there are strengths to integrating multi-methods in qualitative research. Qualitative research provides an opportunity to gain deeper understanding of phenomenon (Almalki, 2016). However, qualitative research is traditionally about exploring the human experience and interpretation of such phenomenon (Sandelowski, 2004; Almalki, 2016), which is not my research aim. Hence, I adjust my approach to include quantitative-like methods, such as a deductive approach and the understanding that the world has a Truth that researchers hope to find (Almalki, 2016). As I am working with the environment, consideration of quantitative research methods – which are methods of studying the natural sciences, like the natural world – is important since the environment makes up the natural world more so than the social world, it is simply more pragmatic (Doyle, et al., 2009, p. 178).

Hence, multi-method research strengthens my overall research with a broader and deeper scope which leads to a fuller understanding and better answer to my research questions (Almalki, 2016; Doyle, et al., 2009, p. 178). This is especially important for my own research as the peace ecology paradigm is uniquely open and encourages multiple approaches and epistemologies. As such, I engaged in participant observation of the ecosystem, conducted interviews with individuals working with the bioregion, and examined documents pertaining to the environment. Together, these methods strengthen the expanse of research and help to reinforce it by gathering support from different means that would otherwise be overlooked (as the environment has in peace studies for years). In fact, it has been said that these sorts of research designs could assist in overcoming the “lack of public engagement in, or denial of, linkages between human activities and their physical environments” (Driscoll, et al., 2007, p. 19).

### Study Area

The environmental policy paradigm previously outlined in my Literature Review Chapter – that human-made effects on the environment are seen and thusly dismissed by policy makers as by-products of necessary advancements in economic or technological growth – makes the research I want

to carry out unrealizable in the West. Instead, my reading pointed me towards Rwanda. Rwanda is a landlocked country in central Africa with a geographical area of 26,338 square kilometres and population of just over 12 million people (Central Intelligence Agency, 2019). Although not often cited as a main factor, Raleigh (2007) notes that environmental stresses on resources from population pressure contributed to the 1994 Rwandan Genocide against Tutsi. Since then, Rwanda has worked to improve as a country for its land and people by addressing issues of justice against perpetrators, youth education, female empowerment, and economic strengthening (Howard, 2014).

In fact, the Rwandan case has been hailed by UNEP as a stand-out example of using natural resources as a peacebuilding measure with their gorilla tourism, for example, in response to their history of conflict over and affecting their natural resources (Matthew, et al., 2009). We have previously explored some of the ideas and consequences of nature tourism in contributing to today's environmental policy paradigm, including how it can contribute to the passivity of the environment's agency while adding to pollution of the area. However, this particular endeavour, as described by UNEP, is akin to a more positive ecotourism. As a sustainable practice both environmentally and socially, ecotourism is supposedly "respectful of both the integrity of local ecosystems and business" (del Mar, 2012, p. 85).<sup>22</sup> While the environment is not considered an actor in this endeavour, this single example of environmental peacebuilding in Rwanda is indicative of more instances for the environment to potentially be considered an actor and for the peace ecology paradigm to be actualized. Because the gorilla program has been praised and studied, I wanted to look beyond that to the peace front, to see where else there were or could be instances of the environment playing a positive role in the peace efforts.

My research primarily took place around the Rwandan capital city of Kigali, because it is located in the middle of the country, acts as the main centre of economics, culture, and government, and is the location of the main organized efforts at peace and environmental stewardship. In fact, all of my contacts were based in Kigali and to that effect it can be said that part of the selection of my more specific study areas is due to feasibility and access, as I further explain below. With the help of my contacts, I was able to expand my research area to include both the Eastern and Western provinces of Rwanda. In the East, I studied around Kayonza, which is about 30 kilometres from Kigali and close to both the Ugandan and Tanzanian borders as well as near Lake Muhazi and the Akagera National Park. In the West, I studied around Kibuye in the Karongi District right on the shoreline of Lake Kivu which is Rwanda's largest lake (Expert Africa, n.d.). Please see the map of Rwanda (Figure 2) below for a visual representation of my study area.

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<sup>22</sup> That being said, pollution is still increased wherever there are ecotourism programs. I will not herein debate the pros and cons of Rwanda's gorilla tourism practices. I rather brought it up, as I said, because of the door it opened to other environmental peacebuilding possibilities.



Figure 2: A map of Rwanda (lonely planet, 2020).

## Data

### Data Collection Techniques

I have tried to make explicitly clear throughout this work that this research is trying to be as open and multi-faceted as possible. Therefore, many different methods of data collection were implemented in order to try and gather as complete and holistic an understanding of the environment's agency for peace in Rwanda as possible, with the goal of strengthening support for the peace ecology paradigm. Participant observation of the ecosystem, interviews with actors working with the bioregion, and document analysis have been used to gather data. Hence, triangulation as a means of validating and strengthening research by substantiating different forms of data (Doyle, et al., 2009; Liamputtong, 2019) was an important tool as the environment-as-actor is not a well-established claim and needs a strong set of data to substantiate it in an understandable way.

### Participant Observation

In order to find support for the peace ecology paradigm in post-Genocide Rwanda, first and foremost I was interested in carrying out a sort of participant observation of the environment. There is no academically accepted way to converse or directly collect data from nonhumans within Peace Studies, so I had to be a bit creative in how I went about trying to collect data in an attempt to keep an ecocentric and holistic method. Using an ethnographic approach to collect my data was helpful in this regard as “within ethnography, researchers adopt ‘a holistic perspective, viewing all aspects of the

phenomenon under study as parts of an interrelated whole” (Liamputtong, 2019, p. 7), except that in this case the cultural relativism to which I am calling attention is ecocentrism.

I carried out unstructured observation of the environment in and around Kigali, Kayonza, and Kibuye in order to gather as much information as possible about the current environment’s agency. My goal with this was to understand the narrative of the behaviour of the environment inline with the ANT strategy where human and nonhuman actors are considered equally (Latour, 2005). I spent time in the natural – or sometimes modified – environment to assess how it is doing and how it interacts with what enters the area, with the goal of better understanding its social force and relationship with other elements of its ecosystem. Notes of my impressions and interpretations were taken, as well as photos that were taken in order to provide unbiased views of the environment and natural elements. Photographic observation – a tool in visual ethnography – was important as “photographs can serve as illustrations of aspects of activities that are not easily described” (Kawulich, 2005). As the environment does not speak in a language I understand, I felt it was important to capture its essence through pictures.

Unfortunately for my research, taking pictures of natural elements was not always allowed and so using this technique in tandem with other notes was important. That being said, images are an important part of Rwanda’s learning culture. My informant at the Environment Museum explained how Rwandans have traditionally had an oral history, but now with so many people and memories lost they understand that a writing and reading culture is better to keep their knowledge. They are doing this at the Environment Museum by having books with either few or no words because Rwandans prefer to look at pictures than to read anything. I found this to be true later while strolling the museum with a local contact whose favourite exhibit in the museum was the nature exhibit which was almost entirely images and had hardly any words. She explained she was able to better engage with the displays than if she were just reading a placard. As a result, I use photographs I have taken throughout my data presentation to support my writing and strengthen my argumentations. In the end, this was a sort of small-scale visual ethnography of the environment as well as a participant observation.



*Figure 3: My contact was excited in this exhibit and actually asked for me to take some pictures of her.*

Moreover, the participant observation in which I participated and observed was not only of the natural environment but also of the human actors engaging with the environment in diverse ways. For example, I was invited to spend several days with one of my informant organizations *Collectif des artisans de paix et la réconciliation* (CAPR) during which I was able to participate in a gender balance workshop and go into the field to see parts of their Conservation Agriculture Project in practice. In fact, CAPR really took me under their wings and I often had a CAPR companion who would accompany me on my research endeavours. I owe them many thanks for their support. I also participated in the monthly *umuganda* activity and attended a traditional wedding of a member of my host's family on top of the day-to-day local happenings I experienced. Furthermore, as part of my research I visited several museums and cultural sites including the Belgian Memorial, Environment Museum, Campaign Against Genocide Museum, and Kigali Genocide Memorial. Notes and pictures were taken at these locations which are analyzed with my data in my Findings Chapter.

Extensive field notes were taken throughout the time I spent in Rwanda about various aspects of life and environmental agency I witnessed or about which I learned. Along with the photographic evidence of the natural environment and the use of the environment to various ends, this amended participant observation was my main method of data collection and supplied the bulk of my data to be analyzed. However, as ethnographic research is almost always used in tandem with multiple methods of data collection (Liamputtong, 2019), I have supplemented the work with interviews and documents.

### *Interviews*

Participant observation in the environment was supported by interviews with key informants. I aimed to carry out purposive sampling<sup>23</sup> of individuals whose work related to peace or the environment. This includes informants in the following fields: government, health, ecology, economics, peace, education, and activism. Locals from these three regions of Rwanda also helped me in the research process as I was able to gather data from them through conversations. In total, I conducted 14 interviews – one of which was a group interview – with key informants connected to 12 organizations which I have outlined in Appendix I. Some of the organizations were contacted and interviews were arranged previous to my arrival in Rwanda. However, CAPR, as part of the assistance they provided me also acted as a gatekeeper upon my arrival, organizing interviews and opportunities for me. Not only CAPR, but my host – with whom I made contact through a mutual acquaintance in Canada – acted as a helpful gatekeeper in terms of gaining access to some key interviews. Through this person and this organization, I was able to build rapport quickly.

Interviews with key informants were semi-structured. This type of interview uses open-ended questions formulated in a way to get the specific information I sought. It allowed me to compare the different answers I received in a flexible and deep way (Knox, 2009). Some of the questions I asked

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<sup>23</sup> Purposive sampling is the decided selection of certain sources – be it people, events, or places – because of the specific information or perspective they can uniquely provide (Liamputtong, 2019).



my participants were more akin to the sorts of notes used in unstructured interviews (for example, *what does the environment mean?*), however I had planned to follow them up with more specific questions. An interview guide can be found in Appendix II; however, it is important to note that interview questions were sometimes edited for specificity prior to interviews in order to provide more relevant prompts. Additionally, while this basic interview guide was the starting point for all interviews, it was interesting to see how the flexibility inherent semi-structured interviews – something Bryman (2012) explains is valuable – led down many different paths and produced a variety of answers in relation to the work and experience of the person being interviewed.

Most of the interviews were not recorded. Notes were taken throughout the interviews with shorthand that indicated interesting points requiring further research, points of view that I found relevant to the research questions, and my impressions of their answers. Furthermore, because my interviews were conducted in a casual style, pulling out a recorder would have disrupted the flow of conversation. Moreover, several interviews were conducted in French (in which I am fluent), so the extracts of speech I reference as part of my data is my translated understanding of their words and should therefore not be considered as exact quotes. I also edited lines for clarity.

My research is about the role of the environment, not the humans and their positions. Interviews were helpful for understanding the people's interpretation of the environmental situation in Rwanda. In order to get a full picture of the agency of the environment it is helpful to get their opinions since they make up the ecosystem I am studying. However, if interviews are, as Kvale (as explained in Kajornboon, 2005) regards them, centralized on human interaction as knowledge production and my research is not focused on humans, it follows that I must use other methods to collect appropriate data for my research. I did this through participant observation and the use of documents.

### *Documents*

As a third method of triangulation, I turned to a variety of documents in order to get different perspectives on environmental agency throughout the post-Genocide development of peace in Rwanda. In order to get a fuller understanding of how the environment is being considered and utilized in the peace and development initiatives in Rwanda since the Genocide against Tutsi, it is necessary to turn to documents for data as there is no way to get a complete understanding by observing the current stasis and conducting interviews. Documents, for my purposes of study, refer to official documents deriving from both the state and from private sources.

Official documents from the state offer a unique outlining of the exact plans of the country and the overview of how the environment is considered. As part of their development process, Rwanda has produced Vision 2020<sup>24</sup> and Vision 2050 outlining their goals for peace and development. These official documents have all been considered, however only the original Vision 2020 document is being used in this thesis in order to help answer my research question. The reason for this decision

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<sup>24</sup> There is also a revised edition of Vision 2020 that was made available in 2012.

stems from the purpose of my study which uses Rwanda as an intrinsic case to add support to the peace ecology paradigm. I did not think it was fitting to consider the changes in Rwanda's development strategies past the original considerations. Additional official documents include the Genocide Memorial Museum's records of Genocide survivors and perpetrators as well as archives from the *Gacaca Courts*. From these, it has been interesting and helpful to look at how the environment has been interpreted as having agency or where it could have exhibited agency without the credit. Museums in Rwanda have been a big part of achieving the country's development goals through better education of the peoples, and so the information provided by these learning spaces also offered useful data that, upon analysis, have contributed greatly to achieving my research aims.

On top of these documents produced by the state, many non-governmental organizations are also working towards establishing better peace and development in the country. Documents produced by these private sources complement the state's documents by, in a way, triangulating what information is accurate descriptions of the state of affairs and the environment, presently and in the future. Some of these private sources of data are also more scientific in nature and actually evaluate the state of the environment in terms of its biology and chemistry. Thus, these documents have aided in bringing the natural science perspective into my work.

Together, the use of these three main data collection techniques helped me to generate a holistic view of the environment's role and 'potential' agency throughout the peace and development process in Rwanda. As I go over in the next section, my multi-methods approach to data analysis continues this trend of using all means possible to lead to holistic and non-anthropocentric research.

### Data analysis

For my data analysis, I primarily use a deductive thematic analysis with a latent approach. Thematic analysis is "a comprehensive process where researchers are able to identify numerous cross-references between the data and the research's evolving themes" (Alhojailan, 2012, p. 39). A thematic analysis is a popularly used and yet poorly defined method of data analysis (Bryman, 2012), although Nowell et al. (2017) point out that it is agreed that thematic analysis "can be widely used across a range of epistemologies and research questions" (p. 2) as it "is a useful method for examining the perspectives of different research participants, highlighting similarities and differences, and generating unanticipated insights" (p. 2). I have chosen a latent approach to analyzing my data because this method reads more into subtext and assumptions underlying the actual data I collect. This is in contrast to the more common semantic approach to data analysis that examines the explicit content of the data (Caulfield, 2019). I made this choice because peace ecology is not the paradigm under which Rwanda's peace process, nor the current Rwandan society, operate. In order to find support for the theory, I look at the intentions behind what the data indicate to see the agency of the environment as I have operationalized in this research project. Further, I have used a deductive thematic coding technique (Nowell, et al., 2017), which means the themes under which I analyzed my data were identified from the peace ecology theory previously outlined. I chose the deductive

approach because I had a predetermined framework – my hypothesis about the environment being a missing key to peace – that outlined my specific research questions – about how the environment acts for peace – which in turn outlined the themes that should be used to analyze my data.

The four themes I identified and used to analyze my data are: interconnectedness, bioregionalism, place, and sustainability. According to Kyrrou (2007), these are the four pillars of peace ecology and so were a perfect way to organize my data. By organizing my data in these themes, I was able to understand it in a more holistic way rather than as separate pieces. This allowed me to find additional connections that could not have been achieved if analyzed in a different manner. That is why one piece of information may be brought up in more than one theme, because there are so many connections. Not only that, but this method allowed me to display my axiological views of ecocentrism and environment-as-actor throughout the data presentation.

## Perspectives

### Ethical considerations

I take a universalist stance on ethics<sup>25</sup> and thereby strongly believe that it is wrong on a moral level to break ethical principles and that doing so goes against what I understand to be the point of doing research. Brauch (2018) explains that “an action-oriented thinking is needed to cope with the ongoing political challenges and to face the new global environmental problems in a proactive way to avoid climate conflicts in the future” (pp. 187-8), which is an understanding I embraced in this thesis. As a result, I take all ethical considerations as upmost important. Upon approval of my project proposal, I put an ethics application through the Norwegian Centre for Research Data, which was approved, and of course followed all outlined requirements and suggestions. I understand that the main ethical principles include do-no-harm, consent, privacy, and deception. These issues have been considered in a twofold manner for my research.

First, I considered how these main ethical issues apply to the environment. As I am considering the environment as an actor equal to humans, Peace Studies ethics says I must receive its consent to participate in this research. Unfortunately, Peace Studies has no ethical guidelines when dealing with nonhuman actors and so many ethical standards cannot apply to my research. As per ecological ethics, which I have tried to embody, I understand that any ethical considerations Peace Studies would afford to humans should also be given to all agents of the biosphere because the environment is intrinsically valuable (Peterson, et al., 1997; Curry, 2006). On that note however, I know I am causing environmental degradation through my work what with all the resources I am using. Thi is an infraction of the ethical principal of do-no-harm. I am torn over this fact, but at least I am aware of my environmental impact and am doing my absolute best to always act as environmentally friendly as possible in order to make sure that all environmentally degrading activities are necessary and justifiable. I was not experienced enough to cut my environmental footprint on a systematic level

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<sup>25</sup> My understanding of a universalist stance on ethics comes from Bryman’s (2012) *Social Research Methods*.

during my research (for example, I used moto-taxis<sup>26</sup> to get to my interviews), but I did work to lessen my negative impact on a more personal level (for example, through less water and shampoo use).

Second, I considered the ethical implications towards the humans in the area I studied. It could have been possible that the locals would be upset and not support my work because they think their more ‘obvious’ needs should take precedence over environmental considerations. It might have been seen as if I were harming the people by ignoring what research they feel they need. However, in line with my approach, I argue and explain that addressing the environment – not before humans, but in tandem with humans – is in everyone’s best interest. Moreover, my research topic is not particularly controversial nor scandalous, so there is no reason for me to not be open and direct with those who were willing to help me further my project along. Hence, deception and privacy concerns were non-issues for me. Luckily the locals and organizations with which I worked were open to my ideas and, although they did not share the same conceptual framework or background as me, they understood the importance of the connection between the environment and humans for their community’s benefit.

### Reflexivity

In addition to the reflexivity I must show in relation to ethical considerations previously discussed, there is a certain amount of self-awareness with regards to insider and outsider relationships with my research subjects. Earthling is my foremost title of self-identification, and from this label it can be said that I view myself primarily as an insider when it comes to dealing with the environment as far as I am part of the earth’s ecosystem (Steverson, 1994, p. 74).<sup>27</sup> However, I was raised in a big city in the northern hemisphere and so my connection with the environment I met in the field was a little outside of my native ecosystem. So, as a new plant being introduced into a garden, it took some effort to accustom my roots to the new soil before I was eventually able to flower. Further, I must be aware of not anthropomorphising the environment. To combat this potentiality, I have tried to clearly outline in my Theoretical Framework Chapter that while I am considering the environment an actor, I understand that its agency is different to human agency and have outlined how I understand this in accordance with ANT and ideas of ecocentrism.

On the other hand, I am clearly an outsider to most local Rwandan people. I am a white-skinned economically secure Canadian. That being said, I am aware and grateful for my privilege in being in a position and from a background where I am able to step back and look beyond the here-and-now everyday needs of my fellow humans and focus on the environment (del Mar, 2012, p. 95). It turns out that the locals and organizations with which I worked thought positively about the fact that I was a Canadian studying in Norway. My French skills helped me gain access to French-working groups in Rwanda despite my different accent. I was fortunate to be able to have connected with local

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<sup>26</sup> This is the colloquial term for the local motorcycle taxis.

<sup>27</sup> As per Steverson (1994), the ecological understanding of land ethics (popularized by Baird Callicott) maintains that humans are a part of community that includes the land.

organizations that were eager for a greater platform on which they can promote their work and thus achieve more, so I was able to garner a positive relationship with my contacts.

### Challenges

There are challenges involved with conducting research in a foreign community, especially in terms of gaining trust and access. As a young female student conducting research in such a thoroughly researched country, it was sometimes difficult to justify to certain informants that my research and I were worth their time to discuss. Additionally, my research topic was quite abstract and my approach to interviews was to work off of their interests rather than demand the focus of the discussion to be on my aims. My work therefore potentially seemed less impactful to my informants than more established researchers' studies. I do feel that some of my more strongly established informants were selective about which questions they felt were worth their time to answer. Some of my more local informants, who were proud of new resources their organizations had available would sometimes direct me to look up answers for myself. I also understand that some of my research questions may have contributed to this attitude; for example, when I asked '*at what point [since the peace efforts began] did you/this organization realize the importance/necessity of doing the work you do? When did you/it actually start realizing the work?*' I was looking more for their inflections on the social situation, but the question was often interpreted as seeking a date so a factual answer would have been sufficient. Continuing the dialogue was helpful to explain further and get to the information I wanted.

In terms of personal security challenges that may have affected my data collection while in the field, my fair skin also played a role. It is hot and sunny in Rwanda during the dry season and so when engagements were conducted outside, I fear that sometimes my anxiety of getting burned and heat exhaustion could have translated into weaning engagement that may have brought discussions to a close earlier than they otherwise could have lasted. Further, if I had been more confident with the moto-taxis, I would have hoped to more thoroughly explore some of the environmental areas I studied. This lack of confidence was not solely born from the inherent dangers of riding on the back of unregulated motorcycles that do not follow the rules of the road, but also the language and cultural barriers that made it difficult for me to express where I needed to go and haggle a reasonable fare for the ride. Thankfully, my contacts were helpful in this regard by teaching me the Kinyarwanda words for 'slowly please' – *buhoro buhoro!* – and often directing and negotiating the price with the moto-taxi driver. Overall, I would say that the challenges to data collection I faced in Rwanda were mostly overcome and did not have an immensely negative effect on my research.

## Findings Chapter

This chapter presents data based upon my fieldwork in Rwanda. The data are presented thematically, according to main pillars of the peace ecology theory. These pillars are interconnectedness, bioregionalism, place, and sustainability. While the Rwandan example is an excellent starting point, it is important to note that many elements of peace ecology which were present in their peace initiatives were not consciously part of their initial plan, but evolved along with the peace process, hence its use as an instrumental case study. By seeing such positive results in Rwanda from initial unconscious inclusion of the environment to more intentional inclusion along the way a hint of the greater possibilities for the future full applications of peace ecology in post-conflict societies is promising.

### Interconnectedness

#### Defining Peace

Interconnectedness, as a component of peace ecology, deals with how things interact together. This theme allows me to analyze how looking at all the parts of the whole – holism – suggests how and when people consider their community and environment over themselves individually. I first address holism from the perspective of Rwandan culture as I experienced and understood it. My research suggests that Rwandan culture is rooted in community, connectivity, and support. According to Vision 2020, “since the 11th century, Rwanda existed as a nation founded on a common history of its people, shared values, a single language and culture, extending well beyond the current borders of the country” (Republic of Rwanda, 2000). My experiences and field notes support this sentiment, as indicated below:

*I was taking a city bus with my contact that I thought was completely full, but she went in and said, “Here Marisa! There is a seat!” The seat was the in-between of two seats, but the people were cool and invited me to sit and were chill about it. I joked that we were now good friends since we were sitting so close, and it was true!*

This community spirit is also true in more official community capacities which I found as my host explained to me that life has always been about community and working with neighbours. His community has a WhatsApp group called ‘Good Neighbours’ which they use to help each other out for things like funeral arrangements and more general sharing of community news.

At the Kigali Genocide Memorial (KGM), I learned that since the Genocide against Tutsi, youth appreciate and understand this community bond as it was necessary for their survival. The youth know the value of Rwandan communalism from their own firsthand experiences, but also because the narrative of the country has been pushing them towards a ‘One Rwanda’ ideology. CAPR2, one of my key informants of the CAPR organization, explained that “the youth don’t know the Genocide nor the tensions from before the Genocide, they just always consider that people are one big Rwandan family.



Which is great! It's the older ones that sometimes forget or haven't fully caught on... especially about ethnical or different people divides.”

I had an interesting discussion with EM1 – my key informant connected to the Environment Museum – about how the Environment Museum actively attempted to follow a holistic ideal, from which I made the following fieldwork diary entry:

*Previously, the Environment Museum was divided into separate parts of the environment with exhibits on specific areas (for example, trees), but they realized that you can't study the environment like that. They ended up going with different themes relating to the environment instead (for example, energy) because they understand that the environment overlaps with itself, as do our interactions with it, so human-themes on how we deal with the environment are kind of the only/best way to break it down into study-able sizes. THIS IS ONE OF MY POINTS!!!*

EM1 further said that “Rwanda is so small, so it doesn't have a lot of natural resources, so we have to really take care to manage what we have well.” At this point he made a joke about them having a lot of people though! “Our human management systems work in themes, so that is the way we can look at the environment – if we have to do that sort of thing. They want to change the way Rwandans live their lives. BUT, the first thing is to KNOW! Without awareness, we won't be able to do anything!” This expression is an example of interconnectedness.

This holistic interpretation is embodied by all actors in Rwandan society. From advertisements capitalizing on the interconnection between community spirit and the communal effort to greenify the city – see Figure 4 – to artistic decisions about the design of the Campaign Against Genocide Museum (CAGM) exhibit rooms, with the choice of green coloured lights for their *Peace Process* exhibit because the colour represents peace and a nice natural life. The organizations I interviewed also worked under holistic definitions of peace that included several interconnections with the environment as well as other concepts. For example, the connection between food, peace, and the environment. When I was doing a training day with CAPR, I was told that the peace organization deals with food security and safety because you “can't say ‘peace’ to someone who is hungry.”

When asked for their understanding of peace, many of my key informants responded with holistic definitions that included a variety of elements. The Children's Peace Library (CPL) representative, CPL1, put her understanding succinctly, saying “when we have peace it means the time when we are in good conditions, emotionally, physically, and mentally. When people can think



Figure 4: An advertisement on the side of the road capitalising on the connections that the Kigali locals see between having a good time and having a good environment

and do their activities well, they have peace.” Also, “when you ate good and well, physically and mentally, morally.”

GER1, who represented the Global Initiative for Environment and Reconciliation (GER), defined peace as “life, behaviour, respect (of each other’s rights), being happy with where you live and with what you do, living without fear... Basically, peace means freedom.” Later in the discussion, he talked about the importance of peace being “not hard security.” He explained that “stagnation is also not peace. Peace is possible while in a time or situation of security, but that alone is a situation where peace is or can be built.” And later added, “when we have security, then we can build peace...when we have all the components of peacebuilding.” Already from these two answers we can see elements of society, physical and mental health, food, law, emotions, and security. Immediately after answering this, GER1 went into the definition of environment, which he finds to be intrinsically in peace and because he knew that this was the subject of my work. He spoke as if the absence of a healthy environment would mean there was no peace. “The environment is life. We are all creatures. We have the same life, rights. So, let’s live in harmony. We benefit each other.” In explaining his organization’s work, he explained how climate change and environmental degradation are most apparent in the East and South provinces where the topography is flat, and poverty is most evident. In his experience, poverty is most seen in areas facing the climate crisis, so “we need to protect the environment for our wellbeing. We want no fear of disasters regarding farmers’ production, for example.”

My key informant representing *Communauté des potiers du Rwanda* (COPORWA), who I herein refer to as COPORWA1, took a different approach to this question of peace answering on behalf of the Batwa People he represents. He said: “The Batwa always like peace. The Batwa are People who don’t like conflict with others. Peace is working with honesty. They always like peace.” He did not use any specific concepts as my other key informants did, but the idea he was evoking of a People who work together and strive for peace is a positive and holistic understanding. Further, CAPR as an organization has a lot of documentation expressing their holistic views of peace, and I noted a couple of things CAPR1 told me in connection to this: “The more you work together, the better to fight to achieve peace with” and “If I want peace, I have to give it my neighbour.” Further, CAPR2 told me that “peace means being calm with your heart, your neighbours, and the environment,” which was a positive and holistic definition. CAPR2 actually brought up the term ‘holistic peace’, saying that it was “a force that we need to act on.”

In discussing how Shelter Them (ST) contributes to peace in the country more broadly, my main key informant ST1 took a long pause and when he noticed I was waiting joked “hmm, how to articulate.” He was pensive when giving his explanation and all but apologized when he did not know how to explain more. To help him articulate I asked him for his understanding of peace, to which he said, “Peace is very wide. No food is no peace. Broken family is no peace. Refugees is no peace,” and these are all aspects that ST is addressing through their programming. I pushed him for a definition

that was not a negation and he told me it could be “state of mind and surrounding where you feel freedom, opportunities, stability, there is development...state of mind inside you where you feel you live well, not traumatized.”

To support my interviewees’ connections to environment, many informants also gave their understanding of what the environment is. For this specific connection, EM1, after giving me a look that said, ‘the environment is important for peace for the obvious reasons,’ talked about management of resources. As in, if the natural resources of the environment are well distributed there will be peace. If they are poorly distributed, then there will be conflicts. Interestingly, many other informants were struck at the request to explain their thoughts on the environment. COPORWA1: “You asked about the environment. The environment means many things. The surroundings. What surrounds us is the environment.” CPL1: “the environment is everything around us, especially the nature and the people but not really the buildings or animals.” On the other hand, FONERWA1, who represented the Rwanda Green Fund (FONERWA), wanted to clarify what I meant by ‘environment’ because he includes the built environment in his working definition. For him, the environment includes the natural environment – specifically natural resources (named as the most important to his organization) – and the built environment – specifically infrastructure, which he called “our own environment.” CAPR2, in bringing the definition of environment back to that of peace, contributed, “the environment keeps people healthy because the environment is life. We cannot have peace without a healthy environment.”

REMA1 of the Rwanda Environment Management Authority (REMA), is of the opinion that the environment has no boundaries, hence all environmental-related issues are transboundary issues. In the Rwandan context, all issues eventually turn into questions of peace. REMA works on peacebuilding and environmental protection. Strictly speaking the environment is not considered by them as part of peace, but the organization does address peace issues. If conflict arises over building being done, REMA investigates and forces closures if things are not being done to code. They also explain their policies to all parties involved, because education is important for people to understand. REMA has accomplished much in addressing ecological violence on a structural scale, so I mentioned to REMA1 my surprise at how that could be so positively addressed before poverty was. She disagreed by saying they were concurrent issues. Environmental Poverty Initiatives are programmes they undertake to help the environment in a way that helps poor people. For example, projects like Green Villages are being designed.<sup>28</sup> To summarise one of her points, she told me that eventually

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<sup>28</sup> Both REMA and FONERWA have developed toolkits for the implementation of Smart Green Villages in the country and have seen initial success since their first Green Village was launched in Rubaya village in 2011 with the UNDP-UNEP Poverty and Environment Initiative Programme. Green villages, also known as ecovillages, are a solution to the international system’s ingrained ecological degradation as they holistically integrate community-level sustainable practices as a sort of proof that humans can thrive while living harmoniously with the environment (Singh, et al., 2019).

there is no way to protect the UN Sustainable Development Goals<sup>29</sup> without crosscutting them because all touch on all parts of people's lives; "Tackling measures together is the best method. Selfishness is bad."

Similarly, many of my key informants would eventually give an answer to how the environment is involved in peace after pausing and considering, but there were a few that refused to identify a link because it went beyond the stated scope of their institution's mandate. FONERWA1 made it clear that FONERWA's directive is specific in that they deal only with disseminating money to deal with the environment and climate change issues. Their mandate states: "To respond to Rwanda's current and future financing needs for environment, climate change, and green growth to accelerate goals of national sustainable economic development" (FONERWA, 2019). They are a government mandated organization with an institution divided into separate tasks, representative of the political divisionism embodied in the international system that makes a holistic view of the environment impossible. FONERWA aims to increase the resilience of the people and lower poverty, specifically relating to environmental issues. While my contact made it clear that the organization is there to build resilience, it is not in their mandate to concern themselves with what happens with that newfound resilience.<sup>30</sup> They seem to understand 'building resilience' as reducing poverty, which they find important because poverty is what is deemed to be the biggest contributor to detrimental hardships in life (ecological degradation). FONERWA and several other environment initiatives focus considerably on poverty reduction, predominantly through positive environmental action since Rwanda's 2008 Economic Development and Poverty Reduction Strategy. FONERWA1 explained (after we built a rapport) that they probably are too restricted by politics to make the connection to peace. However, even as my contact was explaining this restriction in wording, the organization's base understanding can be interpreted as more holistic than the official mandate claims. Links are present. To determine their baseline of poverty, they use an environmental lens<sup>31</sup> to examine gender and equal opportunities.

### Making Connections

I used the words "funny" and "cute" in my fieldwork diary when reflecting on the times my contacts would try to show me how seemingly unrelated things are connected to the environment because they knew that my thesis is about the environment acting. This increasingly occurred with my main contact when I mentioned that I was getting a lot about the peace aspect of what was happening in Rwanda, but not as much about the environment. It is interesting that I, as a non-local, seemed to be a factor that brought awareness to the environment that allowed people around me to 'find' nature and

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<sup>29</sup> Her reference to the UN Sustainable Development Goals shows how Rwanda is developing inline with the environmentally degrading international system.

<sup>30</sup> In the Sustainability theme later in this chapter, I discuss the idea of follow-through on initiatives and will bring this example up again as resilience is an important concept.

<sup>31</sup> The environmental lens is an approach that increases awareness in programs that are not specifically aimed at environmental causes of their relationship with the natural planet to help determine whether things are 'done right' (Ulfsax, 2013).

make new connections. This was particularly true at the Campaign Against Genocide Museum (CAGM), where I was able to chat with CAGM2 about the environment's role in the Campaign Against Genocide. He first told me a story about bees, which I noted as follows:



Figure 5: A view of the Kigali Heights area from the roof of the CAGM. This area used to be entirely forested

*In what is today known as the Kigali Heights area, the presidential guard was confused why the rebels weren't coming any further (they thought they were winning and had the rebels too afraid to advance) but in reality the RPF knew that those trees in which the presidential guard were hiding were full of bee hives. Because they understood their environment, they were able to get the presidential guard to shoot and attract all the bees who attacked them and helped the RPF/rebels win that battle.*

He further went on to explain other examples of environmental agency that were not included in the museum. Mt. Rebero was highlighted in the museum for its importance, but CAGM2 told me about the Murindi Mountain. This place was chosen by the RPF as their area base because it was deemed the most strategic due to it having a good vantage point while not being the tallest mountain and would therefore be unassuming to the Presidential Guard and easier for the people they saved to walk up and over. He also mentioned that the university arboretum was used by many people to hide and how the sorghum plants<sup>32</sup> saved many lives.



Figure 6: A view of Mount Murindi surrounded by the other mountains from the roof of the CAGM

I was shocked to hear all of these incredible stories, but even more shocked that none of them had been featured in the museum. CAGM2 explained that the environment was kind of there, just not mentioned explicitly and added that maybe some of the environmental stories are personal stories that survivors did not want to share. This is a critical point; the environment is already an agent in peace, we humans just do not acknowledge it all the time. To summarize his point, the reason the environment's agency shown throughout the Campaign against Genocide was not presented in the

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<sup>32</sup> The sorghum plant deserves a study of its own for each act of defence and defiance it performed during the Genocide against Tutsi. These plants helped save people by hiding, feeding, and providing for those trying to escape the violence. It does not fit within the realms of this research to expand on this plant's agency, as I am focused more on overall structural change. I do however encourage you to look up survivors' stories available in the *Genocide Archive of Rwanda* to get an idea of how significant these plants were as agents of peace.



museum is because the organizers had to summarize what happened. This means there was no room for stories about the environment because the Campaign against Genocide was an anthropocentric issue, and while he admitted that humanity includes the environment, it was chosen to not be broadcasted. That did not stop him though as he latched on to all the tiny things that the environment does for us, going as far as to remind me that people had to use firewood for warmth and got water from rivers and lakes. As I am analyzing my data, I realize that I wrote ‘funny’ and ‘cute’ because the way they would mention the environment was just so simple that I would not have thought it merited an explicit mention. It apparently did to them because they were not thinking the same way I was. I was looking at interconnectedness on a more structural plane, but the reality for them is practical. This is an example of how the Rwandan museums are following the broken development systems of the West by focusing on what the international system would find most relevant about this history, rather than what locals know, thus encouraging the West’s separation from the environment.

Other informants who work specifically on environmental issues had different understandings of the connections. For example, REMA is in charge of the protection, conservation, and management of the environment. Towards the end of my interview with REMA1, as a way to thank her and go over what had been said, I asked if she was familiar with the term ‘ecocentrism.’ She was not, but she was intrigued (as everyone was who I brought this to). She instead explained their use of ‘ecosystem accounts,’<sup>33</sup> which is what they do that is similar but rooted in anthropocentrism and capitalism. Although this did not match my own understanding of interconnectedness, it illuminates that these sentiments are in circulation, but perhaps in different forms. In other words, this government agency’s understanding of the theme is important to understand, and shared understandings may simply be a matter of different labels. FONERWA1 put it well; “Individuals will tell you, not with the words of climate change, but they will know. It affects them. They see it most in their quality of life.”

### Connections through Education

Generally, the most common way of imparting this interconnectedness systematically is through education, where “holistic education addresses fragmentation and disconnection of modern, technologically mediated human life” (Brantmeier, 2018, p. 81) and aims at “integration and connection – connection with self, other, community, the natural world, and the transnational” (Brantmeier, 2018, p. 82). This is most relevantly expressed through a holistic peace education curriculum that includes sustainability education. Brantmeier (2018) explains that while “holistic education can be considered an antidote to disconnection from place, fragmentation, violence, and unsustainability” (pp. 83-4), “peace education can be understood as education for the elimination of direct and indirect forms of violence” (p. 88). One of the points of interconnectedness is addressing

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<sup>33</sup> REMA1 explained to me that, ‘ecosystem accounts’ is when they take account of the ecosystem in order to find its monetary value to humans. They consider the natural heritage of the area in order to determine the benefits of the local nature for humans in order to know what to protect.

the different forms of violence (which have effects on the environment) with the goal of creating a truly peaceful society.

The national peace education curriculum founded in Rwanda post-Genocide was created with those same goals in mind, however it seems to have missed the complete holistic tie-in of the environment. I was able to speak with IRDP1 of the Institute of Research and Dialogue for Peace (IRDP) and was quite surprised to learn how my contact emphasized the “nope” and “nothing” of the environment in the organization’s work. IRDP was the organization that penned Rwanda’s national post-Genocide peace education curriculum. IRDP1 asked me what I meant by environment because his first impression was the political environment. After I explained, he admitted that the natural environment is important and should probably be considered, but he has not included an environmental dimension to any of his organization’s programs. I found it interesting to note that IRDP1 was the first Western-education PhD with whom I connected and is one of the few who does not automatically incorporate the environment into his working consideration of peace.

That being said, smaller education organizations and community education initiatives are open to the more interconnected version of peace education. I sat down with another key informant at ST, ST2, who did say that as the environment improves, the learning does. It is holistic at ST – anthropocentric, but holistic. I expand on ST’s holistic approaches in the Sustainability theme, but for now I highlight how their play-based approach to learning gets the kids outside to learn the value of all of the environment’s elements. It was explained to be that ‘environment as education’ was not really a focus, rather that the kids need a healthy environment in order to be able to be in school; “If they are scared or hungry or didn’t sleep because they don’t have a place to go, they cannot learn and cannot grow.”

Further, to CPL1, interconnectedness of peace, the environment, and reading is clear. When I asked about whether the environment was relevant to her work on promoting the cultures of reading, peace, and peer-mediation, she gave me a look that clearly meant “DUH!” but politely said “the environment is very important.” She did make clear her point that people have to first take care of themselves, then take care of environmental concerns but that they must be taken care of if peace is to really be; “everything around us affects our state of peace, and the environment is all around us.”

When I asked her to tell me the organization’s role and aims, the question really turned into why CPL is a peace library instead of a regular library. The idea behind the peace aspect to the library is that it is about reading and peer mediation for resolving conflicts, but also for the children to be knowledgeable, aware, and confident enough to help when they see others in conflict. It relates to peace in the country more generally by addressing the young. As CPL1 explained, “Kids are open to doing everything and anything you want to teach them, and they are happy to do it with others.” The ‘Peace Kids,’ as they are referred, work with the school environment groups when they have overlapping events, such as cleaning (indoors and outdoors) and planting trees to make the surroundings more peaceable. I asked, latching on to the tree planting, if the kids understand the



environmental-peace connection or if they question it and what she would say. She implied they were generally open and willing. She did say that sometimes they question the connection to peace when they plant things, but they quickly understand the connection (interconnection) and are happy to do it. The explanation is akin to the one I received throughout my time in Rwanda, that everything is connected and that you need a good place to live if you are going to feel good.

Further, while the official education system is lacking in interconnectedness, the government in its Vision 2020 identifies ‘six interwoven pillars’ and recognizes the interconnection of three cross cutting issues: gender equality; natural resources and environment; and culture, science, and technology. This recognition seemingly comes from the understanding that there are several forms of violence in the country which contributed to the Genocide against Tutsi and need to be overcome for peace development. The only way to tackle them is with a holistic plan as the document states “Economic growth, alone, is not sufficient to bring about the necessary rise in the standard of living of the population”. In fact, “This Vision is a result of a national consultative process that took place... There was broad consensus on the necessity for Rwandans to clearly define the future of the country. This process provided the basis upon which this Vision was developed” (Republic of Rwanda, 2000) and so it is clear that the Rwandan community is aware of the interconnected ties of the various means of their lives and the government is acting on it.<sup>34</sup> This understanding extends and is possibly even more practiced by local NGOs, as explored previously by their diverse initiatives. Indeed, community-driven initiatives were much more connected to this holistic way of thought and were taking the interconnections identified in the Vision 2020 into the wide breadth of interconnected topics each of the NGOs covered. The following three themes – bioregionalism, place, and sustainability – all have components of interconnectedness. Seeing all of these connections helps us focus enough to answer my research questions in the next chapter in order to see firsthand how the environment can act for peace.

## Bioregionalism

### Bioregions in Action

Bioregionalism is another one of the pillars of peace ecology. A bioregion is an area defined by its “natural features rather than arbitrary political boundaries” (Evanoff, 2017, p. 56) while still being a cultural rather than scientific classification. This is so because “bioregionalism attempts to overcome the “nature vs. culture” dichotomy by seeing the two as forming a symbiotic relationship with each other” (Evanoff, 2017, p. 56). Dawson and Martin (2015) studied the links between ecosystem services and human wellbeing in Rwanda to get a better understanding of this connection.

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<sup>34</sup> While this thesis is not challenging the contents of Vision 2020 nor examining how the goals have been effectuated, I do not mean for this to read as placid agreement or support for the Rwandan government or President Kagame. I am not using this thesis to evaluate the effectiveness of the government to carry out their goals. Rather, my aim is to identify the links to peace ecology in the hopes of better and more integration of holistic goals in future post-conflict societies. I am simply looking at connections and goals of post-conflict societies and how the environment can be connected early on in the process.

They write that “more integrated landscape governance may offer synergistic opportunities for conservation and development” (p. 62).

Lake Kivu is an extraordinary bioregion that actively contributes to lifestyle decisions. Both REMA and FONERWA have projects relating to this bioregion (or biological environment, as it is referred to). According to a REMA report on Lake Kivu Islands’ biodiversity (2012), Lake Kivu is the biggest lake in Rwanda with 42% of its total area of 2370 km<sup>2</sup> belonging to Rwanda. It is a young mountain lake with “great depth and very steep shores” (p. 9) and experiences alternating dry and humid seasons with average rainfall and temperatures that are different to other areas of the country due to its continental tropical humid climate and geography.

I was able to spend an afternoon participatorily observe the area with my main local contact, as well as spend some time with a family who lives in the area. In my field notes, I write:



*I love the lake. The breeze is so nice and the water and hills in the background are perfect. So perfect. I could spend all my time here. I feel so relaxed. The water is so nice, the perfect temperature. Despite my personal aversion to water because of the scary and dirty things living inside it, I didn't even care about touching the algae because that is how clean the water was – it was therapeutic.*

Figure 7: Enjoying Lake Kivu

Even the walk to the Lake from the Environment Museum (purposefully erected in this Lake District) was beautiful, I described the way as “the road through the enchanted forest” and took a long time walking it for all the pictures I took.



Figure 8: Lake Kivu was visible from all over town



*Figure 9: My local contact wanted me to take this picture of the beautiful red tree surrounded by the beautiful green forest*

In Rwanda, REMA1 explained how the government protects waterways by banning any sort of development projects within 50 metres of the ocean and 10 metres from lakeshores. These ‘buffer zones’ are important for preventing the negative impacts of construction on the fragile environment. Nevertheless, the locals have integrated the water into their everyday lives. My contact chatted in Kinyarwanda with a local boater about his life with his boat, we watched a local boy come down to the lake to wash his legs, and someone from the kitchen of the nearby hotel came down to collect water to use for their toilets.



*Figure 10: The local boater’s boat on Lake Kivu*



*Figure 11: Locals going out on their boat to fish*

During this period of participant observation, I learned a lot of about the security of the region from my contact’s translations from the locals. I had not even thought at all about security, but it is high on Rwanda’s list of priorities since the Genocide against Tutsi.<sup>35</sup> The lake environment is policed. The Marine Unit of the police force look out on the lake to ensure that people are not abusing

<sup>35</sup> This understanding comes principally from claims my contacts have made. My host, for example, has been working with his neighbourhood to organize among themselves security patrols of the streets in the neighbourhood because it is important for them and, while the government encourages it, the government cannot afford to organize these practices. I did see many armed security guards at almost all building entrances and exits, including malls, museums, and parks and whichever local contact I was with would assure me that this was a normal practice and one that was appreciated. This is also in line with Western ideas of post-conflict security, as outlined in the Literature Review Chapter.

the environment. Strict rules are in place regarding how much fish you can catch and what equipment needs to be used, there are mandatory coops that fishers must join to aid in the management and oversight of water resources (Rwanda National Police, 2018; 2015). The fish that the kids of the family with which we were staying catch make up a significant part of the family's diet, and while eating those tiny little terrifying creatures made me throw up out of horror, it shows how the bioregion helps determine the locals' culture in their diet (we never ate fish in Kigali because it was not found in the area and thus more expensive).

REMA publishes a report on the 'State of Environment and Outlook' in Rwanda, as well as reports on projects more specifically focused on Lake Kivu's biodiversity where aspects of socio-economic and other cultural factors partially determined by and affecting the bioregion.<sup>36</sup> It includes information about socio-economic findings which "revealed that various human activities are still taking place extensively in the islands. There is a lot of farming, animal grazing, and handcraft making using raw materials collected from the forest; there is also fishing, charcoal burning and firewood and medicinal plants collection which invariably indicates strong relationship between ecosystems of the area and human activities" (REMA, 2012, p. 8). This supports the idea of bioregionalism as it is more of a "sensitivity and an environmental ethic than as a science" (Evanoff, 2017, p. 57) and is unlike environmental determinism<sup>37</sup> because it allows for humans to develop their culture dialectically within the nature they inhabit. So, if a society were to adhere to bioregionalist attitudes, they would allow the environment to help determine their local lifestyles. In this way, environmental agency is clearly being shown through the effects of its action which is the (bio)region's culture.

FONERWA (according to FONERWA1) was the first organization who openly acknowledged and used the term 'environmental agency' and understand it much the same way as me (except for their anthropocentric opinion on the reason it is important). To explain this, FONERWA1 used the example of a particular industrial park that was built in a wetland which stopped the wetland from being able to do its thing. Now, that they have realized this "constraint of agency," a law has been created that prevents anything from being built that hinders wetland activities. "In order for greening efforts to be real and actually bring about a positive effect you, the locals, people need to understand (for example) why the locals are encroaching on the (ex.) river and give them alternatives that will enable them not to have to do that anymore!" It is about understanding. He went on to explain that these alternative solutions, sometimes come from innovation, but often the locals know the answers;

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<sup>36</sup> All of REMA's reports are available on their website. While I am mentioning them, I am not going to go into detail of these secondary sources of data because I am not looking to copy work that others have done, but rather bring attention to already present bioregionalist connections while bringing forward a new (ecocentric) outlook. Simply referencing this information and focussing on my collected data is appropriate for this project.

<sup>37</sup> Environmental determinism "is a principle which states that human activity, culture, and physical and mental characteristics are, at once, informed and inhibited by the geographical and climatic conditions of the physical environment" (Keighren, 2015, p. 720). It is a natural science term and leaves no room for humans to adapt their environment, as bioregionalism does.



“Most of the answers come from the communities. All it takes is asking them.” He used the term ‘natural capabilities’ and maybe if I also adopted that term, it would be an easier way for people to understand environmental agency.

Moreover, the Provinces of Rwanda Garden at the KGM<sup>38</sup> represents “the beauty and diversity of all provinces in Rwanda,” according to notes taken from the KGM. Plants and symbols Indigenous to the 10 Rwandan provinces at the time of the Genocide against Tutsi and celebrated for their traditional uses represent each bioregion as well as how they come together in one solid whole to represent the inseparableness of the Rwandan bioregion as an entity. There are local bioregions (Lake Kivu) that come together to make up larger bioregions (the country of Rwanda) and Rwanda (with its post-conflict peace initiatives) is looking towards an even bigger bioregion of Africa and the globe with which to share its knowledge with their positive peace agenda. For example, the Rwanda Demobilization and Reintegration Commission (RDRC) is well respected by global peace scientists and often hosts delegation from other African nations to teach their best practices of demobilization and reintegration of ex-combatants from the RDC jungle into Rwandan society. To a 2018 Sudanese delegation, RDRC Chairperson Madam Mukantabana Seraphine commended the Sudanese for choosing to learn from Rwanda and said; “Remember we are all Africans and therefore we have something in common...Peace is a prerequisite in any developing country” (Grace, 2019).

### Ethnicity

As we have explored in the Literature Review Chapter, it is important to remember how colonizers redefine and create aspects of local cultures to suit their goals. I learned from the KGM and KGM1 that colonization greatly changed the country and its people. The arrivals of Europeans saw the European way of life – with emphasis on roads and their structured systems – change Rwanda. It destroyed Rwandans’ traditional way of life. The colonial process created ‘arbitrary political boundaries’ which were unnatural both to the locals’ way of life and to the environment. Europeans found one people when they arrived and created divides. This sentiment is also present in Vision 2020:

*The colonial power, based on an ideology of racial superiority and in collaboration with some religious organisations, exploited the subtle social differences and institutionalized discrimination. These actions distorted the harmonious social structure, creating a false ethnic division with disastrous consequences.*

While spending time in the KGM, I learned more about this colonial history and its contribution to the Genocide against Tutsi. The Belgians in 1932 introduced the ethnic classifications of Hutu, Tutsi, and Twa with ethnic identity cards. The division was made based solely on socio-economic classification – if you had 10 or more heads of cattle you were a Tutsi, and if you had less you were a Hutu. These socio-economic classes were created from the 18 original clans in the area and afterwards

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<sup>38</sup> At the Kigali Genocide Memorial there were eight gardens and a forest outlying the memorial compound representing different aspects of environmental agency in their own right with each garden representation. They should not be missed when paying respects to the Genocide against Tutsi victims.

the colonizers made the distinctions racial instead of socioeconomical. The ensuing ethnic divisionism led to conflict and violence which culminated in the Genocide against Tutsi that brought about the post-Genocide peace initiatives discussed in this thesis. It was part of these post-Genocide initiatives that the government of Rwanda abolished these ethnic classifications as part of Rwandans' identity (Tabaro, 2015). They did this to counter divisionism in the country between the Rwandan people and promote nationalism in the state (Lacey, 2004). Even CORPORA1, representing the marginalized Indigenous Batwa Peoples,<sup>39</sup> agreed that "It was after the genocide we, our country, stopped being Batwa, Indigenous, etcetera which helped the country" even though it did not help the Batwa people from being marginalized.

He explained that "there are also good actions that are happening because kids (of Batwa families) are going to school and universities." My host further told me that "kids now won't tell you which ethnicity they "are." Old people have discrimination still. Now we are the same. We don't value ethnicity. All this contributes to peace.' Nationalist sentiment (as explored in the Literature Review Chapter) was the inciting factor that pushed the government to abolish these made up ethnicities. However, this decision is in line with bioregionalist thought. Now, Rwandans are better able to live their lives together, with each other and their environments. They have the chance to redefine their way of life to suit their needs, needs at least partially determined by their bioregions. This demonstrates a certain amount of agency imbued to the environment and is a start to erasing the divisions humans have created against the environment.

However, this change away from ethnic identities is not always thought of as a positive shift. Firstly, as we have seen globalization contributing to the environmental policy paradigm, ethnicities can be understood as cultural diversity and cultural diversity can be seen as biological diversity (Heyd, 2010). Erasing these different cultures and promoting a 'One Rwanda' nationalism could in fact be promoting a Rwandan monoculture instead of being true to the bioregionalism that "champions learning and extending the lore of local cultures, including their customs, myths, and rituals" (Evanoff, 2017, p. 60). Yet, as Rwandan ethnicities were constructed by an outside colonizing force and not formed naturally by the locals or environment, this is not an exemplification of globalization losing cultural and biodiversity. Rather, by getting rid of such obscure unnatural divisions, the locals are able to foster traditions that connect with their land while better understanding their position within a greater system.

Secondly, the issues brought forward by the Community of Potters, which is a group of Rwandans who were formally considered and referred to as the Great Lakes Batwa Peoples and claim to be the Indigenous peoples of Rwanda. I learned about the struggles of these Batwa people from my interview with COPERA1. "Traditionally the Batwa lived as hunters and gatherers, all throughout history from many years ago. So, traditionally, the Batwa did not know about agriculture or raising

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<sup>39</sup> I will herein use this term to describe this group of people because that is the term used by my key informant.



livestock because they lived in forests and not had lands... They were forced to learn". The Batwa used to live off the land in the forests and mountains but with Rwanda's new focus on no ethnicities and preservation of the environment, their traditional ways of life are virtually impossible and they have been pushed into Rwandan society where they face severe poverty and have (not successfully) turned to pottery as a source of economic income. My contacts at CORPORWA were so insistent on how difficult it is to transform your way of life when you are forced to change habitats; adaptation in the wild takes generations but at the rate the planet is changing because of climate change species are facing the highest rate of extinction on record (UNEP, 2019). Before the Genocide, 50 000 people identified as Batwa, now there are only 35 000 Batwa left, and they are in danger of becoming extinct if there is no change "because the loss of identity. Without your identity you don't have anything" (CORPORWA1). Humans are also struggling with extinction partly because of the environmental degradation of bioregions.

This can be understood more as the state of Rwanda not carrying out peace ecology or following through on the idea of bioregionalism fully. The abolishment of ethnicities, as I explained, came from a place of necessity to recover from the Genocide against Tutsi as swiftly as possible to address grievances of the citizens and was done without the knowledge of peace ecology or the benefits of bioregionalist thought. According to Evanoff (2017) a key bioregional concept is *reinhabitation*, which "involves becoming native to a place through becoming aware of the particular ecological relationships that operate within and around it," (p. 58) as well as "evolving social behaviour that will enrich the life of that place, restore its life-supporting systems, and establish an ecologically and socially sustainable pattern of existence within it" (p. 58).

I brought up these issues of the Batwa people in my group interview with the Health Development Initiative (HDI). They are aware of this concern and are trying to address this through one of their projects aimed at the Community of Potters. HDI is advocating for the rights of this group of people because they used to live in forests, without access to health care or education because they were not part of the system. The government tried to help them adjust to this new lifestyle by building houses and providing each family with a cow or goats but it was difficult for them to create income because they had no land titles, without which they could not get loans to generate business. The forest was their economic means, but the government tried to adopt an alternative, sustainable, approach to help them. It turns out that many families sold their cattle for one year's income, which was not sustainable as it did not help anyone long-term. A question that HDI is still asking themselves is "Do we keep them separated, to be themselves and never change? Or do we put them with others to see the others' compounds are clean so that they learn by absorption and they will change?"

The point my contacts at CORPORWA wanted me to take away from our interview was that by forcibly removing the Batwa from the forests, it changed their whole way of life. Their culture was informed by their bioregion – the forest – and now their new habitat was forcing them to change their culture. At this point I asked my contact if the state of the forest changed after the Batwa people were

forced out and the government could focus on protectionism. His reply was that “Well, the forest stays the forest.” He did not seem to think there was a real change because the “Batwa are the forest” and kept it healthy anyway. Though he did express the Batwa’s frustration with this turn of events because with the new National Parks, they have no access to their old ways of life. From the point of view of the forests, he was hesitant before responding on whether it would be healthier for the Batwa to continue living within it or for the government to protect it, but “that’s more of the point of view of the government, they think the National Parks are better for conservation and the Batwa don’t bring anything to the forest.” But in reality, he says in reference to the Batwa, “they were protecting the areas.” As the organization that implemented these National Parks, REMA, according to what was explained to me, believes in their mandate of helping the environment. Preserving the environment is how they understand the best way for the environment to help itself, as it has the goal of protecting ecosystems so they can continue performing their functions from which we benefit. It is not the purpose of this research to judge these practices, but this is a good example of how further study and application of peace ecology efforts could be beneficial.

### Thinking Local, Acting Global

Evanoff (2017) explains, “promoting biological and cultural diversity at the local level enables bioregional communities to both preserve their natural environments and prevent them from being exploited by others” (p. 60), which we can see in the ways that local communities are taking charge of the development of their communities and local customs. KGM1 explained to me that:

*Post Genocide Peace initiatives were mainly led by Government willpower. In 1999 there was a consultative meeting by Government officials and Government stakeholders to track all the key issues to think about in order to rebuild our nation. That is where the Unity and Reconciliation Commission started. Memorial sites also started in the same period. The main focus for them was to have respectful places where Victims would be decently buried and raise awareness of the magnitude of what had happened. Though other institutions like churches were to take that in their hands as part of vast healing process, but also to recover from its failure and help Government to restore hope.*

Rwanda’s government-mandated Vision 2020 was created at this time after a national consultation process between 1998 and 1999 which “involved Rwandans from all walks of life, including leadership of all levels in the business community, government, academia and civil society” (Republic of Rwanda, 2000). While the push for community-led development did seem to originate from President Kagame<sup>40</sup> and the government, it was the communities carrying it out that made the reality. The *Gacaca Courts*, which started in 2002, were an example of this community action as decisions about verdicts were made communally. *Gacaca* means grass in Kinyarwanda and I learned from the KGM that these were a sort of ancient traditional courts based on forgiveness and dialogue. They gave ex-perpetrators the options of community service – like building roads, making bricks, rebuilding

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<sup>40</sup> President Kagame is the current leader of Rwanda. He has officially been President since 2000 and acted as a *de facto* leader since the end of the Genocide in 1994.

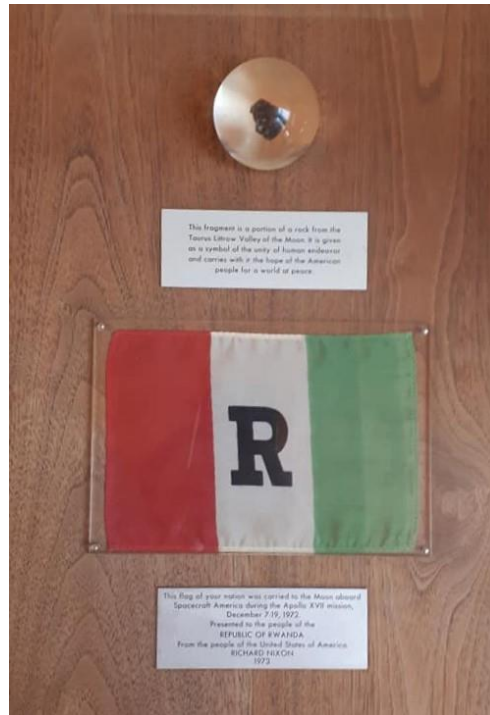
houses for survivors – as a way of showing their retribution to the victims and help to rehabilitate them with the survivors.



Figure 12: A community meeting place in the Kayonza District where local authorities and community groups meet to discuss community matters. This circular outdoor space with natural elements is representative of images I have been shown of how the Gacaca Courts were arranged and carried out

The government is supportive of this tenet of bioregionalism that calls for bottom-up, decentralized, community-led development and social organization in tandem with the local environment. Vision 202 states “People’s participation at the grassroots level will be promoted through the decentralisation process, whereby local communities will be empowered in the decision-making process, enabling them to address the issues, which affect them, the most.” The RDRC also embodies this community-orientation to the returned and “urges beneficiaries to work with others they found in the community to overcome the challenges they face in their day to day lives” (Grace, 2019).

In the introduction area of the Environment Museum, a display of the solar system reminds visitors to understand our real position in the universe, and they also hope to inspire Rwandans to want to explore space – explore beyond Rwanda. EM1 and the museum try to inspire people to explore and choose their own paths. He wants Rwandans to think independently, critically, as well as be curious about life and outside opportunities. He told me that they are a growing nation and the people need to lead the way. Further to this, in my discussion with ST2 on education in Rwanda I was told how important he thinks it is to travel. He told me that one of the bad side effects of Rwanda getting rid of ethnicity and becoming such a good place to live is that less people want to leave to see what else is in the world because they love their home. He thought I would become an expert because of my opportunities. He is going to be sending his child to China or India for part of his education because it is so important to learn about diverse cultures. CAPR2, in discussing similar issues, told me that I was *ni nyampinga*, which he explained as a beautiful strong girl who is confident and ready to travel and be her best self by learning and growing; “here today, Europe tomorrow, and Nigeria the next day.” That is what he wants from all the Rwandan youth and especially girls.



*Figure 13: This display of the Rwandan flag that travelled to the moon along with a piece of the moon is meant to inspire Rwandans who visit the museum that they are connected on intergalactic levels and so anything is possible*

Again, while Rwandan authorities did not purposefully try to adopt bioregionalism in their country post-genocide, by listening to their people and examining their situation they ended up implementing a new form of state organization that is similar to bioregionalism in many ways. This included allowing for natural bioregions to determine culture, promoting bottom-up, community-driven organization, and a good understanding of the importance of living locally for Rwanda but being connected in important ways to the rest of the world. This is incredibly encouraging for peace ecology enthusiast to see happen so organically in a post-conflict state, and gives me hope that if broader knowledge was available on what bioregionalism or peace ecology is and its possible benefits, then it could be more effectively implemented and lead to even greater success than we have seen in Rwanda.

## Place

### Places in Rwanda

According to National Geographic's Resource Library, "one of the oldest tenets of geography is the concept of place" (National Geographic, 2020). As with most important concepts in the social sciences, it has many understandings. For the purposes of this research we understand place as "an area having unique physical and human characteristics interconnected with other places" with the tenet that "place can be applied at any scale and does not necessarily have to be fixed in either time or space" (National Geographic, 2020). This thesis, with its ecocentric view, is more focused on environmental places whose, as Scannell and Gifford (2017) explain, well-being benefits most often involve positive emotions, comfort, entertainment, and connectedness to nature, as well as geographic spaces which "provide belonging, which is not surprising given that place identity often develops at urban, regional, and national scales" (p. 265). I have in the previous theme explored the idea of



bioregions, which could be interpreted as ‘place.’ However, in order to make this analysis simpler and based more on the data I recorded; ‘place’ is in reference to smaller areas than a bioregion.

Before arriving in Kigali, I asked a group of locals on a web-platform *InterNations* about what sort of green spaces there were in the city. One person responded that “Kigali is a generally green city, but there aren’t many public parks, unfortunately.” Mount Kigali was recommended as a great place to enjoy a walk through the woods and see a beautiful view of the city. On my first full day in Rwanda my host was kind enough to take me around and we climbed Mount Kigali. It was beautiful. We saw only one other person aside from the two armed officers at the police checkout. We could smell nothing but the trees, though we had to be careful about the slippery pine needles on the ground!



*Figure 14: This rock atop Mount Kigali is ‘the place’ where the locals come to take a photo when they climb to the top. My host told me that “it is apparently very cool for the youths”*

The Camp Kigali Belgian Memorial is a place which holds symbolic meaning relating to the Genocide against Tutsi. It is the memorial the Belgian soldiers who were murdered at the start of the violence and a place where Rwandans and visitors can come to remember and pay their respects.



*Figure 15: A view of the memorial erected for the Belgian soldiers who were murdered. Each stone represents one of the deceased soldiers*



*Figure 16: A view of the outside of Camp Kigali, the bullet holes remain from where the Genocidaires attacked*



*Figure 17: Inside the building, where remnants of bullet holes remain, there is a remembrance plaque where people come and pay respects. You can see flowers left in the corner.*

My favourite place in Kigali was the rooftop garden café at the Kigali Public Library. It is where I would spend most of my time compiling my notes, preparing and going over interviews, doing research with the local materials, and relaxing after a long day of thesising. I have many comments in my fieldwork diary about how much I loved it there with the breeze, the view, and the butterflies that would fly by.



*Figure 18: My favourite place in Kigali was the Shokola Storytellers Café at the Kigali Public Library. It offered a splendid view and breeze that allowed my head to be calm and better focus on my work*



Rwanda as a place can be described and understood in many different ways. Traditionally, Rwanda is the ‘land of a thousand hills’ – or at least that always seems to be the first descriptor when talking about Rwanda as their national identity. Before the Genocide against Tutsi, according to the first lines of text in the KGM, “Rwanda is a country of hills, mountains, forests, lakes, laughing children, markets of busy people, drummers, dancers, artisans and craftsman. We managed to squeeze thousands of hills and eight million people into our 26338 square kilometers. Our land is rich and fertile, the climate pleasant...” My first impressions when walking into the CAGM *Before the Genocide* exhibit was that “Kigali is so green in the photos!” It was the time of dirt roads (also featured in the photos) and, it was explained to me, the time before development tainted the environment of the country. It was a time of relative peace.

As we have seen, “place can change over time as its physical setting and cultures are influenced by new ideas or technologies” (National Geographic, 2020) and conflict often changes places when the environment falls victim to violence. After the Genocide against Tutsis, Rwanda as a place was changed. The word ‘apocalypse’ was used several times to describe the situation during the Genocide in the KGM, which means “a very serious event resulting in great destruction and change” (Cambridge Dictionary, 2020) and is usually synonymous with complete environmental degradation. Some other quotes I pulled from the KGM and Genocide Archive of Rwanda include: “Rwanda was dead,” “Streets were littered with corpses. Dogs were eating the rotting flesh of their owners,” “Rwanda had gone to hell. It had gone to a different planet,” “There wasn’t anything living. Birds were silent. There were no mice. Only flies over the bodies.” So, one aspect of the peace initiatives was to clean up this place in order to help “my children’s children” as one Genocide survivor hoped. When the peace efforts began, the understanding of Rwanda as ‘place’ began to change again.

We know that “ecosystems provide material (for example, water availability, crop diversity, and climate regulation) and nonmaterial (such as cultural, recreational, and spiritual) benefits to people” (Hausmann, et al., 2016, p. 117). Cleaning Rwanda and restoring it to a place where people could live and thrive (for example by producing enough food to eat) is always an important initial step post-conflict to get a place to be considered peaceful. As Hausmann et al. (2016) explain is important, Rwanda had to evaluate its natural capital<sup>41</sup> in order to work on conservation and break their dependence on foreign aid. While I have found no evidence to suggest that this specific economic understanding of sense of place drove Rwanda in its peace initiatives, it is akin to what happened. Vision 2020 identifies “the major problem in the field of environment protection in Rwanda is the imbalance between the population and the natural resources (...which have been degrading for decades)” through means such as deforestation, pollution, and a growing population that leads to “the

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<sup>41</sup> ‘Natural capital’ is an economics term for ecosystems which I chose to use to highlight the positive connection between economics and environmental awareness since economics is an important consideration post-conflict even though “the economic value of sense of place, as for other cultural services, has been overlooked due to the difficulties related to its quantitative assessment” (Hausmann, et al., 2016, p. 119).

occupation of more and more marginal areas and to the rapid and continuous soil degradation of the fragile ecosystems of the country”. Agriculture has been identified as a key part of the solution for Rwandan self-development. “Investment in rural infrastructures,” “environmental control measures to halt the decline in soil fertility,” and “rural financing schemes and markets” have been identified in Vision 2020 as key policy areas.

Following the call earlier in the report for locals to take more initiative, local NGOs are acting on these issues. For example, as part of their constant communication and advocacy for locals, CAPR participates in yearly events to show local and national authorities the importance of their good work. One such event is ‘Open Day,’ which is a demonstration day for organizations to advocate for their work in a sort of exposition. CAPR used this opportunity to demonstrate the importance of their work on Conservation Agriculture by showing the effects of soil erosion. CAPR1 told me how they had two small patches of earth, one which has grass and one which is just dirt, and they pour water on it to see which one is better at trapping the water. Taking out the abstract concept of ‘future’ allows the officials to realize the importance of their work and to support CAPR and locals to be able to see why they need to take care of their land.



Figure 19: The Environment Museum had a display exposing the same concept as CAPR explains at Open Day.

### Communities Value Places

Hausmann et al. (2016) make another good point in explaining how the focus on community-based management and environment impact fostering their attachment to place is important for sustainable environmental results. They explain how “this is relevant in avoiding public opposition to environmental development in places considered important for sense of place. This reaction may be the result of imposed changes, often unrelated to local identities, and may generate conflicts between institutions, conservation and people” (p. 123). This was the case in post-Genocide Rwanda. CAPR2 explained that when the peace initiatives began, most locals wanted to see physical change in the way

of infrastructure because that is what they – and most people in the world – associate with development. However, the government had extensive sensitization efforts to make people aware of the importance of green development, which CAPR2 explained the focus on planting trees. The government gave every house five trees to plant, then they monitored who had what trees and where they were planted. CAPR2 himself was against the plantings. He wanted better roads, but eventually realized that if it is to be a good road, it needs to have a good environment around it. The sensitization campaign was effective and now most people in the country seem to be on board. The youth especially, who grew up with the emphasis on greenness, are comfortable with the atmosphere. Not just the green atmosphere, I was told, but the whole ‘we are together’ atmosphere. It is taking longer for the older generation (the one who experienced the Genocide against Tutsi), but those government-given fruit trees are helping. “If the trees have fruit, then people will really really love the trees because they can eat from it! If that’s the case, they will protect the trees.” He went on to explain how this would in turn “breed a sense of pride and respect, which betters quality of life and bleeds into other areas” and is yet another concrete example of the environment as actor for peace. CAPR1 was quite animated at this point and expanded on how this sensitization has bled into everything in Rwanda – including the mining where you must be environmentally conscious. What he was saying seems to hold true, as now people’s understanding of the environment is holistic and is included in their understandings of peace (as we have already explored).

Further to the point on the meaning behind the physical change of place in Rwanda, “preferences and willingness to pay are often used to assess the economic importance of perceived values for biodiversity, and may be explored to assess the value of sense of place for biodiversity-related experiences” (Hausmann, et al., 2016, p. 122). One thing I found interesting in Rwanda was the fact that many of the parks and green spaces were accessible only through paying. One morning, while waiting for the public library to open, I was exploring the garden in the back and took some pictures of a beautiful tree when the library grounds security guard came over and told me in no uncertain terms (despite the language barrier) that pictures were not allowed. I was confused and thought she did not want any photos of any of the library patrons so I did not think I was breaking any rules, although my explanation was lost in translation so I just stopped taking pictures in that area (I already had the photo). A few days later I learned it is illegal to take photos of green spaces in Rwanda! My main contact explained that Rwandans think that green space should not be used because that destroys it. Also, parks are a business here (which I realized might have been why I got in trouble for taking pictures of the garden at the library. Park owners charge you for going into the park and taking



Figure 20: My 'illegal' picture of a beautiful tree

pictures! You can rent space out from parks for weddings or music videos, but usually Rwandans avoid touching the green. My main contact even said that sometimes people take an extra big step to get over the green if it is in their path. The only people who you see on the greenspace are the workers who are paid to keep it clean. I was lucky enough to be invited to a traditional wedding while I was in Rwanda for which the family had rented a beautiful park for the place of the wedding celebration so I could see firsthand this utilization of place.



Figure 22: Workers enjoying the park they maintain



Figure 21: A beautiful outdoor area for the wedding

I asked REMA1 to explain this utilitarian and divisionary way of thinking to me and she said: “Why plant grass? Because it will die if people walk on it. It's not a division of humans and the environment. Rather, it's about knowing and understanding the purpose of the grass. As development and innovation continue maybe they will find a way to make it stay alive even when we trample on it, but until then, it's purpose is to be there and so we need to let it by not killing it by walking on it.”

Apparently “one of the main issues hindering the integration of sense of place into ecosystem management is the high variability in how people perceive the environment (which may vary according to cultural background or personal experience)” (Hausmann, et al., 2016, p. 121). This rang true for me since as a Canadian, I was at first confused and discouraged upon learning this development. I noted in my fieldwork diary:

*The big realization today is that, while there is a lot of green in the city, there isn't a lot of space to enjoy the green. I had like an hour to kill this afternoon (and didn't want to brave one of the cafes) and couldn't find anywhere to sit. It was very sad. I sat one place - on a wall with a bit of a part that sticks out, but it was like only big enough for half (if that) of my bum - plus it was full of ants. And then I just sat somewhere kind of off of the main roundabout - like one of the side triangles leading into the circle - and chilled. It wasn't nice though. I was sad. And my host agrees with me about the lack of green space to actually enjoy (as we discussed later).*

However, Rwandans have adopted it into their sense of place and their relationship with the environment and it seems to be helping them heal – the environment in any case is certainly a lot greener than earlier on in the peace process – and so perhaps this method of natural capital can help the integration of economics and environmental conservation in post-conflict societies.



I was again taken aback later at the concrete burial mounds in the KGM, but was explained that concrete works better than wood, and even though there is a stark aesthetic contrast to the surrounding nature it was important to preserve the sense of place. Hausmann et al. (2016) explain the importance of experiencing biodiversity as a component of sense of place and how human well-being can improve. They say, “while sense of place provides a variety of benefits to people in various contexts, the economic value of sense of place is usually neglected” (p. 123). For this reason greater awareness and inclusion of this earlier on in post-conflict situations is integral for positive peace to be achieved.

I saw this understanding expressed in an interview I had with FONERWA1. My interviewee previously worked as an economist before he joined FONERWA. He changed fields because he clearly saw the GDP of the country and saw the ties of how the environment was affecting it; “We build the roads, but then four or five years later the roads will wash away and that is a complete waste of money. Other example of wasted money and resources include irrigation drips, waste, chemical/organic fertilizers”. Then he went on about how “from the highest office, the environment and dealing with this economic oversight was a top priority. The president himself even said something along the lines of ‘we can't differentiate between development and environmental development.’”

### *Sense of Place*

The other main focus of this aspect of the peace process was recreating the ‘sense of place’ of Rwanda for Rwandans. Sense of place represents “the emotions someone attaches to an area based on their experiences” (National Geographic, 2020). Generally speaking, sense of place as a concept can be understood as “the meaning and importance that individuals or groups ascribe to a given setting, based on their experience within it” (Sedawi, et al., 2019, p.3). And so ‘place’ “refers not just to a place’s natural, environmental, and physical elements, but also to its cultural and social characteristics” (Sedawi, et al., 2019, p.3). Place has been a relevant concept for Peace Studies as we have seen in the Literature Review Chapter with the example of peace parks. Composed within a sense of place is place attachment, symbolic meaning, and identity (Hausmann, Slotow, Burns, & Di Minin, 2016). Scannell and Gifford (2017) go on to explain that “place attachment, the cognitive-emotional bond that forms between individuals and their important settings, is a common human experience with implications for their well-being” (p. 256) and “when disrupted, place attachment can have negative implications for well-being; separation from one's significant place, such as through forced or voluntary relocation, can be devastating” (p. 256). Returnees after the Genocide against Tutsi have shown this inner conflict over lack of a sense of belonging to place. REMA1 actually commented in our discussion on how the post-Genocide refugees who are coming back to Rwanda were degrading the environment at will until the government caught wind of it.

### *Attachment to Place*

While in Rwanda, I accessed some of the local RDRC reports which explained the positive effects of the repatriation activities of the organization in Rwanda. The returnees featured in these

reports were hiding in the Democratic Republic of the Congo jungle since the Genocide against Tutsi, but have finally gone home (yes, they used terms like ‘home’ and ‘motherland’). “I had stayed in the jungles of the Democratic Republic of Congo for almost 21 years, in a state of misery...I will live peacefully with the rest in the community for the rest of my life.” “I misled while in the jungles of DR Congo, and this has caused some of us to overstay in the jungles miserably thus costing our lives and time.” “I lived a miserable life for over 20 years. I suffered a lot, now that I am home, my life will change for the better.” One returnee is even quoted as saying “all is well after stepping his feet on his mother land.” It was thanks to sensitization campaigns – particularly ones received over the radio – that these people felt safe enough to return, sensitization campaigns that really ensured a sense of belonging, responsibility, and respect of the returnees as native to the land and thus part of this place.

The RDRC is internationally respected by peace scientists and was created with input from international peace experts as well as local Rwandans. Although not intentional, their reintegration program includes peace ecology concepts such as the highlighting of importance of place, community-driven participation for holistic development, and working locally to have national and global implications. Since there are many proven psychological benefits to human well-being who have a sense of place attachment with their environments including by creating “belongingness by symbolically connecting individuals to their ancestors or cultures or by reinforcing social ties and community membership” (Scannell & Gifford, 2017, p. 257). The reintegration of ‘refugees’ is an important effort being taken by Rwanda for this reason among others.

Moreover, “belongingness to a place can strengthen social capital, resulting in group-wide benefits, such as more effective community action” (Scannell & Gifford, 2017, p. 257 and echoed by Hausmann et al. (2016)) which is one of the peace goals of the country. This can be seen especially in the *umuganda* efforts of the country. I was told that *umuganda* means to come together to do work. It is today’s interpretation of the long-time tradition of *umbedehe* which represents the culture of collective action and working together in communities to solve problems. “It means helping someone who cannot help themselves.” My favourite story from an informant included 10 men drinking beer from the same straw out of a pot after finishing their *umbedehe* session. *Umuganda* is an old, home-grown solution that was re-established after the Genocide against Tutsi as a means to help the community heal by having the people work together to address environmental issues (and has evolved to include any community-related issues). Today in Rwanda on the last Saturday of the month, the country closes down and everyone is mandated to participate in *umuganda*<sup>42</sup> including the Prime Minister! I was lucky enough to be able to participate in one of these *umuganda* days. We walked over to where the *umuganda* was going to take place and I thought the road was beautiful, to the right

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<sup>42</sup> There are strict rules about participation. However, in reality the people are a bit lax and do not all participate, although everyone knows it is important and feels the responsibility to participate.



you could see the houses and fields with the mountains in the background and to the left there was tree overgrowth inching into the road space.



*Figure 23: Heading to join the umuganda! I took this photo because I thought the road with the overbrush was beautiful!*



*Figure 24: The view from the other side of the road we were working on makes it seem like all outdoor workspaces in Rwanda are wonderful with all the hills*

The task for the day was to trim the bushes down to make the road safer and more open for people walking at night. It was a real time addressment to a real time community-level issue! The locals were supportive of me trying to help and accepted me as part of this *umuganda* despite clearly being a non-local (I could not even use the tool that was given to me!). The locals with whom I spoke liked my thesis idea and thought it was true. They said it was good that I was here at *umuganda* because it is about the environment. The whole point of *umuganda* is yes, to take care of the

environment and do community development, but the moral is to come together to do work. There is no individual ownership over the work that gets done.



*Figure 25: My host a took a video of the singing and dancing at the community meeting that was held after the umuganda, and I returned later to take this photo of the tree which served as our meeting place and shade-giver*

### *Memory and Meaning of Place*

Furthermore, “a place of attachment can also provide the important benefit of memory support; it connects us to past events and people, and hosts recurring traditions” (Scannell & Gifford, 2017, p. 257). This memory support is especially important for Rwanda’s post-Genocide peace initiatives because they think it is important to remember what happened in Rwanda as well as how it was before the conflict. The Forest of Memory at the KGM is a perfect example of this, where trees – which the museum explained symbolize eternity – are dedicated to memories of lost loves ones and continue to grow as our memories and knowledge of what happened does.



*Figure 26: The Forest of Memories at the Kigali Genocide Memorial*

Trees are an important part of Rwandan culture in hosting recurring traditions. CAPR2 found it important to explain to me about the historical *umuyenzi*<sup>43</sup> tree. It is a tree that signifies borders and

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<sup>43</sup> I have some issues with spelling the name of this tree. I have it written down in my notes as ‘umuyenzi,’ ‘umujenza,’ and ‘umugenzi.’



limits, specifically limits of one's land. It is a positive symbol in Rwandan society, representing the reconciliation of borders. These trees are the reason why fences are not needed in the country even today. They are a big deal and all parties surrounding the tree must be in agreement on how to treat it.



*Figure 27: Finally, we saw a wild umuyenzi tree on the side of the road*

Also, the Environment Museum hosts an impressive traditional medicinal garden on its roof. The purpose of which, I was told by EM1 is “to teach people. Not to heal themselves, rather to not lose the information. If we respect what we had, we have a lot to win.” They do not have this medicinal garden to encourage people to use plants as their source of medicine. Rather, it is to show the intrinsic value of nature and that it deserves respect. They just want to prevent future problems especially because “if we respect the environment, we will have a joyful life.” “Forests are filters. We must respect their role. Anyone will tell you, if we destroy a filter it will get more polluted. Humans are not the only species on earth.” He likes to say that without humans, the world will survive but with us, it may or may not; “We cut the world into our image instead of letting it shape us. We are not necessary for the earth, but nature is – really is – to us. Respect nature or it will seek revenge.” I asked why were losing the information and how society's relationship with nature changed and he said simply: “People go to hospitals now before they think of plants. Nowadays, traditional medicine is only used in very extreme cases. But honestly, Hepatitis is actually treated better with traditional medicine but that's still not our go to. Knowledge about these sorts of things is really diminishing. The Health Ministry is now in charge of all aspects, and traditional healers don't fall into those paradigms very well.”



*Figure 28: Me getting quite sunburned because I am enraptured by taking notes about this garden, surrounded by some of the other photos we took of the plants in this rooftop medicinal garden at the Environment Museum*

### *Identities Tied to Place*

According to Scannell and Gifford (2017) “Another demonstrated benefit of place attachment is that it can provide emotional and cognitive restoration and escape from daily stressors” (p. 257). Most apparently this can be connected to the emotional and cognitive restoration for the traumatized people of the genocide. At the KGM you start the tour with a short introductory video, where survivors introduce the Memorial. I pulled a few quotes that described the Memorial as place and the importance of place: “I go there to remember positive things about them;” “A place where I feel whole again;” “A place to be buried with dignity.” My original thought was that the environment by acting as ‘place’ could be a display of agency, though I have found through my research that it goes deeper than that. I noticed a ‘Genocide Therapy Room’ and asked my contact, KGM1, if environmental therapy was ever used as part of the post-Genocide counseling. He had this to say: “Environment therapy has been used as part of Genocide counselling, yes. It helps people with trauma to reflect on something else while giving fresh air. If you did visit the whole Genocide Memorial ground, there is a memorial garden that has been helpful in dealing with some patients who were either sent by doctors to visit Genocide Memorial as part of their healing process, or visitors who face these challenges after making tours in the exhibitions...Gardens are symbolic to peace and good rest. Places where one sits and meditates. So, they are therapeutic and beautiful too.”

His opinions are echoed by Hausmann et al.’s (2016) research in that “contact with nature promotes physical, mental and psychological well-being, enhancing peoples’ assessment of quality of



life in ways that cannot be satisfied by alternative means” (p. 118). Visit the gardens I did and found them to be incredibly beautiful and meaningful. The Rose Garden is dedicated to the victims of the Genocide against Tutsi. “The geometric circles encourage the movement through the rows of flowers with space for reflection and admiration at the beauty of each individual rose. Spread over several levels, the rose gardens are filled with a variety of species representing the individuality of each victim” (Kigali Genocide Memorial, 2019). In the Garden of Division, which was full of meaningful environmental symbolism, visitors were specifically encouraged to “sit and reflect in separate places for individual reflections on or about personal responsibility” (Kigali Genocide Memorial, 2019).



*Figure 30: The waterfall in the Garden of Division has water coming from the Garden of Unity through a drop to represent the fall of Rwandan society during the genocide. The water breaks the circle of unity to represent the peace and harmony of ancient times (Kigali Genocide Memorial, 2019)*



*Figure 29: An image of the Rose Garden at the Kigali Genocide Memorial with the circles encouraging movement throughout*

Unfortunately, despite its obvious importance and imperativeness for human existence, place is “one of the most neglected cultural services” (Hausmann, et al., 2016, p. 118) internationally. Hausmann et al. (2016) explain how “globally, sense of place has the potential to contribute to actions for climate change adaptation. However, of greater importance is the value of the collective actions and pro-environmental behaviours that sense of place, at a local (neighbourhood) and global scale, elicits in people” (p. 123). Rwanda, in their post-conflict clarity, seems to have embodied the importance of their understanding of place. Today, the locals seem happy with the place they live. The first thing one man replied when I asked what the best thing to do in Kigali was, was “breathe the fresh good oxygen.” Perhaps it is because they have gone through a loss in their connection to their place that they now understand the importance of it. We cannot all wait to go through such a catastrophe in order to understand how important our places are to us (we cannot wait for environmental degradation to destroy all of the places we know and cherish) and so must look for ways to better incorporate sense of place as peace, and integrating peace ecology in post-conflict situations offers a good starting point as Rwandans have already understood the disastrous cost of losing their places.

## Sustainability

### Youth

We have seen how the Rwandan environment has changed over time, negatively affected by the Genocide against Tutsi and positively worked on as part of the peace initiatives because of its importance as a place and the interconnection of the people and their bioregion. This leads us to the theme of sustainability. Kyrou (2007) explains how sustainability is an important component for both peace and ecology in addressing Galtung's time violence<sup>44</sup> when saying that "the principles of interconnectedness, but especially that of *interdependence*, shared by both the peace and the ecological paradigms, extends human responsibility in terms of protecting the environment and maintaining peace far into the future" (p. 82). Sustainability is a cycle where humans meet their needs while living in tandem with the environment. Nolet (2016) further explains that "a sustainability worldview is a holistic phenomenon that involves a combination of values, knowledge, dispositions, and agency" (p. 64). To achieve this worldview, it is important that we – globally – change our world paradigm views from the dominant 'business-as-usual'<sup>45</sup> position to one of sustainability and sustainable peace. We have already explored the negative implications of incrementalism for the environmental movement, and it is argued in Peace Studies as well that makeshift peace plans are similarly unhelpful for creating meaningful lasting change.<sup>46</sup>

In the previous section, I explored how the post-Genocide government's green sensitization efforts were important for place and meaning making. Here, I expand upon how it could also be seen as a start to a more sustainability mind-frame paradigm. Brantmeier (2018) explains how "sustainable peace starts in the hearts and minds, permeates relationships, influences policy and procedures of institutions, and is woven in the fabric of social structures and how power operates within those structures" (p. 89). This is what happened, especially with the youth of Rwanda. There is a traditional Rwandan proverb that I was told several times by several unique sources; '*a tree can only be straightened when it's young.*' Many local organizations have taken this to heart to try to address the youth while they are still open-minded enough to embrace sustainability; "children are the fruits of Rwanda" (Kigali Genocide Memorial, 2019).

GER1 explained the realities of this phenomenon quite interestingly by telling me how elders respect the environment because they always had in the past, plus they have experienced life and know the environment is important. The middle generation does not really care about the environment because there was not the awareness about the importance of environmental protection given to them when they were growing up. The younger generation know and respect the environment (in the

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<sup>44</sup> Galtung's 'time violence' denotes the harm done to future generations because of failures in dealing with conflict non-violently or imposing deficient peace processes (Kyrou, 2007; Galtung, 1996).

<sup>45</sup> See Brauch's *Sustainable Peace through Sustainability Transition as Transformative Science* (2018), especially pages 185-186 to better understand today's negative competing mindsets and worldviews.

<sup>46</sup> While it was not easy for me to find many articles explaining this view, Ford's (2018) article, *The Impact of Ad Hoc Tribunals on the International Criminal Court*, does explain how "creating ad hoc tribunals in response to atrocities was not a sustainable solution" (p. 1) in his assessment of the International Criminal Court.



Rwandan way) because they were brought up in the new Rwanda. He gave me the example of how children know that trees have fruit and fruits are good to eat, so they must respect the trees. “Our focus is the next generation, to build their capacities for the effective participation in the process of sustainable peace, reconciliation, and conflict transformation. This is because the trauma to this generation is too great to get over.” It is all about the education, both formal and informal (like lived experiences). To this note, part of GER’s work is to keep the traditional knowledge about the environment (specifically agriculture) alive and find a synergy with science and local knowledge. I was told that we cannot ignore the knowledge of elders who know about nature. They know the meaning behind things in nature. “It is unfortunate though because the information is not documented, so we are losing it.” Hence, promoting intergenerational learning – between the youth and elders – is something that GER finds important.

In my interview with CPL1, my key informant explained how the work of CPL relates to peace in the country more generally though addressing the young; “They are very eager and impressionable, so they are the chance to make a lasting difference. Older people either don't care or don't have time to learn. The kids are the best and will change things. All the things.” That being said though, she had had to close the library the week before we met which she said made the kids feel sad and discouraged. As a result, they were slow to come back this week. She is hoping that soon the kids will feel better and come back – she knows they will. But this setback shows how young and impressionable they really are, and how easily they can be discouraged. The importance of a good, supportive, and sustained environment cannot be clearer than this example.

### Project Follow-Through

The UN and other international bodies are on board with this focus on sustainability. This can be seen most obviously with the Sustainable Development Goals, of which include goals for health, food, poverty reduction, and education (United Nations, 2015), and Rwandans have taken this into consideration for their peace goals. Education in Rwanda is a topic I noted in relation to their lack of holistic peace education in their national curriculum that does not cover the importance of the environment to peace. I broach the subject again, as education is important for sustainability as it incorporates the intergenerational aspect introduced in the Interconnectedness theme. ST2, in explaining about the curriculum at ST, told me the school is inspired by the rights-based approach to learning; “well, more play-based, but the methodology comes from the rights-based approach.” ST2 did say that as the environment improves, the learning does. His main point in our conversation was about the quality of education over the lack of opportunities, echoing what ST1 had talked to me about previously about the opportunities being there and its just that the people are not educated in a way to be able to want to take advantage of them. Brantmeier (2018) explains that “it is within the context of outcomes-based learning that higher purposes of learning, such as holism, sustainability, and peace, battle for space within the scope and sequence of an already congested curriculum” (p. 86). ST’s work concurs with this point and they are working on this outcomes-based learning as they are

working on partnering with the schools of their kids so that they can keep track as well as train the public-school teachers so the students can excel. That is why the early childhood education and the follow through they are planning is so important to ensure these distinct types of education are actually fulfilling their purposes there must be sustained support to help this new mindset take hold. This element of continued support over time to ensure the plan is sustainable is akin to international support of post-conflict societies throughout the beginning phases of peace initiatives.

I was able to sit down with members of the Health Development Initiative (HDI) where, in my quest to find the health connection to the environment, I was explained about their human rights-based approach to health care services. At the start of the interview, I was told as a disclaimer that theirs is a stigma-free clinic. Human rights, particularly regarding sexual health and rights, motivate a lot of their work. This human rights-based approach came about because of sustainability, due to malaria being a major problem that was identified in the Rwandan health care system in that laws and policies countering malaria were discriminatory and based more out of fear than helping those affected. So, the human rights-based approach allows them to take a sensitive approach, which they find is the best way to see results. I was told that “addressing one SDG or human right, you address them all,” which is only logical. I was told the human rights-based approach is really a needs-based approach; hence they focus on providing services that the government can then mimic and implement in other areas as well as give training to health workers. Sensitization (education) takes time, and so services are needed in the interim as they provide a model and evidence for a lot. This further ensures participation of all the relevant groups, because good policies are nothing if there is poor application. In that regard, this is not a national issue because policy is there, but at the local level the stigma and attitudes and application of those policies is bad. Behaviour takes a lot of time to change.

At this point I asked the group how they go about making this change most effectively and was told that personalizing it makes the change. “What if it was your son or daughter?” is what they ask older participants which makes them look at their actions and opinions in an entirely new way. Unfortunately, it is hard to get people to personalize environmental issues in non-anthropocentric ways because the international system conditions us to think anthropocentrically and thus as separate from the environment. However, HDI does an effective job of finding and acting on connections because of their holistic view on healthcare issues. I asked what they saw the connection to the environment for their work was and was met with the answer that “a better environment means less HIV, usually from a public health perspective.” To them, ‘environment’ means community, and so when implementing their human rights-based projects they check their programs are helping human rights while also not harming the community (the people or the natural parts). For example, one of their project initiatives built on this connection is related to hygiene, both corporal hygiene and the hygiene of the environment because living in clean areas is better for our health. They are working with 15 secondary schools in the area doing sexual productive health education on menstrual hygiene

and management. The idea is to empower them to protect their own environment or it becomes dangerous.

The follow-through on projects, as the above data from HDI exemplified, is also an important aspect of sustainability that needs to be considered and given credence as part of peace ecology implementation is to better track how the environment's resilience has sustained over time. With one exception, every organization with which I met did follow up as part of their projects. CAPR "understands the importance of the long-term game even though they know that people respond to short-term results." ST sees the sustainable change in the kids themselves. I reflected on this after my interview:

*The youth don't know the Genocide nor the tensions from before the Genocide. They just always consider that people are one big Rwandan family. Which is great! It's the older ones that sometimes forget or haven't fully caught on (especially re. ethnical divides). Many of their kids are finishing high school now!!! There are so many successful stories!! They now have HOPE! It really hit me when ST1 told me the kids feel that "now, even if Shelter Them stops helping, we won't die!" I was initially a bit shocked, but this was a huge success for ST and ST1! A few years ago, they changed their mission because in giving holistically (everything), the families took it for granted. They changed to focus on the empowerment of parents to get them to be independent and strengthen the education perspective of ST to build a foundation of education culture. After school they have a mentoring program. Empowering parents through education means better quality for the kids. Before the early childhood education program started, these kids were at home. Parents didn't know how to care for their kids and so often abused them, which affects their lives later on.*

Even FONERWA, who was clear about not doing follow-ups after project goals are met, did say that "most of the projects include a lot of community sensitization as well as capacity building." This is mostly because they know that if they do not teach the endangered locals about the new infrastructure or how to use the new technology, they will not know how and will continue to do it the old way and still be in danger. The environment changes over time, the plants need to be watered appropriately in order for them to grow.

Further, in relation to the environment's health, it is important to consider how the environment's resilience has sustained over time. I have mentioned how REMA keeps track of the state of Rwanda's environment through a bi-annual (every two years) report, but most of the data I present here is from what people have told me about the changes they see and experience. EM1 noted most with regards to the climate; "It even rained in the dry season the other day! It's a climate catastrophe!" He can feel the pollution and air temperature rising, he even commented on the heat in the city and mentioned that we would feel it even worse in Kigali. And it did rain on a couple of occasions while I was doing my fieldwork in the middle of the dry season. I remember waking up to the rain one morning and being so excited that I could experience African rain. Once I realized what this meant, and heard from the locals the implications of the rain (according to CAPR1 we might not have been able to travel to CAPR's training day because if it had rained a bit more in the East the roads might have been too bad,

not to mention how the rain affects the agriculture being done), I knew I should not enjoy it so much because it was a display of the degrading environment.

FONERWA1 helped me by explaining how before REMA, there was just no awareness of the importance of environmental health or resilience. “The environmental resources were just for us to use. The environment was mostly considered to be trees. The Rwandan Ministry of Environment considered the environment in two main ways: as natural resources, as in the land, water, air that it was and worked on how to manage them; and as a meteorology agency. Now, REMA does pollution protection and stuff too.” That is how FONERWA was birthed. FONERWA1 does not think that climate change will be stopped – he told me to look at the Paris Accords and how they have not worked out. Their answer is to focus on adaptation. “We must evolve without contributing to environmental degradation. At the centre of our efforts is quality of life – peace is broader than quality of life” (he joked about him not using the word peace, but that I can if I wanted to). It is paradoxical how we believe we can stop war – which involves stopping direct violence against people – but not climate change which would involve no direct violence towards to the environment.

While not all post-conflict peace projects are directly focused on the environment, monitoring and evaluation is always important because of the interconnectedness of all elements in an ecosystem and its sustainability. Additionally, one thing not mentioned in this theme is to do with government addressment of corruption in the state relating interconnectedness to community accounting for sustainability. I was told that education is the key to honesty and good people and a strong country! My host hates liars and I commented on this in my fieldwork diary:

*It started as a joke that he always asks me ‘Really?’ when I give him an answer (this time about whether or not I wanted tea) like he doesn't believe my answers. But it's actually because he's been trained not to! He told me in this culture, the impulse is to lie. The impulse is there to protect yourself because usually growing up, if you do something wrong you get punished, hit, or yelled at because the parents don't know any better (because poor education). And then on a national level, the lying to protect yourself bleeds into the work. Plus, there isn't always a system of accountability, because the others in your work also had the same childhood experience. People lie about their shortcomings at work (they have like contracts or something about what they are supposed to fill by the end of the year) and they always score themselves and their companies higher so that they don't get into trouble. This in turn bleeds into them then getting lazy, and not doing the work on purpose and instead embezzling the money or whatever and using it for themselves (selfishness...lying breeds selfishness). But now (with the good government) there is an auditing system and Rwanda is actually doing great at keeping their government workers accountable. That's the problem with other African countries (my host said), they don't have the education, thus the systems to address this corruption. My host hates liars though. And it's really too bad that that is part of the culture here. But he says that with ‘some more education’ and ‘proper upbringing of youth,’ there is hope for an even better future.*

So, the international system knows the value of sustainability, the problem comes in implementing it as a practice and Rwanda, with its comprehensive and positive peace development plans and anti-

corruption initiatives, can be considered a good (but not perfect) example for how this can be done if a peace ecology perspective was more fully respected.

### An Idealistic Future

At this point, the work of President Kagame<sup>47</sup> should be introduced as the relevant mastermind behind Rwanda's post-Genocide peace development. If the connection of the environment to positive peace is so elusive to the majority of actors, then how did it become such a part of Rwanda's post-Genocide peace initiatives? I was told that it is due to President Kagame's vision and without him Rwanda would not have been able to develop in this same peaceful and effective way.<sup>48</sup> President Kagame seemingly fits the bill of an idealistic revolutionary, as expressed in this passage of the conclusion of Vision 2020: "Some will say that this is too ambitious and that we are not being realistic when we set this goal. Others say that it is a dream. But, what choice does Rwanda have? To remain in the current situation is simply unacceptable for the Rwandan people. Therefore, there is a need to devise and implement policies as well as mobilize resources to bring about the necessary transformation to achieve the Vision."

Idealism is not a dead end. Many 'realists' in the peace field do not support peace ecology or the achievable vision of positive peace because they are too utopian. There are many actors in Rwanda who have lived through a Genocide who disagree. As part of each of my interviews, I would ask my key informant what it was like being, living, and working in Rwanda and I received many inspiring answers. COPORWA1 was most pleased with that question saying:

*We are very pleased with that question. Why? Because you see in my explanation before that we now have 60 students in university. I showed you that before we did the work there were no kids in schools and so we are very happy with our achievements and our focus on the government, so you know very well that there are the Batwa people. Even though they don't accept in a proper way the Batwa, it is still touching on their hearts... For you also, because if we didn't have this office, you wouldn't be able to become aware of this. We are Indigenous (never mind what we're allowed to say). So, working with the Indigenous comes from my heart.*

CPL1 was simple in her response; "It's good, important, wonderful work." She loves it, especially when the secondary school students continue to visit her. She was proud of the events she organizes them and since they especially love to debate, they once debated about peace and the environment!

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<sup>47</sup> I have already explained this work's take on Vision 2020 and now find it important to explain my portrayal of President Kagame in my thesis. I am aware of the controversy about how he deals with those who contradict him and the government's over-exaggeration of their development accomplishments (Soudan, 2019). However, while conducting fieldwork I only heard incredibly positive comments about what he has achieved. I do not believe that all my contacts were blind to his shortcomings and they still talked favourably about him and generally believe he did the best that anyone could have done to help Rwanda post-Genocide. Again, I am not using this thesis to evaluate the effectiveness of the government to carry out their goals or President Kagame as a leader. Rather, my aim is to identify the links to peace ecology in the hopes of better and more integration of holistic goals in future post-conflict societies. I am simply looking at connections and goals of post-conflict societies and how the environment can be connected early on in the process.

<sup>48</sup> Again, I make this comment not to show my affection or approval for President Kagame, but rather for the fact that his genius and determination attributed for a lot of this positive development post-Genocide and to highlight the fact that sometimes visionaries that revolutionize a country can lead to good things.

The presence of forward-thinking actors is only the beginning to changing the paradigm under which the international system operates. REMA1 explained her struggles with dealing with individualists, who she referred to as self-centred people. “We are protecting the voiceless but dealing with voices.” Slowly she is garnering support for her initiatives, most prominently by showing potential allies specifically how they benefit from protecting the environment. Her tactic does not involve anthropomorphising the environment, but rather highlighting the harsh connections people have with the earth; “if people are dying, they won’t buy the products.”

Similarly, it has been difficult for ST1. “You need the power of convincing if you’re in this position. ‘No’ with an explanation is acceptable. But, if I show you that it is in your best interest, then you should do it.” Living here now, he told me, is “exciting and challenging.” Challenging because sometimes it feels like too much; “imagine bringing someone in and then they steal or say ‘no’ to the future. It hurts.” Exciting because he sees the changes; “Gives you hope that even more can change of the things that haven’t yet.” He alluded to the price paid for peace in the West, saying that even if we do not realize it there is always a fight for peace (I have, for example, explained the ecological violence that allowed the West to ‘develop’). “Love pushes us to fight for peace or against another’s peace,” so we could find peace with our environment if we loved it.

GER1 told me that his utopia looks like “a country with less climate change, no pollution, no deforestation, good health for the people, innovation... This is my country. I feel happy and proud. It’s good to support your country by contributing to solutions. I am proud and we have so much more! It needs to be shared with the world!” In the end, GER1 and most of my key informants were eager to share more about the success they have had. With so many individuals working so idealistically in Rwanda, it supports the idea that we can be able to see structural change in our world into one that embraces peace ecology. Again, as with most of these comparisons I am drawing from peace ecology and the Rwandan effort, they were not originally designed to follow a peace ecology paradigm. I am drawing the comparisons to exemplify the positive effects peace ecology can have, and have chosen this state which is still developing and could potentially still incorporate more peace ecology into their continued peace efforts or else for other states to be aware that they can implement peace ecology practices to their own states post-conflict and see positive results as Rwanda has done.

To conclude this analysis chapter, the four main themes identified of peace ecology were interconnectedness, bioregionalism, place, and sustainability and data was found in the Rwandan example for all of these themes. While Rwanda never set out to adhere to the peace ecology mindset, in using their best thinking and employing best local practices, their post-conflict peace development initiatives have many parallels to the peace ecology paradigm. True to the idea of holism many Rwandan examples were applicable to multiple peace ecology themes which is even more support for this way of thinking. Now that we have seen how the Rwandan case exemplifies peace ecology in a variety of ways, the next chapter goes back to my original research questions and discusses these new enlightenments that may have led us to be able to answer some of the questions.



## Discussion Chapter

The peace ecology paradigm reminds us of “the inherent capacities of the environment to inform and sustain peace” (Kyrou, 2007, p. 73). It is true that Rwanda is not technically an example of a peace ecology society. However, I have examined it from an ecocentric peace ecology perspective using it as an instrumental case study in order to highlight the environment agency throughout its post-Genocide peace process. The goal of doing this was to show how the environment, as I have explained it, is an integral actor for peace and if we are to have positive peace in the world, inclusion and respect of it as such is necessary.

In the previous chapter, I presented and analyzed my data. I now use those reflections to return to my research questions and offer a final discussion on the environment’s agency in peace. My research was framed by the overarching question: *how can the environment be an actor for peace?* Followed by the subsequent sub-questions:

- e) How has the environment played a role in the overall peace initiatives in Rwanda?
- f) How have views of the environment changed over the years in relation to the stabilizing peace in Rwanda?
- g) Of the environmental peacebuilding initiatives currently in place in Rwanda, why are they happening now and what could have been different had they been implemented earlier in the peace process?
- h) How has the environment itself changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what could its future look like?

I herein address each of the sub-questions before returning to the main question and offering an answer as to how the environment can be an actor for peace.

### How the environment has played a role in the overall peace initiatives in Rwanda

The environment never had a starring role in the peace process of Rwanda. The entire peace process, in line with Rwandan culture, is anthropocentric and, as such, is focused on human development. These development initiatives focused mostly on poverty reduction, but also included the likes of education, infrastructure improvement, and food security. Rwanda wanted to develop into a middle-income nation as per international standards of what constituted a developed country and in the international system, environmental protection is not considered part of this standard. It is when we look at the whole picture, we see the environment acting for peace. Unofficially, the environment’s supporting role was integral to the country’s peaceful developmental success. The home-grown solutions to addressing peace – including *umuganda* – directly had people working towards healing the environment and restoring it to its fullest strength in a holistic attempt at healing the community. This traditional act of environmental peacebuilding shows how community-led environmental peacebuilding (i.e. cleanup) projects can help all members of the ecosystem (including nonhumans) to recover and strengthen their resilience post-conflict destruction.

Understanding of interconnectedness, bioregionalist attitudes, the meaning of place, and the core belief in sustainable development – the main themes of peace ecology – can clearly be seen in the Rwandan population. My research shows that people articulate the environment as a necessary component to peace. I have highlighted in the previous chapter how every definition of peace I was given included a good environment and how this relationship is what many of the local organizations build their foundations upon. Rwandans do not necessarily have the same academic schooling as peace ecology scholars. Rather, they have lived experiences of what works and helps in practice. That is how they know the value of the environment for peace. Whereas in the international system turns to the environment “not for food, shelter, and clothing, but for succour” (del Mar, 2012, pp. 18-9). The Western way of life – and academia as part of that system – perpetuates the divisionism and subsequent othering between humans, what it means to be developed against the environment, and what it means to live primitively. The values that created today’s EPP continue to define our relationship with the environment in a negative and passive way that prevents us from challenging the othering process of anthropocentrism.

This thesis highlighted Rwanda as a country from which the world has a lot to learn because of its astounding post-conflict peace development. Rwanda is already a leader to other nations in some departments – we have seen how their demobilization and reintegration commission is mentoring other countries – and it can also be a leader in the practice of peace ecology, if only it and the rest of the world were aware of the possibilities. Western actors have understood the need to better include the environment if we are to achieve peace, UNEP has even claimed “integrating environment and natural resources into peacebuilding is no longer an option – it is a security imperative” (Matthew, et al., 2009, p. 5). If Western states are too entrenched in their ways to be open to such a paradigm shift, it is in these developing post-conflict states the we must focus our attention and hope to change the world and make positive peace a reality. The country of Rwanda has not officially adopted the peace ecology paradigm. Rwanda is looking to integrate into the international system, but this goal does not encourage community-led initiatives to lead the way down that path. The international system does not adhere to this holistic, ecocentric mindset that the Rwandan locals intrinsically celebrate between peace and the environment. The post-Genocide peace initiatives are a chance to redefine what it means to be part of the international community, by redefining the international community and highlighting community-led environmental peace initiatives.

Having a strong environment has certainly helped the Rwandan people in their everyday lives to live more peacefully. Peace and therapy gardens along with other places of importance such as the libraries, museums, and memorials, have helped with healing from Genocidal traumas, adding to the examples of how environmental therapy should be incorporated in post-conflict societies in dealing with psychological or less severe emotional traumas that occurred as a result of conflict. Rwanda was a communal society before the Genocide against Tutsi, before the colonial invasion, so it was perhaps easier for them to intrinsically reincorporate the environment into their day-to-day as they were never

as far removed as Western society. While their understanding of the value of green spaces is sometimes seen as one of reverence (in that green spaces should not be for human use, which we have seen is a problem in the West), it is grown from the understanding of an intrinsic value of the environment.

According to Stephen Smith on a dedication plaque at the Kigali Genocide Memorial, “Genocide is not a single act of murder, it is millions of acts of murders.” We know that personification helps with relatability which counters violence as a result of othering. We have also seen problems with anthropomorphism of environmental problems and how it is harmful in taking away agency from the environment in issues of environmental degradation. Felicien Mitagengwa is quoted in the Kigali Genocide Memorial as saying, “if you knew me and you really knew yourself you would not have killed me,” and maybe that could be true of the environment as well so long as we respect the environment as a distinct actor with its own unique agency. Rwanda has been able to connect with the environment by understanding their place in their ecosystem; “the environment gives us food and we need food to eat and feel peace.” It really is as simple as that. It is sad that it takes a trauma to break our tunnel vision about what is important and make us realize simple truths that get lost in our quest for development – that we rely on the land. This is unfortunate, but it also allows us (the world) a unique opportunity for post-conflict societies to become leaders in championing the environment as an actor for peace.

### How views of the environment have changed over the years in relation to the stabilizing peace in Rwanda

I explored the question of changing views of the environment in relation to the stabilizing peace in Rwanda most prominently in the Sustainability theme of the Findings Chapter and so am able to conclude that generally speaking views have changed positively throughout the years in relation to the stabilizing peace in Rwanda. This is due in part to government sensitization programs advocating sustainability and interconnectedness, the community-led development initiatives being practiced by the people, and the younger generation being so open to learning, growing, and changing.

When Genocide against Tutsi wounds were fresh, people thought poorly of the environment, as if it was not important. Foremost on people’s minds, according to the data I collected, was that perpetrators needed to be confronted and that infrastructure needed to be rebuilt. This is a common mindset for parties to adopt post-conflict; people want life to return to normal. In Rwanda, through living and seeing how the environment was ever present in their lives, the people eventually realized that a healthy environment was their normal from before colonialization and is therefore necessary for life to thrive and so needs to be respected.

This can be true of all post-conflict societies if the world was more open to alternative ways of thinking. Not every country has such green-minded visionaries leading the peace development through an environmental lens as Rwanda had President Kagame. The theme of interconnectedness is generally being accepted in Rwanda, if more so by the local communities than by governmental

institutions. This stems from the fact that Rwandans are a group based in communalism rather than individualism, which is good for peace as I have already outlined why individualism is bad for the environment. Here it leads many Rwandans to understand peace in a holistic way. Not all of the government programs were able to think so openly and even I sometimes looked down on what my contacts would call a connection to the environment, but at least I was able to accept their points as data in the spirit of holism. Hopefully state-run programs can start to do this in the future. Education is good for fostering holistic understandings, and while the national peace curriculum may not include units on environmentalism, community initiatives do.

This respect towards the environment that Rwandans have fostered since the Genocide against Tutsi is understood differently than I understand respecting the environment (for example, in not touching the grass), which can be another good showcasing that the Western-way is not always the right-way. The environment is almost revered in Rwandan culture and people know not to mess with it. That being said, I am concerned about the possibility of this understanding of respect to pull us back into the position of protectionism that could recreate a divide from the environment in the way we have seen done in the international system – the protectionism versus conservationism paradox that led to today’s structural environmental violence. My data has shown this to already begin to be an issue in Rwanda in terms of their lack of use of green spaces and excization of the Batwa from their traditional forests in an attempt to protect the land. If Rwanda could address this, which they cannot realistically do since they did not set out for peace ecology, it could be a strong example of how to not only view, but also interact with the environment.

This paradox has been plaguing the international system for years but based on this research, a fuller embodiment of bioregionalist attitudes – as explained through peace ecology – could potentially be the best method with which to deal with respecting the environment as its own entity. The environment acts locally and globally with every element in each ecosystem playing a role. Looking at the environment’s agency in a holistic way to see how each agent and action interconnects with each other could give us answers regarding best practices for a variety of issues, especially those that come up in post-conflict situations. The Rwandans’ straightforward understanding of the simple but essential connections to the environment in their everyday reality helps them form a positive consideration of the environment.

### Why the environmental peacebuilding initiatives currently in place in Rwanda are happening now and what would be different if they had been implemented earlier in the peace process

While it may be impossible to say with certainty, based on my research I find that including the environment as an actor earlier in the peace process would have made a positive difference for Rwanda’s state of peace and development today. What is possible to say with certainty, is that had the current environmental initiatives been implemented earlier in the peace process then we would have seen greater results sooner. We have seen from examples in my Findings Chapter, and we know from

it being an obvious fact, that results regarding the environment take time to see. In the same way, education of the people to understand and respect the environment takes time. It is true that immediately post-Genocide the Rwandans were too traumatized to look beyond themselves and think of others, let alone other nonhumans (as my Literature Review Chapter explains that it is often economically secure people from developed nations who are the ones able to fight for the environment's rights) so it is understandable with today's international structures not to talk about environmental rehabilitation from the beginning.

That being said, we have also seen benefits of environmental therapy for Genocide victims, and if that could have been better incorporated into the post-conflict process earlier – which it could have been because trauma and rehabilitation is one of the first things usually addressed post-conflict and is therefore applicable to all post-conflict situations – then the holistic attitude now being championed would have been even stronger and more effective because it happened from the beginning. Rwanda lost a generation (the middle generation) to Genocidal trauma, and that whole body of people were not open to caring about the environment and so were not open to the sensitization efforts of the government. If environmental therapy (in all its forms) had been more prominently implemented immediately post-Genocide, it could have much more easily bled into other post-Genocide areas of life and those most traumatized could have had another actor on which to rely for their healing.

In reality, it took a while to even remember that the environment was something that needed to be addressed in their peace efforts, as REMA1 explained, and this is something that should never happen. In hindsight, my key informants understood how interconnected all of Rwanda's issues are and realized that you cannot address poverty without addressing the environment (for example). Unfortunately, this knowledge was not widespread early on in the peace effort, although this is hardly Rwanda's shortcoming. The country was trying to follow the laid-out paths to development and peace that the international system (and Western nations) followed, and we have seen through the EPP how this path leads to a negative peace where the environment is caged up. We also saw in the literature that there are alternative perspectives to development that include a synergistic consideration of the environment as an equal and powerful actor that can help humans achieve peace, including Indigenous, feminist, and ecologist thought. We need more awareness and support for the environment being an actor for peace in mainstream Peace Studies so that it is on everyone's first checklist on what to address post-conflict. Now we have seen Rwanda 25 years on from the conflict in question, and it is their greenness above anything else that puts them in a position of admiration and leadership for coming so far in such a short amount of time. They are proud of being the first African country with a Green Village, which another reason implementing green awareness early on in the peace process is integral.



## How the environment has changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what its future could look like

Humans use words to share their thoughts, but we cannot expect the same sort of discussion from the environment, so I have chosen to use pictures to discuss this question. Words have been used to describe the people's interpretation of the changing environment, but other means must be taken if we want to allow the environment to have input in this discussion. Where words fail us, pictures can show us. Consider these photos as what they are meant to represent, which is how the Rwandan environment has changed as per the various stages of surrounding peace with a hint at its future.

Before the Genocide against Tutsi, Rwanda was a natural and beautiful green land of a thousand hills. To represent this, Figure 31 is an image I captured on the way up Mount Kigali because of the beautiful greenery and natural road. Immediately post-conflict, the environment turned grey as Rwandans focused on hard security and infrastructure development at the cost of the natural. The result was constructions such as the cement walls with barbed wire seen in Figure 32 that changed the natural environment in a way that may have permanently confined its agency. Now, in a time of relative peace, the environment is once again beginning to flourish, albeit in an anthropocentric way. Figure 33, an image of the Garden of Self-Protection at the Kigali Genocide Memorial, represents the resilience, strength, and healing properties of the environment that were key characteristics for its reunification with its humans. Looking to the future involves learning from the past, a sentiment which Figure 34 embodies with its view over Lake Kivu through the traditional medicine garden of the Environment Museum. The lake inspired me when I was there and is a good representation of time as water is always flowing and changing.



*Figure 31: Before the Genocide against Tutsi and before colonization, Rwanda was a beautifully green land of 1000 hills*



*Figure 32: Immediately post-Genocide, Rwanda focused on hard security and infrastructure development. The focus of the environment was taken away from the natural beauty to focus on hard security*



*Figure 33: The Garden of Self-Protection at the Kigali Genocide Memorial represents the resilience of the environment even now in a time of relative peace. These local cacti represent the need for the environment to protect itself as the victims of the Genocide against Tutsi did. The healing properties also offer insight as to the environment's agency to continuously help actors to heal*



*Figure 33: Looking to the future of the beautiful blue Lake Kivu means remembering and learning from our past, which the traditional medicinal herb garden of the Environment Museum provides*

## How the Environment can be an Actor for Peace

The environment can be an actor for peace in any and all ways that we can understand it to be. We saw through this thesis that in Rwanda the environment was an actor for peace in many ways. As a starting point for peace efforts with Rwandans including the environment in their definitions of peace. As a home for people to restart their lives with libraries, museums, and memorials offering a chance to regain a sense of place and purpose. As a source of food and shelter for those in need, with the youth especially thankful of fruit trees. As a healer for genocidal wounds, with the gardens at the Kigali Genocide Memorial. As an inspiration for learning trust and cooperation with working with the environment to strengthen communities with communal cleanups. As a guide for people to reorganize their lives in more appropriate and sustainable way with protection of Lake Kivu helping to influence the locals' way of life. As a teacher with lessons learned about nature's symbols and its capabilities through traditional herb practices. As a producer of income and livelihood with conservation agriculture and other natural practices. These are just a few of the examples that I was able to highlight in my research project of when the environment was an actor for peace in Rwanda's post-Genocide initiatives.

The environment is always acting, always exhibiting agency, especially in post-conflict situations or situations where there is ecological distress. So, my research question asking *how the environment can be an actor for peace* is not a question about what the environment is capable of, because it is capable of doing too much for us to understand. It is rather questioning our views of the environment. As I have explained, Peace Studies views the environment as an abstract concept, but this position blinds us to its potential of agency. Hence, I have used this research project to look at the environment ecocentrically as an actor for peace. Peace is a positive and sustainable existence where there is no violence and all beings holistically interact in a harmonious way. Thinking ecocentrically is necessary for this regard as it allows us to view more of the environment's agency and lets us feel our connection within our bioregions so we can have one more partner in our search for peace. I explained how the environment acts with the help of ANT, that its actions are shown through the relationships it creates and of which it is a part. In this particular peace process in Rwanda, the environment clearly had many positive effects that helped establish and strengthen the country's state of peace. As the environment is everywhere, this relationship is indicative of all potential post-conflict areas looking to establish peace as well as relatively peaceful areas looking to strengthen their peace and get rid of violence against the environment. The important thing to remember is that even if we do not value it, the environment is always there and will always be there. We rely on the environment for our basic needs, so it only makes sense to respect it as an equally important actor for peace. We have not yet achieved world peace, and now you can see that is because we have not embraced the environment as an actor for peace.

## Conclusion Chapter

This thesis was built on the premise that the environment is the missing key to peace and the question *how can the environment be an actor for peace*. I argued, through a review of the divided literature, that our current international system is constructed on foundations of negative peace that disallows the environment to be considered an actor and so prevents us from achieving world peace. I set out to show how the environment does have agency throughout peace processes through a peace ecology paradigm by looking for examples in the post-Genocide peace initiatives of Rwanda. The gaps in literature surrounding my main research question regarding how the environment can act for peace were plenty, ranging from the lack of holistic, non-anthropocentric, transdisciplinary research on the intersection of peace and the environment to there being no empirical data to support this broad claim. By taking an ecocentric and holistic approach in an attempt to empiricize peace ecology and showing how this unorthodox paradigm can and is somewhat already present in society, I strengthened the ties between peace and the environment and showed how applicable peace ecology can be in real life as a mindset we need to adopt because it is applicable across many situations.

I addressed these gaps by answering my four sub-research questions. First, *how has the environment played a role in the overall peace initiatives in Rwanda?* The environment has played an integral, but understated, role in Rwanda's peace development. The people on the ground see the actions of the environment in their everyday life and how that positively impacts their state of peace. Unfortunately, the environment is not officially acknowledged for the depth of its role because Rwanda is looking to develop into the international system, which we have seen does not credit the environment fairly. Second, *how have views of the environment changed over the years in relation to the stabilizing peace in Rwanda?* As peace continues to strengthen, the environment is being viewed more positively and with more importance by the Rwandan people. This is due to their returning to Indigenous and community-based peace practices which has helped them see the integralness of the environment for them to maintain peace. Third, *of the environmental peacebuilding initiatives currently in place in Rwanda, why are they happening now and what could have been different if they had been implemented earlier in the peace process?* From what I learned, the environmental peacebuilding initiatives happened as soon as the people realized they were necessary. It was difficult for such practices to be organized earlier in the peace process because there is not much history or data outlining how this can be done. Now, the people understand that issues are interconnected and can only be addressed holistically. It is hard to say for certain what would have been different if such initiatives were implemented earlier in the peace process, but based on how much has changed for the better since they have, it is fair to say that more could have been achieved. Fourth, *how has the environment itself changed (from before the conflict, to immediately post-conflict, to a time of relative peace) and what could its future look like?* I let the images I took of Rwanda answer this question. My aim was to let the environment speak for itself and tell its own story. After experiencing it, I hope the environment continues to positively thrive in the future.



With these reflections, I attempted to summarize how the environment can be an actor for peace. While the case studied in this thesis was post-Genocidal Rwanda, the conclusions I have drawn can be pertinent for all other post-conflict societies inasmuch as the environment is always present. The peace ecology paradigm, with such holistic tenets as interconnectedness, bioregionalism, place, and sustainability, is applicable throughout our entire world ecosystem. The environment is always acting, it is just difficult to see or acknowledge its agency in our current environmental policy paradigm. If we change our perspective, as I suggested adopting an understanding of nonhuman agency akin to that explored in actor-network theory, we can better understand the vast ways in which the environment is an actor for peace. In Rwanda, I was able to identify the environment acting as an inspiration, a homemaker, a giver, a healer, a teacher, a guide, a producer, and overall peace agent. I am sure it did much more than that and I can only imagine how much more it could do if human peace actors would work with it by designing peace processes with the environment. I have done my best to show how I think this is the way to get our world closer to achieving world peace, as we cannot have peace if we are in conflict with the environment.

I have explained my motivation for undertaking this research was to contribute my views on how we can achieve world peace through focusing on the environment's agency. This thesis was my attempt at outlining a new approach to realizing social justice, since we have not yet achieved positive results despite the fact that peace scholars are studying how to eliminate violence and environment scholars are studying how to protect our atmosphere. There has already been a lot of thought about how the environment can be an actor for peace, but not enough is being done with that knowledge. I used this thesis to see how these positive thoughts can work in practice. I only looked at one small example and am optimistic that more work highlighting the intersection of peace and the environment will lead to more examples of environmental agency in peace processes. At the beginning of my thesis, I explained that looking at how to solve the environmental degradation happening right now and why that would lead to peace was beyond the scope of my research. However, my work can add to that discussion as well as all of the matters I mentioned were not within the realm of my thesis because all of these issues are interconnected. The environment surrounds us, no matter where we are, and just by that it is a unifying force.

To help establish peace ecology as a paradigm for creating an atmosphere for positive peace, more research and implementation of findings must be carried out. Specifically, in societies at the beginning stages of their peace process it would be interesting to study the full extent of how and where the environment comes up in discussions and practices of post-conflict peace initiatives. It would also be interesting to see the environment's role in the developmental initiatives of developing states who are not post-conflict because it is important to continue studying Indigenous integration on this issue. Also, developing nations can offer unique perspectives that could help rewrite the problematic international world order (the EPP). Further, studies should be done reviewing and comparing the agendas of peacebuilding actors, specifically the UN, to see how they are (or are not)



putting into practice these understandings of environmental incorporation into their peace initiatives. This would be important for moving us closer to respecting the environment as an actor for peace, which would then bring us one step closer to achieving true peace.

That being said, all of this research is useless if we do nothing with it. The most important next step is to start developing peace projects in conjunction with the environment. The vital role of the environment for peace and the many ways it is an actor for peace have been noted. Unfortunately, our international system is not designed to accept this fact. We are failing to address the climate crisis because our international system is too entrenched in its anthropocentric, individualistic ways to see the green path to positive peace. Peace Studies is supposed to be concerned with dealing with more than just direct violence between humans, it is supposed to be about finding peaceful solutions to all forms of violence, including structural violence. If we want peace in the world, we need to include the environment in our attempts. I have argued that post-conflict societies are a possibility to realize this, as they are in a position that makes them open to change.

Today's climate crisis can be understood as the result of the protracted conflict humans are waging against the environment (with our structural ecological violence). The covid-19 pandemic that is ongoing as I write this thesis, as a zoonotic disease, can be understood as the environment showing its resilience and fight back against the humans with which it is in conflict. Humans encroaching on nature, even when done in the name of peace or development is often ecological violence. As such, it can be said that the covid-19 pandemic is one of the biggest international conflicts to hit the world in a long time. Once we pull through, we will be in a unique post-conflict situation where we can start incorporating the environment as a positive actor for peace in our lives instead of continuing to encroach upon it and degrade it in a way that it must also bare its teeth at us. Again, it is one of my strongest convictions in life that the environment is the missing key to peace. I hope we use this experience to start implementing a peace ecology paradigm so that we can create an atmosphere where positive peace may blossom.

## Appendix I

### Description of Informant Organizations

*Campaign Against Genocide Museum (CAGM)* is a museum that explains Rwanda's genocidal history from after the UN was ordered to pull out through the story of how the Campaign Against Genocide Plan was executed by the Rwandan Patriotic Front. I met with two key informants from the CAGM whom I refer to as CAGM1 and CAGM2.

*Children's Peace Library (CPL)* is a group of libraries that act as community centres for local youth and has the aim of promoting the transition towards sustainable peace championed by the youth. I met with one key informant from the CPL whom I refer to as CPL1.

*Collectif des artisans de paix et la réconciliation (CAPR)* is a peace organization based in Kigali aimed at building knowledge around and promoting peace initiatives through non-violent conflict resolution in order to bring about a peaceful society in Rwanda and works by bringing individuals together to grow. This organization played a major role in my research project, however in my thesis I only name CAPR1 and CAPR2 as my specific key informants.

*Communauté des potiers du Rwanda (COPORWA)* is an organization that advocates for the Rwandan Potters' rights. This is an especially interesting group because it claims the Potters are what used to be the Indigenous Batwa People whose rights are now being overlooked with the eradication of ethnicity in the country. I sat down for an interview with my key informant COPORWA1, during which COPORWA2 added some commentary.

The *Environment Museum* is a museum focusing on several aspects of the Rwandan environment and was divided into three areas during my visit: the temporary exhibit, which was about energy and the renewable and non-renewable energy situations in the world and Rwanda; a permanent exhibit on Rwanda's natural resources; and the traditional medicinal garden. It is dedicated to inspiring Rwandans to think about their future. I refer to my key informant from the Environment Museum as EM1.

*Global Initiative for Environment and Reconciliation (GER)* is a non-governmental organization that aims at empowering local communities to build peace through conflict transformation techniques, healing past grievances through reconciliation, and promoting positive ecosystem management in Rwanda as well as the Democratic Republic of Congo. GER1 is how a reference my key informant from this organization.

*Health Development Initiative (HDI)* is an information branch of the Centre for Health and Rights and provides stigma-free information, counselling, and health services to locals with a specialization in sexual and community health. I had a group interview with three key informants representing the HDI organization.

*Institute of Research and Dialogue for Peace (IRDP)* is a participatory research group contributing to the growth of sustainable peace in Rwanda through the encouragement of dialogue and experience sharing. My key informant from IRDP is referenced at IRDP1.

*Kigali Genocide Memorial* (KGM) is the final resting place of victims of the Genocide against Tutsi and a place of learning from Rwanda's history and connecting with victims. From the KGM, my key informant was KGM1.

*Rwanda Environment Management Authority* (REMA) is a national governmental group tasked with the protection, conservation, promotion, and overall management of everything relating to the health of the Rwandan environment. It acts as an advisory group to the rest of the government on such issues. REMA1 is how I reference my key informant from this organization.

*Rwanda Green Fund* (FONERWA) is a government-issued environmental investment fund that invests in projects that support Rwanda's green economy. I met with FONERWA1 as my key contact representing FONERWA.

*Shelter Them* (ST) is an education organization that was originally established after the Genocide against Tutsi to empower and teach youth who were abandoned and orphaned. I had two key informants from this organization, whom I refer to as ST1 and ST2.

## Appendix II

### Draft Semi-Structured Interview Guide

- 1) Can you please tell me about your organization/role and its/your aims?
- 2) Why are you working in this area?
- 3) How do you think your work relates to peace in the area/country more generally than the specific area?
- 4) What does 'peace' mean for you?
- 5) At what point [since the peace efforts began] did you/this organization realize the importance/necessity of doing the work you do? When did you/it actually start realizing the work?
- 6) Tell me about the role of the environment in your work. Is it considered, and how?
- 7) What does 'the environment' mean for you?
- 8) How does the environment affect your work/the work that is done by this organization? How do you consider the environment in relation to your work? When did you start considering it?
- 9) What changes have you/this organization noticed through your work in regard to the environment over the years? [How] have your/your organization's views of the environment, or it in itself, changed?
- 10) Previous to this endeavour, how had you considered how your work could/would relate to peace and/or the environment?
- 11) What is it like being/working/living here?
- 12) Is there anything you would like to ask me?

## References

- Alhojailan, M. (2012). Thematic Analysis: A Critical Review of its Process and Evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.
- Almalki, A. (2016). Integrating Quantitative and Qualitative Data in Mixed Methods Research: Challenges and Benefits. *Journal of Education and Learning*, 5(3), 288-296.
- Amster, R. (2015). *Peace Ecology*. New York: Routledge.
- Austin, J., & Bruch, C. (2000). *The Environmental Consequences of War: Legal, Economic, and Scientific Perspectives* (Vol. 1). Cambridge: Cambridge University Press.
- Bajaj, M., & Chiu, B. (2009). Education for Sustainable Development as Peace Education. *Peace & Change*, 24(4), 441-452.
- Barnett, J. (2016). Environmental Security. In A. Collins, *Contemporary Security Studies* (Vol. 4, pp. 229-246). Oxford: Oxford University Press.
- Beckford, C., Jacobs, C., Nahdee, R., & Williams, N. (2010). Aboriginal Environmental Wisdom, Stewardship, and Sustainability: Lessons From the Walpole Island First Nations, Ontario, Canada. *The Journal of Environmental Education*, 41(1), 239-248.
- Berardi, A., & Mistry, J. (2016). Bridging Indigenous and Scientific Knowledge. *Science*, 352(6291), 1274-1275.
- Berger, R., & McLeod, J. (2006). Incorporating Nature into Therapy: A Framework for Practice. *Journal of Systemic Therapies*, 25(2), 80-94.
- Berkes, F., & Berkes, M. (2009). Ecological Complexity, Fuzzy Logic, and Holism in Indigenous Knowledge. *Futures*, 41, 6-12.
- Bolter, J. (2016). Posthumanism. In K. Jensen, E. Rothenbuhler, J. Pooley, & R. Craig, *International Encyclopedia of Communication Theory and Philosophy*. Hoboken: John Wiley & Sons.
- Brantmeier, E. (2018). Sustainable Peace for the Planet. In J. Miller, K. Nigh, M. Binder, B. Novak, & S. Crowell, *International Handbook of Holistic Education* (pp. 79-88). New York: Routledge.
- Brauch, H. (2018). Sustainable Peace Through Sustainability Transition as Transformative Science: A Peace Ecology Perspective in the Anthropocene. In H. Brauch, U. Spring, A. Collins, & S. Oswald, *Climate Change, Disasters, Sustainability Transition and Peace in the Anthropocene* (Vol. 25, pp. 175-234). Cham: Springer.
- Brauchler, B. (2018). The Cultural Turn in Peace Research: Prospects and Challenges. *Peacebuilding*, 6(1), 17-33.
- Brock, L. (1991). Peace through Parks: The Environment on the Peace Research Agenda. *Journal of Peace Research*, 28(4), 407-423.
- Bryman, A. (2012). *Social Research Methods* (4 ed.). Oxford: Oxford University Press.



- Buckley, A. (2017). *Proceedings of the 16th European Conference on Research Methodology for Business and Management Studies*. Dublin: Academic Conferences and Publishing International.
- Cajete, G. (1994). *Look to the Mountain: An Ecology of Indigenous Education*. Durango: Kivaki Press.
- Callon, M. (2001). Actor Network Theory. *International Encyclopedia of the Social & Behavioral Sciences*, 62-66.
- Cambridge Dictionary. (2020). *Cambridge Advanced Learner's Dictionary & Thesaurus*. Cambridge: Cambridge University Press. Retrieved from <https://dictionary.cambridge.org/dictionary/english/apocalypse>
- Carius, A. (2006). *Environmental Peacebuilding*. Adelphi Consult.
- Carius, A. (2007). *Environmental Peacebuilding: Conditions for Success*. Washington: The Woodrow Wilson International Center for Scholars.
- Carson, R. (1962). *Silent Spring*. Boston: Houghton Mifflin Company.
- Carter, N. (2007). *The Politics of the Environment: Ideas, Activism, Policy*. Cambridge: Cambridge University Press.
- Caulfield, J. (2019, September 6). *How to do Thematic Analysis*. Retrieved from Scribbr: <https://www.scribbr.com/methodology/thematic-analysis/>
- Central Intelligence Agency. (2019, May 13). *Africa: Rwanda*. Retrieved from The World Factbook: <https://www.cia.gov/library/publications/the-world-factbook/geos/rw.html>
- Cooper, R. (2001). Review of the Book Resource Wars: The New Landscape of Global Conflict by M. Klare. *Capsule Review*.
- Crook, M., Short, D., & South, N. (2018). Ecocide, Genocide, Capitalism and Colonialism: Consequences for Indigenous Peoples and Global Ecosystems Environments. *Theoretical Criminology*, 22(3), 298-317.
- Crumley, C. (2006). Historical Ecology: Integrated Thinking at Multiple Temporal and Spatial Scales. In A. Hornborg, & C. Crumley, *The World System and the Earth System: Global Socioenvironmental Change and Sustainability since the Neolithic* (pp. 15-28). Walnut Creek: Left Coast Press.
- Curry, P. (2006). *Ecological Ethics: An Introduction*. Cambridge: Polity Press.
- Dalby, S. (2008). Environmental Change. In P. Williams, *Security Studies: An Introduction* (pp. 260-273). New York: Routledge.
- Dawson, N., & Martin, A. (2015). Assessing the Contribution of Ecosystem Services to Human Wellbeing: A Disaggregated Study in Western Rwanda. *Ecological Economics*, 117, 62-72.
- del Mar, D. P. (2012). *Environmentalism*. Harlow: Pearson Education Limited.
- Doyle, L., Brady, A.-M., & Byrne, G. (2009). An Overview of Mixed Methods Research. *Journal of Research in Nursing*, 14(2), 175-185.

- Dresse, A., Fischhendler, I., Nielsen, J., & Zikos, D. (2019). Environmental Peacebuilding: Towards a Theoretical Framework. *Cooperation and Conflict*, 54(1), 99-119.
- Driscoll, D., Appiah-Yeboah, A., Salib, P., & Rupert, D. (2007). Merging Qualitative and Quantitative Data in Mixed Methods Research: How To and Why Not. *Ecological and Environmental Anthropology*, 3(1), 19-28.
- Elliot, L. (1996). Women, Gender, Feminism, and the Environment. In J. Turpin, & L. Lorentzen, *The Gendered New World Order: Militarism, Development, and the Environment* (pp. 13-34). New York: Routledge.
- Evanoff, R. (2017). Bioregionalism: A Brief Introduction and Overview. *The Aoyama Journal of International Politics, Economics and Communication*(99), 55-65.
- Expert Africa. (n.d.). *Lake Kivu*. Retrieved from Expert Africa: <https://www.expertafrica.com/rwanda/lake-kivu>
- FONERWA. (2019). *FONERWA: About Us*. Retrieved from fonerwa.org: <http://www.fonerwa.org/?q=about>
- Ford, S. (2018). The Impact of the Ad Hoc Tribunals on the International Criminal Court. *Social Science Research Network*, 1-18.
- Gale Encyclopadia of Alternative Medicine. (n.d.). *Environmental Therapy*. Retrieved March 28, 2019, from encyclopedia.com: <https://www.encyclopedia.com/medicine/encyclopedias-almanacs-transcripts-and-maps/environmental-therapy>
- Galtung, J. (1969). Violence, Peace, and Peace Research. *Journal of Peace Research*, 6(3), 167-191.
- Galtung, J. (1996). Peace Studies: Some Basic Paradigms. In J. Galtung, *Peace by Peaceful Means: Peace and Conflict, Development and Civilization* (pp. 24-39). London: SAGE Publications Ltd.
- Gomes, A. (2018). Lessons from the Margin: Indigenous Peace Ecology. *Organicom*, 15(28), 149-166.
- Grace, M. (2019). *RDRC News Dispatch: Special Report*. Kigali: Rwanda Demobilisation and Reintegration Commission.
- Grandy, G. (2012). Instrumental Case Study. In *Encyclopedia of Case Study Research* (pp. 474-475). Thousand Oaks: SAGE Publications, Inc.
- Gray, J. (2000). *Two Faces of Liberalism*. Cambridge: Polity Press.
- Gray, J., Whyte, I., & Curry, P. (2018). Ecocentrism: What it means and what it implies. *The Ecological Citizen*, 1(2), 130-131.
- Greenpeace International. (2020). *Greenpeace*. Retrieved from greenpeace.org/international: <https://www.greenpeace.org/international/explore/about/>
- Griffin, G. (2017). *A Dictionary of Gender Studies*. Oxford: Oxford University Press.

- Hausmann, A., Slotow, R., Burns, J., & Di Minin, E. (2016). The Ecosystem Service of Sense of Place: Benefits for Human Well-being and Biodiversity Conservation. *Environmental Conservation*, 43(2), 117-127.
- Heyd, D. (2010). Cultural Diversity and Biodiversity: A Tempting Analogy. *Critical Review of International Social and Political Philosophy*, 13(1), 159-179.
- Hoeffler, A., & Reynal-Querol, M. (2003). Measuring the Costs of Conflict. *mimeo*, 1-25.
- Howard, E. (2014, April 3). Rwanda, 20 Years On: How a Country is Rebuilding Itself. *The Guardian*.
- Johnson, A. (1997). *The Gender Knot: Unraveling Our Patriarchal Legacy*. Philadelphia: Temple University Press.
- Johnson, A. (2016). *The Tree as Metaphor*. Retrieved from Allan G. Johnson: <http://www.agjohnson.us/essays/tree/>
- Kajornboon, A. (2005). Using Interviews as Research Instruments. *E-Journal for Research Teachers*, 2(1), 1-8.
- Katz, E. (1979). Utilitarianism and Preservation. *Environmental Ethics*, 1(4), 357-364.
- Kawulich, B. (2005). Participant Observation as a Data Collection Method. *Forum Qualitative Sozialforschung*, 6(2).
- Keeling, D., & Lehman, M. (2018). Posthumanism. *Oxford Research Encyclopedia of Communication*.
- Keighren, I. (2015). Environmental Determinism. In J. Wright, *International Encyclopedia of the Social & Behavioral Sciences* (2 ed., pp. 720-725). London: Elsevier Health Sciences.
- Kigali Genocide Memorial. (2019). Children's Garden. Retrieved July 26, 2019
- Kigali Genocide Memorial. (2019). Garden of Division. Retrieved July 26, 2019
- Kigali Genocide Memorial. (2019). Rose Gardens. Retrieved July 29, 2019
- Kirkpatrick, K., & Borbála, F. (2015). *Animals in Irish Literature and Culture*. New York: Palgrave Macmillan.
- Klare, M. (2002). *Resource Wars: The New Landscape of Global Conflict*. New York: Macmillan Publishers.
- Knox, S. (2009). Qualitative Research Interviews. *Psychotherapy Research Methods*, 566-575.
- Kortenkamp, K., & Moore, C. (2001). Ecocentrism and Anthropocentrism: Moral Reasoning about ecological Commons Dilemmas. *Journal of Environmental Psychology*, 21(3), 261-272.
- Krampe, F. (2017). Towards Sustainable Peace: A New Research Agenda for Post-Conflict Natural Resource Management. *Global Environmental Politics*, 17(4), 1-8.
- Kyrou, C. (2007). Peace Ecology: An Emerging Paradigm in Peace Studies. *International Journal of Peace Studies*, 12(1), 73-92.
- Lacey, M. (2004, April 9). A Decade After Massacres, Rwanda Outlaws Ethnicity. *The New York Times*.

- Latour, B. (1996). On Actor-Network Theory. A Few Clarifications Plus More than a Few Complications. *Soziale Welt*, 47, 369-381.
- Latour, B. (2005). *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press.
- Latour, B., & Lenton, T. (2018). Extending the Domain of Freedom, or Why Gaia is so Hard to Understand. *Critical Inquiry*, 45(3), 659-680.
- Levin, S. (2015, December 29). *Ecological Resilience*. Retrieved from Encyclopædia Britannica: <https://www.britannica.com/science/ecological-resilience>
- Lewis, B. (2012). Environmental Rights or a Right to the Environment? Exploring the Nexus between Human Rights and Environmental Protection. *Macquarie Journal of International and Comparative Environmental Law*, 8(1), 36-47.
- Liamputtong, P. (2019). Methodological Frameworks and Sampling in Qualitative Research. In P. Liamputtong, *Qualitative Research Methods* (5 ed., pp. 5-22). Oxford: Oxford University Press.
- lonely planet. (2020). *Map of Rwanda*. Retrieved from lonely planet: <https://www.lonelyplanet.com/maps/africa/rwanda/>
- Lorentzen, L., & Turpin, J. (1996). Introduction: The Gendered New World Order. In L. Lorentzen, & J. Turpin, *The Gendered New World Order: Militarism, Development, and the Environment* (pp. 1-12). London: Routledge.
- Lynn, W. (1998). Contested Moralities: Animals and Moral Value in the Deer/Symanski Debate. *Ethic, Place and Environment*, 1(2), 223-242.
- Mair, M., & Mair, J. S. (2003). Violence Prevention and Control Through Environmental Modifications. *Annual Review of Public Health*, 24(1), 209-225.
- Matthew, R., Brown, O., & Jensen, D. (2009). *From Conflict to Peacebuilding: The Role of Natural Resources and the Environment*. Nairobi: United Nations Environment Programme.
- Mika, C. (2015). Counter-Colonial and Philosophical Claims: An Indigenous Observation of Western Philosophy. *Educational Philosophy and Theory*, 47(11), 1136-1142.
- Milfont, T. (2012). Cultural Differences in Environmental Engagement. In S. Clayton, *The Oxford Handbook of Environmental and Conservation Psychology* (pp. 182-201). Oxford: Oxford University Press.
- Mol, A. (2010). Actor-Network Theory: Sensitive Terms and Enduring Tensions. *Kölner Zeitschrift für Soziologie und Sozialpsychologie. Sonderheft*, 50, 253-269.
- Mrema, E., Bruch, C., & Diamond, J. (2009). *Protecting the Environment During Armed Conflict: An Inventory and Analysis of International Law*. Nairobi: United Nations Environment Programme.

- National Geographic. (2020). *Concept of Place*. Retrieved from National Geographic Resource Library: [https://www.nationalgeographic.org/topics/resource-library-concept-place/?q=&page=1&per\\_page=25](https://www.nationalgeographic.org/topics/resource-library-concept-place/?q=&page=1&per_page=25)
- Neira, M., Bos, R., Corvalán, C., Wolf, J., & Prüss-Ustün, A. (2016). *Preventing Disease Through Healthy Environments: A Global Assessment of the Burden of Disease from Environmental Risks*. Geneva: World Health Organization.
- Nolet, V. (2016). *Educating for Sustainability: Principles and Practices for Teachers*. New York: Routledge.
- Nowell, L., Norris, J., White, D., & Moules, N. (2017). Thematic Analysis: Striving to Meet the Trustworthiness Criteria. *International Journal of Qualitative Methods*, 16, 1-13.
- O'Brien, J., Keivani, R., & Glasson, J. (2007). Towards a New Paradigm in Environmental Policy Development in High-income Developing Countries: The Case of Abu Dhabi, United Arab Emirates. *Progress in Planning*, 68, 201-256.
- Peterson, G., Pope, S., de Leo, G., Janssen, M., Malcolm, J., Parody, J., . . . North, M. (1997). Ecology, Ethics, and Advocacy. *Conservation Ecology*, 1(1), 1-7.
- Petrie, D. (Director). (2005). *Miss Congeniality* [Motion Picture].
- Preece, B. (2018). Environments, Ecologies, and Climates of Crises: Engaging Disability Arts and Cultures as Creative Wilderness. In B. Hadley, & D. McDonald, *The Routledge Handbook of Disability Arts, Culture, and Media* (pp. 281-294). Milton: Routledge.
- Purser, R., Park, C., & Montuori, A. (1995). Limits to Anthropocentrism: Toward an Ecocentric Organization Paradigm? *The Academy of Management Review*, 20(4), 1053-1089.
- Raleigh, C. (2007). Climate Change, Environmental Degradation and Armed Conflict. *Political Geography*, 26(6), 674-694.
- REMA. (2012). *Inventories of Kivu Lake Islands Biodiversity in Support to their Inclusion into the Protected Areas Network in Rwanda*. Karongi: REMA.
- Republic of Rwanda. (2000). *Rwanda Vision 2020*. Kigali: Government of Rwanda.
- Reyhani, R. (2006). Protection of the Environment during Armed Conflict. *Missouri Environmental Law & Policy Review*, 14(2), 323-338.
- Richmond, O. (2018). Peace and the Formation of Political Order. *International Peacekeeping*, 26(1), 85-110.
- Rwanda National Police. (2015, October 5). Fishermen vow to protect Kivu from illegal activities. *Rwanda National Police Archives*.
- Rwanda National Police. (2018, November 15). How Police marine is saving fish stocks on Lake Kivu. *Rwanda National Police Archives*.
- Sandelowski, M. (2004). Using Qualitative Research. *Qualitative Health Research*, 1366-1386.
- Sayes, E. (2013). Actor-Network Theory and Methodology: Just What Does it Mean to Say that Nonhumans Have Agency? *Social Studies of Science*, 44(1), 134-149.

- Scannell, L., & Gifford, R. (2017). The Experienced Psychological Benefits of Place Attachment. *Journal of Environmental Psychology, 51*, 256-269.
- Schmidt, G. (2005). Ecology & Anthropology: A Field Without Future? *Ecological and Environmental Anthropology, 1*(1), 13-15.
- Sedawi, W., Assaraf, B., & Reiss, M. (2019). Regenerating our Place: Fostering a Sense of Place Through Rehabilitation and Place-Based Education. *Research in Science Education*. Retrieved from <https://doi.org/10.1007/s11165-019-09903-y>
- Shelton, D. (2006). Human Rights and the Environment: What Specific Environmental Rights have been Recognized? *Denver Journal of International Law and Policy, 35*(1), 129-171.
- Singer, P. (1975). *Animal Liberation: A New Ethic for our Treatment of Animals*. New York: New York Review.
- Singh, B., Keitsch, M., & Shrestha, M. (2019). Scaling up Sustainability: Concepts and Practices of the Ecovillage Approach. *Sustainable Development, 27*(2), 237-244.
- Soudan, F. (2019, April 6). Paul Kagame: "Nous sommes allés au-delà de l'imaginable". *Jeune Afrique*, pp. 30-36.
- Stake, R. (1994). Case Studies. In N. Denzin, & Y. Lincoln, *Handbook of Qualitative Research* (pp. 236-247). Thousand Oaks: Sage.
- Steverson, B. (1994). Ecocentrism and Ecological Modeling. *Environmental Ethics, 16*(1), 71-88.
- Tabaro, J. d. (2015, July 13). The Passport to Death: Story of Rwanda's Notorious ID. *KT Press*.
- Ullsax. (2013). *The Environmental Lens*. Stockholm: SIDA.
- UNEP. (2019). *Global Environment Outlook 6*. Nairobi: United Nations Environment Programme.
- United Nations. (2015). *Transforming our World: The 2030 Agenda for Sustainable Development*. New York: United Nations. Retrieved from [sustainabledevelopment.un.org](https://sustainabledevelopment.un.org).



