ISRAEL:

GREENWASHING COLONIALISM AND APARTHEID

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FOREWORD

I decided to write my Major Research Paper (MRP) on Israel, as a Palestinian who lived under Israeli occupation and who witnessed Israel's social and environmental injustices first-hand. I wanted to understand how people I met in Toronto could describe Israel as an environmental steward, as it oppresses my people and I have seen the Israeli army protect Israeli settlers, as they burned my village's olive trees. In addition, I wanted to understand how Israel's environmental policies fit within Israel's system of oppression. By highlighting how Israel's self-image as an environmental steward is false, I hope my research can refocus attention on Israel's oppression of the indigenous Palestinians and urges readers to join the call for Boycott, Divestment, and Sanctions (BDS) against Israel. More generally, my research stresses the need to view humans and the environment as inseparable entities, since this paper demonstrates how social harm frequently causes environmental harm and vice versa.

ABSTRACT

This paper demonstrates how Israel uses environmental policy to sustain its oppressive status quo, rather than the environment. This paper is divided into four parts. First, I explain how past colonial and apartheid states used environmental policy to sustain their oppressive status quos. Second, I describe how Israel employs systems of colonialism, capitalism, and apartheid. Third, I explain how these systems harm not only the indigenous Palestinians, but also the environment. Fourth, I explain how Israel uses environmental policy to advance its oppressive agenda. I also explain how this policy often harms the environment. This paper concludes by explaining how Palestinians and supporters of the Palestinian cause are resisting against Israel's oppression. In sum, this paper argues that all oppressive systems, such as Israel's colonialism, capitalism, and apartheid, must be dismantled in order to safeguard human and environmental interests. I argue that environmental policy used by states, like Israel, to advance colonialism, capitalism, and/or apartheid must be rejected by all environmentalists. Indeed, I argue that the definition of the term environment needs to be widened to include humans, since human and environmental fates are inextricably linked, (Mcdonald 2002, pg. 3). This paper combines scholarly research with personal narrative, drawing on my personal experience, as a Palestinian who witnessed Israel's injustices first-hand.

For Mom and Dad, and Palestine, with love

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INTRODUCTION

A personal anecdote

A couple of months after returning to Canada to pursue my Master in Environmental Studies, I attended an event, which highlighted Israel's oppression of the Palestinian people. After the talk, I began to discuss the content with a classmate who suddenly countered: "But Israel is the only country in the Middle East that cares about the environment!" I was shocked. His attempt to justify Israel's violations of Palestinian rights by highlighting its supposed environmentalism was dehumanizing. I had also just come back from a trip to the West Bank, which was occupied by Israel. Images flashed through my mind of a day when Israeli settlers descended upon my Palestinian village of Madama and burned scores of our olive trees. The settlers were accompanied by the Israeli army. When Palestinians tried to stop the settlers, the Israeli army fired tear gas and sound bombs at the Palestinians. This kind of social and environmental injustice, in which Israeli colonists had impunity to assault Palestinian people and land, was a regular part of life for Palestinians living under Israeli occupation.

My classmate's retort that Israel cared about the environment was incredibly flawed and offensive. However, Israel has spent a lot of money to brand itself as a "Green Country" in recent years, (Israeli Ministry of Environmental Protection 2012). Israel's "leading environmental agency", the Jewish National Fund (JNF), has played an instrumental role in the greening of Israel's image by promoting its successes in forestation, combating desertification, and rehabilitating forests, (JNF website 2017, n.p.). Israel's green image helps legitimize it, as a progressive and moral nation, rather than an oppressive colonial, capitalist, and apartheid state, which continues to harm millions of Palestinians and the environment.



Figure 1. Olive Trees on Fire. A photo taken by my brother of the fire, which was started by Israeli settlers on the hills of our village of Madama, located in the occupied West Bank, (2015).

Outline

This paper is divided into four parts. The first draws from the existing literature on green colonialism to explain how past colonial states used environmental policy to advance their oppressive agendas. The second part demonstrates how Israel operates as a colonial, capitalist, and apartheid state, since its birth. A brief historical overview of Zionism, Palestinian displacement, Israeli occupation, Israeli apartheid, and Israeli capitalism is provided. The third part highlights how Israel harms the environment, in addition to the indigenous Palestinians. The last part demonstrates how Israel uses environmental policy and crafts its self-image as an environmental steward to advance its colonial agenda. This paper concludes by discussing how

Palestinians are resisting against Israel's oppression and what they can learn from the antiapartheid struggle in South Africa in their fight for social and environmental justice. The conclusion also stresses the need to view humans and the environment as inseparable entities, and the need for environmentalists to reject any kind of environmental policy that is used to advance an oppressive agenda.

Theoretical framework

This research contributes to colonial and environmental studies, as it explains how Israel operates green colonialism. The concept of green colonialism lacks a precise definition. I define the concept in this paper as the use of environmental policy to advance a colonial agenda. This concept is not to be confused with that of ecological imperialism, which stresses how environmental destruction can facilitate colonial expansion, (Crosby 1986). Based on my intensive research, the book Green Imperialism: Colonial Expansion, Tropical Island Edens and the Origins of Environmentalism 1600–1860 (Grove 1995) is the most comprehensive text available on the topic of green colonialism. In this book, Grove demonstrates how environmentalism has much of its roots in colonialism. Green colonialism has been linked to various countries, such as Canada (Jago 2017), India (Kumar 2012), South Africa (McDonald 2002), and Zimbabwe (Kwashirai 2009). How Israel operates green colonialism is neglected in academia. Some research has been done on the JNF, which uncovers the colonial and greenwashing role of this organization, notably by Kershnar, Levy, Benjamin, Scandrett, Deutsch, Schwartzman, Blumenthal, Abu-Sitta, Balsam, Zayid, Sahlab, Hat-Artichoker, and Kovel (2011) in their book Greenwashing Apartheid: The Jewish National Fund's Environmental Cover Up. However, this paper explains how Israel operates green colonialism

beyond the JNF and how Israel's actions fit into an established colonial pattern. Israel's negative impact on the environment is also often neglected in academia. This paper provides a unique comprehensive overview of how Israel operates colonialism, capitalism, and apartheid, and how these systems intersect to harm Palestinians and the environment.

1. GREENWASHING COLONIALISM

Colonial roots of environmentalism

Environment is a broad concept that can be defined in different ways. However, it typically encompasses non-human elements, such as water, air, and plants. Environmentalism is a movement or philosophy aimed at protecting or improving the health of these elements, (Merriam Webster 2017, n.p.). The movement emerged in different parts of the world, throughout history, and dates back centuries. However, as Grove (1995) argues:

...it was not until the mid seventeenth century that a coherent and relatively organised awareness of the ecological impact of the demands of emergent capitalism and colonial rule started to develop, to grow into a fully fledged understanding of the limited nature of the earth's natural resources and to stimulate a concomitant awareness of a need for conservation.

According to Grove, environmentalism fully emerged in the 17th century, as a response to the negative impacts of capitalism and colonialism on the environment. Capitalism and colonialism also emerged during the 17th century, (Hobsbawm 1960, pg. 107). While there is a longer history shaping the development of both capitalism and colonialism, leading British historian Hobsbawm states neither system fully emerged until the 17th century.

This convergence in histories is of no coincidence, since capitalism and colonialism had one common goal. The goal was to make profit. As an economic and political system, capitalism sought to maximize profit by exploiting cheap labour and natural resources, (Lapon 2011). Colonialism, Murphy (2009) says, is a form of imperialism, (pg. 5). Colonialism refers to a period when a small number of European countries extended formal political control over land on other continents, (pg. 6). In the 17th century, Britain and France occupied Australasia and North America, and Europe took control of much of Asia, Africa, and Latin America in the 19th century. And as Blaut (1993) argues, "[t]he goal of all European individuals and groups involved in the colonial process (clergy apart) was to make money", (pg. 281).

Colonialism generated tons of capital through gold and silver mining, plantation agriculture, trade in spices and cloth, slavery, piracy, and other ways. Commodities, such as sugar, tobacco, coffee, tea, cotton, furs, feathers, timber, and rubber were transported from the colonies to Europe, where they became consumer goods, (Murphy 2009, pg. 9). As countries depleted their own natural resources, due to capitalist policies, and in their search for more valuable resources, they colonized new territories and exploited their people's labour and resources. The search for timber, for example, lay behind British expansionism in North America and elsewhere, (Grove 1995, pg. 389). Malaysia also became "Britain's most valuable tropical colony", because it supplied rubber for the mass production of cars, (Murphy 2009, pg. 10). Colonialism fuelled European capitalism and spread capitalism to other regions in the world.

Colonialism, coupled with capitalism, devastated not only millions of people, over the years, but also many environments, (Crosby 1986). Europeans brought new plants and animals, whether deliberately or accidentally, to the lands they colonized, (pg. 136). Some of these new species severely altered colonized environments, (pg. 136). For example, the European

introduction of cattle in Central America and the Caribbean coast contributed to severe soil erosion, the effects of which can still be felt today, (Grove 1995, pg. 63). However, as Crosby (1986) highlights, it was disease, which accompanied some European animals, that played the biggest role in altering colonized environments and devastating indigenous people. While Europeans evolved immunological defences to these diseases, having interacted in close proximity with these animals over a long time, the majority of the colonized populations did not and were thus rendered "defenceless", (pg. 286). Consequently, disease quickly killed much of the indigenous populations Europeans encountered, (pg. 38). These epidemics facilitated European colonial expansion to a greater degree than military might, according to Crosby, since many of the indigenous people that could have resisted colonialism were killed by disease.

Europeans also destroyed the forests of many of the territories they colonized, to make way for plantation agriculture, dramatically altering the landscape of these territories, (Grove 1995). European deforestation caused soil erosion, the drying of streams, and even reduction in rainfall. According to Grove, the speed and severity of the ecological degradation of colonized territories, due to colonialism and capitalism, alarmed European colonial empires and prompted them to begin implementing environmental policies. Therefore, environmentalism emerged as a European colonial response to the destructive consequences of colonialism and capitalism.

However, colonial empires implemented environmental policies out of self-interest and not out of concern for the environment or the indigenous people they were decimating. Murphy (2009) states colonists pursued two strategies to inform their environmental policy, (pg. 14). These strategies were conservation and preservation. Conservation of nature helped colonial states ensure they could exploit resources from territories they colonized over the long term. Preservation of nature helped colonial states maintain "nature in its natural state regardless of its

utility". Colonial states used both strategies to benefit their political and economic interests, rather than the environment, as I explain below.

Environmental policy for political interests

National parks

The environmental policy of national parks can advance colonial political interests in many ways. National parks were first established by Western colonial powers, such as the United States (U.S.), (Robbins 2007, pg. 1203). Informed by a preservationist strategy, national parks seek to keep nature in its existing state by reserving land for sole state ownership and excluding people from their grounds. After all, Western views of nature hold that people need to be excluded from nature in order to protect it, (Ramutsindela 2005, pg. 2).

Due to their exclusionist trait, national parks are often exploited as a tool of dispossession by colonial states. In the U.S., national parks have been linked to ethnic cleansing, since natives have been forcibly removed and their treaty rights to traditional land use for hunting and fishing erased, often without acknowledgment or compensation, to make way for national parks, (Kantor 2007, pg. 42). Meanwhile, natives were branded as "incapable of appreciating the natural world", because they hunted animals and set fires, (pg. 49). Throughout Africa, the establishment of national parks also involved the "removal, social dislocation, and exclusion of indigenous communities", (Mcdonald 2002, pg. 135). Africans have also been portrayed "homogenously in the role of poachers and whites in the role of conservationists", (pg. 19).

Meanwhile, preservationist environmental policies, like national parks, tend to target areas that are relatively unaffected by development, where indigenous people are already struggling to preserve their livelihoods and cultures against external encroachment,

(Murphy 2009, pg. 15). The natural landscape of an area designated to become a national park, which tends to include forests, mountains, water, and thick vegetation, can provide a great degree of cover and isolation, so people could organize and express themselves culturally and politically, relatively autonomously, (McNeill 2004, pg. 21). The inhabitants of these areas could, thus, control and define their own identities, (Dahl, Hicks, and Jull 2000, pg. 175). By creating national parks and expelling their inhabitants, colonial powers could then not only gain control of a new territory, but also a territory, which could provide cover for anti-colonial, anti-government, or anti-capitalist organizing. By creating national parks, colonial powers could also gain control of the people who inhabited the areas, dispossessing them culturally, politically, physically, and spiritually, and drawing them into the colonial state's society and economy.

After the removals of indigenous people, parks are often advertised as a showcase of uninhabited land or "nature's handiwork unspoiled", (Kantor 2007, pg. 42). The history of the people who inhabited the land, named its features, and harvested and hunted its plants and animals for thousands of years is simply erased. National parks, thus I argue, help advance the political interests of colonial states in two significant ways. First, they help justify colonial land grab and the dispossession of indigenous people. Indigenous people are blamed for environmental destruction and ineffective resource management in this process. Colonial states also argue that the exclusion of people is the only way to protect nature. Second, national parks falsely portray areas as uninhabited, erasing the pre-colonial histories of the parks and hiding the criminal actions of colonial states, helping to further dispossess indigenous people, (Robbins 2007, pg. 1206). Knowledge of the benefits national parks provide colonial powers is unsurprising given the historical fact that national parks were first established by colonial powers, such as the U.S.

And while national parks are created on the premise that they benefit the environment, many argue national parks do more harm than good, (Robbins 2007, pg. 1206). Critics of national parks argue that nature is constantly changing. Using preservation tactics to maintain a landscape in its existing state, as in the case of national parks, is interfering with natural processes and can actually reduce biodiversity, degrading the health of the environment.

For example, Parks Canada (2017), which governs Canada's national parks, recently prohibited the use of power boats and other trailered boats in Waterton Lakes National Park, (n.p.). Parks Canada argues that the prohibition of boats will help prevent zebra and quagga mussels from "contaminat[ing]" the park. Parks Canada explains that zebra and quagga mussels, which were introduced from Europe into North America in 1980s, cling to boats, spread quickly, and outcompete native aquatic species for food. In addition, Parks Canada states: "No method, technology or natural predator exists to remove invasive mussels once established in a water body". However, Parks Canada uses vague language and does not provide any references to back its statements, as to how these mussels harm Canadian ecosystems. Back in 2008, Canadian aquatic ecologist Professor Radu Guiasu also provided evidence that, in some Ontario locations, zebra mussel populations were stabilizing or even declining, (pg. 32). He adds:

Both zebra and quagga mussels have become important food sources for several local species in Ontario, [...]. At Long Point, on the shore of Lake Erie, for example, these waterfowl eat large quantities of introduced mussels, keeping mussel populations in check naturally.

While noting that "deliberate species introductions can have unpredictable consequences and they should never be attempted casually", Guiasu argues that zebra and quagga mussels, demonized as threats to Canadian ecosystems by Parks Canada, can be actually having a positive

impact on some Canadian ecosystems, serving as an important food source for many aquatic species. Rather than attempting to reduce the numbers of these mussels, according to Guiasu: "Perhaps the best thing we can do for many wilderness areas and the species they shelter", he adds "is to leave them alone as much as possible and allow them to continue to exist and evolve on their own". Of course, even if national parks were to benefit certain species, they should never justify human rights violations. However, criticism of the ecological impact of national parks reinforces the argument that national parks are used as a tool to advance a colonial agenda, rather than benefit the environment. This criticism also demonstrates how social harm, even in the form of environmental policy, often translates to environmental harm.

Forest reserves

Forest reserves are state-protected natural areas, which serve to preserve or conserve nature, (National Forest Foundation 2017, n.p.). Forest reserves also have a colonial history, (Grove 1995), They were first established by European colonial powers in the colonized territories of Mauritius, St Helena, St Vincent, South Africa, and India. These reserves were "useful in controlling uruly peoples and 'tribes', claiming territory and organising economic space", helping to advance colonial political interests, (pg. 280). For instance, during the 18th century, the British decided to establish forest reserves on the island of St Vincent, which they had colonized, partly to control the rebellious indigenous Carib population, (pg. 290).

According to Grove, Caribs constituted "one of the most effective groups of organised military (and non-military) resisters ever encountered during British colonial rule," (pg. 282). British settlement commissioners attributed the effectiveness of the Caribs' resistance to the Caribs' use of "extensive forest cover of the island in a very effective military sense", (pg. 290).

Forests, according to McNeill (2004), "have always been and still remain important strategic and tactical assets in combat", (pg. 21). Besides serving as a source of war materials, forests "serve as an obstacle to movement, especially of cavalry and artillery, and provide concealment or cover, especially to infantry or irregular forces". Indeed, the commissioners noted that the Caribs made "any access to [them] impracticable", since they surrounded themselves with wood, (Grove 1995, pg. 290). By creating forest reserves, the British could expel Caribs from the forests, weakening the Caribs militarily. Indeed, after the British crushed the Carib uprising, which was waged against British colonization and forest reservation, they expelled the Caribs not only from the forests, but from the whole island, forcibly transferring the Caribs to the nearby island of Bequia, (pg. 287). Grove states forest reserves have since become "frequently associated with forced resettlement". The creation of forest reserves, thus, helps colonists not only claim territory and justify displacement, under the pretext of environmental protection, but also dispossess indigenous people from a very important military defence tactic in the form of forest.

Agriculture

Agriculture, which involves cultivating and conserving species, can also advance colonial political interests. In 1760, Emmerich de Vattel claimed that only those who practised settled agriculture had the right to control land, because cultivation was the only way to ensure the subsistence of the human race, (pg. 286). Those who did who did not cultivate, Vattel stated, "are wanting to themselves, and *deserve to be exterminated as savage and pernicious beasts*". Based on Vattel's genocidal claims, European colonists often justified colonial annexation and the acquisition of 'sovereignty' by claiming that colonized people did not cultivate land and, thus, did not have the right to own land, (pg. 266). In the case of St Vincent, the British argued that the

Caribs hardly cultivated their land and for what little cultivation they practised "appeared merely in small disturbed spots of provision ground near to their cabins... worked entirely by women; for the rest of the Caribs drew their sustenance by their guns or from the seas," (pg. 285). Referencing Vattel, the British went on to dehumanize the Caribs, delegitimize the Caribs' claims to land ownership, and justify British takeover of St Vincent. By cultivating St Vincent themselves, the British argued that it was they, not the indigenous Caribs, who had the right to own the island. Colonists, therefore, can use agriculture or as means of claiming land ownership and dispossessing indigenous people.

Game parks and irrigation

Game parks, which reserve land primarily for the protection of animals, also help advance colonial political interests by "[fixing] the fluid and porous boundaries of indigenous communities" in Africa, (Murphy 2009, pg. 22). The fixture of boundaries forces migrant people to become sedentary, making it easier for the colonial government to control them. Therefore, the African version of wildlife conservation history portrays game parks as "white inventions which elevate wildlife above humanity" and which serve as "instruments of dispossession and subjugation", (McDonald 2002, pg. 134).

On the other had, irrigation has been used for centuries, by nations across the world, to supply water to plants. However, colonial powers also use irrigation to encourage nomads to become sedentary, (Murphy 2009, pg. 11). In addition, irrigation helps to draw nomads into wage labour and orientate agriculture towards overseas markets, making colonies more profitable for colonial powers.

Legitimization, greenwashing, and capitalism

Environmental policy also helps legitimize colonial states, (pg. 13). For instance, the Netherlands traded bird-of-paradise feathers out of Indonesia, which they colonized, in the 19th century. The indiscriminate slaughter of birds in Indonesia led to local outrage. When this outrage spread overseas, the Dutch government was pressured to show they were "good colonialists". Policies to protect the bird-of-paradise followed, in what became the first case in which "public opinion in developed countries was mobilized to influence environmental policy elsewhere in the world". Therefore, according to Murray, "early conservation policies [which were implemented by colonial countries] were motivated by legitimacy problems rather than enlightened self-interest or some sense of doing the right thing".

The use of environmental policy to legitimize oppressive states grew with the rise of environmental consciousness. Environmental, feminist, anti-war, and human rights activism all boomed during the 1960s, (Entine 1995, n.p.). Environmental protection, especially pollution control, began to rise in response, (Barry and Frankland 2014, pg. 19). In the 1990s, a movement known as "socially responsible capitalism", or cause-related marketing (CRM), also grew and was led by corporations, such as The Body Shop, (Entine 1995, n.p.). CRM is defined as "a type of Corporate Social Responsibility (CSR) in which a company's promotional campaign has the dual purpose of increasing profitability while bettering society", (Organ 2017, n.p.). By creating "ethical policy", companies could market themselves as socially responsible, attracting and profiting off ethically conscious consumers. CRM quickly became a "hot business". As of 1995, for instance, British people spent 25 billion pounds a year with companies "seen as progressive".

To be seen as progressive, many corporations began enacting environmental policy, marketing their products and/or practices as environmentally friendly, even when they were not.

This type of false green marketing is known as *greenwashing*, (Barry and Frankland 2014, pg. 19). Greenwashing is modeled on the word "whitewashing", which is defined as "a coordinated attempt to hide unpleasant facts, especially in a political context," (Greenwashing Index 2017, n.p.). Greenwashing has the same premise, but in an environmental context. An entity complicit in greenwashing tries to "hide unpleasant facts" by marketing itself as environmentally friendly.

For example, UK-based The Body Shop, which is widely seen as "in the vanguard of 'environmentally responsible' companies" and as "one of the world's leading ethically run businesses", has created environmental policy around "energy efficiency", "waste management and pollution control", and "testing and marketing around safe products", (Robbins 2001, pg. 96-97). The company's founder advocated worldwide for rainforests, whales, and the homeless, and against acid rain and exploiters of developing countries. However, The Body Shop "is perhaps widely known as being 'against animal testing'", (pg. 96). On its website, The Body Shop (2017) also regularly promotes initiatives aimed at bettering communities and the environment. Currently, it argues that people "restore 1 square metre of rainforest bio-bridge with every purchase" of its products, helping to "connect rare species by linking habitats of biodiversity and enabling local communities to live sustainably" in Vietnam, (n.p.).

However, The Body Shop is a multinational capitalist corporation, (Purkayastha 2007, pg. 21). As such, it is part of an "unpleasant" capitalist system that profits off the exploitation of people and the environment, (Klein 2014). Indeed, leading scholars and environmentalists, such as Naomi Klein, argue that capitalism is inherently harmful towards the environment, since it encourages infinite consumption of natural resources, for infinite growth in profit, on a finite planet, (pg. 58). Klein contends that capitalism is fuelling climate change, which is causing large-scale human and environmental devastation, due to extreme weather, loss of ecosystems,

loss of biodiversity, and sea level rise, (pg. 13). Due to these effects, climate change is today recognized as "the biggest threat facing humanity", (The International Fund for Agricultural Development 2016, n.p.). How could The Body Shop (2017) strive to "enrich not exploit", as per its website, while it is part of a capitalist system that is based on exploitation and has been fuelling catastrophic climate change?

Indeed, Purkayastha (2007) highlights how, in 1998, The Body Shop was slammed by environmental non-governmental organization, Greenpeace UK, for how it "exploited the public by championing various agendas while it was actually more similar to other corporate attempts", (pg. 7). Greenpeace UK argued that The Body Shop's products were not natural, but had been synthesized and produced. Though The Body Shop claimed it was against animal testing, its products also contained ingredients that had been tested on animals by other companies. Greenpeace UK also dismissed the company's marketing of Community Trade products (CTP). which The Body Shop claimed were sourced from marginalized communities for a fair price in a sustainable way. CTP, Greenpeace UK argued, was a mere marketing ploy, as it accounted for less than one percent of sales of The Body Shop's products. CTP was also labelled as patronizing and was said to have created tensions and divisions within indigenous communities, while undermining their self-sufficiency and self-dependence. Greenpeace UK also stressed that The Body Shop paid exploitative wages to its workers and had an anti-trade union stance. In 2006, The Body Shop also agreed to be acquired by the beauty care giant L'Oréal, which tested on animals and which had "yet to show its commitment to any ethical issues at all", (pg. 1). The Body Shop's anti-union stance, harmful impact on various indigenous communities, synthetic products, and sell-out to L'Oréal prove that the company prioritizes profit over environmental and human well being, like other capitalist companies.

As explained by Beard (2013), CRM simply "allows businesses to continue harmful practices while putting up a facade of philanthropy that does nothing to tackle the root causes of [problems] that lead to the need for [...] help" from corporations in the first place, (pg. 2). The root cause of some of the gravest social and environmental problems facing the world today is capitalism. Corporations, such as The Body Shop, use CRM not only to greenwash their capitalist operations and the capitalist system supporting their profits, but to also encourage people to consume more products and directly contribute to the capitalist system. Worse, CRM businesses undermine activism by convincing people they are doing their part to do good for the world simply by buying certain products rather than working to overhaul the capitalist system, (pg. 12).

While some argue that "well intentioned" corporations can help to "reform" capitalism into a more socially and environmentally responsible system, such corporations are few in numbers, according to Zarembka, (2009, pg. 184). In the end, "big, big business will force corporations to the only road they know, that of profit, competition and capital accumulation with no real frills unless it aids profit by dressing up corporate image". Zarembka adds that "a system based on private ownership of the means of production, profit, competition and the drive to capital accumulation [capitalism] is unlikely to reform much", at least not from internal pressure, (pg. 196). Capitalist reform must come from external pressure on big business, whether from workers or the state, as has worked in the past, rather than from a number of entrepreneurs.

As demonstrated by the cases of the Netherlands and The Body Shop, environmental policy can be used to greenwash or legitimate colonialism and capitalism. I refer to Israel as a modern example of a colonial state that greenwashes its oppressive practices in the fourth part of

this paper. Overall, environmental policies can help advance colonial political interests, whether by displacing locals, expanding state control, or legitimizing colonialism and capitalism.

Environmental policy for economic interests

Environmental policy can also advance colonial economic interests. After all, environmental degradation threatens the "long-term economic security" of the colonial state, (pg. 7). This security relies on government income and the viability of resources in the territories being colonized, such as timber, (pg. 15). France saw a "continuous supply of useful timber", as "absolutely necessary". Therefore, after it began to deplete timber in territories it was colonizing, during the 17th century, it set up forest reserves. As a conservation tool, these reserves prevented French settlers and indigenous people from using the trees, so the French government could guarantee it could exploit them for timber, for its own benefit, over the long term. In addition, the creation of some forest reserves involved the "effective biological reconstruction of the forest environment to serve the economic interests of the state", (pg. 10). Premiums were also often provided by colonial states for the planting of economically valuable trees, such as cinnamon.

European colonialism also marked the first time botanical gardens were established for scientific contribution, (pg. 73). Botanical gardens were used for experiments in raising "rare and useful plants", (pg. 196). These experiments were particularly important in the context of the lucrative European spice trade. European colonists transferred many spice crops to the colonies in an attempt to grow and sell them. Colonists transferred such crops without regard for how they may harm the environment. In addition, botanical gardens were used to study "unfamiliar floras, faunas and geologies", so colonists could better exploit the riches of the lands they colonized, (pg. 8). Medical surgeons were also employed by colonial states, for the first time, as state

scientists and custodians of botanical gardens. From forest reserves to botanical gardens, key environmental policies emerged with European colonial and commercial expansion. Colonial powers used these policies to ensure they can exploit resources over the long term.

Environmental policy for apartheid

"Apartheid reveals with exceptional clarity the way unfairness within the human estate extends its damage into the natural estate as well."

— Alan B. Durning (1990, n.p.)

Environmental policy can also help sustain apartheid. Apartheid is defined in international law as a "system of acts taken by a state which violate the basic rights of one group of people for the purpose of keeping another in power", (Munayyer 2017, n.p.). As per this definition, the oppressive system of apartheid mirrors that of colonialism. Indeed, apartheid is often described as an extension of colonialism, (Gorelick 1986, pg. 75). The United Nations (UN) also "assimilated colonialism and apartheid by asserting that both give rise to the right of self-determination", (pg. 71). However, while both colonialism and apartheid are considered to be "severe violations of international law" and "absolutely prohibited for states", apartheid is also defined by the UN as a "crime against humanity", (Palestinian BDS National Committee n.d., n.p.).

The word apartheid was first used to describe "the system of racial segregation and subjugation of the African and other non-white population of South Africa by white settlers from 1948 to 1994". Apartheid not only inevitably harmed blacks, who became marginalized economically and politically in their own country, but also the environment, (McDonald 2002). For example, the apartheid government marginalized black South Africans, who made up 70% of

the population of the country, by moving and confining them to a meagre 13% of South Africa's land, (pg. 134). This act of displacement "inevitably led to environmental degradation", as it perpetuated the spiritual and physical estrangement of blacks from their land and it led to overpopulation, poverty, and a lack of access to basic services, (pg. 21). Poverty, coupled with estrangement from their land, ensured that few black South Africans had the means, the inclination, or the leisure to engage in conservation activities. Meanwhile, an inferior education system, introduced for blacks by the apartheid regime, resulted in widespread illiteracy and semiliteracy, obstructing the development of an aware and informed public, able and willing to participate in environmental decision-making. By artificially overcrowding land designated for blacks, the land also quickly became one of "the world's most degraded", (Durning, 1990, n.p.). Like colonialism, I argue apartheid is not only inherently harmful to the people it oppresses, but also the environment, due to its exploitative character.

Apartheid South Africa was also capitalist. As a racist and capitalist state, it heavily exploited the labour and natural resources of black South Africans for the profit of the white colonial elite, (Soske and Jacobs 2015, pg. 69). This exploitation severely harmed the environment. For example, the apartheid government deregulated mining and industry to finance the military superstructure that upheld minority rule, (Durning 1990, n.p.). According to McDonald (2002), mining and industry under apartheid were "virtually immune to effective environmental regulation", allowing them to harm the health of people, (especially black workers), and the environment, (pg. 63). The consequences of such environmental degradation were meanwhile largely confined to areas designated for blacks.

Apartheid South Africa also poorly managed landfill sites and heavily used agricultural pesticides and fertilizers, which polluted soil, air, and water, (pg. 71). In addition, apartheid dried

water sources for the poor due to heavy water consumption by the formal sector. White residents also used more than two thirds the amount used by the black township residents for swimming pools, gardens, and white domestic consumption, (pg. 245). It will take decades, if not centuries, to erase Apartheid South Africa's environmental legacy, (pg. 103). Apartheid devastated black South Africans and their environment due to its exploitative nature and its prioritization of profit for the white elite above the interests of black people and the environment.

Yet, as colonial regimes that preceded it, Apartheid South Africa implemented environmental policies. The apartheid government used these policies to perpetuate its oppression. For instance, thousands of black South Africans were forcibly removed from their lands to make way for game parks and national parks during the apartheid era, (pg. 1). In 1969, Apartheid authorities forced 3,000 Makuleke people to leave and burn their homes at gunpoint in Kruger National Park, which is the second oldest national park in the world, (pg. 136). Apartheid South Africa also used this park to train its soldiers, secretly supply material to Renamo in Mozambique, and even launch a chemical weapons attack on Frelimo troops in 1992, (pg. 136). Thus, national parks helped Apartheid South Africa expand its territorial control, dispossess locals, and advance its military objectives.

On the other hand, the archaeological record of the park and the contribution of black labour were completely neglected, (pg. 132). Blacks were also excluded from power, authority, and influence in decision-making and policy formulation within national parks. Meanwhile, whites-only policies in national parks and draconian poaching laws kept rural poor from desparatetly needed resources. The only blacks allowed to remain in the parks were paid labourers. Hence, black South Africans came to see environmental policy as an "explicit tool of racially-based oppression". Like colonialism, apartheid harmed people and the environment. And

like colonists, apartheid authorities used environmental policies to maintain their oppressive hold. Both colonialism and apartheid also worked hand in hand with capitalism.

2. ISRAEL'S COLONIAL AND APARTHEID LEGACY

"We shall try to spirit the penniless population across the border by procuring employment for it in the transit countries, while denying it any employment in our own country... expropriation and the removal of the poor must be carried out discreetly and circumspectly".

— Theodor Herzl, the founder of Zionism, (Tolan 2015, pg. 18)

Zionism and colonialism

Israel uses environmental policy in order to advance its colonial and apartheid agenda, as oppressive regimes that preceded it. This legacy, which has devastates Palestinians and the environment, can be traced back to the emergence of Zionism in the late 19th century.

Zionism is a European colonial ideology. It emerged in Europe, as a movement that sought to establish a Jewish homeland in Palestine, (Mayamey 2010, pg. 2). While Zionists argued that the establishment of a Jewish state was the only way to end anti-Semitic persecution in Europe, they sought to establish it in a state that was already inhabited. Palestine was inhabited by the Palestinian people, the vast majority of whom were Muslim, not Jewish. Robinson (1973) notes that Zionists knew from early on that Palestine was populated, but they were indifferent to this fact due to European supremacist views, (pg. 39). Europeans viewed any territory outside of Europe as open to European colonization, (pg. 40).

Not only were Zionists indifferent, Palestinian presence was seen as an obstacle to their goal of establishing a Jewish state in Palestine. Indeed, leading Zionists advocated for the "transfer" of Palestinians in order to get rid of this obstacle, (pg. 16). For instance, Joseph Weitz, who was the director of the Land and Afforestation Department of Israel's JNF, wrote in 1940:

We shall not achieve our goal of being an independent people with the Arabs in this small country. The only solution is Palestine, at least Western Palestine [west of the Jordan River] without Arabs ... And there is no other way but to transfer the Arabs from here to the neighboring countries; to transfer all of them; not one village, not one tribe should be left.

"Transfer" is a euphemism for ethnic cleansing, (Institute for Middle East Understanding 2013, n.p.). Weitz sought to ethnically cleanse Palestinians from their lands in order to establish a Jewish state. Other leading Zionist figures, such as Ussishkin, (head of the JNF), Ben Gurion, (Israel's would be first prime minister), and Herzl, (the founder of Zionism himself), also openly advocated for the ethnic cleansing of Palestinians, (Robinson 1973, pg. 16). Zionism emerged as a European colonial phenomenon, seeking to create a Jewish State in Palestine through a process of ethnic cleansing.

Zionism, as a colonial project, was soon achieved through an alliance with the colonial power of Britain, (Massad 2012, n.p.). Britain began to occupy Palestine in 1917 and it provided Zionists strong army support, (Rodinson 1973, pg. 20). Britain also gave Zionists the opportunity to develop fundamental social, political, and economic infrastructure, (Mayamey 2010, pg. 12). This opportunity was denied to the non-Jewish Palestinians. It was in 1917 that Britain also passed the Balfour Declaration, which recommended the "establishment in Palestine of a national home for the Jewish people", (UN Information System on the Question of Palestine

1978, n.p.). Koestler (1949) succinctly describes the Declaration as "the promise by one nation [Britain] to a second [Zionists] of the country of a third [Palestine]", (pg. 22). Characteristic of colonialism, this promise was made without authorization or consultation with the indigenous inhabitants of Palestine, (Mayamey 2010, pg. 2). Meanwhile, Britain facilitated mass Jewish immigration, so Zionists could consolidate a Jewish majority. Mattar (2000) documents how the Jewish community, vishuy, rose from 6 percent of Palestine's population, in 1880, (pg. 558), to 33 percent by 1946, (pg. 550). The vast majority (87.5 percent) of all Jewish immigrants to Palestine between 1919 and 1948 were European (Ashkenazi) Jews. As argued by Rodinson (1973), Britain played the role of mother country for the Jewish colony being settled in Palestine by protecting its formation and growth, just as it had once "protected British colonization in North America, and as France had protected French colonization in Algeria", (pg. 64). In return for British support, Herzl promised: "For Europe, we would constitute a bulwark against Asia down there, we would be the advance post of civilization against barbarism. As a neutral state, we would remain in constant touch with all of Europe, which would guarantee our existence". In essence, Herzl agreed that Israel would act as an arm for European imperialism in the Middle East. Aided by colonial Britain, Israel was born out of the colonization of Palestine and within the framework of European imperialist policies, (pg. 43).

Palestinian catastrophe

Palestinians began to be displaced by Zionists long before the establishment of Israel, (Kershnar et al. 2011). The JNF played a key role in this process of ethnic cleansing, which is discussed in the fourth part of this paper. However, large-scale expulsions of Palestinians did not begin until December 1947, in what came to be known as the Palestinian *Nakba*, meaning

catastrophe, (Pappé 2006 pg. 171). While there is no precise definition of ethnic cleansing, it is defined in one UN report as "... rendering an area ethnically homogeneous by using force or intimidation to remove persons of given groups from the area". It is similarly defined in another UN report as "a purposeful policy designed by one ethnic or religious group to remove by violent and terror-inspiring means the civilian population of another ethnic or religious group from certain geographic areas". Both definitions of ethnic cleansing apply to the Zionist expulsion of Palestinians. Palestinians were ethnically targeted, as non-Jews, and forced to leave their lands, through "violent and terror-inspiring means", to make way for the establishment of an ethnically homogenous Jewish state.

Between 1947 and 1949, more than 800,000 Palestinians – over half of the indigenous Palestinian population – were expelled from their lands by Zionists, (Pappé 2006 pg. 21). Zionists also destroyed half of Palestine's villages (over 531 villages) and 11 urban neighbourhoods and emptied them of their Palestinian inhabitants. As Pappé notes, the depopulation and destruction of Palestine was planned. Plan Dalet, which was formally approved by the Zionist leadership on March 10, 1948, designated areas to be ethnically cleansed, (pg. 96). It instructed Zionists to start "destroying villages (by setting fire to them, by blowing them up, and by planting mines in their debris...)", acting as a "blueprint" for Israel's ethnic cleansing, (pg. 113). The plan manifested in numerous massacres and atrocities against Palestinians, the most notorious of which is Deir Yassin. Deir Yassin was designated in Plan Dalet to be ethnically cleansed, and in 1948, Zionist soldiers attacked the village, massacring about 100 men, women, and children. Zionist atrocities sparked fear and caused many Palestinians to flee, facilitating the process of establishing Israel. On May 14, 1948, the Zionist leadership declared

an independent state of Israel. This new state comprised 78% of historic Palestine. Israel was a state founded on a process of colonialism, terror, and ethnic cleansing.

Occupation

In 1967, Israel occupied the remaining 22% of historic Palestine, (Sayigh 1979, pg. 150). This land included the West Bank, East Jerusalem, and Gaza, which came to be known as the Occupied Palestinian Territories (OPT). While Israel could have easily annexed these territories and included them as part of its boundaries, it did not, because Palestinians would have had to be integrated into Israeli society, (Sabawi 2011, n.p.). Israel would have had to grant these Palestinians equal citizenship rights and the Palestinian population would have made up half of the total population of Israel. Occupying the territories rather than annexing them allowed Israel to control Palestinian land and resources without having to give any rights to the Palestinians who came with the land or to alter its demographic Jewish majority.

Israel oppresses Palestinians living in the OPT in different ways. Since Israel conquered the West Bank from Jordan in 1967 and it occupied it since, Israel continues governing the area using Jordanian law, just as it existed that year, (Human Rights Watch 2016, n.p.). While Israel can amend the law at its own will, it rarely does. After all, old Jordanian law provides the West Bank significantly fewer labour and environmental protections than those offered by Israeli law, to the benefit of the Israeli economy. For example, as of 2014, roughly half of Israel's environmental laws did not apply in the West Bank, encouraging Israeli polluting factories to set up in the West Bank, (Rinat 2016, n.p). These factories escape Israel's stronger environmental and labour laws, by forming concentrations in or near the West Bank, (Chaitin, Obeidi, Adwan, and Bar-On, 2004, pg. 532). These concentrations are referred to as Israeli industrial zones. They

connect to Israeli settlements, providing an industrial base for Israel's illegal colonial development in the West Bank.

To boost this development, according to Human Rights Watch (HRW) (2016), successive Israeli governments have "actively encouraged the migration of Israeli and international businesses to settlements by offering a variety of financial incentives that they do not provide to Palestinian businesses in areas of the West Bank under its control", (n.p.). For instance, most Jewish settlements and almost all settlement industrial zones were categorized as National Priority Areas (NPAs). As NPAs, they were offered reductions in the price of land, preferential loans and grants for purchasing homes, grants for investors and for the development of infrastructure for industrial zones, indemnification for loss of income resulting from custom duties imposed by European Union countries, and reductions in income tax for individuals and companies. Israel also draws businesses to settlements by investing in public infrastructure.

In addition, Israeli employers were not required by Jordanian law to pay the minimum wage to Palestinians working in Israeli settlements until 2007. That year, the Israeli Supreme Court held that Israeli labour law should also apply to Palestinian workers in settlements. However, Israel has not yet implemented this decision, creating legal ambiguity. According to HRW, Israeli government authorities actually exploited this legal ambiguity by moving to "completely halt what little enforcement they had previously conducted to ensure settlement employers at least complied with the military orders that Israel applies to Palestinians", (n.p.). Besides operating, and polluting in the West Bank, in order to exploit the lack of environmental and labour protections provided by Israel in the area, many Israeli companies also set up to extract West Bank natural resources. For example, Israel has licensed eleven settlement quarries in the West Bank. These quarries literally carve out Palestinian land, to supply about a quarter of

Israel's gravel market. In sum, Israel profits off its occupation of the West Bank and the lack of labour and environmental rights in the West Bank Israel's occupation entails.

On the other hand, Israel claims that it no longer occupies Gaza, since it pulled its military and settlements out of Gaza in 2005, (Hasan 2013, n.p.). However, as Hasan highlights, Israel is the only country in the world to claim this. All other countries, in addition to the UN, still consider Gaza occupied by Israel. The reason there is majority consensus on this matter is because Israel has enforced a siege on Gaza, since 2007. Israel has effectively controlled Gaza's air, water, and land, since, turning Gaza into "the world's largest open-air prison", (Abu Salim 2016). Today, thanks to Israel's siege (2014), Gaza, which is only 5 miles long and four miles wide, is one of the most densely populated areas in the world, (New Internationalist 2014). In addition, Israel regularly bombs Gaza, as I explain in the third part of this paper. Overall, 1967 marked a new chapter of Israeli occupation, apartheid, and colonialism.

While some argue that colonialism is now obsolete, (such as Murphy 2009), there are numerous studies that find Israel guilty of colonialism. One notable study, commissioned by The Human Sciences Research Council of South Africa (2009), was conducted by an international team of scholars and practitioners of international public law. The team conducted a comprehensive review of Israel's practices in the OPT, concluding that Israel is colonizing the OPT. Israel's policy to fragment the West Bank into cantons and annex part of it permanently to Israel is also provided as an example of Israel's colonialism, (pg. 16). Israel also appropriated land and water in the OPT, merged the Palestinian economy with Israel's economy in order to annex it, and imposed a system of domination over Palestinians. Through these measures, Israel has denied Palestinians their right to self-determination, a hallmark of colonialism, (pg. 13). Figure 2 presents a series of maps next to each other, sourced from Americans for Middle East

Understanding, (Driver 2013). Edited to show three maps instead of four, this picture depicts how Palestinian land shrunk from 1946 to 1967 to 2011, as Israel continues to build more Israeli settlements in the West Bank, colonizing Palestine.



Figure 2. The Colonization of Palestine, (Driver 2013).

It is important to note that while Palestinians living in the OPT do not have any Israeli citizenship rights, Israel is responsible, as an occupying power, for the welfare of Palestinian residents and the environment of the OPT, under international law. These responsibilities are spelled out primarily by the Hague Regulations and the Fourth Geneva Convention, (International Committee of the Red Cross n.d., n.p.). Article 55 of the 1907 Hague Regulations states:

"The occupying State shall be regarded only as administrator and usufructuary of public buildings, real estate, forests, and agricultural estates belonging to the hostile State, and situated in the occupied territory. *It must safeguard the capital of these properties*, and *administer them in accordance with the rules of usufruct*", (n.p., my italics).

According to the Hague Regulations, Israel, as an occupying power, must protect the capital of property of the OPT, which includes natural assets, such as forests. The Diakonia International Humanitarian Law (IHL) Resource Centre (2013) further explains Israel's obligations, as a usufructuary, towards the environment, stating:

Under the rules of usufruct the Occupying Power may [...] and enjoy the use of real property for the purposes of meeting the needs of the army of occupation. However they cannot use any resources in a manner which decreases its value or depletes the resource. The classic example of usufruct would be to take the apple of an apple tree to feed the occupying army, but it would be unlawful if the tree was chopped down, (n.p.).

Under international law, while Israel, as an occupying power, may benefit from the OPT's natural resources "for the purposes of meeting the needs of the army", Israel must protect these resources. Israel's extraction of natural resources from the West Bank, for the benefit of the Israeli economy, is illegal under international law. Machlis, Hanson, Špirić, and McKendry (2014) also stress that the onus is on Israel to protect people and the environment in the OPT "both legally and practically", (pg. 165).

Israeli apartheid

The Human Sciences Research Council of South Africa (2009) also finds Israel guilty of apartheid. The study concludes that Israel's laws and policies in the OPT fit the definition of apartheid found in the International Convention on the Suppression and Punishment of the Crime of Apartheid, (pg. 21). Israeli law privileges Jewish settlers and disadvantages Palestinians in the same territory on the basis of their respective identities. Israel's formation of "reserves" in the

West Bank, to which Palestinian residence is confined, and which Palestinians cannot leave without a permit, is also noted to be very similar to Apartheid South Africa's policy of "Grand Apartheid". Apartheid South Africa operated three pillars. The first pillar separated South Africans into racial groups and accorded superior rights, privileges, and services to white people, (pg. 21). The second pillar segregated the indigenous black population into different geographic areas, which were allocated by law to different racial groups. The third pillar employed a matrix of draconian 'security' laws and policies that suppressed any opposition to the regime and reinforced a system of racial domination, by providing for administrative detention, torture, censorship, banning, and assassination. Overall, the report finds that Israel practices all three pillars of apartheid in the OPT that were practiced by Apartheid South Africa.

A new landmark UN report also finds Israel guilty of apartheid. While the UN Secretary-General has ordered the withdrawal of the report after heavy backlash from Israel and its supporters, it is credible, well-researched, well-argued, and rooted in international law. This report is written by two internationally renowned US scientists: Richard Falk and Virginia Tilley (2017). They demonstrate that Israel operated as an apartheid state not only in the OPT, as the South African report demonstrates, but also within Israel.

Falk and Tilley argue that Israel's apartheid began with the foundation of Israel. As a "Jewish and democratic State", Israel "established Jewish-racial domination as a foundational doctrine", (pg. 32). In order to ensure a Jewish demographic majority, Israel colonized and ethnically cleansed Palestine. It also passed a series of apartheid laws. For example, Israel passed the Law of Return and Citizenship Law in 1950. It granted Jews from anywhere in the world the right to immigrate to Israel and become a citizen, while Palestinians, who were displaced by Israel and had a documented history of living in the country, were denied their right of return.

Israel also enshrined British Emergency Regulations into its law, (pg. 28). These laws were used to govern Palestinians who remained in the West Bank and Gaza after they were occupied by Israel in 1967, (pg. 4). These laws denied Palestinians any basic human or civil rights, such as the right to vote. In 1950, Israel also passed the Absentee Property Law, which allowed Israel to appropriate land that belonged to what it referred to as "absentees", (Davis, 2003, pg. 101). The term "absentees" applied to Palestinians who became refugees during the Nakba and were denied their right of return. Additionally, 93 percent of the land within the internationally recognized borders of Israel was by law closed to use, development, or ownership by non-Jews. Adalah (2012), an independent human rights organization and legal centre, also found more than 50 laws enacted by Israel since 1948 that "directly or indirectly discriminate against Palestinian citizens of Israel in all areas of life, including their rights to political participation, access to land, education, state budget resources, and criminal procedures", (n.p.). By colonizing and ethnically cleansing Palestinians from their land, and discriminating against them, Israel operates colonialism and apartheid.

Israeli capitalism

It is also important to note that Israel operates as a capitalist state for two reasons. First, as explained in the first part of this paper, capitalism is closely linked to colonialism. The obliteration of capitalism is, thus, an important step to ending colonialism and achieving social and environmental justice for the Palestinian people. Second, as capitalism inherently contradicts environmentalism, Israel cannot be a country that cares for the environment if it runs a capitalist economy, which is based on the exploitation of people and the environment.

While numerous analyses have claimed that Israel was a "socialist-type" economy prior to the mid-1980s, Hanieh (2003) demonstrates how Israel operated as a capitalist state since its birth. Israel's economy, which was state-controlled and directed for decades by the Labour Zionist movement, was not a reflection of socialist ideology. Rather, he argues that the absence of a strong indigenous Jewish capitalist class during the Zionist colonization of Palestine led the state or proto-state to control investment. This investment was not antagonistic to private capital.

To the contrary, from 1948 on [Israel] pursued policies aimed at nurturing a capitalist class by encouraging a few key families to undertake joint projects and investment with state and quasi-state enterprises. The turning point in this stateled class formation was the 1985 Economic Stabilization Plan (ESP), which led to the emergence of private capital as a class independent from the state (pg. 6).

Israel was founded as a capitalist state. However, with the expulsion of most of the indigenous Palestinians in 1948, Israel lacked a readily exploitable working class traditionally found in colonial situations. Therefore, Israel led a massive immigration program aimed at bringing Mizrahi Jews to settle in the new state who were able to constitute a working class on which the economic foundations of the country could be built. Israel's occupation of the West Bank and Gaza Strip (WBGS) in 1967 increased the size of Israel's domestic market and provided a new cheap and highly exploitable source of labour in the Palestinian population. By 1985, approximately one third of the WBGS labour force worked in Israel, (47 percent in the construction industry), (pg. 7). Thus, Palestinians came to occupy "the lowest rungs of the labour market". Overall, Israel operates colonialism and apartheid, but also capitalism, as it exploits Palestinian labour and the environment for the profit of the Israeli elite. Since capitalism is

inherently harmful towards the environment, due to its emphasis on infinite consumption, Israel can not be the environmental steward it claims to be.

3. ISRAEL'S DEVASTATION OF THE ENVIRONEMNT

Zionism and the environment

Colonialism, capitalism, and apartheid intersect to make Israel particularly destructive toward Palestinians and the environment. Zionism, since its birth, launched an assault on nature by regarding it as "an obstacle to be overcome", (Levi-Faur, Sheffer, and Vogel 1999, pg. 247). After all, industrialization and urbanization, which were achieved through the exploitation of natural resources, were seen as necessary parts of Zionist plans to accommodate large-scale Jewish immigration, (pg. 247). While Tal (2002) argues that "development" is not necessarily synonymous with environmental devastation, he adds that "Zionist development" has "always been of the particularly aggressive, environmentally unsustainable variety", (pg. 26). A popular pioneer song in Israel during the 1950s captured the Zionist domineering perception of nature, as it goes: "We shall build you, beloved country ... and beautify you ... We shall cover you with a robe of concrete and cement." The Zionist vision of improving Palestine, by building it and making it more beautiful, mirrors ideas espoused by past European colonists. Europeans sought to "improve" colonized territories with their superior technology and society, (Murphy 2009, pg. 11-12).

However, like past colonial empires, Zionists destroyed rather than improve much of the land they colonized. Israel harmed the environment, in addition to Palestinians, through a number of ways, such as the formation of industrial zones, war, water pollution and

appropriation, deforestation, settler violence, and Israel's apartheid wall. Israel's occupation harmed the environment of the OPT in particular ways. The lack of control Palestinians have over their own natural resources, due to Israel's occupation, leaves their environment, (and associated factors, such as their health, economy, and culture), completely vulnerable to corporate and Israeli abuse.

Israeli occupation's impact on the environment

Israel's occupation of the Palestinian territories harms Palestinian residents and their environment in many ways, directly and indirectly, (Machlis et al. 2014, pg. 157). Directly, Machlis et al. highlight how "the unique structures and practices of the occupation have negatively affected biodiversity", citing examples of Israel's extensive settlement building, Israel's construction of its apartheid wall, and Israel's associated construction of a parallel road infrastructure for the settlers and the military, (pg. 165). These structures fragmented Palestinian people, estranging them physically and spiritually from their land, and also fragmented wildlife habitats, eroding the "rich agricultural biodiversity built over centuries by Palestinian famers, from crop varieties to domesticated bees". In Gaza, the south agricultural lands also underwent accelerated desertification due to Israel's imposition of a closed security area along the border, which prevented farmers from accessing and taking care of their lands.

Besides reducing Palestinian access to land and water, Israel has placed restrictions on Palestinian crop exports and irrigation, since 1967, forcing many Palestinians to abandon agriculture for low-wage jobs provided in Israeli settlements, (Levidow 1990, pg. 26). Israel further undermines Palestinian agriculture by subsidizing its own agricultural exports to the OPT and restricting other countries' exports, turning the OPT into a "captive market" for Israeli

goods, (pg. 25). Since 1982, Israel also integrated the West Bank's entire hydrological system into the Israeli national water company Mekorot. According to Levidow, Israel undermines Palestinian agriculture and integrates the West Bank's water system, as part of Israel's ecological imperialism. Palestinians are made more dependent on Israeli water services and food exports, obstructing Palestinian independence, (pg. 25). Meanwhile, Israel draws surplus cheap Palestinian labour into Israeli markets, (pg. 26).

Israel also regularly prevents Palestinians from building renewable energy infrastructure. For instance, the Netherlands recently launched a complaint with the Israeli government after dozens of solar panels that were donated by the Dutch government to a West Bank village were confiscated by Israeli authorities, (McKernan 2017, n.p.). According to Israel, the panels were not built with proper permits and permissions, justifying their confiscation. However, as McKernan reports, building permissions for new Palestinian homes and infrastructure are almost impossible to obtain. Machlis et al. (2014) highlight that military interventions do no necessarily generate negative ecological consequences, citing the Korean and Cypriot demilitarized zones, as examples of military intervention that benefitted landscapes and ecosystems, (pg. 162). However, they state "in the Palestinian and Iraqi cases, the direct ecological effects of occupations have been judged by international organizations to be overwhelmingly negative on balance".

Indirectly – as with conflict more generally – occupation can harm natural resources and ecosystems by damaging or constraining the adaptive coping strategies employed by the occupied people. In the West Bank, Israel's control of natural resources and movement restrictions of the Palestinian population have increased environmental pressures, (pg. 166). For example, rangeland was degraded in the south Hebron hills, located in the West Bank, by over-

grazing, since Palestinians were denied access to traditional pastures and other livelihood opportunities. In Gaza, many Palestinians have been forced to use vegetable oils for fuel, due to Israel's reduction of fuel imports, causing local air pollution. Below, I explain in more detail how Israel's occupation harms the environment, in addition to Palestinians.

Industrial zones: West Bank

As of 2016, there are at least twenty Israeli industrial zones in the West Bank, (HRW, n.p.). These industries deal with toxic materials and harmful waste, devastating Palestinian health, in addition to fauna and flora. One example of such polluting industries is Geshuri industries, a manufacturer of pesticides and fertilizers. Geshuri was ordered to move from Kfar Saba, inside Israel, to an area adjacent to Tulkarem, inside the West Bank, by an Israeli court in 1982, because of the company's negative environmental effects on Israeli land, public health, and agriculture, (Chaitin et al. 2004, pg. 532). The health of Israelis was clearly deemed more important than that of the Palestinian residents of Tulkarem. An empirical study showed that this polluting industry may have devastated the environment and health of the Palestinian residents of Tulkarem, (Qato and Nagra 2013). Tulkarem residents were found to have among the highest rates of cancer, asthma, and eye and respiratory health anomalies compared to residents in other districts in the OPT, (pg. 29). Chemical waste from the factory also harmed the farming land that surrounds Tulkarem, causing trees to lose their leaves and destroying the fertile nature of the soil. Vegetables, which were sold in Palestinian markets, grew not far from the factory.

Israeli industrial factories also exist in Jewish settlements in the West Bank. According to Qumsieh (1998), some of the products are identifiable, but detailed information on quantities produced, labour, and waste generated in these factories is not available, (n.p.). As the table in

Figure 3 demonstrates, aluminum, leather-tanning, textile-dyeing, batteries, fiberglass, plastics are among the major industries within these Jewish settlements. The waste generated by them contains toxic elements, such as aluminum, chromium, lead, zinc, and nickel.

District	Industrial zone	Industry	
Nablus	Barkan Elan Moreh Shilo	Aluminum, fibreglass, plastic, electroplating Aluminum, food canning & textile-dyeing Aluminum, leather-tanning	
Ramallah	Halameesh Giv'at Hadassah Nili Shelta Atarot	Fiberglass & leather-tanning Rubber Aluminum Fiberglass & plastic Aluminum, cement, plastic, food-canning & others	
Hebron	Kiryat Arba'	Winery, building blocks, tiles & plastic	
Jerusalem	Mishor Adumim	Plastic, cement, leather- tanning, detergents, textile, printing dyes, aluminum & electroplating	
Jenin	Homesh	Batteries, aluminum & detergents	
Tulkarem	Near the 1967 border inside the West Bank	Pesticide, fibreglass & gas	

Figure 3. Israeli Industries in the West Bank, (Qumsieh 1998, n.p.).

Wastewater from Israeli industrial zones regularly flows untreated to contaminate Palestinian land and water, (B'tselem 2009). Wastewater from the industrial zone of Elon Moreh, for example, flows through the center of the Palestinian village of Azmut, a few meters from homes, contaminating springs and the groundwater of the Mountain Aquifer, (pg. 29). Olive trees and other crops are destroyed by the wastewater flow. Due to the wastewater's extremely high level of acidity, which is liable to burn upon contact, it is causing "loss of life" and "environmental and health disaster" in Azmut. In the long run, Israeli human rights organization, B'tselem, warns that the flow of raw wastewater will diminish land fertility and land reserves.

Surely, an environmentally protective state would not allow, never mind encourage, heavy polluting and cancer-causing industries to set up in the first place, nor to relocate and spread pollution elsewhere. However, industrial zones play an important part in the Israeli colonial economy, and are thus, accorded higher importance than Palestinian lives and the environment.

War: Gaza

Israel also fuels war, which is one of the most socially and environmentally destructive industries in the world, (Safi 2015). Israel currently has the fifteenth strongest military in the world – an astounding feat due to its small size as a state, (GlobalFirepower.com 2017, n.p.). In addition, Israel is one of the world's biggest war profiteers. In 2007, Israel became the world's fourth largest defence arms exporter in the world, selling radar systems, drones, and anti-tank missiles, (Copans 2007, n.p.). As a top arms exporter, Israel fuels and profits from war. Besides devastating people, according to art. 24 of the UN Rio Declaration, "warfare is inherently destructive of sustainable development," (UN 1992, n.p.). Weapons and the hazardous waste their manufacture and testing generate cause tremendous pollution, (Hynes 2014, pg. 2). Meanwhile, militarism is the most oil-exhaustive activity on the planet, (pg. 3). Wars and the related military industry are reportedly responsible for 6-10% of global air pollution and 10-30% of universal environmental damages, (Safi 2015, pg. 15). Damages vary by type. For example, the vast majority of the Israeli military's camps in the West Bank discharge their wastewater, untreated, into the environment, "creating a serious environmental hazard that pollutes groundwater and rivers", (Shapira 2017, pg. 9).

Israel has not only profited from war, it also led many wars, particularly against besieged Gaza. In the last 10 years alone, Israel led three devastating wars against Gaza, with Operation Cast Lead in 2008, Operation Pillar of Defense in 2012, and Operation Protective Edge in 2014. It is argued that these wars may actually be used by Israel as a laboratory to test their weapons, which are then taken by Israeli weapon manufacturers, such as Elbit Systems, to be marketed as "battle proven" for international buyers, (Kennard 2016).

Israel's wars on Gaza have not only killed thousands of Palestinians and injured thousands more, they also devastated the environment. Palestinian environmental NGO, PENGON, recently published an environmental impact assessment of Israel's 2014 War on Gaza, (Safi 2015, pg. 8). Gaza's environment, the assessment recognized, was already devastated by Israel's siege, (pg. 7). Almost 95 percent of the water pumped in Gaza in 2010 was deemed unfit for drinking due to severe pollution, (B'tselem, n.p.). The water was polluted by the overpumping of the underground water of the Coast Aquifer and Operation Cast Lead, which caused more than 600,000 tons of waste, including asbestos, oils, and fuels, to contaminate Gaza's water. And since Israel began its siege on Gaza in 2007, it forbade the entry of equipment and materials needed to rehabilitate the water and wastewater treatment systems in Gaza.

However, Israel's 2014 war further devastated Gazans and their environment. For instance, the war almost completely halted wastewater treatment, (Safi 2015, pg. 16). Millions of cubic meters of wastewater produced by the people of Gaza were consequently dumped completely untreated into the sea. This dumping deteriorated the marine environment, turning 70% of Gaza seashore unfit for recreational activities, (pg. 17). The war also produced more than 2.5 million tons of demolition waste, causing particulate matter pollution throughout Gaza. The heavy bombing also sparked fires, which caused air pollution with soot, chemicals, and

particulate matter. Moreover, Israel attacked the fuel stores of the Gaza power plant, openly igniting two million litres of diesel, which further contaminated the air. Meanwhile, water and soil infrastructure were damaged and farms, trees, crops, poultry, and livestock were destroyed, (pg. 18). 3,450 hectares including more than 250,000 trees, mostly olive, citrus, and grape trees, and more than a thousand greenhouses and tens of thousands of open lands cultivated for the production of vegetables were directly damaged during Israel's 2014 war on Gaza.

Israel's siege and wars on the captive Palestinian population in Gaza have devastated the Palestinian people and the environment. The fact Israel is one of the world's biggest exploiters of war, an industry that is "inherently destructive" of people and of "sustainable development", should alone negate any argument that Israel is an environmental steward.

Water

Israel has also depleted water resources found in the OPT. Water is not historically scarce in the region, as Koek (2013) notes, (pg. 16). There are three main sources of natural fresh water: The Jordan River, the Mountain Aquifer, and the Coastal Aquifer, which are shared between Israel and the OPT. However, Israel has controlled and exploited water resources in the West Bank and Gaza, long before it even occupied them in 1967, (Levidow 1990, pg. 25). After 1967, "looting" simply became easier and "Israel dug wells much deeper than the Palestinians' existing wells, which then became exhausted and/or more salty". In fact, one of the first military orders of Israel's occupation was the confiscation of almost all West Bank wells, (Lowi 1993, pg. 123). Since then, Palestinian drilling for new wells has been banned and quotas have been imposed on the existing ones. Water that was allocated to the Palestinians was capped at 1967 levels, despite the growth in population over the years. Israel uses 73% of the West Bank's water, diverts an

additional 10% of it to illegal settlements, and sells to Palestinians the remaining 17%, of what in fact is their own water, (Niehuss 2005, pg. 13).

Israel's restriction of water in the OPT has harmed Palestinian health and agriculture. Every year, Israel allocates just 83 cubic metres of water per Palestinian living in the OPT, less than the minimum recommended by the World Health Organization for sanitary conditions necessary for healthy living, (Niehuss 2005, pg. 13). The severe water restrictions force Palestinians to use unclean water for their daily uses, or to put off daily chores, such as washing food, cleaning dishes, and flushing toilets. Palestinians are exposed to water-borne diseases due to a lack of sanitary drinking or bathing water. Estimates show that over 60% of Palestinians living in the West Bank communities are infected with diarrhoea. Israel's wars against Gaza, coupled with Israel's water appropriation and restrictions, demonstrate that Israel completely disregards its obligation as occupying power to protect, rather than destroy, Palestinian lives and their environment. Below, I demonstrate how Israel harms the environment and Palestinian rights beyond the OPT.

Water appropriation

"...when it comes to the common water resources shared with Palestinians and other Arabs, Israel [...] acts like a great sponge."

— Sharif S. Elmusa 1992, (pg. 63)

Besides depleting water resources belonging to the OPT, Israel has also depleted water resources within its internationally recognized boundaries, (Rabi 2014, pg. 4). Israel has diverted most of the water from the Jordan River and from Lake Tiberias (located in the North) to the central and southern parts of the country. This diversion was accomplished through the National

Water Carrier project. Note that the majority (60%) of Palestinians still living within what is now called Israel live in the North, (Jewish Virtual Library 2017, n.p.). The diversion of water from where most of the Palestinian population lives to the South is further indicative of Israel's apartheid policies that discriminate against non-Jews. In any case, this diversion massively reduced the Jordan River's flow, (Rabi 2014, pg. 4). The amount of water that historically flew into the lower Jordan River reaching the Dead Sea was nearly 1.1 billion cubic meters per year in 1900. Now, barely 50 million cubic meters reach the river, mostly consisting of sewage water from Israeli settlements, located in the upper Jordan Valley, and "the brackish water diverted from the springs around Lake Tiberias into the lower part of the river". The water levels are "so low that the Jordan River can no longer replenish the Dead Sea", (Abdulhawa 2016, n.p.). The water level in the Dead Sea drops by 0.8 m every year, as a result. This drop has lead to the development of sinkholes and an increased groundwater flow from surrounding Palestinian aquifers towards the sea. Thus, surrounding aquifers have also become depleted. Meanwhile, the relatively saline waters of Lake Tiberias contaminated groundwater used for irrigation of the Negev, salinating the soil.

Elmusa (1993) also finds Israel guilty of overpumping Palestinian aquifers, which has resulted in seawater intrusion and increased salinity levels, (pg. 63). Israel's overpumping and diversion of water has caused more droughts in recent years, (Sivakumar and Ndiang'ui 2007, pg. 259). Wetlands and aquatic environments around Lake Tiberias and other regions of Israel have been "practically dry for six consecutive years affecting fish-breeding and endemic aquatic species". The recent drought of 1998-2001 in the North was the most extreme during the last 130 years and affected Jordan River water flow, bringing the level of Lake Tiberias to its lowest point in historical periods. This drought was connected to Israel's overpumping, diversion of

water, and drainage of wetlands, (pg. 259). As a sponge, Israel appropriated the vast amount of water inside and outside its boundaries for its intensive irrigation projects, drying the Jordan River and the Dead Sea, and causing soil and water salinity, groundwater contamination, and droughts.

Ecosystem degradation

"Scattered around Israel's towns and cities there may be thousands of 'brownfields' — polluted and abandoned tracts of land, too contaminated for development. A considerable portion of the landscape of Israel... lies decimated by careless development and sprawl"

— Tolan (2015, pg. 18)

up, (Laster and Livney 2015, pg. 93). Israel legally exempts companies from cleaning up, so toxic chemical waste has been allowed to contaminate land, air, and water. This exemption had devastating effects on the environment. For example, chemical waste contributed to the "death" of Al Auja River, which Israel renamed the Yarkon, (Tal 2007, pg. 6). As the largest coastal river in what is now called Israel, this river used to host a variety of endemic fish and rich vegetation. However, chemicals and detergents from factories in the many industrial zones that lay along the flood plain, discharges from the many solid waste dumps in the watershed, and runoff, carrying residues of oils, from roads and industrial debris heavily polluted the river. The negative effects of these chemicals were compounded with the flow of untreated sewage of the many municipalities that made up the Central Israeli Dan and Sharon region. And since Israel diverted most of this river's natural 220 million cubic meters of annual flow to the Negev in 1955, industrial waste and sewage effectively replaced the river's freshwater. As a result of the

pollution, "habitats were destroyed and flora and fauna disappeared" from the river, (Canfei Nesharim 2014, n.p.).

Al Mokatta River, which Israel renamed the Kishon, has also been polluted for decades with acidic waste from Haifa's petrochemical industry. **BBC** article. One explains how the river that was "once the lifeblood of the region has turned to a stinking trench of poison", stating if you put your hand into the river for long enough, the acid will begin to burn it, (Andersson 2000, n.p.). Not even bacteria can reportedly survive in the water anymore, and tests show that fish die in less than three minutes of being in the water. This river is now reportedly the most polluted river in Israel. However, as Shoshana Gabbay, editor of the Israel **Environment Bulletin reports:**

With the exception of the upper Jordan River and its tributaries, the prognosis for Israel's rivers has long been gloomy: a slow and painful death. Whether as a result of industrial discharge, municipal sewage, overpumping or general abuse - rivers have either dried up or become sewage conduits. Tel Aviv's Yarkon, Haifa's Kishon, Ashdod's Lachish, Emek Hefer's Alexander, Lod's Ayalon, Jerusalem's Soreq - these and other rivers are plagued by the same disease: pollution, (Canfei Nesharim 2014, n.p.).

The Organization for Economic Cooperation and Development (OECD) (2011) also found "several of Israel's 15 rivers that empty into the Mediterranean" to be "highly polluted", (pg. 86). Meanwhile, Tal (2007) agrees with Gabbay that the pollution of Al Auja and Al Mokatta is not exceptional. The pollution of these rivers "[fit] into an established pattern, as part of a long series of inauspicious ecological delinquencies" in Israel, (pg. 12).

Israel has also devastated aquatic ecosystems due to its dumping of sludge in the sea. Israel and Israeli advocacy groups regularly boast about Israel's recycling of wastewater, as proof of its environmental stewardship. Israel is reportedly the first country in the world to make effluent recycling a central component of its water management strategy, (Tal 2007, pg. 241). Over 60 percent of Israel's sewage is recycled, considered the highest percentage of any country in the world. By the beginning of the 21st century, effluents contributed roughly a fifth of Israel's water supply and 50 percent of the irrigation supplied for agriculture.

However, the wastewater Israel reuses for irrigation is of environmental and health concern, given its poor pre-treatment, inadequate oversight, and leniency of standards. Sludge is also generated as a byproduct of wastewater treatment, which contains high concentrations of pathogens, heavy metals, and organic pollutants. Israel dumps about half (46%) of this byproduct directly into the sea, (Israeli Ministry of Environmental Protection 2010, pg. 123). Israeli sludge is now highlighted as "the major source of pollution in the Mediterranean Sea, significantly larger than all other sources combined", (Orenstein, Tal, and Miller 2013, pg. 231). As an example of the toxic impact of sludge, Israeli sludge has been found to introduce mercury into the marine environment, a chemical that can biomagnify along the food web, and cause serious harm to people and fauna, (Shoham-Frider, Shelef, and Kress, 2007, pg. 2).

Zionists also drained most of Palestine's swamps, "as part of the Zionist ethos", (Orenstein et al. 2013, pg. 12). Zionists imported eucalyptus trees from Australia and planted them to help dry the marshes. Not only did the draining of these marshes contribute to droughts, but their aquatic wildlife also largely disappeared, according to Orenstein et al.

Meanwhile, Israel almost completely eliminated Palestine's sand dunes, between 1980 and the 1990s, due to Israeli urban sprawls. Their elimination reduced the distribution and

survival of the majority of the reptilian and mammalian species living there, (pg. 59). All Mediterranean and most desert wildlife habitats in Israel have been affected or entirely destroyed due to urban industrial and agricultural development, (pg. 56). In the 1950s and 60s, illegal hunting carried out by Israeli soldiers and civilians, using 4-wheel drive vehicles and automatic weapons, also led to a drastic reduction in some mammal populations, such as the mountain and dorcas gazelles. Poaching stopped during late 1960s, but hunting became a serious conservation problem again in the 1990s, as agricultural workers were brought by Israel from Thailand, as a cheap source of labour. These workers brought with them new hunting habits, such as snares, other types of traps, and slingshots. Hunting now constitutes "one of the greatest threats to wildlife" in Israel, (pg. 56). From water pollution, to wetland drainage, to hunting, to urban sprawl, Israel devastated aquatic and desert ecosystems rather than benefit them.

Israeli agriculture

Palestinian agriculture is much less harmful to the environment than Israeli agriculture, if at all, according to Orenstein et al. Palestinians irrigate small areas near springs mainly for growing vegetables and citrus, (pg. 32). However, Palestinians generally rely on rainwater for their crops, (pg. 39). In addition, Palestinians rotate their crops to maintain fertility of the soil and control weeds. Palestinians also terrace and maintain slopes, relying on a local version of the ancient plow to furrow land without turning the soil. This technology opens up dense woody thickets, diversifying microhabitats, flora, and fauna. Besides, Palestinian agriculture only uses livestock manure as fertilizer. Little floral and faunal extinction, if any, is attributed to Palestinian cultivation or Palestinian Bedouin grazing, (pg. 47). After visiting an area south of

Jerusalem in 1967, Joseph Weitz of the JNF, (who was noted in the first part of this paper for advocating for the "transfer" of Palestinians), admitted:

As I look more deeply into the landscape, I'm filled with shame when I compare 'our' hills of Jerusalem with 'their' hills of Hebron. We, with the power of steel implements, extension services, enormous budgets, expensive water, have not achieved such success", (pg. 49).

In spite of Israel's modern technology, Weitz notes, Israeli agriculture has failed in comparison with Palestinian agriculture, which continues to be practised in Hebron, a city that is located in the Occupied West Bank. Orenstein et al. also argue that "the fertility of Palestine was unsurpassed" prior to the creation of Israel, due to the sustainability of Palestinian agriculture, (pg. 10). Palestinian agriculture tends to protect the environment, rather than destroy it, (pg. 48).

Orenstein et al. paint a bleak picture of the environment after Palestinians were expelled during the Nakba. Herbaceous vegetation on many uncultivated slopes were barely utilized, product of woody vegetation was little used, and woodland in many cases developed into dense thickets that "with the plentiful tinder of dry grass have become a fire hazard", (pg. 49). All smaller patches of cultivated land were abandoned. Israeli agriculture also heavily relied on fertilizers, which spawned eutrophication in surface waters. The resulting nitrate concentrations caused the closing of dozens of drinking water wells, (pg. 249).

Pesticides, insecticides, and other kinds of chemicals, have also been widely used in Israeli agriculture, contaminating water and soil. Over 400 chemical compounds have been permitted by Israel for agricultural use and offered in over 1,000 forms. These chemicals have harmed many species, like almost all raptor species. And while some raptor populations recovered after the banning of DDT, many have not. Insecticides also caused secondary

poisoning in insectivorous birds, significantly reducing their populations, (pg. 68). As Tal (2007) concludes, Israel's modern agriculture, "similar to that of the world's, is not sustainable, and contributes significantly to the growing environmental crisis on our planet", (pg. 251). Use of chemicals, monocultures, and heavy machinery in Israel's capital-intensive agriculture has harmed the environment, unlike Palestinian agriculture.

Deforestation and Israel's apartheid wall

According to Oxfam International (2017), Israeli authorities have uprooted around 800,000 olive trees to date, mirroring the number of Palestinians uprooted during the Nakba. In addition, "entire tracts of productive citrus trees", especially in the Tel Aviv-Jaffa area, were destroyed to make way for the construction of Israeli housing developments, (Benvenist 2000, pg. 164). As Israeli journalist and historian, Benvenist, says, "Israel's destruction of hundreds of thousands of dunams of fruit-bearing trees does not fit Israel's self-image as a society that knows how to 'make the desert bloom'", (pg. 165). Palestinian olive oil production has dropped by 40 percent in the past decade alone, (Oxfam International 2017).

Israel also uprooted trees to construct its apartheid wall, (Sabawi 2011, n.p.). Israel began to construct the wall in 2000, in order to separate Israel from the West Bank, (Stop the Wall 2011, n.p.). Rather than building the wall on the Green Line, which separates Israel from the West Bank, however, 90% of the wall eats much into the West Bank, indicating the wall was constructed as a tool for Israeli land grab. By annexing Palestinian land, the wall isolated, separated, and dispossessed many Palestinian communities in the West Bank, leading many to call this wall an apartheid wall.

Israel uprooted more than 100,000 trees and destroyed more than 36,000 metres of irrigation works to construct this wall. In addition, heavy machinery and millions of tons of concrete were used to construct it, consuming fossil fuels and water. The wall also interferes with natural drainage systems in the West Bank. Wrapping itself entirely around Palestinian towns, such as Qalqilia, the wall, thus, causes flooding and substantial environmental and agricultural damage during times of high rainfall. In February 2009, heavy rain flooded 15 hectares of land planted with vegetables and 1.5 hectares of citrus tree orchards, in Qalqilia, destroying the crops. Besides providing Israel a tool for land grab and control of Palestinian movement, Israel's apartheid wall devastates the environment, providing another example of how social harm causes environmental harm and vice versa.



Figure 4: Israeli Apartheid Wall. A picture I took of the wall that separates Israel from the West Bank, which has harmed Palestinian communities and the environment, (2015).

Settlements

Israeli settlement building, as Qumsieh (1998) notes, has strained the environment, "because of the associated problems of waste disposal, construction of road networks and exploitation of natural resources", (n.p.). Israeli settlements are built on confiscated Palestinian agricultural or grazing lands, requiring Israeli uprooting of thousands of fruit trees. From September 1993 until June 1996 alone, Israel uprooted over 32,500 fruit trees, confiscated

29,000 hectares of land, and bulldozed 3,250 hectares for the expansion of settlements and the opening of new roads to serve them.

Meanwhile, Israeli settlements are six times more polluting than their Palestinian neighbours, (Niehuss 2005, pg. 14). Israeli settlements located on West Bank hilltops also dump sewage and wastewater into the Palestinian valleys below, (Niehuss 2005 pg. 15). As of 2007, only 81 of 121 settlements in the West Bank were connected to wastewater treatment facilities, resulting in the flow of Israeli raw wastewater into West Bank streams and valleys, (B'tselem 2009, pg. 7). In its report, B'tselem highlights several examples of bodies of water that were polluted by wastewater flow from settlements. These include the Hebron stream, which also runs into Israel, and the Mountain Aquifer, (pg. 8). For the few settlements that do have wastewater treatment, treatment plants frequently break down, causing settler wastewater to pollute tributaries of Al Auja River, and Abu Jamus stream. Six settlements – Qedar, Ma'aleh Amos. Nokdim, Otni'el, Etz Ephraim, and Enav – dispose of their wastewater in septic tanks, from which it seeps into the groundwater and pollutes it, (pg. 9).

Additionally, the wastewater of the 25 settlements in the Jordan Valley receives only preliminary treatment, in sedimentation basins and oxidation ponds. This method is considered outdated and does not meet the standard required inside Israel. While West Bank settlers are almost unaffected by the water pollution, since they use Israel's water-supply system, Palestinians rely on water from natural springs, shallow drillings of the Mountain Aquifer, streams, and rainfall reservoirs, (pg. 27). A Palestinian study conducted in the mid-1990s found that crops and water sources of 70 Palestinian villages were contaminated by untreated Israeli settler wastewater, (pg. 28).

Settler violence also contributes to environmental damage. In Madama, the village's spring is deliberately contaminated and its water supply system damaged by settlers from time to time. Settlers often break the water pipes and the water wells in the area. They throw pollutant debris into the water and smash the concrete encasing. Settlers also regularly burn or bulldoze trees and attack Palestinian farmers, always under protection of the Israeli army, (Palestinian Grassroots Anti-apartheid Wall Campaign 2014, n.p.). It is reported that settlers uprooted more than 2,000 olive trees in the month of January in 2014 alone. If Israel were to be a country that truly cares about the environment, surely it would not be building illegal settlements, granting squatters impunity to attack Palestinian land and farmers, and would treat their waste. However, as a colonial and apartheid state, Israel only seeks to serve the interests of its Jewish population, including settlers, to the detriment of the Palestinian people and the environment.

Climate change

Israel's environmental record pales not only on a local scale, but also on a global scale. Levi-Faur et al. (1999) politely describe Israel as an "environmental laggard", (pg. 247). By 1979, they note, Israel had only four environmental associations, in spite of having a population of three and a half million. In addition, it did not establish a Ministry of the Environment until 1988, becoming the 126th country in the world to do so. According to most recent findings, Israel also has one of the biggest per capita ecological footprints in the world, ranking in the top 10%, (Global Footprint Network 2013, n.p.). As seen in Figure 5, it ranks 21st out of 192 countries. Ecological Footprint "measures the ecological assets that a given population requires to produce the natural resources it consumes and to absorb its waste, especially carbon emissions". The bigger the ecological footprint, the bigger the toll a country takes on the

environment. The Ecological Footprint measured by the Global Footprint Network tracks the use of six categories: cropland, grazing land, fishing grounds, built-up land, forest area, and carbon demand on land.

COUNTRIES RANKED BY EC	COLOGICAL FOOTPRINT	PER CAPITA (in global hectares)
(15)	Kazakhstan	6.5
16	Bahrain	6.4
(17)	Aruba	6.4
(18)	Lithuania	6.2
(19)	Austria	6.1
20	Denmark	6.1
21)	Israel	6.0

Figure 5. Countries Ranked by Ecological footprint per capita (in global hectares). (Global Footprint Network 2013, n.p.)

Israel also ranks 47 out of 214 countries in the world, for most carbon dioxide emissions produced per capita between 1980 and 2006, in about the top 20%, (Data Blog 2016, n.p.). Carbon dioxide is a type of greenhouse gas, which has "contributed the most to climate change", (Union of Concerned Scientists, n.d., n.p.). In addition, Israel ranks 37 out of 212 countries for biggest consumption of coal, (U.S. Department of Energy 2014), once again, in the worst 20%. Coal is the dirtiest type of fossil fuel, as it pollutes more than oil, natural gas, and gasoline when burned, (Green America 2014, n.p.). Israel is also the largest consumer per capita of water from natural sources in the OECD, (Rinat 2016, n.p.). At 203 cubic meters of water per capita per year, it is far higher than the OECD average of 126 cubic meters.

Measuring biocapacity deficit/reserve is another tool used to measure environmental impact, (Global Footprint Network 2013). Biocapacity refers to the capacity of ecosystems to

produce biological materials used by people and to absorb waste materials generated by humans under current management schemes and extraction technologies. When the ecological footprint of a population exceeds the biocapacity of the area available to that population, there is biocapacity deficit. A national biocapacity deficit means that the state is importing biocapacity through trade, liquidating national ecological assets, or emitting wastes into a global commons, such as the atmosphere. Israel has the fifth worst ecological deficit in the world, with its ecological footprint exceeding its biocapacity by a whopping 1,740%, as seen in Figure 6. Its deficit is worse than any country in the Middle East. Therefore, not only does Israel have some of the worst ecological impacts on the world, but its ecosystems are also overwhelmed and do not have the capacity to keep up with the demands of its apartheid, capitalist, and colonial operations, and regenerate.

COUNTRIES WITH BIOCAPACITY DEFICIT PERCENTAGE THAT ECOLOGICAL FOOTPRINT EXCEEDS BIOCAPACITY			
Singapore	12,700%		
Bermuda	4,220%		
Reunion	2,280%		
Barbados	1,950%		
Israel	1,740%		
Cayman Islands	1,660%		
Nauru	1,470%		

Figure 6. Countries with Biocapacity Deficit (in percentage), (Global Footprint Network 2013, n.p.).

Overall, the argument Israel cares about the environment does not hold up well considering its devastating impact on the environment in its boundaries, the OPT, and the world,

due to its water appropriation, harmful agricultural practices, wars, settlements, industrial zones, wetland drainage, marine pollution, high coal consumption, deforestation, apartheid wall, pine plantations, and high carbon emissions production. These harms are connected to Zionism's view of nature as an obstacle, and to Israel's apartheid, colonial, capitalist, and war-profiteering apparatus. This apparatus places profit and Israel's ethnocratic supremacy above all else, benefitting from the exploitation of the indigenous Palestinians and the environment. The devastation of the environment devastates Palestinian health, economy, culture, and identity. As explained by Sabawi (2011), "Palestinians [are] mostly a population of farmers — fellaheen." As fellaheen, not only are their economic livelihoods directly tied to the health of the land, but "their view of their identity is therefore defined by their connectedness to the stones, the earth and the trees". Israel's continuing assault on Palestine's environment is therefore an assault on Palestinian identity, health, economy, and culture. In order to move towards a just and environmentally sustainable society for Palestinians, and Israelis, Israel's apartheid, colonial, capitalist, and war-profiteering apparatus, must be dismantled.

4. ISRAEL'S GREENWASHING

Introduction

In spite of Israel's terrible environmental record on local and global scales, Israel and its supporters regularly portray Israel as an environmental steward, in order to greenwash Israel's colonial, capitalist, and apartheid practices. See this excerpt from a document prepared by the Israeli Ministry of Environmental protection (2008), which promotes a green image of Israel:

... Israel has faced major environmental and developmental challenges in the fields of agriculture, rural development, and desertification and water management. The success of the young, developing country in meeting these challenges was due to a mix of innovation, technology and national commitment. Israeli agriculture, for example, invented and made popular drip irrigation technologies that resulted in prosperous local agricultural economies; its agricultural products are exported worldwide with a reputation for uniqueness and quality. Israel's ability to make agriculture in the desert bloom is largely the result of research and investment in salt and drought-resistant plant species, animal husbandry for extreme climates, as well as green/hot house technologies and aquaculture. The country's long experience in managing limited water resources along with the development of novel water technologies have made Israel a leader in all aspects of the water sector. This expertise and these diverse solutions are now being exported to countries worldwide for the benefit of growing populations with scarce water and food resources. Israel's afforestation and land reclamation efforts in degraded drylands provide examples for countries with arid lands of how to recreate forests and parks that provide multiple environmental benefits, combat desertification and preserve open space, (pg. 5).

Making "the desert bloom" is a powerful colonial trope that had been propagated since the founding of Israel. Organizations, such as the JNF, and Zionist leaders, such as David Ben Gurion, used this trope to suggest that Palestine was a barren and deserted land that needed to be greened, populated, and developed, (JNF website 2014). "Palestine was a land without people for

a people without a land", Zionist leaders and advocacy groups claim, so Zionists could settle without injury to anyone's interests.

In this part of my MRP, I explain how Israel's environmental policy helps sustain Israel's oppression, rather than the environment. This part also explains the many ways in which the JNF and other Israeli environmental groups help entrench Israel's occupation, through land confiscations and the greenwashing of Israeli crimes.

'Green Country' propaganda

Israel intensified its greenwashing efforts in the 21st century, as people became more conscious of human impact on the environment and of Israel's violations of Palestinian rights. In response to Israel's sinking reputation, in October 2005, directors from the Israeli foreign ministry, prime minister's office, and finance ministry met to work out "a new plan". This plan was designed to "improve the country's image abroad — by downplaying religion and avoiding any discussion of the conflict with the Palestinians", (Popper 2005, n.p.). The "Brand Israel" initiative was launched the following year in an effort to "re-brand" Israel, or to reinvent the country's image in the eyes of both Jews and non-Jews. The rationale was that Israel "will win supporters only if it is seen as relevant and modern", rather than a rogue apartheid and colonial state. In addition, Israeli think tanks, such as the Reut Institut (2010), feared that "the erosion of [Israel's] international image" posed an existential threat. It feared that the delegitimization of Israel would contribute to its demise, as in the case of Apartheid South Africa, which fell due to economic and political isolation, because of its delegitimization, (pg. 16). In 2008, the Israeli Foreign Ministry hired British firm Acanchi "to craft the new image" and to rebrand Israel as a "land of achievements". Avanchi's founder's mission was specifically "to create a brand

disconnected from the Arab-Israeli conflict that focused instead on Israel's scientific and cultural achievements", (Pfeffer 2008, n.p.). Rather than addressing the root cause of its delegitimization, which lie in Israel's colonialism, capitalism, and apartheid, Israel decided to intensify its public relations (PR) efforts to hide these systems.

As part of its PR efforts, Israel spent considerable amounts of money into branding itself as a "Green Country", since 2012, (Israeli Ministry of Environmental Protection 2012). That year, the Israeli government bought hundreds of 10-second broadcasting spots on CNN International, which narrated Israel's "pioneering green technology for a better world", showcasing "photovoltaic panels, buds sprouting out of thick mud, a drop of water spreading ripples through a pool and sprawling wheat fields", (Udasin, S. 2012, n.p.). This propaganda campaign was launched as a joint initiative of the Environmental Protection Ministry, the Foreign Ministry, and the Prime Minister's National Information Directorate. In 2015, Israel participated in the Expo world's fair in Italy, where it posted a series of propaganda videos, promoting Israel's commitment to peace and protection of the environment. Israel has invested, and continues to invest, considerable resources into crafting its false green image in order to hide its systems of oppression.

Meanwhile, there are many examples of how Israeli advocacy groups have promoted Israel's false green image as a tool to draw support for the apartheid state. StandWithUs (SWU), which is a right-wing pro-Israel group, is one example, (Kane 2014, n.p.). Based in Los Angeles, SWU has 16 branches in the United States, Canada, Israel, and Europe, (StandWithUs.com 2017, n.p.). SWU also has close relations with Israel's Ministry of Foreign Affairs and a "constantly growing" multimillion dollar budget, (Guttman 2011, n.p.). Besides disseminating pro-Israel and pro-Israeli settlement propaganda, SWU receives donations from "a web of funders who support

organisations that are accused of anti-Muslim propaganda and encourage a militant Israeli and U.S. foreign policy in the Middle East", (Clifton 2009, n.p.). Clifton explains:

Some of these organisations [tie] the origins of Palestinian nationalism to Nazi ideology, and [suggest] that a vast Muslim conspiracy – in a similar vein to the anti-Semitic Protocols of the Elders of Zion – is mobilising to undermine the U.S. constitution and impose Sharia law.

In spite of SWU's deep ties to the Israeli government and various Islamophobic groups, SWU is allowed to operate as a non-profit organization, including on Canadian campuses, (CanadaHelps.org). Indeed, SWU focuses its efforts and resources on campuses in order to "[wage] a fight against those whom it believes delegitimize Israel", (Kane 2014, n.p.). StandWithUs promotes events, such as "I Heart Israel Campaign" and "hosting fun events", such as a "Buy Israeli Goods" action day, in order to combat pro-Palestinian events on campus. Greenwashing plays a key role in this organization's pro-Israel advocacy efforts. I regularly see the SWU on York's Keele campus distributing pamphlets on Israel and the Environment, so I picked a pamphlet recently to see what sort of information it held. Sure enough, the pamphlets promoted Israel's supposed successes in forestation, combating desertification by "making the desert bloom", and water conservation, thanks to Israel's wastewater recycling and "use of innovation irrigation techniques". Figure 7 demonstrates a couple of pictures from the pamphlet to demonstrate how Israeli advocacy groups market a green image for Israel, in order to improve its reputation, garner pro- Israel supporters, and help sustain its colonial and apartheid status quo.

Another example of a greenwashed pro-Israel group is Israel 21c. According to its website, Israel21c "was founded in 2001, in the wake of the Second Intifada, to broaden public understanding of Israel beyond typical portrayals in the mainstream media". While the

California-based group claims to be "non-partisan", it is working with the most powerful pro-Israel lobby in the United States, the American Israel Public Affairs Committee (AIPAC), to generate collaborative content, (Popper 2005, n.p.). The Israel21c website has a whole section devoted to the environment with most recent articles titled "Israel is the key to solving the world's water crisis" and "10 ways Israel's water expertise is helping the world".



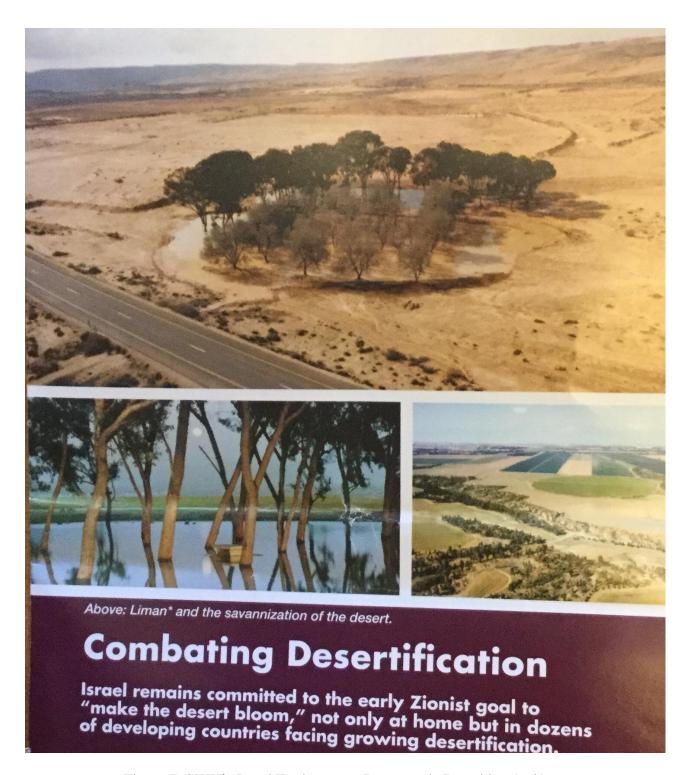


Figure 7. SWU's Israel Environment Propaganda Pamphlet, (n.d.).

Student campus groups, such as Hillel and Hasbara, have also played the environmental card. Hasbara Fellowships, which according to its website, is "a leading pro-Israel campus

activism organization working with over 80 Universities across North America" initiated several campaigns to showcase Israeli environmentalism. "People to People. Nation to Nations." and "Think Green. Think Blue" are only a couple of examples. The latter focuses on the environment, highlighting Israel's achievements in water security, waste management, and environmental peacebuilding. Many of Hasbara's "Israel fact sheets" are also devoted to Israeli successes in the environmental field. Israel and Israeli advocacy groups use Israel's apparent environmentalism as propaganda to legitimize Israel's image and to greenwash Israel's colonial, capitalist, and apartheid legacy, which devastates Palestinians and the environment.

Unfortunately, as my personal anecdote demonstrates in this paper, many buy into Israel's green propaganda. For example, Scientific American recently published an article by Jacobsen (2016), hailing Israel for how, as "one of the driest countries on Earth", it "now makes more water than it needs", (n.p.). The article especially touts Israel's desalination industry, portraying Israel as technologically superior to the rest of the Middle East, making no mention of Israel's occupation or how the West Bank supplies at least a third of Israel's water due to Israel's illegal water appropriation, (Levidow 1990, pg. 25). Nor does this article mention how Palestine was not historically dry and how the rainfall of both major Palestinian cities of Ramallah and Jerusalem exceeds that of London, but Israeli policies have contributed to increased droughts, desertification, and water depletion, (Abdulhawa 2016, n.p.). This article also neglects the negative environmental impacts of desalination, including the byproducts of pollution and greenhouse gases, and its devastation of local marine life. Palestinian author Abdulhawa responds to this article, debunking many of its myths. However, ignorantly biased articles like this speak to the success of Israel and Israeli advocacy groups in actively promoting a false

image of Israel as an environmental steward. This image is used to greenwash and, thus, sustain Israel's oppression.

JNF

The Jewish National Fund (JNF) has played an instrumental role in greenwashing Israeli crimes. The JNF claims to be the "leading environmental agency" in Israel and "the most significant environmental organization in the Middle East", (JNF website 2017). The JNF claims to have had large successes in forestation, combating desertification, rehabilitating forests, and preventing forest fires. The JNF says it has planted over 240 million trees, as the only organization in Israel that is responsible for afforestation. But while these environmental feats sound impressive and laudable, the JNF has harmed Palestinians and the environment in many ways. Most of the trees the JNF planted were non-native European pine and cypress trees, for example, (Orenstein et al. 2013, pg. 65). European pines that were planted were poorly suited to the environment in Palestine and were much more flammable than native species. These pines aged quickly, demanding more water, and were more prone to problems such as pests, disease, and fire. In 2010, these pines easily ignited in a forest fire in the North, destroying about 8,000 acres of woodlands, burning homes and killing more than 40 people, (Greenberg 2010, n.p.). Another journalist, Max Blumenthal (2010), says that "most of the saplings the JNF plants at a site near Jerusalem simply do not survive and require frequent replanting.

The process of planting these non-native trees has also been described "as a series of ecological disasters", (Masalha 2012, pg. 181). Forest floor was burned and bulldozed to erase any remnants of indigenous bushes, trees, and brush, (pg. 182). Plows prepared the soil for new planting, (Tal 2002, pg. 94). Tal adds that toxic pesticides were used to ensure that "the new pine

seedlings would not be troubled by any other undesirable biological activity". The soil suffered, while "the surrounding ecosystem was irreversibly knocked off its balance" due to Israeli plantation. Israeli-planted pine trees also grew acidic needles. These needles formed a highly acidic ground that decomposed very slowly, resulting in a "sterile forest bed inhospitable to additional undergrowth and to most animal populations".

Indeed, Israeli-planted forests constituted an ecologically impoverished system with a diminished ability to support wildlife, (Orenstein et al. 2013, pg. 65). They were inhabited by a "meagre fauna" and were much less diverse than surrounding areas. General habitat structural diversity, vegetative structural diversity, and abundance in native small mammals were all reduced in Israeli plantation areas. JNF forests also contributed to the decline of bird populations, such as raptors that used to forage in open habitats. Environmentalists coined Israeli plantations as "pine deserts", due to their severe ecological impoverishment. Since the 1980s, the JNF changed its afforestation policy, decreasing planting density and planting native trees with pines. However, the vast majority of trees the JNF boasts about planting remain non-native trees, (Pappé 2006, pg. 400). In the land now called Israel, only 10 percent of forests date from before 1948, while its forests contain only 11 percent of indigenous species. This statistic attests to Israel's mass deforestation of Palestinian indigenous species, such as olive trees, the Turks' mass deforestation of Palestine during Ottoman rule, (as this paper details on pg. 73), and the JNF's mass plantations of non-native, toxic, and flammable pines.

Besides creating ecologically impoverished areas, the JNF also frequently destroyed the environment in the name of development. In the 1950s, it drained the largest wetlands in Palestine in order to gain land for agriculture, (Orenstein et al. 2012, pg. 174). The Hula wetlands were rich in flora and fauna, some of which were endemic, (pg. 60). They were also

"vital in preserving ecological and limnological balance" of Lake Tiberias, (pg. 174). While the JNF celebrated this accomplishment, as "part of national ethos", the consequences of this drainage were disastrous. Soil was heavily eroded and many of the species in the wetland went extinct. This drainage was later recognized, even by the JNF, as a major ecological failure.

The JNF also degraded the Negev desert. Ottoman-era documents, aerial photographs from World War I and post-World War II, as well as testimonies from inhabitants, demonstrate that Palestinian Bedouins cultivated this area using terraces, dams, canals, wells, and cisterns, (Pessah 2016). Between 1948 and 1953 however, Israel massacred Bedouins and destroyed livestock and property. Israel expelled about 90 percent of the Bedouin inhabitants during this period in what is referred to as the "Bedouin Nakba". Bedouins continue to be displaced today from their lands in a process of ethnic cleansing, in which the JNF plays a prominent role. For instance, the JNF recently destroyed the Bedouin village of Atir to replace it with the man-made forest of "Yatir", forcing the Bedouin residents to move to the government-planned township of Hura, (Iraqi 2014, n.p.).

The expulsion of Bedouins contributed to land degradation. While the JNF replaced them with forests in order to "make the desert bloom", ecological disaster followed. The earth mounds built to irrigate the forests stopped most rainwater from reaching the valleys below, drying up the ecosystem and increasing salinity, making them less suitable for grazing. The JNF-planted trees absorbed heat and water and removed it from their immediate environment, leading to overheating. Data on yearly increases in temperature of the area suggests a local effect of climate change has taken place. The Negev was salinated and, ironically, desertified due to JNF plantations. As Aytzim (2017), another Zionist environmental group, admits on its website: "From draining the Hula wetlands to the planting of non-native mono-culture trees to the

unsustainable development of land, [the JNF] had a blemished record on the environment throughout its history", (n.p).

Racist, colonial history

How could the JNF have such a blemished environmental record as an environmental organization? Founded in 1901 at the Fifth Zionist World Congress in Switzerland, the JNF's role was not to protect the environment, but to promote settlement and land purchase in Palestine, (Kershnar et al. 2011, pg. 25). Land purchased by the JNF was exclusively reserved for settlement by Jews and could not be leased or resold to non-Jews. Non-Jews were not even allowed to work on JNF land. Many of the Palestinian tenant farmers, who initially cultivated the land, found themselves landless after the change of ownership. Thus, the JNF was complicit in land grabbing and was openly racist in its colonial operations. The UN Committee on Economic, Social and Cultural Rights recognized the racist nature of JNF policies, noting:

"with grave concern that the Status Law of 1952 authorizes the World Zionist Organization/Jewish Agency and its subsidiaries, including the Jewish National Fund, to control most of the land in Israel, since these institutions are chartered to benefit Jews exclusively. [...] The Committee takes the view that large-scale and systematic confiscation of Palestinian land and property by the State and the transfer of that property to these agencies constitute an institutionalized form of discrimination because these agencies by definition would deny the use of these properties to non-Jews", (Holmstrom 2003, pg. 309).

Although the JNF's stated purpose was to purchase land, most of its land was confiscated. After Israel passed the Absentee Property Law, all Arab property landed in the hands of the JNF and

the Israeli Land Administration (ILA), (Kershnar et al. 2011, pg. 44). Today, the JNF owns approximately 13% of the land in Israel, (pg 6). The JNF also has almost half the seats on the ILA Council which itself controls an additional 80% of the land base.

As a racist, colonial institution, the JNF contributed greatly to Israel's colonization of Palestine. It should be no surprise that the JNF contributed so, given how members of the JNF, such as president, Ussishkin, and director of the Land and Afforestation Department of Israel's JNF, Weitz, have openly advocated for the ethnic cleansing of Palestinians, (Robinson 1973, pg. 16). The JNF has confiscated land, planted forests to claim territory from Palestinians, and destroyed indigenous flora and fauna, due to destructive planting techniques. Meanwhile, the JNF claims to be "the leading environmental organization in Israel and the Middle East", helping to greenwash its own colonial, racist, and environmentally destructive history, and that of Israel.

Aytzim and Arava

"Think of a desert: It looks barren — but a little bit of water completely changes everything.

That's a nice metaphor for what we are trying to do — be that little bit of change, the one drop of water that makes all the difference."

— Rabbi Michael Cohen, co-founder of the Aytzim

Aytzim and Arava are two large environmental organizations, which also greenwash Israeli crimes. Meaning "trees", Aytzim was formerly known as the Green Zionist Alliance. This is a New York-based Jewish environmental organization that is considered a U.S.-registered tax-deductible non-profit charity, though it is active in Canada and Israel too. This organization is a member of the American Zionist Movement who, according its mission statement, "Acts on behalf of Israel... and defends Israel's cause with vigor and confidence". The American Zionist

Movement is a federation of Zionist groups affiliated with the World Zionist Organization, which was founded by Theodor Herzl. Aytzim promotes itself as an environmental organization that supports Zionism, a colonial ideology that is linked to human and environmental harm. Aytzim also works in partnership with the JNF. And as the italicized quote, demonstrates above, this organization propagates the Palestine was a desert myth. On its website, Aytzim also says "Aytzim's Green Zionist Alliance has been embraced by all streams of the Zionist movement". Aytzim portrays Zionism as environmentally friendly, greenwashing its harmful legacy.

Aytzim has three sister organizations, according to its website: the Green Movement, the Israel Union for Environmental Defense, and Arava. According to its website, Arava is "a leading environmental and academic institution in the Middle East, working to advance crossborder environmental cooperation in the face of political conflict", (n.d., n.p.). Further, it states its goal to prepare "future Arab and Jewish leaders to cooperatively solve the region's environmental challenges". While the organization may sound neutral and its efforts laudable, the Arava is funded by the JNF. Arava is also funded by a number of offices of the Israeli government, including the Ministry of Foreign Affairs, the Ministry of the Environment, the Ministry of Science, the Ministry of Justice, the Ministry of Regional Cooperation, and the Ministry of Negev and Galil Development, as per its website. As a receiver of money from the colonial JNF and the Israeli government, Arava profits off Israel's oppression of the Palestinian people. Arava also officially partnered with the JNF since 2002. Arava boasts of this partnership on its website, noting how the JNF has funded the construction of Arava's dormitories, academic and research offices, and laboratory, and has provided \$1 million for scholarships. Arava also praises the JNF's "heart and action" and the JNF's work to "bring an enhanced quality of life to all of Israel's residents and translate these advancements to the world beyond". Arava conveniently omits the JNF's racist and colonial legacy from its website, serving to greenwash the organization and, by extension, Israel's colonial history.

As per the History section of Arava's website, Arava also has a partnership with Ben Gurion University, "to give students the opportunity to study at two leading environmental institutions and build upon the skills they developed at the Arava Institute", (n.p.). Like other Israeli universities, Ben Gurion is complicit in many human rights violations against Palestinians, (Keller 2009). Ben Gurion University has protocols for helping army reservist students, (pg. 36). In addition, it grants scholarships to students who participated in Israel's 2008 military attack on the Gaza strip, which killed over 1,000 Palestinians. Ben Gurion University also has a program for Israeli army pilots which grants a B.A. in a shorter than usual time of study. Ben Gurion University's security also regularly harasses political activists. Arava partners with Ben Gurion University, an institution that willingly sustains Israel's oppressive status quo by privileging students who conscript to the Israeli army over other students and suppressing student political activism.

Besides its disturbing ties to the Israeli government, Aytzim, Ben Gurion University, and the JNF, and its role in greenwashing these institutions, Arava helps to *normalize* Israel's colonialism and apartheid. Officially known as the Arava Institute for Environmental Studies, Arava opened in 1996 in Kibbutz Ketura, Israel, as one of the hundreds of people-to-people (P2P) programs that were established around that time, (Rauch 2011, pg. 3). P2P programs are based on "cooperative activities between Israelis and Palestinians to promote peace", (pg. 14). P2P activities vary from interfaith dialogue to environmental cooperation. So many P2P groups were established in the 1990s that Omar Barghouti, who is a founding committee member of the Palestinian Campaign for the Academic and Cultural Boycott of Israel (PACBI) and a co-

founder of BDS movement against Israel, says they became an industry, (Mustafa 2009, n.p.). He calls it a "peace industry", which helps many get rich while producing "absolutely nothing on the ground". Barghouti adds that P2P programs fail to achieve peace, at least a just and sustainable peace, because they seek to normalize, rather than end Israel's violent oppression.

According to PACBI (2011), P2P programs, like Arava, normalize Israel's oppression of the Palestinians, by building acceptance of this oppression as "the status quo that can be lived with", (n.p.). P2P programs build such acceptance by encouraging "coexistence" rather than "coresistance" against Israel's oppression. By encouraging coexistence, within the reality of colonialism and apartheid, P2P programs encourage a "master/slave type of coexistence" where: "There is no war, no conflict, nobody is killing anybody, but a master remains a master and the slave remains a slave", (Mustafa 2009, n.p.). Besides serving to sustain Israel's oppressive status quo, P2P programs can allow Israelis to "feel their conscience is cleared for having engaged Palestinians they are usually accused of oppressing and discriminating against", (PACBI, 2011).

Indeed, every single article I read on Arava's website casts Israel not as a colonial, apartheid, or even occupying power, but as a country that is on equal grounds with the oppressed Palestinians. For example, after Israel attacked Gaza in 2014, killing thousands of Palestinian civilians and injuring thousands more, Arava published this statement on its website: "As the ongoing *tragedy* of the Middle East continues to unfold, we at [Arava] remain committed to *dialogue* and *cross-border partnerships* in order to resolve *differences* through non-violent means and work together for a more sustainable and peaceful future", (n.p., my italics). In a follow-up article on the website, Arava states:

The enormous loss of innocent lives, the fear and the terror that Palestinians and Israelis are subjected to and subject each other to, have left too many of us

stunned in silence. This blog is dedicated to giving a voice to those who reject hatred and violence in search of trust and compassion as a means to repair the broken world we live in.

Arava's attempt to reduce Israel's bombing of Gaza to a mere "tragedy" – or as Barghouti (Mustafa 2009) put it, a "Rome and Juliet story" – in which Palestinians and Israelis "subject each other" to "fear and terror" is maliciously deceptive, (n.p.). With such statements, Arava glosses over the fact that the 2014 military offensive was launched by Israel against a territory it occupies and a native people it oppresses. Arava places equal blame on Israel, which has one of the most powerful militaries in the world, and the besieged and densely-populated Palestinian population of Gaza, which lacks basic necessities, such as drinking water, (New Internationalist 2014, n.p.). Besides, Gaza does not have an army, air force, or navy. New Internationalist notes Israel's 2014 war on Gaza was more akin to Israel "shooting fish at a barrel", rather than tragedy.

On the other hand, Arava does not encourage resistance against Israel's oppression to ensure Israel does not attack on Gaza again. Rather, Arava encourages Palestinians and Israelis to "engage in dialogue, unity, and cross-border partnerships" in "search of trust and "compassion". Arava's suggestion that Palestinian and Israeli dialogue can lead to a peaceful and sustainable future" is as insulting and ridiculous as encouraging Black South Africans to sit with beneficiaries of South African Apartheid during the apartheid era and engage in dialogue rather than resistance. It is certainly not through dialogue that the violent South African apartheid regime and certainly not how the apartheid system of Israel will fall.

By encouraging dialogue and environmental cooperation without recognizing Israel's oppressive role and the need to resist against this oppression, Arava serves to normalize, thus perpetuate, Israel's oppression, (PACBI 2010, n.p.). As a P2P program, Arava's role in

perpetuating Israel's oppression appears to have succeeded. Since it was founded over 20 years ago, Israel has continued to steal Palestinian land, displace Palestinians, bomb Gaza, and inflict other social and environmental harms on Palestinians, as illustrated by this MRP. PACBI adds:

More than twenty years of [P2P] projects in Palestine... have led to nothing but further entrenching Israel's colonization and progressive denial of Palestinian rights, while exonerating Israel on the international scene as a civilized entity trying to bridge gaps with the native Palestinians. This important historical experience has taught the Palestinians, as it did South Africans, crucial lessons: false symmetry between the oppressor and oppressed only results in further empowering the oppressor, hence prolonging the bloodshed and injustice, (n.p.).

For my concluding words on Arava, I'd like to highlight the following words by Alaa Obeid, Palestinian alumna from Arava. Arava has several blogs on its website to demonstrate how its alumni benefit from its program. Alaa clearly did not benefit from the program, stating:

The semester at the Arava Institute ended and we left the kibbutz to go back home, back to reality — and what kind of reality did we find? One for which the past 4 months in Ketura did not prepare me. The kidnapping of the 3 teens, the Israeli Forces' home raids in the West Bank and racist attacks on the street. The same night I arrived in Ramallah, Israeli Forces entered the city for the first time since the Second Intifada causing clashes with the residents and things escalated from there. Now the conflict and occupation have never been harsher.

I did not have the time to digest the past 4 months, to settle down, I was exhausted and stopped functioning normally. The time I spent at the Institute did not seem to exist [...]. Was it really helpful? [...] In PELS, [Arava's mandatory

Peace-building and Environmental Leadership Seminar], there were good and bad sessions. It was not always clear to me what we achieved or if it had been done the right way. Was it right to relocate us from our unequal realities, to adjust our conditions and place us into a situation of equality? Was it right to put us in a better but fictional framework in order for us to feel safe and communicate as if we were equal? Why didn't we talk about the current circumstances, about our different realities, instead of repeating the differences in our history?

At the end of the semester, I felt equal, I felt empowered to change, I felt I was a leader; I was ready to start my future with bigger hopes. However, the harsh reality slapped me in the face. The skills I had gained in PELS have no place in my current reality. I can't practice them because there are gaps which need to be filled; there are basics that don't exist within our societies. At this time, we cannot sit at the same table to work out our differences if one party is still occupied and the other is the occupier.

Alaa notes how Arava's peace and sustainability initiatives are condemned to fail, since they do not challenge Israel's colonialism and apartheid. Rather, Arava provides Palestinians a false sense of empowerment and equality by engaging them in P2P programs, so they accept Israel's oppressive status quo. By normalizing Israel's oppression and partnering with the JNF, while presenting itself as "the leading environmental and academic institution in the Middle East", Arava greenwashes the injustices it, the JNF, and Israel perpetuate against the Palestinian people. Overall, the JNF, Aytzim, and Arava all present themselves as environmental organizations while greenwashing and perpetuating Israel's oppression.

Environmentalism for Israeli political interests

While I already highlighted how Israel and groups, such as the JNF, Aytzim, and Arava, use environmental image to advance political causes, such as legitimization and normalization of Israel's oppression, I now focus on more specific aspects of Israeli environmental policy, such as cultivation, national parks, and forestation, demonstrating how they serve to advance Israel's colonialism and apartheid, linking these arguments back to the first part of this paper.

Cultivation and "making the desert bloom"

Many Zionist groups propagate the myth that Israel is "making the desert bloom", as highlighted in this paper. The JNF even claims: "Forests and parks were not always part of Israel's landscape. The first Jewish pioneers who came to the land of Israel towards the end of the twentieth century found a desolate land that provided no shade whatsoever," (JNF website 2017). The JNF argued that there were no trees whatsoever in Palestine prior to arrival of the first Zionist "pioneers", painting an image of a desert. But while this paper highlighted how Palestine was not deserted, as hundreds of thousands of Palestinians inhabited the land and were expelled, was it truly a "desolate land"?

Much of Palestine's forests were, indeed, decimated by the Ottoman Empire, which occupied Palestine before the British, (Pappé 2004, pg. 64). Olives, cedars, and oaks were destroyed by Jamal Pasha's army to use the wood for railway lines. However, Palestine was certainly *not* "desolate", (Orenstein, et al. 2013, pg. 231). The Middle East is, after all, considered "the cradle of agriculture", (Kaniewski, Van Campo, Boiy, Terral, Khadari, Besnard 2012). The olive, which was one of the first fruit trees cultivated by man, has a long history in the Mediterranean, and particularly in Palestine, (Liphschitz, Gophna, Hartman, and Biger 1991).

It is reported that cultivation of the olive began in Palestine during the Chalcolithic Period, thousands of years before the arrival of the first Zionist settlers. As Qusner (1986) notes, olives constituted "one of the primary agricultural branches in Palestine" for centuries, and by 1914, there were 475,000 dunams of olive groves (47,500 hectares) across the area that is now Israel and the Palestinian territories, (pg. 95). The Palestinian cities of Nablus and Bethlehem are most renowned for olive production. Nablus' "remarkable" number of trees and "luxuriant vegetation" were noted by one traveller during the 19th century, in which he found a "very fair market, [with] excellent apricots and large white mulberries in abundance", (Thomas 1853, pg. 113). Thomas goes on to explain how "it is almost everywhere cultivable, and is in fact highly cultivated", (pg. 114). Another traveler, documents how flowers, such as anemones, convolvoli, and hollyhocks, were "conspicuous" in Nablus, which was "beautifully situated in the midst of gardens", (Crosby 1851, pg. 293). "Everywhere", he added, "were running streams and fountains, by the side of which grew pomegranates, magnolias, figs, olives, oranges, and apricots, in the greatest luxuriance and profusion", (295). From the late 16th century to the early 19th century, Doumani (2000) also notes that Nablus "emerged as Palestine's key centre for regional trade, manufacturing, and the local organization of commercial agriculture", (pg. 25). It also "played a leading role in the growing trade with Europe, especially the export of cotton". These descriptions provide a very different image of Palestine than the "desolate" image promoted by the JNF.

Nablus was not an exception for its greenery and agricultural production in Palestine. Between 1856 and 1882, Palestine exported all sorts of produce via the ports of Haifa, Acre, and Jaffa, to Egypt and Lebanon, as well as Europe, (Kamel 2015, pg. 77). The Palestinian cities of Gaza (wheat), Jaffa (watermelons and citrus), Hebron (grapes), Galilee (tobacco and

watermelons), and others were all "intensively cultivated" by Palestinians and became reputed for different produce. In December 1945 and January 1946, a Survey of Palestine was conducted and published by British Mandate authorities, on behalf of the UN Special Committee on Palestine. It revealed that during the 1944-1945 planting season, about 5 million pounds of grains, 7 million pounds of vegetables, 4 million and a half pounds of fruits (excluding citrus) and 3 million pounds of olives were produced, largely by Palestinian farmers. Furthermore, crops, such as wheat, barley, lentils, peas, chickpeas, and bitter vetch were cultivated in the region for more than 5000 years, (Orenstein et al. 2013, pg. 32).



Figure 8. Nabulsi soap. I took this image of Palestinian soap made out of olive oil while visiting the Touqan soap factory, which opened in Nablus in 1894, (2015).

Three quarters of the Palestinian population was actually engaged in agriculture and animal husbandry, prior to the foundation of Israel, not only to supply subsistence, but also a surplus, "after tithes and taxes, for trading to obtain other necessities and for storage of reserves to be used in years of poor harvest", (pg. 39).

Besides flowers and fruit trees, dwarf shrubs, scrub forest, and oak woodlands, also formed the Palestinian landscape. On the other hand, Canon Henry Baker Tritram described a diverse fauna in Palestine. During his 1863-1864 tour of the region, he provided testament to the

existence of animals that have since disappeared, such as deer, Syrian bears, gazelles, and otters. Therefore, the idea that the JNF made the desert bloom is nothing but a historical revisionist myth, as Palestine had been already cultivated to support agricultural populations for centuries and it did not require Zionist agricultural expertise in producing fruits, vegetables, and other crops. The continued survival of olive trees that are hundreds or even thousands of years old throughout Palestine/Israel should alone negate the desert colonial myth.

This myth continues to be propagated by Zionists, however, because by suggesting Palestinians did not cultivate their land, Zionists seek to delegitimize the Palestinians' claims to land ownership. By denying Palestinians ever cultivated the land, Zionists can also erase Palestinian history and grant Israel a sense of superiority as a country that was able to achieve such an incredible technological and environmental feat in "making the desert bloom" in such a short span of time. Besides, Zionists claiming it was they, not Palestinians, who cultivated the land, helps them claim ownership of the land. The greening the desert myth also serves to legitimize Zionism as an environmental movement, greenwashing its crimes against Palestinians and their land. Therefore, while no amount of cultivation should justify colonialism and displacement, Israel's claim that it cultivated Palestine, "making the desert bloom", is baseless. Palestinians have cultivated Palestine for centuries. However, Israel uses this myth to grant Israel a sense of superiority, greenwash Israel and Zionism, and help Israel claim ownership of Palestine.

Forests

Israel also uses forest plantations to dispossess indigenous inhabitants, erase their history, and to advance other political and economic colonial interests. The JNF, which is responsible for

Israeli forestation, literally planted the borders of Israel. As Manski (2010) explains, the JNF tree line follows the Green Line, demarcating the border so distinctly that it is visible from space. Tree plantations have been used by Israel and the JNF to lay claim to Palestinian territory. By planting European pines and uprooting indigenous olive trees, JNF sought to demarcate Jewish versus Arab space, (Manski 2010, n.p.). These plantations also helped Israel "de-Arabise" Palestine and make it look more like Europe, (Masalha 2012, pg. 177). As Ben Lorber (2012) explains:

"The pines helped evoke images of a European wilderness, creating a familiar 'natural' environment for the mostly European Jewish settlers, so much so that settlers affectionately nicknamed Carmel National Park, planted partially over the destroyed Palestinian village of al-Tira, 'little Switzerland' for its resemblance to the Swiss Alps' (n.p.).'

The de-Arabisation of the landscape was vital to Israel's colonial project, as it helped Zionists claim ownership of the land and it created a more familiar environment for Zionist settlers. As Ben Gurion, noted, about 90 percent of the original Second Aliyah immigrants left Palestine, unable to overcome the enormous challenges of adaptation, (Tal 2002, pg. 28). The Second Aliyah took place between 1904 and 1914, during which approximately 40,000 Jews immigrated into Ottoman-ruled Palestine, mostly from the Russian Empire, (Jewish Virtual Library 2017, n.p.). Tal (2002) reports that even Ben Gurion and the third Prime Minister of Israel, Eshkol, had thoughts about going back to Europe due to nostalgia, a key element of which was the "lush scenery of Eastern Europe", (pg. 28). The JNF's transformation of Palestine into a more European landscape helped to make it more hospitable, or at least more familiar to the settlers. The JNF forests helped settlers "overcome the sense of alienation and the resulting cognitive

dissonance", (pg. 28). Forest plantations helped Europeanize Palestine, encouraging colonial settlers to stay.

The JNF also planted forests over destroyed Palestinian villages in order to erase Palestinian history. JNF plantations hid any physical evidence that Palestinian people used to live in the area by covering the rubble of their homes, mosques, and schools with trees. Over 86 destroyed Palestinian villages lie beneath JNF forests. None of these villages are mentioned on the JNF's website. Palestinian history fades behind the website's descriptions of the forests' "wonderful charms, Jewish heritage, and archeological attractions of the region", (Masalha 2012, pg. 177). JNF-sponsored "Canada Park", for example, is located in the West Bank, beyond Israel's internationally recognized borders. While the JNF claims this park was planted over barren land, it was strategically placed over the ruins of the Palestinian villages of Imwas, Yalu, and Beit Nuba, which were destroyed by Israel in 1967. JNF parks thus helped erase Israeli crimes and erase the memory of Palestinians from the landscape, in a process described as "memoricide", (Pappé 2006, pg. 397). Meanwhile, JNF plantations rendered the landscape unrecognizable, alienating Palestinian refugees, who became "foreigners, immigrants in their own land, trespassers sneaking through the bushes just to get a glimpse at their old villages, or thieves picking oranges from the fruit trees planted by their parents and grandparents", (Tabar 2010, n.p.). Therefore, JNF forestation helped advance colonial interests of hiding indigenous history and colonial crime, and creating a new landscape that alienated indigenous Palestinians and encouraged European Jewish colonists to settle in Palestine.

More recently, the JNF also planted forests to limit Bedouin 'incursion' and to restrict Bedouin herding, (Manski 2010, n.p.). For example, Omer, which is a wealthy town located in the Negev region decided to plant a large forest in 2009. The council of Omer stated that it

decided to plant the forest partially "to assert control over the land within Omer's municipal boundaries", (Yagna, 2009, n.p.). By making this statement, Yagna says the council openly expressed its intent to use the forest to "discourage the incursion of Bedouin in the area who have been settling on open land in the town". The JNF and Israel have used forests to displace indigenous Palestinians, "assert control" over land, de-Arabise Palestine, make it easier for settlers to adapt, and to hide Israeli crimes against the Palestinian people and land.

National parks and nature reserves

Israel has also established national parks and nature reserves to justify land grab and Palestinian expulsion. Israel boasts of more than 70 national parks, (Isaac, Hall and Higgins-Desbiolles 2015, pg. 70). Some of these parks are located in the West Bank, East Jerusalem, and the Golan Heights. Since 1967, many Palestinians have lost land to "Israeli national parks, nature reserves, and other 'green projects', especially in the OPT, (B'tselem n.d., n.p.). Palestinians lost land, because these protected areas closed Palestinian land out of use by Palestinians for the supposed conservation of nature, (Isaac et al. 2015, pg. 70). In racist and colonial fashion, Palestinians have been depicted as "threats" to nature. B'tselem, however, notes the difficulty of attributing Israeli nature reserves to environmental concerns, since Israel strengthens rules protecting reserves when they lead to Palestinian dispossession and relaxes them when they accommodates the agenda of settlement expansion.

For instance, in 1983, the Nature Reserves and National Parks Unit of the Israeli Civil Administration established the Nahal Qana Reserve, declaring a nature reserve on an area of roughly 1,400 hectares along the valley floor of Wadi Qana and its surrounding slopes, (B'tselem 2017). Wadi Qana is located in the Qalqilia area of the Occupied West Bank. The declaration of

land belonging to local Palestinian residents as a nature reserve meant an absolute ban on Palestinians tree plantation and farming, meaning the loss of an important source of income. Some Palestinian residents have resisted the ban, since, by planting olive trees, but the Israeli government regularly uproots and confiscates these trees. One Palestinian resident expresses his anger at the ban and Israel's confiscation of the trees by saying: "The olive trees don't harm the reserve in any way, they add to its beauty". In contrast:

Israeli authorities turn a blind eye to illegal activities by settlers in the nature reserve, such as massive construction, building roads, and discharging wastewater into the wadi. Some 100 homes in the settlements of Yaqir, Nofim, and Karnei Shomron were constructed within the area of the reserve and, in 2014, master plans were submitted for them which include rezoning areas from a nature reserve to residential.

B'tselem argues that nature conservation in the West Bank ought to serve the Palestinian public who is under occupation. Yet, Israel mostly declares natural reserves in order to dispossess Palestinians, while allowing illegal settlers to make use of the land.

East Jerusalem, which is part of the OPT and is supposed to be the capital of a future Palestinian state, has been particularly targeted by Israel for the establishment of national parks in recent years, (B'tselem n.d., n.p.). Since 1967, Israel has established five national parks in East Jerusalem, using the parks "as a ploy to take over Palestinian land and prevent the development of Palestinian [neighbourhoods]", (n.p.). The parks border populated Palestinian neighbourhoods, and in some cases encroach on Palestinian property. Meanwhile, B'tselem (n.d.) provides a humorous map of the national parks Israel established in East Jerusalem, noting how several parks lack "any nature, landscape or heritage treasures" that might justify converting

them into national parks, (n.p.). Israel creates national parks merely to justify the theft and control of Palestinian land, rather than protect the environment.

A representative from NGO Bimkom compares national parks with settlements, (Agence France-Presse 2012). "These national parks, we call them green settlements, because it really works like a settlement", (n.p.). And like settlements, many national parks were founded through the forced displacement of the indigenous Palestinian population. For instance, in 1986, Israel declared the site of the original village of Susya, (located in the West Bank), a national park and forcibly displaced all of the village's 400 residents from their homes. Villagers quickly resettled in caves, tents, and homes they built on land that they owned nearby, (American Friends Service Committee 2013, pg. 1). The Israeli military completely destroyed this new community in 2001, and conducted mass demolitions of rebuilt homes and structures since then. Nearly half of the village population has been permanently forcibly displaced from their homes and village as a result of these demolitions. Unfortunately, as past colonial empires and Apartheid South Africa, Apartheid Israel uses national parks to justify the dispossession of indigenous people, the Palestinians, and land annexation to advance its oppressive agenda.

Environmentalism for Israeli economic interests

Israel and Israeli advocacy groups also use environmental policy also to advance colonial economic interests by attracting tourism (especially ecotourism) and financial support for their colonial activities. For example, the JNF encouraged the Jewish diaspora to fund its colonial activities through its Blue Box, since 1884, by growing trees and propagating the myth that it was "making the desert bloom", (Roberts 2013, p.115). There are testimonies to show many believed this claim, as Israeli Lia Tarachansky (2011) says: "Some of my earliest Jewish

memories involve dropping spare change in the Jewish National Fund's iconic little blue boxes. I was proud that my money would help plant trees in Israel. The JNF, I knew, was making the desert bloom", (n.p.). The JNF used the coins collected in the Blue Box to fund its colonial activities. The JNF's avowed environmentalism thus helped greenwash its crimes, and to establish political and financial support within the diaspora for the Zionist project. By donating to the JNF, Jewish diaspora were not financing land grab, displacement, and racism, but environmental stewardship.

Under the FAQ section of the JNF website, the JNF also admits that it planted non-native pines in Palestine "in the hope of developing a viable wood-based resource for Israel's young developing economy in the 1950's-1960's". As one of its primary objectives, the JNF also states that it sought to plant to advance "the economic use of the forest for tourism" and pasture. Forestation thus helped to advance Israel's colonial economic interests by supporting tourism, providing wood, etc. Indeed, according to the OECD (2011), tourism is one of the most important sectors of the Israeli economy with 45 million tourist arrivals in 2010. Meanwhile, ecotourism, which is in principle associated with more responsible tourism, is one of the biggest niche tourism markets in Israel, (Isaac, et al. 2015, pg. 71). Ecotourists are often catered for at Israeli nature parks. After all, national parks are described in Israeli legislation as being "first and foremost intended for the enjoyment of the visitor" rather than protection of the environment, (McNeely and Harrison, 1994, n.p.). Therefore, as the OECD (2011) notes, Israel's conservation of natural resources through nature reserves and other protected areas serve as a source of economic growth in the ecotourist sector, (pg. 144). Forests planted by the JNF have also "gradually become a main local tourism attraction, as they "include hiking trails, camping areas, and areas for sports and recreation activities". The use of tree plantation to draw financial

support for the JNF, the growth of forests as a "viable wood-based resource", and the establishment of national parks and forests to draw tourists are only a couple of examples of how Israel uses environmental policy to advance its colonial economic interests. As an important part of Israel's PR efforts to improve its image, it is also safe to assume Israel promotes its false self-image to drive Israeli tourism in general, Israeli trade, and other international interactions, but the length of this paper is limited to exploring these examples.

CONCLUSION AND MOVING FORWARD

In his book, *The Ethnic Cleansing of Palestine*, Ilan Pappé (2006) explains that the JNF planted pine trees not only over bulldozed Palestinian homes, but also over fields and olive groves. In the new development town of Migdal Hamek, for instance, "the JNF did its utmost to try and cover the ruins of the Palestinian village of Mujaydil" by growing pine trees at the town's eastern entrance, (n.p.). However, "the pines failed to adapt to the local soil and, despite repeated treatment, disease kept afflicting the trees". Later visits by relatives of some of Mujaydial's original Palestinians villagers "revealed that that some of the pine trees had literally split in two and how, in the middle of their broken trunks, olive trees had popped up in defiance of the alien flora planted over them fifty-six years ago".

This MRP demonstrates how Israel greenwashes its colonial, capitalist, and apartheid legacy. I explain how Israel, like past colonial and apartheid powers, uses environmental policy, such as cultivation, nature reserves, and national parks, to advance an oppressive agenda. Israel cannot be a country that cares for the environment, as it operates as a colonial, apartheid, and capitalist war profiteer, nor should environmentalism ever be used as a reason to justify

violations of human rights. From its water appropriation, to industrial pollution, to drainage of wetlands, to monoculture pine plantations, to deforestation, to war, Israel also proves time and time again that its environmental image is false. Israel, since its foundation, has devastated both the Palestinian people and the environment.

However, just as Mujaydial's original olive trees came back, despite being repressed by decades by a colonial entity, Palestinians are too continuing to resist against Israel's oppression in various ways, whether they are located in the Occupied Palestinian Territories, in Israel, or abroad. Palestinians also engage diaspora and supporters of the Palestinian cause through a variety of campaigns, such as BDS and the Stop the Wall Campaign.

Joining the BDS movement is the most significant way in which supporters of the Palestinian cause can help from outside of Palestine, according to Palestinian civil society, (Palestinian BDS National Committee n.d., n.p.). Boycott, Divestment, and Sanctions (BDS) was initiated by Palestinian civil society in 2005. This movement calls for the application of economic and political pressure on Israel until it complies with international law by:

- 1. Ending its occupation and colonization of all Arab lands occupied in June 1967 and dismantling the Wall;
- 2. Recognizing the fundamental rights of the Arab-Palestinian citizens of Israel to full equality; and
- 3. Respecting, protecting and promoting the rights of Palestinian refugees to return to their homes and properties as stipulated in UN Resolution 194.

The BDS call was endorsed by over 170 Palestinian political parties, organizations, trade unions, and movements. The BDS campaign was modeled after a similar international human rights campaign to end apartheid in South Africa. BDS has proven to work in isolating the apartheid

regime in South Africa and leading to its downfall, so there is no reason why BDS should not work in the case of Palestine. From student union to churches to cities, across all continents, have already heeded the call for BDS and have boycotted or divested from Israel.

I am proud to say that both the undergraduate and graduate student unions of my own York University have already endorsed BDS, for example. However, my university remains tied to Israel. The York University Board of Governors continues to invest in arms manufacturers that supply to the Israeli army. In addition, York's Faculty of Environmental Studies (FES) had a partnership agreement with Arava since 1999, which I only discovered upon completion of this research, (YFile 2008, n.p.). There is a graduate level exchange program with the institute, as part of this partnership, which sends Arava students to the York University for up to a year, while York students go to "Israel". The Lassonde School of Engineering at York University and the Technion Israel Institute of Technology in Haifa have also entered into a "strategic partnership" as of 2014, (Technion Canada, n.p.). Technion is one of the most corrupt Israeli academic institutions. It takes pride in cooperation with Elbit Systems — a major Israeli military company that manufactures drones used in Israel's attacks on Palestinians and helps Israel build its illegal Apartheid wall, BDS, (n.d. n.p.). Technion researchers also develop unmanned vehicles that aid the Israeli army in destroying Palestinian homes, (Keller 2009, pg. 40). As a student of York University and as a Palestinian, I am incredibly disappointed in my university's decision to continue supporting Israel's oppression in the above-mentioned ways, and I hope it considers ending its ties with arms manufacturers, Arava, and Technion.

In May 2010, the BDS movement actually launched a JNF campaign targeting the greenwashing of Israel's colonial and apartheid activities, (Manski 2010). On the ground, Palestinian Bedouin organizers have also increasingly incorporated an environmental justice

analysis into their international advocacy efforts, holding a series of protests in front of the JNF offices in the Negev.

The concept of environmental justice is essentially social justice, inclusive of the environment. As noted by McDonald (2002), environmental justice lacks a coherent theoretical framework, but it uses the widest definition of the environment, and it places people, rather than flora and fauna, at the centre of the web of social, economic, political, and environmental relationships. Environmental justice emerged as an integral part of the anti-apartheid struggle in South Africa, as black workers in particular sought to end apartheid's destructive impact on the environment, and in extension, their health. I argue that the concept of environment needs to be inclusive of people. After all, humans are impacted by environmental changes, as all species. And as the cases of Palestine and South Africa demonstrate, social harm regularly cause environmental harm and vice versa. In addition, I argue that environmental justice should be as integral to the Palestinian anti-apartheid struggle as it was in South Africa, since a healthy environment creates the basis for social, economic, and cultural well-being, especially for Palestinians who continue to largely identify as fellaheen.

The Stop the Wall Campaign was founded in 2002 in Palestine, as "the main national grassroots body mobilizing and organizing the collective efforts against Israel's Apartheid Wall", (Stop the Wall 2011). It is based on the efforts of popular committees in the villages affected by the Wall where people can meet, organize, strategize and mobilize. Its immediate goals are:

- The immediate cessation of the building of the Wall.
- The dismantling of all parts of the Wall and its related zones already built.
- The return of lands confiscated for the path of the Wall.

• The compensation of damages and lost income due to the destruction of land and property in addition to the restitution of land.

The Stop the Wall campaign uses several strategies, including popular resistance action, NGO and national mobilization, information and awareness raising, national networking, and youth education and mobilization. Globally, the campaign targets public opinions and works towards BDS.

Besides social and environmental and justice, I argue that economic justice is vital in moving forward to end Palestinian and environmental devastation. As this paper demonstrates, capitalism generates inequalities and exploits people and the environment to maximize profit. Capitalism also works hand in hand with colonialism and apartheid. Therefore, capitalism needs to be dismantled and alternatives, such as socialism, need to be explored as replacement. Socialism serves to "create economic development that [benefits] everyone rather than a wealthy minority, and where the benefits of development are shared and used for social gain rather than profit", (Farah 2016, n.p.). The case of South Africa also demonstrates that the end of political apartheid is not enough. After South African apartheid fell in the 1990s, environmental and economic justice was not achieved. As McDonald (2002) explains, capitalism remained and its associated large socio-economic inequalities and environmental devastation. The case of South Africa teaches an important lesson. Capitalism needs to be abolished, along with colonialism and apartheid, on the path to achieving social, economic, and environmental justice for the Palestinians.

Last but not least, I urge environmentalists to be more critical of greenwashing techniques and environmental policy, such as national parks, as to how they can be used by colonial states, such as Israel, to oppress people. While this paper highlights how

environmentalism has much of its roots in colonialism and how colonial countries used environmental policy to advance their own oppressive agendas, it is worth noting that some of the first environmentalists were radical anti-slavery and anti-colonial activists, (Grove 1995). Grove states: "Quite consistently [...] those who criticised colonial laissez-faire policies pertaining' to deforestation, soil erosion and species extinctions tended also to be those who deprecated colonial exacerbation of famine and disease patterns and the treatment meted out to indigenous peoples", (pg. 281).

For example, Bernardin de Saint-Pierre who is recognized as a pioneer of modern environmentalism is also recognized as "a pioneering figure in the French anti-slavery movement". Conservationist Saint Pierre coupled "his pleas for ecological restraint with pleas for the release of slaves". In the West Indies, Alexander Anderson argued for forest protection, while criticizing the treatment of the Caribs. In India, Colonel Kyd advocated for the production of famine-resistant crops and opposed continued territorial expansion in areas west of Bengal. Edward Balfour, who was a pioneering environmentalist India, was not only openly anti-colonialist, but also "an equally strong feminist", having "pioneered female medical education in India, bringing about the opening of the Madras Medical College to women in 1875".

Grove concludes that colonial scientists, such as Balfour, "are all are good exemplars of the close connections between nascent environmentalism" and social reformism. Grove notes that the fact that "the scientists employed by the British were frequently either Scottish or Central European, and thus inherently peripheral to the imperial social establishment, only served to strengthen this connection", (pg. 282). In any case, concern for human rights and concern for environmental rights have been clearly linked since the founding of environmentalism. This duality of concerns has carried through the following centuries, as seen

in South Africa and now in Palestine. I believe it is important to remember the radical, human rights, anti-colonial roots of environmentalism and to think environmental issues as human rights issues moving forward. Indeed, we see today how many of the countries leading the fight against climate change, are small, low-income countries, like the Maldives, which link their people's survival to environmental protection. I encourage environmental departments to stress this link between human and environmental rights. Environmentalists, I argue, have a responsibility to speak out and to deny the green platform to colonial, capitalist, and apartheid entities, like Israel, which greenwash their oppressive practices, doing a disservice to the environmental movement and to humanity.

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