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Plastic Pollution and the Global Throwaway Culture: Environmental Injustices of Single-use Plastic

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Abstract

The global throwaway culture has created a cross-ecosystem plastic pollution injustice. The first to suffer this injustice will be the most vulnerable. Our oceans have become our dumpsters. The throwaway culture has created a disrespect of material goods that has turned the earth's resources into rubbish after a single use. Eighty percent of the yearly 8 million tons of plastic that enter the ocean is single use plastic, such as plastic bottles, plastic shopping bags, or cigarette lighters.¹ Plastic has destroyed ecosystems, robbing impoverished communities of natural resources and of a healthy and safe living environment. First to suffer the injustices of plastic pollution are marine life living in the dumping ground of throwaway culture. This paper will discuss the Albatross, a population seabird who are suffering starvation from plastic pollution in the most remote regions of the world. The Albatross will serve as a metaphor, or more accurately a warning, of how humans will soon be affected. It is already known that plastic micro-beads enter the food chain by fish that then pass on the plastic particles for human consumption. Humans are consuming more and more plastic from fish but are also consuming the toxins absorbed by the plastic micro-beads. The injustice of throwaway culture and plastic pollution is heavily supported by scientific evidence, but often facts need to become feelings in order for social change to occur. Every person has a right to access to an environment free of plastic debris and toxins associated with its improper disposal. The issue of plastic pollution in its scale is debilitating. Cleanup is not an option because the plastic pollution is scattered throughout the ecosystem. Recycling adds to carbon emissions. Our best option is to convert our culture and halt production and use of plastic, and most urgently single-use plastic. Radical change is needed. We need to go beyond tweaking our imagined order but instead reconnect our throwaway culture to nature so that we reestablish the appreciation of earth's resources.

Introduction

Humans have the need to change but it is often forgotten that we also have the ability to change. The earth is suffering an injustice from a culture of humans with a throwaway mindset. The earth, and particularly the ocean, has become our dumpster. As of 2014 there is an estimated 268,940 tons of plastic debris in the ocean. That's enough plastic to stack enough 2L water bottles on top of each other to the moon and back.² However these estimates are highly conservative since they are only estimates of the free-floating plastic. The less visible plastic has sunk to the bottom, been incorporated into the sand, or has made its way into the food chain. This paper will expose the injustice of throwaway culture, by critique of plastic use and disposable, and discuss the things that are changing but also the things that ought to change in order to halt this injustice.

The 'throwaway culture' is a term coined by Pope Francis I in his encyclical *Laudato Si*, where he challenges the world to realize the "intimate relationship between the poor and the

¹ John Tibbetts, "Managing Marine Plastic Pollution: Policy Initiatives to Address Wayward Waste" *EHP Environmental Health Perspectives*, April 2015: 3

² Eriksen, Lebreton, Carson, Thiel, Moore, Borerro, Galgani, Ryan, and Reisser, "Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea," 10.

fragility of the planet.”³ Throwaway culture describes the current social and economic structure of society in which unwanted things and people are rejected as waste. Francis argues that the suffering of the poor, because of their close and often immediate dependence on a healthy environment, is linked to a throwaway culture that turns earth's resources into rubbish. He begins his critique of throwaway culture with a piece of paper that is thrown away and not recycled. The piece of paper is used once then laid to waste and pollute another area; the piece of paper that required several to hundreds of years of nutrient consumption to grow as a tree. Nature has an amazing process of production, consumption and return. However throwaway culture consumption is not met in a healthy form of return to the ecosystem. We have not yet been able to “adopt a circular model of production.”⁴ For the sake of the poor, we cannot continue the mindset that the circle of life stops with us humans.

Humans are not separate from nature. This structure of separation between human and nature is a mindset nourished by throwaway culture. Yuval Harari's *Sapiens*, a recount of human history and culture, makes the claim that our (the human) societal structure is completely made up. The laws, the social standards, and culture (i.e. throwaway culture) are just thought that can change by just choosing to act or think differently. Our actions are not entirely biology but more imagined order.⁵ This mentality brings us to the reality that things don't have to remain the way they are. Francis calls for a moral internal change; a change of heart to care for our common home. Timothy Morton, in his book *The Ecological Thought*, in a less theological manner claims we need and can change our way of thought. Morton states that we have a 'nature' mindset.⁶ We say things like 'let me go out into nature' or 'let us go visit nature'. Where is nature, are we separate from the natural world? This separation from nature is also engrained in the throwaway culture. We throw away our plastic into the ocean and it is no longer in our realm of thought. Out of sight, out of mind. In a throwaway culture that plastic and its negative affects are in a separate realm that will not affect them. We need to replace the method of 'that is nature' with 'that is us', in order to live in a healthier and natural environment. Francis, Harari, and Morton each make the point that it is morality, human thought or imagined order that has shaped the world the way it is today. The three authors share the idea that we are facing an issue much bigger than ourselves. In order to make a change the collective whole must change. For Francis the whole will change with several individual changes in hearts. For Morton our action will change when the collective thought is the ecological thought. For Harari the imagined order will change when the community decides on a common and collective thought that becomes incorporated into the imagined order.

The shared concepts that we are facing an issue bigger than ourselves and that we need but can change stress the importance of the concept of ALL in Environmental Justice. Environmental justice is for all. So in order for all to see environmental justice it is important for the whole, or at least the majority, to think like Francis, Harari and Morton. For issues like the Flint water crisis, climate change, or plastic pollution and their effect on the poor, it is vital that communities understand that we choose our structure and actions. It only takes knowledge that we have the need but more importantly the ability to change. Our earth is suffering injustice at the thought,

³ Pope Francis, *Encyclical Letter: Ladauto Si' on Care for Our Common Home*, 16.

⁴ *ibid*, 18

⁵ Harari,

⁶ Timothy, Morton, *The Ecological Thought* (Cambridge, MA: Harvard University Press, 2010), 9.

morals, or imagined order of human throwaway culture. We must realize our ability to change and serve justice to our environment and to fellow humans.

Information Literacy and Value Based Perspectives

The literature establishes that there is an ecological problem with disposable plastic. It is estimated that 80 percent of the yearly 8 million metric tons of plastic debris that enters the ocean, originates from land-based sources.⁷ Meaning that only 20 percent of oceans plastic originates from marine-based sources, such as fishing vessels, piers, and passenger or freight boats.⁸ Cleanup is a near impossible feat since it is estimated that only 5 percent of the oceans plastic pollution is visible or accessible and the remaining 95 percent is below the surface, crushed into micro beads, or dispersed into the ecosystem.⁹ Cleanup is not a viable option; instead we must cut off the pollution from its source. Who are the source aggressors? Our throwaway culture and waste infrastructure are to fault. The multitude of plastic pollution is not just attributed to the odd ignorant man directly dropping a plastic cup into the river but it has everything to do with overconsumption of throwaway society and ill-designed waste management systems, especially those of developing countries.¹⁰ According to a study published in *Science*, between 55-60% of global plastic pollution is sourced by five developing countries: China, Indonesia, the Philippines, Thailand, and Vietnam.¹¹ Eighty percent of the plastic waste that finds its way to the ocean is 'low residual value', or in other terms 80 percent of plastic waste is single use plastic.¹²

Who are the victims of plastic pollution? The victims most directly and drastically affected are nonhuman organisms, however this is not to say that the problem will not reach humans. Plastic pollution is an ecosystem wide issue and guess what? Humans are part of the ecosystem. Marine animals are amongst the first to see the effect of plastic pollution because they are hidden in the shadows of our throwaway culture. They inhabit the environments we use to throwaway our plastic.

We should use the animals as a model for the forthcoming to humans if things do not change. Let us explore the symbolic seabird, the albatross from the *Rhyme of the Ancient Mariner*, as a metaphor for the future human victim. Midway Atoll, one of the most isolated atoll's located in the middle of the Pacific Ocean north west of Hawaii, is the breeding ground for the Laysan Albatross (*Phoebastria immutabilis*).¹³ The Albatross, with a wingspan of more than 6 ft., is a magnificent seabird that can live more than half a century with only a single mate and long years of living at sea without touching land.¹⁴ Their feeding behaviors unfortunately collide with the plastic gyres, giant islands of plastic carried by currents that occupy the most

⁷ John Tibbetts, "Managing Marine Plastic Pollution: Policy Initiatives to Address Wayward Waste" *EHP Environmental Health Perspectives*, April 2015: 3

⁸ Ocean Conservancy, "Stemming the Tide: Land-based strategies for a plastic-free ocean" *Mikinsey and Company and Ocean Conservancy*, September 2015: 10

⁹ ibmd. 11.

¹⁰ ibmd. 11.

¹¹ Ibmd, 11.

¹² Ibmd, 15.

¹³ John Klavitter, "Discarded Plastics Distress Albatross Chicks" U.S. Fish and Wildlife Service, Open Spaces Blog. October 24, 2012.

¹⁴ Ibmd.

isolated regions of the ocean. Albatross skim the surface for squid and other small fish but instead return with a catch of discarded single use plastic. It is estimated 5 tons of plastic are consumed by the parents and fed to their chicks.¹⁵ Since plastic cannot be digested the Albatross slowly accumulate plastic into their digestive system and slowly starve to death. Clean up cannot be done efficiently enough to combat the rate at which plastic continually entering the ocean. Officials say all that can be done now is to increase public awareness.¹⁶ What needs to be done however is for human society to discover solutions for reduced use and proper disposal of single use plastic. Also a social change is required in order to discard the throwaway mentality. It is legend that the to a mariner that the sight of the albatross at sea is good luck but the death of an albatross will only bring bad luck. The albatross are the ecosystem's alarm system going off. The albatross are sending humans a message; we too will soon fill our stomachs with toxic and debilitating plastic.

It is a quiet conversation happening about an issue that takes a world to fix. There are social media movements on twitter, such as #plasticpollutes and #plastic. Organizations such as Plastic Pollution Coalition and 5 Gyres are working at the ground levels in gathering scientific knowledge. Governments, although rarely in developing countries, are working to maintain a better waste management system that prevents plastic from entering the ocean. Local community members, although slowly, are entering the conversation but feel incapable of action because the biggest aggressor in plastic pollution is not entering the conversation: the Industries. Industries are the producers; they feed the throwaway culture with convenient, long lasting, but cheap containers to their product.

Diversity Awareness and Cultural Competence

There is less literature about the direct impacts humans are seeing from the plastic pollution in the ocean. It is clear that marine lives throughout the ecosystem are suffering but there is preliminary research that suggests the dangers that are headed towards human communities. The first to be effected will be the poor who are most dependent and connected to the wastelands of throwaway culture that are dumps and polluted costal communities. Unfortunately the albatross's warning, that humans will soon fill their stomachs with plastic, is already a reality. The plastic we have thrown away has made its way back to humans in a most dangerous manner, through our food. A quarter of fish sold worldwide at markets contain human-made debris.¹⁷ The type of debris is dependent on which community the fish were caught in. A community that has poor waste management protocols for fibers were observed to have fish contaminated by fiber debris. For example, fish caught near Indonesia, a country with poor waste management protocols for plastic, had plastic debris within the fish sold at market.¹⁸ Individuals who suffer most from this plastic contaminated fish are the poor in developing countries such as Indonesia, China, or the Philippines whom live along polluted costal communities. These poor costal communities often also have no other food substitute since fish are the cheapest option. Fish is their main staple.

Humans are intelligent enough that we might not suffer from starvation from overconsumption of plastic as the albatross are, but instead the major concern is that we are

¹⁵ Ibmd.

¹⁶ Ibmd.

¹⁷ Kat, Kerlin, "Plastic for Dinner: A Quarter of Fish Sold at Markets Contain Human-made Debris." UC Davis. September, 2015.

¹⁸ ibdm

consuming the toxins absorbed by the plastic. Plastic, particularly micro beads found in common cosmetic products, act as sponges that absorb toxic chemicals and then slowly release them into an environment, whether that is a lake or a human stomach¹⁹. Fish consume the micro plastic, which contain extreme concentrations of toxins, and then the toxins are transferred into their blood stream and flesh. The irony is that the plastic is absorbing the toxins the throwaway culture has also placed in marine environments.

There is not much conversation about the plastic contaminated fish and their effect on humans since it is a relatively new discovery and has not yet met mainstream media.

Critical Thinking and Interdisciplinary Approaches

American society has an amazing ability to remove itself from the world that sustains it and therefore are able to create a reality that does not reflect ecological reality. The planet is suffering injustice at the practice of a disengaged society. It is therefore important that we begin to think critically, or ecologically, about the environmental issues the world is facing. Ecological thought “includes all the ways we imagine how we live together...existence is always coexistence.”²⁰ It is the realization that everything is interdependent and that humans do not control but are part of the environment. Ecological thought is a mode of thinking that is interdisciplinary. For example, examine the fashion industry. American society has evolved to represent their social status by the clothing they wear. The fashion industry produces new fads at an alarming rate in order to feed the need for new and high status clothing. This structure creates a false cultural reality that tells an individual, if it does not own the latest fad name brand he or she is in the lower cultural status. However the ecological reality is dimmer. As one fad passes, clothing is disposed of, polluting oceanic ecosystems and interfering with underprivileged fishermen.²¹ With an ecological understanding the fashion industry is not just a cultural industry but also an industry of environmental injustice because of its overconsumption of resources. The interdisciplinary approach directly links a cultural practice to an environmental injustice and its impacts on the environment. The fashion industry is focused on its cultural reality but disengaged in its ecological reality. Ecology has not become a mindset for the majority of human societies.

Nowadays were used to wondering what a poem says about race or gender, even if the poem makes no explicit mention of race or gender. We will soon be accustomed to wondering what any text says about the environment even if no animals or trees or mountains appear in it.²²

A religious person is able to find God in everything and apply his or her moral values into every action. In the same way it is time create a society that’s mindset is centered on the understanding of ecology so that they can apply coexistence into their every action. Global issues surrounding the environment will then become less daunting because it is within the realm of thought and reality. With the ecological thought the global issues of throwaway culture will be realized in everyday life.

Ethical Reasoning and Direct Action

¹⁹ The Story of Stuff Project. “Plastic Microbeads: They’re Bad. But Together We Can Stop Them.”

²⁰ Morton, *The Ecological Thought*, 4.

²¹ Juliet, Shor, *True Wealth: How and Why Millions of Americans are Creating a Time-rich, ecologically light, small-scale, high-satisfaction economy* (New York, NY: Penguin Books, 2011).

²² Morton, *The Ecological Thought*, 11.

American culture is besieged by single use plastic. Most people are aware of the frowned upon bottled water. Plastic bottles have been the model of the plastic pollution movement but the public is unaware of the gravity of the issue. We are buried in plastic. When we buy our groceries our snacks come within a plastic wrapped box with plastic wrapped individual granola bars or chips. Our baked goods come in new plastic containers. This practice is not just applied to unhealthy 'processed' food but every aspect of our lives. When we buy fruit and vegetables we place apples or lettuce in thin plastic bags. Even worse we place pre-peeled and sliced apples, oranges²³, or carrots in a plastic container. Was nature's container, the peel, not safe enough or too inconvenient? Our toothbrushes, shampoo, and deodorant come encased in plastic within plastic. Just the other day when I ordered a toasted bagel it was handed to me in a big plastic container in a plastic carrying bag with a set of plastic silverware wrapped in plastic. I was not asked if I needed a bag or silverware. It made me think, why was this necessary? Why would a company waste its money on packaging and unnecessary utensils? Then it came to me, if a food or drink is not plastic wrapped or presented to us in a new and clean plastic container it is considered impure or contaminated. What are we afraid of? My friends, family and sometimes myself take caution when buying from a street vendor who makes fresh food not pre-packaged or frozen, scared of some impurity. Does the plastic somehow ensure an extra purity? Or are we unnecessarily burying ourselves in a toxin and causing havoc in oceanic ecosystems?

The excessive use of plastic is promoted by the throwaway culture of today's world, particularly in developing countries. Once we throw away our trash we never see it again and so create a false understanding of the impact of our throwaway thought. Plastic can be disposed of in three ways. First, it can end up in the dump where it can take an average of a thousand years to decompose. In its decomposition it leaks toxins into the soil and nearby water sources that impoverished communities rely on. Second, plastic ends up in the ocean. Accompanied by the strangling and starvation of ocean organisms plastic is also broken up and consumed by the lowest organisms in the food chain. The tiny plastic particles continue up the food chain to eventually be consumed by primarily the impoverished that get the poorest catch. Third, plastic is recycled. Yes let's save the planet by recycling! Recycling will ensure that plastic rings won't strangle the sea turtles or that toxins won't seep into water sources near the dumps. However no one talks about the negative impacts of recycling. Often the US ships its recyclable plastic to countries that use unjust and cheap labor. The plastic is melted adding to carbon emissions and contributing to the global climate change crisis. Even then, recycling often only works once. Most plastics when recycled a single time are no longer usable and so go straight to the dump or into the oceans.

Conclusion

Throwaway culture is performing a multitude of injustices in regards to plastic pollution. Throwaway culture has destroyed ecosystems robbing impoverished communities of natural resources and of a healthy and safe living environment. Every person has a right to access to an environment free of plastic debris and toxins associated with its improper disposal.

The issue of plastic pollution in its scale is debilitating. It is frightening to change our imagined order and collective thought. It is difficult to give up convenience and ease. But this is what I am calling for. It is the way to end the injustice. I am not suggesting recycling more or

reusing single use plastic. The issue is far too grand for small-scale changes; instead we must halt the use and the excessive production and overconsumption of plastic.

The numbers are overwhelming and perhaps to the point of being unrelatable to human understanding. Not everyone can visit the pacific garbage patches, the isolated midway atoll, or the plastic ridden coastline of impoverished Philippines. You cannot directly stand in front of the issue at hand. And so it is important that we do not turn away from human emotions such as fear, frustration, grief, or anger created by this issue of plastic pollution. Being overwhelmed with these emotions must not paralyze us but instead we must allow ourselves to feel those natural emotional responses so that we can connect to the issue at hand. As Morton suggests we have separated ourselves from nature. We have become disconnected from the natural world but our human emotions are a tool that can reconnect us.

I conclude with words from Chris Jordan, an artist and activist in the plastic pollution movement who hopes to create change by breaking the disconnection through human emotion.

We must face the horrors of our time... The allowing of a deep feeling for the suffering of another for me is a kind of a transformational portal into an experience of actually feeling connected with the world, not just in a conceptual level but a real level inside here, [the heart]. And that is what I think is most missing in our culture right now. We have become disconnected. Not because we are bad people... [but because] the nature of the information we are trying to relate to the world with is so abstract and so overwhelming... Grief can transcend the disconnection... May your lives be filled with grief, and terror, and beauty, and joy, and love.²⁴

Human culture needs to collectively abandon its throwaway mindset in order to end the injustice of plastic pollution. Do not forget the human ability to make change.

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²⁴ Chris Jordan. "TEDxRainier- Chris Jordan – Midway Journey." YouTube. January 07, 2012. <https://www.youtube.com/watch?v=MjK0vbm20M>.

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