

THESIS

MIND THE GAP:  
THE VALUE-ACTION GAP, NUDGES, AND AN ECOSOCIAL VISION

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## ABSTRACT

### MIND THE GAP: THE VALUE-ACTION GAP, NUDGES, AND AN ECOSOCIAL VISION

This thesis explores the question: Why do even those with environmental awareness and attitudes often fail to act in an environmental manner? This question begs a second: How can environmental behaviors be engendered? To explore these questions, I first worked to understand the current state of the environment to determine if there is an environmental crisis. The evidence suggests there is an environmental problem, and further, that a majority of humans are aware and opposed to environmental degradation. I then study the environmental value-action gap, or the gap between an individual's environmental attitudes and lack of environmental action. To understand this phenomenon, I studied the individual barriers to action presented in the literature. While compelling, I believe a study of the systemic barriers must also be addressed and discussed the ways in which structural factors work to hinder environmental action. I conclude my thesis with a novel discussion of the use of nudge theory to remove the gap between environmental values and action. However, I note there must be the development of a Critical Nudge Theory, within a new world vision—an Ecosocial vision—to work toward a truly socially and ecologically harmonious future.

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## INTRODUCTION

*I am a piece of plastic. Conceived in an oil refinery, formed by chemically bonding oil and gas molecules together. The human at the oil rig knows extracting oil from this land is changing the landscape; the well pads and roads are stripping the environment of vegetation and fragmenting wildlife habits. The human is worried an oil spill will occur, damaging the land for decades to come. But, the human needs money, and the position pays.*

*I am then melted down and molded into a desired form. The human who designed my shape has read the horrific articles about the growing plastic island in the pacific and strives to use less single use plastic. However, while creating the specification for the design, knows the cheapest, lightest, and most abundant material for the desired form is me, plastic.*

*I am then shipped across a sea, trucked to a store, lined up and arranged on a shelf with my other incarnations like a solider in a formation against scarcity. The human who is responsible for the logistics of my fossil-fueled travels notes the posters hung up by the water fountain encouraging bike to work day tomorrow. The human walks back to the desk trying to determine if there is enough time in the morning to get the children to school, walk the dog, and bike to work. Probably not, better to just drive.*

*I sit on the shelf until a human purchases me. The human recently watched a video about a whale dying from ingesting too much of me. The human momentarily*

*considers not buying me, but what difference will one purchase make? Completely negligible, the human decides. And there are humans who buy far more plastic items. Why should I not be bought when these other humans continue to buy far more of me without consequences? I am brought back to the human's house, my contents immediately consumed, and I am discarded instantly. The human knows I am plastic and has been told since a young age I belong in the recycling, but the recycling bin is outside and the night is cold. I am thrown in the trash.*

*My life is absurd. My life is the space between the environmental values humans hold and their continued environmentally deleterious action. And I, as plastic, am but one example of the gap which exists between humans' environmental attitudes and actual behaviors. However, I am also the material manifestation of humanity's unique consciousness and ability to create worlds. Humans have created a world in which I exist in toxic abundance, in which forests and grass lands are paved to create mausoleums for commodities extracted from the planet, in which ancient beings are excavated from the earth and burned to allow for a locomotion whose necessity was manufactured by modernity and yet threatens to heat the planet beyond a tipping point. Humans, an integral part of nature, have created a world in which their creations threaten the continued existence of an entire planet. And yet, this capacity for creation of worlds also illustrates the unique ability humans contain to create a different future. Humans can create a world in which ecological attitudes are cultivated, environmental behaviors are the norm, and human and non-human nature flourish.*

Modernity has abstracted the human-nature connection, in which the complexity, fragility, and necessity of the ecological web is reified as an environmental externality. Humanity has attempted to completely externalize nature, existing almost entirely within monuments to the human/nature separation ideal. Within our manufactured world there is no frigid cold (turn on the heat), the animals do not come in (close the door), nor does the food need to be harvested or caught (open the fridge). Western humanity's attempt to disentangle itself from the brutality, uncertainty, and discomfort of nature has nearly succeeded. Yet, our success has created a fallacy which is woven throughout discussions to "save the earth."

The fallacy: environmental behavior is a choice. Those who can afford it, and wish to be benevolent toward nature, can engage in positive environmental behavior. The works concerning environmental behavior mirror this myth in the framing of ecological problems—the environment is considered a separate entity, distinct from the individual. However, humans do not, and cannot, exist apart from the earth system. The environment is not a damaged and discarded toy, which will patiently, statically, remain broken until humanity has the time and capacity to fix it. Rather, the environment is integral and necessary to human's and all other known lifeforms' existence. Viewing environmental degradation as an issue which can be fixed when there is the universal willpower may engender an ecocatastrophe. Humans, although exceptional in many ways, of course, are not excluded. As such, environmental concerns are not peripheral, but rather core to political and theoretical concerns.

All politics must be recognized as environmental politics. Humanity, and thus politics, cannot exist in the absence of a functioning ecosystem. And, the decisions

humans take unilaterally or as a collective polity, indirectly, but often directly, affect ecosystems. It is time to recognize all politics are environmental politics and strive for political discussions and decisions to be couched within this understanding. The environment, and environmental action, ought no longer be secluded to the fringes of political discourse. The environment is deeply political and must be politicized to accurately represent its centrality within human (and all other) lives. The call for these changes is deemed radical, but only by comparison to the status quo, to the current state of human existence.

There is a profound and absolute inability to separate the human from the natural and the ecological from the social. To speak of the thriving of the environment is to necessarily speak to the thriving of the human species. As such, humanity must move away from the human/nature dualism. Humans are natural. Humanity cannot exist outside the natural and as much as we have tried to abstract ourselves from the natural, we are embedded within nature. We need nature to be alive. And, humans are a keynote species, to remove humans would be to irrevocably change the ecological system. This understanding thus necessitates environmental behaviors—humans must engage in lifestyles which promote human and ecological flourishing.

And yet, there exists a general malaise concerning protection of the environment. Even among those populations which understand and support environmental protection, widespread and truly ecological lifestyles have not been adopted. Why have environmental behaviors not been widely adopted? Are humans too busy and consumed with other worries to devote effort to environmental action? Are humans evolutionarily hardwired with an inability to act upon a threat as gradual and global as

ecological degradation? And, perhaps more importantly, how does this information allow us to better protect the environment? Essentially, it is imperative we begin to inquire and answer: how can environmental behavior be inspired? As such, it is necessary to explore why apathy concerning environmental action exists, and how the apathy can be transformed into action.

The wealthy citizens of the United States and analogous high consuming nations, often denoted with the ubiquitous “we,” will be the primary focus in this thesis. The focus on wealthy Westerners ought not be interpreted as a Eurocentric proclamation. Neither is this work’s call for dramatic change a condemnation of increased global living standards, a call for population control, or a desire to prevent certain nations or people from achieving human flourishing. The focus on wealthy Westerners is also not an indication of a lack of understanding that continuation of existing, and inclusion of evolving lifestyle, dietary, and consumption preferences and patterns in China, India, and Africa will exacerbate environmental damage (OECD 2012). Laying the blame on those who were prevented from industrializing at the same time the colonizers, who exploited the human and natural resources from many of these countries to propel their own industrialization, is unacceptable and erroneous. While total consumption and environmental damage is predicted to shift outside Europe and the United States to the developing world, per capita creation of environmental damage is still significantly lower in these regions as total pollution is far larger than the United States (Rosling 2018). Thus, this thesis, and references to “we” as the wealthy consumption-based society, is an attempt to understand why environmental action does not occur even among those

who have the capacity, awareness, and desire to do so. It is also an attempt to discover ways in which environmental behaviors can be inspired.

In Chapter 1, I assess the current state of the environment. Rather than a comprehensive review of the current state of the environment, there is a general discussion of ecological degradation which provides evidence for the necessity of environmental actions and behaviors. I will also explore arguments which advocate that environmental degradation claims may be exaggerated, that radical action is not necessary, and necessary environmental protection can be achieved through reformist measures. I argue, however, that the evidence suggests radical, rather than incremental, changes to environmental behavior are required. As such, I suggest we must look seriously at the phenomenon of the environmental value-action gap, the common phenomenon in which environmental knowledge and awareness are present in individuals yet fails to catalyze environmental action.

To understand the determinants of the value-action gap, in chapter 2 I explore the two most prevalent explanations for environmental apathy. The first explanation—competition for attention—suggests attitudes may petition for environmental behaviors. However, as there is a competition among attitudes, more “powerful” goals translate into actions in favor of environmentally beneficial actions. The second explanation—evolutionary hardwiring—suggests humans unconsciously retain primitive biases which hinder environmental action. As such, the literature most frequently presents the following as barriers to environmental behavior: cost, locus of control, proximity, temporal discounting, self-interest, and disconnect from nature. Yet, as evident through

the analysis of determinants for the value-action gap, I find a problematic adherence to neoliberal principles which places the individual as the sole unit of analysis.

In Chapter 3, I suggest environmental apathy ought to be understood as the effect of structural as well as individual determinants, in particular that structural dynamic normalization is essential to understanding the chasm between environmental awareness and environmental action. This conceptualization of normalization links the creation of environmental degradation as a norm to the power structures in society. As such, I employ a Gramscian conception of hegemony to explicate environmental normalization as the negative externality of the preservation of capitalist power.

In Chapter 4, I seek to find ways to cultivate environmental behaviors. To do so I examine why previous attempts to inspire action through education and shocks have been largely unsuccessful. I then propose two ways in which we may work to close the value-action gap. On the individual level, I suggest the use of nudges. On the structural level, I propose the cultivation of an ecosocial practice and paradigm.

# CHAPTER 1: ENVIRONMENTAL DAMAGE, THE NECESSITY FOR RADICAL CHANGE, AND THE VALUE-ACTION GAP

Rivers are polluted, species are dying at unprecedented rates, the climate is warming rapidly, and these changes are reaching a tipping point, beyond which unforeseen and irrevocable damage is predicted to occur. Encouragingly, there exists widespread knowledge concerning environmental damage, growing fear of what this damage means for the continued functioning of earth systems,<sup>1</sup> and rising awareness of the actions individuals can take to precipitate change. But we have all heard this story before, read these words. We are not surprised, astonished, or left aghast when we are told of an impending ecological catastrophe. Something is amiss. And, it appears, something must be drastically altered to prevent unprecedented ecological damage.

Of course, to advance human and ecological flourishing, it is first necessary to establish a baseline from which strategies can be applied to diminish the differences between the reality of today's existence and the desired future. To do so, in this Chapter I will begin by assessing the current state of the environment. This section is neither an encyclopedic nor a complete assessment of the current state of the environment, but

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<sup>1</sup> The environment will often be referred to as "earth systems" in this thesis. This is in a conscious effort to reference and evoke the interconnectedness of the ecological web, the living and nonliving components of the planet, the extraterrestrial elements which affect the environment, and the connectivity inherent to the functioning of the earth and all its inhabitants. It is essential to remember that efforts in one area, positive or negative, are likely to affect a myriad of different processes, aspects, and biological forms. This is often unintended given the complexity and opacity of earth system interdependences.

rather a general clarification of the ecological degradation occurring throughout the earth system, which will aid the building of a case for the necessity of environmental action. I then present arguments from perspectives which advocate humans should be wary of exaggerated environmental claims, and that radical action is not necessary as environmental protection can be mainstreamed or solved through technological fixes. However, I argue that the current state of the environment demands radical, rather than incremental, changes to environmental behavior. I conclude by discussing the environmental value-action gap, a phenomenon in which environmental knowledge and awareness are present yet fail to catalyze environmental action.

### **Overview of Current State of the Environment and the Cost of Inaction**

Humans, as integral part of the earth system, are changing the planet on a global scale. Although the impacts of these changes are not uniformly distributed, with some individuals and locations disproportionately affected, anthropogenic actions are altering earth systems. However, change does not necessarily obligate action. Thus, there is a necessity for an analysis and assessment of the current state of the environment and potential costs of inaction. A sampling of the ecological degradation occurring across the planet to demonstrate the variance and severity of human alterations to the earth system is included below. Although there will be a conscious effort to present the state of the environment in an ecocentric manner, it is essential to remember that the degradation has severe and increasing consequences on the earth's human inhabitants with often the most vulnerable and least well represented of humanity bearing the brunt of the ecological burden.

## *Atmospheric*

Warming of the climate system is unequivocal. Four independent analyses show that 2000-2009 was the warmest decade on record (UNEP 2012). Scientific consensus agrees the anthropogenic emission of carbon dioxide and other greenhouse gases are the primary cause of contemporary climatic changes (IPCC 2007). On average, conventional world scenarios project greenhouse gas emissions to double in the next 50 years (van Vurren et al. 2014 and Fisher et al. 2007). Scientific knowledge leaves little doubt that a consequence of the increase will be a steady rise in global mean temperature of 3-5°C above pre-industrial levels by the end of the century (IPCC 2007).

Further, unprecedented and increasing concentrations of carbon dioxide are being released into an already fragile atmosphere as the Arctic's permafrost—the largest deposits of organic carbon on earth—experiences some of the most rapid warming on the planet (McGuire et al. 2009 and Tarnocai et al. 2009). A positive feedback loop is likely to occur in which increased temperatures, due to anthropogenic emittance of greenhouse gases, engenders the release of greenhouse gases which have been trapped in natural carbon sequestrations, further increasing global temperatures and prompting the release of more carbon dioxide.

## *Geological*

Anthropogenic activities are also changing the terrestrial makeup of the earth. As the atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea levels have risen (IPCC 2015 and Rignot et al. 2011). There is near consensus within the scientific community that sensitive systems such as coral reefs,

some mountain ecosystems, polar sea ice, and many of the world's glaciers are expected to be lost. The projected increase of the sea level by a will eliminate current costal environments (UNEP 2012).

Although rates of forest loss are slowing, annual deforestation continues to alter the terrestrial ecosystem at an alarmingly high rate, with some 129 million hectares of forest—an area almost equivalent in size to South Africa—lost since 1990. Deforestation, in conjunction with other anthropogenic activities, increase greenhouse gas concentrations and rates of soil erosion and degradation.<sup>2</sup> Unless dramatic action is taken, in the next 30 years over 70 percent of the planet's surface could be negatively by the impacts of roads, mining, cities and other infrastructure developments (UNEP 2002).

Further, the United Nations (2002) estimates around half of the world's rivers are polluted or seriously depleted. Nearly 60 percent of the world's largest 227 rivers have also been strongly or moderately fragmented by dams and other engineering works. Dam building and the control of rivers and flood plains have caused irreversible damage to ecosystems and biodiversity (UNEP 2002).

### *Biological*

Human pressures are precipitating the sixth mass extinction event (Barnosky et al. 2011). According to the Global Biodiversity Outlook 3, vertebrate abundance has plummeted by nearly one-third, while nearly a quarter of plant species are estimated to

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<sup>2</sup> By 2002, 15 percent of earth 's land cover — an area larger than the United States and Mexico combined — was degraded as a result of human activities. About one sixth of this area consists of soil which is degraded to such an extent the it cannot be restored (UNEP 2002).

be threatened with extinction. These statistics are not improving. On average, species assessed for extinction risk are approaching extinction (CBD 2010). By 2050, the OECD (2012) predicts global terrestrial biodiversity will decline by an additional 10 percent. These dramatic alternations to the earth 's flora and fauna increase the risk of abrupt change in landscapes and seascapes (Estes et al. 2011).

And, we must not forget, humans are also impacted. The poor, racial minorities, and women are the most likely to experience environmental injustice. The California Policy Research Center (2001) found that those in poverty disproportionately account for the impacts from industrial toxic air and this gap is likely to increase as conditions worsen. The United Nations (2012) has warned that those who are socially, economically, culturally, politically, institutionally or otherwise marginalized are especially vulnerable to climate change. Further compounding the inequality climate change is predicted to make it increasingly difficult for a developing country to climb out of poverty (UNEP, 2012). As food shortages, droughts, and natural disasters increase, it is the poor and marginalized, without the capacity to be as resilient, who suffer the most.

### **Environmental Protection and Incremental Change**

There is almost near certainty that there is an anthropogenic effect on the planet on a global scale. Among scientists studying anthropogenic climate change over 97% concur humans are affecting earth systems (Cook et al. 2016). Yet surprisingly, humans writ large have yet to agree the situation is dire enough to demand radical change. As such, it is necessary to understand why calls for action have been muted. Thereby, the

scientific evidence previously presented to determine the threat level and the types of action necessary must be situated to determine if radical action is necessary.

Skeptical environmentalists, such as Lomborg (2001), argue environmental damage must be weighed against other pressing nonenvironmental issues so as to not spend undue attention and resources on a problem which has been inflated to an artificially dire degree. Instead, such critics argue, there is a necessity to evaluate all the evidence, and place the evidence in context, to allow humans to make informed allocation decisions (Lomborg 2001). Essentially, advocates of this position believe the information regarding environmental degradation does not necessitate the abandonment of environmental action entirely, but rather our limited attention and resources ought to be focused on the most pressing problems, and only to the extent warranted by the facts—radical action is not required (Lomborg 2001).

One category of this brand of criticism may be considered an attention issue: there are environmental problems which receive outsized attention in comparison to the environmental improvements which have occurred. And, it is certainly true that there have been significant environmental improvements. In North America and Europe there have been significant improvements in both river and air quality. The international effort promulgated by the Montreal Protocol has led efforts to repair the earth's ozone layer by reducing the production of ozone depleting substances. Further, both the number of protected areas and the square kilometers have also increased in the last decades, growing from 2.78 million square kilometers in 1970 to 12.18 million hectares in 2000 (UNEP 2002). This increase has not been a hollow promise of protection given most protected areas are successful at preventing land clearing, and to lesser extent, reduce

logging, hunting, fires and grazing pressures (UNEP 2002). While, a few rapidly developing countries, such as Brazil and Indonesia, successfully reduced their rates of deforestation, the majority in Africa and Latin America continue to experience high rates of deforestation (UNEP 2012).

However, this selection of cases is unfortunately indicative of environmental improvements generally—only a handful of successes, mainly sequestered to the wealthy West (UNEP 2002). Despite these important, but modest, improvements, decades of scientific evidence strongly suggest that humans are exploiting natural resources and creating waste at a level surpassing the planets ability to absorb the waste or ameliorate the negative impacts (UNEP 2012).

A focus on only certain types of environmental narrative is indicative of another criticism—presenting factual data with an undisclosed agenda or bias. To illustrate this concern, Lomborg (2001) points to a statistic estimating European soil at 17 tons per hectare which originated from a single study of a 0.11-hectare sloping plot of Belgian farmland (Lomborg 2001). Certainly, environmental statistics should not be considered valid if sweeping generalizations made from single examples (Lomborg 2001). A myopic analysis of problems, and an inflated generalization or reporting on specific cases, can undoubtedly skew evidence to appear more dire and catastrophic than is warranted.

Further, skeptics of radical change argue time horizons are important. In a highly variable and interconnected world, short term trends can appear which are not accurately reflective of the actual state of the earth systems. Lomborg (2001) argues for an observance of long-term trends and global figures ought to be used as they

aggregate the good and the bad, allow for a more holistic evaluation of the situation. This is true.

Certainly, some environmentalists are guilty of employing catastrophic language, selective representation of data, and other scare tactics in an attempt to spur the population to act. While alarmist prose and spotlighting specifically horrendous cases has diminished the credibility of some elements of the environmental movement, overuse of alarmist rhetoric is not synonymous with a lack of alarming evidence. The evidence presented on the current and future state of the environment *is* alarming. While there have been limited success stories, even the data in this thesis was chosen to build a case for radical behavioral changes, the disparateness and severity of the cases ought to illustrate anthropogenic engendered environmental damage is occurring at an unprecedented and escalating scale.

Others argue environmental degradation is occurring, but the current state of affairs does not necessitate radical change. Although such views exist in abundance, sustainable development and ecological modernization illustrate two reformist approaches. “Sustainable Development” can be used to represent those outlooks which advocate mainstreaming environmental concerns. Sustainable Development advocates for continued economic growth and development, but in such a way as to not compromise the future’s ability to meet their needs (Kates et al. 2005). Rather than radical or immediate change, Sustainable Development promotes incremental changes to be made within the current economic and power structures by enabling institutions of governance, business, and civil society to incorporate environmental and social concerns within existing frameworks. By including measures for environmental

protection within business and the government there can be a continuation of development in a manner, advocates argue, which will protect the earth and its resources so that future generations can continue to develop.

While Ecological Modernization also challenges the notion that the radical reorganization of modern society is fundamental for needed environmental protection, the theory represents outlooks which believe alternative solutions will be found through technological discoveries (Mol and Spaagaren, 2000). A technocratic path, Ecological Modernization advocates employing new environmental technologies to prevent continued damage and restore elements of the earth systems. Ecological Modernization embodies technological optimism, a techno-economic management strategy which lacks calls for fundamental or deep social, economic, or political changes (Tellegen and Wolsink 1998). At its core, as with many other approaches, is a belief that humans will find and implement the necessary solutions before the environmental crisis becomes cataclysmic. In the following section I dispute the underlying assumption that the incremental change promoted by these and other approaches is adequate in the following section.

### **Environmental Protection and Radical Change**

Both ecological systems and global institutions are extremely complex, often changing at a glacial speed. Yet, many argue that the urgency of the situation must be recognized and must be acted upon. Indeed, the decisions made today, and in the immediate future, will undoubtedly precipitate far reaching and long-term consequences. The path dependency of the system, and an unwillingness to address

the ecologically damaging drivers in the past, have committed the earth system, as well as current and future biological generations, to a range of impacts which could and ought to have been avoided. Setting and meeting earth system preserving goals this century is possible, although the current policies, strategies, and economic order are inadequate.

The necessity for radical environmental changes is well documented. Even the OECD, a status quo organization, is calling for drastic changes to protect the environment. The opening statements of the OECD's 2012 report warned "*Progress on an incremental, piecemeal, business-as-usual basis in the coming decades will not be enough. . . and urgent—and holistic—action is needed now to avoid the significant costs and consequences of inaction*" (1, author's emphasis). With an organization as entrenched and wedded to capitalism, with much of the report focusing on the growth of GDP and the economic state, it is significant that the organization is calling for radical and holistic action. Similarly, the United Nations warned "the current development trajectory, based on existing models of international governance, is unlikely to meet internally agreed atmospheric goals, especially those for mitigating climate change and reducing the health impacts of pollutants" (UNEP 2012, 1). These pleas for extreme and holistic action by reformist organizations ought to be considered a momentous indication that exceptional action is needed.

Failure to value the ecological system external to the capitalist system is particularly problematic as the current economic order is an anathema to the protection and preservation of the environment (Löwy 2015; Wallis 2018; Foster and Clark 2010). Capitalism is based on growth, on the accumulation of more capital. The current

economic system, born from the idea of perpetual growth, has grown all-consuming for a biophysically bounded ecological system. Capitalism requires the continual purchasing of goods and services in order to maintain growth which inevitably perpetuates resource extraction and waste disposal conflict including excessive global waste such as carbon dioxide (Martinez-Alier 2016).

Even an economy which does not grow necessitates fresh supplies of natural resources (Haas et al. 2015). Energy is not recyclable. As such, energy from fossil fuels can only be used once necessitating new supplies of gas, oil, and coal from “commodity frontiers” (Moore 2000). Similarly, even those materials which are recycled are only recycled in part, and require more energy to do so, producing a fundamental clash between the economy and the environment. The economy is entropic, not circular. Thus, although not a panacea, radical critics argue that replacing capitalism with a social order based on meeting human needs while simultaneously restoring and protecting the environment, may halt and earth system degradation (Löwy 2015; Wallis 2018). To prevent the planet from being altered past tipping points, these critics argue humanity must abandon a consumption-based economic order, and individual and political decisions must be couched within an effort to ameliorate environmental damage and restore ecosystems. This concept is radical, but many argue radical change is needed now. And change is possible.

### **The Environmental Value-Action Gap**

If we fail to transform our policies and behavior, the outlook is rather troubling. This knowledge ought to induce widespread action. One would not be blamed from

believing that with the current and projected ecological outlook, with generally predicted high certainty by the scientific community, there would be great impetus for change. One need only consider the radical personal, political, and institutional changes an existential threat such as an enemy invasion is able to precipitate. And yet, humanity suffers an acute lack of environmental action at both an individual and institutional level—an environmental apathy.

As expected, there exist individuals who refuse to accept the evidence, believing extreme changes to the earth system are not occurring or are beyond the province of human action. Notwithstanding the beliefs of this minority, in the face of catastrophic environmental degradation there is demonstrable inaction. We can observe a majority of the population who believe the earth is being degraded by human action and yet a near universal lack of personal or institutional environmental action (Roser-Renouf et al. 2016). The observance of this puzzling disconnect has been deemed the “value-action gap.” The value-action gap has been discussed in myriad studies and papers, however, it may be most succinctly defined by the Sustainable Development Commission as “the observed disparity between people’s reported concerns about key environmental, social, economic or ethical concerns and the lifestyle or purchasing decisions that they make in practice” (Flynn et al. 2009, 158).

### *The Myth of the Efficacy of Environmental Awareness*

As the near half a century since the 1970s has exposed, attempts to inspire action through education, fear, or guilt are a woefully inadequate impetus for behavior shifts. While basic environmental actions, such as recycling, have permeated the

population, there has been a distinct lack of environmental lifestyles (Blake 1999). The inherent implication? The limited environmental behaviors may be unrelated to an individual's environmental awareness.<sup>3</sup> For example, although approximately only one out of five Americans remain doubtful or dismissive of global warming, those who can afford it routinely use air travel for vacation, drive alone, or use heat and air conditioning to maintain a constant comfortable home temperature (Roser-Renouf et al. 2016).

Despite widespread environmental awareness most, consciously or unconsciously, continue to engage in environmentally damaging actions. In many cases, research has shown awareness of the environmental crisis, or increases in knowledge concerning environmental issues, promotes an environmental attitude but does not engender environmental behavior (Kollmuss and Agyeman).<sup>4</sup> These findings reveal what is frequently observed by those trying to induce environmental action—there is a divergence between attitudes and actions (Brenan 2018, Reinhart 2018, Saad 2017, Park et al. 2002, and Fahy 2005).<sup>5</sup>

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<sup>3</sup> In this work “environmental awareness” will be defined, in alignment with Kollmuss and Agyeman, as knowledge of the impact of human behavior on the environment. As such, environmental awareness has “both a cognitive, knowledge—based component and an affective, perception—based component” (Kollmuss and Agyeman, 240).

<sup>4</sup> This work will define an “attitude” in in line with many contemporary attitude theorists, as a psychological tendency which is expressed by evaluating an entity with some degree of favor or disfavor (Eagly & Kulesa, 1997; Bohnert, 2001), and “environmental behavior” as behavior which is in accordance with the preservation and restoration of earth systems.

<sup>5</sup> The data confirms this discrepancy. There is a definitive lack of environmental action in America, but the country does not suffer from a lack of environmental awareness or an environmental attitude. In the United States, nearly 60% of Americans are environmentally aware, rating the quality of the environment negatively, with 61% believing the quality of the environment is worsening (Brenan 2018). These rates are even higher among younger generations with 70% of Americans age 18 to 34 and 62% of those 35 to 54 are worried a great deal/fair amount about global warming (Reinhart 2018). The most aware and anxious in America, the “concerned believes” jumped from 37% in 2015 to 50% just two years later in 2017 (Saad 2017). Of those concerned believers, 100% worry a great deal about global warming and believe human activity causes global warming. Two out of three in this group also expect global warming to pose a serious threat in their lifetime, while none believe that news

The value-action gap is significant as the divergence implies that methods which attempt to inspire environmental action through cultivating environmental awareness are ineffective and inadequate. There is often a refrain from those involved in environmental protection that what is needed to preserve and restore the environment is education. And, the evidence suggests the environmental education campaigns, waged in the decades since the 1970's, has been successful at increasing environmental knowledge and concern. The population is *aware* that earth systems are being degraded by human pressures. And, yet, this cogitative recognition has failed to prevent a dramatic shift in action—environmental destructive actions persist.

While individuals may express strong beliefs about the damaging effects of climate change, continued anthropogenic dependence on fossil fuels, or express support for green energy sources, these opinions fail to be transformed into environmental political action. This distinct divergence between stated values and actual behavior is the value-action gap. Simply put, there is an astounding difference between environmental attitudes people harbor and environmental behaviors we engage in.

Given we tend to assume that individuals act in accordance with their values, this seems unexpected and puzzling. However, attitudes do not directly influence behavior.

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reports exaggerate the problem (Saad, 2017). Yet, despite this concern regarding the state of earth systems, the quality of the environment is not currently among the top issues worrying all Americans (Brenan 2018).

This trend is not confined to America. Christie and Jarvis (Park et al., 2002) found that environmental behavior was far lower than the level of environmental concern in Britain. In their study, they observed that the British population was environmentally informed but found little evidence of environmental behaviors or a willingness to make changes to protect the environment. Similarly, Fahy (2005) observed that despite public opinion surveys in Ireland depicting a population increasingly anxious concerning the quality of the environment and waste management, environmental actions were not taken to reduce landfill levels (instead the levels were increasing). Indubitably these examples are antidotes, representative, but far from exhaustive of the extent of the disconnect between environmental awareness and environmental action.

Actions are precipitated by a myriad of reasons, attitudes not chief among them (Flynn et al. 2010). This is not insignificant. In fact, this is of monumental consequence. The incredible implication of this evidence is that efforts to inspire action must recognize the divergence inherent to environmental action and conceive a different method to morph environmental apathy into environmental action.

## **Conclusion**

This Chapter began by assessing the current state of the environment, presenting evidence that there is an ecological crisis, one which may become irrevocable if we fail to act in the near future. However, I acknowledge many contend environmental claims do not demand immediate attention and resources, and necessary action can be reformist, conducted in ways which do not require fundamental alterations to the social, political, and economic institutions. However, I argue these incremental approaches are insufficient and instead there must be a radical reorientation.

While the need for radical change can be debated, the evidence seems to strongly indicate that, despite knowledge of ecological degradation, there is a gap between environmental awareness and actions. Earth system failure is an existential threat. In the coming decades it threatens to irrevocably alter the natural world and put unprecedented pressures on human populations. Even with a complete removal of ecocentric concerns, environmental degradation is predicted to have a catastrophic

effect on the human population (OECD 2012).<sup>6</sup> Earth system degradation is predicted to cause water shortages, decrease crop yields, increase severe weather events, produce a loss of inhabited territory through rising ocean levels, increase premature deaths from air-borne pollutant behavior, and cause mass immigration from climate change refugees (UNEP, 2012). And, of course this list is a small selection of the innumerable effects environmental degradation is currently and predicted to incur on the human population.

However, the reason for this gap remains unanswered. Why, in an age of widespread awareness, prevalent environmental attitudes, and the scientific, technological, and political wherewithal to make the necessary changes, does there remain a distinct lack of action? When facing an existential threat to the planet and humanity there is overwhelming environmental behavioral apathy. This inconsistency indicates that there is a unique element to the threat of environmental destruction. An etiology of this environmental apathy is vital and will be attempted in the next Chapter.

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<sup>6</sup> If market forces continue to drive the world's agenda, more than half the world's population will be living in severely water-stressed areas by 2032, with the frequency of droughts expected to increase. (UNEP 2002). These predicted water shortages are coupled with a global water demand is projected to increase by 55% by 2050. As demand for water swells, competition will intensify. The human toll? As many as 2.3 billion more people living in severely water stressed river basins. Of course, a lack of water is not the only hardship humans will face in a stressed earth system. Unless there is a dramatic change to energy sources, urban air pollution will worsen as increased fossil fuel consumption increases greenhouse gas emissions by a projected 50%. The impact on quality of life for humans (and all anaerobic species) will be disastrous. The number of deaths from exposure to pollutants is predicted to double, increasing to 3.6 million every year (OECD 2012).

The increase in greenhouse gases will also affect food supplies. The IPCC's Fourth Assessment Report indicates that a warming of 4oC, predicted to occur by the end of this century, will negatively impact agricultural yields in most parts of the world (Easterling et al. 2007). Thus, by the end of the century there may be mass food shortages and an inability for large swaths of the human population to obtain life sustaining nourishment. And yet, impacts on humans will not be restricted to sustenance, increases in the frequency of storms and other extreme weather events are predicted and will unquestionable effect the life and livelihood of the world's inhabitants (UNEP 2012).

## CHAPTER 2: THE VALUE-ACTION GAP I: INDIVIDUAL APATHY

There are calls to alter human behavior in ways which would lessen environmental harm. Millions of species inhabit the planet, yet humans, as a collective, manifest a disproportionate impact on the ecosystem. We mold and transform the world to fit our perceived needs and manufactured desires. In doing so, we have exploited the planet and displaced other species. The waste we generate is found in oceans, mountain tops, rivers, and the remnants of forests. And, this anthropocentric planetary monopolization is only increasing. Yet, this realization is not revolutionary; there is a general, if not universal, understanding that a finite planet cannot sustain infinite resource extraction and pollution.

We have an informed and aware public, and, in this respect, the green campaigns have worked! Except, of course, they have not. While the decades of environmental literature, ecological education, and catchy slogans have undoubtedly heightened environmental awareness, they failed to spur widespread environmental actions. There has been a fundamental flaw in attempts to catalyze environmental action—the education fallacy. This fallacy implies that environmental action should result from the development of pro-ecological attitudes, intentions, and information (Gaspar 2013). Yet, despite the awareness of both the environmental crisis and a plethora of behaviors which could temper environmental degradation, there is prevalent

behavioral apathy. Instead a gap exists—the value-action gap. This realization of the value-action gap poses a particular problem: if not a lack of knowledge regarding the environmental crisis, why is there environmental behavioral apathy?

To understand the determinants of the environmental value-action gap, I begin by exploring the two most prevalent explanations for environmental apathy: competition for attention and evolutionary hardwiring. For the first explanation, literature suggests attitudes may petition for environmental actions yet, as there is a competition among goals, more “powerful” goals prevent environmental behavior. The second conception suggests humans unconsciously retain “Stone Age” biases which hinder environmental action. I then recount the most commonly referenced barriers to environmental action: cost, locus of control, proximity, temporal discounting, self-interest, and disconnect from nature.

However, as evident through the analysis of individual, rather than structural, determinants for the value-action gap, I find an adherence to liberal/neoliberal principles undergirding the philosophy of western environmentalism and the value-action gap research. I believe this undergirding is problematic for two reasons: environmentalism couched within neoliberalism demands the individual be the source of change and it promotes environmental action solely within the current exploitive social and economic structure.

### **Barriers to Environmental Action**

The human experience is complex, varying wildly between individuals. These variances necessarily engender differences in concern for the environment and

responses to environmental problems. These individual nuances create the foundation for the vast majority of works considering the environmental value-action gap. Most often the theorized determinants for the value-action gap are firmly within a liberal/neoliberal conceptualization, positioning the individual as the unit of analysis and agent of change. As such, the most prevalent explanations for environmental apathy are contained within two overarching explanations: competition for attention and evolutionary hardwiring.

In the first conception, the perspective is founded in an belief that ecological action is determined by personal motives. As multiple goals can coexist, environmental decisions often occur in a conscious or unconscious state of goal conflict. While environmental attitudes may petition for environmental actions, more “powerful” goals such as comfort inhibit the execution of environmental behavior. In a state of competing goals, only the “winning” goal is implemented as a behavior. Essentially, apathy occurs because there is a cacophony of pressing issues and distractions bombarding the individual ceaselessly throughout the day. Amidst the attention cacophony, individuals subconsciously rank the aspects of their life which require engagement, thereby creating a competition of attention (Gaspar 2013).

The narrative suggests humans fail to act in environmental ways because the human brain can only contain a finite number of competing concerns. When bombarded with threats of crime, the economy, personal health, or a myriad of other problems, there is not enough capacity to also engage in environmental actions. In an explanation of competing goals, which goal “wins” is deemed determinant on the characteristics of the individuals and the surrounding context (Gaspar 2013). Thus, the narrative posits

apathy is a result of personal and practical impediments; lack of financial funds, time, or facilities prevent environmental attitudes from translating to environmental action.

The second conception examines individual barriers to environmental action through a consideration of the evolutionary forces which have shaped human psychology and decision making. This position posits that humans unconsciously retain “Stone Age” biases which hinder environmental action. The conception suggests present day humans evolved from ancestors best equipped to tackle immediate and highly visible threats. As such, humans are not evolutionarily wired to resolve global gradual threats. Further, primal beings survived by valuing self-interest and the collection of personal resources (van Vugt et al. 2014). Our stone age biases, while evolutionarily beneficial, now act as a hindrance to environmental behavior. Thus, the narrative posits a lack of action is a result of evolutionary forces which deter the worldwide and collective response to a gradual and dispersed threat.

Although these two overarching explanations concerning environmental apathy differ in their basic assumptions, works considering the environmental value-action gap coalesce upon an implied understanding that a lack of environmental behavior is determined by attributes of the individual. The individual is the unit of analysis and agent of change. The follow section provides a synthesis of the most commonly referenced attributors to environmental apathy: economic and mental costs; responsibility and locus of control; proximity; shortsightedness and temporal discounting; self-interest; and disconnect from nature.

### *Economic and Mental Cost*

The financial cost often associated with ecological behavior is frequently considered a barrier to environmental behaviors (Bake 1991). As such, the gap between environmental attitudes and environmental action would be a result of an economic trap: personal and immediate costs act as strong catalysts for environmentally damaging behavior when pitted against the far less compelling gradual and indirect ecological harm. Economics are conceptualized as a barrier to ecologically beneficial actions due to a belief (occasionally, but not exclusively justified) that environmental concern is characterized by a willingness to make sacrifices, such as financial sacrifices, for the environment (Kuhlemeier, van den Bergh, and Lagerweij 1999). The perceived cost of environmental behavior is compounded if an individual considers non-environmental actions to be a sunk cost in terms of money, time, or lifestyle. By example, if an individual has purchased a car, utilizing public transportation may provoke feelings of loss of additional and unnecessary funds (Gaspar 2013). Thus, a cognitive disassociation can occur as an individual is environmentally aware, holding environmental attitudes, and yet feeling financially incapable or unwilling to act in an environmental manner.

The economic barrier concept is situated within the narrative that environmental apathy is a result of the additional expenses associated with environmental action (Balderjahn 1988, Howard et al. 1993, Laidley 2011, Inglehart 1995, Diekmann and Franzen 1999).<sup>7</sup> Essentially, environmental action is a luxury few can afford. Increased

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<sup>7</sup> This narrative is bolstered by research concerning those who most profusely advocate for environmental protection—middle and upper middle-class individuals. Studies of consumer behavior in Germany (Balderjahn

wealth may promote environmental attitudes and efforts to act environmentally (even if they are often housed within a model of green consumerism) for three reasons. First, those with increased economic means are both mentally and economically liberated from concerns regarding basic needs, enabling mental and financial resources to be “spent” on environmental concerns. In the competition for attention, an abundance of wealth allows financial concerns to move down the list, empowering environmental fears to secure a more prominent role. Second, Inglehart’s (1997) work suggests wealthy citizens, with fewer worries about basic material needs, are more likely to attempt to achieve post-materialist goals. As material needs are more easily and quickly met, individual actions shift from striving for increased income and property, to values which are more strongly linked to increasing post-materialist values such as self-improvement, personal freedom, providing direct input to government, and attaining a healthy natural environment (Booth 2017). Third, increased revenue will also intensify demand and requirements for a healthy environment. With increased economic assets, individuals on a micro scale, and society on a macro scale, are better able to allocate resources, technologies, and services for improving the environment (Franzen 2003).

In a capitalist global economic structure, especially one in which many individual’s basic needs fail to be met, the additional (correctly or incorrectly perceived)

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1988), and energy conservation behavior (Howard et al. 1993) and curbside recycling (Laidley 2011) in the United States found that the those in higher socio-economic classes were most likely to engage in environmental behavior. On a national level, it is the citizens of richer countries which report greater environmental concern (Inglehart 1995). Further, evidence has illustrated that when those from poorer countries are asked to rank the most pressing problems, environmental issues are indeed ranked lower, however when asked to rate the severity of differing problems, regardless of country affluence, environmental issues consistently rank among the top issues (Diekmann and Franzen 1999). Thus, there is evidence to suggest a lack of funds, or competing pressures for cognitive and financial resources, rather than a lack of environmental awareness, is the culprit for environmental apathy.

mental and economic costs associated with environmental action certainly impacts the behaviors of individuals. As such, the environmental value-action gap may be a result of a cost competition in which the perceived cost of environmental actions “loses” to immediately or personally less costly, but environmentally damaging behaviors.

### *Responsibility and Locus of Control*

An awareness of environmental damage, and a belief it should be halted, may not translate into environmental actions if there is, first, a fundamental belief that one ought not be responsible for bearing the burden for the deterioration of the ecosystem, or, second, the belief that one cannot influence the environmental crisis. These feelings are not unfounded—no individual cut down millions of forested acres, increased the global temperatures, or polluted enough to create a trash island. No one individual is responsible for the ecological crisis. An understanding that earth system degradation is the product of hundreds of years, by millions of people, can understandably create a gap between environmental attitudes and environmental actions.

The disregard for personal responsibility can also be heightened by the awareness that most environmental actions remain voluntary. As such, if other individuals or countries refuse to bear the burden of environmental behavior while reaping the benefits, there is a decreased incentive to become responsible for environmental behaviors. Undeniably, a barrier to action would be erected if one perceives ecologically preserving actions are akin to becoming a whipping boy for the environmental damage caused by previous generations and millions around the globe who refuse to take responsibility for their action.

Similarly, a sense of control is important as a belief that one's actions affect change is undoubtedly necessary for spurring action from values. As such, the psychologist's notion of "locus of control" may be an important element in understanding environmental action. Locus of control refers to the extent an individual attributes control over events in life to oneself or to external sources (Levenson 1973 and Rotter 1966). Consequently, if an individual experiences an internal locus of control, she is likely to act in ecologically protective ways (Schwepker and Cornwell 1991; Ando and Nishihori 2010; and Fielding and Head 2012).<sup>8</sup> Further, if an individual has a sense of self-efficacy, or a belief in oneself to organize and execute a course of action required to improve the environmental condition, an individual is more likely to act in environmental ways (Bandura 1977).

As the locus of control becomes external to the individual, feelings of loss of control are experienced. A perception of lack of control can facilitate faulty thoughts which posit that individual action is inconsequential, or that environmental degradation is so extreme that individual actions are fruitless and inconsequential. If individual action is believed to be inconsequential, environmental attitudes will not translate to environmental behavior.

External locus of control may be especially problematic in an individualistic society. Western environmentalism demands that the individual act, often without regard for a person's relation to the global and historical context of environmental degradation.

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<sup>8</sup> Evidence suggested an internal locus of control is linked to a heightened willingness to purchase ecological products in the U.S. and a stronger connection between environmental intentions and behavior in both Germany, Australia, and Japan (Schwepker and Cornwell 1991, Ando et al. 2010, and Fielding and Head 2012).

Accordingly, counter to environmentalists' intentions, calls to "Save the Forest!" (or any other slogan with an imperative demanding the individual solve ecological deterioration), can foster a state of mind in which the problems dwarf any possible action.

### *Proximity*

The concept of proximity, as a determinant for environmental apathy, posits prehistoric humans exclusively encountered immediate threats. As such, human brains have not evolved to adequately contend with threats imperceptible to the senses. In the ancestral human world, environmental damage presented a threat only when a tangible link between behavior and degradation was immediately evident. In the modern era, the impact of environmentally damaging actions is most often not tangible, and the very real threat of continued degradation is not a dramatic change perceivable by our sense (van Vugt et al. 2014, Gifford et al. 2011, Uzzell 2000).

For many, predominately those who disproportionately contribute to environmental degradation, the negative externalities associated with anti-environmental actions are an indirect problem. There is a distinct divergence between the view outside one's window, and the loss of forests coverage and biodiversity in the Amazon, between a cold winter day and increased global temperatures; of the purchase of one plastic water bottle and the toxic accumulation of plastics in marine life. Global environmental damage is often too displaced, too indirect for those in wealthy Western nations to experience a direct impact. If humans have evolved to perceive threats as tangible and immediate, the gap between environmental awareness and environmental action may be a result of the inability to persuade humans of a threat which often remains undetectable by our visual, auditory, tactile, gustatory, or olfactory senses.

### *Shortsightedness and Temporal Discounting*

Related, but distinct from proximity, are references to humanity's propensity for shortsightedness. This determinant for a lack of environmental action is akin to the parable of a slow boiling frog: quick to hop out of the evidently present danger of a boiling pot but boiled to death if the pot's water is gradually increased. Similarly, humans excel at perceiving and altering behavior to sudden and drastic changes, yet find it far more difficult to perceive slow, incremental changes (Kollmuss and Agyeman). As such, humanity's inclination toward shortsightedness can also be attributed to an evolutionary tendency to focus on immediate problems, for which we have the available tools, while disregarding global ecological damage, of which no adequate easily applicable tool exists.

Global environmental degradation is a slow boiling pot, with enduring consequences not immediately connected to their causes or solutions. Consequently, ecological damage is often not the immediate threat humans have evolved to perceive or solve. Subtle alterations, and damage in remote areas, can easily escape our attention. And, often there is a time lag in which changes are evident only after the human impact has exceeded thresholds and caused severe damage. Thus, it may be this gradual pace of environmental degradation which causes a cognitive barrier to environmental action (Kollmuss and Agyeman 2010).

Coupled with the evolutionarily induced difficulty of perceiving impending earth system failures as a threat is the prioritization of immediate benefits. Humans engage in temporal discounting or placing disproportionate value on immediate rewards. Van Vugt et al. (2014) contend it is this conflict between human's desire for immediate, rather

than delayed, rewards which accounts for environmental problems. Today's desires prevail over long-term needs. The long-term consequences of environmental degradation lose to the immediate goals and problems motivating anti-environmental actions (Amel et al. 2017).

The prioritization of short-term consequences illuminates an individual's unwillingness to spend money on energy efficient light bulbs or forgo conveniences such as a personal car for the long-term benefit of curbing greenhouse gas emissions (Gardner and Stern 2002; Goldstein and Cialdini 2007).<sup>9</sup> Thus, those that attribute apathy to temporal discounting reason that as it is human nature to not perceive gradual ecological changes and discount the future, environmental policies, which fail to account for these propensities, are unlikely to successfully spur environmental behavior.

### *The Social Dilemma of Self-Interest*

The value-action gap may exist as a remnant of the evolutionary valuing of personal interests over the collective. This concept is far from novel, and is famously captured by Garrett Hardin's (1968) "Tragedy of the Commons." Hardin (1968) describes a social dilemma in which a small pasture is shared by several herders. Although sustainable levels of grazing are desirable to all, the individual herders comprehend to addition of a few more cattle to the pasture creates a personal net benefit, although the cost of additional cattle falls on all herders. Substantiated though evidence in a variety of fields as disparate as psychological, anthropological, and environmental sciences, the result is an accidental tragedy: most individuals seek personal benefits, and, though

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<sup>9</sup> This concept is bolstered by field studies which indicate appeals to consider future consequences are generally ineffective in producing behavior change (Gardner and Stern 2002; Goldstein and Cialdini 2007).

inadvertently, collectively cause the destruction of the commons (Dietz, Ostrom and Stern 2003).

Extending this human tendency to environmental apathy, the value-action gap can be identified as the contradiction between self-interested and socially-beneficial behavior, where personal interests often prevail over the collective. This hypothesis for the lack of environmental action suggests human responsibility can be conceptualized as a series of concentric circles emanating from the individuals with descending feelings of responsibility as the circles radiate away from the individual. The personal and family well-being is prioritized, while the stranger's is devalued (Stern et al. 1993). If environmental behaviors align with inner circle prioritizes, the motivation to act is increased. However, if they behavior is in contradiction with personal prioritizes, even though it may align with social priorities, the action is less likely to occur (Kollmuss and Agyeman, 256). In this way, the features which often act to curtail selfishness and encourage cooperation are effectively markedly missing in large-scale environmental dilemmas (Amel et al. 2017).

Evolutionary considerations posit that humans, due to natural selection advantages, are tempted and often act on opportunities which benefit the self at the expense of the collective, which has significant implications for understanding gaps between environmental awareness and action. The cause of this tragedy could be rooted deep in human nature. An evolutionary analysis of self-interested behavior would suggest humans have evolved to prioritize their personal interests over collective interests. From a natural selection perspective, individuals who can gain personal benefits, even at the expense of those they are not related to, would tend to be evolutionarily favored

(Hardin, 1968). A key indicator that the human mind has evolved to prioritize the self is evident from social dilemma research illustrating that most individuals choose selfish actions when interacting with others, especially in single encounter scenarios (Fehr and Gächter 2002; Komorita and Parks 1994; Van Lange, Balliet, Parks, & van Vugt 2013).

Each individual working to maximize personal wealth, comfort, experiences, etc., is most often benefited by acting in environmentally destructive ways. With a dispersed, small, and gradual incentive for environmental action coupled with an acute and immediate cost for such actions, there is a compelling narrative that environmental apathy is a result of the conflict between self and collective interest.

### *Disconnect from Nature*

Despite our most Promethean attempts, the environment is not a separate entity. Humans are not distinct from the environment but are a product of it. Yet, modernity has morphed humans into a species, at least in the West, which dwells within anthropogenic structures for 90% of our existence (EPA). This new reality has undoubtedly affected humans in profound ways, and this disconnect between the modern individual and nature may account for the gap between environmental attitudes and behavior. Indeed, Amel et al. (2017), explicitly states that “experiencing the self as separate from nature is the foundation of humanity’s damaged relationship to planetary resources” (276).

Numerous studies display a substantial correlation between significant nature experiences and environmental advocacy, and between feeling linked to nature and environmental behavior (Palmer 1993; Davis, Green, and Reed 2009; Schultz, Shriver,

Tabanico, and Khazian 2004; Schuett and Ostergren 2003).<sup>10</sup> If modernity has abstracted humans from nature, and we no longer feel connected to the natural environment, it may lessen the desire to engage in environmental behaviors even when there is awareness of ecological harm.

### **Individualizing Environmental Action and Environmental Justice**

As evident from the myriad reasons posited for the divergence between environmental attitudes and action, the creation of environmental apathy is entirely explored and attributed to individual determinants:<sup>11</sup> humans have an economic resource deficiency; lack an internal locus of control; are too shortsighted; are too disconnected from nature; and so forth. This conception of environmental apathy engenders culpability solely within the individual. Causes of environmental apathy stem from a fundamental problem associated with the individual, such as an evolutionary trait

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<sup>10</sup> Palmer (1993), after surveying over 200 environmental educators around the world, found the strongest predictor of environmental concern was the amount of outdoor experience they had as children. Davis, Green, & Reed (2009) found that more engagement in pro-environmental actions was predicted by a greater perceived inclusion of nature in the self. This study is consistent with previous research illustrating that pro-environmental attitudes related to the degree to which people implicitly associate themselves with nature (Schultz, Shriver, Tabanico, and Khazian 2004). Nevertheless, the type of connection to nature remains an important predictor. An individual's understanding of the complexity and fragility of nature also seems to contribute to a readiness to engage in ecological behavior. Individuals who engage in outdoor recreation tend to harbor environmental concern, but this varies with the activity (Teisl & O'Brien 2003). Generally, those who engage in consumptive activities (e.g., hunting or fishing) tend to be less concerned than those who engage in non-consumptive activities (e.g., hiking, photography; di Nenna, Paolillo, & Giuliani, 1987). Similarly, members of American bicycling organizations tend to be more concerned than members of off road vehicle organizations (Schuett and Ostergren 2003).

<sup>11</sup> Some works acknowledge that there are influences external to the individual which impact environmental actions and apathy. However, this is almost always presented as social influences (Gifford and Nilsson, 2014; Kollmuss and Agyeman). Social influences are described the ways individuals are influenced by the context in which we exist daily. This context may be long-term, such as religion or social class, or more ephemeral, such as the passing influence of trends or changing significant others (Gifford and Nilsson, 2014). Social factors should not be confused with systemic factors. Social factors remain within a neoliberal understanding of environmental apathy.

(shortsightedness) or personal failure (self-interest). And, it is the individual who must be altered to arrest ecological degradation (Macpherson 1962; Harvey 2005)

A neoliberal conceptualization is nearly ubiquitous in literature pertaining to green citizenship. Calls for environmental action urge the individual to take personal action against environmental degradation. Western environmentalist slogans could be strung together in a list of imperatives akin to an individualist beat poet: reduce, reuse, recycle, conserve, preserve, save the turtles, buy organic, buy local, buy efficient, unplug, turn it off. This individualization of environmental action abstracts the individual from the intricate and collective processes of environmental deterioration, simultaneously inflating the individuals' confidence in their own efficacy while depoliticizing environmental action and fortifying a paradigm of green consumerism.

If environmental degradation results from the gap between environmental attitudes and actions, and only the individual is considered, the solutions will continue to be efforts which easily fall into a neoliberal paradigm such as purchasing "greener" products or increasing recycling rates. While beneficial, these actions are too myopic and fragmented to affect the ecological crisis. Even if a majority of the world's citizens recycled most of their plastic, a great deal would still accumulate in the oceans, significant energy would still be required to recycle the plastic, and nothing would be done to remove and restore ecosystems damage by the multitudes of plastic which were not recycled in the past.

This individualization of the environmental crisis also engenders an inflated confidence in individual efficacy effectively depoliticizing collective environmental action.

If the environment can be saved by the individual, there is no need to engender collective action to prevent further degradation. That is, the need for a political movement is rendered inert as instead solutions are perceived as housed within the private sphere. In this way an adherence to individualized action depoliticizes the environmental movement shifting the responsibility and locus of control from the collective political action to individual actions.

If turning off a light protects the ecosystem, politicization of environmental protection is unwarranted. In the vacuum of meaningful political participation, individuals are encouraged to “vote with their dollars” to signal the necessity for environmental action. In this way, continued consumption and consumerism is fortified by the reliance on individuals to “be green.” Individualization heightens the myth of personal efficacy for a global problem, while simultaneously reassigning the propellant of change from political and governance measures to the individual and markets. In this way, the neoliberal principle of market solutions, coupled with a possibility for capital accumulation, has corrupted the discourse and activism of the environmental movement, morphing it into an ally of private wealth.

The inability for decentralized individuals to create a cohesive and global movement, as well as the necessity for individuals to rely on available options provided by institutions such as corporations, combined with the depoliticizing, render individualized environmental action impeded at best. Individual actions are necessary, but they are a piece of a larger solution which requires collective and political action.

Conceptualizing the environmental problem, and the necessity for environmental action, as contained within the individual cannot be separated from the material existence of humanity. Individualistic environmental action skews environmentalism toward only those in society which are physically and economically capable of adjusting behavior in an environmental manner. If the individual participates in environmental behavior by buying greener (often more expensive products), riding a bike to work (a short commute), or participating in additional political activities (time consuming and requiring a voice in politics), those lacking the same privileges are rendered unable to take that environmental action. In this way, political agency and environmental agency is restricted to only those who can fully exist and participate in the polity. If political and economic equality existed, a neoliberal construction of environmentalism may be less problematic. However, as it is only a small minority of the population who are capable of engaging in the polity to its fullest extent, individualistic environmental protection becomes yet another method of discrimination.

The neoliberal conception of environmentalism also exacerbates the culpability of the marginalized. Individualization allows environmental deterioration to be transferred to those most impacted by environmental hazards and least capable of making temporal and monetarily expensive actions. If the wealthy, able bodied, and politically active can take environmental action, yet the disenfranchised, poor, and disabled cannot, blame is levied against those still driving a car to work or buying grey products. When individual actions are compared the disenfranchised undoubtedly engage in environmental behavior at a reduced rate, and removed from a systemic context, there is only opprobrium for those that continue to act in environmentally damaging ways.

## **Conclusion**

In this Chapter, I have illustrated that is the individual which is understood as the foundation for a lack of environmental action. Literature suggests the value-action gap is a byproduct of an individual's competition for goal attention or the evolutionary forces which have shaped human psychology and decision making. In either conceptualization of the determinants for the value-action gap, I have found an individualist analysis is the predominate strategy for attempting to understand environmental apathy. The environmental apathy observed in the value-action model, and the profound inability to solve environmental degradation through a system predicated on exploitation of the natural world, demand a reexamination of genesis of environmental apathy. These divergences necessitate the reconceptualizing the individualized concept of agency embedded in much of liberal democratic political thought and western environmentalism. The systemic and structural conditions which engender environmental apathy must also be explored. In such a way, the determinants of the value-actions gap can be analyzed from both an individual and a structural position to provide a more holistic understanding of environmental apathy.

## CHAPTER 3: WHY DOES THE VALUE-ACTION GAP EXIST? II: SYSTEMIC APATHY

The anthropocentric and anthropogenic systems which encourage and reinforce consumerism, over-consumption, pollution, and ecological denigration will only be halted by fundamental behavior shifts. Presently these systems create a practice in which truly sustainable living is exceedingly difficult, if not impossible, for most individuals. The traditional models and paradigms utilized to examine attitudes frame behavior as essentially deterministic: ensuring optimum facilities and promoting correct attitudes will engender pro-environmental behavior (Hobson 2003). Further, the environmental apathy narrative has been relegated to individualism, neglecting the role of the social, economic, and political context.<sup>12</sup> While individual actions are important, a singular focus on the individual determinants of environmental apathy obfuscates an analysis of the structural institutions which promote and perpetuate environmental apathy.

These individualized analyses, although flawed, have served as a starting point for the examination of the divergence between environmental attitudes and action. The determinates of the environmental value-action gap are indubitably complex and cannot be understood within a single framework or diagram. To attempt to create a model with

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<sup>12</sup> There is an emphasis on cultural factors, but this does not extend to a larger systemic/structural analysis (Kollmuss and Agyeman, Boehmer-Christiansen and Skea 1991).

all the factors which shape and influence environmental apathy would be so complicated as to lose all practicality, coherence, and meaning. As such, the following discussion is neither a complete nor a holistic method to understanding environmental apathy. It is, however, an attempt to illustrate that a necessary dimension of environmental apathy—the structural component—has been overlooked thus far.

In this Chapter, I will propose that structural conditions also engender the value-action gap. As such, apathy ought not be understood as solely an expression of individual agency, but also as a result of structural dynamics. The predominately exploitative structural condition today is capitalism, an inherently ecologically damaging system. I argue normalization is one such structural dynamic that is integral to the chasm between environmental awareness and environmental action yet unexplored within the environmental action-gap discourse. I will then employ a Gramscian conception of hegemony and common sense to illustrate the ways in which the normalization of environmental degradation ought to be considered a negative externality of the preservation of capitalist power.

### **Individual Agency and Structural Dynamics**

Apathy is an expression of individual choice, but apathy at the individual level does not discount larger structural forces which affect environmental action. An individual's attitudes are influenced by social norms, cultural traditions, and family customs. As such, if the dominant culture propagates a lifestyle which is unsustainable,

environmental behavior is less likely to occur and the gap between attitude and actions will further diverge.

Thus far, the narrative surrounding the value-action gap, and the ensuing environmental apathy, has been couched within a paradigm of individual agency. David Kyuman Kim (2007) offers a rather traditional definition of agency as the “capacity for self-initiated, intentional action, that is, the ability of an agent (self, consciousness, ego, or even representative body, people, or community) to determine for itself acts and consequences in the world” (8). Here, and in many other definitions, agency is understood as the space created between an individual desiring an action and the physicality of acting. Action by choice, action with intention, is an exercise of agency. The individual, employing reasoning ability, can express subjectivity and thereby is responsible for the ensuing action. This deliberative faculty provides a legitimating framework for political structures such as democracy and is the basis for holding an individual responsible for her actions, fulfilling obligations, and cultivating a respect for norms (Gabrielson 2016).

Research on environmental attitudes and behavior has largely occurred within the field of psychology and therefore tends to focus on individual variables, neglecting the role of social and systemic variables (Fahy 2005). This emphasis is not accidental; historically agency has solely resided within the individual in Western society and politics. Individual agency aligns with myths and ideals of the model Western citizen; the

independent, reasoning, and autonomous agent (LaVaque-Manty 2002).<sup>13</sup> This conception of agency isolates the individual from the larger political, social, and economic context which influences actions. The power and efficacy of the individual are elevated while the structural conditions are minimized, and the environment is often deemed passive (Gabrielson 2016).

Thus, conceptualizing a lack of environmental action as solely within an understanding of individual agency simultaneously inflates the importance of individual actions while deemphasizing the structural determinants and collective cultural and political solutions to earth systems damage. The individual agency-based models and succinct theories are beneficial to provide an understanding of the inconsistency in environmental attitudes and environmental behavior, but a comprehensive assessment of the value-action gap must inevitably include a wholistic analysis of the personal *and* social, political, and economic influences.

While the conception of individual agency successful highlights the centrality of will in human action, it fails to consider or ascribe appropriate weight to the social, political, and economic contexts which shape that same will (Hirschmann 2003). The traditional conception of agency, fixated as it is on rationality and intentionality, is blinded to the ways that the larger structures, such as capitalism, systematically

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<sup>13</sup> “Within the context of the nineteenth-century rise and consolidation of the liberal state in the United States, liberal agency took its shape in the development of, among other things, theories of crime and punishment, narratives of educational promise and self-made men, policies of Native American removal, and the concomitant delineation of the effective boundaries of the polity. Those excluded—the criminal, the cognitively disabled, the enslaved, Native Americans, and women, among others—occupied a liminal space somewhere between the citizen and the beast and, as such, were thought to participate in the inhuman. For many political theorists today, the capacity for justification continues to define political agency, leaving children, the cognitively disabled, future generations, animals, non-human nature, and things in the category of “nonagents” in need of guardianship or representation” (LaVaque-Manty 2002, 137–54).

empower certain peoples and desires, while constraining others. Alternatively, an analysis of structural forces—the ways in which enduring public narratives inform institutions and shape opportunities—examines forces greater than the individual. It is these forces, external but acting upon all individuals, which produce incentives or a false narrowing of options which sway an individual's choices. In this way policies which promote an excess of consumption and thus environmental degradation, will tend to suppress individual environmental behavior while simultaneously promoting ecologically damaging actions.

A discussion of structural dynamics does not render the individual inconsequential. Within the conception of structural forces is a self which is conceived as constitutively relational—created, cultivated, and understood through encounters with others as well as political and economic experiences. Rather than conceiving of agency as an attribute of the individual, agency ought to be understood as distributed through social assemblages, or “social (and material) interactions through which individuals come to have meaningful effects on the world” (Krause 2013, 202).

This more holistic definition of agency acknowledges that the determinants of behavior are not univocal and predetermined, instead moving from micro to macro and macro to micro. Thus, the individual is not, and ought not be, rendered inert when conceptualizing the environmental value-action gap. Individuals provoke profound changes, and individual desires and actions are vital to pro-environmental action. However, to fail to acknowledge the extent to which forces outside the individual contribute to individual desires and specifically environmental action would be to ignore an identically important aspect of the determinants of environmental behavior.

## *Capitalism and Environmental Degradation*

The current social system is capitalism. And, capitalism is an extraordinary engine. In the span of a couple lifetimes, it has provided solutions for many of the human species' existential necessities and produced innumerable benefits for humanity. Together with its cousins, technology and industrialism, capitalism has fashioned a world in which humanity has flourished to an unprecedented degree. Capitalism has been a powerful engine, driving the world toward unprecedented prosperity, comfort, and longevity. Yet, to tell the story of capitalism as the heroic savior of humanity is to remove several chapters from the entire tale. The purpose of capitalism is, and has always been, to maximize profits, not to serve social or ecological needs. Since Adam Smith, capitalist economic theory has posited that by *directly* maximizing the profits of capitalists the community is *indirectly* served. The convergence of capitalists, each maximizing their individual profits, provides for the community by keeping each in check through mutual competition. The capitalist system began and remains a juggernaut steered and driven by a concentrated collection of individuals and small groups doggedly pursuing their own interests and enrichment, checked only by their mutual competition (Sweezy 2004).

Because capitalism is the dominant structure, there is an implicit assumption that climate change, loss of biodiversity, pollution, the diminishing quality of land, air, and water, and all other manifestations of the environmental crisis can, and will, be solved within the current economic system. However, although natural resources are a fundamental requirement for capitalism, the economic system fails to incorporate the cost paid by nature when accounting for the cost of a product or service and ignores the

inherent value of the ecosystem. Further, environmental damage and social injustice are interwoven externalities of capital. The ecological and community costs of those living in the vicinity of environmental hazards, perpetuated by economic growth, is not accounted for in the overall cost of a commodity or service (Parr 2016).

As such, the environment has borne the burden of economic development providing the raw materials necessary for production while accumulating the hazardous and polluting byproducts of capital creation and accumulation (Parr 2016). Yet, as the scarcity of raw materials increase, and the amount of pristine natural areas decrease, Foster et al. (2010) posit there is a change, though no less exploitative morphing of the dominate form of valuation; the increase of “natural scarcity is seen as a golden opportunity in which to further privatize the world’s commons” and accumulate capital (70). This has fostered the birth of a novel economic model—the green economy—and borne witness to an entirely modern breed of capitalism—green capitalism. These oxymoronic concepts promote the capitalist economic system to simultaneously exploit earth system damage to further privatization natural common resources, while creating entirely new market opportunities (Foster et al. 2010). And, in this way, all too often the environmental movement has “become institutionalized as an appendage of the very system whose structure and methods it professes to oppose” (Devall and Sessions 1985, 3).

However, the incompatibility of environmentalism and capitalism is far more fundamental than the paradoxical green economy neologism. Authors such as Michael Löwy (2015), William McKibben (1989), Victor Wallis (2018), Paul Sweezy (2004), and John Bellamy Foster, Brett Clark, and Richard York (2010) argue capitalism cannot

solve the environmental crisis because it is inherently antithetical to environmental protection. Capitalism's insatiable appetite destroys the environment demanding ever increasing natural resources to produce, sell, and store the accoutrements of capitalist consumerism. Accumulation of capital is both the subjective goal and driving force of capitalism. Continual accrual of capital necessitates continuous growth. Growth is achieved through ever increasing consumption demanding an endless and growing treadmill of production, consumption, and capital accumulation.

To meet this simulated demand ever increasing space, raw materials, energy, and labor are required. The necessitated production generates environmental deterioration in a finite world, while systematic exploitation of the natural world is at the tipping point of undermining the ability for the earth systems to provide for a stable existence. Thus, capitalism's inherent impulse toward exponential growth intensifies the demands on the planet, positioning the environment and the capitalist economic system in direct conflict. The integrity of life and natural spaces on the planet is imperiled by capitalism's grow or die imperative.

### *Hegemonic Power and the Normalization of Environmental Damage*

Environmentally destructive behaviors are our collective reality. However, environmental actions, like all actions, are culturally mediated, not occurring in a pre-social zone of absolute autonomy and rationality. Consciousness arises within the context of the cultural and historical practices we inhabit. We tend to consider the particular "realities" of our world as natural and unalterable. That is, the existence and continuation of the environmental crisis may be considered manifestations of the laws of economics or necessary for human development, celebrated or despised, but generally

regarded as unalterable (Crehan, 275). In this way, earth system degradation is normalized.

Normalization—manifest through norms, values, beliefs and habits—form a social paradigm. According to Pirages and Ehrlich (1974) “a dominate social paradigm is a mental image of social reality that guides expectations in a society” (43). Devall and Sessions (1985, 42) provide a list of elements of a paradigm (worldview):

1. There are general assumptions about reality, including man’s place in Nature.
2. There are general “rules of the game” for approaching problems which are generally agreed upon.
3. Those who subscribe to a given worldview share a definition of the assumptions and goals of their society.
4. There is a definite, underlying confidence among believers in the worldview that solutions to problems exist within the assumptions of the worldview.
5. Practitioners within the worldview present arguments based on the validity of data as rationally explained by experts – be they scientific experts or experts in the philosophy and religious assumptions of the worldview.

The normalization of a social paradigm allows activities or ideas to effectively present themselves as natural, inconceivable to be altered, and thus exempt from critical analysis. Placing norms in this space allows for the principles to appear fundamental while alternative modes of thought and existence are rendered unimaginable. Even those principles, concepts, and categories which appear most fundamental are a product of normalization (Foucault, 1975).

This normalization can be understood as Antonio Gramsci’s concept of “common sense.” For Gramsci, common sense is “the incoherent set of generally held assumptions and beliefs common to any society”—in essence, what we noted as normalization (323). Common sense is then understood as the ideology by which

individuals validate their daily activities and functional position in societal, economic, and political systems (Perkins 2011). Capitalism, a sociopolitical economic system which not only allows, but demands ecological consumption is assimilated into the entire cultural and economic ideology and is thereby considered common sense. The common sense of capitalism has a material basis in the destruction of the environment, even though, undeniably, it is nonsensical to adhere to a sociopolitical economic system which destroys and demands the perpetual degradation of the only location in the known universe in which humans (and all species) can survive. As such, a Gramscian conception of hegemony can be employed to explicate environmental normalization as the negative externality of the preservation of capital elite's power.

Power is present and observable and resides in the intricate relations of force within society. This force is not overt but is exerted by the dominant class through the medium of ideology, percolating through the popular consciousness via the institutions of civil society to establish as hegemony (Daldal). Capitalism, consumerism, and ubiquitous lack of environmentally protective legislation/policy/behavior garners consent and power through the normalization they have received in civil society - the product of adherence to hegemony. This hegemony, which necessitates and perpetuates environmental apathy, was not produced by an individual or group's conscious effort but rather through a relational and distributed collective agency associated with capitalism.

In Gramscian terms, hegemony is "the ideological predominance of bourgeois values and norms over the subordinate classes which accept them as "normal" (Carnoy 1986, 66). Hegemonic culture normalizes its values, manufacturing the appearance that the norms are natural or common sense. By propagating its values as norms, the

hegemonic culture reinforces the “naturalness” of its values and maintains the status quo. Hegemony is thus produced and reproduced by the powerful through the institutions which form a hegemonic construction of agency. Rather than utilizing coercive or overt power to maintain power structures and the current world order, hegemonic power is utilized to maintain consent to the environmentally damaging capitalist order. Thereby, through a multitude of independent efforts by those in power to remain in power, a disparate but highly effective campaign of normalization of capitalism, consumption, and the ensuing environmental damage has been conducted.

Although the implications of a Gramscian conception of power dynamics is extensive, in relation to the environment, power maintenance through hegemony is observable in consumerist culture. Capitalism engenders a society based on ostentatious consumption and disposal which becomes the dominate culture. Thorstein Veblen’s (1899) conspicuous consumption theory illustrates the percolation of the elite’s environmentally damaging behaviors through describing the behaviors in which the nouveau riche and aspiring classes display wealth through significantly luxurious spending and consumption (Trigg 2001). It is not simply a culture of consumption, but a culture of over-consumption which is promoted. Conspicuous consumption moves beyond attempts to meet basic needs and instead becomes an expression of socio-economic status. This consumption, and associated environmentally damaging behaviors are ubiquitous, observed throughout classes and in both wealthy and less wealthy states (Ryabov 2016). In this way, Environmental degradation has been normalized, consumerism manufactured as common sense, to allow for the

perpetuation of an economic system, and a power structure, which disproportionately benefits the capitalist elites.

A desire to display wealth through consumption is a symptom of a desire to conform to the world view of the ruling elite. Once ostentatious consumption and disposal has become an integral facet of the dominate culture, it is normalized and perpetuated. Hegemony thus provides for the creation and perpetuation of a culture engulfed in ostentatious displays of consumption and disposal. As outsized consumption and extraneous disposal cannot be extricated from environmental damage, capitalism has, without force, created and reinforced a system in which the environment is exploited and polluted to provide for capital accumulation, especially for the elites, through continuous consumption by the masses. As such, a collective cognitive dissonance can occur with both a general understanding that over-consumption is detrimental and the common sense of continuing to participate in such behaviors.

Further, to critically evaluate the prospect of an increasingly damaged earth systems under capitalism is to discover that the wealthy and economic elite, with the most access to resources and contingency options, are least affected by ecological damage. It is the remainder of society, especially those most economically disadvantaged and disenfranchised, who will bear the burden of an environmental catastrophe. Thus, an examination of environmental apathy and the value-action gap through an understanding of normalization and a Gramscian analysis of hegemonic relations reveals the necessity for consideration of structural forces. Individualized determinants for the continuation of earth system degradation and lack of environmental

behavior are an adequate explicative for a few individuals, or small groups. However, it is rendered inadequate when the gap is nearly universally observed. Gramsci explains:

Self-deception can be an adequate explanation for a few individuals taken separately, or even for groups of a certain size, but it is not adequate when the contrast occurs in the life of great masses. In these cases the contrast between thought and action cannot but be the expression of profounder contrasts of a social historical order... [the masses] for reasons of submission and intellectual subordination, adopted a conception which is not its own but is borrowed from another group; and it affirms this conception verbally and believes itself to be following it, because this is the conception which it follows in "normal times" - that is when its conduct is not independent and autonomous, but submissive and subordinate.

(Gramsci, 327)

Consequently, environmental apathy is far more than the culmination of incomplete or incorrect incentives. Environmental apathy must be considered as an outcome of deep structural imperatives of capitalism, and the continued hindering of that through the production of common sense to ensure the continuation of an inherently environmentally damaging system in which capitalists are directly and disproportionately benefited.

## **Conclusion**

Thus far the environmental value-action gap has been conceptualized and analyzed through the individual as the unit of analysis. I began this Chapter by asserting

that this is an incomplete view of the determinants of the value-action gap as actions are culturally and socially mediated. As such, I argued, we ought to consider the structural conditions as well as the individual determinants for the environmental apathy and the value-action gap. I then posited that these structural conditions normalize environmentally destructive behaviors. However, norms (e.g., environmental exploitation) which effectively disguise that they are not innate can move outside the critical discourse or conceivable space for feasible action if they are perceived as common sense.

Further, I contended capitalism normalizes to intensify the extension and reinforcement of existing power structures. Hegemony manufactures consent to this ecologically destructive system through and hinders opposition to current power system (Gaspar 2013). Thus, refusal to accept the elements of the world which are presented as normal, necessary, natural—such as routine environmental destruction—engenders the possibility to expand freedoms and create radically different worlds. As such, I suggested ecologically detrimental norms ought to be understood in relation to the perpetuation of power structures.

Normalization of environmental degradation maintains current power structures by allowing for the continuation of capitalism and consumerism. Vested interests by capitalists normalizes and perpetuates the current economic system through a cultural hegemony which promotes and normalizes environmentally destructive behaviors. As such, I believe environmental apathy cannot be confined to individual determinants given the imperatives of a power system which necessitates environmental exploitation. However, simply understanding the determinants of the value-action gap is

insufficient—the must be efforts made to inspire change which will allow for environmental behaviors at both the individual and the structural level.

## CHAPTER 4: CLOSING THE GAP

The urgency of environmental degradation is evident, and the necessity for a widespread and sustained response is clear. However, how such an awareness can become effective in engendering environmental actions remains unclear. It is evident that the current attempts to inspire action are inadequate. Earth system destruction will not be prevented by a deluge of pamphlets filled with startling facts, snappy videos spotlighting the ten things *you* can do to protect the environment today, or heartbreaking photos of endangered charismatic megafauna.

Further, many would argue that reformist responses are inadequate. In general, the reformist political response has oriented toward green consumerism and ameliorative public policy founded on the liberal democratic assumption that enough citizens, equipped with environmental information, will assert their values through voluntary organizations, demanding more ecological policies and practices from political apparatuses. And, many reformist responses are founded on the assumption that individual consumers demanding environmental products and processes will produce the necessary incentives to transform the economic system into a green economy. The previous chapters have intimated that such green consumerism and depoliticized efforts are an inadequate response. Instead, individual change requires cultural, economic, and social change, just as these structural forces require individual change. Neither the

individual nor the structure can be changed without the other one also radically altering. Thus, closing the value-action gap, and catalyzing environmental behavioral change, seems something that cannot rely on short term, reformist efforts, nor can it rely on neoliberal assumptions.

In this Chapter, I seek to find ways in which the cultivation of mass environmental awareness can occur, ecological attitudes can be engendered, and most importantly, the behaviors and revolutionary restructuring these commitments must call forth can be implemented. I begin by examining why the two most common attempts to close the value-action gap—education and shocks—have been largely unsuccessful. I then propose two ways in which we may be able to work to close the gap. On the individual level, I offer the implementation of nudges to structure our constructed world in ways to promote environmental behavior. On the structural level, I propose the cultivation of an ecosocial vision.

### **Closing the Gap?: Education**

Environmental apathy is often understood as a lack of education, with attempted remedies frequently including the provision of additional and more detailed information. This strategy is based on the information deficit model which assumes provision of accurate information will engender environmental awareness, change attitudes, and provide the impetus for environmental actions (Fahy, 2005). The assumption, however, has proved to be incorrect—information and education has not engendered environmental behaviors.

In the United States environmental education has been implemented since the 1970s, and yet the information has failed to spur extensive environmental action and protection (Blumstein and Saylan 2007). We are aware of recycling, we know that the ice caps are melting, we try to remember to turn off the lights when we leave the room—and yet we do not live in an ecologically sustainable society.<sup>14</sup> Although the state of the environment might have been far worse without this investment in environmental education, nevertheless it appears evident that the gap between environmental education and ecological behavior ought to indicate that attempts to bridge the value-action gap cannot be built upon the cries for more and earlier education.

This is not to claim that education is valueless. Education is important and necessary for the creation and cultivation of environmental awareness and attitudes. However, when considering the individual and systemic hinderances to environmental protection detailed in the previous chapters, it is evident that education is not sufficient.

Although education is not sufficient for promoting environmental behaviors, the ways in which we educate remain vitally important for an ecological future. Education cannot be simple presentation of information or a laundry list of individual actions. The educational emphasis must expand from information to include action which extends

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<sup>14</sup> For example, per capita fuel consumption has increased worldwide, with the US leading the pack by a significant margin (International Energy Agency 2001). Car size has increased notably over the past three decades, with sport utility vehicles and light-duty truck sales, until very recently, making up a large proportion of the passenger vehicle market (Kockelman and Zhao 2000). Additionally, the fuel economy of modern smaller vehicles has dropped to its lowest point in over two decades (Office of Transportation and Air Quality 2007). These trends have contributed to a dramatic increase in greenhouse gas emissions since the advent of the industrial age, leading us toward a global climate change of potentially catastrophic proportion and duration (Intergovernmental Panel on Climate Change 2007). During the past 50 years, between one half and one fifth of all terrestrial biomes capable of producing crops have been modified by human activity (Millennium Ecosystem Assessment 2005). This activity has resulted in a massive loss of ecosystem function.

beyond the individual. Education ought to include collective political, economic, and social actions which will prevent an earth systems catastrophe. This necessary environmental education requires a process of mass political action given the range, widespread acceptance, and normalization of power patterns (Wallis 2018).

### **Closing the Gap?: Shocks**

In politics and social action, shocks are utilized as catalysts for change (Sutton 1992). Shocks are often employed, or at minimum incorporated in environmental action and education campaigns, with the assumption that the more shocking the presentation, the more likely action will follow. Environmental awareness shocks are an offshoot of shock advertising, a technique to “surprise an audience by deliberately violating norms for societal values and personal ideals. . . to capture the attention of a target audience” (Dahl et al. 2003, 269). The connection to perceptions of humanity’s tendencies is evident—the technique is a direct response to the understanding that humans are shortsighted (as discussed in Chapter 2, humans’ perceptions of danger are ill-equipped to process and act upon the dangers of a large and gradual problem when we evolved in a world where dangers were sudden, immediate and obvious). For the capitalist Westerner much of the environmental externalities are neither seen nor felt. As such, shocks have been employed to promote action in the absence of a direct and imminent threat to the individual or community. Environmental awareness shocks attempt to provide a tangible sensory signal and attendant emotional jolt, which should produce corresponding environmental action.

The shock ought to stimulate action. Shocking imagery, such as a starving polar bear, is employed as a stimulus to encourage attitudes and behavior change (Parry et

al. 2013). However, as the public becomes more aware and saturated with information, it becomes increasingly more difficult to craft environmental awareness campaigns which attract attention. To cut through the cacophony of information, many environmental awareness efforts have attempted to promote behavioral change by deliberately distressing their audience. Shocks attempt to reach individuals in an increasingly mentally saturated world. And, there is evidence that shock tactics are an effective way of attracting attention and ensuring a message is remembered (Dahl et al. 2003).

Thus, it is not surprising that shocks are employed to inspire environmental action; it is in response to an understanding that humans have become normalized and accustomed to the current ecological state of being. However, just as with a stimulant, an immunity begins to build to the shocks, and there is a necessity for an ever-increasing shock value. Within environmental movements, the shock, rather than the change, has become the focus. To quote Baudrillard (1994) (quoting Marshall McLuhan), the “*medium is the message*” (80). Humans are becoming immune to environmental shocks. The shocks become increasingly shocking yet do not shock us into action. We observe the horrifying image of a bird starved to death by the plastic filling their stomach, then continue to buy plastic. The message is rendered inert as is the medium. Thus, closing the value-action gap, and provoking environmental behavioral change, also cannot rely on reactionary efforts.

### **Critical Nudge Theory and Environmental Change**

Individual actions routinely pressure earth systems and the collective weight of our individual actions have created ecological degradation at alarming and

unprecedented levels. As such, to attain an ecologically harmonious future avenues for individual environmental action must be created and expanded. A critical nudge theory may present one such avenue for promoting individual environmental behaviors.

In their popular book, *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Thaler and Sunstein (2008) suggested certain behavioral or decision-making patterns are a result of cognitive boundaries, biases, or habits. To alter this, choice architecture—the physical, social, and psychological context which subconsciously influence behavior—can be altered in ways which promote, rather than hinder, a preferred behavior. In this way individuals can be “nudged” toward beneficial behaviors. That is, a nudge is named so because it provides a small adjustment to the physical, social, or psychological surroundings to encourage certain behaviors. As Thaler and Sunstein (2008) note:

A nudge, as we will use the term, is any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives. To count as a mere nudge, the intervention must be easy and cheap to avoid. Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not (6).

As such, Thaler and Sunstein (2008) suggest nudges may circumvent common challenges inherent to traditional attempts to promote certain behaviors. Application of nudges in public policy might supplement or even replace traditional regulation as the theory suggests nudges can influence individuals’ choices and behaviors in ways which are more effective, less invasive, and more economical than traditional approaches. In this way, nudges appear to offer an effective way to influence behavior without restricting freedom of choice, imposing mandatory obligations, or providing monetary incentives/disincentives (Thaler and Sunstein 2008).

Discussions of subconsciously altering behavior through choice architecture may appear alarmingly dystopian. However, choice architecture describes the ways in which the decisions humans make are affected by the layout/sequencing/range of choices available. Thus, choice architecture cannot be avoided. It is our surrounding, and the ways in which we understand the world, which nudge us toward certain behaviors.

Any store has a design; some products are seen first, and others are not. Any menu places options at various locations. Television stations are placed on different positions on the dial, and strikingly, position matters, even when the costs of switching are vanishingly low; people tend to choose the station at the lower position. A website has a design, which will affect what and whether people will choose (Sunstein 2015, 11).

Choice architecture is inevitable. Humans cannot wish it away. The weather, the ways we construct spaces, customs and traditions, etc., are part of this choice architecture (Sunstein 2015). The dark and ominous clouds nudge us toward taking an umbrella, just as the default option nudges us toward receiving the email newsletter, or the placement of candy at the checkout line nudges us toward an impulse buy.

The choice architecture surrounding us is constantly nudging us toward certain behaviors. And, of course, institutions such as the government and the private sector cannot avoid nudging. Every state, even ones which purport to be firmly committed to laissez-faire, makes choices which inherently nudge citizens in a particular direction.<sup>15</sup> As such, it is reasonable to be concerned about how we are nudged and but the concept of a nudge ought not carry a moral judgement (Sunstein 2015).

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<sup>15</sup> Even a state fully committed to laissez-faire must establish prohibitions and permissions, including a set of default entitlements, establishing who has what before bargaining begins. Recall that the rules of contract (as well as property and tort) provide a form of choice architecture for social ordering (Sunstein 2015).

Although not widely implemented, nudges have begun to be utilized within the environmental arena. Most frequently environmental nudges have been studied and implemented in energy use, efficiency, and choice policy (Olander and Thøgersen 2014; Pucher and Buehler 2008; Nolan et al. 2008; Mømsen and Støerk 2014).<sup>16</sup> Nudges have also been used to promote environmental behaviors in areas such as recycling, water conservation, and waste management (John et al. 2013; Schultz 1999; Milford et al. 2015).<sup>17</sup>

Although unexplored, nudge theory appears a particularly useful tool for the diminishment of the value-action gap as nudges promote behavior outside rational/cognitive choice. As such, nudges could be employed for environmental protection as they bypass the necessity to connect environmental attitudes to environmental action. Essentially nudge theory addresses the very issues presented by the environmental value-action gap—the ability to promote action untethered from attitudes. In this way the translation of environmental attitudes to environmental actions becomes unnecessary. If there is environmental awareness, and environmental attitudes, and yet a lack of environmental behaviors due to individual hinderances, environmental nudges provide a possibility to close the gap. Thus, nudges can be

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<sup>16</sup> Some examples of these types of studies include consumer's willingness to participate in automatic reduction of energy use during peak electricity demands (Olander and Thøgersen 2014), increases in cycling (Pucher and Buehler 2008), and increased use of fans rather than air conditioning (Nolan et al. 2008). Mømsen and Støerk (2014) performed an experiment in Germany to determine which nudge tactic is most effective for nudging consumers to choose renewable energy.

<sup>17</sup> There are also several environmental nudge experiments pertaining to recycling. John et al. (2013) conducted research evaluating nudge tactics on recycling rates. Schultz (1999) also conducted an experiment exploring the effects of individual and group normative feedback on recycling rates and contamination. Milford et al. (2015) conducted research on the effectiveness of reducing wasting and increasing recycling rates by sending letters which contained information about recycling and compared households to their neighbors.

implemented which subconsciously promote the very environmental behaviors people desire, but ultimately do not perform.

However, problematically nudge theory has not developed a needed discussion of the structural and systemic reinforcement inherent within the theory. Existing conceptions of nudges are firmly imbedded in the neoliberal conception of environmental protection: individuals ought to be the main transformative unit. Further, nudges are presently designed and implemented by the existing institutional framework. Relying on these institutions fails to recognize the entrenched power structures and normalization of environmental degradation inherent to the current world order. As such, it is those in positions of political and economic power who choose what others ought to be nudged toward, reifying the socially and ecologically damaging paradigm. Thus, the foundational adherence in traditional nudge theory to the individual as the unit of change, and existing institutions as the implementors of nudges, is too entrenched within the status quo to facilitate the individual actions necessary for an ecological future.

Implementation of environmental nudges without structural changes cannot be effective as they do not address the deeper socioeconomic and environmental determinants of non-environmental behavior. However, the potential for nudges to erase the gap between attitudes and action is far too promising to discard a priori. I propose a critical nudge theory is necessary to articulate the interconnections between the necessity of altering individual behaviors and the radical transformations to make those choices possible, engaging, and enduring. Nudges, as with any individual environmental action, can only produce long and lasting environmental benefits if they are to occur in

an ecologically structured world system. Given this structural change, a critical nudge theory that attends to needed structural change ought to be adopted. In the following section, I suggest aspects a critical nudge theory ought to include.

A critical nudge theory is aware that choice architecture is inevitably and constantly nudging humans toward certain behaviors, but harnesses this understanding to promote a better future. In this way critical nudge theory provides an opportunity for increased individual agency through an understanding and conscious creation of the world which promotes beneficial behaviors. As such, a critical nudge theory allows for, and promotes, mindful construction of choice architecture to encourage ecologically protecting behaviors.

A critical nudge theory is critical of the ways in which choice architecture has been manipulated by corporations to increase consumption. Nudges are currently used within the capitalist choice architecture. We are nudged to buy more, to stay at the store longer, to want more, to have our needs met by disposable rather than durable goods. As nudges are inevitable, ability to alter human behavior through choice architecture ought to be harnessed for efforts which are socially and ecologically beneficial. Failure to engage in a critical nudge theory will, at best, result in a missed opportunity and at worse result in continued articulations of capitalism nudging humans toward an environmental catastrophe.

A critical nudge theory demands a democratic dialogue concerning the creation of nudges. Nudges ought to be conceptualized through a democratic process in which desired behaviors are agreed upon by an inclusive and representative polity. Use of a

democratic dialogue during the creation of nudges can also be employed to promote the behaviors humanity agrees wishes to engage in yet fail to. As such, nudges will not be co-opted to incentivize populations to act in ways commiserate with the interests of those who create nudges in the absence of a democratic dialogue.

A critical nudge theory also demands periodic reflection. The ways in which the choice architecture has been constructed to incentivize ecological degradation and maintenance of power must be examined and altered. This examination, and subsequent alterations, must occur regularly to ensure the ways in which humans construct the world are in alignment with goals to promote environmental and human flourishing.

A critical nudge theory requires expressions of freedom, choice, agency, and individuality are disconnected from ecologically exploitative over-consumption. Nudges toward durable goods, reductions in energy use, or away from consumption only restrict agency if identity and expressions of human flourishing are perceived through ecologically damaging behavior understood as an articulation of individual preferences and freedom. Understood in this way, critical nudges can simultaneously preserve personal freedoms while promoting a decoupling of self-expression and identity through ecologically deleterious over-consumption.

A critical nudge theory may provide avenues for individual behaviors to become aligned with ecological attitudes. However, the theory evidently demands transformation of the social, economic, and political structures. This type of restructuring, in which

nudges are conceptualized and implemented within a system which encourages ecological and social flourishing, is presented in the following section.

### **Critical Nudge Theory and an Ecosocial Vision**

Successful implementation of critical environmental nudge theory necessitates a radical paradigm shift and a restructuring of the social, economic, and political institutions. If humans remain within an ecologically damaging and socially exploitative paradigm, restructuring choice architecture to facilitate environmental behavior to the extent necessitated by the ecocatastrophe will not and cannot occur. More broadly, conscious environmental behaviors will be assisted through an ecological restructuring as the individual can only alter actions within the range that is allowed within social systems. Currently, the world is structured in such a way that ecological behaviors and living an ecologically focused and harmonious life, is exceedingly difficult, if not nearly impossible.

Efforts to solely alter individual behaviors are not a viable solution if we wish to lessen environmental degradation. To allow for individual ecological agency and critical environmental nudges, a radically different organization of society, economics, and values is necessitated. Thus, individual agency and structural forces are not oppositional concepts nor mutually exclusive. Societal structures and individual agency are co-constitutive: the current socioeconomic structure cannot exist without individuals exerting agency to perpetuate power structures and accumulate capital, while simultaneously individual choices are directed or severely limited by conceptions of the world engendered by the current undergirding capitalist structure. As such, a complete change of the structure is suggested, as individuals would then be able to reduce

impacts on the environment in a way more substantial than even the most conscientious person functioning within the parameters of daily life under capitalism is able to achieve (Wallis 2018).

Given the urgency of the ecological situation, it is necessary to support improvements even if they are partial or reformist in nature. However, it must also be understood and recognized that when reformist improvements are made, the underlying impetus for ecological destruction remains mostly unimpeded. Token green measures are better than complete inaction, but they fail to challenge the underlying power structure which relies on ecological exploitation (Wallis 2018). Thus, partial and reformist alterations to the socioeconomic system are utterly insufficient. That is, humanity must create and operate within a radically different paradigm.

This discussion by its very nature appears radical and quixotic as the dominant global system, responsible for the environmental crisis, is the same system which sets the terms of the debate about the crisis (Löwy 2015). Current discussions and attempts to alter behavior remain within the capitalist hegemony. If we believe ecological behaviors must become the norm, a radical and revolutionary restructuring of society is needed. To allow for necessary alterations, solutions must be considered outside what is currently deemed acceptable—it must be radical. This is a task both for individuals, organizations, and governments. It requires consideration of alternative realities, both actual and potential, of societies, movements, institutions, and the individuals which forefront consideration of the social and the environment—it is quixotic. But it is also necessary and achievable; radical does not necessarily impractical.

Thus, if we are concerned with creating a more ecologically and socially harmonious future, it is necessary to describe a vision for an alternative ecological, social, political, and economic structure. Although a vision for an alternative structure is not sufficient to engender the changes necessary to preserve and restore earth systems, a vision is necessary as it can aid in the creation of a new worldview. Worldviews do not necessitate actions nor clarify a political structure, but worldviews *do* provide for the creation of spaces which allow for alternatives that can then spur action. Thus, cultivation of an ecological vision is necessary as revolutionary changes cannot occur within the current worldview.

I propose the creation of an ecosocial paradigm. I use the term to denote the revaluing of the environment and of humanity. Although in the following section I will draw heavily from ecosocialist literature, an ecosocial vision is distinct from ecosocialism. An ecosocial vision can, but does not necessarily, include the political and economic practices associated with the ecosocialist conception. As such, this discussion will emphasize the values and overarching themes associated with an ecosocial vision, rather than the economic, political, and social specifics of an ecosocialist government structure and society.

The term ecosocial emphasizes the *eco* first as the ecological ought to be foregrounded. Environmental protection is necessary, all other emancipatory efforts, and life in general, cannot succeed if an ecocatastrophe occurs. Further, the human nature bifurcation is a false dualism as the human cannot exist without the natural. The ecological is the umbrella under which all of humanity is encapsulated. The *social* of ecosocial is necessary to the term as there is an element unique to humans which

cannot be forgotten or overlooked in a new worldview. The social emphasis works to prevent denial or denigration of “the uniqueness of human beings, human subjectivity, rationality, aesthetic sensibility, and the ethical potentiality of humanity” (Bookchin 237).

An ecosocial vision embodies a rejection of human chauvinism while still allowing for the celebration of humanity’s special forms of excellence. The current world order, founded on capitalism’s propensity for hierarchy and domination, would be replaced with a demand for freedom and flourishing for the environment and humanity. Thus, an ecosocial vision is grounded in two primary principles: a decoupling from capitalism and emancipation writ large.

An ecosocial vision assumes an economic reordering and a revaluing. Production, rather than a guiding principle, must be reoriented as a function of social needs and the requirements of environmental protection (Löwy 2015). Consumerism and over-consumption would be devalued while the ecological and the social would be placed in a place of import. Production/industry would become subordinate to the advancement of the flourishing of the ecological (which necessarily includes, humans as humans are inextricably entwined within the ecological web).

An ecosocial vision articulates a reorientation of human’s relation to objects. The power and domination imbricated within the materiality of objects, through consumption and accumulation of things, must be dismantled. While identity and individuality are necessary for humans, for society, and for creation of culture, capitalism has co-opted self-expression and identity transforming it into a motivation for consumerism and over-consumption. Consumption based on “ostentation, waste, mercantile alienation, and

accumulationist obsession” ought to be prevented (Löwy 2015, 9). Individual identity would be disentangled from consumption and purchasing power. In an ecosocial worldview the social is interrogated and reoriented to allow for individual expressions of identity which are not displayed through consumerism, consumption, accumulation, and ostentatious displays of objects.

An ecosocial restructuring promotes emancipation writ large. Such a vision articulates the opposition of domination and exploitation in all of its forms and seeks solidarity with the human and nonhuman oppressed and exploited. If environmental exploitation is a product of self-interest, which is magnified to allow for the domination of other classes, peoples, and the environment to serve the interests of the wealthy capitalists, then environmental protection necessitates social emancipation as well. An ecosocial vision represents the unification of social emancipatory movements, working to produce a humanity which is more humane and respectful of nature. Rather than liberation movements working in parallel, or even in opposition, an ecosocial vision clarifies the need to end oppression, domination, and exploitation writ large. Flourishing, in the most universal sense, ought to be the goal of social and environmental movements within an ecosocial vision.

Within this broad and quixotic goal there could be a dialectic among the different strains of liberation. An ecosocial vision allows for the ecologizing of the dialectical method and unification of the study of natural and social worlds in a comprehensive theory that sees human beings and the natural world as complementary, not antagonistic, partners in evolution. An ecosocial vision ought to be based in a dialectical theory which interprets nature, society, and the human individual as dynamic processes

(Best 1998). Movements, struggles, and fights for liberation can unify within an overarching desire for freedom while engaging in a dialectical interconnection, synthesizing new forms and views of liberation to allow for ecological (and thus necessarily human) protection, liberation, and flourishing. Simultaneously teaching and learning, engaging in a dialectical practice to achieve a more all-encompassing liberation to allow for the protection of earth systems (which necessarily includes humans).

An ecosocial vision clarifies the need for a radical re-ordering of society, of humans' relation to the rest of the environment and to other humans. An ecosocial movement must be revolutionary. Bringing an ecosocial vision to practical reality is not a simple linear process. However, the follow elements can be implemented to facilitate the transition to an ecosocial liberation. To work toward an ecosocial world:

1. An ecocentric viewpoint ought to be universally adopted. Ecocentrism recognizes the intrinsic value in ecosystems and the biological and physical elements that they comprise, as well as in the ecological processes that spatially and temporally connect them. Ecocentrism understands the “world is an intrinsically dynamic, interconnected web of relations in which there are no absolutely discrete entities and no absolute dividing lines between the living and nonliving, the animate and the inanimate, or the human and the nonhuman” (Eckersly 1992, 56). Adoption of ecocentrism would not prevent human flourishing as ecocentrists believe human individuals and human culture is equally entitled to live and flourish as any other species, provided it is done so in a way that is aware of the needs of other humans and nonhumans (Eckersley 1992). Such a viewpoint ought to be adopted as it

provides a basis for understanding that emancipation writ large necessarily supports human and ecological flourishing. It provides a theoretical foundation which works to prevent human chauvinism and the destruction of the natural world for humanity's false needs. Adoption of such a viewpoint does not suggest the static or prevent humans for altering and interacting with the rest of the natural world. It does remind us of the interconnectedness of the ecosystem in which humans play an essential role, and the necessity for humans to consider how actions will impact the rest of the earth system.

2. Capitalism must be replaced with an economic order which can meet human needs while restoring the environment. Rather than reifying commodity fetishism the economic must be reintegrated into the ecological, social, and political (Löwy 2015). One option is the adoption of ecosocialism. Ecosocialism redefines the goals of socialism within an ecological framework (Löwy 2015). The positions are not as disparate as may initially be assumed. Some iterations of environmental protection and socialism converge when critiquing production as a goal in itself, the necessity of capital accumulation, the dictatorship of money, and the reduction of the social to calculations of profitability (Löwy 2015). Both orientations point to the need for deep and wide-ranging structural changes (Wallis 2015). An ecosocialist movement in particular aims, to end environmental destruction, reverse ecological damage, and in general construct an alternative to the capitalist system (Löwy 2015). That is, ecosocialism aims to reorient modes of production to be couched within environmental and social considerations and an egalitarian and democratic society

(Löwy 2015). As such, ecosocialism could prove an adequate for the replacement of capitalism articulated by an ecosocial vision.

3. Ecological and social considerations must be foregrounded. Every political and economic decision, at every level, must be considered toward an environmental dimension. Democratic decision making, rather than capitalistic focused elite decisions, must become the process through which political and economic decisions are conducted.
4. Social inclusion must be comprehensive. The most oppressed elements of human society, the poor and indigenous peoples, must take full part in the realization of a revolutionary ecosocial world. To give voice to those the capitalist system has silenced and devalued, and to revitalize ecologically sustainable traditions, social inclusion must be a key tenet of an ecosocial vision.
5. Demands must not be co-opted. Formal acknowledgement of demands can empty them of content. An ecosocial world cannot be achieved if demands are co-opted, folded into the status quo, and continued inaction normalized. Remaining in a dialectic may allow demands for ecosocial liberation to persist outside normalization. The dynamic quality of the oppositions of theses and creation of a synthesis presents an ever-evolving understanding and movement which cannot be easily normalized as there is no single idea nor notion to be normalized. Prevention of co-optation will also require reflexivity. To remain critical of exploitation, inquiry into environmental and social values must constantly re-attune itself to “reality” in order to uncover how ecosocial ideas are used and abused. The consequences for the environment and human relationships, of actions and values developed in pursuit of

an ecosocial vision must be interrogated and re-interrogated. This will allow for dynamic evolution and awareness of unforeseen exploitation or domination.

## **Conclusion**

A space is needed in which we can move toward the liberation of the environment and society. The behaviors which will precipitate a new social and ecological world order are co-constitutive of the world order itself. That is, it is prescient and necessary to understand the ways in which individual behaviors can be promoted and the ways in which a new vision can come into existence. In pursuit of this, I have sought to find ways in which the value-action gap can be closed or bridge to allow for environmental behaviors and an ecological paradigm.

An awareness of the gap, of a necessity to cultivate environmental behavior is not novel. In this Chapter, I examined the two most common attempts to close the value-action gap—education and shocks. These, and other attempts thus far have been largely unsuccessful as education and shocks attempt to stimulate action through cultivation of environmental awareness and attitudes. However, as the value-action gap demonstrates, awareness and attitudes are not sufficient to bring about the radical environmental changes necessary if we are to promote ecological behaviors and lifestyles. I then proposed the gap may be closed through the implementation of a critical nudge theory. However, given the ways in which nudges in praxis are too wedded and embedded to the current system, I also proposed the necessity of the cultivation of an ecosocial vision. Thus, I sought to envision an alternative ecological, social, political, and economic structure which could create the spaces and possibilities for a critical nudge theory and world order reoriented toward earth system flourishing.

## CONCLUSION

The entrenched environmentally exploitative capitalist system is powerful, yet there is space for the creation of an ecosocial world. The catalysts which will engender an ecosocial world remains unclear, however the capitalist system reveals itself every day to be ideologically bankrupt, unable to overcome the ecological and social crises it produces. As such, there is a growing space and necessity to cultivate and engender environmental behaviors.

Undeniably, the reasons for environmental degradation and lack of action are extensive and wide ranging. Yet, we must begin to question why our attempts to engender environmental behaviors have thus far proved unsuccessful. How can we be aware of the current and impending ecological destruction, and the ways in which it presents an existential threat to the planet, and remain apathetic about environmental action? What if we cannot educate away environmentally destructive behavior? Essentially, why is there a lack of environmental action? And, how can we work to engender environmental behaviors?

To begin to answer these questions, an understanding of the personal barriers and structural determinants is necessary when considering why a value-action gap exists, and how it may be bridged. Both elements are necessary as the ecological crisis dwarfs individual action. An analysis of the structural element can elucidate the inherent connections between capitalism, power relations, and the environmental crisis. The

expansion of ecological imperialism is inseparable from capitalism. The sedimentation of power, and the continuation of exploitation of the environment and people through an uncritical acceptance of the current world order is symptom of the acceptance that the structure is natural, necessary, or unchangeable. It is this sedimentation of capitalist power, a power which encourages and demands environmental exploitation, which is the cause for concern.

To analyze the structural forces, to indicate the individual ought not be the sole unit of analysis nor agent for change, is not to imply the individual does not bear responsibility, nor that the individual ought not be made aware and empowered. It is a false dichotomy which positions individual agency against systemic factors. This is erroneous and potentially disastrous for the conceptualization of environmental apathy. Individuals are responsible. Individualized determinants for the divergence between environmental attitudes and environmental actions ought to be understood and altered for environmental preservation and restoration. However, the individual does not exist in a vacuum devoid of overt and obscure influences on personal preferences, decisions, choices, and abilities.

Individual and systemic determinants ought not be conceptualized as mutual exclusive. Instead, the two should be combined and layered. To view structural conditions as an affront to personal agency is only to remove more personal agency and provide more power to systemic conditions. To acknowledge that there are visible and invisible forces influencing individual decisions is to begin to reassert the agency of the individual. Just as reading only half a report will not yield a complete understanding,

reliance on understanding the determinants for the environmental value-action gap through a neoliberal individualized lens cannot provide a comprehensive understanding.

As the near half a century since the 1970s has exposed, attempts to inspire action through education, fear, or guilt are a woefully inadequate impetus for behavior shifts. While, basic environmental awareness and attitudes have permeated the population, there has been a distinct apathy concerning environmental actions. In pursuit of an understanding, and possible solution to the value-action gap, I began, in Chapter 1, by providing evidence that the current and predicted state of the environment necessitates environmental behaviors. A sampling of the ecological degradation occurring at an atmospheric, geological, and biological level was used to demonstrate the variance and severity of human alterations to the earth system. I argued the evidence suggests radical change, outside the capitalist structure, is required to halt and restore environmental degradation. Failure to value the ecological system external to the capitalist system is particularly problematic as the current economic order is anathema to the protection and preservation of the environment. I concluded Chapter 1 with a discussion of the value-action gap, or space that occurs when the values or attitudes of an individual do not correlate to actions.

Although individual variances necessarily engender differences in concern for the environment and responses to environmental problems, it is widely observed that environmental attitudes do not seem to affect behavior. These individual nuances create the foundation for the vast majority of the works considering the value-action gap. Thus, to understand the determinants of the environmental value-action gap, in Chapter 2, I began by exploring the two most prevalent explanations for environmental

apathy: competition for attention and evolutionary hardwiring. The first explanation—competition for attention—suggests environmental attitudes may petition for environmental behaviors. However, as there is a competition among attitudes, goals more “powerful” than environmental protection become actions. As multiple goals can coexist, environmental decisions often occur in a conscious or unconscious state of goal conflict. In a state of competing goals, only the winning goal is implemented as a behavior. Essentially, lack of environmental action is result of environmental goals “losing” to the cornucopia of other of pressing issues and distractions bombarding the individual ceaselessly throughout the day. I explored this concept through barriers presented in the literature such as economic and mental cost, responsibility, and locus of control.

The second explanation, evolutionary hardwiring, posits humans unconsciously retain “Stone Age” biases which hinder environmental action. This position suggests humans evolved from ancestors equipped to tackle immediate and highly visible threats, not global gradual threats. Further, primal beings survived by valuing self-interest and the collection of personal resources. Our stone age biases, while evolutionarily beneficial, now act as a hindrance to environmental behavior. Thus, the narrative posits, a lack of action is a result of evolutionary forces which deter the worldwide and collective response to a gradual and dispersed threat. I explored this explanation through barriers such as proximity, shortsightedness and temporal discounting, self-interest, and disconnect from nature.

Yet, as evident through the analysis of individual determinants for the value-action gap, I found a problematic adherence to neoliberal principles in the literature. As

evident from the myriad reasons posited for the divergence between environmental attitudes and action, the existence of environmental apathy is entirely explored and attributed to individual determinants. This conception of environmental apathy engenders culpability solely within the individual and fails to consider structural determinants for the value-action gap. This is congruous with the neoliberal approach to the environmental crisis which has become the predominant strategy used in response to widespread ecological damage. It is the individual who is charged with saving the planet by turning lights off or buying green. The environmentalist's call is individualized imperatives and the solutions champion altering personal choices and realigning values so environmental concerns are considered more pressing.

However, I argued the analysis of individuals and adherence to neoliberal principles as the undergirding philosophy of western environmentalism is incomplete and problematic. In Chapter 3, I suggested apathy ought to be understood as the effect of structural as well as individual determinants. The individual agency-based models are beneficial for providing an understanding of the inconsistency in environmental attitudes and pro-environmental behavior, but a comprehensive assessment of the value-action gap must inevitably include an analysis of the personal as well as social, political, and economic influences.

I suggested normalization is an essential, yet unexplored, contributor to the gap between environmental awareness and environmental action. Normalization, manifest through norms, values, beliefs and habits, forms a collective worldview. Placing norms, such as environmentally degradation, in this space allows for the principles to appear fundamental while alternative modes of thought and existence are rendered

unimaginable. This conceptualization of normalization links the creation of environmental degradation as a norm to the power structures in society. As such, I employed a Gramscian conception of hegemony to explicate environmental normalization as the negative externality of the preservation of capitalist power. Capitalism, consumerism, and ubiquitous lack of environmentally protective legislation/policy/behavior garners consent and power through the normalization they have received in civil society—the product of adherence to capitalist hegemony and the “common sense” of the value-action gap.

In Chapter 4, I sought to find ways to promote individual behaviors and cultivate a new ecological system. To do so I examined why previous attempts to inspire action, through education and shocks, have been largely unsuccessful. Environmental apathy is often understood as a lack of education, with attempted remedies often including the provision of additional and more detailed information. While, education is important and necessary for the creation and cultivation of environmental awareness and attitudes, when considering the individual and systemic hinderances to environmental protection detailed in the previous chapters, it is evident that education not sufficient.

Further, in response to an understanding that humans have become normalized and accustomed to the current ecological state, shocks are also often used in environmental action and education campaigns. However, just as with any stimulant, an immunity begins to build to the shocks, and there is a necessity for an ever-increasing shock value. Within environmental movements, the shock, rather than the change, has become the focus. Thus, closing the value-action gap, and provoking environmental behavioral change, cannot rely on education nor reactionary efforts.

With an understanding that current attempts to close the value-action gap are inadequate, I presented two proposals which may assist in the diminishment of the gap. On the individual level, I suggested the implementation of the nascent behavioral economics concept of nudges. Individual actions routinely pressure earth systems and the collective weight of our individual actions have created ecological degradation at alarming and unprecedented levels. As such, to attain an ecologically harmonious future, avenues for individual environmental action must be created and expanded.

A critical nudge theory may present one such avenue for promoting individual environmental behaviors. Nudges could be employed for environmental protection as they bypass the necessity to connect environmental attitudes to environmental action. However, the current conception of nudge theory is absent of a discussion of the structural and systemic reinforcement inherent within the theory. Implementation of environmental nudges without structural changes cannot be effective as they do not address structural determinants. Given this necessity for a more critical approach to nudges, I proposed a “critical nudge theory” ought to be adopted. Although far from comprehensive, I provided aspects a critically nudge theory must include.

Successful implementation of critical environmental nudge theory necessitates a radical paradigm shift and a restructuring of the social, economic, and political institutions. Further, if humans remain within an ecologically damaging and socially exploitative paradigm, adopting environmental behaviors to the extent necessitated by an impending ecocatastrophe cannot occur. Thus, I also sought to describe an alternative ecological, social, political, and economic structure—an ecosocial vision. The cultivation of an ecological vision is necessary as the revolutionary changes cannot

occur within the current worldview. Although, it is understood that an alternative structure will not necessarily engender the changes necessary to preserve and restore earth systems, worldviews do influence political structures and allow for the creation of spaces which allow for the required actions.

However, I still remain unsure how to catalyze a movement toward this new ecosocial paradigm. Future research must explore ways in which a mass movement can be inspired, in which a new paradigm can be created, and a new socially and ecologically focused structure can come to exist.

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