The Psychological Roots of Ecologically Destructive Consumptive Behaviour: Ecological Alienation and Self-Alienation

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Abstract

Humanity's excessive consumptive behaviour is the primary cause of ecological destruction. Yet, neither lowering consumption nor production levels seem to be addressed in environmental policies and thus remain notably high. Therefore, this dissertation investigates the psychological roots of humanity's ecologically destructive consumptive behaviour.

My hypothesis is that ecological alienation and self-alienation are the main, compounding factors of ecologically destructive consumptive behaviour. Ecological alienation leads to devaluation of nature. As environmental values are paramount to sustainability-driven behaviour, devaluation of nature decreases the prevalence of such behaviour. Additionally, I argue that humanity's excessive consumption is driven by consumptive addiction whereby individuals substitute their authentic physical, mental and emotional needs with consumption; and that this consumptive addiction is rooted in self-alienation.

I suggest that ecological alienation and self-alienation are themselves rooted in the modern industrial worldview and its related value systems, and that these factors influence and reinforce each other. Ultimately, what is necessary to counter ecologically destructive addictive consumptive behaviour might be exactly what runs the risk of being indefinitely destroyed because of it: humanity's reconnection with nature.

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Introduction

On a geological timescale, the Earth has been a slowly changing theatre on which humans are a relatively recent occurrence. In spite of the fact that human activity has not been around for long, its impact is undeniable. It is widely agreed that we have now moved into the 'Anthropocene': the geological period in which humanity is the most important force to impact the planet and its ecosystems (National Geographic, n.d.). And humanity has left a trail – one of microplastics, crops, and fallen species.

As a product of the Enlightenment period and its emphasis on reason and logic; achievements in physics and industrialization; the almost religious belief in science, technology and progress; and steadily increasing knowledge about nature and how to plunder and wield her to our benefit, we humans have come to see ourselves as Lord and master over nature. However, slowly but surely we are beginning to realize that we may not be qualified for the job. We are decimating our ecosystems and driving the planet toward mass extinction.

Simultaneously, the Earth is no longer understood as an inert, indifferent stage for human folly. Instead, the Earth has become an interactive stage – perhaps even a fellow actor – that is influenced by and responds to our actions: through wildfires, climate change, and a global pandemic. As Latour writes in *Facing Gaia: Lectures on the New Climatic Regime* (2017, p. 3), "the physical framework that the Moderns had taken for granted, the ground on which their history had always been played out, has become unstable. As if the décor had gotten up on stage to share the drama with the actors."

However, even with our current knowledge and understanding of pollution and resource depletion, substantial change remains a slow process. Pro-environmentalism and anti-consumerism have been on the rise since the 19th century. Between then and now, what has changed? A pessimist might say: 'nothing much' or 'things got worse'. The start of the 21st century highlighted some of the most pressing problems of our times, most of which can be partially, if not largely, attributed to contemporary consumerism. Growing inequality, climate change, rising mental health issues, depletion of natural resources, accumulation of waste, air and water pollution – just to name a few.

These different, yet strongly interrelated challenges urge us to reconsider the ways in which we use and misuse the planet's resources to satiate our desires. The current speed of ecological destruction demands of us that we become more concerned about our environmental negotiations and behaviour. However, both individuals and the collective at large seem to lack

the necessary perspective and urgency when it comes to the importance of making decisions that are sustainable for the planet, ourselves, *and* future generations. These tendencies cannot only be attributed to a lack of knowledge. Over the past few decades, evidence detailing humanity's influence on ecology has risen in quality – through both science and experience – and quantity – the wealth of knowledge and its circulation. Thanks to education, (social) media and news channels, most consumers are at least moderately informed about the destructive environmental impact of consumerism.

The reality of humanity's devastating effect on the natural environment has sunk into an even deeper understanding during recent global developments. Nature briefly appeared to make a comeback as human interference with it reduced as the result of the restrictive measures related to Covid-19 (Watts, 2020). Hopeful commentators suggested that the worldwide attention to these unexpected side-effects of the global pandemic were a sign of increased environmental awareness – and that as a result, that our collective hyper-consumption might be replaced by more conscious consuming.

As much as I hope to believe there might be truth in this, blind faith in a quick shift has proven naïve. Consumption statistics including those related to waste and pollution are back at, and even higher than, the levels they were pre-covid (Addo et al., 2020; Ahmed et al., 2020). Suggestions that increased environmental awareness will significantly alter the structural conditions of excessive consumerism overnight appear illusory. This begs the question: if knowledge is not enough – and if a global pandemic is not enough – to alter humanity's destructive consumptive behaviour, then what is?

Apparently deeper questions need to be addressed, such as: what lies behind humanity's persistent consumptive behaviour? More specifically: which psychological driving forces motivate individuals to *continue* to consume in spite of their awareness of the disastrous environmental impact of their consumptive behaviour?

Therefore, in this thesis I explore the psychological roots of ecologically destructive behaviour. I argue that these roots are twofold. In the first place, members of modern industrialized societies have become alienated from nature, which has affected the value systems driving their behaviour. Secondly, they have developed an addiction to consumptive behaviour that overrides rational control.

I argue that today's insatiable consumerism is rooted in humanity's physical and psychological divergence from nature, in the modern industrial human's anthropocentric worldview and its related value systems. The presence of environmentally-driven values is paramount to sustainability-driven behaviour. I argue that the modern human has physically

and psychologically removed itself from nature to such a degree that they have grown to devalue nature: thereby suggesting that the devaluation of nature increases the likelihood of environmentally destructive consumptive behaviour, and that humanity's more natural state of being is one that is more closely connected to nature comparable with indigenous worldviews and ways of life. Thus, I suggest that the first psychological root of ecological destruction is based in humanity's alienation from nature.

However, values alone are not sufficient to determine behaviour. I argue that the presence of environmentally-driven values can be overruled by human needs and desires and, related to this, by the effects of trauma and stress. Trauma fundamentally means a disconnection from self (Maté, 2018). The effects of trauma and stress influence human behaviour and decision-making: it affects to what extent we have the capacity to act in accordance with our values. Trauma is also a precursor for addiction. As Gabor Maté points out in the documentary *The Wisdom of Trauma*, "in the life of every person who has ever been addicted and who ever will be addicted, there is always trauma" (Benazzo et al., 2021).

Addiction is any behaviour that a person craves and finds relief in, but simultaneously suffers negative consequences from – however, regardless of these consequences, the addict cannot give up the behaviour. Ecological destruction is an undeniably negative consequence of consumptive behaviour which in turn negatively affects the living conditions of humanity itself. Arguably, many consumers are aware of these consequences; and yet they are unwilling or unable to give up their consumptive behaviour. Therefore, I theorize that humanity's excessive producing-and-consuming is driven by addiction to consuming whereby individuals substitute their authentic physical, mental and emotional needs with consumption; and that this consumptive addiction is rooted in deeper psychological disturbances caused by trauma. Ultimately, I suggest that the second psychological root of ecological destruction is based in an alienation from the self: an individual internal psychological separation that is expressed in addictive consumptive tendencies.

In Part I (*Values, Environmentalism, and Deep ecology*), I evaluate the importance of values, needs and desires for sustainability-driven behaviour. I specifically discuss environmental values, which are a core aspect of environmentalism: a philosophy, ideology and social movement involving environmental protection and preservation. Continuing, I consider the *deep ecology* approach: a philosophical theory and movement that prioritizes the intrinsic value of all living organisms and the planet as a living ecosystem, independent of humanity. This theory suggests that society's potential to overcome ecological challenges rests on

individual and collective values. The *deep ecology* approach holds an ecocentric attitude toward nature similar to indigenous worldviews, which will be discussed in the following part.

Part II (*Nature, the Inferior Other*), evaluates the first psychological root of ecological destruction: humanity's alienation from nature. I explore indigenous worldviews and the modern industrial worldview, their relative value systems and their corresponding treatment of the connection of humanity to nature. I discuss philosophical and psychological explanations for humanity's disconnection from and devaluation of nature, which I hypothesize result in a general disinclination to make environmentally sustainable or regenerative choices. I will apply the concepts of alienation and *otherness* to gain an understanding of nature as the *inferior Other*, as opposed to nature as an integral part of humanity's concept of *Self*.

Part III (*Consumptive Addiction: A Symptom of Self-Alienation*) investigates why and how even consumers who endorse environmental values can be persuaded to purchase ecologically destructive products. I suggest that in order to impel lasting behavioral change, we need to address the psychological roots of consumptive behaviour. I expand on the *deep ecology* approach by arguing that values are not sufficient to ensure sustainability-driven behaviour because of the subconscious forces that drive human behaviour. These forces disconnect humans from their authentic needs and their consciously endorsed values. Ultimately, I suggest that the second psychological root of ecological destruction is self-alienation: a state of being which is rooted in trauma and expressed in consumptive addiction.

In Part IIII (*Conclusion*), I offer a conclusion of the thoughts and insights put forth in this thesis, and address the opportunity for understanding and responding to the presented ecological and psychological challenges with greater awareness.

I. Values, Environmentalism, and *Deep ecology*

Ecological awareness may be defined as being informed about, and knowing the impact of, our actions and activities on our environment and the ecosystems around us: individually and collectively, locally and globally. Some of the biggest environmental challenges we face today are food waste, biodiversity loss, plastic pollution, air pollution and deforestation – problems that are all directly related to consumerism (Earth.org). To relieve such consumerism-related problems, there tends to be a focus on waste management and imagining ways to promote a 'circular economy', in which the recycling and reusing of resources plays a large role.

However, even if such a circular economy causes relatively less environmental harm, focusing solely on waste *management* instead of waste *reduction* is insufficient. As long as the demand for complex modern products remains as is, closing this circle stays an illusion. Humanity will keep needing more resources that the planet cannot provide**.** A dangerous side effect of circular-economic thinking is that we stop worrying about our level of consumption, eventually leading to even more production. It surpasses underlying problems at both the individual and the collective level and keeps us in the habitual loop of over-consuming and over-producing, without looking at the fundamental causes of how and why humans keep craving more in a way that is detrimental for all life on Earth.

The real problem that needs to be addressed is consumerism itself, including humanity's relentless demand for more. In the words of Powers (John, 2018), "environmentalism is still under the umbrella of a kind of humanism: we say we should manage our resources better. They are not our resources; and we won't be well until we realize that." From an anthropocentric world view, nature may be ours to pillage and plunder however we desire. Powers argues that we have it backwards. A thought that I agree with, but that requires exploration. First, it must be understood that the way we think about nature and how we treat the environment is, in part, a matter of values – e.g., when we conceive of nature as resource or decoration; irreplaceable or disposable; inherently valuable or consumable.

To begin to understand the psychological roots of ecological destruction – the essence of which, I argue, lies in humanity's alienation from nature and alienation from our own, internal nature – we first need to understand a few basic concepts. In this section, I will define the concepts of values, specifically environmentally-driven values; the relationship of values with decision-making and behaviour; environmentalism; and *deep ecology*.

1. Values and Environmentalism

In order to define environmental values, we need to understand the concept of values themselves. Values are a specific set of beliefs about what is right and wrong, desirable or undesirable (Vidal, 2008). Beliefs refer to attitudes about the world which can be either true or false. Individuals are oftentimes unaware that their beliefs are socially and culturally constructed, and hold them to be facts (Olsen et al., 1992).

Schwartz and Bilsky (1987) proposed the following definition of values: values are beliefs about desirable end states or behaviours that transcend specific situations and guide selection or evaluation of behaviours and events. Thus, values are guiding principles which provide individuals with motivation to identify goals and criteria to guide actions and achieve them. This definition resonates with more recent work, proposing that environmental values are beliefs about the significance, importance and well-being of the natural environment that inform how humans should treat the natural world (Reser & Bentrupperbäumer, 2005).

Environmental values are a core aspect of environmentalism. Environmentalism is a broad philosophy, ideology and social movement involving concerns for environmental protection, preservation, regeneration, or improvement of the health regeneration of the natural environment (Merriam-Webster, 2021). This includes critical systems and processes of the Earth such as the climate, pollution and biodiversity. It recognizes humanity as a participant in ecosystems and seeks to incorporate the impact of changes to the environment not only on humans, but equally so on animals, plants and non-living matter.

At its core, environmentalism is an attempt to balance relations between humanity and the natural systems with which they co-exist and depend upon in such a way that a safe and healthy equilibrium of sustainability is reached. Environmentalism is opposed by anti-environmentalism, which portrays environmentalism as an overreaction of the human contribution to natural fluctuations of the planet, such as climate change (Rowell, 1996). Anti-environmentalism generally holds that the state of the Earth is much less precarious than environmentalists claim it to be.

A milestone of environmentalism was the creation of Earth Day, a worldwide annual event to raise awareness about and demonstrate support for environmental protection. First held on April 22, 1970, Earth Day was an expression of a rising ecological awareness. The year 1972 marked a turning point in the development of international environmental politics: it held the first major United Nations' conference on international environmental issues, the United Nation's *Conference on the Human Environment*, also known as the *Stockholm Conference*

(Baylis & Smith, 2005). By the mid-1970's, concern about environmental issues started to reach a greater number of global citizens as the concept of environmental ethics began to take form and become more widespread. This was expressed in agrarian back-to-the-land movements – calling people to small-scale agriculture, emphasizing self-sufficiency and local community – and in the philosophical environmental movement of *deep ecology*.

2. The *Deep Ecology* Approach

The concern expressed in this thesis is that society's potential to overcome ecological challenges rests on addressing its root causes, as opposed to merely addressing the surface-level symptoms. A concept that addresses this underlying concern in a similar way is *deep ecology*: a philosophical movement that prioritizes the intrinsic value of all living organisms, and the planet as a living ecosystem, independent of humanity. The term was introduced by Naess in the early 1970's (Glasser, 2001) as a critique of what he understood as 'shallow ecology': an ecological activism that fights against ecological destruction of the planet from the motive that the well-being of humans depends on the well-being of the earth. The *deep ecology* approach is ontologically inspired: it steps away from strong metaphysical claims about the difference between human and nature, and focuses on a better understanding of how they fit together in a broader sense. It emphasizes the need to stop conceptualizing the relations between people and environment, or mind and nature, in terms of exclusive disjunctions.

Naess understood the entire ecosystem as being one big holistic enterprise: humanity being only a small, and not the most important, part of it. Thus, *deep ecology* steps away from an anthropocentric viewpoint toward a more ecocentric perspective. Ecocentrism endorses the viewpoint that we live in a system of interdependence with our natural environment. From this wider perspective, according to Naess (1989), it is each individual's own responsibility to define their position toward the current environmental problems.

The 'shallow' approach focuses on treating the symptoms of environmental degradation rather than the causes. This approach is not grounded in principles that address the relationship between humans and nature, but in "technological optimism, economic progress, and scientific management" (Glasser, 2001, p. 4042). Practically, this means that it would support waste *management* rather than waste *reduction*. Its central concern is the well-being and prosperity of people in economically privileged countries, not the well-being and prosperity of all, including nature. Nature is mainly seen as resource existing for human benefit. This effort to diminish human impact on the environment rather than address the root causes stimulates technical,

economic, and organizational solutions to what are "more likely ethical, social, and political problems" (Glasser, 2001, p. 4042). Arguably, this approach lacks the necessary depth to actually create long-term change. That is where its counterpart comes in.

The 'deep' approach, while in no way discounting the necessity of addressing symptoms such as pollution and resource depletion, adopts a broader, more long-term position. Drawing on a wide diversity of philosophical or religious ultimate premises, which acknowledge that every living being has intrinsic value, the deep approach sees the flourishing of nature and culture as fundamentally intertwined. It is critical of technological optimism and limitless economic growth, and decidedly against valuing nature in purely instrumental terms. It demands that we take into consideration the pervasiveness, severity and depth of environmental problems. A key premise is that environmental management should be geared toward managing the habits and desires of humans, rather than managing nature (Naess, 1989; Glasser, 2001).

In the context of *deep ecology* as an ecophilosophical approach, Naess' concept of 'depth' refers to two things: in the first place, the general level of *problematizing* that one engages in seeking out the underlying, co-evolving causes of the ecological crisis. To give an everyday-life example: imagine a beach that is littered with waste by the end of a busy summer's day. One could propose solutions that might be helpful or hindering to varying degrees. For example, one might put down more trashcans. Adding trashcans affords people with greater ability to throw their litter away – however, it is no guarantee that they will. Furthermore, this solution essentially only moves the problem – the waste – to another place. Thus, it is ultimately an insufficient solution: it only looks at a post hoc relieving of symptoms instead of addressing the root causes of waste. Moving toward a deeper level of asking questions aimed at finding more adequate solutions could start with: why are they this many disposable products and packaging? What can be done to decrease this? Why do people bring/use disposable products and packaging instead of reusables, and what can be done to stimulate use of reusables? What in the perception and value-systems of humans stimulates littering, and what can be done to change this?

These sets of questions ultimately reside within one and the same important category: that of the human, their psyche and behaviour; and whose actions or lack thereof impact its environment to an extend unrivaled in planetary history. The deepest possible questions addressing the underlying, co-evolving causes of the ecological crisis we find ourselves in ultimately all have to do with humanity's accountability and responsibility. This viewpoint is related to the second aspect of Naess' concept of depth and to the ultimate project of this thesis:

it builds on the understanding that rigorous positive change can only happen as the result of structural perspective and behaviour change.

The second aspect Naess' concept of depth refers to is the extent of one's *willingness* to consider and act upon potential individual and collective, social and institutional responses: even if this requires changes that represent a radical departure from the status quo (Glasser, 2001). The worldwide climate marches are an example of such willingness for and action toward change. Another simple, practical example would be bringing your own reusable cup for take-away coffee: something that may have been considered to be exaggerated some years ago, but is now a widespread trend. For many people this willingness does come naturally: potential reasons behind this will be discussed in Part II: *Nature, the Inferior Other,* where I investigate this disinclination and failure to care for our natural environment as a result of ecological alienation. The purpose of *deep ecology* as an ecophilosophical approach in a sense is to reverse this movement away from nature, and to "assist individuals in the process of weaving descriptive and prescriptive premises about the world, ecological science, and their ultimate beliefs into a cohesive framework for guiding decisions involving society and nature" (Glasser, 2001, p. 4041).

Building on this purpose of reconnecting people to their fundamental beliefs around ecology and life, *deep ecology* poses that along with humanity's exceptional capacities –e.g., for reason and moral consciousness – come certain responsibilities: particularly in relation to the survival and thriving of non-human life and the ecological sustainability of the planet. There is a strong 'call to action' directed at the individual: a focus on *praxis*, i.e., human responsibility for and consequently action taken toward increasing the well-being of the natural and social worlds. But this is easier said than done: one of the primary root causes of ecological destruction, Naess claims, is the widespread disjunction between people's core beliefs and actions (Glasser, 2001). People oftentimes neither comprehend how their everyday choices and actions harm the environment, nor recognize how these consequences may be in direct conflict with their values and beliefs. As discussed, the *deep ecology* approach emphasizes that environmental management should be geared toward managing the habits and desires of humans, rather than managing nature. When it comes to managing these habits and desires, the *deep ecology* approach focuses on value-based systems and change, urging people to become aware of their core beliefs and actions, and to live in accordance with their values.

A critique to and suggested development of this approach is that many people will not endorse environmental values; meaning that becoming aware of, and living in accordance with

their values will not have the intended effect. Instead, a transvaluation of nature and its exploitation for excessive human consumption is required.

3. The Devaluation of Nature

Upholding standards of sustainability is increasingly seen as a challenge of human values not only by the *deep ecology* approach, but also by other contemporary theories. To consciously make environmentally friendly choices, we need a certain perspective: a way of looking at the natural world that entails a certain level of respect, importance, and fundamental value. Environmentalists and anti-environmentalists have a different perspective when it comes to ecology and humanity's part in it: they will hold different values and consequently make different life choices. Psychological research has discussed the adoption of biospheric values, also called environmental or sustainability-driven values, as supporting this perspective and leading to greater sustainability (Gratani et al., 2016; Axsen & Kurani, 2013; Schultz & Zelezny, 1999).

Thus, the problem of ecological destruction is at its base a problem of values: it entails a general a devaluation of nature. We can place emphasis on values of economic growth or sustainability; although these are not entirely mutually exclusive, support of the first generally diminishes support of the second. Someone who values nature as less important, or does not see, understand or believe the problems that consumerism brings to the environment, will care less about the environmental implications of their decisions. For example: given the choice between a brand new mass-produced piece of clothing and a second-hand item or buying nothing, people with different values around ecology and sustainability will (generally, although not necessarily: as we will see in Part III) choose differently.

Egoistic, altruistic and environmental values are the most fundamental determinants of environmental concern. Generally, these values change little during our lifetime and strongly influence our worldview (Stern, Dietz, Abel, Guagnano & Kalof, 1999). Values guide our decision-making, especially when we reflect on difficult and ambiguous choices in which we need to compromise and weigh our preferences (Dietz & Stern, 1995). Logically, pro-environmental behaviour will more likely be carried out by individuals who hold supportive values. Thus, it has been theorized that pro-environmental behaviour is rooted in environmental values, which reflect the importance that people attribute to nature and the environment (Wang, et al., 2021; Stern and Dietz, 1994; De Groot and Steg, 2009). Psychological studies focused

on the influence of personal values on pro-environmental behaviour has shown that personal environmental values often indirectly predict a range of pro-environmental behaviour.

When it comes to lowering human-caused environmental problems, behaviour change is crucial. The values-beliefs-norms theory of environmental concern and behaviour suggests that values "influence our worldview about the environment (general beliefs), which in turn influences our beliefs about the consequences of environmental change on things we value, which in turn influence our perceptions of our ability to reduce threats to things we value. This is turn influences our norms about taking action" (Dietz et al., 2005, p. 356).

4. Moral Values: Concerning the Relation between *Self* and *Other*

Values that specifically revolve around existing norms around taking action are *moral values.* Moral philosophy investigates the meaning or justification of moral claims: theories that describe what makes our actions right or wrong. The concept of 'morals' or 'morality' can be used descriptively, referring to codes of conduct (i.e., normative behaviour) that are either put forward by a society or group (e.g., cultural, religious), or codes of conduct that are recognized and accepted by an individual for their own behaviour. The concept of morality can also be used normatively, commonly referring to moral standards: codes of conduct that, given specific context or conditions, would logically be supported.

Contrary to what used to be thought, morals are not solely the result of logical deduction. Instead, moral values are influenced by our emotions and the amount to which we empathize with the target object (Haid, 2001). Empathy can be understood as the ability to recognize, understand, and care for the feelings and perspectives of others. Contemporary researchers such as Goleman (2020) often discriminate between three types of empathy. *Cognitive empathy*, sometimes called *perspective taking*, refers to our ability to recognize, identify and understand others' emotions and perspective. *Affective* or *emotional empathy* refers to the feelings and sensations we get in response to others' emotions: the ability to feel what they feel. *Empathic concern*, also referred to as *compassionate empathy*, is *other-oriented* in the sense that it involves the ability to attune to what others need from you.

Empathic understanding shapes our moral values and guides our actions. However, empathy is biased – it is shaped by our (personal, cultural, religious) values and beliefs. Humans are more likely to empathize with those who are from similar social, racial and political circles, and with those they have frequent and meaningful interactions with. This resembles the concept of *Self* and *(inferior) Other*. Psychological research has demonstrated that members of an ingroup

– who perceive their group as the normative group, i.e., as *Self* – are likely to empathize less with members of an outgroup – the *Other* (Cikara et al., 2017).

Moral values and related tendencies to empathize with and help others form the foundation of human society. These tendencies can be extended to non-human living beings and the environment. Sustainability-driven moral values ideally guide individuals to care for and feel responsible for nature. To illustrate: imagine person A who lives in an indigenous community. They grew up closely connected to nature and were passed down value and belief systems that revolve around the inherent value of nature. Person A will likely hold that we should least interfere with the natural environment, taking only what we need to survive; and that it is immoral to cut down entire rainforests to create homogenous crop fields.

Person B grew up in a big city as the child of a business owner of an agricultural company that produces and exports crops. Person B has little intimate experience with nature and grew up under a modern industrialized value system. They were taught that nature exists to provide for humans and can be manipulated to their advantage. They believe that the supply of natural resources is limitless and if not limitless, that technology will solve future issues. Person B just took over the agriculture company, and will likely see less harm than person A in felling the same trees – especially if it earns them a high enough profit. Coming from a vastly different background, with different culture, traditions, education, models, geographical and social environment, person A and B's moral values will be distinctly different from one another.

Thus, moral development is influenced by the values and beliefs that are implicitly (e.g., modelled through behaviour) and explicitly (e.g., verbally taught) conveyed to us by our caretakers, education systems, and peers; disciplinary practices; socioeconomic differences; and cultural and religious beliefs (Siegler et al., 2010). Moral values involve the underlying (e.g., cultural, social, personal, religious) values and belief systems that guide our moral thought and behaviour. This implies that moral values are not innate, intrinsic characteristics, but multidimensionally-shaped aspects of cognition. They are considered to be persistent and long-lasting, but not completely fixed and unchangeable. Although moral values are shaped by existing value and belief systems, and influenced by similarity (i.e., ingroup versus outgroup; *Self* versus *Other*), they can fluctuate and change over time through exposure and interaction.

5. Beyond Values

Although (moral) values reinforce our actions, they alone do not determine pro-environmental behaviour. Human behaviour is influenced and constrained by individuals' immediate needs, desires and capabilities which depend on social, cultural and economic factors along with

personal values and beliefs (Dietz et al., 2005; Gratani et al., 2016). This shows in the following: although we currently seem to be witnessing a global increase in environmental awareness and values, a widespread lack remains in personal, societal, organizational and governmental spheres when it comes to direct action. I believe that this lack of environmentally sustainable action is rooted in two distinct forms of disconnection: in the first place, humanity's alienation from nature; and secondly, in humans' self-alienation.

I hypothesize that there exists a widespread disconnection between modern industrial humans and nature which influences their perception of and the values they hold toward nature, which leads to devaluation of the natural environment. Second, there exists an internal disconnection within humans which gives rise to the disinclination to act in concordance with their values, even when they endorse environmentalism.

In Part II I will evaluate the psychological explanations, rooted in history, culture and philosophy, for the general alienation from and devaluation of nature resulting in a general disinclination to make environmentally sustainable choices. In Part III I will examine the deeper, more individual-focused psychological explanations behind ecological destruction, which I hypothesize are rooted in trauma and expressed in consumptive addiction.

II. Nature, the 'Inferior Other'

In this section, I argue that ecological alienation lays the foundation for ecologically destructive consumptive behaviour. I discuss the difference between indigenous ecocentric worldviews which endorse a harmonic perspective that sees nature as intrinsically valuable, and the modern industrial anthropocentric worldview which holds an antagonistic perspective that sees nature as inferior to humanity. I suggest that the modern industrial worldview is responsible for the devaluation of nature, and ultimately for the alienation from nature. Specifically, I hypothesize that this disconnection from nature is rooted in the modern industrial value system and related aspects such as urbanization and globalization.

6. Ecological Alienation: The Aftermath of Industrial Modernity

In order to understand this psychological root of ecological destruction, we need to understand how a philosophy of dominance over nature generates and perpetuates the sense of separation from and superiority over the natural environment. This dominance has longstanding roots, but was propelled by the arrival of industrial modernity during the post-enlightenment era. During that time, both practical changes in society and its values began to significantly separate humanity from nature.

It appears that the modern industrialized worldview puts forth a value system that considers non-human nature as inferior and replaceable. Essentially, modern industrial humans do not perceive themselves as an integral part of nature, or nature as a part of them. Not seeing the intrinsic value of nature and its importance for our own survival and well-being advances the human/nature separation in a reciprocal loop.

Prior to industrial modernity, humans necessarily had a closer relationship with nature. The arrival of industrial machinery created distance between humans and nature. The machinery of the agricultural evolution pushed people off of the fields and into the cities, increasing the gap even further.

In great contrast to modern industrial worldviews are indigenous worldviews. Indigenous worldviews understand humanity to be a fundamental part of ecology, put more value in living in harmony with nature and less value in material and economic gain. Indigenous worldviews have been vastly eroded by colonialism worldwide. Colonialism paved the way for the expansion and trade of resources and goods. This was the beginning of the widespread exploitation of the environment.

Simply put, ecological destruction is a function of the ways humans relate to and value nature. Therefore, I will evaluate the treatment of nature as the *inferior Other*, a disconnection from and devaluation of nature which is rooted in the history of religion, culture and philosophy.

7. Harmony and Hierarchy: Indigenous Worldviews versus the Modern Industrial Worldview

In this section I will discuss the metaphysical claims of different worldviews regarding the relationship between humans and nature. To simplify, I will divide the metaphysical modalities of relating to nature into two camps: one who endorses ecological equality and harmony with nature (precolonial, indigenous, Eastern) and its antagonist, which holds a hierarchical perspective and sees nature as inferior to humanity (industrial modernity).

Indigenous philosophies of nature more closely resemble precolonial and Eastern philosophies. Indigenous traditions understand nature to hold a central part of existence, in which humans do not stand above nature. Similar ideas can be found in Hinduism and Buddhism. In *Hindu Views of Nature and the Environment* (2003), Coward writes: "In contrast to some attitudes toward nature as an "It" that is separate from humans, Hindus see the surrounding world as a "Thou" of which they are an interdependent part. Humans and their society are imbedded in nature and dependent upon cosmic forces." Most Hindus believe that all living things are sacred because they are a part of God, the divine, as is the natural world.

Similar to Hinduism, most Buddhists believe people need to respect the balance and cycles of nature, so things can continue for future generations (Sponsel & Natadecha-Sponsel, 2003). In Mahayana Buddhism, Buddha-nature refers to the potential of all things and beings to become enlightened through the process of reincarnation: including fish, trees, and even rocks. One part of the natural world is no more or less important than another, they simply are at different stages of their existence. The idea of nature having inherent value by sheer merit of its existence runs in stark contrast to the industrial modern worldview that nature is not a "Thou", but an "It"; that it is different from, and by default less significant than, humanity.

The harmonic perspective sees nature as intrinsically valuable. It claims that all beings are an important and meaningful part of life. This way of looking at the world implies that environmental values, or environmentally-driven values, lie at the core of precolonial, indigenous and Eastern philosophies. From this perspective humanity and the rest of nature are viewed as an integrative whole, of which the parts are perhaps distinct from one another, but deeply interrelated and more or less of equal value.

In *Conquest of Abundance* (1999), Feyerabend argues for the return of a wider perspective of reality which includes a way of being in and relating to the (natural) world that has been denounced by modern orthodoxy as primitive. He writes:

> "The search for reality that accompanied the growth of Western civilization played an important role in the process of simplifying the world … this search has also a strong negative component. It does not accept phenomena as they are, it changes them, either in thought (abstraction) or by actively interfering with them (experiment) … In both cases, things are being taken away or 'blocked off' from the totality that surrounds us. Interestingly the remains are called 'real', which means they are regarded as more important than the totality itself." (Feyerabend, 1999, p. 5)

In other words, modernity has simplified the world by chopping up the entirety of 'life' into 'human' and 'nature'; not only a means of identifying, designating and discussing certain aspects of life for practical purposes, but as a substantial, metaphysical difference. Contrary to harmonic perspectives, the antagonistic perspective does not honor the remnants of indigenous and Eastern traditions but that, which endorses a hierarchical philosophy of ruling-over instead of living-with nature. While Judeo-Christianity suggests that humanity is the shepherd of nature, historically, interpretations of religious texts would lead us to believe that nature was created for the use and utilization of humanity – unto a point of excessive exploitation. This perspective places nature at the disposal of humanity, an attitude that was further constructed and amplified by the industrial revolution.

The antagonist position holds a strongly anthropocentric worldview, seeing nature as valuable only insofar as it is useful to humans. Nature is perceived as 'other', to be subjugated and harnessed for its resources: its only reason of being is to feed, shelter and entertain humanity. I argue that this position, centered around opposition and separation between humanity and nature, is the fundamental reason behind environmental destruction.

In the following sections I will discuss the psychological roots of this separation, using the concept of alienation and the theory of *Self* and *Other* to understand the mechanisms behind it. A number of related factors are addressed: such as Enlightenment values, industrialization, urbanization, globalization, and the significant role of modern capitalism that weaves these related causes together.

8. Economy, Ecocentrism and Anthropocentrism

To better understand the distinct ways of perceiving and valuing nature, we need to understand the definition and present-day expression of capitalism: an economic system based on private ownership and production for profit, centered around supply and demand. The ideology on which Western capitalism was founded has turned the global economy into a costly, environmentally devastating system. Its line of thinking equates material gain and economic growth with development; which, in turn, is regarded as a prerequisite for human well-being and prosperity.

Today's economic system is fueled by the desire for short-term gross domestic product (GDP) growth (Investopedia, 2021). In such a system, continuous growth of GDP is the major prerequisite, aim and aspiration for the global economy. Continuous growth of GDP necessarily requires increased levels of production and consumption. Over the past decades, economic orthodoxies have influenced policymaking to focus on increasing production, enabling and stimulating societies to consume. Private consumption expenses increased more than fourfold from 1960 to 2000, during which the global population merely doubled (Dauvergne, 2008).

The modern industrial economic system has failed miserably to improve general social well-being, reduce inequality, and uphold a healthy balance and equal exchange when it comes to our ecological environment. Some might argue that 'positive progress' has been made, such as a higher standard of life for many people, better healthcare, increased life expectancy, or the acknowledgment of human rights and principal equality of humans. However, even positive developments have their unforeseen downsides and potentially detrimental long-term implications. A higher standard of life, increased life expectancy and blind faith in economic growth come with increased population, waste, pollution, and resource depletion.

Our growth-oriented economic insatiability has been accompanied by serious environmental damage, including lack of biodiversity. The 'living planet index' assesses the state of biodiversity in the world's ecosystems. It was found to be 30% lower in 2010 compared with 1970. In about the same time, our ecological footprint has almost doubled (Balaban, 2019). Humanity currently uses the equivalent of 1.5 planets to provide the necessary resources to meet our current consumption levels, and to absorb the waste this generates (Taylor & Segal, 2015). If modern industrial habits of production and consumption continue along this trend, this number is expected to rise to the equivalent of 2 planets by 2030 and 2.8 planets by 2050.

In other words, the ecological crisis we find ourselves in is the result of environmental policies being curtailed to meet the needs of economic growth. I argue that the alienation between humanity and nature lays at the root of this curtailment; correlated with strongly

anthropocentric values that discount the inherent value of ecology. Anthropocentric means to regard humanity as the central or most important factor of existence. It is a metaphysical viewpoint arguing that humans are the most significant entities on Earth, in opposition to any other lifeform. This belief is deeply embedded in modern industrial culture. Were modernity to distance itself from an anthropocentric worldview, we might not breed an excess of livestock or produce non-essential non-biodegradable products – decreasing biodiversity, excreting harmful waste products and influencing the climate.

A glimmer of hope shines in the fact that environmental awareness seems to be on the rise. Rules and regulations against environmentally destructive practices are slowly making their way into public and governmental policies as our scientific understanding about the detrimental effect of humanity upon the planet grows. These transitions highlight anthropocentrism's antithesis, ecocentrism: the philosophy that humanity is an integral part of ecology. Ecocentric philosophy resembles indigenous and Eastern perspectives that endorse the principle that everything that is part of nature has intrinsic value for the sheer reason that it exists.

The rise of e.g., climate policies and marches, veganism, recycling, upcycling, and even giving rights to nature[1] indicates that more people are becoming more aware of their ecological footprint. However, the gravity of anthropocentrism, capitalism and consumerism is strong. Since the industrial revolution, economic growth has been pursued at the expense of natural and environmental resources. Traditionally, environmental concerns have been considered as barriers toward economic development; not acknowledged as problematic by those in positions of power; and the natural environment not valued for its intrinsic value. The modern capitalistic trend of production for profit works against ecologically sustainable production, which main focus is ensuring basic survival and well-being. Essentially, in terms of policymaking, economic growth and technological advancement have been valued with greater importance than ecological sustainability and regeneration. Imagine the difference between mass crop farming with international trade versus owning your own farm where you only grow what is necessary to sustain yourself and your family. Contrarily, in the antagonistic modern industrial value system products are produced purely for profit. The urgency of present ecological

[1] In a 2016 lawsuit concerning the pollution of the Atrato river, Colombian judges decided that protection of forests, rivers and other elements of a healthy living environment have a direct relation to guaranteeing the right to life, health and culture: consequently, the court acknowledged the Atrato river as an autonomous entity with rights (den Outer, 2021).

challenges force us to rethink the relationships between economic growth and development, environmental protection and regeneration.

In this antagonistic perspective, humanity places itself outside of nature and rejects a more harmonious living situation. Modern industrial and capitalistic tendencies push the boundaries of what is healthy for the ecology. They stretch lands, minerals, forests, animals, water and oil for the benefit of humans beyond what these natural reserves can sustainably provide. To add an illustration: only taking water from a river to drink yourself will leave the river untouched, and in harmony with nature; continuously taking bucket after bucket of water from the river to sell, will ultimately run the river dry. Similarly, going out to fish every once in a while to feed your family will not empty the ocean; but years of overfishing for the international market will push fish to the brink of extinction. As the World Wildlife Fund (2021) states:

> "Catching fish is not inherently bad for the ocean, except for when vessels catch fish faster than stocks can replenish, something called overfishing. The number of overfished stocks globally has tripled in half a century and today fully one-third of the world's assessed fisheries are currently pushed beyond their biological limits, according to the Food and Agriculture Organization of the United Nations."

In other words, nature is full of valuable resources, but modern industrial consumerism ultimately sucks the river of life dry. It's a deadly trend to continue taking resources out of our natural environment faster than they can be replenished.

This insatiable devouring of nature's resources for profit might be less of a problem if humanity would see itself as an extension of nature: its body, our body; its future, our future. Instead, from the modern industrial standpoint, we are separate from and stand above nature. I speculate that this is neither humanity's optimal nor natural state of being: rather, we have separated ourselves from nature through an ongoing process of alienation.

9. Ecological Alienation

Alienation identifies a distinct kind of social grievance that involves a separation between a subject and an object that are considered to belong together (SEP, 2018). The concept of alienation is especially, although not uniquely, associated with the work of Karl Marx. He saw creative, productive labor as the essence of human activity. For Marx, alienation meant the

subjugation of workers by the bourgeois for their labor. In this process, an individual's subjective value becomes inextricably linked to the output of their labor.

Many phenomena that characterize modern industrial society fall into the category of and expand upon Marx's theory of alienation. Alienation is viewed as an umbrella term that includes dimensions of alienation distinguished by Seeman: *powerlessness, normlessness, meaninglessness, social isolation, cultural estrangement*, and *self-estrangement* (Seeman, 1959, 1975). Geyer divided types of alienation into classical and modern: that which has always been inherent to humans on the one hand, and that which has appeared in society after cultural development (Geyer, 2001). The process of alienation occurs on both micro- and macro layers: between the subject and aspects of the objective external environment (e.g., work, labor results, nature, religion, social structures, institutions) and between the self and an unattainable reality of the self (self-alienation).

The subject of alienation is typically an individual or group, while the object is an 'entity' which is not itself a subject (a non-subject object, e.g., religion, or nature), another subject, or the original subject. The alienation between subject and object is generally considered an undesirable separation. Accounts of alienation typically imply that a certain baseline unity or harmony is violated by the separation between subject and object. Alienation always refers to a subjective state of an individual. However, considering that alienation is a subjective state does not imply that its causation is necessarily internal. As Geyer (2001, p. 388) states:

> "It may either be largely brought about by another preexistent subject, 'reified' state of the same individual, as psychoanalytic theory would hold (although admittedly, such a state would ultimately be environment-induced, e.g., by neuroticizing parents, traumatic early-life experiences, etc., but not directly environment-caused in the present) or by factors having an 'objective' existence in the individual's present environment (e.g., the Marxist and non-Marxist approaches regarding alienating work situation)."

My hypothesis is that the psychological roots of ecological destruction are based in alienation. I propose that the alienation that lies behind ecological destruction is twofold. In the first place, it entails the problematic separation of humanity from nature that stems from the modern industrial anthropocentric worldview, which runs contrary to the indigenous ecocentric perspective. Ultimately, the modern industrial worldview poses nature as inferior to humanity: it perceives nature as the *inferior Other*. Alienation is applicable to an understanding of nature

as *Other* in the following way: if humanity is the subject, nature is the object from which humanity is alienated in a way that leads to ecologically destructive behaviour. The modern industrial perspective on the relationship between humanity and nature poses nature as an external, foreign object: humanity being the *Self* (subject), and nature the *inferior Other* (object).

Secondly, I hypothesize that humanity's alienation from nature is related to humanity's individual psychological separation, of which consumptive addiction is a symptom. Thus, the second type of alienation that I suggest lays behind ecological destruction is humanity's self-alienation, which will be addressed in Part III.

10. *Self & Other*

Before we can understand the nature of the *inferior Other,* we need to understand the concepts of *othering* and *otherness. Othering* is the construction and identification of the *Self*, or in-group, and the *Other*, or out-group, by attributing relative inferiority and/or radical alienness to some other/out-group (Brons, 2015). *Otherness* identifies and refers to defining characteristics of the *Other*: who or what is it? How is the *Other* – the opposite, opposing, or outsider – distinct, or different from the *Self* – the one, or group, that is posed as central, the norm, or ingroup – in terms of social norms, social identity, geographical identity, political identity, and/or aesthetics?

The characteristic of *otherness* can be understood as a person's non-conformity to social norms and expectations. *Otherness* is the condition of political exclusion, or marginalization that may be defined by the state, government, or social institutions or groups that hold sociopolitical power. The *Other*, opposing the *Self*, is often seen as out-of-the-ordinary and even inferior from the standpoint of the normative social perspective. Consequently, labeling or designating someone – or something – as *Other* alienates the person or community labeled as such, placing them at the margins of society.

Philosophers such as Hegel, Beauvoir, Sartre and Levinas have offered valuable insights which appeal to the concepts *Self* and *Other*. I will discuss their work to explain the theory of nature as *inferior Other* opposing humanity as *Self*. Hegel introduces us to the concepts of *Self*, *Other* and *otherness*; Beauvoir helps us to understand and critically assess the concept of *inferior Other*; Sartre's concept of *dialectic opposition* deepens this understanding by inviting us to perceive the *Other* as a psychological phenomenon, an entity which exists in dialectic opposition to the *Self*; and Levinas urges us to acknowledge the *Other's* right to existence, and to take ethical responsibility for the *Other*.

10.1 The Inferior Other

The concept of *otherness* can be traced back to Hegel, who introduced the concept of the *Other* as an essential part of self-consciousness. The concept of the *Self* requires the existence of the constitutive *Other* as a complementary entity, which is required for defining the *Self*. The notion of *othering* is rooted in Hegel's dialectic of identification and distantiation in the encounter of the *Self* with an *Other* in Hegel's 'Master-Slave dialectic' (Brons, 2015; Hegel, 2018). The concept spread from post-colonial studies and feminist theories to other areas of social sciences and humanities.

Beauvoir in particular focuses on the inferiority of *otherness*. In Beauvoir's work, she provides a detailed explanation of how the *Other* is (perceived as) inferior. Specifically, she discusses the suppression, oppression and devaluation of women, as opposed to men, throughout history (Beauvoir, 1952). For the purpose of this thesis, I will use her understanding of the *inferior Other* as it offers a clear and thorough understanding about the nature of the relationship between the *Self* and some *inferior Other*, but I will replace the false dichotomy of women/men with humanity/nature.

In Beauvoir's conception of the *inferior Other*, the *Other* involves an opposition between men and women. In her study *The Second Sex*, first published in French in 1949, Beauvoir elucidates the persistent second-class status of women in history. Her philosophy was a reply to Sartre's account of the *Other* in *Being and Nothingness* in which he tries, as he puts it, to "overcome the reef of solipsism" (Sartre, 2020). Beauvoir specifies the relationship of *Self* and *Other* into a distinct opposition: the *Self* implying men and denouncing women as *Other*. She discusses the existential-phenomenological grounds of the forces that subordinate women to men and analyzes why women – as opposed to men – are subject to *othering*. The term *othering* describes the reductive action of labeling and defining an *Other* as a secondary native. The practice of *othering* excludes those who do not fit the norm of the social group, which is a communal version of the *Self*.

Beauvoir discusses and integrates social developments and scientific results in a synthesizing perspective, aimed to grasp the hidden patriarchal undercurrents of her time. Beauvoir concludes that this dynamic will not come to an end by legal or economic changes alone, but that institutions, customs, public opinion and the whole social context need to change in order for men and women to become equal. This inequality and discrepancy between *Self* and *Other* can be transferred to other domains such as the racial, cultural, geographical and social domain.

Generally, we tend to think of *Self/Other* examples purely in the form of human (perceived) differences. Do 'they' have a different gender, skin color, or social class? In terms of this thesis, I propose that we can distinguish yet another distinct *Self/Other* analogy, namely the distinction between humans and nature.

10.2 Nature as the Inferior Other

Beauvoir's explication of the subject of inequality between women and men parallels the inequality of humans and nature: humanity considers itself as the central *Self* and nature as the *inferior Other*. This concept of nature as the *inferior Other* can be better understood by examining Sartre's concept of *dialectic of intersubjectivity*. Sartre applied the *dialectic of intersubjectivity* to describe how the world is changed by the presence of the *Other* (Sartre, 2020). He described that the *Other* appears as an entity which exists in dialectic opposition to the Self, considering the *Other* as a psychological and social phenomenon rather than a radical threat to the existence of the *Self*.

Sartre's concept of *dialectic opposition* allows for potential harmony within false dichotomies such as the one between humanity and nature. In the false dichotomal perspective of humans and nature, the modern industrial perspective does not allow for such harmony as it puts nature in a stark antagonistic opposition to humanity. Treating nature as the *inferior Other*, the modern industrial perspective denies a harmonious dialectic relationship between humans and nature and in doing so silences nature's voice.

In opposition to Sartre, in *Totality and Infinity: An Essay on Exteriority* (1991), Levinas wrote that philosophical traditions reduce the *constitutive Other* to 'an object of consciousness' by not preserving its absolute alterity – i.e., the innate condition of *otherness* by which the *Other* radically transcends the *Self* and the *totality of the Self* in which the *Other* is being placed. Levinas observed that, as a challenge to self-assurance, the existence of the *Other* is a matter of ethics: the ethical priority of the *Other* equals the importance of the ethics of ontology in real life. Ontology focuses on the concepts of being, becoming, existence, and how entities can be understood and categorized. In other words, affirming our own existence by acknowledging the existence of the *Other* implies that they have a right to exist; that *Self* and *Other* can be affected by the existence of an other (*Self*); and that we, as *Self*, have an ethical responsibility toward the *Other*. In the terms of this thesis, this ethical responsibility translates to human responsibility toward nature.

11. Analysis of Ecological Alienation

We established that the modern industrial worldview entails an antagonistic alienation between humanity and nature. It endorses the perspective of nature as *inferior Other*, placing humanity separate from and above nature. In order to reverse this alienation, we need to understand what underlies and perpetuates it. Specifically: what initiated and primed the perpetuation of this separation; and how are the modern industrial worldview and alienation from nature connected to the widespread socially normative tendencies toward an addiction to consumerism? I will first address the question that pertains to the alienation of humanity from nature which is rooted in the influence of rationality and religion upon value systems during the Enlightenment period.

11.1 Enlightenment

The ideological roots of the assumptions that divide humans from nature and state that nature is only valuable insofar as it can be used for the benefit of humanity are longstanding. They can be traced as far back as the Judeo-Christian-Islamic creation story where God gave humans the task of ruling over all life on Earth. This line of thinking experienced a noteworthy revival and expansion during the Age of Reason. At the commencement of the Enlightenment René Descartes argued that the human is the only living being with spirit and mind. Because animals were thought to lack an innate capacity for rationality, they were considered to be inferior to humans. Under such a perspective of humans as the only existent rational animal, the responsibility was logically bestowed upon humanity to govern over and utilize nature – and under certain understandings, to overpower and exploit nature.

Under the influence of Descartes' line of thought, the Enlightenment, thought to have its primary origins in the scientific revolution of the 16th and 17th centuries, put forth values that emphasized the importance of science, technology, human logic and reasoning. With the rise of industrial modernity, Western cultures began to define themselves in terms of these values. During the industrial revolution (~1760-1840) values of economic growth and progress took flight. During the early stages of the industrial revolution, the marriage of science and technology was anticipated to remediate scarcity and human suffering by exploiting nature's resources to meet the everyday needs of growing populations.

The unanticipated consequences of the modern industrial worldview's values regarding the exploitation of nature have become increasingly problematic throughout the progression of the industrial revolution and thereafter. The antagonistic vantage point of the modern industrial worldview considers nature as essentially a "storehouse of resources to be employed for the

satisfaction of ever-increasing material needs by an ever-increasing human population" (Taylor & Segal, 2015, p. 78). From and since the onset of the industrial revolution, progress became equated with the fulfillment of material desires. This has stimulated the value sets necessary to create consumer-oriented habits, tendencies and addictions. These value sets are intrinsically linked to developments that reflect and perpetuate the ideological divide between humans and nature: urbanization and globalization.

11.2 Urbanization

Further compounding human disconnection from nature is the modern lack of physical proximity or exposure to it. Time spent in nature has taken a backseat in many of our lives. It has been replaced with time spent in urban environments where we are overly reliant and utterly dependent upon technology. The intrinsic value of nature runs the risk of remaining unseen, unexperienced and underdeveloped by the modern industrial human as urbanization decreases opportunities for citizens to interact with nature.

Urbanization refers to the proportionate decrease of people living in rural areas due to a relocation to urban areas and the ways in which societies adapt to this change. It can be understood as the process by which cities are formed and grow due to individuals in search of economic opportunities. This pull is particularly strong for young people who, by the modern industrial worldview and its value systems, have been led to believe that cities hold the economic promise of education, career opportunities and financial stability.

By default, the opportunity to connect with nature in cities is limited. Natural space generally exists only in small and scattered amounts. This enables and stimulates humanity's alienation from nature. Remember that moral values are shaped by existing value and belief systems, and influenced by exposure, interaction, and similarity. Similarly, connection and interaction with nature influences the extent to which we value and care for nature (Lumber et al., 2017). Examples might make this concept more tangible. For one, humans generally will not experience a strong emotional bond with strangers. They only start to take a fondness and care for people who they meet more frequently: whether they are family, friends, neighbors, or the baker down the street. Furthermore, regardless of the frequency of contact, you will likely feel more deeply connected to a friend with whom you engage in meaningful and personal conversations – even though you only meet twice a year – than with the baker down the street who you see twice a week. Distinct cultural groups who have little (positive) interaction with one another will be more likely to see one another as foreign and other-than; endorsing sentiments of perceiving the other group as the *(inferior) Other*. In a similar way, humans can

grow emotionally attached to places they are intimately connected with – including nature (Lumber et al., 2017). To illustrate, imagine a large fire destroys the place you grew up in. Your connection to the place of your upbringing will be stronger because of the frequent and prolonged exposure to that location. You would likely feel more troubled about your old neighborhood burning down than about an unfamiliar place with the same fate.

This connects to the theme of this thesis in the following way. Nature connectedness is subjective, formed through individual experiences – but experience with nature in the city is scarce. City dwellers are less likely to frequently and intimately connect to nature as urbanization decreases possibilities for meaningful interaction with it. Processes that formerly required direct and frequent contact with nature – such as gathering or growing food, making clothes, doing laundry – have been exponentially scaled, institutionalized and automatized as a result of the industrial revolution. With the surge of technology, specialization, urbanization and the subsequent arrival of globalization, the need to personally interact with nature for the purpose of basic survival has arrived at a low point in history. This lack of personal interaction with nature strengthens the probability that humans will perceive it as *inferior Other*.

Thus, modern industrial humans become exponentially disconnected from nature due to urbanization. The exposure to and interaction with nature is limited for individuals who live in cities as they generally have restricted personal experience and shared memories with the natural environment. This influences and ultimately decreases their ability to value nature. Furthermore, urbanization limits the experiential knowledge and understanding of the positive effect that spending time in nature can have on humans' health and well-being.

11.2.1 The Positive Effect of Nature on Well-Being

Contemporary psychological research not only shows that time spent in nature increases the amount to which humans' value nature, but also that connection to nature has a positive influence on humans' lives and well-being. The Earth has its own natural charge and humans appear to function better when they are in direct contact with it. Walking barefoot on any natural surface such as soil, sand or grass – also known as 'earthing' or 'grounding' – is now considered a scientifically proven method with numerous remarkable health benefits such as reducing inflammation, increasing antioxidants, and improving sleep (Sokal & Sokal, 2011). Earthing influences physiological processes as it changes the density of negative charge in the electric environment of the human body.

A review published in *Journal of Environmental and Public Health* (Chevalier, Sinatra, Oschman, Sokal & Sokal, 2012) examined a number of studies that emphasize how drawing

electrons from the Earth improves our well-being. It is hypothesized that earthing regulates correct functioning of the endocrine and nervous system through its complex influence on humans' bioelectrical environment and alterations in electrolyte concentrations. I.e., it helps regulate our hormonal balance and stress response. Furthermore, earthing changes the electrical activity in the brain and can reduce stress by normalizing cortisol rhythms, supports immune function, moderates heart rate variability, and improves glucose regulation.

Nature not only works as preventative medicine benefitting our general health. It even influences the way and speed at which we heal. A much cited study published in *Science* in 1984 was the first experimentally controlled study to demonstrate that looking out on nature can speed recovery from surgery, infections and other complaints (Ulrich, 1984). The study reviewed the medical records of patients who were recovering after surgery at a Pennsylvania hospital and discovered that those with a bedside window looking out on green, leafy trees – as opposed to patients whose view was a brick wall – needed significantly less pain medication, healed a day faster on average and had fewer postsurgical complications.

Almost forty years ago this was groundbreaking research. Little was known about the detrimental influence of stress on physical, mental and emotional well-being, nor of the positive impact of destressing, let alone of the nature-based ways to get there. Since then, the evidence suggesting that direct connection to nature, gardens and plants encourages health, healing, pain reduction, relaxation and recovery has been steadily increasing.

Nature's contributions to our well-being are multidimensional: meaning that they can contribute to physical, mental and emotional well-being. These dimensions are highly interconnected. Our thoughts and behaviour activate our neurophysiological networks, which stimulate our endocrine systems; these give rise to sensations and feelings (emotions) that we then interpret; which, in a circular manner, once again promotes thoughts and consequentially guides our behaviour, etc. We are shaped by our past experiences, our upbringing, language, culture, tradition, education, interactions with family, friends, peers – and by our environment.

The Natural Capital Project (NCP, n.d.), part of Stanford University, has portrayed many of these connections between our external environmental and our subjective experience of cognition, emotion, physicality and spirituality. The NCP was recently used to inform an assessment of 775 European cities to understand the potential of nature-based solutions for climate change. Studies show that access to natural spaces increases people's physical activity in cities; and consequently, increases their overall health and well-being. Associated health benefits to activity in nature diverge from relieving stress and reduced cancer risk to promoting metabolism and reduced cardiovascular risk. This adds an important link to physical health,

based on the understanding that our environment guides and affords our actions, and influences cognition, emotion and behaviour.

Abovementioned psychological research affirms the both intuitive and rational reasoning that an organism belongs and prospers in its natural environment. Place a polar bear in the desert, and it will not last long; place a desert snake in the Arctic and it will certainly perish. The difference between polar bear, snakes and humans is that humans are a highly adaptable species. Humans, to a great degree, can adjust to various climates by way of clothing, housing and nutrition. Similarly, humans have adjusted to city life in concrete buildings amidst technology, surrounded by loud noises and little green. But there is a limit even to humanity's adaptability: urbanization comes with a price.

11.2.2 The Impact of City Life and Lack of Nature on Well-Being

City life is associated with many factors that can have a negative effect on our quality of life: increased population density, traffic, fast-paced life, littering, noise pollution, a lack of meaningful relationships and a greater degree of anonymity and isolation. Cities, compared to rural areas, are associated with higher rates of most mental health problems, e.g., depression, anxiety, loneliness, stress and addiction (UDMH, n.d.; WHO, n.d.). There are many interrelated factors behind this urban increase in mental health issues. There may be preexisting risk factors such as poverty, unemployment, previous trauma and immigration; social factors that come with preexisting risk factors, involving physical and psychological segregation, discrimination, and low social cohesion; and environmental factors such as the overload and intensity of stimuli (e.g., noise, disarray, traffic, density, crowding) and lack of natural spaces.

The work of the NCP shows that the presence of and ability to immerse ourselves in nature has a positive effect on our well-being and helps regulate stress; its absence makes us more susceptible to physical, mental, emotional, and spiritual ailments. When we return to the worldview of the harmonic perspective – which endorses the indigenous understanding that not only do we come from, but we *are* nature – the fact that humans thrive when they are in close connection to nature is not remarkable. Humanity comes from living, breathing nature, not from brick and mortar: contemporary science shows us that connecting to our roots natural makes us flourish.

However, the ability to connect with natural spaces becomes increasingly challenging as exponentially larger patches of nature are destroyed for the purpose of building cities or gaining resources. And as the alienation from nature increases, humanity loses touch with its own nature. The mental health issues that arise in urban areas are being stimulated by a culture

that for long – recall the Enlightenment – has placed the mind at the center while stigmatizing emotions and mental health issues. They are amplified by a capitalistic culture that is centered around profit, progress, career, and consistently dismissing the signals of bodies and minds that call for rest.

Fast-paced city life and the pressure to attain excessive wealth encourages humans to stretch their own physical, mental and emotional boundaries. City stimuli leading to overload increase the body's baseline levels of arousal, stress, and Fight-Flight-Freeze reflex (UBMH, 2021). Guided by unnatural lighting and alarm clocks instead of natural light and their own circadian rhythm, humans continue to overrule the natural urges of their body instead of honoring to them. This all contributes to isolation, depression, anxiety and consumptive addiction (discussed in Part III). To add to the complexity, the high-level interconnectivity of today's world has made contemporary consumerism, which relies on individuals' addictive tendencies, a global phenomenon.

11.3 Globalization

This brings us to another development that reflects and perpetuates the ideological divide between humans and nature: globalization. Globalization refers to the growing interdependence of the world's economies, cultures and populations, made possible by cross-border trade in goods and services, technologies, investments, people and information. Globalization effectively made a wide variety of products and services available to individuals worldwide at all times.

This direct and diverse availability is in stark opposition with life as it were some two-hundred years ago. Back then, people relied much more on whatever the local environment had to offer. Modern technological industrialized societies are known for micromanaging, homogeneity and a 24-hour economy: striving for a life lived in a completely controlled environment where everything is readily available all year round. Wherever possible, processes are automatized, optimized and globalized.

As the volumes of production, trade, investment, financing and the numbers of consumers continue to rise in a globalizing economy, the ecologically destructive side-effects of consumption continue to spread exponentially. These global patterns of destruction arise "when states and firms pursuing economic growth, profits, financial stability, and local interests displace the environmental costs of producing, transporting, using and replacing consumer goods" (Dauvergne, 2008, pp. 5-6)

A minority of people in Western society alive today still consciously lives according to the seasons, consuming only what is seasonally and locally available. Instead, we find mangoes – a predominantly South-American fruit, quite impossible to grow in a moderate maritime climate without additional tools – in Dutch supermarkets year-round. Due to globalization, all kinds of habitual and potentially addictive luxuries and conveniences – from (processed) foods and clothing to social media and Netflix shows – are readily available to be consumed at all times.

Arguably, these examples are not always unequivocally and equally destructive. One environmentally suboptimal decision does not equate environmental suicide. However, this changes when billions of people, day after day, engage in environmentally destructive consumptive behaviour. There is a vast difference between more or less conscious consumption that takes the ecology into significant consideration, and the excessive consumption of modern industrial humanity.

Therefore, in the next section I investigate humanity's habitual use of consumption with the purpose of satisfying surface-level desires. I argue that this behaviour can be understood as consumptive addiction, rooted in humanity's alienation from nature and self-alienation.

III. Consumptive Addiction: a Symptom of Self-Alienation

Part I established that there exists a disconnection between humans and nature which influences their perception of and the values they hold toward nature, lead to devaluation of the natural environment. Part II evaluated the psychological, cultural and historical development of this alienation and devaluation of nature, resulting in a general disinclination to make environmentally sustainable choices. Modern society's alienation from nature is further compounded by urbanization and globalization, causing the gap between the modern industrial human and nature to grow even wider.

However, these factors can only partially explain the modern tendency for excessive consumption beyond what is ecologically sustainable or necessary for human survival. In this section I will investigate why and how the average consumer, even those who uphold ecologically-driven values, can still be persuaded to purchase products beyond their needs.

I argue that the modern industrial human, driven by contemporary capitalist values of progress and economic growth, has become estranged from their authentic needs. This brings me to the second psychological root of ecological destruction: self-alienation. I argue that this alienation is expressed in the widespread addictive tendency to consuming, fueled and perpetuated by contemporary capitalism's consumer culture.

12. The Importance of Addressing Self-Alienation

The importance for addressing this alienation, or internal psychological separation from the self, is twofold. Firstly, it is necessary if we want to get to the root of ecological destruction. Humanity's actions are the main cause behind the destruction of nature; and human behaviour is guided by values, needs, desires, thoughts and emotions. In other words, humanity's ecologically destructive consumptive behaviour is guided by psychological phenomena. In this section, I argue that excessive consumptive behaviour is an expression of addiction: a psychosomatic disturbance which is rooted in self-alienation.

Secondly, even if we could somehow address all the ecologically detrimental effects of today's excessive consumerism *externally* – e.g., by effectively re- and upcycling and somehow preventing resource depletion while upholding current levels of producing and consuming – there remains a pressing *internal* problem that needs to be addressed – a psychological problem that can be understood as a form of addiction. By understanding excessive consumption as a state of addiction, I hope to raise awareness about this internal problem we are collectively

facing. In doing so, I urge the average consumer to use their consumer behaviour as a gateway into understanding their authentic needs. Ideally, through the process of deconstructing their consumptive behaviour and addressing their authentic needs, humans can set themselves free from their consumer addictions and simultaneously lower their ecological footprint.

Current psychological and scientific understandings of addiction and stress, when combined with a broader perspective of capitalism and consumerism, set the stage for understanding how excessive consumerism is both the result of and a perpetuating factor behind humans' psychological alienation; thus further contributing to ecological destruction.

13. What is Addiction?

13.1 Characteristics of Addiction

In the past, addiction has been regarded as a mental illness restricted to drug or alcohol abuse for which the addict themselves was to blame – e.g., due to weakness of will, or failure to control their impulses. Nowadays, most health professionals advocate for a more dynamic understanding of addiction. Maté (2018) endorses a holistic approach to understanding and dealing with addiction. He encourages us to see addiction as a multidimensional problem that concerns not only individual responsibility, but also has a range of social and systemic aspects.

Addiction is typified by a sense of urgency, a desperate determination to have one's momentary desires fulfilled immediately: regardless of the consequences to oneself, others or the environment. Addictive tendencies are usually the result of prolonged stress or trauma. The addictive cycle involves inhibited developmental processes whereby the individual has not been provided with the social context necessary for maturation, and with that a matured, healthy way of regulating emotions (Maté, 2018). Instead of consciously tending to and moving through feelings of anger, hurt or exhaustion, the individual finds other ways to cope with uncomfortable feelings, typically by temporarily numbing feelings of sadness, anxiety, loneliness, etc.

Essentially, addictions are a suboptimal attempt to regulate emotions and relieve symptoms of stress and anxiety. Humans often struggle to regulate their internal world – i.e., any physical, emotional and mental discomfort. In such a state of crisis, addictive tendencies seem to be the 'easiest' or 'fastest' route to release tension – and/or the only route one is familiar with. This can lead to addictive consumer habits such as excessive eating or (online) shopping (Maté, 2018; Perez & Esposito, 2010; Hamilton & Denniss, 2005). Consumer addictions can

thus become a way to numb and provide temporary relief from feelings of loneliness, uncertainty, fears and anxiety that modern life entails.

One particular characteristic of addiction is that the object of addiction is pursued regardless of its negative consequences. Addictions can have adverse physical effects, be costly in terms of time and money, strain relationships, and have destructive environmental impact. Nonetheless, addicts are gripped by a desire to consume that overcomes the power of their resistance – because addictive behaviour promises to numb, suppress, or find a quick release from uncomfortable feelings. Because of this promise, regular consumers can grow a strong attachment to or craving for the act of consuming: whether this is the consumption of food, alcohol, shopping, technology, or articles of convenience.

Due to the dependency that is induced by addiction, stress levels increase when receiving the fix is postponed or withdrawn. It can feel as if the craving has a hold on us, that it controls *us* rather than the other way around. This is related to the dopamine system of the brain. Dopamine is a neurotransmitter that is involved in the brain's reward system. Addictions activate the dopamine system of the brain which elicits a rush of satisfaction; granting us with the high of a reward. One can be physically and/or psychologically addicted; either way, all addictions are based in the neurochemistry of the brain.

13.2 Neurophysiological Factors of Addiction

Addiction causes various changes in the brain such as those that involve executive dysfunction, and others that involve anhedonia – the inability to experience joy – in response to withdrawal (Levy, 2018). The drive to ingest or inject addictive drugs is akin to the drive to engage in other addictive behaviours in the sense that they activate the so-called dopamine system. Maté writes that "all addictions – whether to drugs or to nondrug behaviours – share the same brain circuits and brain chemicals. On the biochemical level the purpose of all addictions is to create an altered state in the brain" (Maté, 2018, p.129). Dopamine contributes to addiction through its roles in reinforcement, motivation and self-regulation (Volkow et al., 2017; Maté, 2018). Dysregulation of the dopamine system can result in increased, habitual and inflexible responding.

The dopaminergic neurophysiological mechanism helps explain why many individuals resort to addictive tendencies, such as increasing energy-rich food intake. Food is a quick and direct way to regulate our emotions as certain foods promote the release of dopamine (Volkow et al., 2017; Köster & Mojet, 2015). The motivation to engage in certain addictive behaviour and the behaviour that follows are influenced by past and present experiences. External

reinforcing stimuli (i.e., potentially addictive substances) increase the likelihood and/or strength of the behavioral response to the internal drive. Repeated delivery of a potentially addictive substance or behaviour reinforcer generates conditioned associations between the reinforcer and predicting cues (e.g., the train station one comes to associate with fast food). This is accompanied by downregulated capacity for top-down self-regulation and downregulated dopaminergic response to other incentives, facilitating the emergence of impulsive and compulsive responses to reinforcers (Volkow et al., 2017).

Thus, addiction can be defined as relapsing behaviour that activates the dopaminergic system, aims to satisfy short-term cravings and persists despite its long-term negative consequences. These short-term cravings can be understood more thoroughly through explaining 'authentic' and 'false' needs, and surface-level desires. Distinguishing between these concepts clarifies how modern-day consumerism can be understood as an expression of addiction.

14. On Human Needs and Desires

14.1 Physiological and Psychological Homeostasis and Needs

The human experience of needs and desires are phenomenological expressions of the physical, emotional and neurochemical messages of the body. These needs and desires inform us that something is required to come back to a state of homeostasis. Homeostasis is a term that refers to the physiological and psychological balance that is achieved when one's needs and desires have been met (Matias et al., 2020). Physiological and psychological processes operate conjointly to maximize equilibrium and stability for various psychical and psychological functions. These functions include "cognition, affect, chronic stress and subjective well-being, and also out-of-control conditions such as isolation, boredom, addiction or insomnia that are in need of self-care" (Matias et al., 2020, p. 873).

The acknowledgement of psychological homeostasis and related psychological needs is relatively recent. In 1987, the World Commission on Environment and Development called for sustainable development in its report *Our Common Future*, identifying non-sustainable consumption and production as a root cause for global environmental problems. *Our Common Future* defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". It defined these needs only in terms of basic sustenance and survival: e.g., food, water, energy, housing,

health care and employment. This report was illustrative of a limited view of human needs. It overlooked the fact that human needs transcend purely subsistence-based ones.

Maslow's hierarchy of needs tells us that our core needs are both physical and psychological: they include safety, love, belonging, esteem, and self-actualization (Maslow, 1943). Human needs include feelings of love and belonging; individual, collective, and cultural security; and a sense of personal freedom (Taylor & Segal, 2015). Physiologically, homeostasis can be disrupted by a physical need such as hunger; psychologically, homeostasis can be disrupted by an emotional need such as grief.

The attempt to return to a state of physiological and psychological homeostasis is termed regulation (Matias et al., 2020). Physiological regulation includes the drives of thirst, hunger, and sleep; emotion regulation includes the drives to seek support, movement, or creativity. However, especially in the case of stress and addiction, accurately identifying and self-regulating these needs becomes increasingly more complex.

Emotions and emotional needs are interrelated with the neurophysiological reactions in the body and with the phenomenological experience of the subject. Intense emotions increase cortisol levels, which can elicit an unconscious demand for experiences or substances which stimulate the availability of neurotransmitters that 'make us feel good' – such as dopamine. In periods of stress, humans may specifically desire highly palatable foods, generally rich in sugar and/or fat. In that moment the individual may not be physically hungry, but rather have the psychological, emotional need to be pacified.

14.2 Authentic Needs, False Needs and Surface-Level Desires

The craving for highly palatable food when we are under stress can be understood as a *false need*, or a *surface-level desire* (Maté, 2018). Underneath it lies the need to be pacified: an *authentic need*. Authentic needs can be strictly physical, causing us to feel hunger, thirst, or pain; eliciting the desire for food, water, or physical treatment. Authentic needs can also be emotional, causing us to feel anxiety, sadness or loneliness; signaling that the psyche needs to experience a sense of safety or belonging. Contrary to authentic needs, false needs are the superficial needs and desires that provide temporary relief, but do not address the root cause of our discomfort.

To offer a recent illustration: due to the global pandemic many people experienced a lockdown situation, during which their number and quality of intimate and meaningful in-person interactions was significantly decreased. Individuals in this situation may begin to feel sad and lonely. As a consequence of this, their bodies begin to send messages requesting for

things that should bring back a sense of psychological homeostasis and emotional harmony. Individuals may or may not be aware of their actual needs; either way, the authentic emotional needs of connection and companionship cannot sufficiently be met in this situation. Instead, individuals start craving certain foods more often and become increasingly susceptible to online advertisements. I.e., false needs to extraneously consume arise: desires that *can* be fulfilled and make the person feel immediately, albeit superficially satiated.

15. The Emotional Consumer

15.1 Consumption-Driven Manipulation of Needs and Desires

Contemporary consumerism is built upon this superficial satisfaction. Humans are encouraged to consume by creating the impression of false needs and surface-level desires that speak to their authentic needs and desires. Contemporary consumer businesses do not only sell goods: they sell *feelings.* Even more specifically: they sell the *promise* of feelings. Product value has everything to do with how humans believe something will make them feel (Cialdini, 2007). Going beyond the basic subsistence-based needs of food, water, shelter and safety, humans need little else to keep them alive. However, beyond these basic needs lay the more hidden, immaterial, emotional and spiritual desires: the aversion to pain, and attachment to pleasure; the desire to belong, and fear of being exiled.

Advertising and marketing, the spinning axes of modern consumptive behaviour, address, amplify and manipulate consumers' conscious and subconscious needs and desires. These interrelated industries are dedicated to introducing products to customers and convincing consumers to buy their products. As such, an understanding of consumer buying behaviour must be based on knowledge of human emotions and include the vital influence that emotions have on decision-making. In his book *Descartes' Error* (1995), Antonio Damasio argues that emotion is a necessary component to virtually all decisions. Emotions stem from previous experiences: past experiences and related emotions shape our preferences and affix values to the options we consider.

15.2 Emotions: The Driving Force Behind Behaviour

When analyzing consumer behaviour, it is important to keep in mind that emotions propel us toward action. Successful advertisements specifically address these fundamental emotional drives. Such advertisements play on feelings such as fear of exile and desire to be accepted, fear of aging and desire to stay young, fear of loss, lack or scarcity, desire for comfort,

connection, abundance, and growth (Cialdini, 2007). For example, scarcity has the ability to increase product desirability through the mechanism of perceived value and consumers' desire for uniqueness (Nichols, 2017), but also through the mechanism of fear and perceived threat (Kirk & Rifkin, 2020). When consumers believe a certain product will soon be unavailable to them, they are more likely to buy it. The 'scarcity principle of persuasion', identified by Cialdini (2007), implies that the rarer or more difficult it is to obtain a product, offer, or piece of content, the more valuable it is perceived to be.

This principle could be observed during the Covid-19 pandemic, in which excessive consumerism and hoarding behaviour witnessed a steep increase. This specific type of hoarding behaviour is motivated by 'fear of being caught unprepared' and it is 'heightened following an adverse event due to an increase in risk-aversion' (Kirk & Rifkin, 2020). Through the act of hoarding and consuming, consumers attempt to take back a sense of control and safety. This consumer behaviour is not strictly 'addictive'[2]. as it occurs in a brief period of time during or in the aftermath of an intense event. However, it is a great example of how purchasing behaviour can function as a coping mechanism and why scarcity marketing works: such tactics address humans' deeply rooted fears.

Contemporary consumerism typically encourages people to try to satisfy their emotional and spiritual needs through purchasing things they do not actually need by addressing surface-level needs and desires (Maté, 2018; Hamilton & Deniss, 2005; Cialdini, 2007). It pressures and lures consumers into using a certain product that will magically solve their (emotional) issues. This generally happens as a subconscious process, as many people are not aware of their authentic needs. Thus, the innate drive to feel good, safe, and comfortable – by somehow regaining a sense of control, comfort, pleasure, or relief – can lead consumers to purchase things that they do not actually need. Instead, consumers purchase a new item, gadget, clothing or snack because this satisfies false needs, and because they (are led to) believe that their purchase will make them feel better. Although the high of a new purchase may not last long, the desire to recreate the sensation drives consumers to consume more.

Naturally, not all consumer behaviour will be an expression of the addictive consumptive tendency. However, I argue that much of humans' consumptive behaviour checks the boxes for addiction: and in this light, we should understand consumerism as a potential addiction.

[2] At least not yet: as we learned, addiction has its roots in trauma and can be the result of a prolonged trauma response. I.e., acute hoarding behaviour could grow into addictive consumptive behaviour.

16. Cultural Dimensions of Consumptive Addiction

16.1 Modern Industrial Values: Possession and Productivity over Ecology and Harmony

Contemporary capitalism and consumer culture, which are embedded in the modern industrial worldview, continue to put economic values above ecological values[3]. They can be understood as cultural underpinnings of addiction. Economic gain is reached by motivating consumers to consume, and by stimulating addiction to consumption. The ecologically destructive nature of contemporary capitalism perpetuates and thrives on humans' addictive tendencies to consume: tendencies that oftentimes rest on a subconscious drive to fulfill surface-level needs when authentic needs are not met. are a perfect example of the cultural underpinning of addiction. From the modern industrial perspective, excessive consumption is not perceived or acknowledged as an addiction. Instead, consumption is considered a means to an end – the end goal is to stimulate the economy and to maximize financial gain.

Embedded in the modern industrial value system – which favors power, possession and productivity over ecology, harmony and rest – modern societies uphold high standards of achievement and social norms. The modern industrial worldview motivates humans to deviate from their own nature and to deny their actual needs. When such values become internalized, someone who values progress, productivity and material possession over equilibrium, harmony and rest will be inclined to overrule their authentic needs in order to attain the things that line up with this value system. It requires laborers to overextend themselves and ask more than is physically, mentally and emotionally sustainable. The underlying drives behind these motivations may be rooted in coping and survival mechanisms: the need for safety and belonging and the fear of scarcity and exile, expressed in consumptive desire. It is sustained by the belief that a higher degree of monetary or material possessions equals safety and survivability: "The capitalist economy absolutizes survival. It is not concerned with the *good* life. It is sustained by the illusion that more capital produces more life, which means a greater capacity for living" (Han, 1971, p. 50).

Illustrative of these capitalistic tendencies toward relentless achievement is burnout, a condition that results from chronic (workplace) stress (Han, 1971; WHO, 2019). Burnout has not been recognized and labelled until relatively recently, which amplifies its connection to

[3] The latest IPCC report urges humanity to change their ways and international agreements are made to reduce CO^2 emissions (Luttikhuis, 2021). Thus far however, governments nor companies address the importance of lowering production and consumption levels, and instead offer relatively superficial solutions that should reduce emissions.

modern industrial culture and its related value system. Prevalence – and recognition – of burnout symptoms has gradually, and steeply, increased over the past decades..

16.2 Culture of Self-Alienation

The abovesaid shows how modern industrial culture dictates that individuals bypass their authentic needs. What logically follows when humans are out of touch with their authentic needs, is an alienation from the self. This form of alienation is an internal disconnection: an inability to recognize, or a disinclination to act upon, their authentic needs. Concurrently, self-alienation leads to a disinclination to act in concordance with consciously endorsed values. An individual who suffers from the effects of stress or trauma does not have access to the full capacity of their cognitive resources. In this state, cognitive functioning is dominated by the limbic system: i.e., by the emotional brain. The emotional brain demands immediate relief, a sense of safety and calming of the nervous system: even if this relief comes through the act of addictive behaviour with negative consequences. Compounding efforts of satisfying the *shallow self* with consumptive behaviour leads one further away from the *deeper self*, becoming increasingly self-alienated. The subsequent inability of humans to deal with physical, mental and emotional needs in a long-term healthy manner paves the way for addiction.

The modern industrial worldview that values progress over rest, hierarchy over harmony, and materialism over sustainability, leads individuals to neglect and disavow their physiological and psychological needs in order to 'keep up with the Joneses'. The tensions resulting from this make people more susceptible to excessive consumptive behaviour – a vulnerability which modern industrial ventures in turn are able to wield to their favor. Given the compounding cultural influences that increase the prevalence of additive tendencies, I suggest that 'cultural' should be added to the summation of factors that play a role in addiction offered by Maté: "Addiction has biological, chemical, neurological, psychological, medical, emotional, social, political, economic and spiritual underpinnings – and perhaps others I haven't thought about" (2018, p. 130).

17. Understanding Excessive Consumption as Addiction

17.1 Expanding the Colloquial Understanding of Addiction

The colloquial understanding of addiction could be something along the lines of "mental and/or physical dependence on a substance such as alcohol or (other type of) drugs". As I have pointed out earlier, this definition is far too limiting for what addiction actually is. To understand how

modern-day consumerism can be understood as a state of addiction, I suggest that this narrow colloquial understanding must be expanded in at least four ways.

1. Addiction is not a binary property, but a continuum. We need to understand addiction as a spectrum we all fall on somewhere.
2. Humans can not only be addicted to material ingestible or injectable substances, but also to behaviours – such as exercise, shopping, social media, or gaming – and the (idea of) purchasing or possession of non-ingestible/injectable substances. Addiction has less to do with the exact substance or behaviour, and more with the accompanying psychological states of craving, attachment and dependency.
3. Underneath any addiction lay psychological emotional needs and desires such as validation, belonging, safety, meaning and control. Addiction is a symptom signaling that certain fundamental authentic physical, emotional or spiritual needs have not been met. When authentic needs are not met, this allows for false needs for addictive substances, habits or objects to arise.
4. Whether or not something is perceived or recognized as an addiction is colored by society and culture. Cultural normativity explains why some addictions are more socially accepted than others, and sometimes go completely unrecognized.

Taking addiction in this broader sense, we can say that many, if not all modern industrialized humans are to some degree addicts – even if they are high-functioning, and even if their addiction of choice is socially accepted. Excessive consumerism is a non-dichotomous, socially accepted form of addiction with various expressions – e.g., consumption of food, clothing, technology, services, etc. – aimed at soothing or suppressing authentic needs through the satisfying of surface-level desires. Modern industrial capitalistic ventures play into these authentic needs through addressing and encouraging surface-level desires for material, virtual or monetary possessions. Consumptive behaviour is influenced and motivated by advertisement, marketing and social media: all of which afford comparison of self and other, and address humans' conscious and subconscious fears and desires.

17.2 Global Addiction, Affluenza, Consumptive Addiction

Understanding excessive consumerism as a collective state of addiction can also be found in the work of Pérez and Esposito: "…the dominant consumerist ethos associated with market capitalism and modern life is essentially a culture of addiction, one that encourages an

unrestrained appetite for personal and material satisfaction." (2010, p. 85). They argue that "insatiable consumption has become a *global addiction* whose treatment mandates a paradigmatic shift that breaks completely from deep-seated values, habits, and structures associated with neoliberal capitalism" (2010, p. 84).

Similar ideas can be found in the work of Hamilton & Denniss (2005), who referred to the worldwide compulsion to consume as 'affluenza': an addictive condition whereby true needs are substituted with addictive consumeristic behaviours. It can also be found in Taylor & Segal (2015, p. 80): "Arguably the individual who is not seeking to fill his or her inner void with consumer goods makes for a relatively poor consumer in terms of growth economics."

…and in the work of Maté (2018, pp. 256-258):

> "… oil is only one example among many: consider soul-, body- or nature-destroying addictions to consumer goods, fast food, sugar cereals, television programs and glossy publications devoted to celebrity gossip … Like the hardcore addict's pursuit of drugs, much of our economic and cultural life caters to people's craving to escape mental and emotional distress."

Like any other addiction, over-consuming can be an expression of individual psychological discomfort and dysfunctional systems that do not optimally support the members of society nor the natural environment. Consumerism can be a way for people to regulate their emotions and a means to cope with stress; and as such, through repeated activation of the dopaminergic system, become addictive. Without addressing these addictive tendencies the average modern industrial consumer may continue to live a life of material abundance, but simultaneously one of emotional and spiritual poverty. Added to that, the material abundance of the consumer depletes natural resources and destroys the planet.

Despite logic and available knowledge about what is good for us or for the planet, humans' drive toward exorbitant consumption persists. Excessive consumptive behaviour is reinforced and perpetuated, regardless of dire ecological consequences, through the psychological mechanism of addiction. A critic of this hypothesis might argue that consumptive addiction and ecologically destructive consumer behaviour is always a matter of values. For example, in some cases a self-proclaimed environmentally-conscious consumer might simply value their comfort or pleasure more than the environment. Or, critics might say, a self-proclaimed environmentally-conscious consumer might only claim to uphold ecological values

in performing socially desirable behaviour: i.e., they value their reputation more than they value the environment. Another option is that the consumer is unaware of their actual values.

Although these are all valid possible scenarios, I maintain my stance that the power of consumptive addiction goes beyond personal values. In the next section I highlight two psychological characteristics of addiction that are especially likely to override ecologically-driven values, and thus pave the way for consumptive addiction: hyper-focus on the self and hyper-focus on the present.

18. Specific Characteristics of Addiction Responsible for Ecologically Destructive Consumptive Behaviour: Self-Centeredness and Immediacy

Addiction is rooted in alienation from the self: it arises when humans become disconnected from their authentic needs and subsequently unable to provide for these authentic needs in a healthy and supportive way. This disconnection from the self is paradoxically related to a hyper-focus on the self. On the one hand, this paradox involves a disconnection from authentic needs – and thus from what I henceforth call the *authentic* or *deeper* s*elf*. On the other hand, it involves a hyper-focus on false needs and surface-level desires – i.e., a hyper-focus on what I henceforth call the *shallow* s*elf*. I take the inspiration for this terminology from the *deep ecology* approach, where the notion of 'shallow' indicates the focus on treating the symptoms of environmental degradation rather than the causes.

The notion of 'deep' in no way discounts the necessity of addressing these symptoms, but includes a broader, more long-term position that demands that we take the pervasiveness, severity, depth and root causes of environmental problems into equal consideration. With regard to the self, 'shallow' refers to a limited understanding of the self and the focus on pacifying the surface-level symptoms of one's authentic needs rather than addressing the causes behind them. 'Deeper' refers to a broader understanding and perspective of the self, its needs, desires and origin, and what is required for adequate fulfillment. The concept of 'depth' urges us to move toward a deeper level of asking questions aimed at finding more adequate and sustainable solutions to support our physical, mental and emotional well-being.

The *deeper self* is capable of self-reflection, effective self-regulation, and altruistic and environmentally-driven behaviour. The *shallow self* is egocentric, driven by subconscious needs and surface-level desires. Hyper-focus on the *shallow self* goes hand in hand with a hyper-focus on the present. A hyper-focus on the present is characterized by an exaggerated sense of immediacy and an inability to look beyond the present moment. These manifestations of hyper-

focus can be understood as the personal desire for immediate gratification that is characteristic of an addictive state.

Conscious (planned) and subconscious (impulsive) purchase patterns are mainly driven by, respectively, practical (utilitarian) and emotional (hedonic) incentives (Haidt, 2001; Ahmed et al., 2020). The conscious decision-making process is strongly correlated to prefrontal cortex activation: the part of the brain associated with planning and logic. However, when humans are stressed or anxious their decision-making process falls back on their limbic system – the emotional brain (Haidt, 2001; Starcke & Brand, 2012; Youssef et al., 2012).

For an addict, relieving feelings of stress and anxiety is of paramount importance. Ironically, not yet being in possession of the addictive substance or object of choice can be an experience of stress in and of itself (Maté, 2018). Rooted in coping and survival mechanisms, getting your 'fix' can quite literally feel like a matter of life and death. The experience of intense emotions such as anxiety, scarcity, danger, pressure, etc. *decreases* activation in the 'thinking brain' (prefrontal cortex) and *increases* activation of the 'emotional brain' (limbic system). The limbic system is geared toward finding the fastest route to safety and survival, comfort and relief: when activated, it limits humans' ability to make decisions that comply with their conscious, rational values. In these moments, the limbic system overrules the prefrontal cortex, demanding immediate self-comforting behaviour and emotional self-regulation as soon as possible.

The addict finds itself in an irrational, egocentric, hypervigilant state in which they are disinclined to make decisions that reach beyond this immediate self-gratification – the *shallow self* demands to be appeased. As such, consumptive addiction allows for easy persuasion: consumers can be coaxed into making purchases by addressing their subconscious mind. Clever advertisements appeal to emotions, promising relief or improvement through purchase. Values that one usually adheres to in their healthy state of mind fall to the wayside: what matters is instant relief and the numbing of feelings – echoes of authentic needs – that bring unease and discomfort. This implies that, even if an individual rightfully claims that they have environmentally-driven values, these environmentally-driven values could be overruled in a moment of stress or overload. In that moment, the individual does not act from their logical, conscious brain, but from their emotional, more primal brain. This process translates to moral reasoning and behaviour: individuals who experience stress are less likely to demonstrate utilitarian behaviour (Starcke & Brand, 2012; Youssef et al., 2012).

In other words, stress and addiction impact our moral compass. The addicted state is characterized by self-centeredness and immediacy. As a result of this hyper-focus on the

shallow self and on immediate gratification in the present moment – as opposed to a wider perspective of existence in being and time – the importance of the long-term perspective of future generations and the planet as a whole become more or less inaccessible.

19. Consumption as Visible Stress Response during Covid-19

A recent example that illustrates the hypothesis that I hitherto put forth is embedded in the worldwide stress response related to the current global pandemic. Trauma occurs when we feel helpless and unable to regulate our emotions during a stressful experience. The current Covid-19 pandemic is the global epitome of a traumatic situation. Humanity has been collectively confronted with the potential and/or actual death and disease of themselves and their loved ones. People report having trouble sleeping, difficulty concentrating, being more short-tempered than usual, feeling hopeless, depressed, exhausted or lethargic. The World Health Organization (WHO Europe, 2021) states that:

> "As the coronavirus pandemic rapidly sweeps across the world, it is inducing a considerable degree of fear, worry and concern in the population at large and among certain groups in particular, such as older adults, care providers and people with underlying health conditions.
>
> In public mental health terms, the main psychological impact to date is elevated rates of stress or anxiety. But as new measures and impacts are introduced – especially quarantine and its effects on many people's usual activities, routines or livelihoods – levels of loneliness, depression, harmful alcohol and drug use, and self-harm or suicidal behaviour are also expected to rise."

People across the globe experience a long-term low-level Fight-Flight-Freeze response as they move in and out of a state of anxiety related to Covid-19. Added to the already strenuous time, mental health issues have been increasing as for many people their usual means of releasing tension in a healthy way – e.g., being outdoors, social contact, exercise – has been greatly limited due to Covid-19 measures such as social distancing and lockdowns.

What do humans resort to when their access to healthy coping mechanisms is limited? Recent literature and research point toward the theme of this chapter as an answer to this question: humans consume to cope. In the context of Covid-19, subconscious impulse buying behaviour has significantly increased across the world (Addo et al., 2020; Wiranata & Hananto,

2020). Dutch publishing companies even reported a paper shortage due to the increase in online orders and required packaging (Hermus & Van Putten, 2021). Thus, the present project of understanding the effects of stress, trauma, addiction, and specifically the widespread addiction to consuming, is particularly urgent at this time.

IIII. Conclusion

> "Only when the last tree has been cut down, the last fish been caught, and the last stream poisoned, will we realize we cannot eat money."
>
> – Cree Indian Prophecy (GoodReads, n.d.)

This thesis aimed to identify and analyze the psychological roots of ecologically destructive consumptive behaviour. By analyzing human behaviour through a philosophical and psychological lens, this thesis has shown how alienation from nature and self-alienation – expressed in addictive tendencies – are compounding factors of ecological destruction.

Humanity's excessive consumptive behaviour is the primary cause of ecological destruction. As long as the demand for complex modern products remains as is, even a circular economy centered around recycling and reusing of resources is not sufficient to ensure a sustainable future. Circular-economic thinking surpasses underlying dilemmas. It ensures a habitual loop of over-consuming and over-producing, without examining how and why humans keep craving more.

This dissertation began with the assumption that human behaviour is guided by psychological phenomena: thoughts, beliefs, values, needs and desires. Specifically, it addressed the question: which psychological driving forces motivate individuals to consume beyond their needs, irrespective of their awareness of the disastrous environmental impact of excessive consumptive behaviour?

A philosophical movement that addresses similar concerns is *deep ecology*. The *deep ecology* approach holds an ecocentric attitude similar to indigenous worldviews. This theory suggests that humanity's potential to overcome ecological challenges rests on the awareness and enactment of environmentally-driven values. A critique of the *deep ecology* approach is that not everyone will endorse environmental values, nor feel motivated to display environmentally-driven behaviour. Instead, a transvaluation of nature and its exploitation for excessive human consumption is required.

The presence of environmental values is crucial for sustainability-driven behaviour. Pro-environmental behaviour is rooted in environmental values. Alternatively, ecologically destructive consumptive behaviour can be driven by a lack of such values. I argued that the collective lack of environmental values is rooted in humanity's ongoing alienation from nature,

the first psychological root of ecological destruction; and that this ecological alienation stems from the modern industrial human's anthropocentric worldview and its related value systems.

Different worldviews hold different claims regarding the relationship between humans and nature. Precolonial, indigenous and Eastern worldviews generally claim that nature is intrinsically valuable. From such 'harmonic perspectives', humanity and the rest of nature are considered to be of more or less equal value and viewed as an integrative whole. The antagonist position is characterized by the modern industrial worldview, rooted in Enlightenment values. The modern industrial worldview developed a value system based on power, progress and economic growth as opposed to harmony, nature and sustainability. Progress became equated with the fulfillment of material desires – exploitation of nature became a justified means to an end. This has stimulated the value sets necessary to create consumer-oriented habits and addictions. These value sets are intrinsically linked to developments that reflect and perpetuate the ideological divide between humans and nature: urbanization and globalization.

Humans can have an emotional attachment to their natural environment, especially when this interaction is frequent and meaningful. Connection and interaction with nature influences the extent to which we value and care for nature. Unfortunately, personal interaction with nature has significantly decreased with the rise of technology, specialization, urbanization and globalization. Urbanization and globalization have deprived many individuals of the need, and opportunity, to intimately interact with nature. The modern lack of physical proximity or exposure to nature further alienates humans from nature and encourages them to view it as an *inferior Other.* The understanding of nature as *inferior Other* runs parallel to the concept of ecological alienation, in which humanity is the subject (*Self*) and nature is the object (*Other*).

The progression of alienation from and devaluation of nature results in a disinclination to make environmentally sustainable or regenerative choices; it increases the likelihood of environmentally destructive consumptive behaviour. However, environmental values alone are not sufficient to ensure sustainability-driven behaviour. The presence of environmental values can be overruled by needs and desires and, related to this, by the effects of trauma and stress. Trauma and stress disconnect humans from their authentic needs and their consciously endorsed values. The deeper needs underneath the surface-level desires oftentimes cease to be addressed – emotional needs such as belonging, safety and comfort, which are called to our attention by feelings such as stress, anxiety, depression and loneliness.

Trauma fundamentally means a disconnection from self and is a precursor to addiction. As such, addiction is an expression of and perpetuating factor behind self-alienation. The effects of trauma, stress and addiction influence human behaviour and decision-making, affecting the

extent to which humans have the capacity to act in accordance with their values. Regardless of the ecologically destructive consequences of excessive consumption, the average consumer refuses to give up their consumptive behaviour. Therefore, I suggest that humanity's excessive producing-and-consuming is driven by a state of addiction whereby individuals substitute their authentic physical, mental and emotional needs with consumption.

Two psychological characteristics of addiction in particular that might override ecologically-driven values, and thus pave the way for ecologically destructive consumerism, are self-centeredness and immediacy. Self-centeredness and immediacy decrease the capacity to make decisions that are beneficial for long-term individual *and* planetary sustainability. Addiction is characterized by such a hyper-focus on the self and on the present, which are expressed in the urge for immediate self-gratification. As a result, humans tend to the *shallow self* and its superficial needs while disregarding the *deeper self* and its authentic needs. The *deeper self* is capable of self-reflection, effective self-regulation and environmentally-driven behaviour. The *shallow self* is egocentric, driven by subconscious needs and surface-level desires. As such, consumptive addiction allows for easy persuasion: clever advertisements address the subconscious mind and appeal to emotions, promising stress relief and superior quality of life.

Thus, I argued that the second psychological root of ecologically destructive consumptive behaviour is self-alienation. Self-alienation decreases the inclination to act according to conscious values by allowing for addictive coping mechanisms to take over. Consequentially, even individuals who endorse environmentally-driven values may not act upon them. As such, ecologically destructive consumptive addiction can be understood as an expression of, perpetuating force behind, and reflection of both ecological alienation and self-alienation.

Resolution of these challenges requires a fundamental reexamination and transvaluation of the relationships between humanity and nature, economic growth, individual and planetary well-being. It requires a holistic approach in which we consider ecological and human well-being together in unison. This includes a reexamination of humanity's concept and understanding of the self, and how to tend to our needs without excluding the needs of planet. The psychological foundations that guide and underlie our values, needs, desires, decision-making and behaviour need to be uprooted and redefined. In order to counter the trend of endless consumption, humans' should reconsider the interrelatedness of humanity and nature, consumptive addiction and ecological destruction. In other words, I suggest that resolution of these challenges requires

considering a holistic, ecocentric perspective in which humanity and nature are seen not as separate entities, but as interrelated parts of a whole.

Moving forward, questions remain: how can we change? Who is responsible? Some might say governments and corporations are primary contributors that should instigate change. Although the magnitude of their contribution is undeniable, not all methods of remediation exist on this plateau. The economy relies on supply-and-demand: decreased demand necessitates less supply. We need to change our behaviour top-down *and* bottom-up.

When the goal is behaviour change, conscious awareness and full engagement of one's personal resources are necessary preconditions: the subconscious needs to be made conscious. Thus, my aim with this thesis has been to address the average consumer, their responsibility, and their potential for change – both on a planetary and a personal scale. I have wanted to illuminate that individuals can *utilize* their consumptive behaviour as a gateway into acquiring a deeper understanding about themselves and the subconscious, psychological forces that drive them.

Simultaneously, this dissertation is an encouragement for humanity to include nature into their understanding of the *Self* while resituating humanity within the all-encompassing sphere of nature. The disconnection from nature is more than just a mental or metaphysical thought experiment. It is a lived experience that has a direct impact on our health and well-being. Ironically, what is necessary to counter ecologically destructive addictive consumptive behaviour might be exactly what runs the risk of being indefinitely destroyed because of it: humanity's reconnection with nature. Identifying where urban nature is missing while actively engaging in adding and restoring nature in cities could provide individuals with valuable opportunities to improve their physical, mental, and emotional well-being.

Humans who live in close connection to the restorative potential of nature, and are capable of recognizing and honoring their authentic needs, might not as easily resort to ecologically destructive consumptive behaviour used as coping mechanism. Someone who is connected to their *deeper self* will be less focused on satisfying the *shallow self*, and less easily swayed by alluring advertisement. Reconnecting to nature and to our own nature – our *deeper self* – supports us in making the necessary change of considering a broader, long-term perspective that includes ourselves, nature, and future generations.

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