# ON THE WAY TO "ECOLOGICAL CIRCUMSPECTION": A REVALUATION OF THE HEIDEGGERIAN CONCEPTION OF TECHNOLOGY

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## ABSTRACT

# ON THE WAY TO "ECOLOGICAL CIRCUMSPECTION": A REVALUATION OF THE HEIDEGGERIAN CONCEPTION OF TECHNOLOGY

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This study aims to create awareness regarding climate change by reexamining the Heideggerian understanding of technology and offering the concept of "ecological circumspection," which is inspired by Martin Heidegger's terminology and articulated for the first time here. Since the onset of the Industrial Revolution in the second half of the 18<sup>th</sup> century, technology has emerged as a significant driving force in human life. Even though technology has enabled us to achieve remarkable progress in various domains of life, it has also initiated environmental problems along with overpopulation and the depletion of natural resources. Today, our planet is confronted with a significant ecological threat, namely climate change, which has been predominantly instigated by technological progress. This indicates that in the near future, as a human species, we may experience a variety of ecological disasters that imperil our ability to survive on Earth. At this crucial juncture, Heidegger's ideas are unique for comprehending the essence of modern technology and confronting the current climate crisis. In this specific setting, an ontological inquiry into the Western metaphysical tradition, which has contributed to the escalation of the present ecological problems, is necessary. By truly grasping the underpinnings of the contemporary conception of "being," we may recall our organic connection to all

beings, which are the essential elements of our planet, and cultivate an ecological circumspection regarding how they naturally unfold.

**Keywords:** climate change, climate crisis, ecological circumspection, Martin Heidegger, technology

# "EKOLOJİK FARKINDALIK" YOLUNDA: HEİDEGGERCİ TEKNOLOJİ ANLAYIŞININ YENİDEN YORUMLANMASI

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Bu tez çalışması, iklim değişikliğiyle ilgili farkındalık yaratmak adına Heideggerci teknoloji anlayışını yeniden yorumlayıp Martin Heidegger'in terminolojisinden ilham alınarak ilk kez burada telaffuz edilen "ekolojik farkındalık" kavramını tanıtmayı amaçlamaktadır. 18. yüzyılın ikinci yarısında başlayan Sanayi Devrimi'nden bu yana teknoloji, insan yaşamının önemli bir bileşeni hâline geldi. Hiç şüphe yok ki teknolojik gelişmeler sayesinde günümüzde, geçmişe nazaran görece daha konforlu hayatlar yaşıyoruz. Lakin, teknolojileşmeye paralel aşırı nüfus artışı ve doğal kaynakların fütursuzca tüketimi beraberinde iklim değişikliği olarak adlandırılan ciddi bir ekolojik tehdidi gündeme getirdi. İnsanlık tarihinde bir dönüm noktası olarak nitelendirilebileceğimiz bu durum bize, yakın gelecekte, insan türü olarak dünya üzerindeki varlığımızı tehlikeye atabilecek çeşitli ekolojik felaketlerle karşı karşıya kalabileceğimizi gösteriyor. Gelinen bu kritik noktada, çağdaş teknolojinin özünü anlayıp mevcut iklim kriziyle etkin bir şekilde mücadele edebilmek için Heidegger'in özgün fikirlerini referans alarak ekolojik sorunların tırmanmasına katkıda bulunan Batı metafizik geleneğinin ontolojik gelişimini daha iyi analiz edebiliriz. Böylece, modern "varlık" anlayışımızı objektif bir şekilde irdeleyerek gezegenimizin temel unsurları olan tüm canlı ve cansız varlıklarla olan organik

bağımızı hatırlayabilir ve bunların doğal tezahürlerine dair ekolojik farkındalık geliştirebiliriz.

Anahtar Kelimeler: iklim değişikliği, iklim krizi, ekolojik farkındalık, Martin Heidegger, teknoloji

To my mother, father, Gökalp, Defne, and Güneş Uğur...

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# LIST OF ABBREVIATIONS

COP	: Conference of the Parties
EU	: European Union
GISS	: Goddard Institute for Space Studies
IED	: Institute of Entrepreneurship Development
IEP	: The Institute for Economics and Peace
IISD	: International Institute for Sustainable Development
IPCC	: The Intergovernmental Panel on Climate Change
Mtoe	: Million tons of oil equivalent
NASA	: National Aeronautics and Space Administration
NDCs	: Nationally determined contributions
UN	: United Nations
UNFCCC	: The United Nations Framework Convention on Climate Change

## **CHAPTER 1**

## **INTRODUCTION**

It is indisputable that technology exerts a profound impact on our lives in the current era. Whether we realize it or not, it shapes our mode of existence in numerous ways. When this is the case, have we ever thought about what technology actually is and how it affects us? The initial step in this inquiry would be to conduct an etymological analysis that leads us back to the time of the "first philosophers." The term "technology" originates from the ancient Greek word "tekhnologia," which is a combination of the following two words: "technē," meaning "art and craft," and "logos," meaning "word and speech." The word tekhnologia, in this context, refers to the "systematic treatment of an art, craft, or technique." Technology was first used to define applied arts in the early 17<sup>th</sup> century when it first appeared in English but it is now used in a broader sense. The term is defined by Encyclopedia Britannica (n.d.) as follows: "The application of scientific knowledge to the practical aims of human life, or, as it is sometimes phrased, to the change and manipulation of the human environment." In other words, technology includes procedures, systems, and devices that result from the application of scientific knowledge to practical purposes in human life. Before proceeding, I should note that, from here on out, I will occasionally use the terms "late modernity" or "contemporary (era, life, etc.)" to refer to today's global and technologically highly developed world as a continuation of modernity rather than as an element of the next era known as postmodernity.

Technology has been an essential part of human existence ever since the invention of the first primitive tools. Through the course of human history, it has evolved exponentially. One might say that the main era of technology started with the beginning of the Industrial Revolution, which roughly corresponds to the second half of the 18<sup>th</sup> century. Today, the spectrum of technology is so wide that it permeates almost all spheres of life. Although technology has considerably improved the

standard of living, it has recently led to a serious environmental concern, namely climate change, which challenges the sustainability of life on our planet. According to Goddard Institute for Space Studies (GISS) researchers at NASA (n.d.), who have analyzed global temperatures continuously since 1880, there has been a recorded increase of at least 1.1°C in the average global temperature on Earth. By 2040, it is anticipated to rise by another 1.5°C.

Why should we bother if the global temperature fluctuates by one or two degrees? The truth is that even a one-degree shift has far-reaching implications for the heat of the world's oceans, atmosphere, and land masses. For instance, a temperature drop of approximately one to two degrees was sufficient to trigger the beginning of the "Little Ice Age" on Earth, which was a period of substantial cooling that impacted the Northern Hemisphere between the 14<sup>th</sup> and 19<sup>th</sup> centuries. Global warming and the resulting climate change have already led to more extreme weather conditions as well as an elevation in sea levels. It is predicted to have even more disastrous consequences in the upcoming years. While natural variability plays a small role, overwhelming evidence suggests that human activities brought about by the intensive use of technology, particularly emissions of heat-trapping greenhouse gases, are primarily responsible for the warming of our planet. The reality of climate change, substantiated by our leading-edge scientific knowledge, urges us to take immediate action.

At this critical juncture, I truly think that the genuine insights of Martin Heidegger, who can be regarded as one of the most influential philosophers of the 20<sup>th</sup> century and also human history, are crucial for understanding the character of contemporary technology and addressing the current climate crisis. Particularly in his later period, Heidegger endeavored to elucidate the essence of technology and its profound impact on human life. Given that Heidegger lived through a period of major transformation, this is likely not coincidental. He was born in 1889 in the mountain village of Messkirch in southern Germany. This was a religious, rural area that had changed little over the centuries. His parents were small farmers and craftsmen. As stated by Ringer (1990), in the 1900s, Germany was undergoing a stunning transformation into a major industrial force. Since the Middle Ages, the traditional rural Germany in which Heidegger grew up had remained essentially unchanged.

Then, it was replaced by modern towns with electricity, cars, and heavy industry. Before Heidegger's eyes, every aspect of Western society was urbanizing. This dramatic change should have prompted him to reflect upon the very nature of this happening. After becoming a prominent figure in German academia, Heidegger often spent his vacations in the Black Forest highlands in an Alpine cottage. The pristine nature of this timeless world likely served as a source of inspiration for him to develop his ideas regarding the transformative nature of modern technology.

Considering what has been expressed up to this point, in my thesis, I will reevaluate the Heideggerian understanding of technology and argue that some of Heidegger's ideas can be employed to develop an ecological awareness for dealing with the current ecological problems that have been caused by our technological status quo. My argument is that we need to build on Heidegger's critique of modern technology and further develop the way that Heidegger's insights have already been used in ecological philosophy by elaborating on the notion of "ecological circumspection," which is inspired by Heidegger's terminology and uttered anew in this thesis. This argument's hidden premise is that Heidegger's later philosophy incorporates naturalistic elements, which can be seen in his poetic writing style and exemplification of natural motifs such as rivers, mountains, forests, etc. Throughout this study, my primary objective will be to draw attention to the potential environmental threats due to climate change and then scrutinize the theoretical and practical implications of Heideggerian philosophy to confront them. With that in mind, I will try to expand upon the foundations laid by those who have written on the relationship between Heidegger and environmentalism in the past, while at the same time bringing this particular connection up to date concerning the current environmental crisis that has been triggered by human activities. In that regard, I wish to demonstrate that the current dilemma warrants a fresh voice in the environmentalist movement, and the uniqueness of Heidegger's ideas offers us the ability to perform an inquiry of the metaphysical tradition that has contributed to the escalation of the present ecological problems.

Within the scope of this primary theme, after the introduction, in the second chapter, I will examine technology as an emerging environmental issue to show that, as humanity, right now, we are standing at a crossroads. This suggests that climate change, an anthropogenic phenomenon caused mainly by technological advancement, especially since the beginning of the Industrial Revolution, has lately had a critical impact on both natural ecosystems and their inhabitants. The emergence of climate refugees serves as a tangible example of how climate change may potentially disrupt the world's socioeconomic structure. Although there appears to be a global consensus on the steps to be taken to reduce the negative effects of climate change, international and national politics can hinder the implementation of agreed-upon policies. In the third chapter, which is the densest part of this study, I will first analyze Heidegger's conception of technology primarily based on his later works to shed light on our conception of and relationship with technology. This attempt requires a meticulous analysis of the origins of our technological paradigm, which has led us to see everything as available resources to be utilized efficiently. Afterward, I will scrutinize the concept of "supreme danger," which depicts the covert and pervasive nature of contemporary technology as it eventually turns human beings into calculable units. Followingly, the nihilistic aspect of technological thinking, inherited from Friedrich Nietzsche's ideas of "will to power" and "eternal recurrence," will be mentioned. The last section of the third chapter is about the notion of "saving power," which is articulated by Heidegger in his famous essay, "The Question Concerning Technology," and calls attention to the inherent potential of liberation from the chains of technological thinking. In the fourth chapter, I will first outline the reasons why Heidegger is a key figure in ecological philosophy. Then, I will introduce eco-phenomenology and link some of Heidegger's ideas with this relatively new field of study. After that, I shall look into the prospect of a metaphysical transformation from a Heideggerian perspective. Lastly, I will consult some key notions of Heidegger, such as "be-ing, event, letting things be, freedom, and dwelling," to demonstrate how we can think of a "new beginning" in a theoretical sense. In the fifth chapter, after discussing the term "ecological circumspection," I will explicate the concept of the "consciousness of cosmic history" as a pivotal element of the mental attitude called "meditative thinking," which is advocated by Heidegger himself. Next, I will attempt to describe the intrinsic characteristics of historical epochs and examine the conditions that may precipitate a paradigmatic transition. While doing that, I will examine art as an

alternative domain of truth and a possible counteraction to technological dominion. Lastly, I will discuss the notions of "sustainable architecture" and "ecotechnology," which can be taken as practical implications of ecological circumspection. I will conclude this study with my final remarks in the last chapter.

Throughout this academic pursuit, my principal focus will be to articulate the pressing necessity for a shift in our ontological commitment to create a harmonious relationship with nature, as we have reached a certain critical threshold in terms of ecological sustainability. I contend that only a minority of individuals and cultures have ecologically sustainable lifestyles in their own spaces in this day and age, which means that most contemporary people perceive life from a technological viewpoint that takes nature as a resource to be exploited to its fullest extent. This human condition of unthoughtfulness regarding our distorted perception of the natural environment should be the main symptom of what Heidegger refers to as "forgetfulness of being [Seinsvergessenheit]." He notes,

The question concerning our basic relations to nature, our knowledge of nature as such, our rule over nature, is not a question of natural science, but this question is itself in question in the question of whether and how we are still addressed by what is as such within the whole. (1967, p. 51)

That is to say, how we relate to nature depends on what we think it means for anything to exist at all, including us. Here, the fundamental question is: "What is the right way for us to interact with the natural world of which we are an elemental part?" I believe this question would provoke a more in-depth analysis of the issues that ultimately matter to us. In that direction, Heidegger's ideas can be used as a springboard to develop a robust environmental attitude which can provide a foundation upon which to construct a prudent environmental attitude. The priority of Heidegger's philosophical quest is to respond to questions that arise from the pressing concerns of the world within which we live (Fried, 2013). Given that humans have "facticity," i.e., they are situated in a particular place at a particular time in a particular context (Heidegger, 1962), the questions that arise depend on this place, time, and context. Heidegger would argue that profound questions emerge in situations of breakdown. To borrow one of his best-known examples in *Being and Time*, we do not realize that the hammer we are using is unfit for the task at hand

until we run into a problem (Heidegger, 1962). My claim is that climate change is the type of breakdown that necessitates a careful evaluation of our current situation and an immediate set of responses.

In this line of thought, I contend that Heidegger's philosophy does not only offer an analysis of the conceptual foundations of Western thought that have allowed environmental devastation; it also provides us with a lens through which to comprehend the crisis of climate change in terms of the human-nature relationship. Since Heidegger rejects normative ethics, he does not instruct as to whether natural entities merit moral consideration or not. However, his outlook gives us competent intellectual tools to build a strong basis for ecological circumspection by attentively discerning the forgotten elements of the Western metaphysical tradition. In his famous 1966 interview with *Der Spiegel*, Heidegger (1981) reaffirms that the technological world must be superseded in the Hegelian sense, that is, incorporated at a higher level, not pushed aside. These hints presented by him show us that the issue with technology is much more complex than we initially think. Hence, I shall persist in posing questions throughout this study, not to obtain precise answers but rather to maintain a vigilant spirit, as Heidegger promotes.

#### **CHAPTER 2**

#### **TECHNOLOGY AS AN EMERGING ENVIRONMENTAL CONCERN**

Since the Industrial Revolution, technology has become a major force in human life. While it is evident that technology has given us the ability to excel in many spheres, this has not come without a cost. Today, our planet faces a serious environmental threat, i.e., climate change, that has been caused mainly by the advancement of technology. This just means that, in the near future, we may encounter various ecological catastrophes that could threaten our ability to live on Earth. In the following section, I will attempt to depict the history of the Industrial Revolution to shed light on the circumstances that have led to the climate change in terms of technology and energy consumption.

#### 2.1. The Historical Trajectory of the Industrial Revolution

The term "Industrial Revolution" refers to a historical era that began in Great Britain in the second half of the 18<sup>th</sup> century and was characterized by an acceleration of technological advancement. This acceleration in the processes of technology not only resulted in the development of new tools and machines but also encompassed practical enhancements across diverse domains that impact labor, production, and resource utilization. The Industrial Revolution was most notable for its integration of technology and industry. Pivotal inventions and breakthroughs have played a crucial role in shaping nearly all spheres of human activity within the framework of industrialization, hence giving rise to numerous new sectors.

In order to chart the rapid progression of technology over the last 250 years, I will refer to a 2019 article published by the Institute of Entrepreneurship Development (IED) that details the phases of the Industrial Revolution. The first phase of the Industrial Revolution began in 1760s, during which significant changes occurred as a

result of mechanization, which led to the gradual substitution of industry for agriculture as the primary driver of the societal economy. In addition to the massive coal mining, the advent of the steam engine provided a new source of energy that sped up the production of railroads and stimulated the economy. The second phase of the Industrial Revolution started in the 1870s when new energy sources like electricity, gas, and oil began to emerge as a result of technological advances in various industries. The promise of the internal combustion engine, developed as a result of this revolution, began to be realized. The development of new forms of transportation, such as the automobile and the airplane, and new means of communication, such as the telegraph and the telephone, were other significant developments during this phase. The 1970s marked the beginning of the third phase of the Industrial Revolution, which was characterized by the use of nuclear power as a viable source of energy. During this period, with the development of computers, electronics, and telecommunications, new fields such as robotics, biotechnology and space exploration became possible. Nowadays, the term "Industry 4.0" is used to refer to the highly technologized state of the 21<sup>st</sup> century with the proliferation of computer technologies and the internet, which have revolutionized almost all aspects of contemporary life.

It can be argued that the Industrial Revolution's historical development has led to a perspective shift that prioritizes the extensive use of natural resources at all costs to meet the unprecedented demand that human society has created. In this context, from 1800 to 2000, global energy consumption rose from 305 Mtoe (million tons of oil equivalent) to 9,242 Mtoe, an increase of approximately 30 times (Martin-Amouroux, 2022). This dramatic shift vividly demonstrates the exponential growth in energy use during the course of the Industrial Revolution.

#### **2.2.** Climate Change

At this point, it would be useful to mention how technology causes climate change. The answer is very straightforward: The amount of energy we use and, consequently, the amount of greenhouse gases like carbon dioxide, methane, nitrous oxide, and fluorinated gases (hydrofluorocarbon, nitrogen trifluoride, etc.) that we emit are determined by the technology we employ. Global warming and, thus, climate change occur as a result of the increased emission of hazardous gases that have a warming effect on the planet. Excessive emissions of greenhouse gases act as a blanket stretched around the world, trapping the sun's heat and causing global temperatures to rise. The extensive use of fossil fuels to procure more and more energy can be given as a specific example of the generation of the above-mentioned harmful gases. European Union (n.d.) reports that carbon dioxide emissions resulting from human activities are the primary driver of global warming. By 2020, its atmospheric concentration has increased by 48 percent from its pre-industrial (before 1750) level. It is also estimated that natural factors, including variations in solar radiation and volcanic activity, have contributed a negligible amount, specifically within the range of plus or minus 0.1°C, to the overall warming observed between the years 1890 and 2010.

The Intergovernmental Panel on Climate Change (IPCC, 2014), which is a reputable institution on climate change, states that "warming of the climate system is unequivocal" and that "human influence on the climate system is clear" (p. 2). Alternatively stated, there is no longer any significant disagreement among the scientific authorities over the existence of climate change, and it is evident that climate change is a result of human activity. The IPCC (2014) has identified several far-reaching and extremely damaging effects of climate change. Global warming, thawing glaciers, rising sea levels, acidification of the oceans, reduced agricultural yields, and an increase in the frequency and severity of extreme weather events such as wildfires, heat waves, floods, and droughts are among the ones that have already occurred. According to the IPCC (2014), if we continue to act in the same manner, the situation will almost surely get worse in the next few years: "Continued emission of greenhouse gases will cause further warming and long-lasting changes in all components of the climate system, increasing the likelihood of severe, pervasive, and irreversible impacts for people and ecosystems" (p. 8).

In recent years, there has been a rise in the quantity of research suggesting that the deterioration and destruction of ecosystems caused by humans make the situation more vulnerable. Along with overpopulation, unsustainable natural resource use,

deforestation, biodiversity loss, and their interactions harm ecosystems, societies, communities, and individuals' ability to adapt to climate change. Global warming of at least 1.5°C by 2040 will result in unavoidable increases in multiple climate hazards, posing numerous risks to ecosystems and humans (IPCC, 2022).

#### 2.3. Anthropocene

Scientists have dubbed the time beginning in the late 1800s the "Anthropocene," or "the epoch of humans," because of the profound impact humans have had on the environment. Scientist Paul J. Crutzen (2002), who coined the term "Anthropocene," calls the human race "a major environmental force" (p. 23). In collaboration with his associates, he provides the following explanation of the Anthropocene:

Although Earth has undergone many periods of significant environmental change, the planet's environment has been unusually stable for the past 10,000 years. This period of stability—known to geologists as the Holocene—has seen human civilizations arise, develop and thrive. Such stability may now be under threat. Since the Industrial Revolution, a new era has arisen, the Anthropocene, in which human actions have become the main driver of global environmental change. (Rockström et al., 2009, p. 472)

In the same vein, let us examine what scientists and philosophers have said recently. Among the world's leading climate change experts, Lonnie G. Thompson (2010) puts it bluntly: "Global warming poses a clear and present danger to civilization" (p. 153); Dale Jamieson (1992), one of the first professional philosophers to study climate change, contends that there needs to be a philosophical shift in how we address this problem; Martin Schönfeld (2012), a modern philosopher who focuses on climate issues, makes a case that, owing to climate change, "culture as we know it must be reinvented, identity as such must be redefined, and reality in its entire environmental gestalt must be reappraised" (p. 73). In addition to climate change, the essential resources on which humans rely for survival are diminishing at an alarming rate. Consequently, prominent scientists have raised questions regarding the enduring sustainability of human societies as they are currently understood. James Hansen (2006), a highly distinguished climatologist, declares that

Life will survive, but it will do so on a transformed planet. For all foreseeable human generations, it will be a far more desolate world than the one in which

civilization developed and flourished during the past several thousand years. (p. 12).

These are neither apocalyptic nor exaggerated rants; rather, they show the sobering truth of our predicament. In a nutshell, climate change is an indication of a breakdown in the human-nature relationship, which requires a fresh outlook.

## 2.4. Climate Refugees

Lately, the term "climate refugees" has been used to describe people who have been forced to be displaced from their customary habitats, either temporarily or permanently, due to the adverse consequences of climate change. This suggests that climate change is more than simply a hazard to ecosystems; it is also a potential threat that can unsettle the social and economic structure of the world. Having stated, "Climate change can enhance the competition for resources like water, food, and grazing lands, and that competition can trigger conflict," Antonio Guterres (2009), secretary-general of the United Nations (UN), highlights the multidimensional effects of climate change. According to a World Bank report from 2021, the climate problem could force more than 200 million people to relocate within their countries by 2050. The Institute for Economics and Peace (IEP) estimated in 2020 that the projected number of individuals who are susceptible to displacement by the year 2050 will exceed 1 billion.

The rise in temperatures linked to climate change results in the melting of glaciers, which leads to floods that submerge the land, rendering it uninhabitable. The National Geographic article, which was published in 2023 and titled "Environmental Refugee," captures various aspects of the issue of climate refugees by pointing out some probable future scenarios. For instance, half of Bangladesh's population resides in areas that are less than five meters above sea level. Scientists estimate that by 2050, climate change-related floods are expected to have wiped off 17 percent of Bangladesh's current landmass. Henceforth, the loss of land in Bangladesh may result in as many as 20 million climate refugees. Another example is the Maldives, which is an island nation in the Indian Ocean. The Maldives is possibly the most vulnerable country to sea level rise, which may lead to the displacement of thousands

of its inhabitants due to alterations in both ecological and economic conditions. Rising sea levels might cause the Maldives' 1,200 islands to drown within the next few decades. This might necessitate the relocation of almost all Maldivians. Nowadays, the Maldives' political leaders are collaborating with their counterparts in Australia, India, and Sri Lanka to strategize an evacuation plan if the country becomes unlivable.

While coastal areas are threatened by rising sea levels, droughts brought on by climate change might result in climate refugees inland. Due to the inability to cultivate crops on their lands, people might have to relocate to alternative locations to sustain their livelihoods. For example, the Gobi Desert in East Asia grows by more than 3,600 square kilometers each year. Farmers and traders in the Gobi region move to China's densely populated cities as the desert engulfs the meadows. As the effects of climate change become more strongly felt in the years to come, this migration surge is likely to intensify. These predictions relating to different parts of the world demonstrate that climate change is a multifaceted global issue that needs to be approached prudently to mitigate its negative effects.

#### 2.5. Climate Negotiations

In recent decades, governments have made collective commitments to halt the acceleration of global warming. We may track the development of "global climate action" on the official website of the European Union (n.d.), according to which the Montreal Protocol, enacted in 1987, was a historic environmental agreement that served as a template for subsequent climate change diplomacy. The treaty was eventually ratified by every nation worldwide, mandating their cessation of the production of gases that have detrimental effects on the ozone layer. In 2017, the Institute for Sustainable Development (IISD) reported that the protocol has effectively achieved a reduction of approximately 99 percent in terms of the presence of these gases that contribute to ozone depletion.

The United Nations Framework Convention on Climate Change (UNFCCC) was the first global convention to expressly address climate change. It was signed in 1992

and ratified by 197 countries. Within that organization, the establishment of an annual forum, referred to as the Conference of the Parties (COP), was initiated to facilitate international deliberations focused on the stabilization of greenhouse gas concentrations in the Earth's atmosphere. These gatherings eventually resulted in the Kyoto Protocol and the Paris Agreement. The Kyoto Protocol, which was signed in 1997 and subsequently enforced in 2005, represents a milestone as the first climate agreement to possess legally binding provisions. It obliged associated parties to cut emissions to a certain degree and established a system for monitoring progress. The Paris Agreement, enacted in 2015, stands as the most notable international climate accord thus far, whose primary objective is to compel all nations to establish commitments for reducing greenhouse gas emissions. Governments have established objectives, referred to as nationally determined contributions (NDCs), to mitigate the rise in global temperature. The Paris Agreement also seeks to achieve global net-zero emissions, wherein the quantity of greenhouse gases released is equivalent to the quantity removed from the atmosphere, commonly referred to as achieving *climate* neutrality or carbon neutrality. These agreements acknowledge the involvement of various parties, such as municipalities, civil society, and the private sector, in tackling the issue of climate change. These parties are invited to scale up their efforts and support actions to reduce emissions, build resilience, and decrease vulnerability against climate change.

However, engagement in an international discourse on climate change might serve as a political move. For instance, the United States withdrew from the Paris Agreement by the decision of former President Donald Trump in November 2019 due to the unfair economic burden placed on American workers and businesses by the United States' commitments under the agreement (U.S. Department of State). But the new President Joe Biden reasserted the United States' dedication to the agreement in January 2021, shortly after assuming office (U.S. Department of State). The corresponding proclamation emphasized that climate change can never be considered a peripheral issue within policy discussions. In addition to that, local politics that supposedly aim to combat climate change can deviate from their primary courses, as in the case of Turkey. In 2021, the name of the "Ministry of Environment and Urbanization" was changed to "Ministry of Environment and Urbanization and Climate Change." Yet, the incidents of deforestation performed with the approval of the ministry itself in various places such as Artvin (2022) and Muğla (2023) for building hydroelectric power plants and mines show how problematic and paradoxical it can be for a government to implement the proper actions against climate change in their own territories.

#### 2.6. A Point of No Return

When the aforementioned concerns are taken into account, it is fair to say that we have reached a critical juncture in terms of our relationship with nature. A juncture of this kind demands a decision that has to be made immediately regarding the most effective route to move forward. We do not have the luxury of dismissing these scientific and socioeconomic analyses as nothing more than idle speculation. In reality, we frequently choose to disregard ominous news and doomsday predictions, or, when that is not possible and when they are literally in our backyards, we rush around trying to figure out how to deal with our problems and get rid of them as quickly and cheaply as possible. But this time, we have to figure out a "proper" solution, which primarily requires a collective transformation of consciousness.

In his late-1930s work, *Contributions to Philosophy*, Heidegger (2012) questions "whether nature is debased into an exploitable domain of calculation and organization" (p. 72) or whether we can adopt a new perspective regarding the human-nature relationship. For him, this is one of the most important decisions humans have to make in modernity. If we bring this notice up to date, we may say that climate change compels us to choose a path ahead: Do we keep on exploiting nature in line with the calculating and ordering doctrines of natural science and technology, or can we establish a new way to relate to nature that is based on a "circumspective" attitude? While dealing with these options, we can engage in Heidegger's conception of modern technology, which has valuable insights regarding our subject matter.

#### **CHAPTER 3**

#### HEIDEGGER'S CONCEPTION OF MODERN TECHNOLOGY

Heidegger's ideas on technology are scattered across his corpus but are most clearly expressed in his essay, "The Question Concerning Technology." In his analysis of technology, Heidegger (1977b) initially questions the essence of technology. However, by the middle of the essay, it becomes quite apparent that not only the essence of technology but also the essence of humankind is being questioned. Following this interpretation of Heidegger, the question of technology is inextricably linked with the essence of human beings since technology and humanity cannot be understood independently. Heidegger (1977b) continues his discussion by distinguishing between mere technology and the essence of technology. When we talk about mere technology, we refer to all the tools and instruments developed to make our lives easier and more comfortable in the material sense. On the other hand, the essence of technology is the structure of the technological world and our existence within it. Heidegger (1977b) maintains that modern technology has evolved into a pursuit that enforces unlocking, transforming, storing, distributing, and switching about; accordingly turning everything into orderable units in the form of standing-reserve [Bestand]. In the following section, I will try to explicate the origins and nature of this proclivity.

# 3.1. The Roots and Nature of Technological Thinking

It can be maintained that the current understanding of reality, to a certain extent, has its origins in the Western metaphysical tradition. On this ground, a look back at the history of Western metaphysics is necessary to grasp our present comprehension of reality, according to which all entities are seen as standing-reserve. In this case, we need to trace the Western conception of being, as this very metaphysical lineage is crucial to understand how we perceive our relationship with nature. Therefore, we need to first figure out how nature has come to be seen as a homogeneous grid of energy that could be used to the fullest extent possible. To accomplish this, I will examine closely Heidegger's history of being [*Seinsgeschichte*] and adhere to Heidegger's (2003) thesis that "the desolation of the earth [stems] from metaphysics" (p. 86). In search of the metaphysical underpinnings of our current understanding of being, we need to comprehend the ontological commitments of prior epochs. For this reason, it is required to take an intellectual journey back in time to the foundations upon which our present conception is built. Before that, I will briefly mention the notions of physis (sometimes spelled *phusis*) and aletheia to point out two central ideas of my discussion.

## 3.1.1. Two Sides of Physis: The Presencing and The Present

Heidegger (2014) defines physis as "what emerges from itself (for example, the emergence, the blossoming, of a rose), the unfolding that opens itself up, the cominginto-appearance in such unfolding, and holding itself and persisting in appearance in short, the emerging-abiding sway" (p. 15). With Heidegger's definition in mind, it is crucial to take into account that there are at least two facets to physis: the presencing and the present. The process of emerging into presence is physis, but the entity that emerges and endures as a result of this process is also physis.

Before moving on to the next topic, Heidegger's ontological distinction between beings and being—what is present and presencing itself—and the notion of "world" need to be clarified. *Das Seiende* means "that which is" in German and is commonly translated as "beings." Any entity, real or fictional, can be considered a being following this definition. The more challenging term in Heidegger's philosophy is "being," which is the translation of the German word *Sein*. Heidegger (1991) notes that "the tiny word 'is' names the being of beings" (p. 125). Following Richard Polt (2006), I will equate the being of beings with "the multifarious ways in which beings as such can have significance for us or make a difference to us" (p. 58). That is to say, "the significance of beings" can be taken as a crude definition of the term "being." While recognizing their ultimate interdependence, the distinction between beings and being should be maintained.

In Being and Time, Heidegger's (1962) definition of "world" is "that 'wherein' a factical Dasein as such can be said to 'live'" (p. 93). As a reminder, in Heidegger's philosophy, "Dasein" refers to "human existence," which roughly means "being there." In this context, Dasein is capable of questioning and comprehending its own being as well as projecting itself toward the future. According to Hubert Dreyfus (1991), Heidegger's concept of the world does not refer to the entirety of things that exist on the planet. Rather, it has more to do with a web of significant relationships in which a person resides in a certain domain. If we think about the world in this way, it is easy to see how people can live in different worlds, even if they live next door to each other. Naturally, different worlds emerge at different historical epochs; that is, being shows up in ways that are ontologically and culturally specific to the people of those epochs. Considering this, we may say, for instance, that although they all cultivate the same crop, the ancient Greek, the medieval, and the modern-day farmers live in separate worlds because the manners in which entities manifest themselves in each epoch are distinct from one another. The crop may have been viewed as a gift from the goddess of agriculture by the ancient Greek farmer; the medieval farmer would credit God with the creation of the crop; and the modern-day farmer may view the harvest primarily through the lens of its monetary worth. Even if the crop is the same, meaning that it has more or less the same biological structure, it is viewed differently in different epochs for the simple reason that people in these epochs exist in different worlds and give different meanings to entities.

# 3.1.2. Truth as "Aletheia"

The term "aletheia," which means "unconcealedness," has its roots in ancient Greek philosophy and plays a crucial role in Heidegger's fundamental ontology. By connecting aletheia to the idea of truth, Heidegger drew fresh attention to this concept. Viewed through a Heideggerian lens, truth as aletheia is unconcealment, the revealing or bringing of what was previously hidden into the open. It emphasizes coming from non-presence into presence by presencing. Thus, the truth of something becomes its very presencing, as in the case of physis, which indicates a swift transition from concealment to unconcealment. So, how does aletheia relate to our subject matter? The answer lies in the following quote: "Technology is a mode of revealing. Technology comes to presence [in the West] in the realm where revealing and unconcealment take place, where aletheia, truth, happens" (Heidegger, 1977b, p. 19). Taking this remark into consideration, we may affirm that technology is neither a mere instrument, nor can it be viewed solely from an anthropological standpoint, rather, it is an interactive domain where truth continually and plainly shows itself. This implies that every time we employ technology, whether conceptually or practically, we directly intervene in the process of creating our own reality.

# **3.1.3.** Three Phases of Being: The Ancient Greek, The Medieval, and The Modern

While mentioning Heidegger's understanding of metaphysics, Charles Guignon (1993) states,

Since the first beginning [in ancient Greece] has predefined all subsequent ways of experiencing things, it follows that the historically shifting interpretations of being in our culture have all been permutations on the understanding that took shape at the dawn of our civilization. (p. 16)

Guignon's remark shows that ancient Greek thought patterns have a significant impact on our current understanding of being. Keeping this in mind, based on Heidegger's discourse, it can be maintained that there are three major epochs of being: the ancient Greek, the medieval, and the modern. So, we will start with the ancient Greek epoch and work our way forward to examine the evolution of the notion of being in terms of two aspects of physis, namely the presencing and the present, which were previously introduced.

Heidegger (2012) contends that in the Ancient Greek era, pre-Socratic philosophers such as Heraclitus and Parmenides were able to briefly obtain insight into the being of beings in the sense that they questioned the presencing aspect of beings, but later philosophers, who focused on enduring presence rather than presencing, quickly obscured this insight. In other words, since Plato, philosophy has concentrated on what pertains to presence while disregarding the act of presencing itself. Henceforth, "the essence of presencing, and with it the distinction between presencing and what is present, remains forgotten" (Heidegger, 1975, p. 50). In the Roman era, the notion

of physis became "natura," which denotes all present natural entities. For Heidegger (2014), "with this Latin translation, the original content of the Greek word phusis is already thrust aside, the authentic philosophical naming power of the Greek word is destroyed" (p. 15).

However, a new age of being, which is called the Medieval era, began when Christianity spread throughout the Roman Empire. During this nearly 1,000-year period, beings came to be considered completely dependent on God's creation: "being is the creation of the creator. The supreme being (summon ens) is the Creator himself" (Heidegger, 1987). It may be argued that in the Medieval era, the present aspect of physis was heavily emphasized, as all beings were considered in a hierarchical structure as the creation of a constantly present God. Therefore, the presencing aspect of physis was put aside. According to Heidegger (2012), Plato's Theory of Forms, in conjunction with the Aristotelian concept of being as a dynamic presence or production, offers the metaphysical foundation for the understanding of being that prevailed in the medieval epoch. The Platonic split between the extrasensory realm of forms and the sensory world of particular beings has established a clear-cut distinction between heaven and earth that is essential to Christianity. The heavenly, eternal realm of God has been substituted for the realm of eternal forms, and this realm has been commonly regarded as having greater significance than the sensory world. Besides, from a Christian point of view, humans are akin to all other natural beings in that they are all creatures of God, but they also differ from natural beings in that they are created in God's image. This depiction shows that, in the medieval era, humans were thought to be in nature but not of nature.

Heidegger (1977a) recognizes René Descartes as the originator of contemporary philosophy in line with popular convention in the history of Western philosophy: "The whole of modern metaphysics taken together … maintains itself within the interpretation of what it is to be and of truth that was prepared by Descartes" (p. 127). In the modern period, which was initiated by Descartes, individuals have begun to see reality as a representation of the subject rather than as something created by God. Correspondingly, the concept of "what it means to be a subject" has taken on an entirely new meaning as only human subjects have been considered to be "real"

subjects. A supremacy has been placed on the self by Descartes' undertaking, which has positioned it as the most reliable source of knowledge. With the Cartesian turn, the medieval notion that humans are special compared to all other natural entities has been elevated to a new level by the assumption that humans are the sole subjects. Therefore, modern science has accepted the basic Cartesian metaphysical framework of viewing the self as a privileged subject attempting to gain clear and distinct knowledge of natural objects, which are acknowledged as extended entities in space and time. In doing so, rather than providing a glimpse into the nature of things themselves, understanding nature has become a representation by the authoritative measures of science. Since modern science has considered only what could be clearly and distinctly calculated by the human subject to be worthy of measurement, reality has come to be seen as the coherence of the motion of material bodies and nothing else. Thus, nature has been viewed as a set of bodies whose configurations could be known definitively through calculation. To wit, over the course of Western philosophical history, the notion of physis, which was "the originally emergent of the violent forces of what holds sway ... now becomes reduced to the demonstrable visibility of present-at-hand things" (Heidegger, 2014, p. 69). This indicates that in the modern era, the notion of a constantly present God has been replaced by a privileged subject whose presence cannot be doubted. Thus, everything in nature has become the objects of the subjects' representations and measurements, which means that natural beings are now at the subject's disposal, i.e., present, ready, and available. In this respect, one might argue that, just as in the case of the Medieval period, the present aspect of physis rather than its presencing aspect has been extensively stressed in the modern age, which has arguably led to a rigid conception of nature.

#### 3.1.4. Enframing as an Endless Sequence of Challenges

The challenges [Herausfordern] that technology enables are what have led to the revelation of beings in terms of standing-reserve. Challenges, in this context, do not refer to difficulties or problems but rather to specific types of demands placed on both the human being and the human being's surrounding world. This endless loop of gathering and disclosing that unceasingly ensures its continuity is thus what Heidegger refers to as "enframing" [Gestell]. Heidegger's (1977b) illustration of

agriculture sheds light on this aspect of the discussion. Traditional farming does not necessarily challenge the land: seeds are sown, fields are tilled, and the land's natural processes produce crops. Indeed, the farmer's labor orders the land, but the land is not challenged to perform anything outside of its natural growth and rest cycles. However, in a challenging disclosing, the farmer's ordering of the land takes on a new dimension. The land is no longer something that the farmer works with; rather, it is something that the farmer works upon, employing the most modern machinery, genetically modified crops, and pesticides to get the highest possible yield and avoid squandering any of the potential offered by the land. Hence, the earth faces a challenge because of the requirement to maximize all its available potential and avoid wasting any of it. The modern farmer pushes the boundaries of the earth and possibly even goes further. The issue is not necessarily the type of procedures that are carried out on the land; farming continues to consist of planting, tending, and harvesting crops. What changes is how farmers relate to the land, and as a result, they demand an increasing amount of what the land has to provide. In this particular case, the relationship between the farmer and the earth is what ultimately makes it possible for the earth to be exploited. This change in relationship becomes more noticeable if we further suppose that oil or a valuable earth metal is discovered beneath this agricultural area. This time, the earth itself is no longer seen as the earth but rather as a repository for the resource and a barrier to its extraction. As the soil moves to the back of the picture, its nature as a complex organic entity disappears. In both cases, beings are not considered to have the *arch* $\bar{e}$  of their movement (physis) contained within themselves, but rather they are understood to have significance outside themselves in terms of their instrumentality. Considering that instrumentality is conceived of from a human standpoint, humans then take on the role of orderers of what is revealed in the natural environment.

#### 3.1.5. Technē as a Way of Poiēsis

At this stage, we need to emphasize some key concepts such as *technē* and *poiēsis* which can help us understand the nuance between the dynamics of previous and modern technologies. At the beginning of "The Question Concerning Technology," through a brief discussion about causality, Heidegger (1977b) presents the terms

"technē" and "poiēsis." Technē, from which "technology" is derived etymologically, is an ancient Greek word that literally means "a true art, craft, or discipline." Similar to technē, poiēsis originates from the ancient Greek and denotes the act of "making or formation." It is worth noting that the term "poetry" shares the same etymological origin with poiēsis.

Heidegger (1977b) claims that techne is associated with "the activities and skills of the craftsman, but also for the arts of the mind and the fine arts" (p. 13). Although acknowledging that this is the common interpretation of the term, Heidegger stresses that this is not the essence of technē: "What is decisive in techne does not lie at all in making and manipulating nor in the using of means, but rather in the ... revealing. It is as revealing, and not as manufacturing, that techne is a bringing-forth" (p. 13). Heidegger (1977b) further contends that the craftsman who builds a house or a ship brings forth a new perspective on how the materials are comprehended and disclosed. In this specific sense, technē can be regarded as a mode of poiēsis, i.e., bringing-forth, since it brings forth a new understanding of entities. As already indicated, poiēsis is production, but not in the sense of modern technology. It is more akin to the bringing-forth of physis. Recall that one aspect of physis is emerging into presence. Heidegger (1977b) states, "Through bringing-forth, the growing things of nature as well as whatever is completed through the crafts and the arts come at any given time to their appearance" (p. 11). Considering this citation, technē can be seen as an aspect of aletheia, or truth; it is not merely the act of making an artifact; rather, it is a mode of poiesis that organizes materials and aesthetic ideas under *telos*. What is crucial in technē is bringing-forth which is an artistic way of revealing entities. In this manner of thinking, modern technology, which is predicated upon the concept of enframing, blurs the process of bringing-forth. The following subsection aims to juxtapose earlier and modern technologies through the lens of carpet weaving. I am sure this illustration will effectively demonstrate the distinctions between the underlying presuppositions of technē and enframing.

## 3.1.5.1. Carpet Weaving vs. Carpet Manufacturing

Carpet weaving is one of the prominent traditional crafts of Turkey. Still, in various regions, people continue to practice this tradition for cultural or economic reasons.

Carpet weaving is a highly laborious and intricate process. During specific seasons, men shear the wool, which is used to weave the carpets while women gather the dye materials. Then, the men build the carpet loom, a horizontal frame that sits on the floor, while the women spin wool into yarn. The hues are derived from indigo, walnut skin, lettuce leaf, and pomegranate skin, among others. The women create the patterns, choose the colors, and weave the carpet, which depicts scenes from their rural lives. While working, they chant traditional songs. The carpet is made by tying strands of colored yarn onto a wool base. As a final step, the edges are sewn, extra wool is burned off to make the patterns stand out, and the carpet is thoroughly cleaned. All of these skills are taught orally and through practice. In this regard, carpet weaving is intimately linked to the way of life as well as the traditions of the communities that are involved. There is another side to this narrative, as carpet manufacturing has become a big industry in Turkey, especially since the 1990s with the development of technology (Turkish Ministry of Trade, 2022). Carpet producers now employ cutting-edge technologies in large-scale production facilities. Thousands of people from many fields of expertise participate in the production process. Machine-made carpets are manufactured much more rapidly than handwoven ones, resulting in lower production costs. It is also possible to quickly adopt the most recent fashion trends by using advanced graphic design software and tools.

It can be well said that a woman who performed traditional carpet weaving, say five hundred years ago in the 1500s, had a completely different experience than the one who works in a carpet factory today. The former is an integral part of a process of poiēsis which could also be thought of in terms of technē. By using solely natural ingredients and relatively primitive tools, she brings forth the carpet through a strenuous procedure. As a member of her community, she reflects her genuine feelings and cultural heritage into the unique designs and their applications. The hand-woven carpets are generally used for domestic furnishing and embellishment, and special carpets are intricately crafted for medical therapy, nuptial celebrations, the arrival of a newborn, expressions of grief, and religious devotions. On the other hand, the latter, say, a graphic designer who works in a carpet production facility today in the same location, just deals with some specific tasks within her responsibility. She probably does not know much about the whole process. Her primary motive would be to complete the job requirements based on strict deadlines and receive her salary on schedule. Except for the moments of existential crises or deep reflections, she does not even recognize that she is a replaceable component of a massive workflow, the main incentive of which is to achieve a flexible and efficient ordering of resources to maximize profit. Overall, these two women's existential perspectives diverge significantly because they both live in different epochs and experience entirely different realities. Thus, being reveals itself whether in the form of poiesis, i.e., techne or enframing in their own "worlds," resulting in an abyss between their realization of life. Additionally, as stated previously, handwoven carpets serve multiple functions within the cultural life of the community. This point deserves special attention in light of Heidegger's concept of "letting beings be," which will be examined in greater depth in the following chapter. For now, suffice it to note that the rich functionality of hand-woven carpets, which are brought forth through delicate processes, exhibits how beings are manifested in multifaceted ways and shows their truths in a free fashion, which is not the case for the manufactured ones that are produced in a completely rigid manner through the process of enframing to fulfill a certain need in most cases.

The comparison between carpet weaving and carpet manufacturing also demonstrates that the modern understanding of being, which regards entities only as accessible resources, has become so prevalent that it restricts our comprehension of beings to the point where we take it for granted and as the only option. Thus, we tend to ignore the existence of other possibilities regarding the multiplicity of beings. In fact, entities can be manifested in a variety of ways, which potentially offers us other options that are hidden in our current understanding of being. This pervasive and domineering characteristic of modern technology, which makes it unnoticeable and to be taken as a natural condition, will be detailed in the next section under the title of "supreme danger."

# **3.1.6.** The Rule of Modern Science: Machination, the Gigantic, and Mastery over Nature

Conclusive knowledge based on calculation is only attainable thanks to the fact that modern science has already determined which aspects of entities are significant and has ruled out anything that cannot be quantified with precise accuracy. As a consequence of this, the world evolves into a manifestation of the priorities of modern scientific inquiry. In the same way that Descartes's natural world is the world as it is represented to the knowing subject, the natural world of modern science is the world as it has already been conceptualized by modern scientists, which is a coherent motion of extended and quantifiable bodies that can be predicted in advance by using scientific techniques. Modern scientists operate within a predetermined and limited realm of the scientific method since only quantifiable phenomena are open to inquiry. In other words, we can shape the natural world to serve our interests so long as our mathematical model of it is complete and accurate. From this standpoint, the term "machination" [Machenschaft] can be defined as a comprehensive rubric of understanding things based on exposing their full material potentiality in a highly mechanized setting. Heidegger (2012) explains the nature of machination, which persistently impedes the manifestation of truth, by saying, "Within machination, there is nothing question-worthy, nothing that could be deemed worthy through questioning as such, alone deemed worthy and thereby illuminated and raised into truth" (p. 86). Undoubtedly, the Cartesian turn has far-reaching implications for how modern individuals conceive of what it means to be. Heidegger (1977a) notes as follows regarding this transformation:

When man becomes the primary and only real subjectum, that means: Man becomes that being upon which all that is, is grounded as regards the manner of its Being and its truth. Man becomes the relational center of that which is as such. (p. 127)

To express it another way, the world is transformed into a realm exclusively for human beings when the self is designated as the only subject. Everything that does exist exists only to the extent that we have the capacity to think of it. We no longer see the blooming rose as something that shines on its own or as something that God created. Instead, we see it solely as a representation of our scientific construction. Thus, the entirety of the world becomes a representation of the subject since objects have no inherent existence and exist only in relation to how they are presented to the subject. As Heidegger (1977a) puts it, "the world [is] change[d] into a doctrine of man" (p. 133) in that "man founds and confirms himself as the authoritative measure for all standards of measure with which whatever can be accounted as certain—i.e., as true, i.e., as in being—is measured off and measured out (reckoned up)" (p. 151). Heidegger's concept of the "gigantic" [Riesenhafte] aims to encapsulate the unprecedented dominance that humans acquire over nature by relying entirely on scientific and technological means:

The gigantic unfolds in the calculative and thus always brings the 'quantitative' into prominence but is itself a denial of the truth ... in favor of the 'rational' and the 'given' inasmuch as the gigantic is the unconditioned predominance of representation and production. (Heidegger, 2012, p. 349)

Daniela Vallega-Neu (2002) notes that "In the gigantic beings are discovered through their boundless calculability and makeability. Any being is always already discovered as quantitatively calculable" (p. 61). Since the entities are seen merely in terms of their extensions in space and time, humans tend to think that they possess a complete understanding of them once they determine their spatiotemporal coordinates. This indicates that the uniqueness and distinctiveness of entities are lost when they are understood in terms of their spatial and temporal positions. To put it alternatively, "[The gigantic] is ... quantity as quality" (Heidegger, 2012, p. 106). This implies that all qualitative differences among beings vanish when only quantitative measurements are considered. Heidegger (2012) further claims that by viewing everything as quantifiably calculable, people have completely lost touch with the idea of nature as physis, that is to say, nature eventually yields to machination. "Ultimately what remained were 'scenic views' and recreational opportunities, and now even these have been calculated to gigantic proportions and prepared for the masses" (p. 218).

We have entered the modern epoch as we have acquired a deeper understanding of nature and a greater command over it. In this era, "everything has to conform to the current state of calculation ... the incalculable is merely that which has not yet been mastered in calculation" (Heidegger, 2012, p. 95). This implies that we experience an age where calculating and mastery become more important than what is calculated or mastered. As the modern era unfolds, the notion that humans can control and master nature gains widespread acceptance. Living around the same time as Descartes, a modern philosopher, and champion of the Scientific Revolution, Francis Bacon's

famous phrase "knowledge is power" (1966) means exactly this. According to Bacon (as cited in Farrington, 1966), the modern sciences do not "merely exert a gentle guidance over nature's course; they have the power to conquer and subdue her, to shake her to her foundations" (p. 93). One can argue that once nature is reduced to something that can be fully calculated, it is commanded exploitatively. When subjects perceive the world as being centered around themselves, they are more inclined to prioritize and accentuate the properties of entities that are directly pertinent to their interests. Hence, the emphasis in modern science is not merely on understanding the world; it is on attaining knowledge to master it. This makes sense within the Cartesian perspective, in which humans are viewed as subjects and natural entities as objects placed against the human subjects who not only interpret but also manipulate them. The human subject consequently dissociates from the rest of nature and sets out to overcome this opposing domain.

Even before the current environmental concerns in the Anthropocene, which include anthropogenic climate change and the depletion of resources, Heidegger identified the seeds of environmental exploitation in the advancement of the sciences and technology. Rather than rejecting modern science and its progress, he wanted to comprehend how scientific, industrial, and technological development led to a new way of revealing. Heidegger's study compels us to conclude that objects are no longer seen as things that stand against the subjects because they have become completely calculable and interchangeable units of extended bodies. Here, the basic assumption is that mastery of nature is attainable by careful mapping of the coordinates and the motions of natural objects. In Baconian terms, we gain control over nature by learning more about it.

# **3.2. The Supreme Danger**

In the age of modernity and following, late modernity, our knowledge has gradually become so powerful that we can control nature to the point where it is taken as an ordinary resource. Thus, all of nature is transformed into a gigantic grid of energy that can be exploited for human consumption and directed in accordance with human objectives. For instance, as Heidegger (1977b) states, modern technology has turned agriculture into a mechanized food industry. With this transition, agriculture's

primary focus has become obtaining the highest output at the lowest cost. Factory farms would be a good example to broaden the scope of this analysis. These profitoriented facilities treat animals as commodities and aim to maximize productivity while minimizing costs, granting these animals only "enough" care and maintenance. This shows that the human drive toward mastery and profit takes precedence over respect. Nothing is mysterious or unique about any natural entity anymore because everything can be completely calculated and thus manipulated. Nature now appears in a new light: "The revealing that rules in modern technology is a challenging [*Herausfordern*], which puts to nature the unreasonable demand that it [supplies] energy that can be extracted and stored as such" (Heidegger, 1977b, p. 14). Another example given by Heidegger himself is the Rhein River, which is no longer viewed in its natural terms; rather, it is understood as only one additional component of the enormous, unified energy grid. Heidegger (1977b) makes this point clear by stating,

When man, investigating, observing, ensnares nature as an area of his own conceiving, he has already been claimed by a way of revealing that challenges him to approach nature as an object of research, until even the object disappears into the objectlessness of standing-reserve. (p. 19)

In a variety of ways, Heidegger discusses what he views as the danger of dangers in our age (McWhorter & Stenstad, 2009). The "formlessness" that defines Heidegger's (1977b) analysis of modern technology manifests itself as the "supreme danger." Here, formlessness refers to the pervasive and ambiguous characteristic of modern technology, which permeates the entire fabric of life without being recognized. In parallel to that, having reduced all entities to the status of standing-reserve, ultimately, human beings tend to view the human self as something to be optimized and utilized:

As soon as what is unconcealed no longer concerns man even as object, but does so, rather, exclusively as standing-reserve, and man in the midst of objectless is nothing but the orderer of the standing-reserve, then he comes to the very brink of a precipitous fall; that is, he comes to the point where he himself will have to be taken as standing-reserve (Heidegger, 1977b, pp. 26-27).

Beginning with modernity, being any entity implies being a constituent of the grand web of standing-reserve which is conceived in terms of an all-encompassing rubric of energy that is stockpiled and therefore readily available to be utilized. From this viewpoint, every relationship with anything is based only on utility and optimization, while the human will itself is a function of this whole process. The technological age, which Heidegger sees as the culmination of the ancient metaphysics of being, is marked by the relegation of all beings to a stockpile to be laid aside and preserved for future use in the form of standing-reserve (Cardoza-Kon, 2018). As this technological comprehension of being gains traction and spreads, it drastically alters all interactions. Within this vortex, both subjects and objects are dragged into the domain of standing-reserve. Yet this chaotic drift cannot be noticed because its very pervasiveness helps make it invisible, which is seemingly a paradox. Heidegger's (1992) "law of proximity" can be used to explain this paradoxical fact, which suggests that the closer we are, the harder it is to see, and thus when something has a profound impact on our lives, it can be difficult to grasp its full significance (p. 135). The Cartesian subject, who originally set the measure of reality by focusing on what can be clearly and distinctly perceived in space and time, is now considered standing-reserve together with the object. Then, resourcefulness starts to be viewed as the only genuine metric: "The current talk about human resources, about the supply of patients for a clinic, gives evidence of this" (Heidegger, 1977b, p. 18). As enframing has taken root, humans, much like the Rhine, are taken in terms of their productivity, and it gets harder to conceive of this transformation critically. Indeed, by coming to consider ourselves in the precise terms that underlie our technological refashioning of the world, we unwittingly turn ourselves into resources to be optimized, ordered, and improved for maximum efficiency throughout all spheres of life.

It is tenable to say that Heidegger's later conception of enframing, as the essence of modern technology, is an existential threat since it relegates all beings, including humans, to the status of resources to be maximally utilized. In this context, the "darkening of the world" refers to the uniform nature of technological societies in which all entities are revealed in terms of their utility (Heidegger, 2014). This tendency also manifests itself as a totalizing force that flattens culture. The politics that serve to sustain and articulate the culture therefore turns into a politics of enframing.

# 3.3. The Nihilistic Seeds of Technological Thought

Without a doubt, Friedrich Nietzsche is a significant character in Heidegger's critique of modern technology. As we have seen up to this point, Heidegger views the progression of technology as a manifestation of the West's disintegrating metaphysical odyssey. In his later writings, he articulates this oblivious disposition in terms of enframing. In his article, "Heidegger's Nietzsche," published in A Companion to Heidegger, Hans Sluga (2005) maintains that "Heidegger had been concerned with the 'hopeless frenzy of unchained technology' since at least 1935" (p. 116). Heidegger (2014) previously stated that this frenzy had consequences in a "measureless on-and-on-so-forth of the ever identical and the indifferent" (p. 51). Thus, being has been reduced to calculation, and beings have been transformed into something "that can be ruled in modern, mathematically structured technology" (Heidegger, 2014, p. 216). Sluga (2005) further maintains that Heidegger links the technological frenzy of "always the same" and its mathematical structures to Nietzsche's metaphysics. In fact, Heidegger (2002b) regards Nietzsche as the herald of "the battle to exploit the earth without limit as the domain of raw materials and to employ 'human resources' soberly and without illusion in the service of the absolute empowering of the will to power" (p. 191). Although this interpretation seems to neglect the cosmogonic and vitalist connotations of Nietzsche's concept of "will to power," it conjures up an image of the world as "a monster of energy, without beginning, without end ... a sea of forces flowing and rushing together ... out of the stillest, most rigid, coldest forms toward the hottest, most turbulent, most selfcontradictory" (Nietzsche, 1968, p. 550).

Drawing from the aforementioned considerations, it can be argued that for Heidegger, by historically assuming the being in a specific way, the West has descended to an ontological forgetfulness that can be described by Nietzsche as nihilism, which manifests itself in the modern world as enframing. Nietzsche's metaphysical concepts of "will to power" and "eternal recurrence" have provided an accurate analysis of the character of this age in terms of its nihilistic, subjectivist, and technological mindset. Heidegger (1968) is certain that Nietzsche signals "the moment when man is about to assume dominion of the earth as a whole" (p. 57), and

his thinking demonstrates the essence of modernity in the "steadily rotating recurrence of the same" (p. 109).

To sum up, Heidegger's analysis of Nietzsche becomes a comprehensive critique of the entire Western paradigm of thought; that is to say, Nietzsche's ideas provide Heidegger with a means of articulating how being reveals itself in modernity. Thus, Heidegger exposes technological human beings' nihilistic condition and demonstrates how the progression of metaphysical thought, beginning with Plato and persisting through the ages, ultimately culminates in an imminent climax, namely technological thinking, or enframing.

Before moving on to the next section, where we will discuss the inherent potency disclosed within this turbulence, we should bear in mind that the heart of enframing is what Heidegger (1977b) refers to as the "supreme danger," which implies that grasping the essence of technology is difficult because it is not only totalizing but also hidden in the forgetfulness caused by its proximity to humanity. Enframing is now so ingrained in daily life that it does not draw attention to itself. We have been gradually exposed to its formative effect and become instruments in the perpetuation of a technological economy with no overarching goal other than its own maintenance.

# 3.4. The Saving Power

Heidegger (1977b) quotes Friedrich Hölderlin towards the end of "The Question Concerning Technology:"

But where danger is, grows the saving power also. (p. 28)

After referencing Hölderlin, Heidegger (1977b) tells us that inquiry is "the piety of thought" (p. 35) and guides us in the direction of a possible free relationship with technology. But then the question is, how can we create a free relationship with technology in terms of Heidegger's contemplation? Bryan Bannon (2014) contends that Heidegger's main concern is modern technology's totalizing nature. In this respect, Heidegger (1977b) gets us to think and let go of our controlling relationship

with technology and thus urges us to be meditative instead of purely calculative: "Wherever man opens his eyes and ears, unlocks his heart, and gives himself over to meditating and striving, shaping and working, entreating and thanking, he finds himself everywhere already brought into the unconcealed" (p. 18-19). If all we ever accomplish is a more sophisticated understanding of technology and the ability to effectively use equipment and techniques, even if they undeniably raise our quality of life and our understanding, if it does not include a grasp of the essence of technology, it will not set us free but will instead serve to further enslave us. Heidegger essentially suggests that the ultimate responsibility for ourselves is to be thoughtful by breaking free of the restrictive relationship with technology and to be meditative rather than just calculative. Within this particular framework, "meditative thinking" can be conceptualized as thinking attentively, thoughtfully, and thankfully by focusing on the entirety. This notion will be detailed along with the concept of the "consciousness of cosmic history" in the fifth chapter under a separate subsection.

As previously indicated, Heidegger (1977b) desires "to prepare a free relation to [technology]" within which "it opens our human existence to the essence of technology" (p. 3). As Jeff Kochan (2010) explains, "the attainment of a free relation to technology is possible only once the essence of technology becomes an object of critical scrutiny" (p. 584). Hence, "engaged questioning" is one approach to conduct thoughtful analysis that was articulated by Heidegger at the conclusion of "The Question Concerning Technology." The famously enigmatic last line of the essay reads, "For questioning is the piety of thought" (Heidegger, 1977b, p. 35). At first glance, this comment appears to be nothing more than a fitting conclusion to a well-organized and carefully considered piece. However, the entire meaning and purpose of the essay may be found in this one sentence, which identifies our ability of questioning as the last reserve that we can rely on.

Following Heidegger's lead, I argue that nature can be better understood in other ways. From this perspective, a paradigm shift in our understanding of "what it means to be" is required if the natural ecosystem and human society are to have a sustainable future. Since the way we see the world affects how we live in it, we need to change our existential standpoint to deal with the current ecological crisis so that

we may cultivate a reflexive awareness that helps us to perceive how our everincreasingly technological worldview constructs a deceptive reality for us. This paradigmatic leap can lead to new ways of relating to nature that are less manipulative, controlling, and harmful. If we realize that modern technology is one of many viable modes of disclosing and we have other alternatives, then we have a chance to be freed from its perilous effects. In his 1995 book, *Inhabiting the Earth*, Bruce Foltz reawakens interest in Heidegger's philosophy as a possible philosophical foundation for environmentalism. He states that

The rift between ourselves and the natural environment that has resulted in the environmental crisis ... cannot be healed by additional scientific research or more efficient technological regulation, but only through a poetic reestablishing of those world-regions within whose dimensions we can dwell and be at home. (pp. 158-159)

In order to understand what it means to dwell poetically, Foltz (1995) looks to Heidegger and links ethics to the comprehension of dwelling "within the midst of beings as a whole" (p. 168). The notion of "dwelling" will be explained in the following chapter, where I shall make an effort to argue that Heidegger's thinking can serve as a foundation for environmental philosophy and attempt to elucidate the conceptual framework of a new beginning in which nature is understood circumspectively.

# **CHAPTER 4**

#### **A NEW BEGINNING**

In the sections that follow, I will first mention some key implications of Heidegger's ideas within the fields of ecological philosophy and eco-phenomenology. Then, after a brief discussion regarding the prospect of a paradigm shift, I will endeavor to inquire into the conceptual basis of a new beginning from a Heideggerian standpoint to provide a framework regarding the notion of ecological circumspection.

# 4.1. Heidegger as a Key Figure in Ecological Philosophy

It is possible to say that Heidegger's later works, in particular, have had a significant impact in the field of ecological philosophy. Several contemporary philosophers have employed Heidegger's views while addressing current environmental concerns. In the following paragraphs, I will give a couple of examples to exhibit how Heideggerian philosophy has been interpreted in different ways in dealing with ecological problems that we confront today.

Nancy J. Holland's naturalistic reading is an excellent example to start with since she reminds us that we can cultivate new ways of interacting with nature. As thoroughly discussed up to this point, with the advent of Cartesian understanding, technological thinking, namely enframing, has become the dominant paradigm of humanity, as though there is no other way to assess natural entities other than readily available resources. Heidegger refers to this tendency brought about by modern technology as the "supreme danger" since it has established itself as the only way and completely obscured other options. In terms of Heidegger's interpretation of physis, this pervasive and deceptive tendency blurs the presencing aspect of beings, which potentially bears numerous possibilities, by dictating their currently present aspect, causing them to be seen merely in a calculable fashion. Holland (1999) suggests that

Heidegger not only depicts the origins of the technological view of being in his lecture course on Aristotle's *Metaphysics* but also presents "an alternative account of the relation between Dasein and the natural world, based on a different understanding of being, an alternative with arguably important implications for contemporary ecological questions" (p. 413). According to Holland (1999), Heidegger's defense of the integrity of natural beings offers the foundation for safeguarding them against the exploitation that can be caused by modern technology. She maintains that "we must respect the natural in its own terms, acknowledging the limits as well as potential of its 'bearance'" (p. 415). Holland's remarks persuade us that natural beings can be understood in countless ways which are contingent and transformable. This means that there are always other options which cannot be seen at first sight.

In her 2008 book, *Heidegger, Politics and Climate Change*, Ruth Irwin takes on the task of applying Heidegger's philosophy to the problem of climate change. She claims that Heidegger's "other 'beginning' is recognition of the finitude of civilization itself and of human life as-a-whole on the planet" (p. 147). In this regard, climate change should prompt humans to reflect on the negligence inherent in the contemporary age and initiate a paradigm shift that connects humanity to nature. I believe that Irwin's effort to use Heidegger's philosophy to contemplate an appropriate response to the climate crisis is innovative and perceptive. By stating, "Climate change is a crisis of mastery over nature" (Irwin, 2010, p. 54), she contends that a reflection on the brevity of human civilization can move us beyond mastery toward a more harmonious relationship with nature. Concerning this reflection, I shall introduce the notion of the "consciousness of cosmic history" in the next chapter.

Besides Holland and Irwin, Kevin Michael Deluca promotes Heidegger as a breath of fresh air for environmentalists. Deluca (2005) asserts that Heidegger's examination of machination, which was discussed in the previous chapter, could potentially provide a novel viewpoint within the realm of environmental philosophy to challenge the prevailing idea of Cartesianism, which sees the human subject as the dominant force in controlling and managing nature.

#### 4.2. A Heideggerian Eco-phenomenology

Eco-phenomenology is a relatively new field that has emerged in response to environmental concerns and is explained by Iain Thomson (2004) as follows: "Ecophenomenology's guiding idea, put simply, is that uprooting and replacing some of our deeply entrenched but environmentally destructive ethical and metaphysical presuppositions can help us heal the earth, combating environmental devastation at its conceptual roots, as it were" (p. 381). Given that Heidegger aspires to depart from Western philosophy's reified canon and introduce a fresh perspective to understand reality, he can be regarded as a suitable candidate who holds an ecophenomenological stance. Bryan Bannon (2014) identifies various elements that can be gleaned from Heidegger's work in an undertaking to develop an ecophenomenology: (1) An attempt to be open to understandings of nature that are not entrenched in narratives of mastery that derive from Cartesianism. (2) A venture to transcend the confines of the Western metaphysical tradition. (3) An acknowledgement of the interconnectedness and interdependence of all beings.

When viewed from the eco-phenomenological perspective stated by Bannon, there needs to be a fundamental shift in our conception of "what it is to be" for us to create a sustainable natural and human world. In this direction, Heidegger's philosophical framework offers us a robust foundation for conceptualizing the natural environment. The edited publication, *Eco-Phenomenology: Back to the Earth Itself*, also gives a comprehensive overview of the eco-phenomenological movement and its connections to Heidegger. Here, by linking Heidegger's ideas of "meditative thinking" with "letting beings be" and "care", Monika Langer (2003) sketches out the broad strokes of what a Heideggerian eco-phenomenology may look like.

# 4.3. A Glimpse into the Possibility of a Metaphysical Transformation

Heidegger was not optimistic about the capacity of humans to bring about a shift in the trajectory of being's historical progression since he frequently emphasized that enframing has come naturally from the first beginnings in ancient Greece. Heidegger (2012) states that machination "does not name a kind of human conduct but a mode of the essential occurrence of being" (p. 99). That being the case, as discussed extensively in the previous chapter, Heidegger believes that the current age of technology coincides with the concept of "completed metaphysics," which alludes to Nietzschean notions of "will to power" and "eternal recurrence." This means that enframing has been revealed as the culmination of Western metaphysics from its inception in ancient Greece forward. Heidegger's statement, "Only a god can save us" (1981), which he uttered in the *Spiegel* interview in 1966, should have stemmed from this predicament. Even more despondently, Heidegger (2003) maintains,

Before being can occur in its primal truth, being as the will must be broken, the world must be forced to collapse and the earth must be driven to desolation ... The laboring animal is left to the giddy whirl of its products so that it may tear itself to pieces and annihilate itself in empty nothingness. (2003, pp. 86-87)

In the passage above, Heidegger contends that the world must undergo a total disintegration to bring about a new kind of revealing of entities, which might be seen as an excessive expression of his pessimism, yet he does sound more optimistic in several parts of his oeuvre. In his book, *Contributions to Philosophy*, Heidegger (2012, p. 218) poses the questions: "Does nature have to be renounced and abandoned to machination? Can we yet seek the earth anew? Who will kindle that strife in which the earth finds its open realm, secludes itself, and is genuinely the earth?" By asking these questions, Heidegger essentially inquires about whether or not we have the will to be open to various ways in which natural beings come into appearance that are not instantly subsumed under the category of enframing. Then, we should ask ourselves how it is possible to conceive of what Heidegger (2012) refers to as "the inception of another course of history" (p. 12) as opposed to the widespread notion of enframing that characterizes our contemporary technological worldview.

The answers to these essential queries could be found in a proper contemplation of the idea of being, which Heidegger believes has been forgotten. I truly think that allowing openness for natural entities within the very act of being may present new horizons. That way, beings can be encountered, interpreted, and utilized in ways other than as scientific objects that are amenable to technological manipulation. Following this train of thought, Heidegger (as cited in Safranski, 1998) addresses the limitations of scientific comprehension of beings in his 1937 *Plato* lectures as follows:

It is a separate question whether, through that science, the being [das Seiende] has become more being [seiender] or whether something totally different has inserted itself between the being and cognitive man, as a result of which his relationship with the being has been eroded, his instinct for the essence of nature driven out of him-and his instinct for the essence of man choked. (p. 220)

Taking this remark into account, it can be asserted that, in the contemporary era, a cognitive barrier has emerged between "being" and humanity, which results in a restricted assessment of the essence of nature.

## 4.4. Basic Elements of a Postmetaphysical Vision

In his later period, Heidegger focused extensively on the question of what a paradigmatic shift could entail. In the following lines, I will try to use some of the elements of Heidegger's postmetaphysical views to present a new understanding of human presence in the natural world.

## 4.4.1. Be-ing (Seyn)

Understanding Heidegger's postmetaphysical vision of how beings could be disclosed in a new beginning requires a firm grasp of the term "Seyn," which is generally translated as "be-ing." As Vallega-Neu (2003) notes, "For Heidegger, the use of the word 'Seyn' [be-ing] (instead of 'Sein' [being]) indicates that being is not thought of metaphysically" (p. 7). Since enframing is a result of the Western metaphysical tradition as a whole, Heidegger's goal is to move beyond the Western metaphysical tradition, and be-ing is one of the keys to doing that. In the same framework, Polt (2006) states that "Heidegger's Seyn ... is best interpreted as the giving of being, that is, as the event in which beings as such and as a whole are enabled to make a difference for us" (pp. 28-29).

What we may gather from the quotations presented above is that, for Heidegger, the new beginning is a time when humans become open to the different ways in which entities reveal themselves. The goal should be to remain true to things as they essentially unfold, and because all natural beings are infinitely complex, this necessitates a truthful commitment to being as it opens in genuine ways. Since things stand on different truths depending on various perspectives, the key is to keep broadening these perspectives that exist in any given entity. Another way to look at it is that any interpretation of something natural needs to consider the natural unfolding that takes place within the thing itself. It is also important to remember that one's interpretation does not have to be ultimate, as there are always new ways of looking at things. As a matter of fact, Heidegger does not cast aside the concept of being and substitute it with be-ing. Rather, both are relevant to his thoughts. Heidegger (2012) notes that being and be-ing are "the same and yet fundamentally different" (p. 135), and he defines be-ing as "the origin of the truth of beings as such" (p. 47). When a rigid view of being predominates, we no longer see alternative aspects of entities that may be more appropriate. As there are countless ways in which beings can present themselves as significant to us, Heidegger wishes to demonstrate that entities need not be taken decisively in any particular way. One of the objectives of the new beginning is to encourage humans to be receptive to the clearing in which things reveal themselves in ways other than the predetermined interpretations that have already proliferated. Heidegger (2012) states that be-ing is "nothing 'human' in the sense of a human dominion" (p. 209). To put it another way, the giving of the signification of beings is not something that humans should postulate; rather, it is something that humans should be receptive to as it naturally unfolds. This is the basis of Heidegger's new beginning, wherein "beings are not grounded on the human being, but humanness on beyng [be-ing]" (p. 145). This approach justifies Heidegger's so-called "turning," in which he begins to value the truth of being more than the question of being itself. That is to say, Heidegger's move from "Sein" to "Seyn" is meant to shift the focus of the issue from "What is being?" to "What is the unfolding truth of being?" Being thus becomes an unfolding event, with Dasein serving as its focal point. Regarding this point, Guignon (2005) notes in his essay, "The History of Being," as follows:

What was forgotten [by Heidegger] in the first understanding of the being of beings is what Heidegger now calls be-ing (Seyn). Be-ing is the event of appropriation or "enownment" in which (a) beings are encountered as such

and such in a particular understanding of being, and (b) the humans who do the encountering come to be appropriated in such a way that they can play their proper role in the essential unfolding of truth. (p. 401)

# 4.4.2. Event (Ereignis)

Heidegger (2002a) states that "what we experience in enframing as the constellation of being and man through the modern world of technology is a prelude to what is called the event of appropriation [Ereignis]" (p. 36-37). In other words, Heidegger, in defining the final epoch of Western metaphysics as enframing, advocates for the beginning of a postmetaphysical era. He considers Ereignis to be an occurrence that takes place after enframing. Polt (2005) maintains that there are several distinct interpretations of Ereignis in Heidegger's corpus, but the one that is most pertinent to the discussion comes from the late 1930s writings in *Contributions to Philosophy*, in which Heidegger imagines what the new beginning may look like. Polt (2005) further states, "In 1936–8 [*Ereignis*] means, roughly, the possible happening in which a new dwelling may be founded: a place and age in which a people could cultivate significance" (p. 376). This suggests that with Ereignis, Heidegger (2002a) intends to create a space in which a new, more appropriate type of disclosing can grow:

For in the event of appropriation [*Ereignis*] the possibility arises that it may overcome the mere dominance of [en]frame[ing] to turn it into a more original appropriating. Such a transformation of [en]frame[ing] into the event of appropriation [*Ereignis*], by virtue of that event, would bring the appropriate recovery—appropriate, hence never to be produced by man alone—of the world of technology from its dominance back to servitude in the realm by which man reaches more truly into the event of appropriation [*Ereignis*]. (p. 37)

Based on this passage, it can be inferred that for Heidegger, Ereignis is a more appropriate kind of revealing than the current one. One of the aims of Ereignis is to allow beings to be restored and understood in a way that respects their unique ways of revealing. Heidegger (2002a) asserts that in and through Ereignis, "man and Being reach each other in their nature, achieve their active nature by losing those qualities with which metaphysics has endowed them" (p. 37). In his later writings on "letting

beings be," "freedom," and "dwelling," Heidegger provides a vision of a better way to comprehend the world around us and comport ourselves towards it. In the following subsections, I will expound upon these notions.

# 4.4.3. Letting Beings Be (Gelassenheit) and Freedom (Freiheit)

Paul W. Taylor (2011) contends that each teleological center of life, which he describes as a "unified, coherently ordered system of goal-oriented activities that has a constant tendency to protect and maintain the organism's existence" (p. 122), possesses an inherent worth that deserves moral consideration. Keeping this basic principle in mind, Georg Seidel (1977) claims that Heidegger is "a possible philosopher for the ecologists" (p. 97), with a particular emphasis on Heidegger's "authentic knowing," which involves letting beings come to light on their own terms. As a way of envisioning what a new kind of comportment may look like, Heidegger uses two important concepts: "letting beings be" [Gelassenheit] and "freedom" [Freiheit]. In order to emphasize the reciprocal relationship between these concepts, he articulates the following statement:

But as soon as we are capable of this, namely of letting something be in that into which—as into its own essence—it is let, then we are truly free. Freedom rests in being able to let, not in ordering and dominating. (Heidegger, 2010, p. 149)

Enframing "demands that nature be orderable as a standing-reserve" (Heidegger, 1977b, p. 23) and so implies a dominant mindset, whereas letting beings be allows an unfolding in unique and appropriate ways. By embracing this approach, natural entities are released from being regarded as standing-reserve, and get in line with the ways in which they reveal themselves authentically. Concerning this viewpoint, when discussing Heidegger's project in his later thought, Hans-Georg Gadamer (1976), one of Heidegger's most notable students, maintains that technological thinking negates

standing-in-itself of beings and lead[s] to a total leveling of them. A complete objectification of this kind would no longer represent beings that stand in their own being. Rather, it would represent nothing more than our opportunity

for using beings, and what would manifest would be the will that seizes upon and dominates things. (pp. 226-227)

Gadamer (1976) continues by saying that one of the goals of Heidegger's later ideas is to give beings back their inner fullness of being since the contemporary way of thinking no longer takes into account how things come to be on their own terms.

Even though we often think of letting be as a passive attitude of indifference, Heidegger (2010) stresses that it entails more than passively observing the unfolding of beings; it lies "outside the distinction between activity and passivity ... because it does not belong to the domain of the will" (p. 70). Here, the aim should be to start thinking about beings in terms of preservation and cultivation instead of manipulation and domination. This manner comes with the notion of "saving." For Heidegger (1977c), to save means "to loose[n], to emancipate, to free, to spare and husband, to harbor protectingly, to take under one's care, to keep safe" (p. 42), and it is "to fetch something home into its essence, in order to bring the essence for the first time into its genuine appearing" (p. 28). In this regard, Heidegger's concept of saving beings pertains to enabling them to manifest in their inherent ways without imposing any constraints on them. To phrase it alternatively, we should facilitate novel avenues of comprehending entities. Instead of viewing them as spatiotemporal aggregates, we should create a space that facilitates the emergence of original insights. Hence, the act of letting be, which is a way of saving, involves freeing beings from an inappropriate understanding based on their monetary values and making room for a manifestation that is more faithful to how they show their true nature.

Heidegger's concept of freedom exists beyond the realms of activity and passivity, just as letting be does. It is, in fact, much more different than the commonly associated notion of "doing as one pleases." In his consideration of early Heidegger, Guignon (2011) includes an interesting remark on Heidegger's concept of freedom and its connection to the idea of letting beings be:

This freeing up or letting be requires that we resist our common tendency to impose onto things a prior grid of interpretation designed to make them fit our antecedent expectations. In freeing, we give things the breathing room they need to unfold in their own proper way, to "essence" (in Heidegger's verbal use of the word wesen) without foisting on them an interpretive schema determined by our interests and projects. (p. 92)

In parallel to Guignon's statement, it can be said that the notion of freedom represents a departure from the formative structure of technology and is, therefore, an effort to abandon the tradition of Western ontology. Relating to this, Gregory Cajete (2000) writes as follows:

The blindness of modern perception with regard to nature prevails throughout post-modern technocratic society. Western science and society continue to deny the spirit and intelligence of nature. Enclosed in a technologically mediated world, people rarely encounter nature in any significant or creative way. (pp. 22-23)

That being the case, Heidegger's contrast between technology, which sees nature as standing-reserve ready to be used, and his concept of freedom, which can be identified as taking a circumspective stance toward natural entities, becomes clearer. Indeed, Heidegger conceptualizes a new beginning in which humans and natural beings relate to each other in alternative ways. Hence, the transition to a new era would bring us face-to-face with the concealment itself and allow us to experience exactly what metaphysics forgot: the truth of being. Only in this manner, will humanity eventually figure out how to let beings be, i.e., to remove the confinements of science and technology so that beings can unfold freely. According to Michael E. Zimmerman (1993), Heidegger provides a rationale for restricting technological dominion over natural entities as follows: First, similar to Aristotle, he argues that a living being progresses and maintains itself based on its inherent potentialities, though he would not call these the essence of the being. Second, he contends that humans should respect such inherent potentialities whenever possible. Zimmerman (1993) further maintains that if Kant's notion of respect is grounded in an understanding of the human mode of being, then respect for animals, plants, and even ecosystems can be rooted following their unique modes of being. In this light, natural beings cannot be treated arbitrarily by humans. We should always keep in mind that for Heidegger, Dasein, equipped with enormous disclosive power, is also burdened with an unmatched obligation to care for other beings.

#### 4.4.4. Dwelling (Wohnen)

"Letting beings be" and "freedom" require a special experience of life that prioritizes respect and care. Heidegger (1993) calls this sort of living "dwelling" [*wohnen*], which indicates being at peace within the free sphere that protects everything in its natural unfolding. The fundamental character of dwelling is to live in harmony on Earth as opposed to dominating or mastering it. "To dwell poetically is to live in a way that does not encroach on the bringing-forth of phusis but that takes part in this very bringing-forth" (Barbaza, 2009, p. 193). From this angle, dwelling entails a mindful eye towards the interconnectedness of all entities in addition to a respectful deference to them as they are in themselves (Rentmeester, 2016). This sort of manner calls for a thoughtful capacity to appreciate things in the context of their relationships with other entities, as well as respectful attention to things in the order in which they present themselves. Heidegger (1993) elaborates on the connection between dwelling and saving as follows:

Mortals dwell in that they save the earth ... To save properly means to set something free into its own essence. To save the earth is more than to exploit it or even wear it out. Saving the earth does not master the earth and does not subjugate it, which is merely one step from boundless spoliation. (p. 352)

This shows how dwelling can be an alternative way to live on the earth without controlling or mastering it. For instance, a forest is more than just a huge stockpile of lumber; it is the source of countless natural processes. It also provides homes for animals and enriches the ground beneath our feet. When one can see the forests in this way, one takes the initial step toward living in a manner that recognizes forests for what they really are rather than the standard practice of today, which is to view them merely as rich resources to be utilized. In "The Question Concerning Technology," Heidegger (1977b) compares a hydroelectric plant with an old bridge to demonstrate what dwelling signifies:

The hydroelectric plant is not built into the Rhine River as was the old wooden bridge that joined bank with bank for hundreds of years. Rather the river is dammed up into the power plant. What the river is now, namely, a water power supplier, derives from out of the essence of the power station. (p. 16) When encountering an old bridge that connects two banks, the river, and the banks are both still taken for what they are. A hydroelectric plant, on the other hand, ensures that the river is just there to provide energy to the facility. Unlike the bridge, the hydroelectric plant does not allow the river to be what it genuinely is. Because the energy supplied is ultimately used to satisfy human needs, structures like the hydroelectric plant only reinforce the notion that nature is something to be subjugated and manipulated for the benefit of humanity. Yet, the bridge does not support this attitude because it is constructed into the landscape and allows it to remain as it is instead of transforming it into something alien and adapting it to serve specific purposes. To conclude, in dwelling, one takes into account the natural unfolding of beings while still using them as means, as in the example of the old bridge. The point is to respect them the way they are, rather than ignore the paths in which they naturally unfold and force them against their natural accords.

# **CHAPTER 5**

# CULTIVATING ECOLOGICAL CIRCUMSPECTION

In the preceding chapter, I attempted to demonstrate some conceptual grounds for a potential metaphysical transition from a Heideggerian standpoint. Now, the question we should be asking ourselves is: How can we initiate the postmetaphysical comprehension of reality that Heidegger mentions? Before we continue, let us keep in mind that the issue is not simply the degradation of nature but also a limitation in our way of thinking that levels our concept of being.

## 5.1. What is "Ecological Circumspection"?

In order to provide a satisfactory response to the crucial question stated above, I will be introducing a new term that I have named "ecological circumspection." This term was conceived with the vocabulary of Heidegger in mind and basically refers to "a state of awareness that sees nature as an inseparable part of human existence" to survive the ecological threats that we face currently. At this point, I wish to take the opportunity to briefly discuss the term "circumspection" within the framework of Heideggerian thought. But first, it is worth noting that "circumspection" is defined by the Cambridge Dictionary (n.d.) as "the quality of being careful not to take risks." In Heidegger's corpus, "circumspection" is the translation of the German word "Umsicht," which connotes the qualities of prudence and foresight.

In some of Heidegger's lectures from the 1920s, circumspection is succinctly mentioned, but it comes to the forefront in *Being and Time*, where it is a key element of Heidegger's analysis of "average everydayness." While Heidegger (1962) maintains that circumspection "belongs to concern as a way of discovering what is ready-to-hand" (p. 159), Dreyfus (1991) construes circumspection as:

a mode of awareness. It is a form of experience, opening onto the world and the things in it ... But this experience can be characterized only as openness.

It is not mental, inner, first-person, private, subjective experience (Erlebnis, Husserl's term), separate from and directed towards nonmental objects. (p. 68).

Based on these remarks, one way to define circumspection is as the capacity through which Dasein can incorporate entities into its practical action. If we turn back to the notion of ecological circumspection, a respectful responsiveness to things, as they show themselves, and a reflective capacity to value them in terms of their innate qualities, are prerequisites for this mode of awareness. Hence, ecological circumspection requires looking at things from a different perspective rather than focusing only on economic value and efficiency, which have become the most important guiding forces for our choices with the advent of technology. To illustrate, ecological circumspection requires (1) considering forests to be ecosystems, water to be the source of all life, and food to be a resource that is finite and even rare in many places of the world; (2) not viewing things through the lens of human interests but rather perceiving them in their natural state; (3) understanding that there is a limit to everything, including human ability and the resources available to it; and (4) having regard for the interdependence of the relations within a habitat as well as the dependence of humans on having healthy ecosystems.

Ecological circumspection necessitates a mental disposition that involves "engaged questioning" and "meditative thinking." To wit, as humans, we possess a distinctive capacity compared to other beings to open up the meaning of being because of our ability to ponder the question of our existence, and in doing so, we are capable of imagining other ways of living. By truly having respect for natural entities, we can forge an alternative route based on ecological circumspection. In doing so, we first need to conduct a proper diagnosis of our situation. David Abram (1997) contends that humans have lost touch with the environment that provides for them and urges a "reinhabitation" of nature through greater awareness of how the world around us works naturally. Restoring humanity's lost connection to the earth is a key step towards addressing the destruction of the planet that humanity is presently committing, which means "to begin to recall and reestablish the rootedness of human awareness in the larger ecology" (p. 156). Abram's claim suggests that contemporary Western culture is mostly unfamiliar and, as a result, detached from a genuine

comprehension of nature and natural processes. This disconnectedness is characterized by a technological understanding of nature that excludes any other possibilities that may otherwise be a recognition of nature's intelligence.

Here, a few essential questions arise again as to how we might come to be open to the emergence of a new beginning and thus how it is possible that thinking and living may be different. The answers to these questions lie in how we can start to let go of our illusion of mastery and position ourselves as conscious subjects who are endowed with the ability to question. As technology has become woven into the very fabric of contemporary life, by strategically intervening in technological design, we have the chance to shape our own future.

At this critical juncture, Heidegger encourages us to pay attention to the preconceptual phenomenological "presencing" that will be a major source of what Dreyfus (1993) so aptly describes as any "new paradigm, rich enough and resistant enough to give a new meaningful direction to our lives" (p. 367). In this context, Heidegger proposes an alternative attitude toward our world, one that is much more reflective and thankful than the relentless instrumental reasoning that characterizes the technological mode of revealing. Indeed, Heidegger is convinced, as Dreyfus argues, that we should be grateful for our technological understanding of being, for, without such an ontological clearing, "nothing would show up as anything at all, and no possibilities for action would make sense" (p. 363). This rather unconventional perspective explicitly demonstrates the emergence of saving power from the very depths of supreme danger. So, if we can manage to relate to nature in a way that is open to alterity, we can incorporate a sense of ecological circumspection into our practices. Through this comportment, we can start to experience and reveal the basic elements of a post-technological ontology, which can arouse the potential of life in a completely different way and offer a new ground upon which we might stand and endure in the world of technology without being in its thrall. This suggests that a new technological and cultural paradigm that appreciates the natural unfolding of beings is necessary if we are to be saved from the repercussions of enframing.

Recall that in the previous chapter, I briefly referred to Irwin's emphasis on the transience of human civilization. Now, I would like to expand on it and present the

notion of the "consciousness of cosmic history," which might be viewed as an essential cognitive part of ecological circumspection.

## 5.1.1. The Consciousness of Cosmic History

The widely accepted scientific theory known as the "Big Bang" posits that the universe came into existence approximately 13.8 billion years ago as a result of a massive explosion that originated from a point of singularity. Then, from that infinitely dense and gravitational starting point, it began to grow. This process, which has been subjected to certain fundamental forces, has continued unabatedly and paved the way for the formation of matter and, subsequently, galaxies, stars, and planets. In this sequence, it is estimated that, approximately, the Earth's formation occurred 4.5 billion years ago, followed by the emergence of the earliest signs of life on Earth 3.5 billion years ago.

Today, we more or less know our place in the universe. Our planet is located in the Solar system, which is in the Milky Way galaxy. The Milky Way is just one of the billions of galaxies that make up the universe. So, how does this deep reflection relate to our topic of discussion? The answer comes with the notion of the "consciousness of cosmic history," which can be defined as being aware of our place in the universe in a temporal and spatial sense. This awareness can assist us in reconsidering our individual and collective ideals from a broader perspective by grasping our position as an "ordinary" species in the ocean of existence. It is true that we often get caught up in the fast pace of daily life and forget to see the big picture, yet we should always remember the fact that in the whole universe, the Earth is just a speck and our lives cover very short periods like a spark in the vastness of the night. At the beginning of "On Truth and Lies in a Nonmoral Sense," Nietzsche (1993) ironically describes this condition:

Once upon a time, in some out of the way corner of that universe which is dispersed into numberless twinkling solar systems, there was a star upon which clever beasts invented knowing. That was the most arrogant and mendacious minute of "world history," but nevertheless, it was only a minute. After nature had drawn a few breaths, the star cooled and congealed, and the clever beasts had to die. (p. 79)

In order to better understand what Nietzsche points out, dismissing his criticisms of rational thinking, let us take the concept of the "cosmic calendar," which was popularized by the American scientist Carl Sagan (1934-1996). Within this imaginary framework, the period of 13.8 billion years is compressed to one year. Assuming that the Big Bang took place in the first second of January 1, the formation of the Solar System and then the Earth coincides with September. As human race, we take the stage in the last seconds of December 31<sup>st</sup>. In fact, this depiction should not make us feel insignificant. Instead, we should be motivated to better understand our place in the universe. Thus, we may objectively evaluate some entrenched assumptions regarding our own "being" and search for the answers on a more rational basis. As previously defined, the notion of meditative thinking entails the quality of focusing on the entirety of beings. I further claim that the consciousness of cosmic history is one of the most crucial aspects of this all-encompassing notion. Once we grasp the cosmic origins of our existence, we can position ourselves properly within this grand scheme. It is also important to bear in mind that the spiritual practice of "meditation," in its basis, strives to awaken compassion and thus attain enlightenment by realizing the interconnected fabric of existence.

These explanations should suffice to characterize the pivotal connotation of meditative thinking in my argument as a neglected yet fundamental mental disposition. Ending this discussion here, in the subsequent section, I will delve into an analysis of historical epochs to seek some indicators in terms of the possibility of a paradigm change.

## 5.2. An Outlook for the Future: The Latent Qualities of Epochs

If we are to discuss the potentiality of a metaphysical transformation, we need to decipher its dynamics by carefully analyzing prior epochs. As discussed broadly in the third chapter, three major eras of being can be contemplated from a Heideggerian perspective: the ancient Greek, the Medieval, and the modern. This classification lets us roughly track the human history of thought since ancient Greece for almost 2,500 years. The onset of the ancient Greek era is commonly attributed to the rise of philosophy in the 6th century BCE, marked by the pioneering contributions of

philosophers such as Thales, Anaximander, and Heraclitus, who introduced groundbreaking ideas about the nature of life and human understanding. The Medieval era, also known as the Middle Ages, started around the 5<sup>th</sup> century CE with the widespread dissemination of Christianity across the Roman Empire. This era continued until the 17<sup>th</sup> century CE and gave way to the modern epoch, as Cartesian understanding began to shape Western thought from the bottom up. To facilitate a more rigorous examination, it may be appropriate to incorporate an additional epoch, late modernity or the contemporary era, which started with the astounding discoveries in the natural sciences during the 1900s. The final epoch is notably distinguished by a pervasive technological mindset in which nature is reduced to a mere resource, and consequently, the likelihood of environmental catastrophes has increased.

Let us pause momentarily and try to discern the latent attributes of this historical progression. To begin with, it is safe to say that all epochs are ignited by some sort of intellectual revolution, which lays the metaphysical groundwork for the corresponding epoch. The birth of philosophy, the spread of Christianity, the rise of Cartesian thought, and, lastly, the introduction of quantum theory and subsequent developments in science and technology set the scene for a new epoch in which the conceptions of being have become vastly different. It can also be said that since the beginning up to this point, our understanding of being has evolved into new forms while affecting one another and retaining some common characteristics. However, we cannot conceive of an epoch in terms of a uniform and linear interval of time. There exist several subepochs that display notable deviations in their characteristics from the primary epoch. For instance, although the Renaissance is part of the Medieval era, it might be considered a subepoch in which the concept of subjectivity rose to the surface of human consciousness, thus somewhat established the basis for the Cartesian understanding. Or, upon examining the ancient Greek era, significant distinctions can be observed between the philosophical tenets of the Presocratics and those of subsequent philosophers, including Plato and Aristotle. Besides, momentous societal events like wars, revolutions, discoveries, and inventions have a substantial impact on the formation of the given era's characteristics. To illustrate, let us consider the impacts of the Second World War, the French Revolution, the discovery

of the laws of motion, and the invention of the steam engine on the respective epochs. All these observations imply that every epoch of being is divided into subepochs, interwoven with a central metaphysical commitment, and also accompanied by a series of historically remarkable occurrences.

Examining the lengths of epochs can also be informative, as the first two epochs, the ancient Greek and the Medieval, persisted for almost a millennium, while the third one, the modern, lasted 200 years and gave way to the contemporary era at the beginning of the 20<sup>th</sup> century. In this picture, the brevity of the third epoch relative to the two preceding epochs is noteworthy, and this can be justified by the acceleration of technological progress. As the current dwellers of the world, we do not know how long this epoch, namely late modernity, will last. Perhaps the transition is just occurring in a manner that is imperceptible to us. In any case, I firmly believe that we may expect a paradigmatic shift, whether it be voluntary or involuntary, rather soon, assuming the tremendous technologization of life.

Based on the analysis in this section, we know that a change in metaphysical perspective requires an intellectual spark. Even if we were to concede Heidegger as the proponent of a potential shift in the understanding of reality, we cannot be sure whether his philosophical insights are enough to initiate a postmetaphysical transformation. Maybe, as Heidegger (2003) contended, the world must first come apart, say, as a result of a natural catastrophe or a nuclear war, for us to develop a totally new understanding that puts nature at the center of human life in a circumspective manner.

# 5.3. Art as a Resistance to Enframing

In the last part of "The Question Concerning Technology," Heidegger (1977b) explains the rationale behind the ancient Greek conception of art as technē:

Because it was a revealing that brought forth and hither, and therefore belonged within poiesis. It was finally that revealing which holds complete sway in all the fine arts, in poetry, and in everything poetical that obtained poiesis as its proper name. (p. 34) This phrase makes it evident that for Heidegger, art is also a mode of revealing just like technology. As we know, modern technology has created a disclosing that facilitates enframing while art offers another way within the realm of poiēsis, or bringing-forth. Following this elucidation, Heidegger (1977b) directs his focus towards the affinity and difference between the essences of technology and art:

Because the essence of technology is nothing technological, essential reflection upon technology and decisive confrontation with it must happen in a realm that is, on the one hand, akin to the essence of technology and, on the other, fundamentally different from it. (p. 35)

Thereupon, Heidegger (1977b) proposes art, rather in a quiet voice, as an alternative to overcome the drawbacks of technological thinking as long as it is seen as a manifestation of truth, i.e., aletheia: "Such a realm is art. But certainly only if reflection on art, for its part, does not shut its eyes to the constellation of truth, after which we are questioning" (p. 35).

As presented in "The Question Concerning Technology," Heidegger's thoughts on art balance out his concerns about technology. He believes that art may free us from the shackles of enframing by showing us new paths. Thus, art can be viewed as another form of disclosing within the context of our relationship with nature and ourselves by providing prospective means for reassessing our fundamental conceptions concerning our contemporary existence. By being original and inspirational, art can open up unique perspectives on things that communicate new meanings. In the case that technological thinking affects our perception of time and space by dictating a uniform outlook and reducing the natural world to a collection of resources that are solely intended for exploitation, then art can emphasize alternative ways regarding our relationship with nature. This openness and flexibility in perspective can imbue the world with a renewed sense of amazement, thereby reinstating the essential bonds between humanity and nature that transcend mere utilitarian purposes.

There are, in fact, many fields in which creative artistic approaches might be used to offer new insights and challenge enframing. One of them is architecture, which is simply defined as "the art of designing and making buildings." In the next subsection, I will elaborate on the concept of "sustainable architecture," which might serve as a proper example of art's potential "saving power." This discussion can also be directly linked to the notion of "dwelling," which was covered in the previous chapter. By bringing this topic to light, I hope to showcase the potential role architecture can play in fostering awareness of our definitive yet vulnerable place in nature and offer a vision to minimize the ecological footprint with the ultimate goal of bequeathing a sustainable world for future generations.

#### 5.3.1. Sustainable Architecture

Sustainable architecture requires architects to create smart designs and use available resources and technologies to ensure that structures have minimal negative effects on the environment and communities. In contrast to profoundly entrenched unsustainable architectural practices that view nature as a space devoid of any inherent significance, sustainable architecture values all natural elements in their own contexts and prioritizes an inhabitation approach that considers nature's vitality. In his book, Martin Heidegger on Technology, Ecology, and the Arts, Anthony Lack (2014) maintains that Heidegger's ideas about technology and dwelling on Earth can be seen in the architectural works of John Lautner and Glenn Murcutt. In this setting, the works of Lautner, an American architect who lived between 1911 and 1994, can be interpreted as an aesthetic response to the dilemma of humans' becoming estranged from and disenchanted with nature. By positioning his houses in environments that allow for permeable boundaries with nature, Lautner employs modernity to reconnect us with nature. His particular architectural style places emphasis on the interplay between the building and the natural environment as well as the relationship between interior and exterior spaces. Lautner shows us how to value nature and bring it into our homes while still being modern and comfortable. From this viewpoint, it is possible to reestablish a connection with nature by developing an aesthetic apprehension of the natural surroundings, such as forests, rivers, and mountains. So, as a human species, we can conceive of ourselves as an inseparable element of nature by harmoniously coexisting with other natural entities instead of constantly present subjects in front of which everything is a manipulable object.

The affordable, uncomplicated, place-based modernism of Murcutt, who is an Australian architect born in 1936, demonstrates how to live elegantly and stylistically in nature. The native terrain serves as a source of inspiration for his building philosophy, which he develops through careful experimentation with local materials, light, and air currents to explore unique aspects of each location. According to Lack (2014), Murcutt's use of modern technology, influenced by the Aboriginal proverb "touch the earth lightly," can be seen as an example of deliberate architectural practice that adheres to the Heideggerian understanding of dwelling, which was thoroughly covered in the preceding chapter. As a reminder, the essential nature of dwelling is to live in harmony on Earth rather than dominating it. In this sense, Murcutt's architectural approach is based on a careful assessment of the surrounding environment, since he prefers learning from the terrain rather than considering it as an opposing realm to be mastered and shaped. Murcutt favors low-cost, readily available, and long-lasting materials. Another principle that guides his material selection is that they are produced with minimal resource consumption and would conserve energy in the building's function.

Apart from that, the original architectural styles of Lautner and Murcutt demonstrate that beings can be interpreted in a variety of ways, as opposed to the historically constrained perspective that has emphasized enframing and mastery. It can also be said that both architects stress the close connection between human beings and nature by envisioning alternative modes of interacting with the natural environment. Hence, we may draw ourselves out of a technologically frantic existence as we learn to live in tune with the world in which we dwell. In such a dwelling, we can feel at "home" with other elements of nature that we have a genuine appreciation for. As Heidegger (as cited in Dreyfus & Wrathall, 2005) notes, "reflection is required on whether and how, in the age of the technologized uniform world civilization, there can still be a home." As an alternative way of resistance to enframing, among others, sustainable architecture can evoke this profound situatedness.

Another important aspect of ecological circumspection is putting into practice nature-friendly technological approaches. "Ecotechnology" is one of them, which will be mentioned in the following subsection.

## 5.4. Ecotechnology

By harnessing and modifying natural forces to maximize their positive impacts, ecotechnology is an applied science that aims to meet human needs with the least possible ecological harm. In that regard, ecotechnology encompasses a wide range of "sustainable engineering" practices that prioritize the preservation of ecosystems, embrace ecological principles, and promote sustainable development while safeguarding biodiversity. Murray Bookchin is one of the pioneering figures in this field of study. His definition of ecotechnology is as follows:

If the word "ecotechnology" is to have more than a strictly technical meaning, it must be seen as the very ensemble itself, functionally integrated with human communities as part of a shared biosphere of people and nonhuman life forms. This ensemble has the distinct goal of not only meeting human needs in an ecologically sound manner—one which favors diversity within an ecosystem—but of consciously promoting the integrity of the biosphere. (1980, p. 109)

According to an ecotechnological approach inspired by Bookchin, the Promethean desire of using technology to "dominate nature" is replaced by the ecological ethics of making use of technology to improve the quality of human life while pursuing a balanced approach. The term "balance" is a central notion in ecotechnology and refers to the ability of ecosystems to maintain continuity despite the diverse requirements, functions, and activities of their inhabitants, as well as the ongoing possibility of structural changes within the system. In doing so, all components are merged to produce a highly interconnected living and non-living constellation in which every component serves as a supporting aspect of the totality.

The fish tanks, "sun tubes," and ponds that use fish wastes to nourish the plant nutriment on which they live are merely the simplest examples of a wide-ranging ecological system composed of a large variety of biota—from the simplest plants to sizable mammals—that have been sensitively integrated into a biotechnical ecosystem. (Bookchin, 1982, p. 265).

In this light, it can be asserted that an ecotechnological imagination strives to uncover appropriate ways of revealing, and respects the unity and interdependence that exist between the humans and natural environment. A genuine grasp of ecotechnology may truly bring the sun, wind, plants, and animals into our lives as participants in a symbiotic and harmonious ecological environment.

# **CHAPTER 6**

## CONCLUSION

All in all, since the Industrial Revolution, which can also be counted as the beginning of the Anthropocene, i.e., the epoch of humans, the way we conceive and use technology has engendered serious ecological threats, such as climate change, which puts the sustainability of nature in extreme danger. It should be noted that climate change is chiefly caused by the increased emission of greenhouse gases that have a global warming effect as a result of intensive industrialization over the last 250 years. The excessive accumulation of these hazardous gases in the atmosphere acts as a blanket that absorbs the sun's heat and raises global temperatures.

On numerous occasions, scientists warn that the phenomenon of climate change is real and that if proper actions are not taken immediately, it may cause environmental catastrophes in the foreseeable future and endanger the continuation of human life on Earth. Even today, we are witnessing some adverse effects of climate change, such as melting glaciers, rising sea levels, ocean acidification, and extreme weather events. It is anticipated that by the year 2050, one billion climate refugees may be forced to relocate due to climate issues. This demonstrates how the socioeconomic structure of the world may be severely affected by climate change in the coming years. It is accurate to say that, now, as human beings, we are experiencing a breakdown that calls for a solid comprehension of our situation as well as the formulation of effective solutions. Even though climate change has been recognized as a critical issue on a global basis, there appear to be some political obstacles surrounding the implementation of appropriate policies at both the local and global scales.

While grappling with the challenges brought by climate change, we can draw upon the philosophical tenets of Heidegger's conception of modern technology, which offers significant insights into the matter at hand. According to Heidegger, the problem is not technology per se but rather technological thinking, which constructs a propensity to transform all entities into quantifiable units in the form of standingreserve. Heidegger contends that the modern understanding of reality is rooted in the Western metaphysical tradition, and examines the history of Western metaphysics to comprehend our current understanding of being, according to which all entities are viewed as standing-reserve.

In a Heideggerian framework, three main epochs of being can be identified: the ancient Greek, the medieval, and the modern. As a manifestation of "physis," being was first understood in terms of "presencing" in the Presocratic era. Beginning with Plato and continuing onward, this vigorous interpretation has been forgotten and then replaced with the notion of "enduring presence." During the medieval era, the proliferation of Christianity led to the conception that being was entirely reliant on God's creation. From a Christian perspective, humans share a commonality with other natural beings since they are all considered divine creations, yet humans are distinct from them in that they are fashioned in the image of God. It can be argued that this ontological commitment, which also involves a hierarchical structure, has fundamentally created a distance between humans and nature. In the modern era, which was instigated by Descartes, there has been a shift in the comprehension of reality, whereby it has been viewed as a representation of the subject rather than a divine creation. Descartes' project has placed a significant emphasis on the self, positioning it as the most reliable source of knowledge. Hence, the medieval idea of the exceptionality of humankind has been given a boost by the Cartesian turn with the presumption that humans are the only subjects. In fact, modern science operates within a Cartesian metaphysical framework in which the self is viewed as a privileged subject endeavoring to acquire clear and distinct knowledge of natural objects, which are acknowledged as extended entities in space and time. It is true that perceiving nature in terms of quantifiable entities has enabled us to make indisputable progress over the course of time. Thanks to this progress, today we can expect to enjoy longer, healthier, and generally better lives. However, the dilemma arises because our "success" has led us to assume that this is the only way to envision reality. In other words, the achievements brought by the scientific, industrial, and technological developments founded on Cartesian metaphysics have

led us to adopt a relatively narrow worldview and the ethical ideal of dominion over nature.

To prevent further confusion, it is important to note that Heidegger's critique of technology is not directed at any particular technological item but rather at the increasing technologization of intelligence, which he sees as an ontologically reductive process that turns all things into meaningless resources that are waiting to be optimized. When studied rigorously and sensitively from a phenomenological perspective, Heidegger's frequent characterization of enframing as the present technological comprehension of being exhibits the fact that contemporary technology reveals itself as a manifestation of the unsettling historical direction in which our underlying ontology appears to bring us. To put it another way, Heidegger's criticism of technology is centered on discovering the ontological grounds of a continuing transformation of intelligibility, the repercussions of which transcend far beyond the sphere of technological entities. Thus, the proper cure for this problem must address its ontological underpinnings, rather than its technological symptoms.

In the ages of modernity, and following, late modernity, our knowledge has become progressively so potent that we can control nature to the point where it is regarded as a common resource for human utilization. Now, nature has been converted into a massive energy network that can be harnessed for human utilization and manipulated to align with human interests. Furthermore, Heidegger's examination of modern technology reveals a state of "formlessness" that is characterized as the "supreme danger." Here, formlessness refers to the ubiquitous and inconspicuous nature of modern technology, which penetrates all spheres of life without being noticed. In parallel to that infiltration, eventually, human subjects are seen as something to be utilized and optimized. It is plausible to assert that Heidegger's later conception of enframing, as the essence of modern technology, poses an existential threat because it reduces all entities, including humans, to the status of mere resources to be exploited to the greatest extent possible. Recently, the widespread use of the word "human resources" can be regarded as proof of this tendency. For Heidegger, this is not the case with earlier technologies, which assumed technē, or poiēsis—an artistic way of revealing entities following their natural unfoldings-as their basic principle

of production. A comparison of a windmill and a hydroelectric plant would demonstrate the difference between the inherent dynamics of previous and modern technologies. While the former respects the natural course of the river, the latter attempts to capture it as much as possible.

Heidegger also thinks that Nietzsche's ideas of "will to power" and "eternal recurrence" accurately describe the modern age's nihilistic, subjectivist, and technological attitudes by showing how the development of metaphysical thought inevitably reaches a climax, namely technological thinking, or enframing. So, the primary question would be: What can be the solution to this pervasive invasion? Heidegger essentially suggests that we should explore a free relationship with technology by being thoughtful and letting go of our restrictive attitude-to be meditative rather than just calculative. This manner, which can be called "meditative thinking," requires the cultivation of awareness that prioritizes the interdependence and interconnectedness of all beings while maintaining a respectful attitude. Here, the "consciousness of cosmic history," which can be regarded as an element of meditative thinking, serves as a basis for grasping the brevity of human civilization within an imaginary "cosmic calendar." The true recognition of our place in the whole universe would give us a sense of modesty rather than frustration, which would enable us to position ourselves properly in our quest for meaning. In addition to meditative thinking, Heidegger introduces "engaged questioning" in "The Question Concerning Technology," which denotes the distinctive quality of being a human and the potential for finding alternative options regarding the "lifeworld." In that regard, as human beings, we have the capability to find genuine ways of living within the perilous and, at the same time, marvelous prospects presented by the technological age only by scrutinizing its assumptions, hazards, and potentials.

It is important to consider that when something is revealed in one way, all of its other possibilities become simultaneously hidden. This means that by choosing one disclosure, we rule out the other options. For instance, the ancient Greeks' disclosure of being has been obscured in our contemporary disclosure of being, meaning that our mode of revealing has led to a concealment of the ancient Greeks' revealing. Keeping this interchangeability in mind, I argue that we can interpret nature in new ways. To do it, we can build on Heidegger's critique of modern technology and expand on how his insights have already been applied in ecological philosophy. That being the case, a paradigm shift in our comprehension of being(s) is required if the natural ecosystem and human society are to have a sustainable future. Since our perception of the world defines how we live in it, at this critical point, we must alter our existential standpoint to address the current ecological crisis so that we may foster an "ecological circumspection" that enables us to recognize how our everexpanding technological view fabricates a misleading reality for us. Hence, we can strategize smart moves to maintain a healthy relationship with the natural world. This paradigmatic shift holds the promise of ushering in nonauthoritarian and nondestructive modes of interacting with nature through which natural beings are interpreted and experienced in ways that are not limited to the role of scientific objects susceptible to technological manipulation.

Heidegger, in fact, offers us a basic theoretical framework within which we can conceive of a new beginning. The main constituents of this postmetaphysical framework are the concepts of "be-ing, event, letting beings be, freedom, and dwelling," which together underline a circumspective attitude towards natural beings by which they reveal their unique potentials without any limitation. If such potentials are conceivable, then this may be because the earth is perceived not as a resource but as a possibility. Then, we may realize that while our technological comprehension of being is our destiny, it is not our fate. In other words, even though our understanding of things and ourselves as resources to be ordered and utilized efficiently has been accumulating for centuries and permeates our practices, we are not obligated to adhere to this "frenzy." It is not how things have to be in the future, but simply the ontological clearing we are going through at the moment. Once we realize that technological thinking represents our most recent understanding of being, we will come to appreciate it because it informs us of the possibility of other alternatives that can be chosen at any given time.

Ecological circumspection, in this specific context, is a call to think in ways other than technologically, calculatively, and pragmatically. It is to examine attentively the assumptions that undergird both our ecological vandalism and our desire for scientific and technological progress, as well as the most basic patterns of our contemporary human existence. Artistic resistance can be regarded as one exemplary aspect of ecological circumspection among others due to the simple reason that art is, according to Heidegger, another form of revealing, just as technology is where truth, i.e., "aletheia," happens. By being original and inspiring, art can provide fresh perspectives on beings that convey new meanings. If enframing dictates a uniform view of time and space, hence reduces the natural world to resources for exploitation, then art may unveil nature's possibilities and its alternate relations to humanity. Sustainable architecture can be seen as a concrete example of an artistic dwelling that aims to create elegant and sustainable designs where we can connect with nature and feel at "home." In this regard, the works of modern architects such as Lautner and Murcutt demonstrate the multifaceted ways in which natural surroundings can be contemplated. Implementing environmentally friendly technological approaches can also be thought of as an option in terms of applying ecological circumspection. "Ecotechnology" is one of them, which seeks to use technology to satisfy human needs while simultaneously protecting biodiversity. Murray Bookchin is a leading figure in this field of study, and his writings can be read as a manifesto against the Promethean urge to master nature by technological means.

As a final comment, in order to resurrect ourselves and deal firmly with the ecological crises in the days ahead, we need to reaffirm the vitality of nature. After having forgotten the presencing sight of nature, we now have a glimmer of hope to be able to regain natural wisdom, which has been set alight by the Pre-Socratics and later revived by Heidegger. In doing so, we may recollect our organic affinity with all living and non-living beings, which are the essential ingredients of our planet. If we develop a respectful attitude regarding how they unfold naturally, we may have a significant chance to see their sparks of truth and find smart ways to survive the breakdown that we are experiencing right now.

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### **APPENDICES**

## A. TURKISH SUMMARY / TÜRKÇE ÖZET

Bu tez çalışması, Heidegger'in teknoloji felsefesi ekseninde, Sanayi Devrimi ile beraber fitili ateşlenen teknolojik gelişmelere paralel insan faaliyetlerinin bir sonucu olarak ortaya çıkan iklim değişikliği tehdidini gündeme getirerek insanlık tarihinde bir kırılma oluşturabilecek bu tehdide karşı hakiki bir farkındalık geliştirmeye dönük bir yol haritası sunmayı amaçlamaktadır. Bu doğrultuda, Heidegger'in terminolojisinden ödünç alınan ve dış dünya ile olan etkileşimimizin doğasını belirleyen "circumspection" kavramı, "farkındalık" olarak tercüme edilip bu çalışmanın odak noktası olan "ekolojik farkındalık" konseptinin oluşmasında belirleyici olmuştur.

Antroposen olarak da adlandırılan İnsan Çağı'nın başlangıcı olarak kabul edilen Sanayi Devrimi'nden bu yana, yani yaklaşık olarak iki yüz elli yıldır, teknolojiyi algılama ve kullanma biçimimiz, iklim değişikliği gibi ciddi bir ekolojik soruna yol açmak suretiyle gezegenimizin doğal dengesini tehdit eder hâle gelmiştir. İklim değişikliği, esas itibariyle teknolojik gelişmelere paralel olarak küresel ısınma etkisi yaratan sera gazlarının artan emisyonundan kaynaklanmaktadır. Karbondioksit, karbonmonoksit ve metan gibi sera gazlarının atmosferde aşırı ölçüde birikmesi, güneş ısısının atmosferde hapsolmasına ve dolayısıyla da küresel sıcaklıkların yükselmesine neden olmaktadır. 1880 yılından beri sürekli olarak küresel sıcaklıkları ölçümleyen Amerikan Ulusal Havacılık ve Uzay Dairesi (NASA) bünyesindeki Goddard Uzay Araştırmaları Enstitüsü (GISS) araştırmacılarına göre, sözü edilen tarihten bugüne gezegenimizin ortalama küresel sıcaklığında en az 1,1°C'lik bir artış kaydedilmiş olup 2040 yılına kadar küresel sıcaklığın 1,5°C daha yükselmesi beklenmektedir. Küresel sıcaklıktaki bu değişimin, dünyayı ve dolayısıyla insan yaşamını nasıl etkileyebileceğine yönelik yapılan bilimsel projeksiyonlar, küresel ölçekte 1°C civarında bir sıcaklık değişiminin bile atmosferin, okyanusların ve kara

kütlelerinin ısısı üzerinde geniş kapsamlı etkileri olabileceğini göstermektedir. Yaklaşık bir ila iki derecelik bir sıcaklık düşüşü, 14. ve 19. yüzyıllar arasında Kuzey Yarım Küre'yi etkisi altına alan ve "Küçük Buz Çağı" olarak isimlendirilen soğuma döneminin oluşmasını tetiklemiştir. Özellikle Avrupa kıtasında etkisini yoğun olarak hissettiren şiddetli yağışlar, hayli serin geçen yaz mevsimleri ve zorlu hava koşullarına bağlı oluşan kıtlık, insanlık tarihinde örnek teşkil eden bu dönemin alametifarikaları olmuştur.

Son yıllarda, bilim insanları defaatle iklim değişikliği olgusunun gerçek olduğu; gerekli önlemler alınmadığı takdirde yakın gelecekte bunun çevresel felaketlere neden olabileceği ve insan yaşamının devamlılığını tehlikeye atabileceği konusunda uvarılarda bulunmaktadırlar. Bugün bile iklim değişikliğinin, eriyen buzullar, yükselen deniz seviyeleri, okyanus asitlenmesi ve ekstrem hava olayları gibi birtakım olumsuz etkilerine tanık olmaktayız. Yapılan araştırmalar, 2050 yılında 1 milyar iklim mültecisinin, iklim değişikliğinden kaynaklanan sorunlar nedeniyle yaşadıkları yerlerden ayrılmak zorunda kalabileceğini göstermektedir. Bu tespit, iklim değişikliğinin, yakın gelecekte sadece ekolojik problemlere neden olmakla kalmayıp dünyanın sosyoekonomik yapısını ciddi şekilde etkileyebilecek çok boyutlu bir sorun olarak karşımıza çıkabileceğine işaret etmektedir. Kabul etmemiz gereken bir gerçek var: İnsanlık olarak içinde bulunduğumuz bu kritik durumu gerçekçi bir şekilde kavramayı ve akılcı çözümler üretmeyi gerektiren bir dönüm noktasındayız. Bundan böyle, bahse konu bilimsel ve sosyoekonomik analizleri yersiz spekülasyonlarmış gibi görme lüksümüz yok. Hiç vakit kaybetmeden, çözüme yönelik somut adımlar atılması şart!

Son dönemde, pek çok ülke, bağımsız veya eş güdümlü olarak iklim değişikliğinin olumsuz etkileriyle mücadele edebilmek adına çeşitli eylem planları oluşturup bunları hayata geçirmektedir. Global ölçekte ülkeler arasında imzalanan bağlayıcı anlaşmalar ve yerel düzeyde uygulamaya alınan düzenlemelerle gezenimizdeki doğal yaşamın sürdürülebilirliğini teminen karbon ayak izinin en aza indirilebilmesi için yoğun bir çaba sarf edilmektedir. Birleşmiş Milletler ve Dünya Bankası gibi dünya siyasetinde söz sahibi uluslararası kuruluşların yanında, bazı sivil toplum örgütlerinin, derneklerin ve hatta sosyal medya fenomenleri ile ünlülerin de desteğiyle iklim değişikliği, küresel ajandanın en önemli maddelerinden birisi olarak gündemde tutulmaya çalışılıyor. Söz gelimi, Türkiye'de 2021 yılında, "Çevre ve Şehircilik Bakanlığı"nın adının "Çevre, Şehircilik ve İklim Değişikliği Bakanlığı" olarak değiştirilmesi, ülkemiz nezdinde de iklim değişikliği olgusunun hayatımızın yadsınamaz bir gerçeği hâline geldiğinin bir göstergesi. Tüm bunlara rağmen, ulusal ve uluslararası düzeyde iklim değişikliği tehdidinin ne kadar sağlıklı analiz edildiği ve çözüme yönelik oluşturulan stratejilerin ve yürütülen çalışmaların etkinliği hususu çok sayıda soru işareti barındırmaktadır. Bu belirsizliğe rağmen, insanlık olarak içinde bulunduğumuz ve yaşamı tepeden tırnağa teknolojik bir bakış açısıyla değerlendirdiğimiz bu dönemde, iklim değişikliğinin neden olabileceği sorunlara yaklaşırken Martin Heidegger'in teknolojinin özüne ilişkin önemli tespitler barındıran modern teknoloji eleştirisinden yararlanabiliriz.

Heidegger'e göre teknoloji ile ilgili asıl sorun, tüm varlıkları "kullanıma hazır kaynak [standing-reserve]" formunda ölçülebilir birimlere dönüştürme eğilimi oluşturan teknolojik düşünce şeklidir. Heidegger, "çerçeveleme [enframing]" olarak da adlandırdığı modern gerçeklik anlayışının Batı metafizik geleneğinde kök saldığını ve tüm varlıkların kullanıma hazır kaynak olarak görüldüğü mevcut varlık anlayışımızı anlamak için Batı metafiziğinin tarihsel gelişiminin incelenmesi gerektiğini savunur. Bu noktada, Heidegger'in felsefesinin temelini oluşturan ve Heidegger tarafından tarihsel süreçte geri plana atılıp unutulduğu öne sürülen "varlık" kavramının Heideggerci çağrışımlarına kısaca değinmekte fayda var. Heidegger, ontolojik olarak "varlıklar [das Seiende]" ve "varlık [Sein]" kavramları arasındaki nüansa dikkat çeker. Birincisi var olan şeyleri ifade ederken ikincisi var olan şeylerin varlığına atıfta bulunur. Basit bir örnekle açıklamak gerekirse masa, sandalye gibi duyularımızla algılayabildiğimiz "ontik" varlıklar ile onları varlık alanına taşıyıp orada tutan "ontolojik" varlık nosyonu birbiriyle yakından bağlantılı olsa da aynı şeyler değildir. Bu anlayış çerçevesinde Heidegger, "Dasein" olarak tanımladığı insanı, kendi varlığını sorgulayabilme yeteneğinden dolayı diğer varlıklardan ayrı tutar.

Heidegger'in çalışmalarından yola çıkarak varlığın üç ana çağını, antik Yunan dönemi, Orta Çağ ve modern dönem olarak sınıflandırabiliriz. Antik Yunan

döneminin başlangıcı olarak kabul edilen Presokratik dönemde varlık, doğadaki değişim [physis] özelliğinin bir tezahürü olarak ele alınmış; Thales, Anaksimander ve Heraklitos gibi ilk filozofların ortaya attığı yenilikçi düşüncelerde, sıklıkla varlığın dinamik doğasına gönderme yapılmıştır. Heidegger, Platon'la beraber bu nosyonun unutulduğunu ve varlığın, sadece mevcut olanla özdeşleştirilmeye başlandığını iddia eder. Orta Çağ'da Hıristiyanlığın yayılması, varlığın tamamen Tanrı'nın yaratımına bağlı bir anlayış dâhilinde değerlendirilmesine vol acmıştır. Bilindiği üzere, Hristiyan inanışı, insanı ve diğer bütün canlıları ilahi yaratımlar olarak kabul etmekle beraber insanı, Tanrı'nın suretinde yaratıldığı için diğer canlılardan ayrı tutmaktadır. İnsanın ayrıcalıklı bir konuma yükseldiği ve dolayısıyla hiyerarşik bir yapı da içeren bu ontolojik anlayış, kronolojik olarak insan ile doğa arasındaki ayrışmanın başlangıcı olarak da kabul edilebilir. René Descartes'ın matematiği temel alan öğretileriyle şekillenen modern çağda, gerçeklik anlayışında köklü bir değişim yaşanmış ve varlık, ilahi bir yaratımdan ziyade öznenin bir temsili olarak görülmeye başlanmıştır. Descartes, özneyi en güvenilir bilgi kaynağı olarak konumlandırarak bireyselliği ön plana çıkarmış ve bu sayede, Tanrı nazarında insanın istisnai bir yeri olduğunu savunan Orta Çağ fikri yerini, insanın yetkin bir özneye dönüştüğü Kartezyen anlayışa bırakmıştır. Bu anlayış ekseninde işleyen modern bilim, nesneleri, uzay ve zamanda konumlanmış varlıklar olarak değerlendirip insanı, söz konusu nesneler hakkında açık ve seçik bilgi edinmeye çalışan ayrıcalıklı bir özne olarak ele almaktadır.

Doğayı ve doğayı oluşturan nesneleri, uzay ve zamana yayılmış hesaplanabilir varlıklar olarak kabul ederek özellikle son birkaç yüzyılda bilim ve teknolojide önemli mesafeler katettiğimiz yadsınamaz bir gerçek. Mühendislikten tıbba, eğitimden haberleşmeye kadar hayatın hemen her alanına etki eden teknolojik gelişmeler sayesinde bugün, geçmişe nazaran çok daha konforlu hayatlar sürmekteyiz. Bununla beraber, diğer yaşam alternatiflerine sırt çevirerek dünyayı sadece teknolojik bir gözle değerlendirdiğimiz bir nevi körlüğe saplanmış olma ihtimalimizi de göz ardı edemeyiz. Başka bir deyişle, Kartezyen metafiziğe dayalı bilimsel, endüstriyel ve teknolojik gelişmelerin bizi görece dar bir dünya görüşünü ve doğa üzerinde egemenliği esas alan yanıltıcı bir etik anlayışı benimsemeye yönelttiği de söylenebilir. Bu noktada, Heidegger'in teknoloji eleştirisinin, belirli bir

teknolojik ögeye veya teknolojinin araçsallığına ya da antropolojik yönüne değil, her şeyi kullanıma hazır kaynak olarak gören, ontolojik olarak indirgemeci ve doğayı hegemonyası altına almak isteyen bir mantaliteye yöneldiğini not etmek gerekir. Fenomenolojik bir perspektiften titizlikle ve duyarlılıkla incelendiğinde Heidegger'in çerçeveleme olarak adlandırdığı ve bütün varlıkların ekonomik faydalarına göre değerlendirildiği bu yönelim, bir yandan da geçmişten bugüne etkisini giderek daha fazla hissettiren felsefi bir geleneğin kaçınılmaz olarak ulaştığı bir doruk noktası olarak da görülebilir. Bir bakıma, Heidegger'in teknoloji eleştirisinin, varlık kavramının tarihsel süreçteki değişiminin ontolojik temellerini keşfetmeye yönelik bir girişim olduğu da söylenebilir. Tam da bu nedenle, teknolojileşmenin beraberinde getirdiği sorunların çözümünde sadece teknolojik semptomların değil, geçmişten günümüze sürekli değişim hâlinde olan ontolojik varsayımların da göz önünde bulundurulması gerekmektedir.

Son dönemde tecrübe ettiğimiz bilimsel ve teknolojik gelişmelerin ışığında, varlığı anlamlandırma şeklimiz de önemli ölçüde değişti. Sadece insanın kullanımına tahsis edilmiş sıradan kaynaklar olarak görülmeye başlanan doğal varlıklar, sınırsızca manipüle edilebilen devasa bir enerji ağının bileşenlerine dönüştü. Bu dramatik hikâyenin başka bir can alıcı yönü daha var. Heidegger'in, modern teknolojinin özünü anlamaya yönelik yürüttüğü inceleme, "en büyük tehlike" olarak nitelendirilen bir "biçimsizlik" durumunu da gün yüzüne çıkarmaktadır. Biçimsizlik, bu bağlamda, fark edilmeksizin yaşamın her alanına nüfuz eden modern teknolojinin gizemli ve bir o kadar da yayılmacı doğasına işaret etmektedir. Heidegger tarafından modern teknolojinin özü olarak nitelendirilen bu biçimsizliğin, varoluşsal bir tehdit oluşturduğu da söylenebilir çünkü bu özelliğiyle modern teknolojik anlayış insanı, tıpkı diğer varlıklar gibi kendisinden maksimum seviyede faydalanılacak, her an kullanıma hazır kaynak statüsüne indirgemektedir. Günümüzde, özellikle iş dünyasında, "insan kaynakları" ifadesinin yaygın olarak kullanılması, bu anlayışın modern hayatta ne ölçüde yer ettiğine kanıt niteliğindedir.

Heidegger, temel üretim ilkeleri olarak "technē" ve "poiēsis" kavramlarını benimseyen, yani varlıkları doğal gelişimlerini takip ederek âdeta sanatsal bir üslupla görünür kılmayı amaçlayan önceki teknolojik anlayışlarda böyle bir durumun olmadığını ileri sürmektedir. Bir yel değirmeni ile bir hidroelektrik santralinin karşılaştırılması, önceki teknolojilerle modern teknolojinin içsel dinamikleri arasındaki farkı gözler önüne serecektir. Bir yel değirmeni nehrin doğal akışına ket vurmazken bir hidroelektrik santrali nehri mümkün olduğunca tahakküm altına alıp ondan olabildiğince faydalanmaya çalışır. Modern dönemde, tıpkı hidroelektrik santrali örneğinde olduğu gibi çerçevelemeye maruz kalan doğal bir varlık, kendi özerkliğini tamamen yitirip teknolojinin hegemonyasına girmekte ve makineleşme çarkı içerişinde sadece kendi devamlılığını ön planda tutan kısır bir döngünün sıradan bir parçası hâline gelmektedir.

Önceki teknolojilerle modern teknoloji anlayışı arasındaki farkı irdelemek adına başka bir örnek üzerinden varlığın, farklı zaman dilimlerinde, farklı ontolojik perspektiflerden nasıl algılandığına bakabiliriz. Geleneksel halı dokumacılığının Türk kültüründe özel bir yeri vardır. Hâlâ, Türkiye'nin çeşitli bölgelerinde insanlar kültürel ya da ekonomik nedenlerle bu geleneği devam ettirmektedir. Doğrusunu isterseniz, geleneksel halı dokumacılığı hayli zahmetli süreçler içeren, sanatsal bir faaliyet olarak da görülebilir. Belirli mevsimlerde erkekler halı dokumada kullanılan yünü kırkar, kadınlar ise boya malzemelerini toplar ve yünü ipliğe dönüştürür. Halıyı dokurken kullanılacak olan renkler, çivit otu, ceviz kabuğu, marul yaprağı ve nar kabuğu gibi doğal malzemelerden elde edilir. Desenleri oluşturup renklere karar veren kadınlar, kırsal yaşamlarını temsil eden figürleri yöresel türküler eşliğinde resmederek halıyı dokur. Sözünü ettiğimiz tüm bu beceriler sözlü olarak ve uygulama yoluyla nesilden nesile aktarılır. Bu yönüyle halı dokuma, ilgili toplulukların gelenek ve yaşam tarzlarıyla da yakından bağlantılıdır.

Öte yandan, fabrikasyon halı üretimi, özellikle 1990'lı yıllardan itibaren Türkiye'de büyük bir endüstri hâline geldi. Büyük ölçekli halı üretim tesislerinde son teknoloji ürünü makine ve yazılımlar kullanılarak üretilen halılar, hem iç hem de dış pazardaki talep doğrultusunda müşterilerin beğenisine sunuluyor. Birçok uzmanlık alanından binlerce kişi, üretim sürecine katılıyor. Makine halıları, elde dokunan halılara göre çok daha hızlı üretildiğinden bunların üretim maliyetleri de tabiatıyla düşük oluyor. Basit bir mukayese yaparak konunun özüne gelecek olursak faraza beş yüz yıl önce yani 1500'li yıllarda geleneksel halı dokumacılığı yapan bir kadın ile günümüzde aynı coğrafyada bir halı fabrikasında grafik tasarımcısı olarak çalışan başka bir kadının, varlığı deneyimleme şekillerinin birbirinden çok farklı olduğu rahatlıkla söylenebilir. İlki, sanatsal bir yaratım sürecinin ayrılmaz bir parçası konumundadır. Tamamen doğal malzemeler ve görece ilkel teknoloji ürünü aletlerin kullanıldığı meşakkatli bir işlem sürecinden sonra halıyı ortaya çıkarır. Topluluğunun bir üyesi olarak kendi kültürel mirasıyla beraber halis duygularını, dokuduğu halıya yansıtır. Dokunan halılar, döşeme ve süsleme işlevlerinin yanında kutlama, ibadet ve tıbbi tedavi gibi toplumsal ve manevi amaçlara da hizmet eder. Diğer taraftan, sürecin bütününe yönelik pek bir bilgisi olmayan ikincisi, sadece kendi sorumluluğundaki bazı belirli görevleri yerine getirir. Birincil amacı, işlerini aksatmadan tamamlayarak maaşını vaktinde almaktır. Varoluşsal kriz ya da derin düşünce anlarını saymazsak bu kisi, ana motivasyonu kârı olabildiğince artırmak olan ve insan da dâhil tüm varlıkları bu prosesin bir bileşeni olarak mobilize etmiş devasa bir düzenin değiştirilebilir bir parçası olduğunun farkında bile olmayacaktır. Sonuçta, farklı zaman dilimlerinde yaşayan bu iki kadının varoluşsal bakış açılarının önemli ölçüde ayrıştığını söyleyebiliriz çünkü ikisi de birbirinden tamamen farklı gerçeklikler deneyimlemektedir. Bu farklılığa bağlı olarak varlık, sanatsal yaratım veya çerçeveleme şeklinde tezahür eder.

Ele aldığımız meselenin başka bir boyutu da marjinal ve provakatif söylemleriyle felsefenin ufkunu açan Friedrich Nietzsche'nin, modern teknolojik düşünce tarzının oluşmasında oynadığı ve çoğu zaman gözden kaçabilen hayati rol. Heidegger, Nietzsche'nin "güç istenci" ve "ebedî tekerrür" ile ilgili fikirlerinin, çerçeveleme düşüncesinin kaçınılmaz olarak nasıl son noktaya ulaştığını göstererek içinde yaşadığımız çağın nihilist, öznelci ve teknolojik tutumlarını doğru bir şekilde yansıttığını düşünür. Bu yönüyle Nietzsche'nin, Heidegger'in modern teknolojiye ilişkin görüşlerinin şekillenip olgunlaşmasında başat bir entelektüel figür olduğunu söylemek yanlış olmaz.

Buraya kadar ifade edilenler ışığında, insanlık olarak deneyimlediğimiz bu kritik sürece ilişkin sorulması gereken en önemli soru, çerçevelemeyi temel doktrin olarak kabul eden teknolojik düşünce şeklinin hâkimiyetine nasıl son verileceği olmalıdır. Heidegger, 1953'te yayımlanan "Teknolojiye Dair Soru" adlı makalesinde, kısıtlayıcı

zihinsel kalıplardan sıyrılarak teknolojiyle özgür bir iliski yolu keşfetmenin önemine vurgu yapar. Bunu yaparken Kartezyen anlayış üzerine kurulmuş hesaplayıcı düşünce modelini terk edip "meditatif düşünme [meditative thinking]" şeklini benimsememizi salık verir. Bütünselliği merkez alan, başka bir ifadeyle dünyaya ve varlıklara "holistik" bir pencereden bakan meditatif düşünme pratiği insanın, gerçeğin tezahür etmesindeki en önemli aracılardan birisi olduğunu fark etmesini sağlayarak diğer varlıklara rehberlik etme konusunda sorumluluk almasını olanaklı kılar. Bu tespiti yaparken dünyanın yaşamsal dokusunu oluşturan bütün varlıkların birbirleriyle bağlantılı olduğu gerçeğinin de hatırda tutulması gerekmektedir. Meditatif düşünmenin en önemli mental bileşenlerinden birisi sayılabilecek "kozmik tarih bilinci," hayali bir "kozmik takvim" fikri etrafında, zamansal ve mekânsal olarak insanlığın oldukça kısa bir zaman diliminde var olageldiğine dair bir kavrayısı ön plana çıkarır. Gündelik hayatın yoğun temposu içinde genellikle göz ardı edilen bu kavrayışla beraber, insan türü olarak dünyadaki ve evrendeki yerimizin tarafsız bir gözle değerlendirilmesi, bizi hayal kırıklığına sevk etmekten ziyade sağduyu ve alçakgönüllülükle donatarak anlam arayışımızda kendimizi doğru bir şekilde konumlandırmamızı sağlayacaktır.

Meditatif düşünmenin yanı sıra, Heidegger'in "Teknolojiye Dair Soru" adlı makalesinin son kısmında dile getirdiği, insan olmanın ayırt edici niteliklerinden olan rasyonaliteye ve diğer yaşam alternatiflerinin olasılığına vurgu yapan "derin sorgulama [engaged questioning]" nosyonu, mevcut teknolojik düşünce anlayışımızı gözden geçirirken başvurabileceğimiz başka bir yöntem. Bu yöntemi uygulayarak modern teknolojinin beraberinde getirdiği riskleri değerlendirip alternatif gerçeklikler yaratabilme potansiyelimizin farkına varabiliriz. Bu hususu biraz daha açmak gerekirse herhangi bir şey bir şekilde görünür olduğunda yani varlık alanına geçtiğinde onunla ilgili diğer tüm olasılıklar gizlenmiş olur. Heidegger'in örneğinden hareketle, Ren Nehri'ne bir hidroelektrik santral inşa ettiğimizde buna alternatif olabilecek diğer olasılıkları, mesela doğayı çerçevelemekten çok doğa ile uyumlu bir teknolojik anlayışı da perde gerisine itmiş oluruz. Ayrıca, varlığın belirli bir zamanda, belirli bir formda görünür kılınması, tarihsel süreçte varlık anlayışının değişkenlik gösterdiğine de bir delil niteliğindedir. Örneğin, Antik Yunanlıların varlığı belirli bir şekilde anlamlandırmaları, bizim aynı varlığı farklı bir şekilde anlamlandırmamızda gizlenmiştir. Bir bakıma, bizim varlığı tezahür ettirme şeklimiz, antik Yunanlıların varlığı tezahür ettirme şeklinin gizlenmesine yol açmıştır. Bu değişkenlik ilkesini akılda tutarak doğanın bambaşka şekillerde yorumlanabileceğini unutmamalıyız. Bilhassa geç dönem eserlerinde, şiirsel özellikler sergileyen yazı ve düşünce tarzının yanı sıra sıklıkla orman, nehir ve dağ gibi doğal motiflere başvuran Heidegger'in modern teknoloji eleştirisini özümseyerek onun fikirlerinin ekolojik felsefeye olan yansımalarını daha iyi anlayabiliriz.

Hâl böyleyken iklim değişikliği gerçeğiyle yüzleştiğimiz bu kritik dönemeçte, varolussal bakış açımızı, mevcut ekolojik krizle en etkin şekilde mücadele etmek üzere güncellememiz gerektiği şüphe götürmeyen bir gerçek. Esaslı bir paradigma değişikliği gerektiren bu süreçteki önceliğimiz, içinde yaşadığımız dünyayı daha iyi anlayıp ekolojik anlamda daha dengeli bir yaşam sürmek adına ekolojik farkındalığımızı artırmaya yönelik somut adımlar atmak olmalıdır. Özellikle Sanayi Devrimi'nden itibaren, çerçeveleme prensibine dayanan modern teknolojik anlayış, insanlık adına yanıltıcı bir gerçeklik oluşmasına yol açmıştır. Bu nedenle, ayrılmaz bir parçası olduğumuz doğal dünya ile yeniden sağlıklı bir ilişki tesis etmek için modern teknolojiyi yadsımadan akıllıca stratejiler geliştirmek zorundayız. Bu stratejilerin temelini, doğal varlıkların yalnızca teknolojik manipülasyona tabi olan bilimsel nesneler olarak yorumlanıp deneyimlenmediği, bilakis kendi doğalarına uygun bir şekilde tezahür etmelerini mümkün kılan bir ontolojik varsayım oluşturmaktadır. Tam da bu noktada, Heidegger'in bakış açısı bize yepyeni bir başlangıç tasavvur edebileceğimiz bir teorik altyapı sunmaktadır. Bu metafizik ötesi altyapının ana bileşenlerini, doğal varlıklara karşı farkındalıklı bir tavrın altını çizen, Heideggerci felsefeye özgü çeşitli kavramlar oluşturmaktadır. Bunların başında "özgürlük [freedom, letting beings be]" ve "doğa ile uyum içinde yaşam [dwelling]" gelmektedir.

Doğayı bir kaynak olarak değil de bir olasılıklar bütünü olarak görmeye başladığımız anda, teknolojik varlık anlayışımıza kaderci değil de özgürlükçü bir perspektiften bakarak bunu dönüştürmeye yönelik bilinçli adımlar atabiliriz. Başka bir ifadeyle, doğal varlıkları ve nihayetinde insanı, kullanıma hazır kaynak olarak görme

eğilimimiz tüm yasam pratiklerine nüfuz etmis olsa da bu tavrı devam ettirmek zorunda değiliz. Teknolojik düşünce anlayışı, insanlık olarak şu anda deneyimlediğimiz varoluşsal bir süreç. Gelecekte yaşamın nasıl olacağına, yapacağımız tercihlerle yine biz karar vereceğiz. Modern yasamın bütün mecralarına sirayet eden bu yayılımın, sadece ve sadece bugüne dair varlık anlayışımızı temsil ettiğini anladığımızda istediğimiz herhangi bir zamanda yönelebileceğimiz diğer yaşam alternatiflerinin olasılığı hakkında da bir farkındalığa ulaşmış oluruz. Bu bağlamda, Heidegger'in bu konuya ilişkin yorumlarından ilham alınarak tasavvur edilen "ekolojik farkındalık" konsepti, teknolojik, hesaplayıcı ve pragmatik olmayan yollarla düşünmeye bir çağrı niteliğinde olup hem doğayı kontrol etme fikri üzerine kurulu ekolojik vandalizmimizi hem de bilimsel ve teknolojik ilerleme arzumuzu körükleyen varsayımları ve çağdaş varoluşumuzun en temel kalıplarını dikkatle incelemeyi önceleyen, çevreye duyarlı bir anlayışa vurgu yapmaktadır. Örnek vermek gerekirse ekolojik farkındalık dağları, okyanusları ve ormanları, içinde birçok yaşam türü barındıran zengin ekosistemler olarak görmeyi; doğal varlıkları kendi doğal hâllerine ve akışlarına göre değerlendirmeyi; su ve gıda başta olmak üzere her şeyin bir sınırı olduğunu ve bir habitat dâhilindeki tüm ilişki ve etkileşimlerin birbiriyle olan sıkı bağlantısını görmeyi gerektirir.

Sanatsal direniş, Heidegger'e göre sanatın, tıpkı teknoloji gibi hakikatin vuku bulduğu bir alan olması nedeniyle, ekolojik farkındalığın önemli bir bileşeni olarak görülebilir. Genel itibariyle sanat, orijinal ve ilham verici olmasıyla varlıklara dair yeni bakış açılarının gelişmesine katkı sağlar. Nasıl ki çerçeveleme anlayışı, tek tip bir zaman ve mekân görüşünü dayatıp doğayı sadece maksimum seviyede faydalanılacak kaynaklardan ibaret sayıyorsa bir direniş tarzı olarak sanat da doğanın sonsuz olanaklarını ve onun insanlıkla alternatif ilişkilerini açığa çıkarabilir. Bu minvalde, "sürdürülebilir mimari [sustainable architecture]" olarak bilinen mimari tavır, kendimizi "evimizde" hissedebileceğimiz, zarif ve doğa ile uyumlu yaşam alanları yaratmayı amaçlayan sanatsal anlayışın somut bir örneğidir. Heidegger'in özgürlük ve doğa ile uyum içinde yaşayamaya ilişkin felsefi görüşleri, John Lautner ve Glenn Murcutt gibi sıra dışı mimarların projelerinde hayat bulmaktadır. Sürdürülebilir mimarinin yanında, çevre dostu teknolojik yaklaşımları, ekolojik farkındalığın başka bir bileşeni olarak düşünülebiliriz. Teknolojiyi çevreye zarar

vermeden insan ihtiyaçlarını karşılamak için kullanmayı amaçlayan "eko-teknoloji [eco-technology]" buna örnek verilebilir. Bu çalışma alanının önde gelen isimlerinden birisi olan Murray Bookchin tarafından ortaya atılan fikirler, doğaya teknolojik yollarla hükmetme dürtüsüne karşı bir manifesto olarak okunabilir. Doğa ile insanı bir bütün olarak ele alan eko-teknolojik bir anlayış, "denge" prensibini esas alarak güneşi, rüzgârı, bitkileri ve hayvanları, birbirinin yaşamında kritik rollere sahip, uyumlu bir ekolojik çevrenin olmazsa olmaz unsurları olarak sayar.

Son olarak şunu söyleyebiliriz: Yakın gelecekte iklim değişikliğine bağlı olarak yaşanabilecek ekolojik krizlerle etkin bir şekilde mücadele edebilmek için doğanın canlılığını yeniden keşfetmemiz gerekiyor. Presokratik dönem filozofları tarafından tanıtılan ama iki bin yıllık tarihsel süreçte unutulan ve nihayetinde 20. yüzyılda Heidegger tarafından yeniden canlandırılan bu nosyon, insan olarak farkındalık yolculuğumuzun kilit noktası. Gezegenimizin temel bileşenleri olan ve insan türü olarak bizden çok daha önce var olagelen canlı ve cansız tüm varlıklarla olan organik bağlantımızı hatırlayıp bunların özsel süreçlerine saygılı bir tutum geliştirmeyi başarabilirsek şu anda deneyimlediğimiz kırılmaya çözüm üretebilme konusunda önemli bir adım atmış oluruz.

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