

TO BE DETERMINED: AN ANTHROPOCENE INQUIRY

by

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DEDICATION

Dedicated to my Village Boys: Joel Miller, Drew Mahan, Chase Tackett, Matt Henton, Michael Richards, and to your partners & new children. It is an honor to be their uncle, I thank you for your lifelong friendships, and I wish your young luck in the Anthropocene. To my sister Erin, father Royce, and mother Ruth, I would not be where I am today without you. And with special thanks to my St. Louis Ceramics Community, including but not limited to, Jim Ibur, Eric Hoffer, Vic Bassman, Guy Sachs, Jane Isenburg, Shari Gorde, Chad Nelson and Felicia Breen, for helping to solidify my love of the field.

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ABSTRACT

We live in the Cenozoic Era, The Age of Mammals, but only 3% of Earth's mammal biomass are considered wild. Since before the Agricultural Revolution to the present date, humankind has always had an impact to make this statistic a reality. This has led to a global scientific debate on the renaming of the Holocene Epoch to be called the Anthropocene. This paper informs the audience of human's shared history with our planet, before the author then interprets it into a collection of visual art. With art's ability to concrete large and abstract ideas, the conclusive desire is to present knowledge as power, because much is needed to change culturally if our species is to survive. Will we accomplish what is required, or will humankind become yet another small marker within the Geologic Time Scale?

INTRODUCTION

My Grandpa, Papa, used to say, “The times are changing’,” as almost a catch-all to events he did not agree with. He was a cranky, racist old fart, who I hardly knew before he passed, but I remember thinking, “good!” to his pessimism, while he drank whisky and watched baseball. While his catchphrase is not one I use, or his values my own, I have learned how correct, but also arbitrary, his phrase was. From 9-11, the 2008 financial crisis, weather disasters, artificial intelligence, COVID, and now Trump, I have witnessed and lived through seemingly a lot since my birth in 1991, but so too have all previous generations before me and so too will the generations that succeed me. Each generation seems to inherit grievances of the past and leave problems for the future. This leads me to what I believe to be the most pressing issue of our current generation: climate change.

From my chosen career as an artist, I will first present this idea with scientific fact before explaining how my interpretation became visualized. I decided to write in this format so as to not muddy the former from the latter. As scientific information can be dense, I still believe that information of this kind leads towards progress and will help illuminate the often opinionated or enigmatic nature of contemporary art. The hope being that this explanation clarifies my creativity. And with clarity, a more comprehensive and/or accurate interpretation will be possible.

As we stand at the threshold of the dawn of an increasingly turbulent Nature, there are many questions which I will propose that I have no answers for. I hope the reader’s contemplation throughout this paper will lead them to think about their place within our time, and in turn, their relation to human history as a whole; please enjoy.

SHARED HISTORIES

The Debate

We have theorized, acknowledged, and in many cases turned our backs to climate change related evidence. John Tyndall, an Irish physicist, was the first to research in 1859 an important finding regarding the key tenet of the greenhouse effect: carbon dioxide molecules absorb heat. This, he theorized, could create change to the climate due to an increase of carbon dioxide within the atmospheric composition. Tyndall's findings then led Svanta Arrhenius, a Swedish chemist, in 1896, to figure out that the burning of fossil fuels would raise global temperatures, and theorized that these effects would become noticeable in a few hundred years, or sooner, if fossil fuel use increased;¹ as it has. In 1900, approximately 0.58 billion metric tons of carbon dioxide were released that year, while 38 billion metric tons were released in 2024;² this represents a 6400% increase. Global change, which could have taken much longer to become noticeable has vastly been accelerated, and there are no signs that this trend will change. Energy consumption, global population and more fossil fuel use are all on the rise.

Tyndall's and Arrhenius's findings were not lost to time, but hidden, minimalized, and reduced in importance. Hubble Oil, the predecessor to Exxon, published in 1957 a study on the combustion of fossil fuels since the Industrial Revolution, and found that "fossil fuel combustion had increased the concentration of atmospheric carbon by about 5%."³ In 1965, climate advocate and scientist Gordon MacDonald, warned President Lyndon Johnson that, "Each passing year..

¹ Nathaniel Rich, *Losing Earth: A Recent History* (Farrar, Straus and Giroux, 2019), 21-22

² Rebecca Lindsey, "Climate Change: Atmospheric Carbon Dioxide," Climate.gov, May 21, 2025, <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>.

³ Rich, *Losing Earth: A Recent History*, 48

Humanity's large-scale geophysical experiment grew more audacious.” President Johnson spoke of MacDonald’s concerns in a special message to Congress shortly after his inauguration, stating that his generation had “altered the composition of the atmosphere on a global scale.” Lyndon’s Science Advisory Committee would later report on “rapid melting in the arctic, rising sea levels, increased acidity of fresh waters” and warned that these changes could “not be controlled through local or even national efforts.”⁴

In 1979, The Jasons, a secretive group of USA top-scientists, predicted a 2-3 degree Celsius increase by 2150.⁵ At the request of the White House, in 1980, the National Academy of Scientists proposed that “the carbon dioxide issue should appear on the international agenda in a context that will maximize cooperation and consensus-building and minimize political manipulation, controversy and division.”⁶ But this never passed, and instead, manipulation increased. “Every few years, Industry scientists, at the behest of their corporate bosses, reviewed the problem, finding good reasons for alarm and better excuses to do nothing,” as author Nathaniel Rich states.⁷ This finding is shown pretty clearly by the fossil fuel industry spending \$2 billion between 2000 and 2016 to defeat climate change legislation in comparison to environmental groups spending one-tenth the amount.⁸

There is power in money, and big business and corporations hold so much more compared to non-profits. If in the 1980’s the USA would have accepted the National Academy of Scientists’ proposal, I wonder how much corruption would have been reduced? What would politics look like today if corporations had been forced out of politics instead of seemingly

⁴ Rich, *Losing Earth: A Recent History*, 23

⁵ Rich, *Losing Earth: A Recent History*, 33

⁶ Rich, *Losing Earth: A Recent History*, 8

⁷ Rich, *Losing Earth: A Recent History*, 49

⁸ Rich, *Losing Earth: A Recent History*, 6

embraced? Would corporations be considered as people, as they are today, with all rights included? Politics could have been very different today had better decisions, less selfish decisions, or decisions which did not favor corporations been made 45 years ago. But I also wonder, since “..ninety corporations are responsible for 63% of the cumulative emissions of carbon dioxide and methane between 1850 and today,”⁹ and they have the rights of individuals (as decided in the 1886 Santa Clara County v. Southern Pacific Railroad court case), should they be tried and fined as such for their part in so much pain and death? But instead, they get tax breaks with seemingly no accountability. This has led to the world’s richest 1% monopolizing 48% of global wealth, and the poorest 50% of humans using 1%.¹⁰

With global temperatures warming by 1.2 degree Celsius since the Industrial Revolution, the 2016 Paris Climate Agreement hoped to limit warming to 2°C by 2100,¹¹ but now in 2026 the hope is to limit the increase to 2.6°C with current target goals.¹² If limited to a 2°C increase, then extinction of the world’s tropical reefs, a sea level rise of several meters and devastating flooding of the Persian Gulf would be the main consequences. A 3°C total warming will bring about forests in the Arctic, abandonment of most coastal cities and widespread famine. 4°C would put Europe in permanent drought with vast swaths of China, India and Bangladesh becoming deserts, the submergence of Polynesia to under the sea, and many rivers thinned to a trickle resulting in

⁹ Christophe Bonneuil and Jean-Baptiste Fressoz, *The Shock of the Anthropocene: The Earth, History and Us* (Verso Books, 2016), 68

¹⁰ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 70

¹¹ Rich, *Losing Earth: A Recent History*, 4

¹² Climate Action Tracker, “Paris Temperature Goal,” accessed April 25, 2026, <https://climateactiontracker.org/methodology/paris-temperature-goal/>.

global-wide droughts and terminal dehydration.¹³ “The prospect of a 5°C warming prompts some of the world’s preeminent climate scientists... to warn of the fall of human civilization.”¹⁴

These stated events are beginning, and already more humans are forced to migrate due to climate related issues such as floods and drought than to other violent conflicts such as war. As gravely stated by Nathaniel Rich, “Starvation, drought, the inundation of the coasts, and the smothering expansion of deserts will force hundreds of millions of people to run for their lives. The mass migrations will stagger delicate regional truces, hastening battles over natural resources, acts of terrorism, and declarations of war. Beyond a certain point, the two great existential threats to our civilization, global warming and nuclear weapons, will lose their chains and join to rebel against their creators.”¹⁵ This notion of reaching a 5°C+ increase and its resulting implications may seem or sound farfetched, but we have already had warnings for 150 years, understood the science for 120 years, and had decades of litigation, debating & lack of action. How bad will the environment have to get before we as a species behave rationally to this existential threat? Will we take action in time to reduce the worst consequences? And what will society look like facing the consequences of the new global reality?

Currently, to meet the 2°C goal set by the non-binding and unenforceable Paris Climate Agreement, greenhouse gas emissions would need to be cut to almost zero by around 2050. This would entail “halving global greenhouse gas emissions every decade going forward, doubling the share of renewables in the energy system every five years, ending deforestation, and reconfiguring agriculture and our diets”¹⁶ so that we eat less beef and more plants. We need to

¹³ Rich, *Losing Earth: A Recent History*, 4

¹⁴ Rich, *Losing Earth: A Recent History*.

¹⁵ Rich, *Losing Earth: A Recent History*, 4

¹⁶ Simon L. Lewis and Mark A. Maslin, *The Human Planet: How We Created the Anthropocene* (Yale University Press, 2018), 382

elevate climate change initiatives to take precedence over the current capitalistic GDP drive. However, these two goals are quite contradictory, and we only ever hear about the DOW, GDP, tariffs and inflation; especially during Trump's regime. And this makes me wonder: To make this transition a reality, how would current notions of life, liberty and the pursuit of happiness need to be impacted and changed? Will we ever be willing, or would force be necessary?

Tracing Time

Roger Revelle was an oceanographer, geologist, climatologist, and science administrator, whom in 1957 stated,

“Human beings are now carrying out a large-scale geophysical experiment... Within a few centuries we are returning to the atmosphere and oceans the concentrated organic carbon stored in the sedimentary rocks over hundreds of millions of years. This experiment, if adequately documented, may yield far-reaching insight into the processes determining weather and climate.”¹⁷

This statement is the crux of the Anthropocene debate; to which, Anthropocene, as “coined by the aquatic biologist Eugene F. Stoermer in the early 1980s and popularized by atmospheric chemist Paul Crutzen in 2000,”¹⁸ literally means Epoch of Man.

“The history of the Anthropocene is not one of frenetic modernism that transforms the world while ignorant of nature, but rather of the scientific and political production of a modernizing unconscious.”¹⁹ We as a species are a part of nature, and the idea that we are simply another species, as Darwin formulated, goes against centuries of cultural propaganda. This realization, I believe, is in part why we have had “unrestrained efforts of the fossil fuel industry, compounded by the ingratiating abetment of the Republican Party, to suppress scientific fact,

¹⁷ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 77

¹⁸ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 9

¹⁹ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 199

confuse the public, and bribe politicians.”²⁰ This willingly ignorance, in part, exists for the same reason as why we find ourselves in a culture war. Cultural propaganda, religiosity, and changing culture is battling against science and a wave of non-White humanitarianism. These old beliefs, of placing humankind as the apex species on a podium, have led us culturally to where we are today; and where we find ourselves is unsustainable. We are terraforming and killing species on a scale equal to that of a mass extinction; and all for a temporary boost in comfort for ourselves. And soon, seemingly, all of our leisure and ease will be paid as debt in the form of suffering by preceding generations.

But to better understand the Anthropocene and this dilemma, a brief breakdown of the Geologic Time Scale should be given. Earth’s timeline is broken down into 4 Eons. The Hadean, Earth’s hellish infancy, was approximately 4.54 billion years ago and lasted for about 500 million years and includes Theia’s strike which reshaped the earth and formed the moon. The Archean, which started approximately 4 billion years ago and lasted for 1.5 billion years, showcases the formation of simple life such as prokaryotic microbes like bacteria and photosynthetic organisms like cyanobacteria which began to alter the climate to make it more accepting of other life forms. The Proterozoic, which started approximately 2.5 billion years ago and lasted for about 1.95 billion years, brought about the Great Oxygenation Event which started from the Archean’s photosynthetic organisms and saw more complex life with nuclei. And lastly, the Eon to which we live, The Phanerozoic, started 540 million years ago and leads us to the present.

²⁰ Rich, *Losing Earth: A Recent History*, 181

The Phanerozoic is divided into three Eras. The Paleozoic, meaning Ancient Life, started approximately 540 million years ago and lasted until 252 million years ago, and holds the Cambrian Explosion and Great Dying; an Era of massive complex growth and extinctions. The Mesozoic, or Middle Life, lasted until 66 million years ago and is known as the Age of Reptiles. The Mesozoic, which showcases dinosaurs, vertebrae, flowering plants and the breaking up of Pangea, ended with a large meteorite strike and volcanic eruptions. The Cenozoic, or New Life, started 66 million years ago, and saw the “rise of mammals and flowering plants, following the demise of the flightless dinosaurs.”²¹

The Cenozoic is divided into three Periods. The Paleogene, lasting for 43 million years, saw biological niches being filled after the dinosaurs and presents many familiar species such as grasses, oak trees and palm trees. The Neogene, beginning 23 million years ago, evolved even more familiar species such as deer, bison and horses. And finally, The Quaternary, started 2.6 million years ago, and is the Period to which we live in. The Quaternary is divided into two epochs: epochs being the smallest and most specialized unit of measure within the Geologic Time Scale; with the first being the Pleistocene. The Pleistocene lasted until 11.6 thousand years ago and is known for glacial periods, warmer interglacial periods, megafauna, and early humans. Lastly, our Epoch of the Holocene, lasting hypothetically to the present date, and known for its long interglacial warmth.²²

This history is meant to act as a time frame, but also to explain how these divisions are placed. There are a group of geologists who form and work for the International Commission on Stratigraphy, or ICS. These geologists use various forms of dating techniques such as

²¹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 66

²² Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 67

radiometric dating, paleomagnetism, luminescence dating, relative dating, fission track dating, cosmogenic dating, and tephrochronology to analyze and date various Earth strata.²³ Since much of the Earth is obviously under the surface, when a unique strata presents itself, geologists document these locations with Global Boundary Stratotype Sections and Points (GSSPs), or more simply known as Golden Spikes. Most of the time, a global positioning point will be placed at these locations, but sometimes a literal spike is used; hints the nickname. And the debated question is where and when to place such a spike for the Anthropocene debate. Since humans have not been around long enough in the Holocene to form much of a strata layer to use various ICS dating strategies, how should we denote a new Epoch transition happening before our eyes?

Plastics and waste have certainly filtered their way into every facet of our lives and bodies, but these materials will settle and vanish in a relatively short time when speaking of geologic time, and will not necessarily form a distinctive stratum. What we have done, however, which will last a much longer span of time, is nuclear use. Radionuclides can last between millionths of a second to billions of years. And from all of humanities experiments and disasters – such as the nuclear testing in the 40s, the U.S.A. bombings of Japan in WWII, Chernobyl meltdown, ThreeMile Island meltdown, and Fukushima Daiichi disaster – our species has embedded a layer of refined plutonium radionuclides into the rock strata across the entire Earth. This formally cements humans into a recognized strata which merits a golden spike; but when in geologic time should it represent?

A Sitka Spruce planted in 1901 on Campbell Island, nicknamed the world's loneliest tree, presents peak carbon-14 fallout from 1965, but that tree will eventually die, and the marker

²³ Mark Stelten, "A Beginner's Guide to Dating (Rocks)," U.S. Geological Survey, October 23, 2023, <https://www.usgs.gov/observatories/yvo/news/a-beginners-guide-dating-rocks>.

would be lost.²⁴ There are also the options of placing markers to note our actions using carbon dating from ice core samples to denote the atmospheric drop in carbon dioxide of the “Little Ice Age” in 1610 or the Great Acceleration (mass carbon dioxide increase) in the early 1950s.²⁵ My favorite option is the 1610 marker because of the history surrounding the last glacial period in the Holocene Epoch. The “Little Ice Age,” started back in the 14th century. When North America became colonized by Europeans, they brought over with them diseases such as smallpox, measles, influenza, typhus, diphtheria and pertussis which decimated the Amerindian population. These diseases, but also war, genocide and ethnocide upon their peoples, caused the Amerindian population to drop by around 90% between 1492 and 1650, which left them with approximately 6 million in population. These deaths allowed for forests to grow again, resulting in carbon sequestration, which caused a drop in atmospheric carbon concentration from 279 to 272 ppm (parts per million) and resulted in a cooling which brought about the “Little Ice Age”.²⁶ Basically, the whole of the Pleistocene and the “Little Ice Age” of the Holocene, shows how delicate of a balance our climate and atmosphere has been over the Quaternary: where a “little change” in population caused hundreds of years of global cooling. Today, however, a 50 million decrease in population would not change anything. In 1650, the global population was predicted to be around 500 million. This means that the deaths of approximately 9.1% of the world’s pre-Industrial Revolution population resulted in the world’s carbon concentration decreasing by 2.5%, which caused the last ice age. Today, with 8.3 billion, we live with a Carbon Concentration of 424ppm.

²⁴ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 310

²⁵ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 312

²⁶ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 16

A golden spike being placed for this event would show a definitive end to the Holocene's regularity of glacial and interglacial waxing and waning, and from then on present a new Epoch of global warming, climate related changes, fossil fuel use increase, nuclear fallout and wildlife mass extinctions. However, since the Holocene is only 11,700 years old, a newly defined Epoch would probably need to replace the term of Holocene: thereby changing the Geologic Time Scale to having the Pleistocene last until 1610; or to when a golden spike date/location is decided upon for the Anthropocene.²⁷

Grounds For Growth

Over the past 2.6 million years, or Quaternary Period, there have been more than fifty glacial-interglacial cycles.²⁸ Over this time of pre-human interference, Paleoclimatologist Chronis Tzedakis and his colleagues have figured out that the atmospheric carbon dioxide level of 240ppm is the critical number for these glaciation cycles. The largest carbon dioxide parts per million existed as the glaciation began to recede and slowly began to drop as an increase in vegetal re-growth sequestered carbon dioxide. The sequestering then lowered carbon dioxide's greenhouse effect, cooling the planet, and allowing for a new glaciation once 240 ppm was reached again. But 240ppm is 40ppm lower than pre-industrial time, and 160ppm lower than today.²⁹

What makes the time of mankind unique is that a lowering of carbon dioxide levels has never happened except during the "Little Ice Age." Paleoclimatologist Bill Ruddiman has concluded that this is because of the Agricultural Revolution. During a normal interglacial period

²⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 322

²⁸ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 138

²⁹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 144

when vegetation should be regrowing to sequester carbon dioxide, humans began clearing trees and land for agricultural use. This carbon offset in turn presented the favorable conditions to continue farming: farming set the conditions which brought about a relative climatic balance which halted a new glaciation and allowed for an increase in agricultural practices. Without this offset, and agriculturalists means to produce more food, complex societies might never have formed.³⁰

As seen with termites, ants and bark beetles, which predate our own agricultural practices by some 50 million years,³¹ farming increases caloric quantity; and as a tenet to the ABCs of ecology,³² a species will grow in proportion to its available food supply. This increase in food supply for humans via agriculture allowed the *Homo sapiens*' population to increase from approximately 5 million at the beginning of the Agricultural Revolution to 500-million ten-thousand years later, in the year 1500 CE.³³ At the onset of the use of our early agricultural practices is when empires began to emerge, metal working became common, and long-distance pollution can be seen: "Elevated mercury levels associated with the Inca Empire from 3.4k years ago are seen in ice-core records in the Peruvian Andes, while the impacts of Roman Empire copper smelting are documented in ice-cores in Greenland from 2k years ago".³⁴ This strong correlation between human existence and practices with climate change and pollution, really starts to show a shared Earth-history and human-history; or of *Homo sapiens* as never being separate from Nature.³⁵ Thus the Anthropocene as being a period of rising temperatures, mass

³⁰ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 145

³¹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 144

³² Daniel Quinn, *The Story of B* (Bantam Books, 1996), 287

³³ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 145

³⁴ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 145

³⁵ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 38

extinctions and pollution, away from the “relatively stable interglacial conditions”³⁶ of the Pleistocene, becomes noticeably obvious.

But this debate, of whether or not to classify human existence as the cause of a new Epoch resides on this question: “Is Earth in a new state or is it irreversibly headed towards a new state, caused by humans, and on a scale similar to those of past geological shifts”;³⁷ such as the Great Oxidation, tectonic shifts and meteorite strikes. Many seem to agree that this debate is merited because of three reasons: Environmental change and wildlife migration/extirpation, religious theology of Homo sapiens’ separation from nature, and anticipated future impact.³⁸ Meaning, from our onset following the Out of Africa II migration (the beginning of Homo sapiens global spread), we have always been impacting the planet; and the future only seems to hold more of the same.

A fun thought is as to why Europeans got the largest straw as a civilization in recent history in terms of economic boom and industrialization “rather than other long-lived civilizations such as the Egyptians, Chinese, Mayan or West African Nok”.³⁹ On this idea, in the book, *Human Planet*, the author explains that, “First, one group of people are needed who are willing and able to subjugate another group.. Then, people with technical proficiency to make ever-better machines are required... There is also the need for a large urban population of workers without links to the land, but who need feeding”.⁴⁰ This last reason sets Europe apart due to their religious and colonization practices which allotted for conversion of people and their

³⁶ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 75

³⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 76

³⁸ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 35

³⁹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 202-203

⁴⁰ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 203

lands to gain massive “ghost acres;” or land that is not one’s own but used as land to bolster a foreign country’s economy.

These practices led to Globalization 1.0, also known as the Industrial Revolution - to which since 2.2 trillion metric tonnes of carbon dioxide have been added to the atmosphere (Human Planet 218) - and in turn created a globalized economy and resulted in an increase in the population growth rate.⁴¹ It is estimated that we reached a population of 1 billion around 1804. This 100% increase took about 300 years and again doubled to 2 billion 123 later by 1927.⁴²

This then led to Globalization 2.0, or a coordinated global system of international trade with economic growth “as a major collective goal,” and the Great Acceleration which followed World War II.⁴³ This Great Acceleration happened because “..of new medicines, improved living conditions and the so-called Green Revolution in agriculture”.⁴⁴ Much like how agriculture set up the conditions for more agriculture, the Great Acceleration reduced infant deaths, cured preventable diseases and allowed for more people to create more food which increased population rapidly. “In 1950 the global population was 2.5 billion, by 2017 it had risen to 7.5 billion people: a rise of a full 5 billion in 65 years. In terms of mass, all the bodies of humanity today weigh about 375 million metric tonnes, up from 78 million tonnes in 1990”.⁴⁵

We are currently, in 2026, at a global population of 8.3 billion, and it is estimated to increase by another 2 billion in the next three decades. While many “developed countries” are reaching a neutrality in population increase via a transition from high birth and death rates to low birth and death rates due to “infant and mother mortality rates dropping, following better

⁴¹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 306

⁴² Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 208

⁴³ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 309

⁴⁴ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 233

⁴⁵ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 234

sanitization and healthcare provision, immunization programs... and investment in women's education",⁴⁶ it will take a while for this cultural shift to occur within "developing countries." This transition in "developing countries" may never occur however, because "educated women take control of their own fertility," and many cultures are heavily patriarchal.⁴⁷ This rapid population increase foreshadows Paul Ehrlich's *Population Bomb* theory,⁴⁸ whereas our growth is so rapid and unsustainable, that it could, and most likely will, lead to mass famine, environmental collapse, and a societal breakdown.

These statistics are exactly how we have managed to increase atmospheric carbon dioxide levels by 6400% since 1900. It is theorized that if all emissions were to immediately be stopped, it would still take converting 50% of cropland to forests to reduce atmospheric carbon dioxide levels to 350 ppm by 2100, but while this would freeze and disrupt life as we know it, it further does not seem feasible as we will need to increase cropland to feed our increasing population.⁴⁹ The ABCs of Ecology⁵⁰ strike again, and it is for this reason that humans fighting hunger will never cease. Some will always starve. This is a natural occurrence in nature, which failure to recognize and instead try to "fix," will only lead to a higher population and displaced starvation elsewhere and/or prolong it to else when. It is for these reasons above stated that our species has become a force of Nature which has only increased environmental impact as time and population have increased. "This is the heart of the Anthropocene thesis".⁵¹

⁴⁶ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 235

⁴⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 235

⁴⁸ Rich, *Losing Earth: A Recent History*, 151

⁴⁹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 262

⁵⁰ Quinn, *The Story of B*, 287

⁵¹ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 65

To and Fro

These ideas and realizations might leave one to wonder about human nature and culture, and how one might subvert this social construct/contract to which was entered seemingly by cultural obligation and reinforced via norms. It makes me wonder if altruism - as defined by group selection versus individual selection⁵² - or other cultures which are socialistic, communistic or communally based might be a way forward because of seeming cooperation in will and theoretical equality? But if global efforts are not agreed upon, I find it hard to foresee humanities survival. Because, as Edward O. Wilson points out,

“It is popular to say that the first rule of altruism is never to expect anyone to do anything contrary to his personal interest. Because of the way the brain has evolved, it is especially difficult to protect distant environments if people imagine even a small amount of personal risk or sacrifice. True altruism, this logic continues, is limited to family, tribe, race, or nation, where our genes are seen as indirectly rewarded by our individual devotion to others”.⁵³

This notion continues to divide personal interest from global interest. And as “Freedom can only be conceived in the context of social arrangements and institutional constructions”,⁵⁴ I find it hard to imagine how altruistic principles would ever be able to transcend humanities will and desire for a freedom which encompasses so many various cultures’ beliefs and practices in order to do what is necessary to reduce global warming and climate change.

“Philosophically, recognizing the Anthropocene ends the idea of humans acting on a thing called Nature, and so being separate from it, a way of thinking that has dominated Western thought”.⁵⁵ First,

“Greek science... which conceived nature as an externality subject to laws independent of human intentions... then Christianity, which invented the

⁵² Edward O. Wilson, *Half-Earth: Our Planet's Fight for Life* (W. W. Norton & Company, 2016), 210

⁵³ Rich, *Losing Earth: A Recent History*, 209

⁵⁴ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 41

⁵⁵ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 278

singularity of man within a creation that was his to dominant... and finally the scientific revolution, which substituted for an organicist view of nature that of an inert mechanics which could be rationally modified”.⁵⁶

This is the Western progression of thought and notion of “human exceptionalism” as religiously defined with humans as “special creations,” but to which when factually discounted, leaves us with a few ethical proposals to move forward with. These being, first, “anthropocentric (sustainably managing the Earth for humankind),” then “biocentric (respecting the intrinsic right to existence of every being on Earth),” and lastly, “ecocentric (‘thinking like Gaia’, in the words of J. Baird Callicott, following on from Aldo Leopold)”.⁵⁷ I believe that many would enjoy being anthropocentric, as it would disrupt our current mode of existence the least, and was theorized by E.O. Wilson to be possible in his book *Half-Earth*. Being biocentric seems farfetched because of how societies are complacent with how livestock and fisheries are brutally treated, but I would like to believe that this is how many Amerindian cultures existed; so perhaps this could make a comeback. And while becoming ecocentric might be a means of cultural reprogramming to rewrite the social contract to which many have been placed into, this ethical proposal rests on the individual, and the first rule of Altruism almost negates this possibility on a large scale.

However, all three of these proposals, in accordance with the acceptance of the above facts and theories, begins to dissolve the ideal of democracy because the idea of material abundance is lost.⁵⁸ Because why vote, why trust the state, and what even is independent sovereignty when modern comfort and luxury as we know it threatens to be lost?

Christophe Bonneuil and Jean-Baptiste Fressoz state this very well here:

⁵⁶ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 68

⁵⁷ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 40

⁵⁸ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 41

“Prevailing economic theory maintains a very tenuous relationship with matter. It envisages goods according to their psychological effects, as purveyors of utility, rather than according to their material characteristics. In the same way, capital is not conceived as a concrete set of productive equipment, rather as assets generating financial flows. This dematerialization has the effect of naturalizing the exponential growth of the economy during the Anthropocene by disconnecting it from any material substratum”.⁵⁹

Basically, western thought on material becomes disconnected from the earth, and only concerns itself with utility and commerce.

Given all of this, one can see how the stability of the global economy and global environment are intrinsically linked. The economy which cares little for environmental concerns only desires GDP escalation, which in turn damages the environment which sustains us. It is as if wealth has become a type of blood which flows with a notion of quality of life, with and as a utility, but which ultimately harms the whole. But this critique and acknowledgement of our system, with us as the “universal agent, indifferently responsible”,⁶⁰ is not enough to stave off the existential climatic annihilation of life as we know it without extreme measures being taken in accordance to; because as Frederic Jameson said, “it seems to be easier for us today to imagine the thoroughgoing deterioration of the earth and of nature than the breakdown of late capitalism”.⁶¹ This is in part because of the extreme wealth which has recently been

“created... by a factor of 134 between 1700 and 2008... And has given rise to a ‘second nature’ made up of roads, plantations, railways, mines, pipelines, wells, power stations, futures markets and container ships, financial positions and banks that structure flows of matter, energy, goods and capital on a world scale”.⁶²

⁵⁹ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 209

⁶⁰ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 67

⁶¹ Frederic Jameson, *The Seeds of Time* (Columbia University Press, 1994), xii

⁶² Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 222

This notion also proposes the idea of the Capitalocene, as proposed by Eric Hobsbawm, in opposition to the Anthropocene, but humans are the ones to produce the capital: mankind is the agent of responsibility.

However, Edward O. Wilson proposes that, “The pathway of economic evolution will be set by growth that is increasingly intensive and less extensive. Its most advanced products will empower individuals with instruments capable of achieving more and more with less and less per-capita consumption of materials and energy... Achieved, it will reduce the world’s ecological footprint, and free space and resources for the rest of life, not constrict it as a perceived necessity of a growing economy”,⁶³ which sounds great to me. It sounds like an art of its own, because oftentimes, it is hard to receive an economically livable profit off a work of art versus the time one put into it, but if respect for the materiality of an object is returned, and utility shows a means of the appreciation given to its care and up-keep, then less will be wasted, less will be needed, and this in turn will lower production.

This resulting reduction in GDP is a great place to start an economic revolution I believe. And for those in politics, those who are able to create this needed change, but who disagree with such staggering evidence, I propose Nathaniel Rich’s statements that,

“..the politician who claims that climate change is uncertain betrays humanity in the same fashion as the politician who fabricates weapons of mass destruction in order to whip up support for profiteering a war,” for, “..when a government relaxes regulations on coal-fired plants or erases scientific data from a federal website, it is guilty of more than merely *bowing to corporate interests*; it commits crimes against humanity”;⁶⁴

just as Trump is doing now. Goddamn that man.

⁶³ Wilson, *Half-Earth: Our Planet’s Fight for Life*, 194

⁶⁴ Rich, *Losing Earth: A Recent History*, 195

Reactions

Just as humans have, on the whole, always proven to have had an impact on climate, so too have they had an impact on wildlife. There have been two large mass extinctions during human history: the first when *Homo sapiens* traveled to a new area on Earth during the Out of Africa II migration, and the second once “*Homo economicus*” arrived following Globalization 1.0.⁶⁵

You see, it is not that religions have been wrong in saying that our species is special, because evolutionarily we are; just not divinely so. *Homo sapiens*’ ability to plan and coordinate with strategy allowed us to become the planet’s apex predator. And what we did with this ability was to hunt to extinction many of the world’s megafauna (animals 40+ kg in weight). Over this migration cycle 4% of the world’s mammal species are predicted to have been lost, or half of all megafauna; with “Africa losing 18%, Eurasia 36%, North America 72%, South America 83% and Australia 88% of their large-bodied mammals”.⁶⁶ These uneven numbers are not due to cultural differences, but due to the newness of never before *Homo sapiens* inhabitancy. The genus species of *Homo* spent a larger time in Africa and Europe before spreading East. The megafauna losses in places of early settlement are where genus *Homo* learned to first hunt. These varying numbers of megafauna extinctions which predate *Homo sapiens* were likely the result of *Homo erectus* and *Homo neanderthalensis*.⁶⁷

Today, in the Cenozoic Era, or “Age of Mammals,” the mass/weight of wild mammals makes up approximately 3% of the world’s total, while humans make up about 30% and our

⁶⁵ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 179

⁶⁶ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 104

⁶⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 104

domesticated livestock which feeds us around 67%.⁶⁸ And this trend will continue. We will continue to convert more land for livestock and cropland as our global populations rise further which will ruin wildlife habitat and displace the residing nature. This displaced nature then runs into Homo sapiens living areas, which we then typically kill in one way or another.

I would like to thank Montana State University's Melvin Marmots here. The Melvin Graduate Art Studios reside on the Agriculture Department's land on the MSU campus. Here, surrounded by fields for horses and cows, the mountains loom with reverence; seemingly a sanctuary. Out near the Melvin building are a bunch of steel pipes, to which yearly there comes a new batch of local marmots; a large, cute relative of squirrels and groundhogs. Here, they live and reproduce yearly; it is a joy to see the new generation grow. However, yearly, the campus also kills them with poison. They are seen as a nuisance because they dig holes; as is their evolutionary nature. But Westernized Homo sapiens do not deal well with discomfort and slight inconvenience: we "fix" the problems. And I think this example is an act which presents a distinguishing feature to human nature: we kill not for subsistence. From crushing, traps, sprays, drowning, gassing, poisons and guns, we kill that which discomforts; which the vast majority of ecology does not do. Why, after terraforming their natural home and landscape, and forcing them into this closer ecology to us - while providing for them seemingly natural housing - do we kill them yearly? I think it is because killing them is easier and cheaper than simply moving the steel pipes.

We could not have grown to 30% of mammal biomass without this serious terraforming. We now use "one-quarter of Earth's natural photosynthetic productivity... that much of the

⁶⁸ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 246

planet's freshly manufactured biomass ends up in our hands and stomachs and the share is growing".⁶⁹ This quantity of energy can be imagined with "280 billion lightbulbs of power, or 17 trillion watts... Equivalent to the captured photosynthesis by the trees in half of the world's rainforests",⁷⁰ with a disproportionate use of the energy used by income rich nations and people. Which, almost funny, "...a homeless American today consumes twice as much energy as the average global citizen".⁷¹ But it goes to show you how much energy we use in the states. And on this note, over Christmas break, I was talking to my sister who is very active in the Springfield Illinois community. CyrusOne, a \$15 billion company, has received initial authorization to build a \$500 million data center in Sangamon County. While directly pulling from the local power grid, it is projected to almost double energy use; or the equivalent to 300,000 Sangamon homes. All of this for AI purposes. Talk about increasing fossil fuel use.

This ever-increasing fossil fuel use and resulting pollution is leading to 200 billion tonnes of ice being lost from Greenland and 150 billion tonnes from Antarctica yearly.⁷² While I was in Iceland with my sister in 2021, a native glacial hiker and tour guide informed us that the glacier we stood upon, Sólheimajökull, lost about 10 vertical meters a year and up to 100 meters horizontally. Sólheimajökull would most likely be completely gone before 2100, and I would wager a bet that the glaciers in Glacial National Park in Montana will be completely gone in the next decade or two.

During the late Pleistocene (21k years ago), there was so much stored water in the world's ice that sea levels were over 120 meters lower; equivalent to the height of the Statue of Liberty.⁷³

⁶⁹ Wilson, *Half-Earth: Our Planet's Fight for Life*, 172

⁷⁰ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 235

⁷¹ Rich, *Losing Earth: A Recent History*, 197

⁷² Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 219

⁷³ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 138

And with the projection that the arctic will be ice-free during late summer by 2100, this could add up to 70 more meters.⁷⁴ But while sea level rise is often considered to be the main impact on the marine system, carbon dioxide has also increased the acidity of seawater, because oceans are the largest carbon dioxide neutralizer. Since the dawn of human activity, the oceans have sequestered about one-third of our produced atmospheric carbon dioxide by it settling onto the oceans surfaces and sinking within. This quantity on the pH scale measures a reduction of 0.1, but since “pH is a measure of the number of hydrogen ions in a solution, on a logarithmic scale... each unit represents a 10-fold increase. The change so far then represents a 30% increase in hydrogen ions”.⁷⁵ This acidification “alters the cycling of nutrients and many other elements and compounds in the ocean, and it is likely to shift the competitive advantage among species, and have impacts on marine ecosystems and the food web,” such as leading to shell defects, growth rates, lifespans and extinctions of calcium carbonate species like corals, foraminifers, coccoliths and shellfish.⁷⁶

This acidification is further being increased through farming practices. The Haber-Borsch process of converting nitrogen into ammonia for fertilizer is for one highly energy intensive, but also leads to eutrophication (dead-zones) at river deltas and lakes by the water picking up this extra fertilizer and flowing it down through their tributaries. These factors have “doubled the intensity of the nitrogen cycle”.⁷⁷ This altering of the nitrogen cycle is comparatively so intense, “that the nearest realistic geological comparison is an event almost 2.5 billion years ago”.⁷⁸

⁷⁴ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 221

⁷⁵ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 222

⁷⁶ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 223

⁷⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 242

⁷⁸ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 243

Also, “Before the agricultural revolution there were roughly 6 trillion trees on Earth; now there are about 3 trillion”.⁷⁹ It is for this reason, and the above stated, that “Today every sovereign nation in the world has a protected-area system of some kind. All together the reserves number about 161k on land and 6.5k over marine waters. According to the World Database on Protected Areas, a joint project of the United Nations Environmental Program and the International Union for Conservation of Nature, they occupied by 2015 a little less than 15% of Earth’s land area and 2.8% of Earth’s ocean area”.⁸⁰ Because many do care about our impacts, and want to preserve what we have left, but I think this attempted preservation is too little, too late. Even these designated wildlife areas and sanctuaries are being encroached upon. I think this is recognizable by the mere fact that we have them. “Geographer Erle Ellis suggests that we should consider almost all land on Earth as ‘anthromes’, short for anthropogenic biomes”,⁸¹ because all land has been turned into having a purpose for us. We protect these special regions and places from ourselves, because if we did not, Homo economicus would surely step in to make use of it.

All of our actions have led to global decline in all species except for humans, livestock, and our pets. While we only intensively study a small fraction of species in depth, a correlation can be extrapolated to the whole. The Living Planet Index was created in 1970 and monitors 14k species spread pretty evenly between fish, amphibians, reptiles, birds and mammals, and shows “average population sizes to have more than halved since the index began”.⁸² For while many worry themselves or pay more mind to extinction rates, which are estimated to be between 11k-

⁷⁹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 245

⁸⁰ Wilson, *Half-Earth: Our Planet’s Fight for Life*, 186

⁸¹ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 245

⁸² Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 247

58k species each year,⁸³ this statistic only accounts for the termination of a species, not the overall daily cost of our economic drive, mode of modern existence and desire for luxury & absolute comfort.

Hope Withstanding

Despite all of these highly alarming statistics, there is still hope. Jim Hansen, American climatologist, believing in technology and economics, has a proposal “which runs a decade, arrests climate change, and saves trillions of dollars.” American economist William Nordhaus said, “The problem is political, rather than one of economics or feasibility... It’s harder to trust human behavior.” Al Gore said, “From the first time I got involved with the issue until now, the central problem has always been that the maximum considered politically feasible still falls short of the minimum required to be efficacious. Confronted with that gap, you have two options. One is to curl up into a fetal position and fall into despair. The other is to develop a strategy for expanding the limits of what is politically feasible”.⁸⁴ And American environmentalist Rafe Pomerance believes that if the U.S. Congress was to insist on serious and major climate policy then the rest of the world would follow, but this raises the question of how to “motivate congressional action”.⁸⁵

Nathaniel Rich states that, “When popular movements have managed to transform public opinion in a brief amount of time, forcing the passage of major legislation, they have done so on the strength of a moral claim that persuades enough voters to see the issue in human, rather than political terms”.⁸⁶ This, I suppose, would be the ultimate goal of my art work. Increasing

⁸³ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 248

⁸⁴ Rich, *Losing Earth: A Recent History*, 201

⁸⁵ Rich, *Losing Earth: A Recent History*, 202

⁸⁶ Rich, *Losing Earth: A Recent History*, 202

noticeability and cognizance could promote emotions which could swell to action. The potential resulting small or large changes, I think, brings comfort to me. For I am hoping that German physicist Max Planck's famous quip of, "a new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die and a new generation grows up that is familiar with it",⁸⁷ is incorrect, because we do not have the time for him to be correct; or at least not in this case.

"The dominant view of the Anthropocene hence encapsulates a long process of Weberian 'disenchantment, pre-eminence of 'instrumental rationality' (Adorno and Horkheimer) and negation of the world as given otherness (Arendt), a process that has made moderns 'men without a world' (Deborah Danowski and Eduardo Viveiros de Castro). This imaginary is not neutral and dominates other imaginaries (such as those of indigenous communities and of other grassroots socio-environmental movements), which may themselves be the bearer of relevant perspectives and solutions in the face of our present ecological disarray".⁸⁸

Or said way less eloquently, the Anthropocene is the result of rationality replacing spiritualism, and this abandonment of the inert value of the Earth has resulted in a globalized (Western) worldview which shuts out other perspectives and beliefs to which could help in this global plight; much like how monocropping for increased production makes food sources more susceptible to blight.

This existential issue can proceed in three ways: "continued development of the consumer capitalist mode of living towards greater complexity; a collapse; or a new mode of living".⁸⁹ A collapse is what Paul Ehrlich's *Population Bomb* warned about, or as seen in many apocalyptic movies of the future with a decline in complexity. And we have already had many new modes. Starting with hunter-gather, we proceeded to agricultural, then mercantile, industrial

⁸⁷ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 323

⁸⁸ Bonneuil and Fressoz, *The Shock of the Anthropocene: The Earth, History and Us*, 63

⁸⁹ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 369

and now consumer capitalist modes during Globalization 2.0 & 3.0.⁹⁰ We have been successful with change, but the global population was 500 million leading into consumer capitalism, so I wonder what change could be made to support 8 or 10 billion people; perhaps collapse is the only feasible option unless a global concerted effort is given.

But could a greater awareness bring about a sensible response? How bad will things get before action is seriously considered or taken? A theorized shield in space to block some of the sun's heat has been proposed, or balloons in the atmosphere to sequester carbon dioxide, and in the sci-fi-comedy television show *Futurama*, they literally move Earth further away from the sun with robots farting. What extreme measures will be taken when extreme measures are all that remain? Because biology has us care about our children, or the following generation with our grandchildren, I believe these concerns diminish the further down the line into future history we venture; aka our great-grandchildren or their children.

It is because of this self interest in our immediate futures that has allowed the Anthropocene to come into being. And I wonder how much effort will be given when less extreme measures are attempted, once politically merited efforts are asserted, because "narrow self-interest, after all, is how we got here".⁹¹ "At some point," states Nathaniel Rich, "perhaps not very long from now, the fears of the young will overwhelm the fears of the old. Sometime later, the young will amass enough power to act. If we wait long enough, there may be time yet to avoid the most apocalyptic scenarios, but little else".⁹² This sentiment is close to Max Planck's quip. But I do find it comforting, that regardless of what results because of Homo sapiens' time

⁹⁰ Lewis and Maslin, *The Human Planet: How We Created the Anthropocene*, 370

⁹¹ Rich, *Losing Earth: A Recent History*, 203

⁹² Rich, *Losing Earth: A Recent History*, 204

and actions here on Earth, that life will continue without us, just as it has for the past 3 billion years; a timeframe hardly conceivable.

INTERPERTATIONS

Indoctrination

With all of this in mind I created a body of work to exemplify aspects of this newly proposed, or revised epoch, in order to try and grasp my mind around its magnitude. Because while many still do not believe, others are affected but uninformed, and for those of us who acknowledge but are unable to do much, this forthcoming reality is beginning to become ever present. And regardless of belief, this new global reality will continue to affect every living entity on our planet with increasing frequency and fury.

With thinking in our current times of change, I thought it would be fun to begin when I began; or close to then. Following my parents' divorce when I was almost three years old, my father, sister and I moved into a trailer for about a year. My only memory of that place was eating various junky cereals like Lucky Charms and Cookie Crisp; which I was never allowed to have after. From there, we moved into the first family home I can remember: A 900 square foot, 2 bed, 1 bath, single family house, where my sister and I shared bunk beds. This, when I was 4 years old, was when we had our first television. This bulky boob tube was shared by us all. I do not remember the brand or size, but one of my greatest joys at the time was playing Sonic the Hedgehog on the Sega Genesis, and more specifically, watching my dad play Sonic Spinball; the latter being an action-based pinball game which was far too difficult for me. Via the Sega, the games, and through the use of the television, I was able to convince the neighbor boy across the street to come over and play; his name is Joel, my first friend, and we have now been friends for 30 years.

The reason for this story is that televisions have always been a part of my life, and with increasing pull, they, and screens in general, have become so tied to culture and even status that they have become nearly inescapable. I mean, I see the allure. After the Sega came a Super Nintendo, then Nintendo 64, Play Station, Play Station 2, Game Cube, Xbox, and lastly the Xbox360; not to mention the Gameboy Black and White, Gameboy Color, Gameboy SP, Gameboy Advanced and Gameboy DS, which I also played on. I was basically the equivalent of an iPad kid, but I do not regret the tens of thousands of hours to which I must have put into these systems. I explored universes, trained monsters, commanded armies and defeated gods, all while playing, growing up, and making & building friendships which will last my lifetime. I accomplished all of these feats while growing up in a village of about 2,500; a pretty fulfilling youth I think. However, from all of this technology inducement, I finally had a revelation in the middle of high school. All of these systems either had planned obsolescence or became obsolete through time; it was like running after coins continuously like Sonic. So I broke the cycle, and shortly thereafter, I got my first girlfriend, started smoking a bit of pot, and began taking art classes during my junior year in high school. There wasn't a care for the world outside of my village, and this developing interest in art eventually led me to where I am today.

But coming back to the present while reflecting upon my past, whereas I left screens mostly behind, I see humanity's obsession with them increasing. Screens become like blinders which block out the periphery, while also like binoculars which magnify specifics. These two elements allow for easy disassociation and focus onto whatever the viewer desires. So, to "use" this medium, which attracts human attention like insects to a light, I created a series of televisions to which the channels cannot be changed. These screens show images of the past; blurred by carbon like how time fogs memory. All of them present images of once-in-a-lifetime

events which have impacted me and that I have witnessed. To name a few: historic floodings, historic winds, and glaciers which have melted and become lost to time. These disasters surrounding Jen Olsen's World Clock are meant to present humanity's time and its fleetingness.

Society as we know it is on a timeline of unknown quantity, and soon, the nature which we thought to have mastered will bring a reality crashing upon us that we can hardly fathom. This brings me to worry about my friend's children. Because when they are grandparents in age, there will be forests in the arctic, and I do not want to know how much worse in intensity and frequency "once-in-a-lifetime" weather events will be for them.



Figure 1. *Television Land*. Wood-fired ceramic televisions with screen-printed underglaze images by Kyle Kirkpatrick, March 2026.

Consumerism

A “Capitalocene” versus Anthropocene is a small debate within this continuum of discussion, but not without merit. The crux, I believe, lies within the geologic timeline of when to place the proposed Epoch. Humans had been around for 100,000+ years with “minor” impacts to the environments; with the majority of larger impacts happening in recent history. It might seem fair to place this cataclysmic change upon our current capitalistic mode’s culture than humankind as a whole, but the ultimate cause of our current system is still humankind. I thus wanted to present my career, and livelihood, in the way that it has sustained me.

Without getting jobs at Mississippi Mud Pottery in Alton, Illinois, and as an Educational Assistant at Meramec Community College in Kirkwood, Missouri, I would have either continued as a barista or perhaps quit the field all together and found a state job. These acquired jobs allowed me to live in the field full time while constantly making and selling to live. The daily flow became a sort of ritual, and while I had a good work ethic before, I learned how to make my hobby not only into a job, but a profitable existence. Producing more in the cold months and selling more at fairs over the summer became a yearly occurrence where I had even started to have a growing list of regulars. I loved this. Not only did I get to meet and enjoy the company of community members, but they enjoyed my work. Some were pottery enthusiasts who wanted to learn some technical know-hows, most were simply admirers, and few were acquaintances & friends. It felt like I was actually doing-the-thing.

When I calculated it, I would throw at least one run of 32 mugs per week at the pottery; but also personal mugs on the side. 32 mugs multiplied by 4 (weeks), plus maybe 32 personal mugs a month would equate to 160 mugs a month; although I know the actual number would be more. 160 multiplied by 12 months equals 1,920 mugs a year. 1,920 times 7 years of working in the St. Louis area would equal 13,440 mugs made by me while there. 13,440 multiplied by an under priced value of \$30 would equal \$403,200. Now this \$400k, while seemingly high, quickly becomes lower when the cost of running a business and materials is docked, but that is why potters make more than mugs and produce almost every day. I threw about a thousand pounds a month there, which would make six tons a year, or 42 tons of clay while I was in the St. Louis area; no wonder I developed such a case of tendonitis. But this is the field, and I would not have it any other way.

I could not shake off this business lined way of thinking when I arrived at Montana State University. I had been thinking about pricing, money and selling for too long in a professional/career orientated way. But I slowly broke that mentality and was able to be fully creative again. Now, capitalistically speaking, it may suck having spent thousands of dollars preparing pieces for this thesis which will never sell, but the goal of graduate school is to expand thinking, creativity and skills; not money. However, with the Anthropocene's looming dangers and its closely linked associations to capitalism and consumerism, I found it fitting to create a pottery wall.

This wall of simple pottery not only relates to my skills, but to the profession in general. When I started off in ceramics I had the naive impression that I was somehow going to be outside the mainstream, when in fact I simply now cater to the mainstream. Those who got 9-5s, state jobs, federal jobs or STEM degrees, I thought of as being cogs in their systems, but now

with their economic advantage, I am now a cog in their spending of discretionary income. Those with extra funds trickle down to support artists, crafts-people, and other non-necessities alike. But being relatively poor is not the worst. By having less I use and consume less. And I think through personal living, that I generally do not desire much; as I am happy with merely feeling content, calm and safe. The better my physical and mental health is, the better my quality of life is.

In this sense, I make excess for others with excess. However, the perceived and actual value of art or handmade crafts can lead others to care more for these handmade objects. Non-machine made, with the human touch and a bit of soul, can transcend typical consumeristic boundaries I believe. Quantity can be replaced with quality, and through this change, I hope that less will be bought in general. In the quote of, “It is easier to imagine the end of the world than the end of capitalism,” it assumes that there is no functional alternative. But if we choose to progress and to not go extinct as a species, which I think everyone wants, then we will find a solution. And although I am a maker and seller, I choose to believe that my goods fight against big-box consumeristic endeavors where more is never enough. I simply wish for enough to sustain myself.

Within this small collection of utilitarian vessels presides generations of knowledge. While learning about ceramics over the past 16 years, I have been privileged to learn from some amazing people who themselves learned from other great people. Not only does this work present a major goal of the field (selling), but also a collectivity of translated knowledge. In this light, ceramics is the same as any field: knowledge being transferred and added to in order to pass-on information. But with ceramics being such an old practice, it is almost like a glimpse into the majority of human history itself.

Capitalism

Stemming from mercantilism with its state-based system of economics focused on gold and silver trade, capitalism grew with its focus on free-trade, competition and private ownership during Globalization 1.0. How this, our current system, grew exactly, would be a study of the history of economics, but my focus here resides in how this system seems to have affected our culture. As we all have entered into this system without any way of really exiting, I am interested in how this impacts daily life.

For as long as I can remember during my youth, I received a weekly allowance of \$5 for doing weekly cleaning chores and mowing the lawn. I progressed from buying a pack of Pokémon cards to saving for months in order to buy a new videogame; and even for a little while using my weekly \$5 to buy a RuneScape subscription. Despite my cleaning skills and efficiency improving over time, my wage remained the same. I had to seek other opportunities in order to earn more. This translated to regularly mowing neighbors' lawns during the summer and shoveling snow during the winter, to detasseling corn and working at a food truck at the state fair as I got older. These wages varied, and the hard work made me feel as if I had rightfully earned my dollars. And this feeling has not changed, as I think others would agree.

Although, oftentimes, it feels as if we deserve more. We pick up extra duties, pull extra shifts, and sometimes carry the slack from lackadaisical co-workers, but it is never enough for a large majority. We, through opportunity, education or perhaps from life choices, have been placed in the bottom 90% of income earners. And while we strive to earn more for ourselves and families, the idea I want to focus on is *deserve*.

We have this idea that we merit more, as if worthiness comes from titles, promotions and thereby pay; almost like there is an imposed and merited caste system based on earnings. But this

is a relatively new idea I think; at least for us common folk. Titles, land and prestige used to bestow individuals with position, as changing economic classes was basically unheard of; unless one, as my ancestor did, and say save a king from an assassination and earned themselves a new title. But for the most part, one was born, raised, lived and died, while having no option to earn much more. But now, with free market capitalism, one is free to seek all of the money-making ventures that they can fathom. Anyone can hypothetically become a “somebody,” and be a new Bezos, Zuckerberg or Jobs. Or, like most, we seek a little extra money for either a little bit of cushion or for a commodity which could ease discomfort in some way.

This general income inequality is on the top of the National Happiness Index scales. The more we see others having as opposed to ourselves, leaves many with desiring for more: reducing overall happiness. Many actually need more, which leads to petty crimes for subsistence, while most others simply desire more. And this constant desire leads to more general consumption and waste. We treat ourselves with coffee, a soda, take-out, or perhaps some new shoes or clothing apparel. We may not be in a higher economic class bracket, but we can allow ourselves a little luxury for a boost of dopamine; which never quenches our thirst.

For this idea, I wanted to make a porcelain mannequin. Ceramic was chosen as a medium for its historical marker as a medium of preservation which stands the test of time. Porcelain was chosen as the type of ceramic because of its perceived value as the highest form of ceramic due to its purity and refinement of composition. From here, I engaged in capitalism and purchased a mannequin in order to make a mold from it. The mold was plaster, which was mined, processed and shipped with the end goal of being bought and used; as was done.

This transformation from a cheap plastic object which connotes materialism and consumerism, to a large standing ceramic sculpture implies a higher perceived importance. The

head was transferred out for a television to connect the piece to advertising: the system's primary way of leveraging one's psychological desires. The static screen acts as a versatile image of general mind haze for an unconscious, or conscious, desire. And the wood-fired surface is meant to make associations to pollution, waste and to the general excess of capitalism.

The whole piece is "extra" in the sense that so much material and energy was used in order to, kind of, replicate an object whose function and creation already required much energy to be created and shipped (from China); and for all extensive purposes, even served its original function better than the ceramic version does. But this excess holds the associations to which imbues this ceramic mannequin with meaning. To speak of waste, pollution, materialism, capitalism, and excess, extra processes were needed. The ultimate capitalistic goal would be to sell this piece so that I am able to buy, spend and create more capital as our system deems as the primary objective of our system.

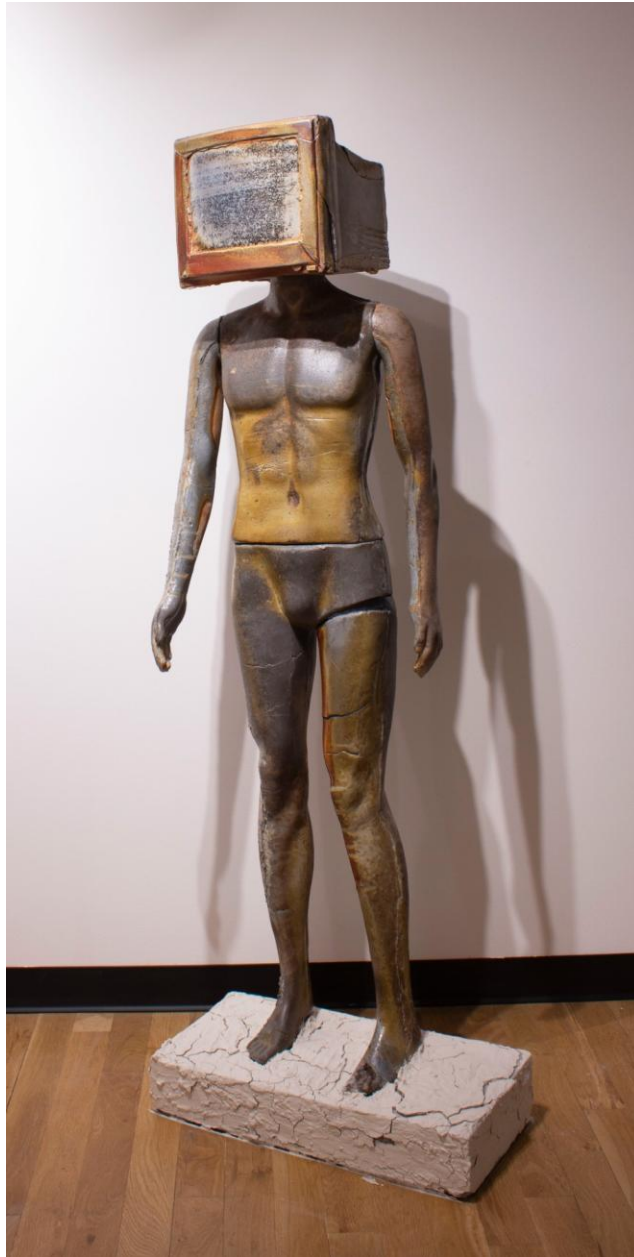


Figure 2. *Effigy of Capitalism*. Wood-fired ceramic mannequin with television head and screen-printed underglaze static face by Kyle Kirkpatrick, March 2026.

Mobilization

We have moved far as a species and accomplished seemingly so much. From our Out of Africa II Migration we ventured north and east. First we killed our cousins *Homo erectus* in

Europe, then made it to Australia over Ocean, before traversing the tundra of Siberia and Russia to make it to the Americas; all the while bringing megafauna to their knees. We became the supreme invasive species in under 100,000 years.

But this slow start was just the beginning. With the help of the Agricultural Revolution, we ended the Pleistocene Epoch, and entered into a time of global warming, empire expansion, material explorations & pollution. We connected civilizations through trade routes and exploitation, grew human understanding through languages and sciences, and breached our atmosphere to connect the world through satellite communications and the world wide web. From humble beginnings to apex predator, to a force of nature, we have never seemingly stopped becoming an ever more powerful harbinger of self.

To encapsulate this idea of migration, pollution and self-incrimination, I chose to include my old family car in my thesis. Bought from my father in 2018, I owned it for just under 7 years, while he had owned it for about the same amount of time; none of us expected it to survive for as long as it did. I would have simply repaired this '07 Ford Escape if I could have, but the rust damage to the undercarriage was simply too great, and without fully disassembling it to build upon a new base, there was no way to repair it that would not have placed me into significant debt.

Professor DeWeese originally gave me the idea to “make my own junkyard,” and the ideas expanded from there. I wanted its innards to make molds out of. A few molds were made from the pieces, but many parts were simply too complex, or too beautiful and perfect the way they were engineered. Because the pieces are so many, I will continue to make molds from and use these pieces in the future, but for this thesis, I wanted to showcase this agent of pollution in a deconstructed metaphor.

I have talked about how civilization has been thrown into a system with rules not of their choosing; and with capitalism's domination, there are fewer and fewer other modes of existing. This contract, or system, cannot be seen unless deconstructed, examined and evaluated. These separate parts interlock through deliberation, legislation, and jurisdiction, seemingly becoming translucent as scrutinized.

Now, I am very much a novice in most things, political history ranking high on this list of unknowns, and while my Anthropology is only slightly better, my pattern recognition is high. From the small amount that I claim to know, I can assert that where we have found ourselves in and as a society is not sustainable.

I, as one individual, have caused so much harm. From just trying to live in a field of my desires, doing the best I can, mass pollution has been in every step of my journey. Right before deconstruction, I logged the car at 272,578 miles. When speaking to my father recently, he believed there were about 50,000 miles on it when he bought it. The average miles per gallon for this make and model is 22. Thus, 272,578 divided by 22 would equal 12,389 gallons of gas consumed by us as a family for this one vehicle. When each gallon of gas is burned and mixed with extra oxygen, it produces 8,887 grams/19.6 pounds of carbon dioxide.⁹³ Our contribution for this one vehicle equates to 198,297 pounds of carbon dioxide added to the atmosphere. This 95+ metric tons of carbon dioxide is relative to the carbon sequestered by 3,800-4000 tree saplings for 10 years or by the burning of approximately 100 tons of coal. Once this general statistic is multiplied by hundreds of millions of drivers globally, one can see how detrimental to the environment vehicles quickly become.

⁹³ EPA, "Greenhouse Gas Emissions from a Typical Passenger Vehicle," accessed April 25, 2026, <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>.

This, however, is but a fraction of my contribution. There is so much energy put into the materials to which I consume. Food, entertainment and career also require a mind-boggling amount. How I can validate this use is in part due to my socially acceptable contract with the system, but also with the help of Buspirone. But as has become ever more clear with this research, is that this capitalistic mode will either end or be forced to end; it is just a matter of when and how it will end. Quick changes to society are typically known as collapses, while steady changes are transitions. It is up to society and the collective efforts we push which will determine if we transition or collapse. The time is running short with only two or three generations remaining before shit really hits the fan.

So, for this installation, I wanted to showcase the vehicle's dissected body. The shell, a hollowed vestige of its former self, stands front and center. The deconstructed body is meant to evoke a surgeon's autopsy where the cause of death is meant to be diagnosed; but to no avail. However, contrary to this metaphor, the cause is known by many, but the evidence has been hidden by misinformation, disinformation, cultural propaganda and ignorance. We have known for over 100 years the effects of our trajectory, but we have barreled with increasing veracity to where we are today. Am I or is the system more culpable for this forced contract? I suppose the answer does not matter as much as the question of how we progress from here.

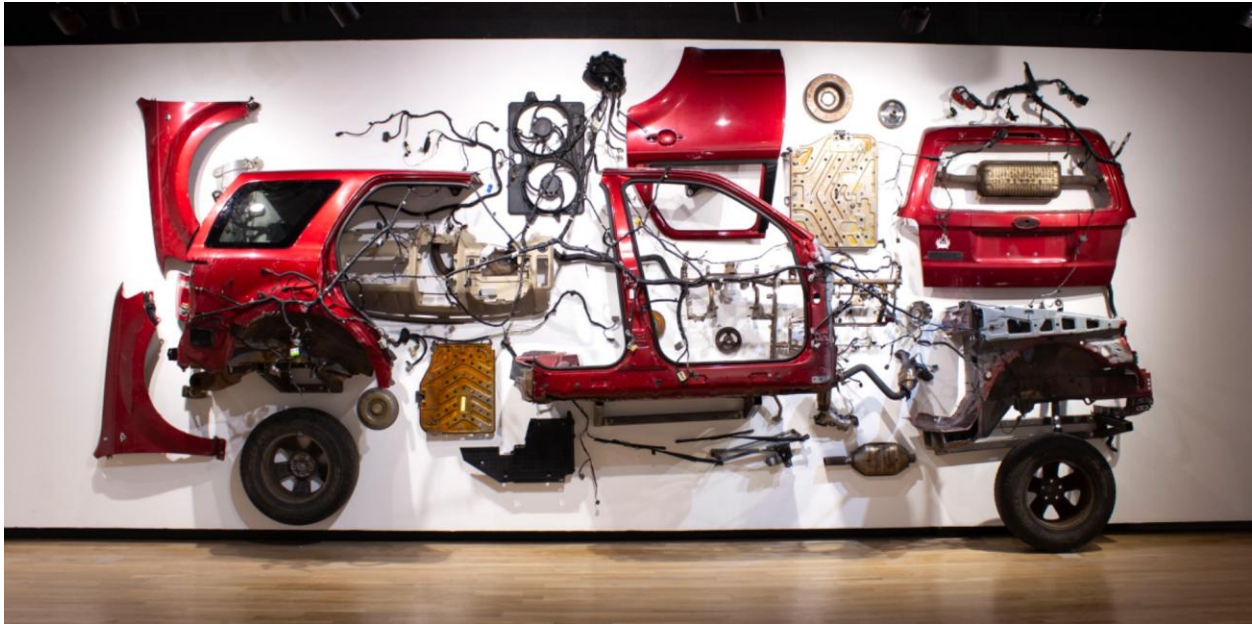


Figure 3. *Dissected Mobilization*. A bilaterally cut Ford Escape then dissected into thirds surrounded by various car parts and wiring by Kyle Kirkpatrick, March 2026.

Waste

My piece for this concept encapsulates most of my ceramic workings and efforts in this program. From learning to make complex molds, to tearing apart my old car for parts to make molds from and experimenting with surfaces, this fountain is my favorite piece; which took about a year to make from concept to creation. And kind of not surprising, it took much more preparatory time than actual working time to complete.

Throughout all the preparatory workings, I enjoyed thinking about how I was recycling my own waste, but upon reflecting I realized how vain this notion was. Instead of selling the car to a junkyard, to where people would then piecemeal purchase this vehicle apart for actual use, I destroyed all practical reallocations. By my ignorance, all I did was create a junkyard, but also by this same logic, I think that we all contribute to this same fate within our modern system of consumption.

From everyday waste, some may attempt to recycle, but most end up in landfills. We purchase outsourced objects for cheap which get brought via the barge cycle. We buy and discard constantly, but once the waste is out of sight, it often becomes out of mind as we make a mental check mark and metaphorically pat ourselves on the back for completing a chore. Much like flushing used toilet paper, we often do not think of the complex systems in place to deal with our discarded waste.

But materialism is just one form of waste. Another, equally important, is energy waste/use; as all materials require energy to be formed and converted into their intended purpose. For this idea, I wanted to use and harness various types of energy to form into my thesis: electricity was used for studio use, bisquing ceramics and various tool use; natural gas and wood were used to high-fire pottery and sculpture; propane was used to candle kilns; gasoline was used in the deconstructed car, general transportation, log splitter and chainsaws; oil was also for the car and chainsaw. This list does not include what would have gone into the material acquisition; and even if it did, I am sure this would not be a complete list.

What this list does, however, is show a personal cognizance for my practice's impact. And for this awareness, I thought it seemed fitting to create a piece which exemplified material and energy waste. This fountain, designed to flow oil, shows control in making and execution, but also mimics our own conception of energy dominance; an ultimately uncontrollable force as we have conceived so far. The oil flows from designed platforms over the top of converted earth, papers, plastics, metals, glass, rubber, and icons of cultural ruin, as hands reach up; suffocated by products of their own creation. Wood ash, and tens of thousands of pounds of carbon burned through the use of wood's energy, colorates the surface with the help of oxides and local clays & slips. For myself, this piece encapsulates the extravagance and privilege of being a working artist

during the Anthropocene. It's not a *chill* piece in concept, but neither is the reality to which we live, and nor will the future be at this rate. Some realities need stark reminders, and this is a plea into the void for betterment.

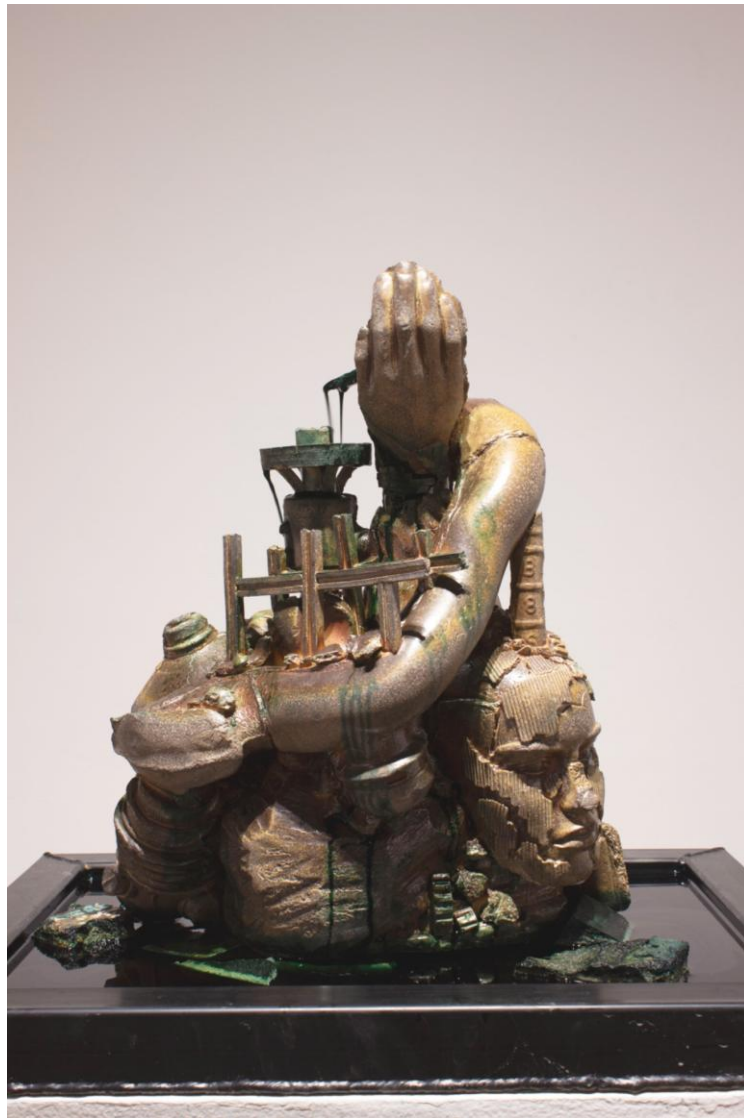


Figure 4. *Empire of Waste*. Ceramic fountain with icons of waste which pours a toxic green liquid by Kyle Kirkpatrick, March 2026.

Systems

A baseline of this research goes back to systems theory: A transdisciplinary study of systems. In order to understand how we have reached our current methodology of existence, an abundant comprehension and acceptance of the past is needed. Anthropology, world history, chemistry, biology, ecology, geology, sociology, political ecology and political economy - and a few more I would wager - have all been used to piece this information together. To represent this notion of systems theory specifically, I created an engine installation. I wanted to represent a deconstructed system divided into their respective parts. The parts inform each other and work together to create the system, while each maintaining their intended purpose and separate function. No singular piece is definitively defined as representation of a particular field of study, but instead displayed as a unifying metaphor.

This complexity is why I think many have a hard time grasping, accepting or coming to terms with our new reality. And even I, after directly studying and researching the Anthropocene, would hardly call myself a good reference. But these holes in knowledge and articulation do not mean that advocacy should not be pronounced, rather, studied more. Each of these fields can, and should be, researched further; which I believe I will do following graduation.

I mean, I get it, the information presented is grim. There is no getting around that fact. And I do truly believe that humans are mostly innately good and seek wellness. It just turns out that in our current universe we have taken enough wrong turns to land us into a self-caused mass extinction. But there are ways out; it's just about whether or not we start to make the correct decisions.

I spent my undergrad and some time after, studying about the formation of the individual. In graduate school, I applied what I had studied to the individual's impact/place in society; which led me to the Anthropocene. But recently, I have been thinking about a Seneca quote which I learned long ago. The quote from *On the Shortness of Life*, reads, "It takes the whole of life to learn how to live, and - what will perhaps make you wonder more - it takes the whole of life to learn how to die".⁹⁴ We learn, we strive, we dream, we forget, we flop around and wade through difficulties while occasionally summiting great personal challenges: this is life. This whole wild and glorious ride leads us to live true to ourselves, while also preparing us for our ends. And while we know of this inescapable fate, I think, maybe, that what applies to an individual in this quote can also be applied to the whole. That is: It takes the *whole* of life to learn how to die. By witnessing, being agent to and agent of, this mass extinction, that the whole of human existence has been needed in order to prepare us for our own extinction.

It is not fatalism, existential dread, angst, or nihilism which leads me to this notion, but merely an understanding of our current trajectory mixed with a hypothetical thought. I am much more against than for this outcome of extinction, but global changes and collaboration would be needed on a scale never before seen, and quickly, to change this projected fate. Perhaps this will happen, perhaps it will not. These are the two options, and when pontificating the latter, perhaps the acceptance of the expiration of self prepares us for the extirpation of the whole?

⁹⁴ Lucius Annaeus Seneca, *On the Shortness of Life; Consolation to Helvia; On Tranquility of Mind*, trans. C. D. N. Costa, Great Ideas (Penguin Books, 2004), 12

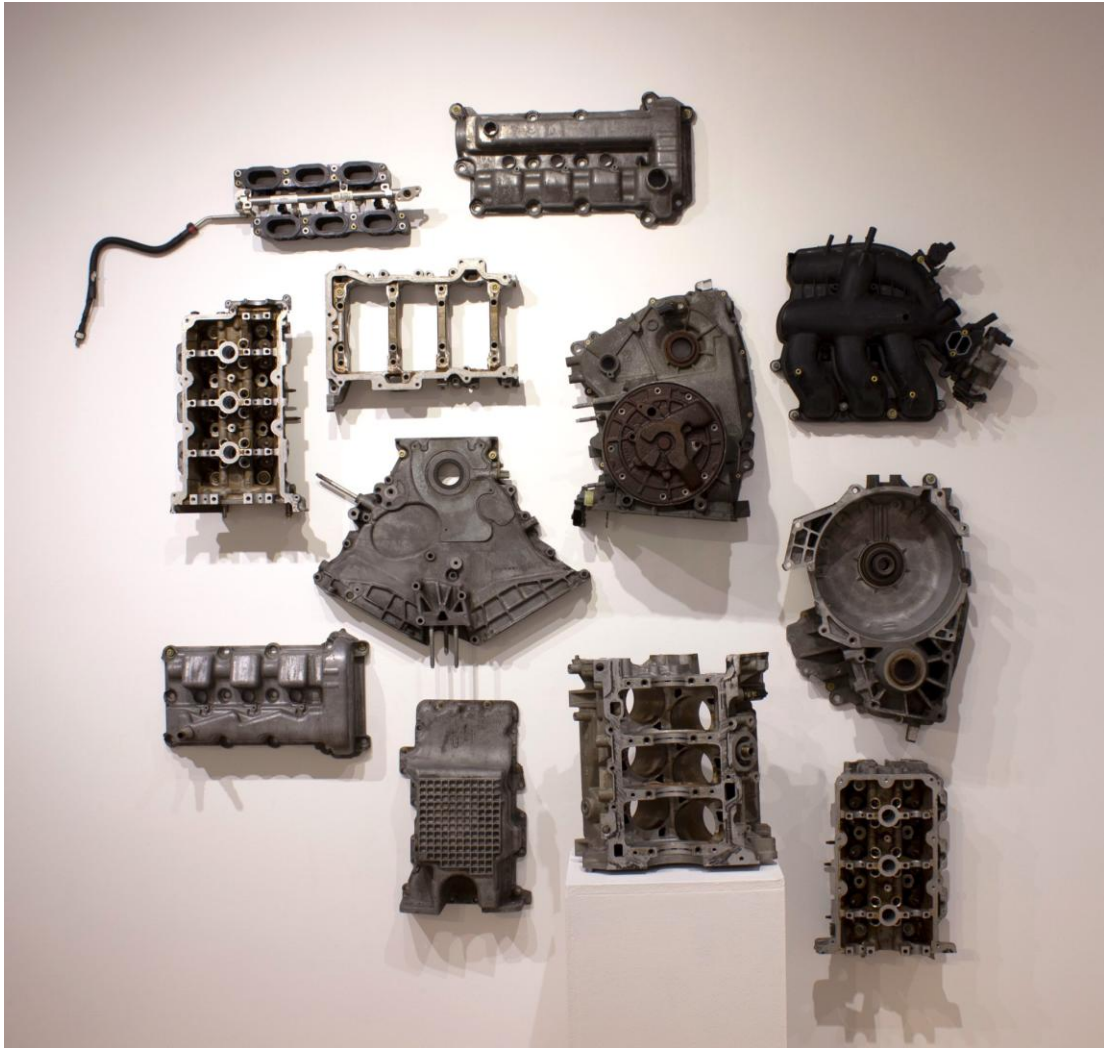


Figure 5. *Integrated Systems*. Meticulously cleaned engine and transmission parts from Ford Escape by Kyle Kirkpatrick, March 2026.

Relations

I listened to a podcast a few years back about how humanity can be divided into two groups: Prophets and Wizards. The former warns about societal change and seeks other avenues than simple continuance. The latter pushes forward, embracing technology and change, in the attempt to solve humanities problems through our current modality. Perhaps it was my Gameboy

experience, or maybe a collection of events, but I find myself in the Prophet camp within this idea.

Having long found myself pushing against technology and embracing a neo-luddite mentality, the present tense has been where I find myself attempting to live the most. Reading physical books, traveling to spend in-person time with friends and family, and learning from & being inspired by people I actually meet, has been a rewarding life and time well spent in my opinion. While this has led my general knowledge of the field to falter a bit, I can at least say that all my interactions have been genuine. To place myself in this field, research was done. Four artists which stood out to me conceptually were Olafur Eliasson, Mary Mattingly, Agnes Denes and Kimiyo Mishima.

Eliasson's art theory centers on, "seeing yourself sensing.. focusing on embodied experience, viewer participation, and environmental awareness".⁹⁵ This can be seen in many of his works, but specifically in 'Shadows traveling on the sea of the day' and 'The Weather Project.' These works focus on community engagement and introspection. Both works engage the viewer directly by having their participation be key to the understanding of Olafur's ecological concepts. The viewer understands because they are affected.

Mary Mattingly took a different approach. Her works are personal, but the implications also expand to meet the viewer. Her works are mostly photographs, not large scale installations like Eliasson's, where her medium impacts the planet less so. I learned about her from reading *Art in the Anthropocene: Encounters Among Aesthetics, Politics, Environments and Epistemologies* by Heather Davis and Etienne Turpin. Mary is best known for her series 'Life of

⁹⁵ Studio Olafur Eliasson, "Shadows Travelling on the Sea of the Day," accessed April 25, 2026, <https://olafureliasson.net/archive/artwork/WEK110073/shadows-travelling-on-the-sea-of-the-day>.

Objects.’ While being a minimalist, she still owns possessions. For this series, she cataloged every object she owned: found how they were made, where they were made, how she acquired them, and their environmental impacts from creation to her ownership. Mattingly then bound all of her possessions into a ball via rope and hauled them around and posed with them. There’s a physical performance and psychological conceptualization to her ideas on capitalism and materiality. Asking herself and viewers these questions: “Why do I own them? How did they get into my life? And what’s my responsibility?”⁹⁶ This resonates with me and leads me to my next artist of interest.

Kimiyo Mishima, born 1932 in Osaka, Japan, experienced and lived through World War II. This prolonged event, along with growing up during the “Great Expansion,” created a sense of distrust in the rapid expansion of media and resulting change in culture. This, “rise in the oversaturation of media coincides with a rise in the use of non-renewable resources and non-recyclable materials”,⁹⁷ became the basis for a majority of her life’s ceramics working. By creating Trompe-l’œil ceramic art of single use garbage, Mishima advocates that, “waste is a sign of overproduction, of a society that generates more than it can sustainably process and certainly more than it needs”.⁹⁸ Kimiyo and Mary share this cognizance for the unsustainability of our current mode of living.

The last artist I will mention is Agnes Denes. “Agnes Denes was among the earliest voices to assert the obligation of artists to address global concerns, ecological ones in

⁹⁶ The Everson Museum of Art, “Object of the Week: Package-73 by Mishima Kimiyo,” January 22, 2021, <https://everson.org/object-of-the-week/object-of-the-week-package-73-by-mishima-kimiyo>.

⁹⁷ The Everson Museum of Art, “Object of the Week: Package-73 by Mishima Kimiyo.”

⁹⁸ Reuben Keehan, “A Sense of Absurdism: Breakable Throwaway Objects,” QAGOMA Stories, Queensland Art Gallery, November 9, 2021, <https://qagoma.qld.gov.au/stories/kimiyo-mishima-a-sense-of-absurdism-breakable-throwaway-objects>.

particular”.⁹⁹ I am not the largest aesthetic fan of her work, but with her basically being the grandmother of Eco-art in my eyes, I cannot help but to be inspired. Over reading numerous articles and interviews, I will share two of my favorite ideas from her. First, during a conversation with Maika Pollack, Pollack states, “Art today exists primarily within a system of galleries and art fairs, but rarely seems to leave the art world,” to which Agnes responds, “I want to leave it. Period”.¹⁰⁰ I love this for two reasons. The first being that the field is more than a commodity for the elite. The second reason is that I do not want to teach students to indoctrinate them into white-cube desires. I firmly believe that by engaging with art, by developing creativity, that the maker gains agency over themselves, and that this skill will lead them to leading a more authentic and full life. Art to me is not about the outcome, but the journey; just like life. The second quote from Agnes which I loved is, “You live life forwards and understand it backwards.” This quote, this research, my time here and past - along with a trip to Archie Bray last week - has led me to think a lot about my future.

I realized that this 16-year journey has taught me that capitalism and the times desire more from an aspiring artist; so I need to work harder. Engagement with communities is not enough. And even these stated artists, well known and admired, have greatly varying outcomes to their “Prophesying”. This sad reality of working towards advocacy has had mostly null results outside of academia it seems. But culture changes over time, often from one generation to the next, so perhaps others and myself are in turn successors who can carry their mantels.

⁹⁹ Whitney Museum of American Art, “Agnes Denes,” accessed April 25, 2026, <https://whitney.org/artists/345>.

¹⁰⁰ Maika Pollack, “Agnes Denes,” Interview Magazine, May 18, 2015, <https://www.interviewmagazine.com/art/agnes-denes>.

For now, and perhaps for the last time, I want to thank Montana State University, their staff & faculty, and to the friends I have made while here, for helping me grow as a maker and human. Maybe I'll be able to give back to others, as you all have given to me, through teaching or advocacy down the road. But for now, while the economy is tanking, art field positions are dwindling and authoritarians run rampant, I am going to keep my head above water for the first time in my adulthood. It is time for some soul searching upon graduating, in this, our Anthropocene.

REFERENCES CITED

- Bonneuil, Christophe, and Jean-Baptiste Fressoz. *The Shock of the Anthropocene: The Earth, History and Us*. London: Verso Books, 2016.
- Climate Action Tracker. "Paris Temperature Goal." Accessed April 25, 2026.
<https://climateactiontracker.org/methodology/paris-temperature-goal/>.
- EPA. "Greenhouse Gas Emissions from a Typical Passenger Vehicle." Accessed April 25, 2026.
<https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>.
- Jameson, Fredric. *The Seeds of Time*. New York: Columbia University Press, 1994.
- Keehan, Reuben. "A Sense of Absurdism: Breakable Throwaway Objects." QAGOMA Stories, Queensland Art Gallery, November 9, 2021. <https://qagoma.qld.gov.au/stories/kimiyo-mishima-a-sense-of-absurdism-breakable-throwaway-objects>.
- Lewis, Simon L., and Mark A. Maslin. *The Human Planet: How We Created the Anthropocene*. New Haven: Yale University Press, 2018.
- Lindsey, Rebecca. "Climate Change: Atmospheric Carbon Dioxide." Climate.gov, May 21, 2025. <https://www.climate.gov/news-features/understanding-climate/climate-change-atmospheric-carbon-dioxide>.
- Pollack, Maika. "Agnes Denes." Interview Magazine, May 18, 2015.
<https://www.interviewmagazine.com/art/agnes-denes>.
- Quinn, Daniel. *The Story of B*. New York: Bantam Books, 1996.
- Rich, Nathaniel. *Losing Earth: A Recent History*. New York: Farrar, Straus and Giroux, 2019.
- Seneca, Lucius Annaeus. *On the Shortness of Life; Consolation to Helvia; On Tranquility of Mind*. Translated by C. D. N. Costa. Great Ideas. London: Penguin Books, 2004.
- Stelten, Mark. "A Beginner's Guide to Dating (Rocks)." U.S. Geological Survey, October 23, 2023. <https://www.usgs.gov/observatories/yvo/news/a-beginners-guide-dating-rocks>.
- Studio Olafur Eliasson. "Shadows Travelling on the Sea of the Day." Accessed April 25, 2026.
<https://olafureliasson.net/archive/artwork/WEK110073/shadows-travelling-on-the-sea-of-the-day>.

The Everson Museum of Art. "Object of the Week: Package-73 by Mishima Kimiyo." January 22, 2021. <https://everson.org/object-of-the-week/object-of-the-week-package-73-by-mishima-kimiyo>.

Whitney Museum of American Art. "Agnes Denes." Accessed April 25, 2026. <https://whitney.org/artists/345>.