

E-Museum Teaching Guide
The Anthropocene



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Introduction

“The Anthropocene” unofficially designates the geological epoch since human activity began to have an irreversible impact on the planet and its ecosystems. “The Anthropocene” e-museum brings together artworks from the Syracuse University Art Museum’s collection that register some of these irreversible impacts, their contributing causes, and their still unfolding effects. Some of the objects in the e-museum depict industrial, developmental, colonial, military, and consumer activity that have driven global climate change, water scarcity, and resource contamination. Others register climatological, ecological, and geological events – common and uncommon – that have intensified over time due to human activity. Still others offer historical windows onto things like [sea levels in Venice](#), [glacial expanses in Scandinavia](#) and the [Alps](#), and [the early spread of COVID-19 in 2020](#).

Though several international scientific bodies are currently working to have the Anthropocene recognized officially as a new geological epoch, the planetary changes that this proposed epoch would acknowledge (and their anthropogenic causes) are not fundamentally in dispute. The planet’s climate and crust have measurably warmed in the past century, and this warming has been accelerating. This has had myriad and often interconnected effects, including more intense weather and seasonal climatic events, glacial and polar ice pack melt, sea level rises, ocean acidification, biome shifts, mass extinctions, epidemiological crises, famines, droughts, floods, and wildfires. Global warming is not the only irreversible impact that human activity has had on the planet. The development of various synthetic materials, chemical compounds, and nuclear energy have produced their own indelible environmental consequences, including polluting the oceans with microplastics, leaching toxic chemicals into water and soil, and contaminating entire geographical regions with slow-decaying radioactive waste.

More open for discussion is the question of when this new geological epoch began (leading candidates include the Agricultural Revolution, the Industrial Revolution, the Atomic Age, and the Great Acceleration). Another debate is whether this epoch should be named something else. The term “The Anthropocene” has been criticized for its anthropocentrism, its perceived inability fully to conjure networks of ecological complexity, and its political failure to single out colonialism, capitalism, and the Global North for blame as the primary drivers of anthropogenic planetary change. We use “The Anthropocene” here primarily for pragmatic reasons due to its broad cultural currency. The term offers a convenient conceptual frame through which to help students make connections across a set of artworks that are documenting, bearing witness to, and commenting on human activities, ecological changes, and climatic phenomena that might otherwise seem disparate or disconnected (and that, for many of the artists who made these works, certainly would not have seemed connected). All of the works in “The Anthropocene” e-museum are registering and reacting in different ways to unfolding planetary processes that affect everyone and everything on Earth, however unequally.

Keywords: *The Anthropocene, slow time, climate change, climate grief, industry, development, capitalism, urbanization, war, extraction, deforestation, fossil fuels, petrochemicals, electricity, nuclear energy, water scarcity, carbon emissions, pollution, contamination, hurricanes, forest fires, floods, desertification, sea levels, glacial melt, endangerment, extinction, environmental justice, hyperobjects, landscape*

Teaching Strategies: General Questions

Individually and collectively, the works in the e-museum can help students think critically about how different artworks:

- Ascribe responsibility for the enduring planetary changes they reference or depict
- Represent and influence cultural attitudes towards forms of human activity that we now know have had lasting and indelible planetary impacts (including urbanization, deforestation, pollution, plastics use, war, dam construction, power grid development, atomic energy, and fossil fuel extraction and consumption)
- Represent and influence cultural attitudes towards various ecological disasters and the factors and histories that can contribute to their severity for human populations
- Encourage grief, anger, hope, care, or some other affective response towards irreversible planetary changes
- Participate in or challenge anthropocentric thinking in relation to the enduring ecological changes or events they reference
- Prompt reflection on ways that artworks can contribute to, or discourage, thinking on a planetary scale, including thinking about humanity as a biological population
- Prompt reflection on the benefits or limitations of “The Anthropocene” as a label for the geological epoch in which the artworks were created

Each of these bulleted points can easily be converted into a general discussion prompt for a specific artwork by prefacing it with the phrase “How does this object...?” or “How do these objects...?”



[City Halo](#), Richard Florsheim [Object 1982.078]

Ecological and Cultural History

Introducing more specific cultural and historical contexts for the ecological histories that an individual artwork references can transform how students experience the work and provoke thoughtful discussion of how its significance might have changed over time. This is true whether or not the work invokes these culturally entangled ecological histories explicitly or intentionally (or even could have done so at the time of its creation). Two examples:

Leopold Hugo's [atmospheric photograph of a windswept Torrey pine](#) on a cliffside [Object 1981.1658] records a landscape near his home in La Jolla, California (near San Diego) in the 1910s. Torrey pines, often prized aesthetically for their twisted shapes, are also prized by environmentalists since they are the rarest native pine tree species in the United States and amongst the rarest species of tree on Earth. Their numbers began diminishing sometime between 3,000 and 8,000 years ago due to a non-anthropogenically caused climatic warming event. By the time Hugo took this photo, their numbers had shrunk to the 100s. As a result of late twentieth-century conservation efforts (including the establishment of a U.S. National Park on the Channel Islands near San Diego), the population of Torrey pines has since risen into the 1,000s, but they are newly threatened today by droughts and rising mean annual temperatures attributed to anthropogenic climate change. Anthropogenic climate change has also produced a radical spike in the number of bark beetles in Southern California, a native insect population that depends on pine trees, including Torrey pines. Bark beetles can be crucial to forest health, promoting regeneration and thus biodiversity, but under dry conditions – such as those caused by droughts and wildfires – they can become pests. They are potentially fatal threats to the ecologically precarious Torrey pine population.

Ask your students how any of this informs or affects their interpretation of Hugo's 1910s photograph. How might the information alter their sense of the photograph's subject matter (a solitary pine) or the significance of its compositional emphasis on the sky and wind? Knowing what they now know, how do the unseen elements of the ecosystem captured by the photograph potentially alter the photograph's significance? To what extent does or doesn't it make sense to think of Hugo's photo as documenting "The Anthropocene"?



[\[Solitary torrey pine\]](#), Leopold Hugo [Object 1981.1658]

Ecological and Cultural History cont.

Ron Kleemann's [screenprint of cars lined up at an urban gas station](#) [Object 1993.190.09] records a familiar American scene from the year it was created: 1979. Following a drop in crude oil extraction due to the Iranian Revolution in January 1979, global gas supplies diminished, and American gas prices nearly doubled by the summer months. In an attempt to curb demand at a time of diminished supply, President Jimmy Carter's administration deregulated the price of gas. However, this policy had the opposite effect, touching off a buying frenzy that led to long lines and supply shortages in many parts of the country. The supply of gas to all American consumers could have been uninterrupted; it was the consumer panic itself that produced the shortages (not least of all because of the quantities of gasoline that idling vehicles burned while in line to buy gas). Long-term effects of the 1979 oil crisis have included a push for more domestic U.S. oil production, leading to more American lands being made available for drilling, and an early Congressional initiative to try to limit the nation's dependence on fossil fuels.

Nonetheless, U.S. gas consumption ultimately tripled between 1950 and 2012 (though it has declined slightly in recent years due to electric vehicle sales). Based on the most recent EPA study (2021), gasoline now accounts for 57% of total energy consumption in the U.S. transportation sector and 16% of all energy consumption in the U.S. The United States was responsible for nearly 25% of world oil consumption in 2017-2022, while the U.S. accounted for only 5% of the global population during this same period. As has been well documented, global average temperatures have been warming at an increasingly rapid rate in the past 50 years due to a combination of anthropogenic factors, high among them the failure to curb emissions from gasoline-powered internal combustion engines.

Have students discuss the potential significance of Kleemann's artwork at the time it was created as opposed to today. What kind of stance does it seem to take on what it depicts? While entitled *Gas Line*, what other environmental elements are visible in the depicted scene and how are their ecological histories entwined with this urban gas line? How does or doesn't it make sense to think of Kleemann's print as an image of "The Anthropocene"?



[Gas Line](#), Ron Kleemann [Object 1993.190.09]

Artist, Artistic Process, and Audience

You can also ask your students more directed questions based on biographical information about the artist, information about the methods and techniques used in creating the artwork, or information about the audiences for which a given artwork was created. Two examples:

Shalinee Kumari, one of a new generation of painters in India's Mithila region, painted [Mother Nature in COVID time](#) [Object 2023.2] at the height of the COVID-19 pandemic in 2020. Mithila historically has been one of the most impoverished regions of India, and today it is amongst the most vulnerable districts of India to the effects of climate change, which has heightened ecological awareness in the region generally. Kumari's painting references the fact that while COVID-19 was ravaging human populations, the disease-preventative lockdown on human activity (depicted at the top of Kumari's painting) caused measurable ecological improvements across a range of indicators, including air quality, marine animal populations, forest sizes, greenhouse gas emissions, and more. The lockdown thus offered an experimental window, however tragic, into collective anthropogenic effects on the planet's many ecosystems.

Traditionally, Mithila paintings were painted by women onto the walls of homes as part of a ritual celebration of various milestones. Beginning in the late 1960s, however, some women began painting them onto homemade paper instead, which meant the paintings could be sold to help support households. Kumari's paintings represent a departure even from the newer, portable, saleable version of Mithila painting in the extent to which they make personal statements by weaving their traditional subjects and themes into contemporary political, geopolitical, and ecological concerns.

Have your students discuss the interaction between the painting's traditional subject matter (Mother Nature) and its contemporary ecological referent (the COVID-19 pandemic). What do you make of the use of color in the painting? Though calling attention to the positive ecological effects of the pandemic for animal species other than human beings, is the painting critical of humanity and/or of urban centers? How might it matter for interpreting the painting's political significance that it originated from Mithila? Or that its painter is a young woman?



[Mother Nature in COVID time](#), Shalinee Kumari [Object 2023.2]

Artist, Artistic Process, and Audience cont.

William Garnett's [1967 photo of Lake Powell](#) [Object 1986.568] captures America's second largest water storage basin just four years after it was created, in 1963, by flooding Arizona's Glen Canyon. Glen Canyon was a picturesque geological formation inhabited in prehistoric times by the Ancestral Puebloans. The photograph carries documentary interest as an early record of the geographical site's transformation in the 1960s. It carries additional documentary interest today given the extent to which Lake Powell and nearby Lake Mead made headlines in 2023 for their severely reduced water levels, the combined result of drought and demand.

Less apparent to a modern viewer who knows Lake Powell's ecological and cultural history, however, might be the novelty of this photograph's aerial perspective on it. Garnett became fascinated with flying when he sat in the navigator's seat while being flown home on a GI transport at the end of World War II. Already trained as a photographer (Garnett had worked as a police photographer before the war), he enrolled in pilot training, and ultimately purchased his own plane, which he outfitted with cameras. Aerial photography was associated primarily with mapping and military use in the 1950s, but Garnett's work helped change this. He pioneered aerial art photography, eventually taking photographs on regular assignment as a photojournalist for TIME-LIFE and also landing a prestigious professorship at UC-Berkeley, in its School of Environmental Design. His photographs often capture seasonal and human-produced changes to the landscape. His photograph of Lake Powell was published in *Color Nature Landscapes II*, a 1983 portfolio of ten large-scale landscape photographs by five established art photographers. The portfolio's main audience was collectors and museums.

How does any of this information about Garnett's life, methods, or audience shape your experience of his photograph of Lake Powell? To what extent does it alter your sense of the relations the photograph produces between the viewer and the landscape it depicts? Discuss from an ecological historical perspective the project of making Lake Powell aesthetically pleasing via a photograph taken from an airplane flying with clear skies. What are some of the different layers of ecological significance operative in this photograph?

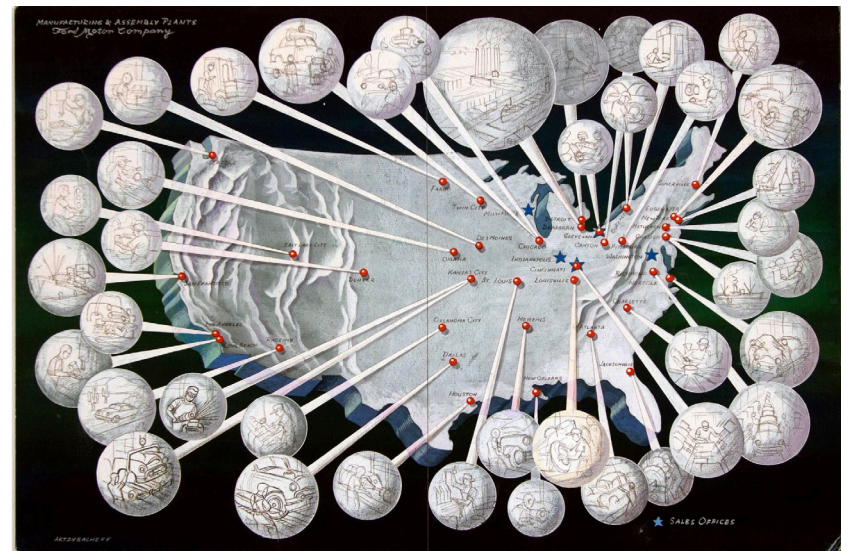


Photo of Lake Powell, William Garnett [Object 1986.568]

Visual Analysis

Any of the above approaches can be combined with more targeted questions about elements of form, composition, color, or style. For example:

- How do the style and colors of this work factor into the way you're experiencing it as an image of grief or hope about the ecological phenomenon or human practice it depicts? How might a different style or a different color scheme for the exact same composition have contributed to a different affective experience? To what extent would you characterize its colors as "natural" or "unnatural" in context, and how does that matter to your response?
- What decisions do you see the artist making about what to include and not to include in the picture frame? What about the angle or perspective they adopt in the image? How do these compositional choices contribute to the statement you see the artwork making (or failing to make) about the kinds of planetary harm it depicts? Specific to photographs, what elements of the image appear to be beyond the photographer's control? To what extent (or in what ways) is the subject of the photograph its author?
- How spare or crowded does this image seem compositionally, and what impact does that spareness or crowdedness have on the kinds of commentaries you see it making about planetary changes?
- How do the figures matter to how you are interpreting this artwork's ecological project or significance? What about the ground or background? The relation between the two? In the case of works that have multiple figures, what different functions do these figures serve? Or what different relational vectors to other figures, or to their surroundings, do they establish?
- Are there any visual elements of this artwork that seem to function symbolically?



Map of Manufacturing and Assembly Plants - Ford Motor Company, Boris Artzybasheff [Object 1965.1109]

Pairings and Groupings

Many of the works in the “The Anthropocene” e-museum make for critically provocative pairings or groups. Some of our suggested groupings for discussion include:

- **Dense cityscapes:** Richard Florsheim’s [City Halo](#) [Object Number 1982.078]; Stacy Pearsall’s [Monopoly Houses](#) [Object 2016.0023]; and Chaim Koppelman’s [Beach Crowd](#) [Object 1964.272]
- **Contemporary Mithila paintings of global ecological threats:** Shaline Kumari’s [Shakti](#) [Object Number 2010.0463] and Kanchan Jha’s [Frontline Corona Warrior](#) [Object 2021.0001]
- **American artists on driving/road culture:** Raoul Middleman’s [oil painting of a man driving into a Howard Johnson’s](#) [Object 1966.294]; Boris Artyzbasheff’s [painting detailing the locations of Ford manufacturing plants](#) [Object 1965.1109]; Robert Flick’s [photo collage of a rural highway in California](#) [Object 1990.165.09]; Mary Petty’s [cartoon of early RV culture](#) [Object 1979.2337]; Steve Fitch’s [photograph of a giant dinosaur roadside attraction](#) [Object 1990.165.12]; and Robert A. Widdicombe’s [photograph of Cadillac Ranch](#) [Object 1990.165.20]
- **The solitary tree as ecological statement:** Berenice Abbott’s mid-century [photograph of old-growth forest logging](#) [Object 1981.2394]; Pete Turner’s 1970 [photograph of a dust storm](#) [Object 2004.0065.2]; Leopold Hugo’s early twentieth-century [photograph of a windswept Torrey Pine](#) [Object 1981.1658]; and Lars Bo’s [print of Adam and Eve deserting the Garden of Eden](#) [Object 1963.0150]
- **Artists take flight:** Richard Florsheim’s mid-century print of a [nighttime cityscape from an airplane window](#) [Object 1967.761]; William Garnett’s 1967 [photo of Lake Powell](#); Frank Gohlke’s 1981 [photograph of highway construction in Oklahoma](#) [Object 1990.165.07]; Marilyn Bridges’ 1991 [photograph of a water tank in the desert](#) [Object 2021.0260]
- **Cities and sea levels:** Franz Richard Unterberger’s [mid-19th century oil painting of Venice](#) [Object 0040.050]; Henry Pember Smith’s [late-19th-century oil painting of Venice](#) [Object 1954.15]; Berenice Abbott’s [long-range photographic view of Miami in the mid-20th century](#) [Object 1981.2677]; and Karl Schrag’s [print of a tidal wave threatening a coastal metropolis](#) [Object 1970.746]



[Tidal Wave](#), Karl Schrag [Object 1970.746]



[Miami, Florida, Across Bay](#), Berenice Abbott [Object 1981.2677]



[Grand Canal, Venice](#), Franz Richard Unterberger [Object 0040.050]

Assignments and Further Resources

For general assignments related to this and other e-museums, consult "Art, Ecology, and Climate E-Museums: A Teaching Guide." You can access the guide via the Project's webpage (under the "Learn" pulldown menu on the Syracuse University Art Museum's website).

An in-depth Art, Ecology, and Climate Project Teaching guide for Joe Maloney's [Asbury Park, NJ](#) (American; dye transfer print photograph; 1979) [Object 2017.0704.04] can be found on the Project's webpage.

Additional context for several other artworks in this e-museum can be found in the teaching guides for other e-museums in the Art, Ecology, and Climate Project. For the following works, consult the relevant teaching guide on the Project's webpage. The relevant guide is listed in parentheses after the work:

- Ed Kashi, [OKRIKA, NIGERIA|2004](#) (Entanglement)
- Pete Turner, [Dust Storm](#) (Atmospheric)
- Philip Kappel, [Seatrain](#) (Power and Energy)
- Dong Kingman, [White Hope](#) (Pollution and Contamination)
- Giorgio Sommer, [Chamounix Glacier de Bossons Pris de Plan Achat](#) (Wilderness and Wildness)
- [Saran Wrap](#) advertising still (Pollution and Contamination)

Much more artwork related to the Anthropocene can be found throughout the Art, Ecology, and Climate e-museums, including "Environmental Justice," "Extraction," "Pollution and Contamination," "Food Systems," "Power and Energy," and "Water Use."



[Asbury Park, NJ](#), Joe Maloney[Object 2017.0704.04]

The Anthropocene

Selected Recent Books

Texts on Art and the Anthropocene

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- Bonneuil, Christophe and Jean-Baptiste Fressoz. *The Shock of the Anthropocene: The Earth, History and Us*. Verso Books, 2017.
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- Langston, Nancy. *Climate Ghosts: Migratory Species in the Anthropocene*. Brandeis University Press, 2021.

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Selected Recent Books cont.

- Lewis, Simon L. and Mark A. Maslin. *The Human Planet: How We Created the Anthropocene*. Yale University Press, 2018.
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- Schaberg, Christopher. *Searching for the Anthropocene: A Journey Into the Environmental Humanities*. Bloomsbury Books, 2019.
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- Yusoff, Kathryn. *A Billion Black Anthropocenes or None*. University of Minnesota Press, 2019.



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