

Cynthia Haveson Veloric
University of the Arts, Philadelphia

Edited by

Sarina MILLER

PERSPECTIVE

Selected Essays on Space in Art and Design



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SERIES IN ART

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Sarina Miller
Temple University

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INTRODUCTION

Perception is informed by perspective and space is inextricably linked with time. The Japanese concept of *ma* as empty space or a gap, pause, or interval refers to perceptions of both space and time. *Ma* can be recognized in the physical distance between actors on a stage, pauses of varying lengths in dialogue or music, and in the negative space around a sculpture or between objects in a painting. *Ma* is not incidental and exists only in the recognition and appreciation of its presence. Conversely, a rejection of emptiness and negation of the void have been expressed in Western philosophy through concepts like plenism (fullness) and *horror vacui* (“fear of empty space”). In visual aesthetics, *horror vacui* describes a space that is filled with ornament. The dichotomy of fullness and emptiness implies value in different ways, depending on context, and the visual syntax of these concepts is designed to communicate to specific audiences. A luxury boutique, for example, may display a few objects within an abundance of space to emphasize their scarcity/rarity, thereby increasing their perceived value. By contrast, a discount outlet store may reverse this design process and fill a space with merchandise to suggest lower cost due to an abundance of product.

Our perception of space is governed by our point of view (perspective), which is determined by relative distance, both spatial and chronological; we perceive differently a three-dimensional space that we occupy physically, space that is suggested or flattened through illusion, viewed up close or from afar, and any space created in the past that we view in our own time. These spatial-temporal relationships can be perceived as simultaneous, sequential, or cyclical.

The inherent connection between space and time was presented as a provocative challenge in the early twentieth century with the development of Analytic Cubism, in which objects were visually dissected and portrayed in fragmented forms from various angles, forcing the viewer to contend with multiple viewpoints simultaneously. The complexity of this task mirrored ways of thinking in other contexts and represented shifting perspectives in the modern world.

When the Great Kantō earthquake fragmented the topographic spaces of Tokyo and surrounding areas in 1923, a conscious reimagining of that space during its rebuilding was informed by Western modernity. In Japan, the closing of this cultural gap between East and West also meant widening the distance between the traditional past and the modern present. A visual expression of this phenomenon can be seen in a 1927 advertisement by Sugiura Hisui for the Tokyo Metro subway line, Japan's first subway (fig. 1). In the poster, linear/sequential

time is conveyed in the design of space through an illusionistic perspective that suggests present and past visually as near and far. The approaching train and its passengers waiting on the platform are shown in diminishing perspective, with the figures in modern/Western clothing appearing closer to the viewer in the foreground and smaller, traditionally dressed figures in the background.

Circular spaces can represent infinity or eternity, and in Indian religions this relates to a cyclical concept of time associated with the belief in *saṃsāra* (cycle of birth, death, and rebirth). Spatially, this is often expressed in the depiction or suggestion of circles. The mandala (Sanskrit for “circle”), in various mediums such as textiles or colored sand, is a symbolic microcosm of the universe, the circular space of which is often enclosed by a square and contains a central dot (*bindu*) that represents the origin or point of creation. In the architectural space between a rounded stupa and the circular railing enclosing it, Buddhists circumambulate in a clockwise direction as a symbolic representation of *saṃsāra* and the eightfold path to enlightenment (*nirvana*), the liberation from *saṃsāra*.

In the essays that follow, the isolation of space as a formal design element encourages a deeper understanding of how it conveys meaning in specific historical and contemporary examples. These essays explore space—both real and imagined—to analyze critically the ways in which it has been designed and experienced in different cultures.

Sarina Miller



Figure 0.1. Sugiura Hisui, advertisement poster for the Tokyo Metro subway line, 1927.
The Tokyo National Museum of Modern Art.

7.

EMBODIED SPACE: THE *POLLUTION PODS* EXPERIENCE

Cynthia Haveson Veloric
University of the Arts, Philadelphia

Abstract

This essay examines how the designed space of Michael Pinsky's *Pollution Pods* provides a forum for discourse on the causes and effects of the climate crisis. Artist and architect Michael Pinsky confronts global pollution in his travelling installation, *Pollution Pods* (2018--), in which visitors are enticed to enter five linked transparent geodesic domes that represent the cities of Tautra, Norway, London, São Paulo, Beijing, and New Delhi. The cities themselves are invisible, but visitors inhabit them through their senses. Through the clever sequencing of rooms, climate consciousness comes slowly through the “back door” rather than through a grand entrance. Pods’ transparent walls and ringlike formation invite awareness and anticipation of other “cities.” This configuration symbolically reinforces the idea that all corners of the globe are connected, just as air pollution, a hyperobject, knows no boundaries.

Keywords: Aesthetic Ambiguity, Air Pollution, Climate Crisis, Environmental Activism, Geodesic Dome, Microclimate, Somatic Marker Theory

Despite the negative connotation of this chapter's title, the dramatic and futuristic design of Michael Pinsky's *Pollution Pods* stimulates curiosity and excitement about what lies within (figs.7.1-7.2).¹ Visitors are enticed to enter five linked transparent geodesic domes, each of which represents a city. The cities themselves are invisible, but visitors inhabit them through their senses. The first one evokes the pine-scented atmosphere of the island of Tautra, Norway. This pod serves as a utopian “baseline” of fresh air quality against

¹ This chapter is an edited excerpt from the author's dissertation for the PhD in Creativity at the University of the Arts (2022).

which others are compared. As visitors move through highly polluted, albeit slightly different spaces, their senses join with varied emotions. London smells primarily of diesel fumes (nitrogen dioxide) with slight fog, São Paulo of vinegar due to ethanol-based fuel, and New Delhi of diesel, large particulates from the unsealed roads, and smoke from burning plastic and crop burning. Beijing's scent has been described as that of sulfur, coal, and wood from domestic heating. Except for Norway, the odors trigger watery eyes, headaches, and claustrophobia, along with feelings of lightheadedness, toxicity, and sickness associated with airborne environmental risk.² Signs are posted to indicate that the atmospheres are simulated yet the experience is still unpleasant, and some visitors think the installation is dangerous, a notion that heightens the artwork's meaning.

Pollution Pods is an artistic vehicle or an aesthetic trap that conveys scientific data in a non-rational way. By recreating the distinct air quality of several cities, it provides a unique phenomenological experience; that is, the visitor becomes hyper-aware of oneself in this atmosphere in this moment in time. As the body adjusts (or tries to adjust) to different atmospheres in each pod, it sends messages to the brain about safety or danger.³ The atmosphere has a strong impact on the visitor's ability to understand the data about the air quality, which is shown in a small computer display in each pod.

Pollution Pods is a paradigm of sensorial aesthetic experience which makes air pollution personal and comprehensible. Neuroscientist Antonio Damasio's "somatic marker theory" has relevance here. Somatic markers are feelings in the body that are associated with emotions, and these emotions are neurologically connected to the prefrontal cortex of the brain, which is the center responsible

² Accounts of visitor experiences are easily found on the internet. Around 40 videos show visitors inside the Pods such as BBC's "London Live Pollution Pods," April 27, 2018, <https://www.youtube.com/watch?v=B1Yus0VPET4>. Pinsky's website includes links to hundreds of journalistic pieces which include visitor quotes about their sensory experiences. See <http://www.michaelpinsky.com/reviews/>. Another large selection of reviews and press can be found at the Cape Farewell website, <https://capefarewell.com/pollution-pods/reviews.html>. Pages of a visitor comment book from the Portland, Dorset, UK venue were made available to the author. All works illustrated are by Michael Pinsky unless otherwise noted.

³ The science behind this phenomenon is explained in a video showing the artist, Greta Thunberg, and Dr. Maria Neira of the World Health Organization inside the Pods titled "Greta Thunberg Experiences 'Pollution Pods' at UN Youth Climate Summit." <https://nowthisnews.com/videos/news/greta-thunberg-experiences-pollution-pods-at-un-youth-climate-summit>.

for guiding behavior, particularly decision-making.⁴ Therefore, the *Pollution Pods* installation stimulates a variety of physical reactions, which, via the emotions, can lead to cognitive changes.

The atmosphere in *Pollution Pods* creates a strong *affect*; the emotional, physical, and sensual conditions created within each pod bridge the divide between feeling and cognition. Affect is an essential tool in climate-themed art that lacks written explanations.⁵ Additionally, while this affect is not necessarily conscious, a conscious experience may issue from it.⁶ This consciousness emerges slowly as the visitor passes through a sequence of rooms which contain abrupt atmospheric transitions. Consciousness also emerges through ambiguity of perceived appearances versus what lies within. Pinsky interrupts our expectations of a futuristic, pollutant-free journey (referring to Buckminster Fuller's geodesic domes) by manipulating our senses, and thus, our brains. Neuroscientist Semir Zeki's theories of ambiguity and the brain⁷ posit that due to the existence of high levels of ambiguity in certain works of art, the viewer must engage longer to make sense of it. Initially, *Pollution Pods* appears enticing before turning into an experience of the terrible sublime. According to Zeki, "the relationship of ambiguity to consciousness is critical."⁸

The *Pollution Pods* designer successfully merges art and activism in the public sphere.⁹ He creates micro worlds that are packed with environmental messages to reduce the psychological distance between climate change and visitors by constructing a visually memorable space that lures people in, then confronts them in surprising ways. A seemingly benign adventure turns into an ethical and reckoning as the excitement of moving through intriguing spaces is replaced by a feeling of entrapment in odorous cells (fig. 7.3). The installation forces a critical engagement with air pollution and encourages thoughtful

⁴ Antonio Damasio, *Descartes Error: Emotion, Reason and the Human Brain* (New York: Penguin, 2005).

⁵ Philosopher Brian Massumi proposes affectivity as crucial to an understanding of the absolute inseparability of thought and feeling and argues for the lack of distinction between synesthetic and cognitive states. See Brian Massumi, *Parables for the Virtual: Movement, Affect Sensation* (Durham, N.C.: Duke Univ. Press, 2002) as paraphrased in Erika Doss, "Affect," *American Art* 23, No. 1 (Spring 2009): 9.

⁶ Steven Shaviro, "Affect vs. Emotion," *The Cine-Files*, issue 10 (Spring 2016).

⁷ Semir Zeki, *Inner Vision: An Exploration of Art and the Brain* (Oxford: Oxford University Press, 2003); Semir Zeki, "Art and the Brain," *Daedalus* 127, no. 2 (1998): 71–103. <http://www.jstor.org/stable/20027491>; Semir Zeki, "The neurology of ambiguity," *Consciousness and Cognition* 13 (2004): 173–196.

⁸ Zeki, "The Neurology of Ambiguity," 174.

⁹ Michael Pinsky (b. Scotland 1967) holds a PhD from the Royal College of Art and is a self-avowed environmental activist.

questions: What is causing the pollution in each city giving it a distinctive odor? What populations are regularly exposed to the real toxic particulates that visitors are sampling voluntarily? How does that affect their health and sanity? What can I do to ameliorate air pollution? What are the larger economic, social, and political forces that contribute to the problem?

Pinsky had been pondering the visualization of these issues when he received a commission from Climart, a research project launched in 2014 at the Norwegian University of Science and Technology (NTNU). Scientists, psychologists, and artists studied and assessed how audiences were affected by climate-related artwork.¹⁰ To that end, they have launched climate art installations throughout Europe, including ArtCOP21, which ran simultaneously with the 2015 United Nations Climate Change Conference (COP21) in Paris. Pinsky's design took into consideration the results of Climart's survey in Paris, though he pursued a different route.¹¹ Rather than creating an artwork that aestheticized nature by using beautiful colors or sublime depictions, or that triggered a personal connection to an environmental problem, Pinsky designed a minimalist suite of transparent rooms which contained dystopian environments.

Pollution Pods didn't start with an image. Rather, it evolved out of conversations about air pollution. Pinsky's sketchbook was filled with words and concepts prior to architectural drawings (fig. 7.4). He disclosed, "You have your political agendas that you want to push. Then, on the other hand, you ask how this is going to manifest physically. The visual part came later in the process... We're talking about climate change and the causes and the consequences and how we can deal with it. Then we moved on to 'how do we get people to engage with this?'"¹² Pinsky's solution was to design a series of domes to enclose different kinds of polluted air. The first iteration of the geodesic *Pods* was built in Norway

¹⁰ The Climart project (2014-2018) was led and housed at the Institute of Psychology at NTNU, Trondheim, Norway. As of 2017 they had analyzed thirty-seven installations. The team included Christian A. Klöckner, environmental psychologist and NTNU (project leader), David Buckland, Director, Cape Farewell, Sam Jury, artist, (co-coordinator), Laura Sommer, environmental psychologist NTNU, Paul Stern, environmental psychologist, National Research Council, Janet Swim, environmental psychologist, Penn State University, Martina Zienert & Joachim Börner environmental communicators, Kolleg fuer Management und Gestaltung nachhaltiger Entwicklung, Peter Huybers, climate scientist Harvard University, Edgar Hertwich, environmental scientist Yale University.

¹¹ See L.K. Sommer and C.A. Klockner, "Does Activist Art Have the Capacity to Raise Awareness in Audiences? A Study on Climate Change Art at the ArtCOP21 Event in Paris," *Psychology of Aesthetics, Creativity, and the Arts* (July 1, 2019). The study indicated that the highest psychological activation in visitors was generated by works that displayed "the awesome solution," defined as offering solutions and emphasizing the beauty and interconnectedness of nature.

¹² Michael Pinsky interview by the author, November 2019.

with the help of local craftspeople, using local spruce recovered from the roadside. The spruce rods were snapped into hubs to form the triangular frame, to which the plastic membrane is attached with metal hooks (fig. 7.5).¹³ Each pod contains the name of the city and a screen showing its air quality data, and short corridors separate each dome's unique environment.

Continuous movement through the individuated spaces is integral to the *Pollution Pods* experience so that atmospheric contrasts are felt acutely (fig. 7.6). Each dome connects to the next to form a ring, causing the visitor to move cyclically through each of the five pods until they arrive again at the first one. Unlike the prescribed direction of many museum exhibitions, in which the next gallery is revealed to the visitor only once they have moved through the previous one, *Pollution Pods* creates anticipatory space with its transparent walls, encouraging simultaneous awareness of the exhibition's other parts in a way that may be read as analogous to global consciousness (fig. 7.7). These plastic walled divisions between cities are only a temporary form of air pollution containment. We know that in the real world, the relatively clean air of Tautra, Norway (the first pod) will eventually merge with the dense particulate air of New Delhi, and with the global atmosphere. Pinsky's initial idea to transport the actual air from each city was discouraged due to health and safety issues, so with the help of chemists and odor specialists, he devised chemical mixtures that emulated the presence of ozone, particulate matter, nitrogen dioxide, sulphur dioxide, and carbon monoxide.¹⁴ The experiences were created by heating/cooling the domes with air conditioning systems to reach the target temperature (London & Beijing were cooled, New Delhi and Sao Paulo were heated). Humidity was added with air humidifiers (London, New Delhi) and fog machines created the illusion of airborne particles in the New Delhi dome. Smells designed by a perfume maker were atomized through professional automatic perfume dispensers.¹⁵ Air in the Tautra dome was purified through air cleaning technology and traces of ozone were added to the Sao Paulo dome.¹⁶ Some of the odors occurred naturally while others were manufactured.¹⁷

¹³ Pinsky, email to author, April 1, 2021.

¹⁴ Scents for the Norway iteration were created by Jorg Hempenius and the Norwegian Institute for Air Research. Later iterations collaborated with International Flavors and Fragrances for scent, filters from Airlabs, and air quality index equipment from Plume Labs.

¹⁵ The key smells for London were diesel fumes, New Delhi--burned grass / plants and plastic, Beijing--burnt coal, Sao Paulo--burned ethanol.

¹⁶ Air cleaning technology was provided by Airlabs.

¹⁷ Climart project leader Christian Klöckner explains, "We don't want the air in the domes to expose the public to danger, so we'll remove the most dangerous substances and

Ironically, anthropogenic means were used to create artificial smells of human-induced pollution in an exhibition which critiques such outcomes.¹⁸

One palpable way to get the public to engage with insalubrious environments is to physically immerse them. In *Pollution Pods*, five disparate microclimates are enclosed individually to change perceptions of what nature (air, atmosphere) is, its trans-corporeality (ability to pass through our bodies),¹⁹ and what our bodies are willing to tolerate. As architecture scholar Daniel Barber suggests, “The making of environments is integral to the production of architectural space. From its construction of microclimates to its contribution to planetary ecologies, architecture not only shapes specific habitats, but also our relation to what is commonly perceived as nature.”²⁰

The shaping of specific habitats by importing or producing specific atmospheres has a variety of precedents in Western culture. The iron and glass Palm House at the Royal Botanic Gardens at Kew (1844-48) (figs. 7.8-7.9) was a successful architectural and engineering endeavor which aimed to preserve, display, and make available for study tropical trees and flora from around the British Empire. Inspired by Sir Joseph Paxton’s Conservatory at Chatsworth (1837), Palm House was the first building to use the newly patented rolled wrought iron

replace them with harmless ingredients and fragrances that resemble the real city air. The Norwegian Institute for Air Research (NILU) is contributing its expertise to create the right air mixtures for each dome, so that the smell and feel of breathing in the air is realistic,” he adds.” Klöckner email to author, April 6, 2021.

Vibeke Ann Pettersen, “Stinky City Air as Climate Art,” *Norwegian SciTech News*, June 2, 2017, <https://norwegianscitechnews.com/2017/06/stinky-city-air-climate-art/>.

¹⁸ This irony, along with the use of toxic art supplies, non-eco-friendly packaging materials, fossil fuel modes of transportation, and mined/industrially processed products, in other words anything that contributes to CO2 emissions, are ongoing ethical problems in ecoart. Most artists defend their practices by claiming their educational/humanitarian/philosophical benefits outweigh their carbon footprint. Many are beginning to reduce their carbon footprint by refusing to fly, using recycled or discarded materials, and purchasing carbon offsets. Author has been in conversation with several artists about this issue, including Pinsky himself, Justin Brice, Jenny Kendler, and Diane Burko. A wakeup call on this issue was presented in an article by Lucy Siegle, “Ethical living: can art be environmentally friendly?” *The Guardian*, April 14, 2012, <https://www.theguardian.com/environment/2012/apr/15/lucy-siegle-ethical-art-paint>.

¹⁹ The notion of trans-corporeality, the porousness and permeability of human and nonhuman organic entities is discussed in Stacy Alaimo, *Bodily Natures: Science, Environment, and the Material Self* (Bloomington: Indiana UP, 2010).

²⁰ Daniel A. Barber, et al, “Architecture, Environments, History: Questions and Consequences,” *Architectural Theory Review* 22, no. 2 (2018), p.262, <https://doi.org/10.1080/13264826.2018.1482725>.

I-beams. Its intricate system of iron ribs supports the glass panes that provide the abundant light needed for the specimens. Palm House was a monument to industrial innovation and scientific progressivism, and a symbol of colonial power. On a purely sensorial level, it was a welcomed environmental antidote to the soot, filth, and noise of industrial London and survives today as a haven for endangered species.

Another iconic example of architecture that embodied technology, progressivism, and optimism was created some ninety years later by the visionary architect, Buckminster Fuller (1895-1983). In the late 1940s and early 1950s, Fuller executed, patented, and popularized the first geodesic domes in the United States, which served as a primary source of inspiration for Pinsky's *Pollution Pods* (fig. 7.10). Based on "synergetic geometry," his lifelong exploration of nature's design principles, the geodesic dome was the result of his revolutionary discoveries about balancing compression and tension forces in building.²¹ These durable, relatively lightweight energy-efficient shelters were originally crafted from aluminum and fiberglass panels, although later iterations used glass, plastics, and high-tech materials. The lack of interior walls or supporting columns allowed for unobstructed energy flow and Fuller's adage of "doing more with less" was expressed in the simple exterior shell of metal frames and clear skins. The domes have since been used in crisis scenarios, military projects, and as biospheres. Pinsky stated, "By directly quoting [Buckminster] Fuller's iconic structure as its primary visual statement and spatial metaphor, *Pollution Pods* would conjoin art and technology, while questioning division and containment as a prime technique of Modernity."²² Indeed, the design of space in *Pollution Pods* is key to its functionality, atmospheric enclosures, and rhetorical symbolism.

Fuller's prototype of a sustainable human habitat was the inspiration for many scientific and futuristic designs, including Biosphere 2 in the Arizona desert (fig. 7.11). Built in 1987, Biosphere 2 was an attempt to salvage civilization through a merging of technology and ecology.²³ Within architecture inspired by

²¹ For a concise definition of the terms *synergetics* and *synergetic geometry* see The Buckminster Fuller Institute website <https://www.bfi.org/about-fuller/big-ideas/synergetics>. For a clarification of the terms, mathematical examples, and their application to human survival, see Amy C. Edmondson, *A Fuller Explanation: The Synergetic Geometry of R. Buckminster Fuller* (Design Science Collection. Boston: Birkhäuser, 1987).

²² Pinsky and Sommer, *Pollution Pods*, 94.

²³ Carl Zimmer, "The Lost History of One of the World's Strangest Science Experiments," *New York Times*, March 29, 2019, <https://www.nytimes.com/2019/03/29/sunday-review/biosphere-2-climate-change.html>. Two years into Biosphere 2's construction NASA scientist James Hansen testified before Congress on the dangers of climate change.

Fuller, along with Mayan, Babylonian, and Islamic structures, scientists replicated miniature ecosystems that included a rainforest, a savannah, a desert, fresh and saltwater wetlands, and an ocean coral reef. Beneath the impressive exterior of stepped pyramids, barrel vaults, geodesic domes, and semicircular “apses” covered with faceted domes, Biosphere 2 was a sealed world where scientists conducted sustainability experiments on humans, plants, and animals. The results would then be used for applications in outer space as a refuge from our deteriorating earth.

Another utopian vision of an architectural space that could provide a healthy, eco-friendly lifestyle with minimal means was Ant Farm’s *Clean Air Pod* (1970) (fig. 7.12). Established in 1968 by Chip Lord, Doug Michels, and Curtis Schreier, Ant Farm was born out of the San Francisco counterculture movement. The group’s experimental art critiqued norms of consumerism, government policies, corporate influence, growing levels of air pollution, and the pervasiveness of mass media. One of their attempts to bring environmental awareness to the public was the staging of an “air emergency” on the UC Berkeley campus on the first Earth Day in 1970. Members of the group wore gas masks and lab coats as they directed passersby via loudspeaker into the *Clean Air Pod*, an inflatable “room” in the shape of a giant pillow. The transparent, pliant skin of the pod provided a dramatic contrast to the Brutalist architecture of the Berkeley campus. Once inside, visitors would be protected from unhealthy air and realize the viability of the pod as a potential habitat. In many ways, *Clean Air Pod* anticipated *Pollution Pods*, but Pinsky inverted the proposition by substituting dirty air instead of clean, creating a dystopia rather than a haven. This inversion of utopian precedents makes *Pollution Pods* a heterotopia, a discursive space that is both real and unreal, contradictory, mutable, and disturbing, a microcosm of incompatible parts.²⁴ Pinsky uses a design methodology and an architectural composition technique to create the alterity of a heterotopia by juxtaposing several microcosms of different environments from around the world.²⁵ The pods are both illusory and real, singular and symbolic of other places. Both transparent and framed, they call into question the notions of containment and visibility and the visitor’s connection to global disparities.

Pollution Pods is a form of eco-aesthetics that draws people in through appealing design, then immerses them in real time human-induced environmental

²⁴ For a philosophical theory of heterotopias, see Michel Foucault, “Of Other Spaces, Heterotopias,” Translated from *Architecture, Mouvement, Continuité* no. 5 (1984): 46-49. <https://foucault.info/documents/heterotopia/foucault.heteroTopia.en/>.

²⁵ S. Spanu, “Architecture and the Heterotopic Concept,” In *Heterotopia and Heritage Preservation*. The Urban Book Series (Springer International, Cham., 2020), https://doi.org/10.1007/978-3-030-18259-5_4.

problems. It creates sensory conditions that stimulate somatic markers and emotions, all of which play a definitive role in meaning-making. *Pods* changes perceptions about “nature out there” because as visitors breathe the polluted air, they become inseparable from nature. Further, the wooden rods and transparent plastic skin of the domes invite contemplation about the merits and drawbacks of natural and man-made materials. The visitor begins to think about fossil-fueled homes and cars, and the industries that produce the products they use daily. The strength of *Pollution Pods* lies in its distinct atmospheric contrasts from cell to cell, which causes a physical and cognitive reckoning of environmental and socioeconomic conditions that drive climate change.

The art installation functions as a great equalizer of diverse groups as they collectively move through compromised spaces. Their experience is controlled by the design of the spaces and those spaces are bound by the skin of the domes. Yet the cyclical pattern of movement within a ring formation symbolizes a world without boundaries. The divisions between pods are only illusory; in the real world, all polluted environments will eventually merge. This creative use of design and space forces new sensory and cognitive understandings of pollution's global implications. *Pollution Pods* fosters communal conversations in the pods themselves, then in social, digital, and print media.²⁶ Perhaps most importantly, high-ranking health, government, and industry leaders have visited the *Pods*.²⁷ Pinsky's hope is that they can effect policy change around air pollution, which will impact climate change.

Space becomes the design element and air becomes the signature component of the installation because it moves around the visitor's space, creating interactive energy and discourse. Air is the *actant*, a term used by philosophers Bruno Latour and Jane Bennett to define nonhuman entities that have agency towards other entities.²⁸ The actant in the pods stimulates our senses of smell, taste, and

²⁶ The installation generated thousands of Twitter posts from around the world, particularly in the United Kingdom, US, Norway, and India. Data on audience, sentiment, demographics, themes, and volume obtained Feb.2021 from Twitter by the author. *Pods* also reached thousands through videos posted on the internet, from sources as diverse as the BBC, the World Health Organization, Science Gallery Melbourne, Radio Bremen, Times of Oman, and UN Climate Change. Additionally, there have been hundreds of articles and reviews in print and digital magazines. See <http://www.michaelpinsky.com/reviews/>.

²⁷ These include social media moguls Mark Zuckerberg and Sergey Brin, environmental activist Greta Thunberg, World Health Organization Director of Public Health Dr. Maria Neira, and Minister for the Ecological Transition of Spain Teresa Ribera.

²⁸ Bruno Latour, *Reassembling the Social: An Introduction to Actor-Network-Theory* (Oxford: Oxford University Press, 2005):71. Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham, NC: Duke University Press, 2010), viii.

thermoception and produces a synesthetic environment. The actant also stimulates our somatic markers, or feelings in the body associated with emotions. In *Pollution Pods*, the combination of distinct encapsulated spaces with unexpected sensual perceptions creates a powerful dialogue with the body that fosters new understandings of our environmentally compromised planet.



Figure 7.1. *Pollution Pods*, first iteration, Tautra, Norway, 2017.
Timber, plastic membrane, plastic hubs. Thor Nielsen/NTNU.



Figure 7.2. *Pollution Pods*, Somerset House, London, Earth Day, 2018.



Figure 7.3. *Pollution Pods* by Michael Pinsky at Somerset House for Earth Day 2018.
©Peter Macdiarmid for Somerset House.

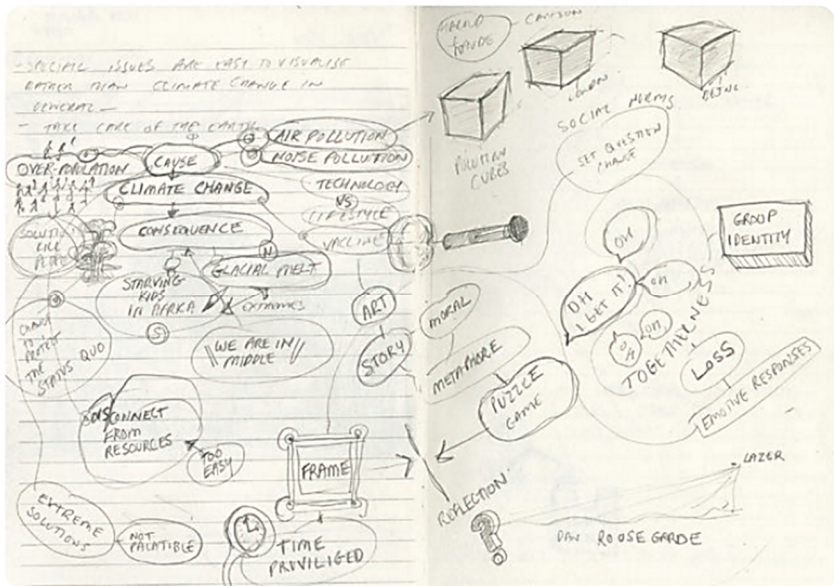


Figure 7.4. Michael Pinsky's sketchbook.



Figure 7.5. *Pollution Pods* by Michael Pinsky at Somerset House for Earth Day 2018.
©Peter Macdiarmid for Somerset House.



Figure 7.6. Interior, *Pollution Pods*, TED 2019 conference in Vancouver.
Photo Credit Marla Aufmuth.



Figure 7.7. *Pollution Pods*, TED conference, Vancouver convention center, April 2019.
Photo Credit: Michael Pinsky.



Figure 7.8. Decimus Burton and Richard Turner, Palm House, Royal Gardens at Kew,
1844-48.



Figure 7.9. Palm House, interior.



Figure 7.10. Buckminster Fuller, The Montreal Biosphere, formerly U.S. Pavilion at the 1967 World's Fair, Montreal, Canada.
Photo by Cédric Thévenet.



Figure 7.11. John P. Allen, Biosphere 2, Oracle, Arizona, 1986-1991.



Figure 7.12. Andy Shapiro and Kelly Gloger in front of Ant Farm's *Clean Air Pod*, Earth Day, 1970, Berkeley, CA. Courtesy Chip Lord and the Ant Farm Archive at the Berkeley Art Museum.
Photo by Ant Farm.

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