

The Pollution Pods contain carefully created environments, emulating different atmospheric conditions globally. Visitors begin in Tautra in Norway, enjoying the pure air and then continue through to the cities of London, New Delhi, Beijing and Sao Paulo which between them suffer from some of the lowest air quality in the world. Each dome replicates a nuanced polluted environment containing varying levels of ozone, particulate matter, nitrogen dioxide, sulphur dioxide and carbon monoxide. London with its invisible but high levels of nitrogen dioxide sits next to New Delhi where the air is filled with a suffocating haze of airborne particles.

Taking inspiration from Buckminster Fullers' geodesic domes, originally designed in the early 20th century to provide sustainable disaster-resistant global shelter using forms drawn from nature, the sculptural exterior starkly contrasts with the interpretation of the toxic everyday realities within. First commissioned for and shown in the middle of nature in Norway, this artwork explores air pollution as one of the many the environmental and human impacts of contemporary consumerism. Pinsky's work invites visitors to consider the complex and interconnected nature of our world, and aims to challenge perceptions of, and action around, climate change.

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The Partition of the World

Breathless under the leaden sky, I put on my charcoal respirator mask, and cycled through the London traffic to the Courtauld Institute, to see the Pollution Pods by Michael Pinsky. On arrival at Somerset House, I hurried away from the exhausted air of the Strand and entered the calmer atmosphere of the great courtyard, where the imposing neoclassical architecture delineated a zone of enclosure, a legacy of the pursuit of justified true belief.

Straight ahead of me were the Pollution Pods, whose transparent polymer skin revealed the work's iconic form and structure: a compound of five geodesic domes arranged in a circle, and connected by polygonal passageways. Informed by systems theory and autopoietic processes in nature, the crystalline geometry of the domes proposes a meta-design solution to the eternal problem of containment. Evoking a space race moon base, world trade fair, or biosphere expo, this human-scale technological pavilion provoked contradictory senses of memory and anticipation, and I felt a tinge of nostalgia for an imagined time when the future seemed large enough for hope to grow in. Pacing around outside, I saw the structure's physical articulation of "dynamic maximum tension" as a vision of reconciliation between divergent impulses. I thought of the astronauts who set out fifty years ago to expand the sphere of technology, but who returned from the dead moon with a humbling image of our living planet, hermetically sealed in the vacuum of space.

Trying to imagine the infinite raises hypothetical questions. We might welcome Lefebvre's point that the possible is part of the real,2 but how far is our sense of possibility limited by the social situation? A more concrete and historical question: if we had known then what we know now, would we have acted differently? Perhaps: today, it seems clear that since the early 1960's oil companies have known that their core business contributes directly to global heating, and that they not only kept this knowledge from the public, but systematically cast doubt on the work of climate scientists.3 However, the obstacles to knowledge include not only hidden evidence and disputed interpretation, but also ideological contradiction, such as pursuing unlimited economic growth on a finite planet. Another level of complexity is added by the psychology of denial,4 which might prevent me from fully knowing that I have not merely multiplied and amplified my physical powers by fossil fuels, but that therefore I owe my very existence to ecological debts incurred in the past and drawn against the future.

In 1968, a year before the first moon landing, Buckminster Fuller's book, Operating Manual for Spaceship Earth reconceptualized the Earth as a vessel, to propose that humanity must take responsibility for maintaining the atmosphere in a state to support life. Fuller's move paradoxically transformed the basis of environmentalism, while consolidating its abstract spatial configuration. The word "environment" is based on the French word, "environ" meaning surrounding, which implicitly positions humanity at, or as, the centre of existence, and nature as the periphery. Although Fuller's call for the human race to take control of the Earth system could imply an almost pre-Copernican, anthropocentric model of the cosmos, the radical implication of his model was to dissolve the binary separation of "nature" from society, and to redirect the linear trajectory of technological development into a network of interconnected loops that could operate in dynamic equilibrium within ecological limits. Fuller's vision of "Spaceship Earth" quickly resonated through contemporary popular culture, with a proliferation of images featuring geodesic domes enclosing and supporting spaces of atmospheric stability vital to human life.5 By directly quoting Fuller's iconic structure as its primary visual statement and spatial metaphor, Pollution Pods conjoins art and technology, while questioning division and containment as a prime technique of Modernity.







In this respect, the Pollution Pods relate to Rhinewater Purification Plant (1972), realized by Hans Haacke in the Haus Lange gallery in Krefeld, West Germany. The work pumped polluted water from the Rhine into the gallery, and through a sequence of sedimentation vessels and filters of sand and charcoal, with the purified water flowing through a tank of living fish before pouring onto the ground outside. By connecting the gallery to the ecosystem in this way, Haacke proposed an affinity between the process of decontamination and the institution of art as a space for critique. In a characteristically adversarial political move, Haacke's installation was accompanied by Krefeld Sewage Triptych (1972), a display of information naming the corporations polluting the Rhine, and detailing the quantities of toxic effluent they dumped into the river. Whereas TJ Demos has suggested that Haacke's Rhinewater Purification Plant "might be criticized for its

failure to involve the audience within its feedback loop" the Pollution Pods forecloses any such "critical distance". Entering the installation was like crossing between the categories of a Venn diagram; the air inside stank of volatile organic compounds, polycyclic aromatic hydrocarbons and particulate emissions from diesel engine exhausts and power station chimneys, and as a Londoner I had no option but to shift my imaginary subject position from being a spectator to a participant.

Still more disturbing was the feeling that as I entered the work, the work entered me. Immersed in each of the five atmospheres, my clothes and body absorbed the odour of pollution, until my habitual illusion of individuality became infused with an uneasy sense of permeability. Research shows that air pollution damages human health at every stage in life, reducing male fertility; passing through the placenta to harm the foetus; impairing fundamental cognitive development in children of and correlating with increased

experience of psychosis in adolescent people; while adults exposed to air pollution succumb to dementia earlier, and die younger. We know the body is both personal and political, but we also know that coping with urban living means ignoring harmful toxins. By putting the vital act of breathing under the heightened attention of art, the Pollution Pods makes the contradiction between embodied knowledge and wilful ignorance almost intolerable. In this, the Pollution Pods recalls the work of Gustav Metzger, the pioneer



of Autodestructive art, who in the Sharjah Biennial of 2007 realized his Project Stockholm, June (Phase 1), 1972/2007, in which exhaust from 120 cars was pumped into an enclosed space, evoking the genocidal atrocities of Nazism, and exposing a death drive within consumer capitalism.¹⁴ Tracing the imperialist and colonialist tendencies in the historical emergence of capitalism, Achille Mbembe identified a primary enclosure dividing the space of European civilization from the world outside, a land in "a state of nature, one in which neither faith nor law governed[...]".

This racialized "Partition of the

World"¹⁵ (to which this essay owes its title) designated most of the planet as a vast zone for the expansionist project of Modernity, with its dualistic categorizations supporting the logic of capital accumulation. Today, the separation of the private sphere from the public and commons enables private interests to continue

extracting value from the public and commons, while 'externalizing' costs and risks, such as by polluting the atmosphere. Yet such general ecological abuse intersects with particular social inequality, so that the spatial distribution of air pollution corresponds to the divisions of race and class. In his book, Sacrifice Zones, Steve Lerner has described how, in the USA, African American, Hispanic, Native American and Alaska Native, and working-class white people are most exposed to harmful pollution levels.¹⁶ As part of the inequitable distribution of risk and opportunity, people of colour produce less pollution than white people, and are more exposed to it.17 Moreover, although white people produce more air pollution, they breathe less of it.18 This is no coincidence: focusing on Black Lives Matter, David Pellow identifies air pollution and the climate crisis in the USA as statesanctioned environmental racism, and argues for emancipatory action beyond the state.19

Crucially, the "pollution" in the Pollution Pods is a laboratory simulation, an olfactory representation of toxins, made by a corporation that produces artificial flavourings and perfumes to make commodities taste or smell more appealing. Here, art appears to imitate life, offering a privileged art audience the thrill of danger safely contained. But the simulated pollution not only "references the real to which it is subordinate",20 it is implicated in the phenomena it represents: the environmental control equipment used, in every stage of its lifecycle from resource extraction, through manufacture, use, and disposal, generate pollution. Similarly, extending the boundary of the physical installation to include its bioplastics manufacture, its electricity consumption, and its transportation by land, sea and air reveals networks of ecological impacts from the

microscopic scale of particulate emissions to the macroscopic scale of climatic disruption. Though presented as hypothetical and elsewhere, the danger is real and present. Even so, to view toxic air pollution, and the ecological collapse it is part of, simply as problems of technology is to misrecognize our predicament.

In Steps to an Ecology of Mind, Gregory Bateson wrote, "[...] what can be studied is always a relationship or an infinite regress of relationships. Never a 'thing".21 Following Bateson, the relationships activated by an artwork include not only the artist and audience, but also the manufacturers of the materials and equipment, the technicians who install the work, the commissioner, research partners and host institutions, all operating within policy frameworks developed and implemented by national governments within the pressures and constraints of the global financial system.

While presenting its operations as the inevitable result of a neutral rationality, this technocraticinstrumental system seeks to encompass and penetrate every area of life on earth, from the atmosphere to the unconscious, while endlessly reproducing ideological constructions of interiority and exteriority, and colonizing the psychic spaces of the mind with its figurations of fear and desire. The brighter we shine the light of reason, the darker falls the shadow of superstition. In a double movement, Pollution Pods presents an emblem of utopian faith in technology, then fills the air inside with deathly vapours, haunting the secular fantasy of control with anxieties around the return of what has been repressed and excluded.

Being immersed in the work is to experience the separation of artistic experience from the everyday as illusory, and to recall that the artworld is a subset of the world. Inviting a critical engagement with its own conditions of being, the Pollution Pods open the way for a broader questioning of exclusionary categorizations. If air pollution is a symptom of ideological divisions that correspond to psychological barriers, what role might art have in uniting the technocratic project of decarbonization with the emancipatory goal of decolonization?

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Michael Pinsky

Michael Pinsky is a British artist whose work has been shown in galleries and public spaces internationally. Taking the combined roles of artist, urban planner, activist, researcher, and citizen he starts residencies and commissions without a specified agenda, working with local people and resources, allowing the physical, social and political environment to define his working methodology. Past work has been shown at TATE Britain; Museum of Contemporary Art, Chengdu; Saatchi Gallery; Victoria and Albert Museum; Institute for Contemporary Art, London; La Villette, Paris; BALTIC, Gateshead and the Liverpool Biennial.

Cape Farewell

Michael Pinsky's Pollution Pods are produced by the Cape Farewell charity. Cape Farewell has for twenty years worked to re-position climate change as a cultural challenge – the science is certain, the solution is within us all, our politicians and our economists. Cape Farewell was created by the artist David Buckland and has worked in depth with over 400 'creatives' and climate scientists to understand the challenge of our dangerously warming planet and to use creativity to craft stories that bring the complexity of climate change to the public as a human scale narrative.

Cape Farewell works locally and internationally with schools, the public and endeavours to hold our leaders to account.

www.capefarewell.com

Footnotes

- Buckminster Fuller compressed the words "dynamic maximum tension" to form the neologism "Dynamican".
- See Henri Lefebvre The Urban Revolution translated by Robert Bonono. London: University of Minnesota Press. (2003) p.45
- Neela Bannerjee, John Cushman, David Hasemyer, Lisa Song CO2's Role in Global Warming Has Been
 on the Oil Industry's Radar Since the 1960s https://insideclimatenews.org/news/13042016/climatechangeglobal-warming-oil-industry-radar-1960s-exxon-api-co2-fossil-fuels April 2016 [Accessed 2
 July 2019]
- 4. See Sally Weintrobe (Ed.) Engaging with Climate Change: Psychoanalytic and interdisciplinary Perspectives London: Routledge (2013)
- 5. See for example, the science fiction film Silent Running (1972), directed by Douglas Trumbull
- 6. TJ Demos 'The politics of Sustainability: Art and Ecology' in Radical Nature Art and Architecture for a Changing Planet 1969-2009 Barbican Art Gallery/Koenig Books, p.22
- See Fredric Jameson Postmodernism, Or, The Cultural Logic of Capitalism London: Verso (1992) pp. 48-49
- 8. K Balakrishnan et al. The impact of air pollution on deaths, disease burden, and life expectancy across the states of India: The Global Burden of Disease Study 2017 in The Lancet Planetary Health, vol.3, issue 1, Elsevier (2018)
- Rachel B Smith, Daniela Fecht, John Gulliver et al. Impact of London's road traffic air and noise pollution on birth weight: retrospective population based cohort study. British Medical Journal 2017; 359: j5299
- loar Rivas et al. Association between Early Life Exposure to Air Pollution and Working Memory and Attention Environmental Health Perspectives 127:5 CID: 057002 May 2019
- 11. Joanne B. Newbury; Louise Arsenault; Sean Beevers; et al. Association of Air Pollution Exposure with Psychotic Experiences During Adolescence JAMA Psychiatry. 2019; 76(6): pp. 614-623.
- lain Carey, Ross Anderson, Richard Atkinson et al. Are noise and air pollution related to the incidence of dementia? A cohort study in London, England. In: BMJ Open, Vol. 8, No. 9, e022404, 01.09.2018
- Jos Lelieveld et al. 'Cardiovascular disease burden from ambient air pollution in Europe reassessed using novel hazard ratio functions', European Heart Journal, Volume 40, Issue 20, 21 May 2019, Pages 1590–1596, https://doi.org/10.1093/eurheartj/ehz135
- 14. See http://sharjahart.org/sharjah-art-foundation/projects/project-stockholm-june-phase-1
- 15. Achille Mbembe Critique of Black Reason. Durham and London: Duke University Press (2017), p.54
- See, Steve Lerner Sacrifice Zones The Front Lines of Toxic Chemical Exposure in the United States. Cambridge, Massachusetts: MIT Press, 2010
- See Janine François, The Future Of Climate Activism Must Centre People Of Colour Huffington Post 3 May 2019 www.huffingtonpost.co.uk/entry/climate-change-people-of-colour_ uk_5cc96b37e4b0076cfb2a8a0a
- Christopher W. Tessum, et al. 'Inequity in consumption of goods and services adds to racial-ethnic disparities in air pollution exposure' Proceedings of the National Academy of Sciences, 26 March 2019, vol. 116 pp. 13
- 19. See, David Pellow Toward a Critical Environmental Justice Studies: Black Lives Matter as an Environmental Justice Challenge, Du Bois Review— Social Science
- 20. Stephen Wright Towards a Lexicon of Usership. Eindhoven: Van Abbemuseum, (2013) p.4
- 21. Gregory Bateson, 'Minimal Requirements for a Theory of Schizophrenia' in, Steps to an Ecology of Mind Chicago: University of Chicago Press (1972), p.246

During the Corona virus outbreak, research into air pollution has revealed that people living in areas with poor air quality have less chance of surviving the Covid-19 infection, and that the virus itself can spread more easily in areas with higher levels of particulate matter.

The causes and consequences of climate change and global health are intrinsically conjoined and as such, many of the solutions we implement will improve both the heath of the planet and human kind.

As terrible as it is, the current pandemic demonstrates that governments and wider society in general, can radically alter policies and lifestyles. One can only hope this is a precursor to a global commitment to address climate change.