1929 and 1930. The proposal's seventh panel, dedicated to the landscape features of the imaginary city, was named *ville verte*—"green city"—deploying a term previously used by the architect for his 1930 plan for Moscow, which was inspired by the work of the OSA architects.[20] Yet the use of the very same term—"green city"—by Le Corbusier, Ginzburg, and other architects of OSA only exposed two further differing understandings of the very idea of the city and its relationship to the park-as-forest. Openly criticizing the Soviet disurbanist experience, Le Corbusier's proposal was based on the idea that the surface of the modern city was an uninterrupted park dedicated to leisure and strolling activities of the inhabitants, while cars circulated on a higher level on viaducts hidden behind the large trees' foliage. To make this possible and allow for this "seeming luxury,"[21] the city's density was increased by four: the park-as-forest was the answer to the problems of density and concentration at the same time as it was at the service of the logics of exploitation of the modern metropolis, to which it offered a palliative solution. For Le Corbusier, as openly stated in a letter to Ginzburg, a dense city was the only desirable scenario since "dispersion frightens, makes poorer, and loosens all the ties of physical and spiritual discipline."[22]

Ginzburg's Green City took an opposite stance. It did not aim at solving the city's problems; instead, it aimed at destroying the city and starting anew, toward "a new form of human settlement that will be free of internal contradictions and might be called socialist."[23] In Ginzburg's Green City, the park-as-forest was not an area for leisure, it did not have a proper function nor did it need to be preserved; it represented the totality of the urban space within which all living and working functions are socialized. Rather than envisioning the park as a natural "reservoir" that embellished the dense industrial metropolis, for Ginzburg and the disurbanists, the park was to become a laboratory in which to gradually test new forms of life and social relationships that would never pit collective sharing and individual life against each other. In the Green City scenario, the small one-person timber cabin immersed in the wild greenery of the forest was not the manifestation of solitude, but the starting point of a relaxed communitarian life. While the park-as-forest was here finally liberated of its link to the capitalistic logics of the modern metropolis and freed from any exploitation purpose, it also became the place where each inhabitant was offered his or her own basic, individual living space—a room of one's own—through which everyone was to be granted the possibility to choose the form of living he or she wished to pursue. The park-as-forest was no longer the mechanism of enclosure that privatized land and restricted its use, but a truly common land freed from the exploitative logic of public and private property.

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[1] Green City's original incarnation was Mosej Ginzburg and Mikhail Barshch's schematic proposal for the Green City competition in 1930; the second incarnation was a scheme submitted in the same year to a competition by a group of architects close to Ginzburg—Barshch, Vladimir Vladimirov, Mikhail Okhitovich, and Nikolai Sokolov—for the new industrial city in Magnitogorsk; and the third expression was a theoretical proposal published in the journal *SA* later that year. Ginzburg was not the sole author of these projects; they were made by a group of architects that, like Ginzburg himself, were members of the Association of Contemporary Architects (OSA), the largest and most influential Russian architectural organization of the 1920s. We have attributed Green City (as a design strategy, not as a specific project) to him because of his leading role in the development of the idea. See: S. O. Khan Magomedov, *Moisei Ginzburg*, trans. Claudio Masetti (Franco Angeli: Milan, 1972). See also Mosej Ginzburg, *Dwelling: Five Years' Work on the Problem of the Habitation*, trans. John Nicolson (London: Fontanka Publications, 2017).

[2] The term "disurbanism" was popularized by Anatole Kopp in his seminal book, *Town and Revolution*, in which he refers to proposals such as Green City as "deurbanist" and identified everyone in OSA as proponents of this tendency. However, members of OSA never used the term and the radical anti-city stance of Green City was the result of a long process of elaboration that moved from more centralized urban structures to more dispersed settlements. See Anatole Kopp, *Town and Revolution: Soviet Architecture and City Planning 1917–1935*, trans. Thomas E. Burton (New York: George Braziller, 1970), 163–86. For a more accurate historical reconstruction of the OSA's position within the early years of Soviet Russia see Vieri Quilici, *Il Costruttivismo* (Bari: Laterza, 1991).

[3] Marc-Antoine Laugier, *Observations sur l'Architecture* (The Hague, 1765), 312–13.

[4] Manfredo Tafuri, *Architecture and Utopia: Design and Capitalist Development*, trans. Barbara Luigia La Penta (Cambridge, MA: MIT Press, 1994), 1–40.

[5] Carl Darling Buck, *A Dictionary of Selected Synonyms in the Principal Indo-European Languages* (Chicago: University of Chicago Press, 1949).

[6] "Park," Online Etymology Dictionary, https://www.etymonline.com/word/park.

[7] For an analysis of Central Park as a project of dispossession see Alvaro Sevilla-Buitrago, "Central Park against the Streets: The Enclosure of Public Space Cultures in Mid-Nineteenth Century New York," *Social & Cultural Geography* 15, no. 2 (2014): 151–71.

[8] See Dennis Domer, *Alfred Caldwell: The Life and Work of a Prairie School Landscape Architect* (Baltimore, MD: Johns Hopkins University Press, 1997), 30–32.

[9] Hugh D. Hudson Jr., "Terror in Soviet Architecture, the Murder of Mikhail Okhitovich," *Slavic Review* 51, no. 3 (Autumn 1992): 454.

[10] Ibid., 448–67.

[11] Arrested in 1935 after a famous speech in which he defended his ideas and attacked the Stalinist "cult of hierarchy," Okhitovich was sent to a gulag where he was executed in 1937.

[12] Ginzburg, *Dwelling*, 152.

[13] Ibid., 154.

[14] Ibid., 152.

[15] Ibid., 148.

[16] See Hugh D. Hudson, "'The Social Condenser of Our Epoch': The Association of Contemporary Architects and the Creation of a New Way of Life in Revolutionary Russia," *Jahrbücher Für Geschichte Osteuropas* 34, no. 4 (1986): 571.

[17] Ibid., 572.

[18] Published in the English-language compilation Leon Trotsky, *Problems of Everyday Life and Other Writings on Culture and Science* (New York: Monad Press, 1973).

[19] Le Corbusier, *The Radiant City: Elements of a Doctrine of Urbanism to Be Used as the Basis of Our Machine-Age Civilization*, trans. Pamela Knight et al. (New York: Orion Press, 1964); originally published as *La ville radieuse* (Boulogne: Editions de l'Architecture d'Aujourd'hui, 1933).

[20] In March 1930, Le Corbusier came to Moscow for the third time as he was finishing the drawings for the Centrosoyuz building (1933). While there, he was invited to weigh in on the Green City competition entries. These "Commentaries Relative to Moscow and the Green City" started a dispute with Ginzburg. On the exchange between Le Corbusier and Russian architects and especially with members of the OSA group see Jean-Louis Cohen, *Le Corbusier and the Mystique of the USSR: Theories and Projects for Moscow*, 1928–1936 (Princeton, NJ: Princeton University Press, 1992), 126–63.

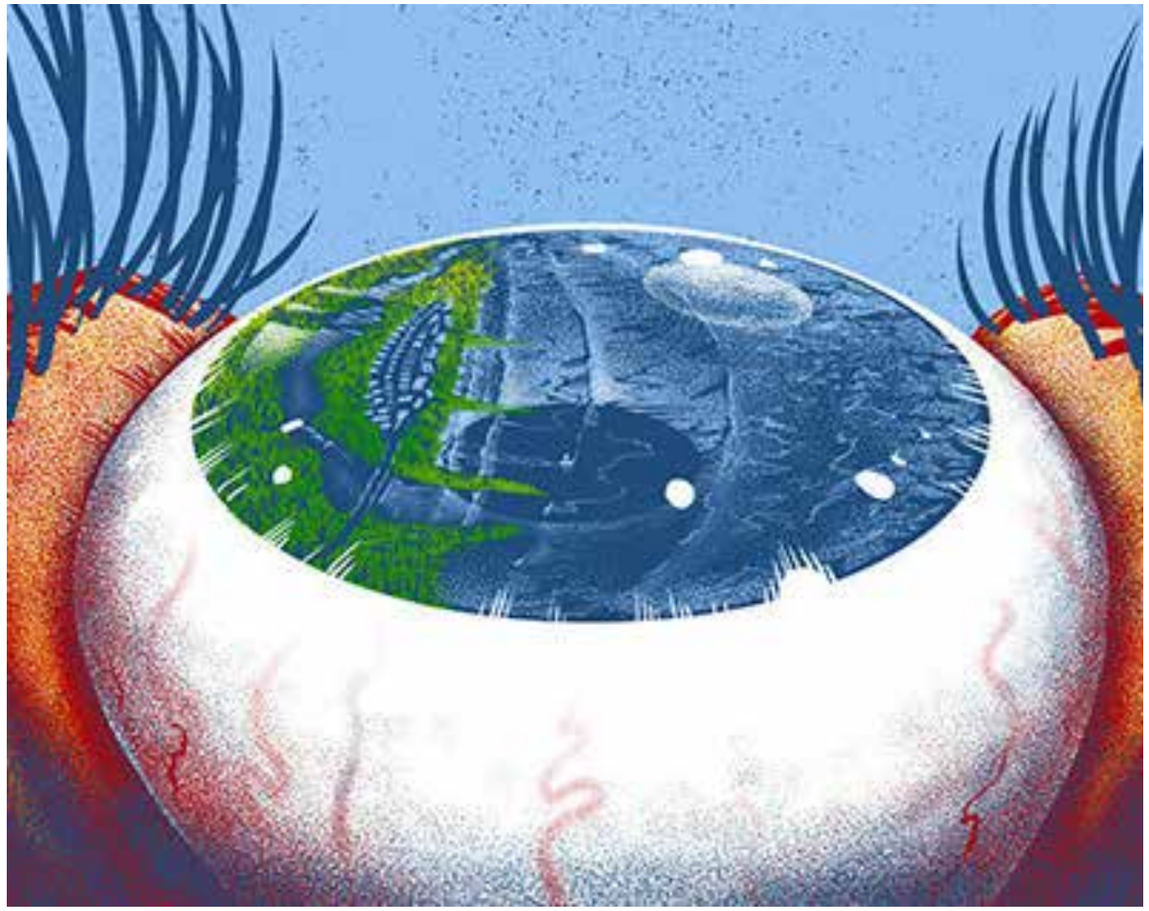
[21] Letter from Le Corbusier to Mosej Ginzburg, March 17, 1930, "Mikhail Okhitovich, Moisei Ginzburg, and Disurbanism," The Charnel-House, April 7, 2011, https://thecharnelhouse.org/2011/04/07/mikhail-okhitovich-moisei-ginzburg-and-disurbanism/.

[22] Ibid.

[23] Letter from Moisej Ginzburg to Le Corbusier, published in English in appendix to Kopp, *Town and Revolution*.

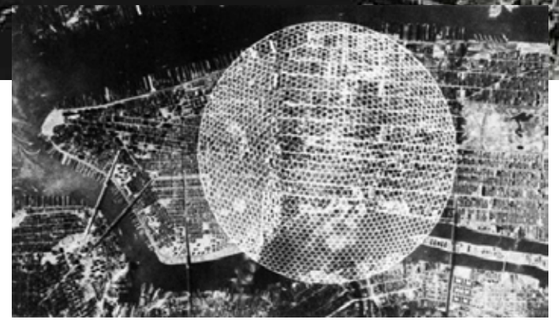
Dome Life

Emily Waugh



They have been modifying the planet since they arrived. At first, their trace was nearly imperceptible, but as their population expanded, so did their imprint. Slowly, over thousands of years, they have reformed Earth to meet their demands. They have cleared its forests, dug up its resources, drained its lakes and rivers, paved its surfaces, and loaded its atmosphere with destructive gases. They have permanently altered the course of the Earth's system, marking the dawn of a new epoch.[1] How will they protect themselves along this path toward total extinction?

They have been living comfortably for many years now. Life is an ongoing celebration of mobility, technology, and convenience. They have automobiles to take them wherever they desire, and perfect lawns to match their perfect families. They have all the consumer goods they can imagine and the money to buy them with. They will put a man on the moon within the next decade, but on their home planet they are slowly being poisoned by their own progress. Industrial chemicals in their food are striking them with disease, water shortages prevent them from washing their prized automobiles, and in cities people can no longer safely breathe the air. A warning is issued. "'Silent Spring' Is Now Noisy Summer."[2]



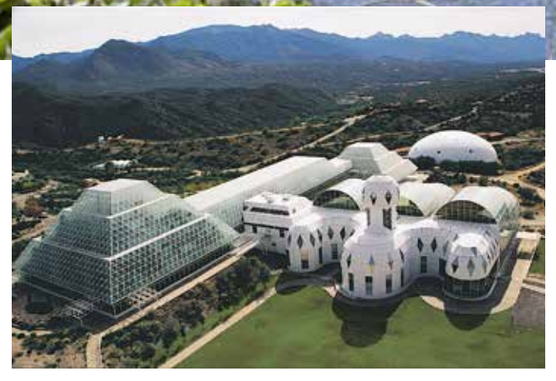
R. Buckminster Fuller and Shoji Sadao
Dome Over Manhattan
New York, New York, 1960
A two-mile dome over New York City encloses a section of the city to regulate climactic conditions, reduce heat loss, and harvest rainwater, allowing people to wash their cars and water their lawns even during water shortages.

Winooski Planning Commission
Dome Proposal
Winooski, Vermont, 1979
In the midst of the late 1970s' energy crisis, the former industrial mill town of Winooski, Vermont, was struggling to pay its heating bills. The town secured US Department of Housing and Urban Development funding for a proposed 1-mile-wide, 250-foot-high dome to help manage energy consumption and costs.

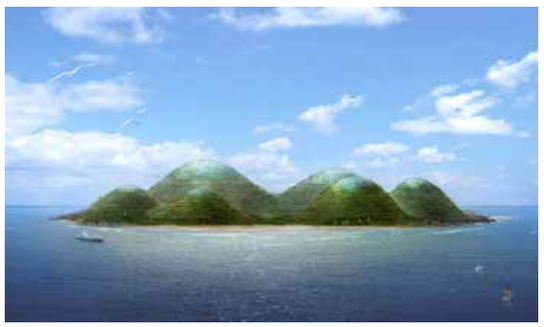
The threats are more legible now. For the first time, they see that there are limits to Earth's resources, as petroleum shortages push the industrialized world to crisis. They begin to understand that their actions contribute directly to the health of the planet. Their air conditioners and aerosol hairsprays have blasted a hole in the ozone layer, their nuclear-power reactors spew deadly plumes of radioactive material, and farmers continue to slash and burn forests to meet the demands of the now five billion inhabitants.[3]

They still believe they can save the planet by modifying their behavior (reduce, reuse, recycle!), but they continue to experiment with self-sustaining ecosystems with a view to colonizing outer space.

Paolo Soleri
Space Arcology "BULB" (Space for Peace), 1987
The Space for Peace projects illustrate Paolo Soleri's arcology (architecture + ecology) philosophy and propose self-contained cities that provide the ecological and cultural resources to support human life in space.

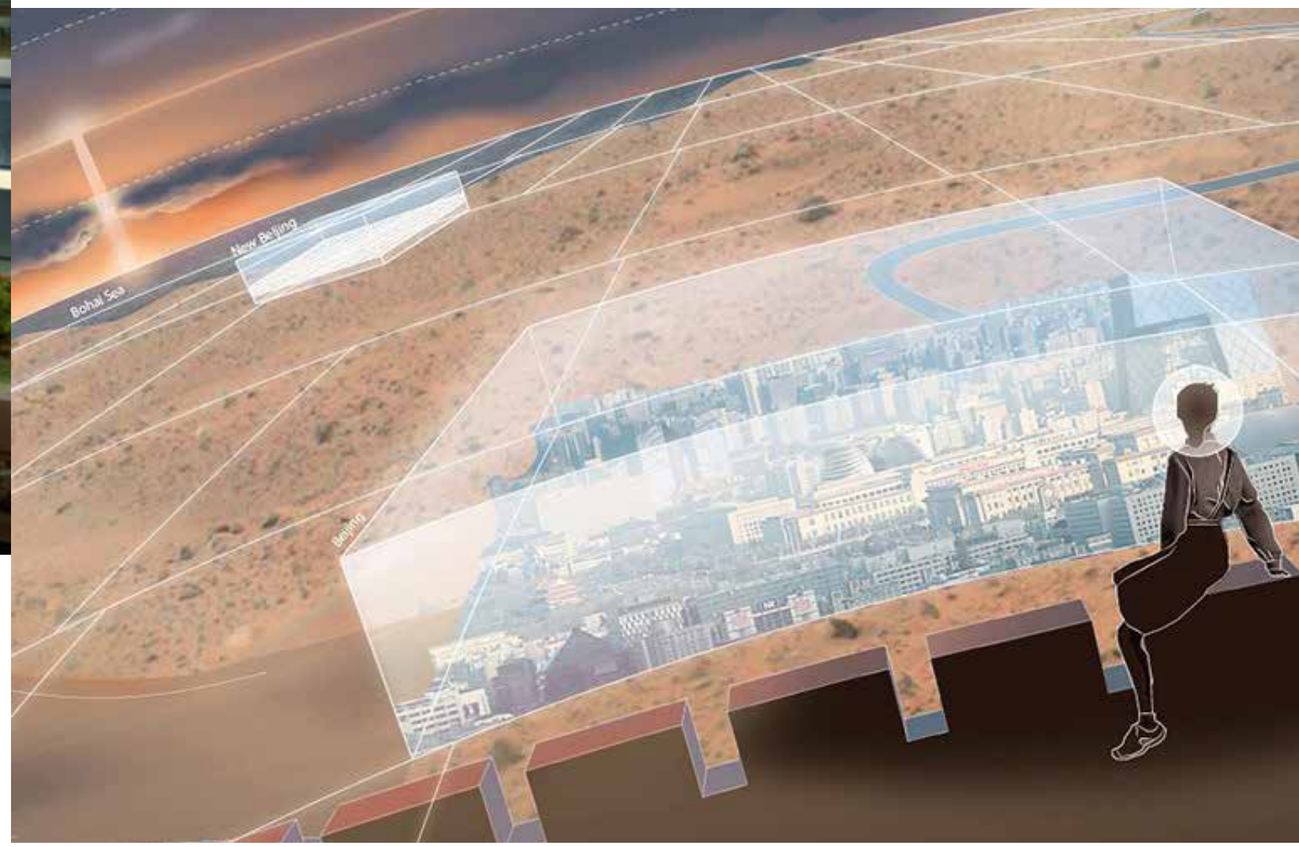


Space Biosphere Ventures
Biosphere 2
Oracle, Arizona, 1991
Biosphere 2 is designed to be the second fully self-sufficient biosphere after Earth. It is intended to demonstrate the viability of closed ecological systems to support human life over extended periods in space. It includes seven biomes, an agriculture system, living quarters, laboratories, and workshops.



Studio Dror
HavvAda Island
Istanbul, Turkey, 2012
HavvAda is a man-made, self-contained island less than two miles off of Istanbul. Six green-covered mountains are supported by large internal geodesic domes ranging from 230 to 400 meters in height. Each hill-like module is self-sufficient and completely autonomous in energy production and recycling, creating a net-positive ecosystem.

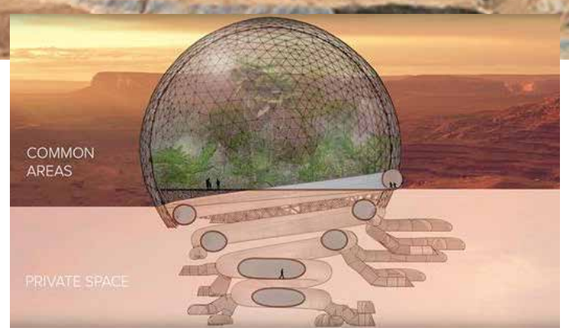
By now they have come to understand that they have made an error. It is hot and getting hotter. The cities are in peril: the rising seas threaten to swallow their inhabitants whole. The winds and wildfires that tear across the land almost daily now have already undone so much of the "progress" they have made. Droughts, floods, earthquakes, and other disasters force a newly designated class of climate refugees to abandon their homes at a rate of one person per second. One major city has declared the arrival of the "airpocalypse"; it is engulfed by poisonous fog.[4] Another has identified "Day Zero," the date that its reservoir supply is so depleted that running water will be cut off to its residents' homes.[5] Food supplies are next. They have isolated and protected a global seedbank against inevitable disaster. It is time to do the same for themselves.



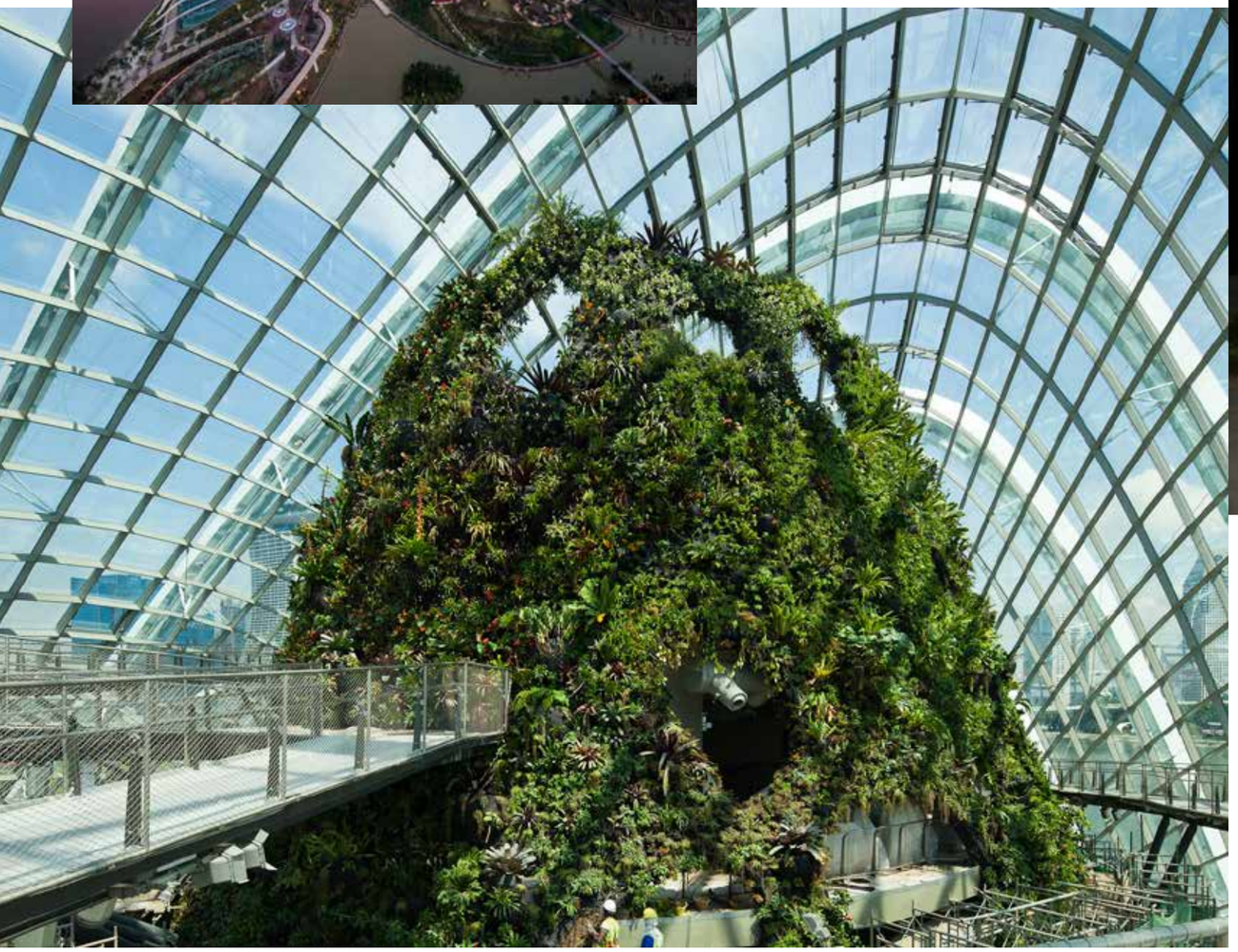
Design Earth
The Atmosphere is Dead, Long Live the Atmosphere
Beijing City Vision Competition, 2014
In the aftermath of the "airpocalypse" in Beijing, a fictional "Earth Ordinance Act" mandated a 100-by-100-meter world grid, designed to capture the energy of the sun, which is then distributed to 10 mega flyhead capsules—climate-controlled greenhouse environments to sustain the populations of the world's cities.

Bjarke Ingels Group
Mars Science City
Dubai, United Arab Emirates, 2017
This space simulation campus covers 17.5 hectares of desert outside Dubai with four geodesic domes. Scientists will work in laboratories dedicated to investigating self-sufficiency in energy, food, and water for life on Mars.

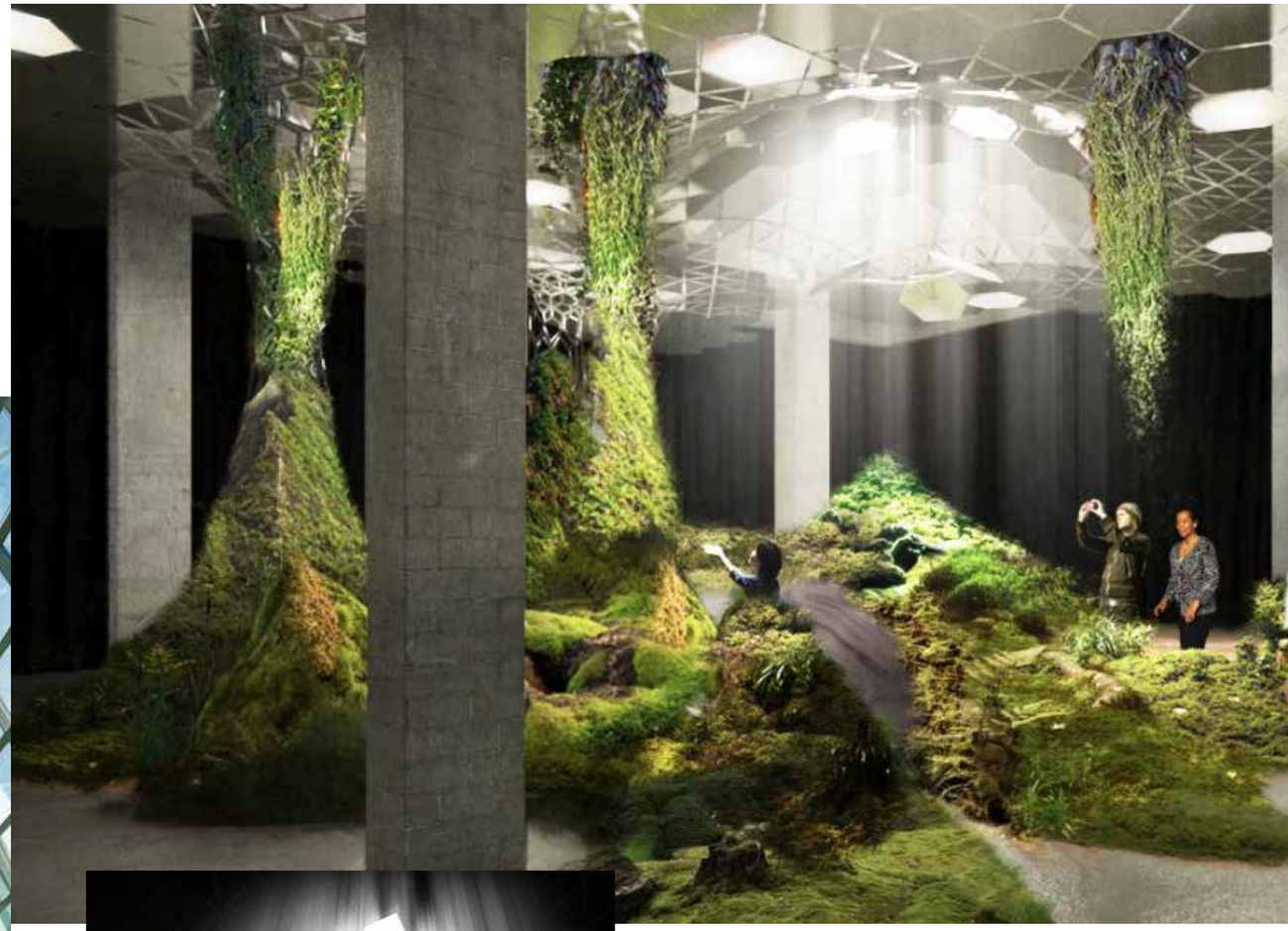
Total destruction is certain. They understand that they must become multiplanetary to ensure their survival as a species, if only for a select few. Those with the means to do so continue to invest in engineered inhabitable environments to establish off-world colonies, while average citizens can find security in "tree museums"—large enclosed forests and gardens where they can temporarily immerse themselves in healthy "natural" environments.



Valentina Sumini and MIT
Redwood Forest Team, 2017
Redwood Forest proposes domed tree habitats that can each house up to 50 people. The domes provide open, public spaces containing plants and water, and are linked to other habitats via an underground root system.



Grant Associates and WilkinsonEyre
Gardens by the Bay, Singapore, 2012
This 101-hectare park features two climate-controlled, carbon-neutral greenhouses: the Flower Dome and the Cloud.

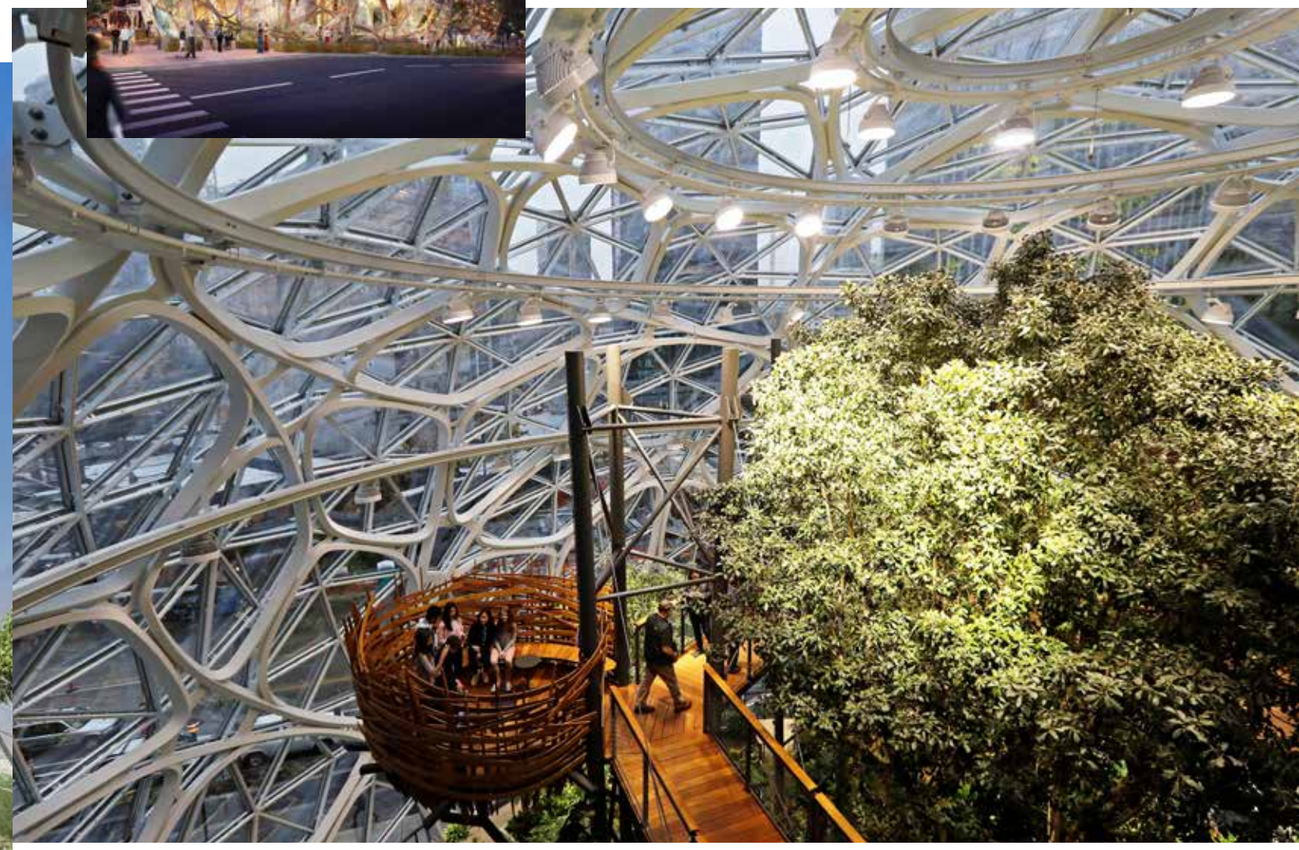


RAAD Studio
The Lowline, New York, New York, 2012–2020
To create more green space in dense New York, the Lowline aims to be the world's first underground park. It uses "remote skylights" to light the one acre former Williamsburg Bridge Trolley Terminal. A reflective parabolic dish collects sunlight, sends it to the subterranean space through a fiber-optic cable channel and distributes it with a reflective dome.

The scientists believe there is still time to shift the course of Earth's catastrophic trajectory and to define a new future for the planet. They must act together and they must act soon. Will they continue to isolate and protect small segments of the planet for their personal protection, or will they answer the invitation to "work together as a human race to make a sustainable future on planet Earth"?[6]

Safdie Architects, PWP Landscape Architecture
Jewel Changi Airport, Singapore, 2014
The world's tallest indoor waterfall and eight-acre garden are the central features of the airport's "jeweled" biodome.

NBBJ
Amazon Headquarters, Seattle, 2017
The corporate campus includes three office towers and three biodomes, and it will house 450 species of plants.



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[1] The term "Anthropocene" was not popularized until 2000 by atmospheric chemist and Nobel laureate Paul Crutzen, but many argue that the new epoch began after the detonation of the first nuclear bomb in 1945. From this point on, human impact on the Earth has been so pervasive and fundamental that it represents a new geologic epoch.
[2] With the 1962 publication of *Silent Spring*, author Rachel Carson exposed the environmental impacts of widespread industrial pesticide use. Her book is credited with igniting the environmental movement and represents the first real public awareness of the human impact on the Earth. John M. Lee, "'Silent Spring' Is Now Noisy Summer," *New York Times*, July 22, 1962, 87.
[3] It took thousands of years for the world's population to reach one billion people in 1805, but only another 123 years to double to two billion in 1927. With declining death rates and stable birth rates, the population reached three billion just 22 years later in 1957. In 1974 there were one billion more, and in 1987, the global population reached the five billion mark. Today, there are an estimated 7.6 billion inhabitants on Earth and it is projected to near 10 billion people by 2050.
[4] In 2016, air pollution levels across China reached a level six times higher than the World Health Organization Guidelines prompting a "red alert warning." An estimated 460,000 people across 24 cities were told not to leave their homes as a thick, poisonous fog engulfed the north of the country. Harriet Agerholm, "Chinese 'Airpocalypse' Affects Half-a-Billion People as Smog Crisis Worsens," *Independent*, December 20, 2016, http://www.independent.co.uk/news/world/asia/china-airpocalypse-smog-air-pollution-levels-red-alert-beijing-a7487261.html.
[5] Cape Town, South Africa, has predicted April 21, 2018, as "Day Zero," the day that their drought-stricken reservoir supply may reach critical lows, forcing the city to cut off running water to all homes in the city. After this date, residents may line up at neighborhood taps for a ration of 25 liters of water per day. It will be the first major city in the world to do so. Geoffrey York, "Cape Town at Risk of Becoming First Major City in the World to Run Out of Water," *Globe and Mail*, January 18, 2018, https://www.theglobeandmail.com/news/world/day-zero-approaching-as-cape-town-runs-out-of-water/article37654137/.
[6] In 2017, over 15,000 scientists from 184 countries cosigned the "World Scientists' Warning to Humanity: A Second Notice." It is an update to their 1992 "World Scientists' Warning to Humanity," which warned that human impacts on the environment were putting the future of Earth at risk. In the updated version, the authors state: "Humanity has failed to make sufficient progress in generally solving these foreseen environmental challenges, and alarmingly, most of them are getting far worse" urging everyone to work together and to act soon. William J. Ripple et al., "World Scientists' Warning to Humanity: A Second Notice," *Bioscience* 67, no. 12 (December 2017), https://academic.oup.com/bioscience/article/67/12/1026/4605229.