FUTURE STOCK

Half-empty or half-full?
**Architecture imagines tomorrow.**

by Hubert Murray FAIA

In Edward Bellamy's utopian novel, *Looking Backward: 2000–1887*, the hero falls asleep in Boston in 1887 and wakes up 113 years later to a socialist society where transactions are made through cooperatives with something resembling a credit card, and sermons and music are available through home-installed cable "telephone." Apart from the fact that the concept of debt (and its converse, credit) has been around for 5,000 years, cable arrived back in 1983, and Costco is probably the closest Boston is going to get to socialism in the foreseeable future.

Less optimistically, writing this year in the journal *Daedalus*, climate scientists Naomi Oreskes and Erik Conway imagine "The Collapse of Western Civilization: A View from the Future." It's a look back from the vantage point of the "Second Chinese Republic" in the year 2373, the tercentenary of environmental collapse. Chronicling the failure of Western free market democracies to come to grips with environmental issues, even after 2021 ("the year of perpetual summer"),

they record that only centralized, autocratic societies were able to survive.

Philosophers, novelists, and scientists are either optimistic or pessimistic, writing about the future as utopia or dystopia, as an ideal society or as technically predictive, or both. But for architects, the future is an act of creation, the building of new forms both emblematic and instrumental in the wish fulfillment of a new society. In this sense, the work of architects is irrepressibly optimistic.

The mood of futurism has much to do with the mood of the time. In the 19th century, at the peak of the Industrial Revolution in Europe, Jules Verne's fantasies, *20,000 Leagues Under the Sea* and *Journey to the Moon*, were full of sunny technical predictions. His long-term submarine voyages, space travel by rocket, light-propelled spacecraft, lunar landing modules, and space capsule splashdowns were a century before their time. His "phonotelephote" envisioned for 2889, a thousand years into the future, is what we have
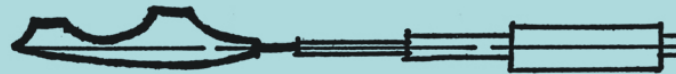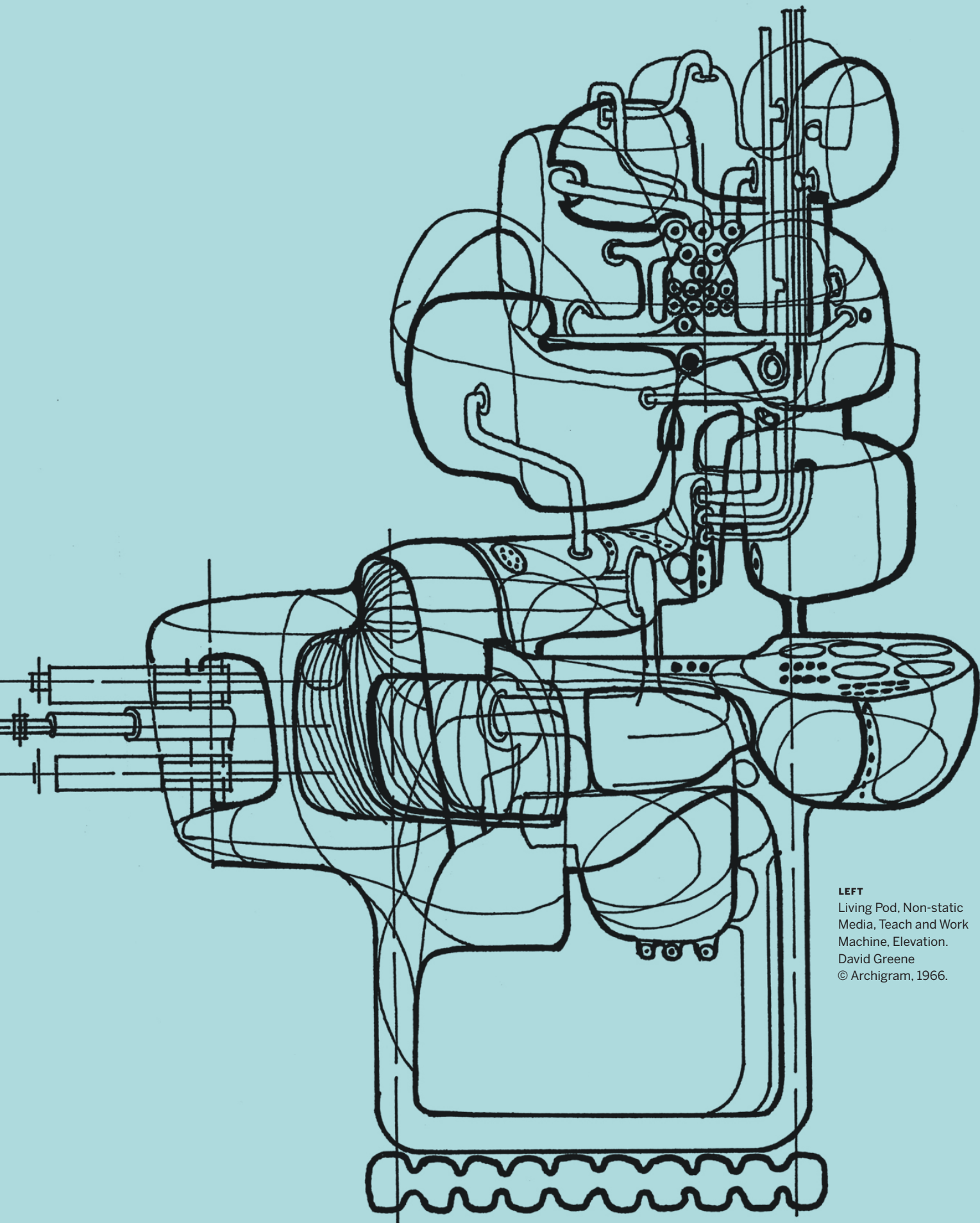
learned to call videoconferencing.

As the industrial ascendancy passed from Europe to the United States, a breath of technical optimism was reflected in popular culture through the space adventures of Buck Rogers. From the vantage of eight decades later, the buildings and equipment appear clunky and unconvincing. The ethical core of the action, however, is only too familiar to a modern reader, driven by a titanic struggle between Caucasian Americans and turbaned foreigners of mutable identity, initially the Han, later Mongols.

Aldous Huxley and George Orwell, writing in the mid-20th century, reflected political angst pre- and post-World War II, offering the alternate dystopias of hedonistic nihilism and authoritarian socialism. Huxley published *Brave New World* in 1932 about a World State flourishing in 2540. The population is bred according to eugenic principles, sex is recreational, collective pleasure is the main principle for living, and the truth gets buried under trivia. Orwell's *1984*, published in 1949, projected a future of the absolutist state, evoking surveillance by "Big Brother" and brainwashing by "thought control," a vision closely resembling Stalin's Soviet Union.

Steven Spielberg's film *Minority Report*, created in 2002 and forecasting the world of 2054, synthesizes Huxley's and Orwell's dystopian visions. The technologies of multitouch interfaces, retina scanners, anticipatory advertising, and robotic insects give material credibility to the more abstract and radical concept of "preemptive prosecution." All of these are a reality in 2013.

In the 1960s, fact took over from fiction as America succeeded in putting a man on the moon. The Arthur C. Clarke/Stanley Kubrick co-production of *2001: A Space Odyssey* leapfrogged over the present with breathtaking movie technology, a scientifically sound rendition of space travel, and prescient themes of the relationship of man and machine, the role of evolution, and an existential questioning of our human destiny.


Where does architecture come into this?

The high-tech era of modern architecture owes much of its provenance to the aesthetics of American technology, if not to the actual content. Buckminster Fuller, the quintessential visionary, was an evangelist for pre-fabricated monocoque construction in the 1930s, a prophet of lightweight, thin-skinned environmental enclosure. The Dymaxion House (1933) was the manifesto, and Spaceship Earth at Epcot (1982) the apotheosis of the optimistic future enshrined.

Archigram, a group of London architects influenced by Fuller—with enthusiasm for the US space program, North Sea oil rigs, and Carnaby Street—were the futurists of liberated individualism. David Greene's *Living Pod* (1966) and *Logplug* (1969) and Mike Webb's *Cushicle* (1967), inspired by lunar modules, were prefigurative forms of people working at their laptops, answering phones, and tweeting in the coffeehouse, up a mountain, or on the beach. Peter Cook's *Plug-In City* and Ron Herron's *Walking City* (both 1964) were precursors of the globalized, wired, 24-hour environment realized over the next two decades by Renzo Piano and Richard Rogers (jointly and separately) in the Centre Beaubourg in Paris (1972); the Lloyd's insurance building in London (1986); and the dynamic, hydraulically adjusted, mile-long Kansai International Airport (1994) in Japan.

Although the technical futurists of the long 20th century have been both optimistic and, for the most part, apolitical, there is also a tradition of social futurism framing a political vision predicated on physical form. The Italian Futurists and the Russian Constructivists at the beginning of the 20th century both employed radical architectural form to uphold and celebrate revolutionary content. Antonio Sant'Elia's *casa gradinate* for the *Città Nuova* of 1914 was part of the vision for "Milan in the year 2000," a militant break with historicism. Similarly, Constantin Melnikov's 1929 Rusakov Club in Moscow was a thrust into the future, the "social condenser" a symbol of the new collectivist society. Although architecture and infra-structure became a futuristic expression for both (lots of concrete and steel), they diverged in political direction, with the Italians leading toward techno-fascism and the Russians envisioning the supremacy of the state in Lenin's vision for a communist future through soviet power and electrification.

Architectural utopias have most often been
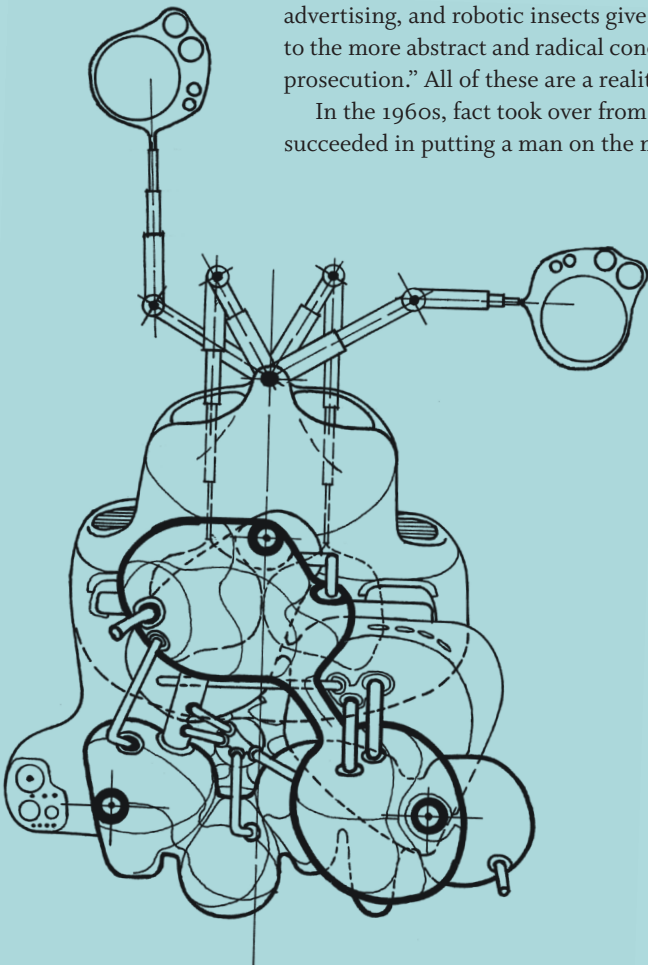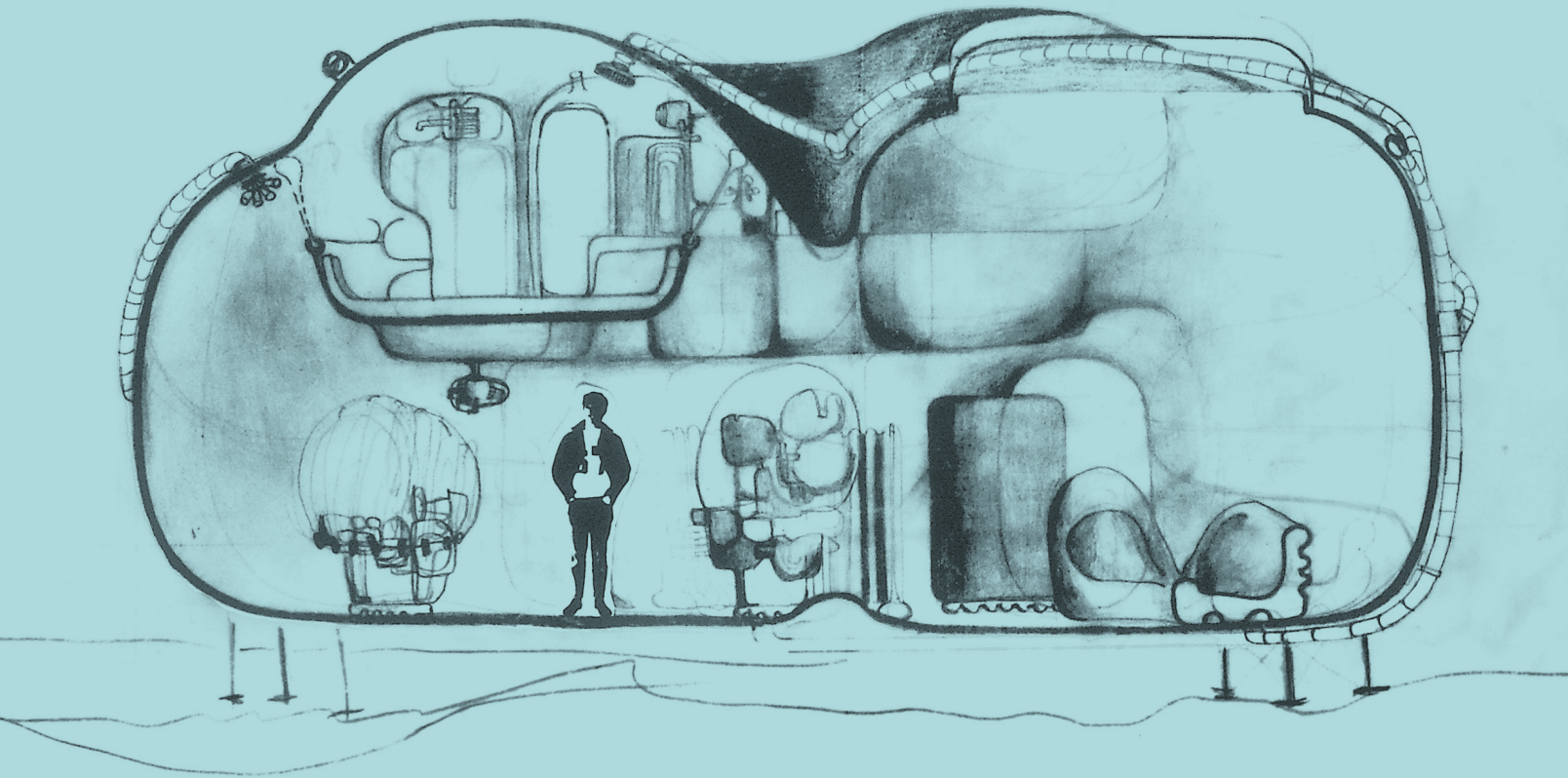
expressed in the form of housing. Charles Fourier's early-19th-century vision for a community of 1,620 people (a finely calculated number) living together was a program for establishing a harmonic relationship between town and country, the "unity of head and hand," and a vision for the liberation of women. The physical manifestation of this concept was the Phalanstery, a vast superblock that combined living, learning, working, and recreation, as well as social and economic exchange. The full realization of Fourier's dream is embodied in Le Corbusier's *Unité d'Habitation* in Marseilles, completed in 1952, almost 130 years after the original articulation of the concept for communal living on an urban scale.

In 1972, the global think tank Club of Rome published *Limits to Growth*, accurately depicting many of the stresses the world is confronting today in population growth, industrialization, resource depletion, environmental pollution, and food production. The only missing ingredient from this dire mix was a forecast of global warming and its consequences.

Faced with the bleak futurism of novelists and scientists alike and its congruence with reality, the strong tradition of architectural utopianism is needed now more than ever, albeit in more self-reflective forms. Those architects who have embraced the

challenge of integrating social and environmental sustainability demonstrate a crucial role that architects can play in creating a viable future. Neither constrained by a single utopian vision nor imprisoned by style, the range of building types and scales in contemporary practice suggests a pluralistic, viable future not just for an elite or for advanced industrial countries, but for a world population.

L'Oeuf Architects in Montreal, for example, show that it is possible to retrofit existing public housing into energy-efficient, low-carbon, attractive neighborhoods. The MASS Design Group has brought enormous design intelligence to the development of low-cost, healthy hospitals in Rwanda. And on an urban scale, the City of Stockholm has revitalized its old waterfront with a zero-carbon city expansion for 35,000 people.

These examples illustrate that the future lies not in the single pursuit of technological invention nor in social utopianism nor yet in a hermetic vision of environmental purity but in a synthesis of these visions for which design is the critical integrating catalyst. More than most other professionals, architects are trained to think holistically and imaginatively, every act of design essentially a mental leap into the future.

Is the future to be business as usual, or do we build a tomorrow in which the planet and its inhabitants stand a chance of survival? ■

ABOVE
Living Pod, Sketch Section, David Greene © Archigram, 1966.

LEFT
Living Pod, Non-static Food Dispenser, Plan. David Greene © Archigram, 1966.