



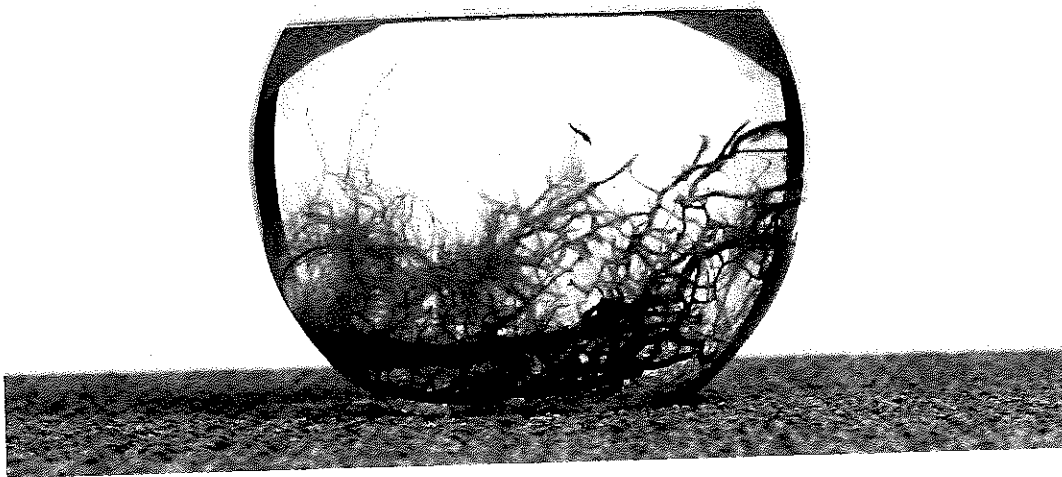
# BEHIND THE GREEN DOOR

A Critical Look at Sustainable  
Architecture through 600 Objects  
by Rotor

Oslo Architecture Triennale

A balanced ecosystem in a sealed glass sphere. Composed of a few shrimp, a sea fan, algae, decorative shells, and gravel in water, the Ecosphere is a spin-off from NASA's research on self-contained communities for human space exploration. According to its makers, it can maintain a living environment for up to 20 years without the need for maintenance.

*EcoSphere®*, by *EcoSphere Associates*; USA, 1982.



The view of the Earth as a whole from outer space may look beautiful and innocent at first sight, but it empowers a type of planning and design which is not only insensitive to local environmental conditions and cultures, but also alienates humans from themselves. So let's break that crystal ball, liberate those poor enclosed shrimp, and try swimming with them in companionship.

*Peder Anker, associate professor, New York University*

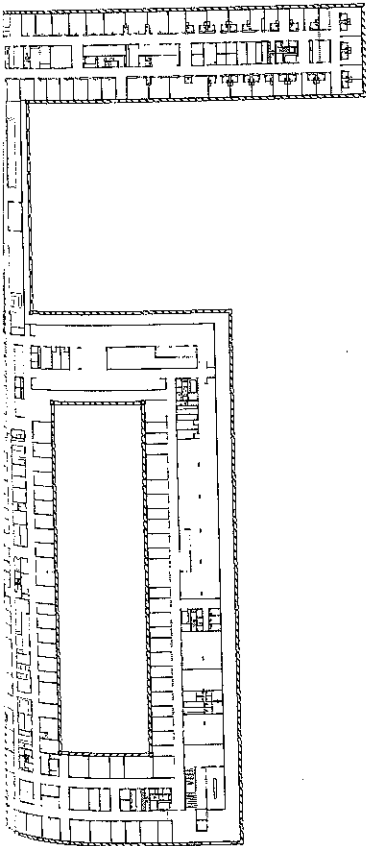
Juxtaposed with the Earthrise photo, this motif invites readings comparing it and Earthrise. The two spherical motifs reflect each other, and their mutual contextualization imposes new directions for its reading, adding new layers of meaning to both motifs and to the representation of sustainability.

*Anne Elisabeth Toft and Claudia Carbone, associate professors, Aarhus School of Architecture*

What about the modernist idea that beauty is a matter of elegant design? If 'sustainable design' is 'good design', is it by definition beautiful?

Videotape of an introduction to straw bale construction.

*Straw Bale Construction: The Elegant Solution by Sustainable Systems Support; Arizona, USA, 1992.*



Beauty can't be useful, even the early modernist aesthetics of *Neue Sachlichkeit* eventually merged into a magnificent play of pure forms and light ... Maybe in reaction to this, sustainable architecture seems to be promoted first and foremost through the images of extremely ugly architecture, to reassure us of its functionality.  
*Triin Ojari, director, Museum of Estonian Architecture, Tallinn*

The environmentally conscious architect of today can safely embrace the modernist heritage of the Bauhaus as the very origin of ecological design. During a lecture at Harvard in the 1950s, Walter Gropius said: "The greatest responsibility of the planner and architect, I believe, is the protection and development of our habitat. Man has evolved a mutual relationship with nature on earth, but his power to change its surface has grown so tremendously that this may become a curse instead of a blessing".  
*Peder Anker, associate professor, New York University*

Picture of Arne Naess, professor of philosophy, being carried away by two policemen during peaceful demonstrations against the construction of a hydropower dam at the Mardalsfossen waterfall. He later coined the term 'deep ecology' to define an environmental philosophy advocating the inherent worth of living beings, regardless of their utility to human needs and a radical restructuring of modern human society.

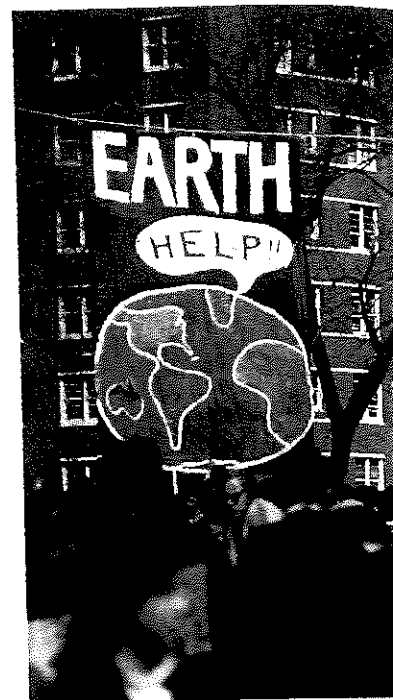
*Photo: Grete Sandberg; Mardalsfossen, Norway, 1970.*



Photo of a banner spotted at the first Earth Day manifestation.

*Earth Day; New York, USA, 1970.*

*Photo: Hulton Archive*

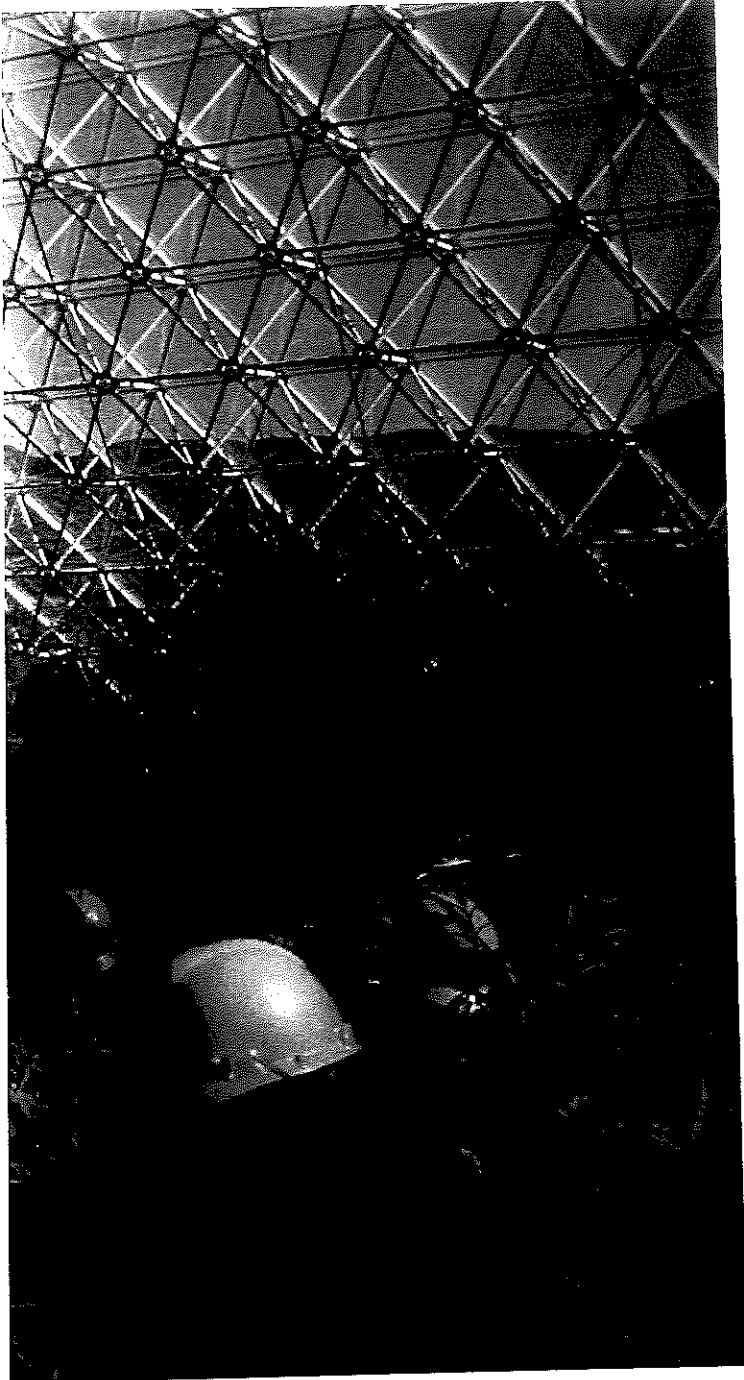


The inherent paradox of sustainability: Arne Naess being arrested while protecting waterfalls that later became the main source of clean energy production.

*Karl Otto Ellefsen, rector and professor, Oslo School of Architecture*

Architecture students from AHO (see previous page) crystallised a clear message about a disaster or a harmonious balanced ecosystem 'after us'. This either/or dichotomy between a future of industrial doom or ecological bliss came to dominate the environmental debate in Norway, thanks to the philosopher Sigmund Kvaløy, who was mighty impressed with the exhibition and invited the architects to join his seminar about ecology and philosophy. The people in the group were soon known as the 'deep ecologists' seeking philosophical answers on how humans should (and should not!) relate to the natural world.

*Peder Anker, associate professor, New York University*



*The Biosphere* was first published by Vladimir Ivanovich Vernadsky in 1926. It conceptualizes the interconnections between the geosphere, the biosphere, and the noosphere. Vernadsky was a leader of the Soviet industrial project about living rationally with nature.

*John Palmesino and Ann-Sofi Rönnskog, founders, Territorial Agency, London*

Despite the trouble, the Biosphere 2 building became a model for ecological architecture – setting the standard for autonomous environmental design. Its narrow focus on the circulation of energy and ecological efficiency came at the expense of a wider cultural, aesthetic and social understanding of architecture and the human condition.

*Peder Anker, associate professor, New York University*

Biosphere 2 was perhaps the ultimate built example of a closed-system ecology. It was widely perceived as a high-profile failure. As a consequence, sustainability has defaulted to the open-system model.

*Simon Sadler, professor, University of California, Davis*

Biosphere 2's early missions were plagued by technical, personal, and management difficulties, but these gave credence to the idea of self-sustaining ecosystems that we can live in. We'll need them if humanity colonizes space – the best insurance policy we could have to survive as a species.

*Herbert Wright, architectural writer, historian and curator, London*

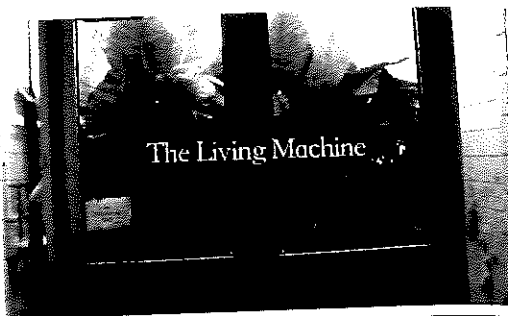
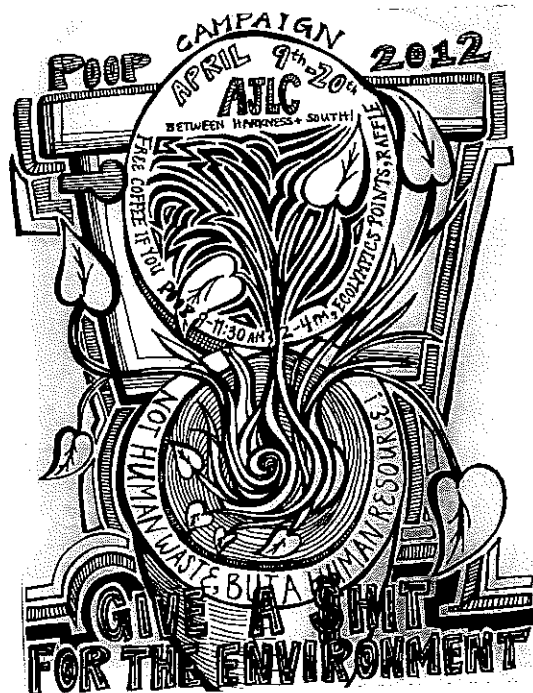


The Lewis Center for Environmental Studies is equipped with an installation that processes sewage into reusable water for flushing toilets and watering plants. This Living Machine imitates natural cleansing processes that occur in wetlands. Plants, bacteria, protozoa, and other aquatic organisms are used to remove organic nutrients and dangerous pathogens. The installation was designed to handle 9,000 litres of waste water a day, it is currently only handling 10% of its capacity. When there is a lack of sewage going through the machine, it is much more difficult to work with.

a. Campaign poster soliciting students to relieve themselves.

b. Explanatory video from the college website.

Project: Living Machine®, by Dr. John Todd, Living Machines Inc; Oberlin, Ohio, USA, 2000.

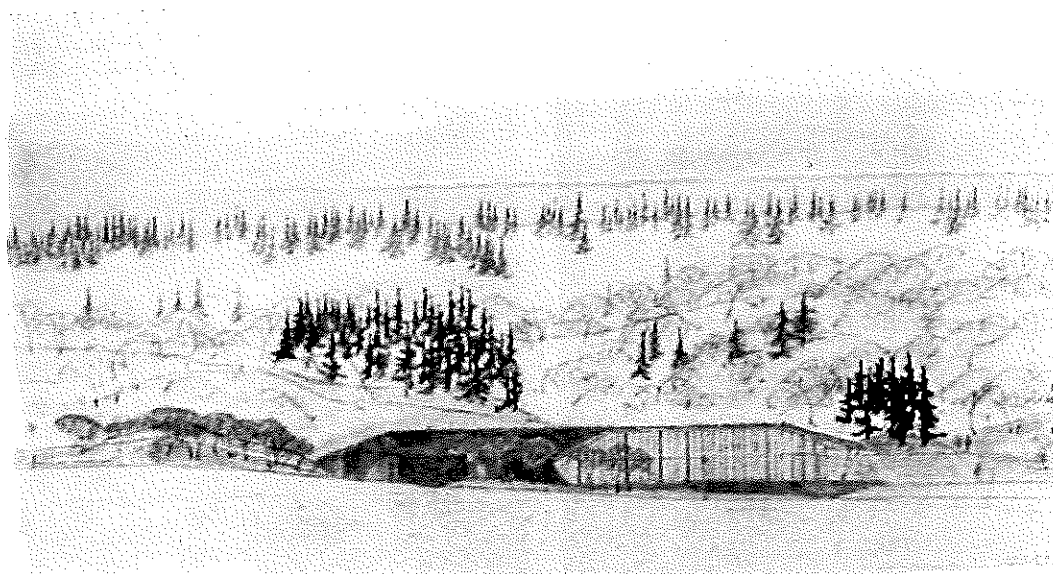


There is, of course, nothing wrong with being toilet-revolutionary – finding environmental friendly solutions to sewage. Indeed, it is praiseworthy. Yet, behind the 'living machine' – as opposed to the modernist 'machines for living' – there is a larger problematic vision for design formulated by John Todd and the New Alchemists since the 1970s. They argued that the ideal building should be like a microcosm of nature's household. In practice, they focused narrowly on the circulation of energy and matter within buildings. Also see page 201

Peder Anker, associate professor, New York University

Hand-coloured drawing of the Tromsø University sports facility and its surroundings. The building is buried underground and covered with a green roof to provide thermal insulation. Ventilation pipes and towers that allow natural light to enter the building project above ground level.

*Project: Kraft Hallen, by Steinsvik Arkitektkontor; Tromsø, Norway, 2001.*



In 1988, in his book, *Classic Architectural Birdhouses and Feeders*, Malcom Wells wrote: "We lost, somewhere along the way, the capacity to design, by instinct, perfect natural houses. All we can do now is hire architects and hope for the best." This beautiful proposal for Tromsø University brings to mind the importance of his plea for a more gentle architecture – one builds underground in order not to destroy the land.

*Peder Anker, associate professor, New York University*