

Cybernetic Biotopes: Antarctica

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At the end of the 20th century, Antarctica represents the largest scientific laboratory in the world with multinational research programmes in every area from biology to astrophysics. This frontier condition provides a radical platform to explore the paradoxical condition of architecture in an engineered world where the body's existence is increasingly in networks over real space, and where what is left of nature is permanently monitored.

In response to emergent scientific priorities of the National Science Foundation, studio projects proposed a network of temporary multinational research platforms as an alternative to existing permanent stations. The prerogative of 'zero impact' and inherently groundless condition of Antarctica supported experimentation with kinetic systems, flexible

infrastructures, high performance materials, new morphologies and smooth topological spaces of minimal and continuous surface properties. By combining the extremely artificial and the extremely physical these *cybernetic biotopes* inscribe the mechanical into the organic and explore technology as a biological process. These physical assemblages have the capacity to react to the world, to be spontaneous, adaptive and alive. By questioning conventions of permanence, stability, and site, projects established a mutable micro-urbanism based upon transforming relations of energy, matter, and information.

The studio was offered at Columbia University, Graduate School of Architecture and Planning in Spring 1997 in collaboration with Matt King and Dave Richards of Ove Arup & Partners, New York.

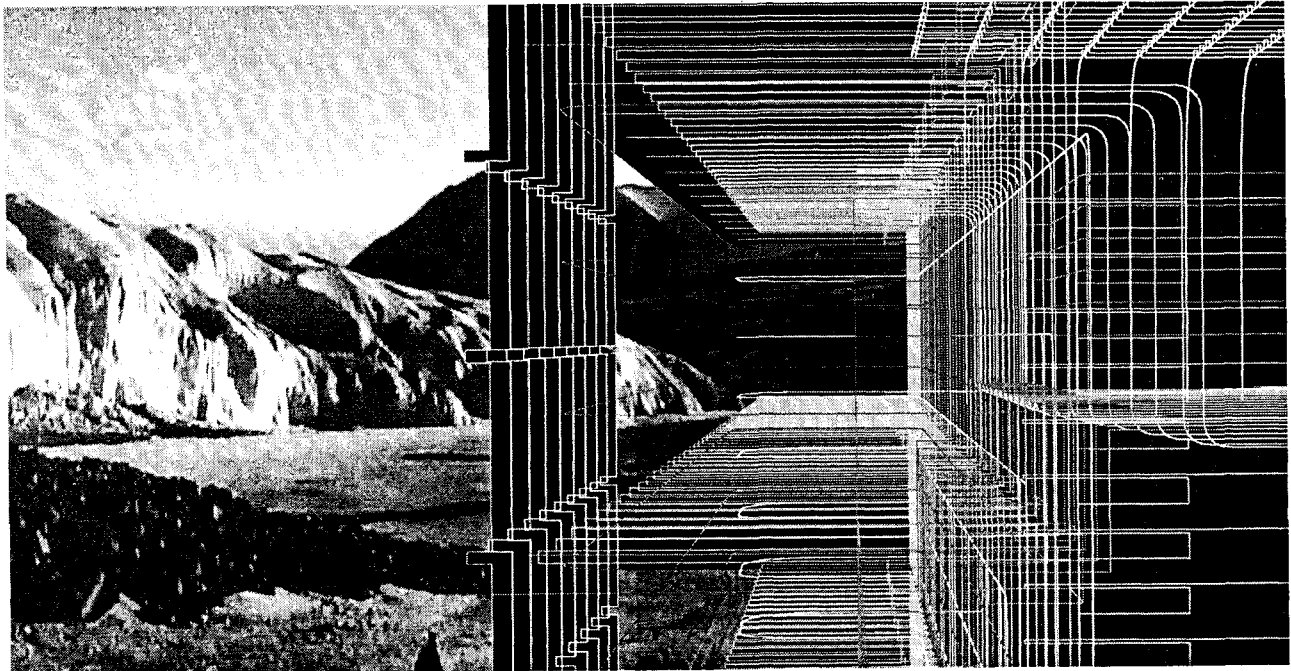
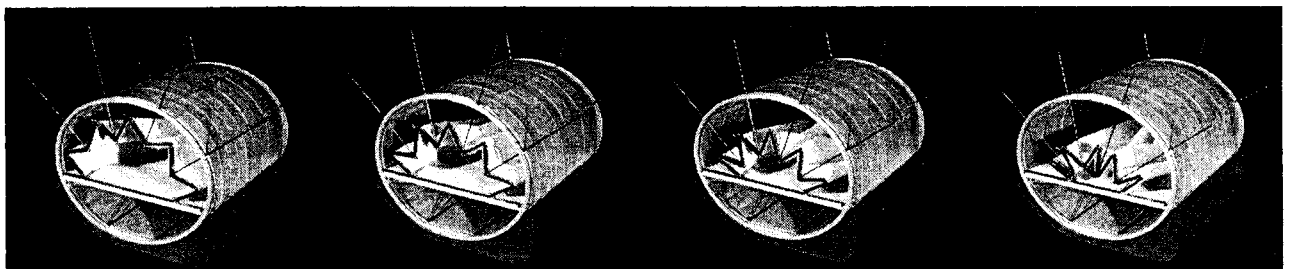
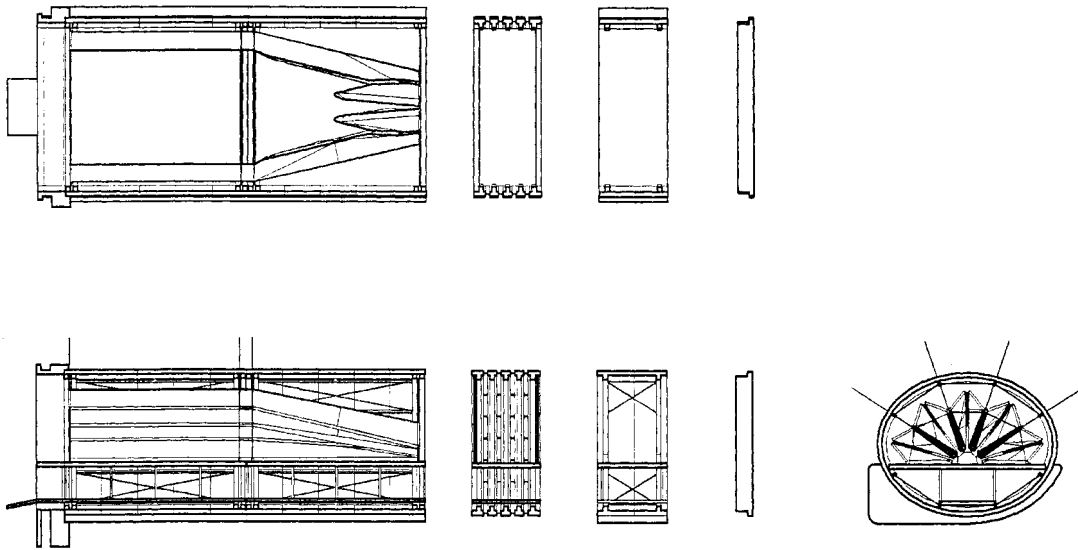
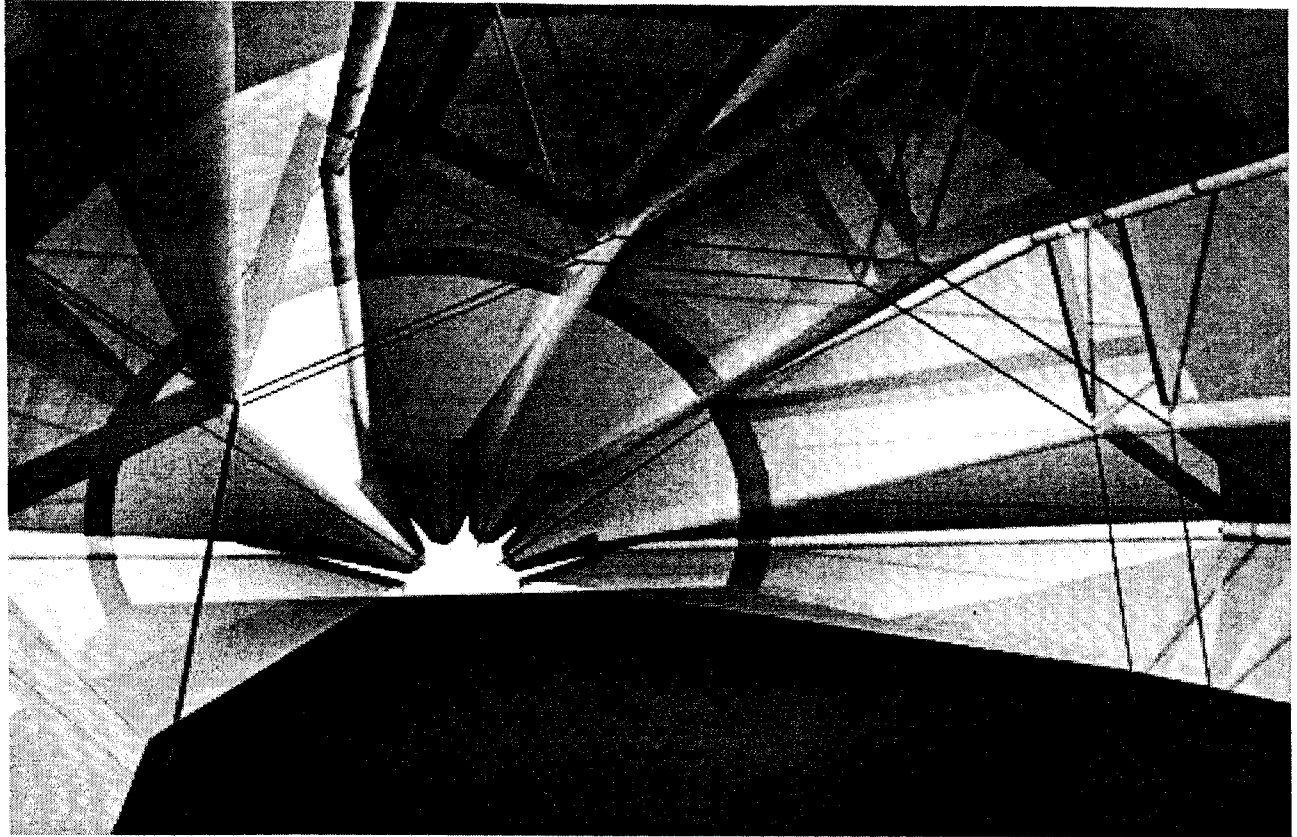


Fig. 1. McMurdo Tele-robotic Station: Ignacio Lamar.



Figs. 2-4. Ecto-pod: Phillip Anzalone, Cory Clarke, Nam-Ho Park.