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**'EVENTSTRUCTURES'**

Paper for the International Symposium on  
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1972.

## EVENTSTRUCTURES

architecture as a multi-state and responsive morphology of structure.

The environmental planning of an age is not neutral. It is the expression of a going series of attitudes, and when in existence it reinforces those attitudes by structuring the basic environmental elements (house, street, city, landscape,) from which we infer the structure and meaning of the totality.

An overriding feature of the present environmental planning is its deterministic monumentality which effectively limits the user's range of exercise of his identity, and corresponds to the passive pragmatism of our political structures.

Now needed is a new initiative towards a responsive environment of more personal freedom and autonomy, where structure will stimulate and give changing expression to individual and collective identity.

Pneumatic structures offer a viable technology for the realisation of these desirable architectural ideals. And introduce us to the radical operational possibilities of the foreseeable 'biomorphic' and cybernetic developments.

But research and developement in this field on the part of such concerned institutions as the military, manufacturers, universities and civil architecture dept's, shows a significant failure to engage this technology socially and make operational those ideals. Instead we have

only got an accumulation of data and discussion, specialist military industrial and consumer applications, and public relations spectacles like Expo.

What little operational research and meaningful social engagement of this technology has occurred has been largely due to the works of 'do-it-yourself' activist groups and individuals.

The question relevant to this symposium is at what stage will priorities of attention and resources for pneumatic structures be not just focussed on the accumulation of technical data, but also on the promotion and valuation of operational implementations of that technology towards desirable social ends.

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The WATERWALK - noticing the mode of consumption of this pneumatic invention 1968 - 1972.

In 1968 at its first public demonstration, the general enthusiasm for this new pneumatic device was apparent. Formulating our attitude for its future use and development, we decided to release this concept to public attention by means of events and publication. Then, because of its cheapness, its simple and evident construction, and the standard availability of the materials, we expected it would become a public utility through the spontaneous initiative of interested persons to reproduce and experiment

with it. In this way 'middlemen' are redundant, production and consumption would be simultaneous in each person.

But over four years, with event demonstrations in Holland, Germany, England, and Australia, and worldwide publication in virtually all the popular magazines, on television, and cinema news, we have noticed only a few such initiatives and these then being from prospective entrepreneurs.

Instead we have received hundreds of letters invariably asking "...where can I buy it, how much does it cost?". And the same from the Marine and Bridge Division of the US Army Mobility Equipment Research and Development Centre.

The evidence is of a compulsive adherence to the "taboo frontier; production-consumption". Enthusiasm seems not to find its own way. It waits for the familiar procedure of commercial production and counter sales. And until then the innovation is currency for the media (as in James Bond's 'Diamonds are Forever').

Given that interest in pneumatic structures because of their radical operational possibilities in the social context, then the success of a pneumatic innovation cannot be separated from its success in dealing with the prevailing production-consumption habits which can compromise its operational fate.

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PAVILION for 'Sonsbeek 71', Arnhem, Holland. This was a two level air-supported structure - a dome with a ground level foyer and an upper level auditorium. Seating in this auditorium was on an air supported skin, a circular mattress surface which sloped down to a rigid stage. Each level is a distinct pressure zone, 15mm w.g. in the auditorium supporting the dome roof, and 60mm w.g. in the foyer supporting the mattress skin and the there seated public. This mattress seating skin was restrained with cables attached to sandbags on the ground in foyer (screw anchors would give a less interrupted space). Revolving doors gave access to each level, and a spiral staircase led from the foyer up through the stage into the auditorium. The structure was made from Trevira reinforced pvc and transparent pvc panels, and was 18m.Ø and 9m high. (illustrations 2,3,4,5)

Its functioning at Sonsbeek 71 illustrated certain implications of the juxtaposition of such a pneumatic structure in the context of an otherwise passive situation (i.e. a display of sculptures). Hundreds of people were queuing to go inside, and not so much to sit and watch and talk about a televised slide show, but to jump and shout around and enjoy the physical and acoustic and other peculiar properties of the structure.

With the problem of organising these crowds into groups of thirty at a time, and because of the structure's diversion of their enthusiasm from the programmed slide and talk show, the

managers of Sonsbeek 71 decided to close the pavilion half way through the exhibition.

This apparent failure of the structure was in fact the failure of the public using the structure to behave in a predictable and passive manner.

The offer of a responsive environment spills out in its implications, bringing into question the whole ordering and conceptual priorities of our existing environmental context.

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Eventstructure Research Group  
Amsterdam '72

Illustrations:

1. WATERWALK - Slotterplas, Amsterdam, 1969.  
Tetrahedron made from 0.5mm pvc, 5m high, with a waterproof zip.
2. PAVILION - 'Sonsbeek 71', Arnhem, Holland.  
Cross section.
3. Idem - exterior view.
4. Idem - plan of the upper level auditorium seating.
5. Idem - view of the auditorium.
6. WATERWALK TUBE - Hannover, Germany, 1970.  
A tube made from 0.5mm transparent pvc and Trevira reinforced pvc, 250m long, 3m Ø, air inflated and anchored at intervals to the floor of the lake. The public could walk through the tube from one side of the lake to the other.
7. Idem - interior view.
8. BLADEN DISILLUSION - 'Sonsbeek 71'.  
An inflatable replica of Ronald Bladen's hard-board minimal sculpture 'Wedge'.
9. CLOUD - Stedelijk Museum Amsterdam, 1970.
10. VIDEO PAVILION - 'Sonsbeek 71'.  
An air-inflated rib structure. Three ribs support a draped outer skin, and an inner skin which is held by a vacuum between itself and the outer skin. The pressure in the ribs is 500mm w.g., and the vacuum between the skins

is -15mm w.g. The ribs are ballasted with sand, and the skins are fixed to a concrete rim. The structure measures 20m by 20m, and 9.5m high, the ribs are 2m Ø and the whole is made from Trevira reinforced pvc.

11. Idem - exterior view.

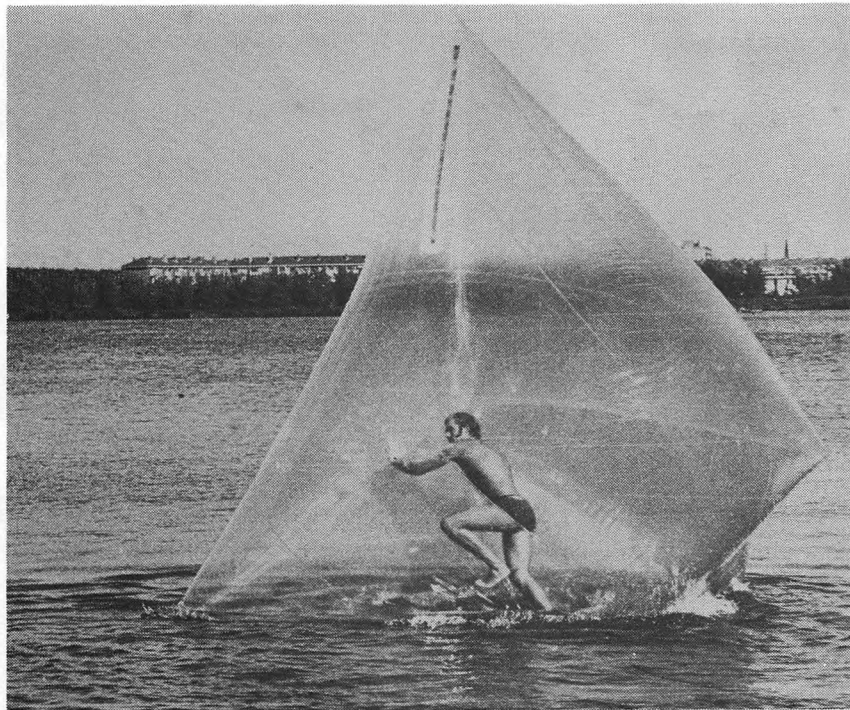
12. AIRGROUND - Brighton Festival, England 1968. An air-supported transparent pvc roof covers a semi-inflated skin floor which provides a kinetic play surface for the public.

13. MOVIE MOVIE - 4th Experimental Film Festival Knokke Le Zoute, Belgium, 1967.

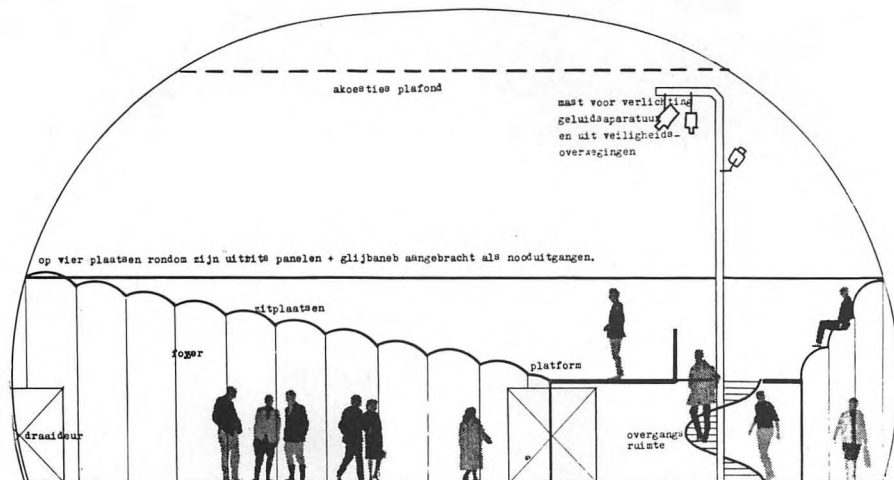
A multi-skin air-supported structure onto which films were projected, and in which the audience could physically participate. A situation of mutual responsiveness between the structure (as architecture and screen), the projected imagery, and the people.

Photographs: ERG and Peter Boersma.

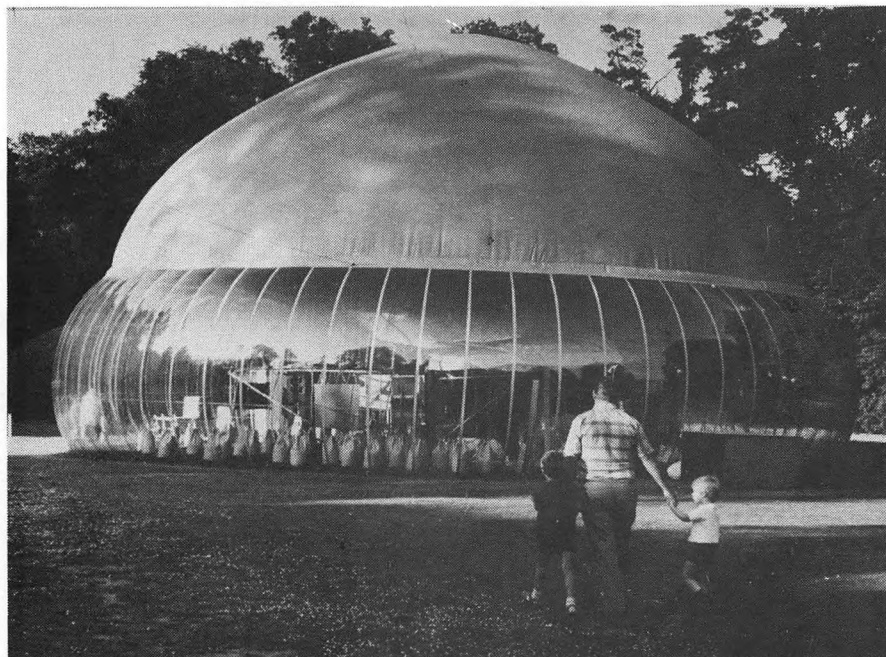
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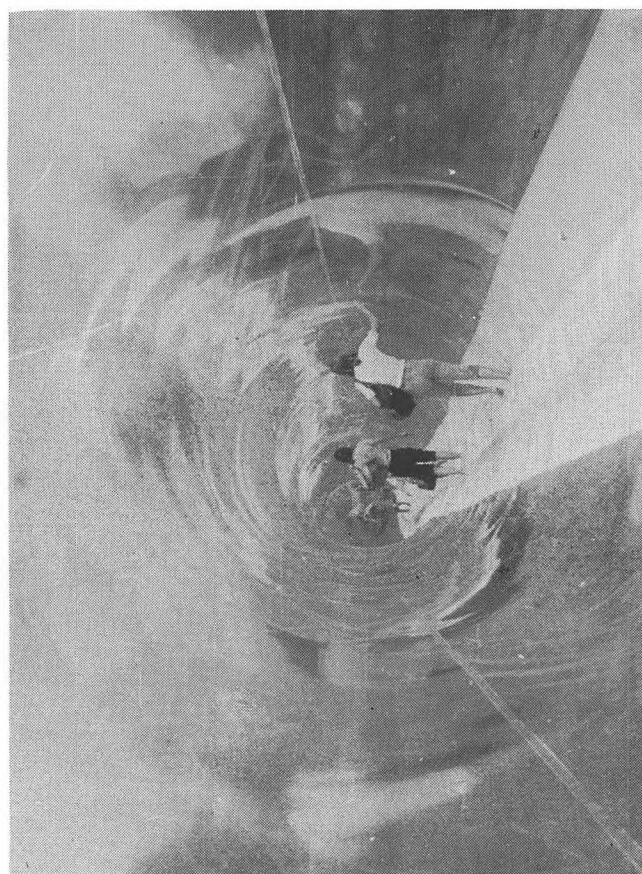


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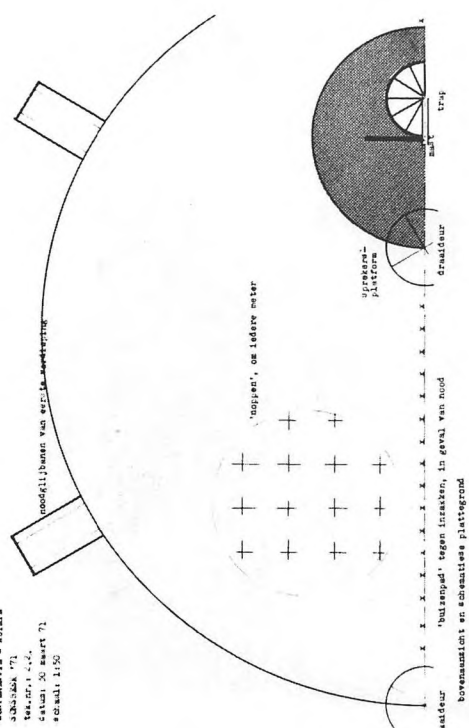




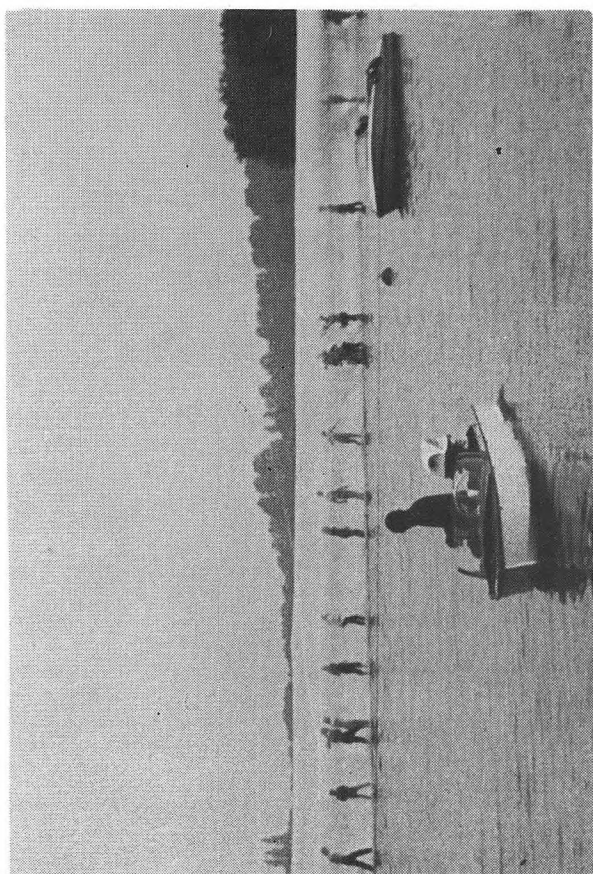
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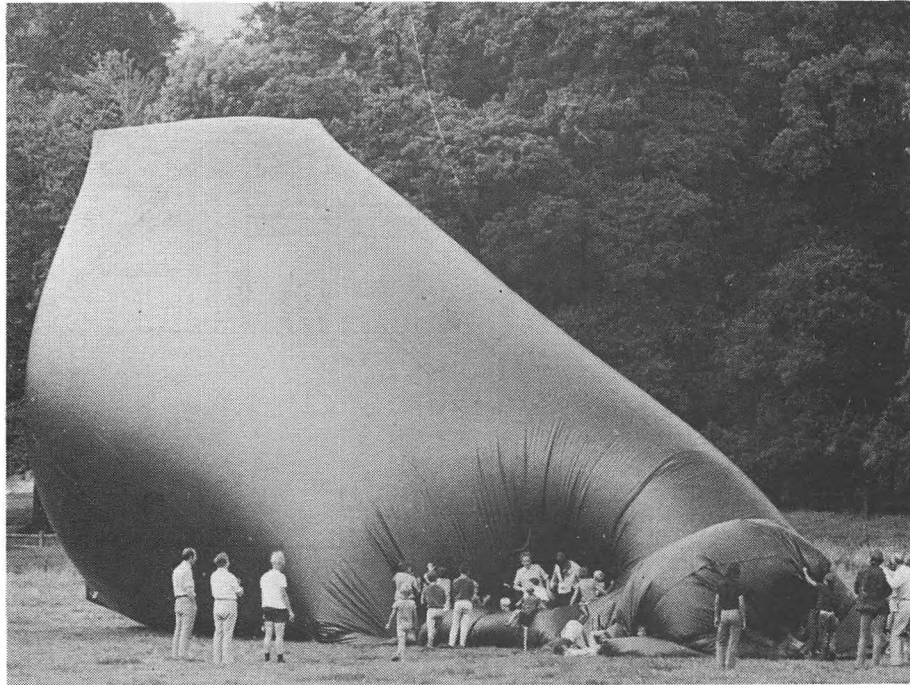
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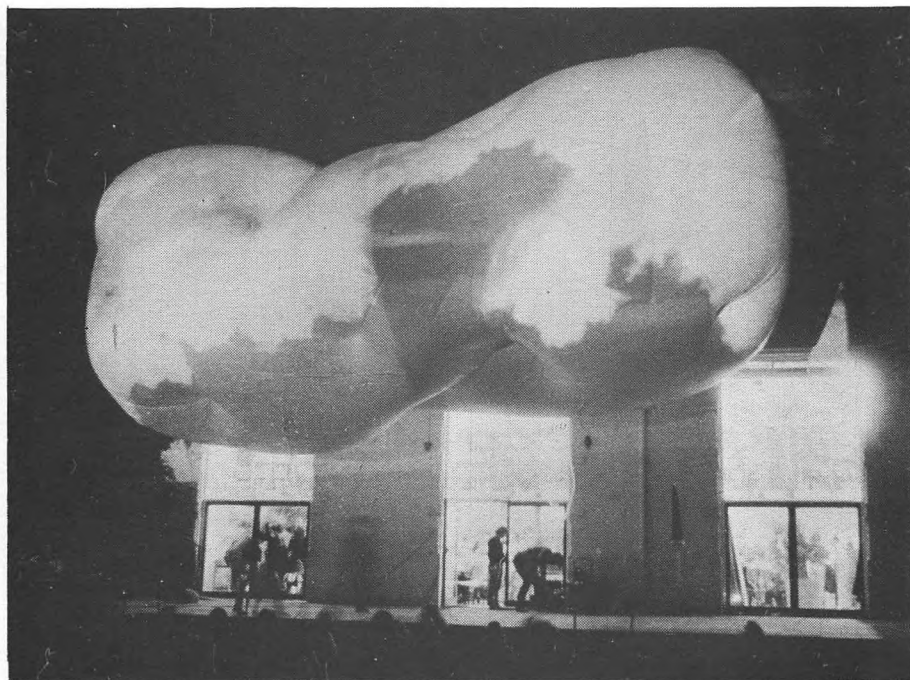
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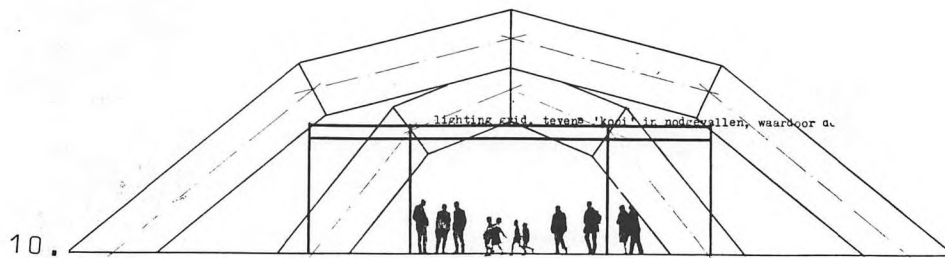
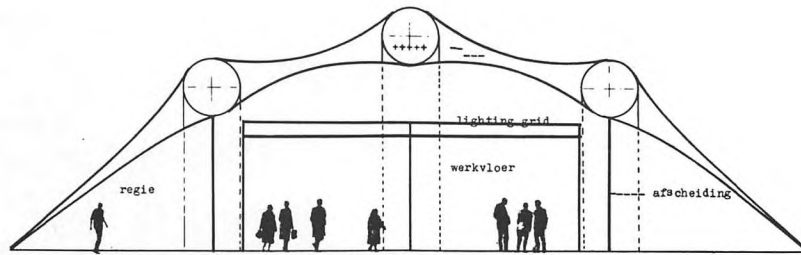
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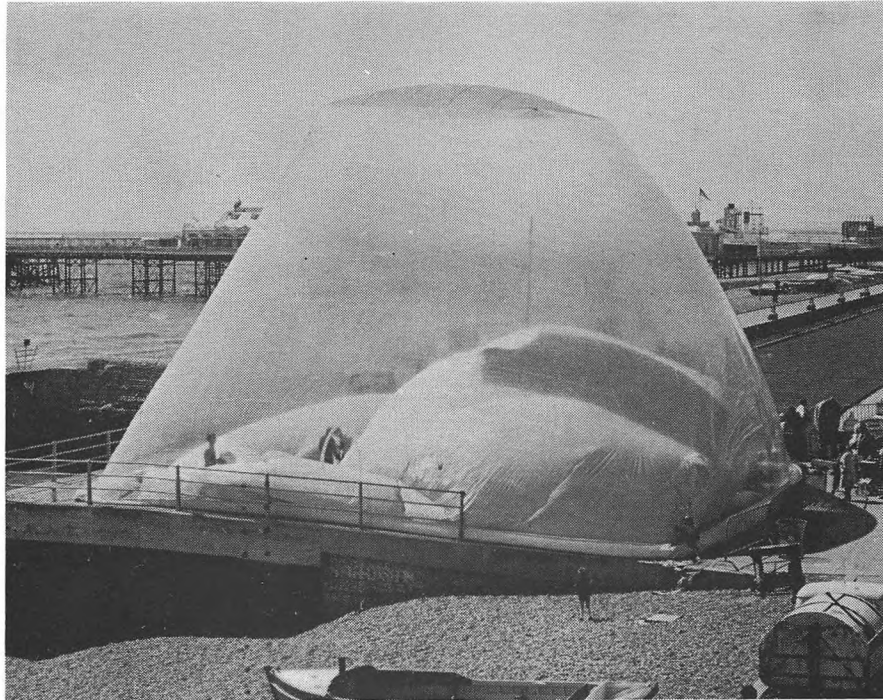


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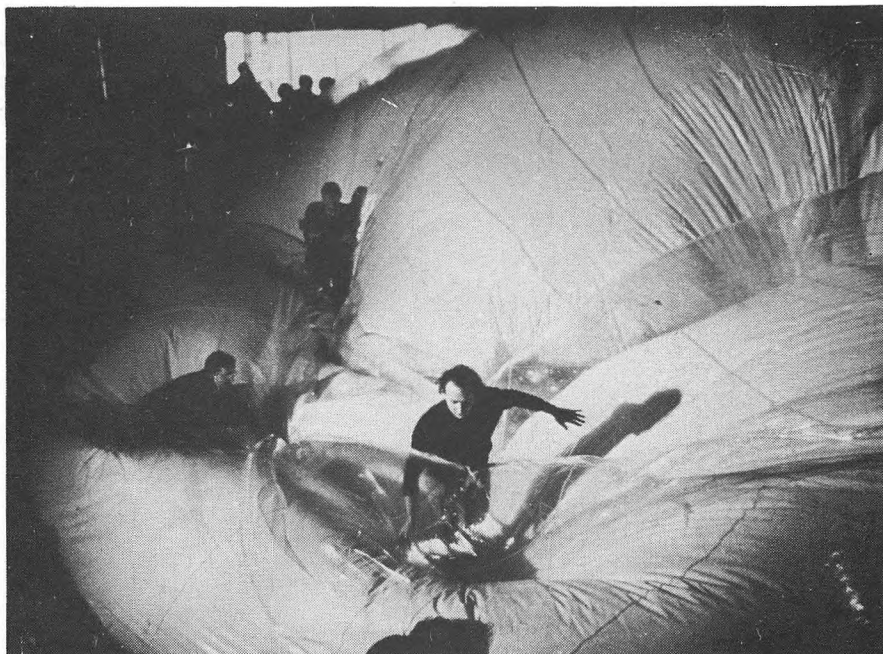


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