

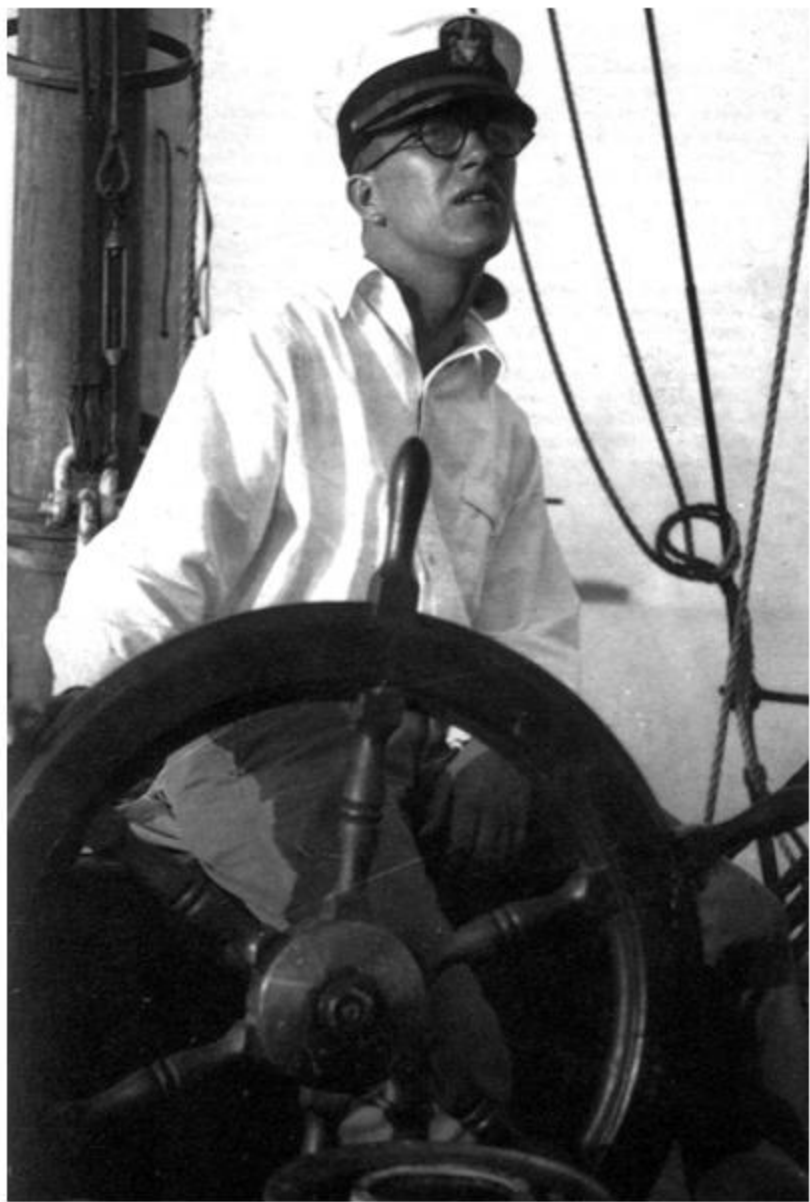
# Sailing Spaceship Earth: Buckminster Fuller's Environmentalism

Sean Keller  
Assistant Professor  
IIT College of Architecture









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MIND  
JANUARY

TIME EXQUISITE LIGHT

TIME SLOW MATTER

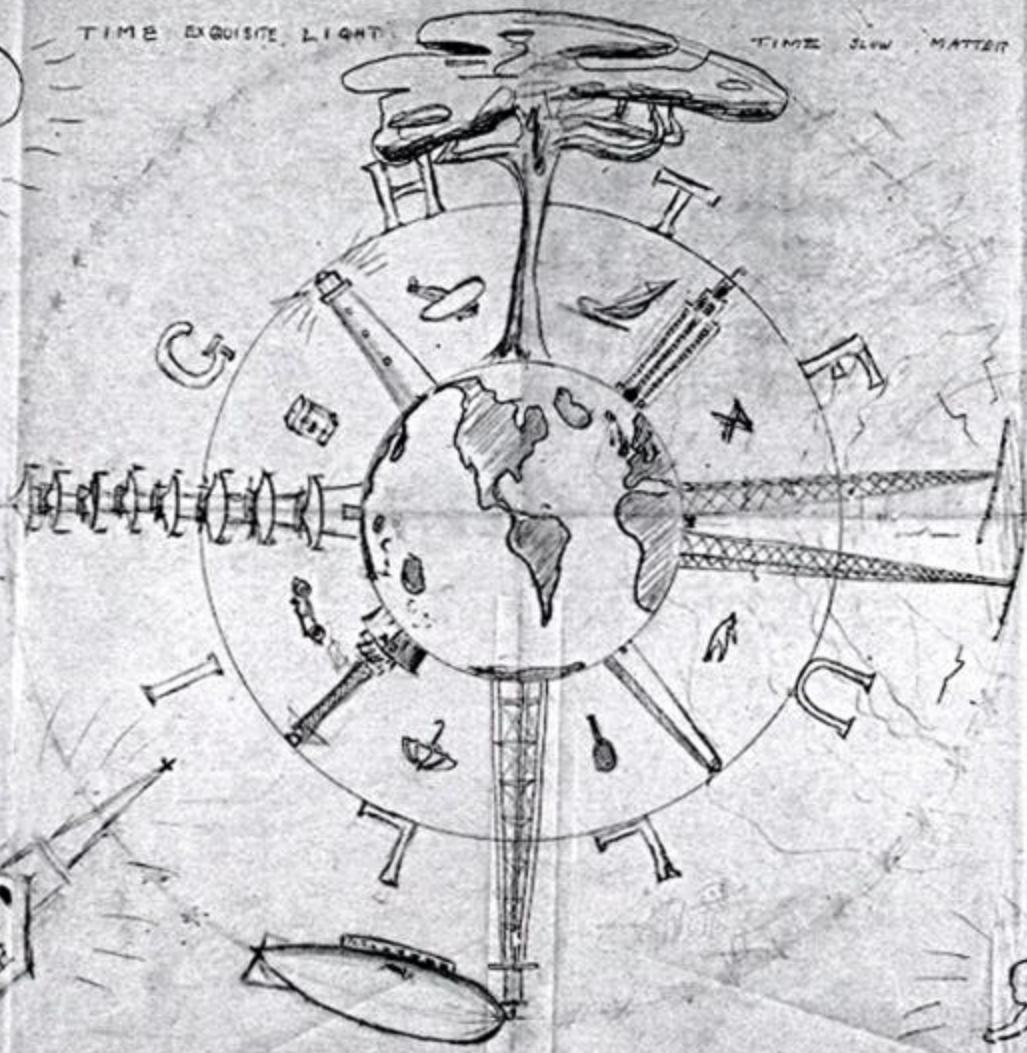


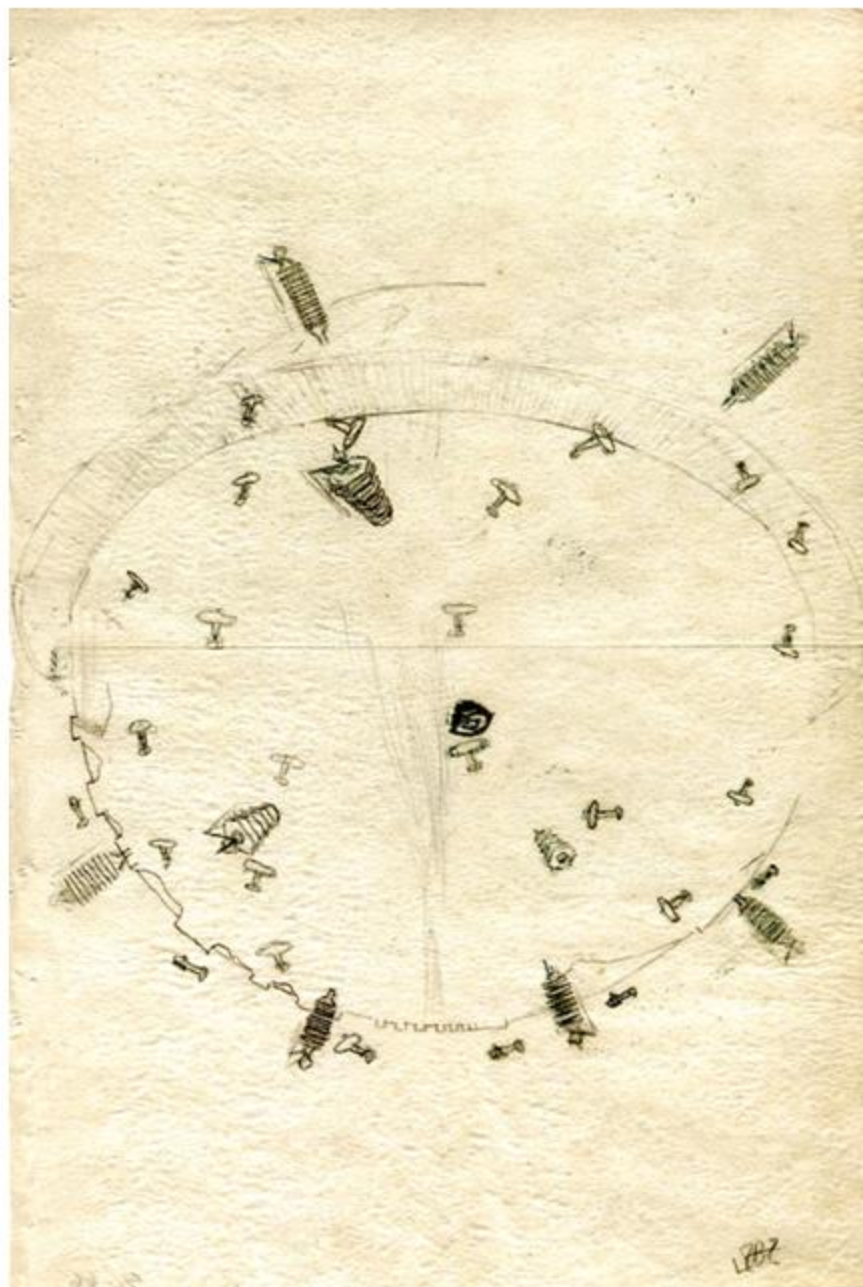
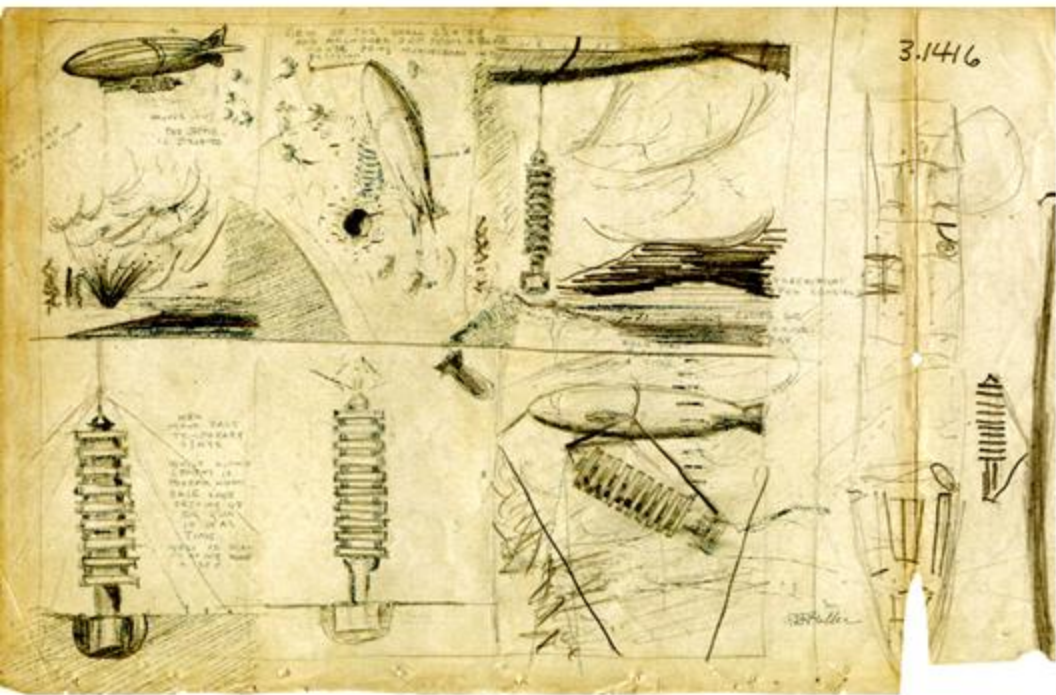
TIME METAL MECHANICS

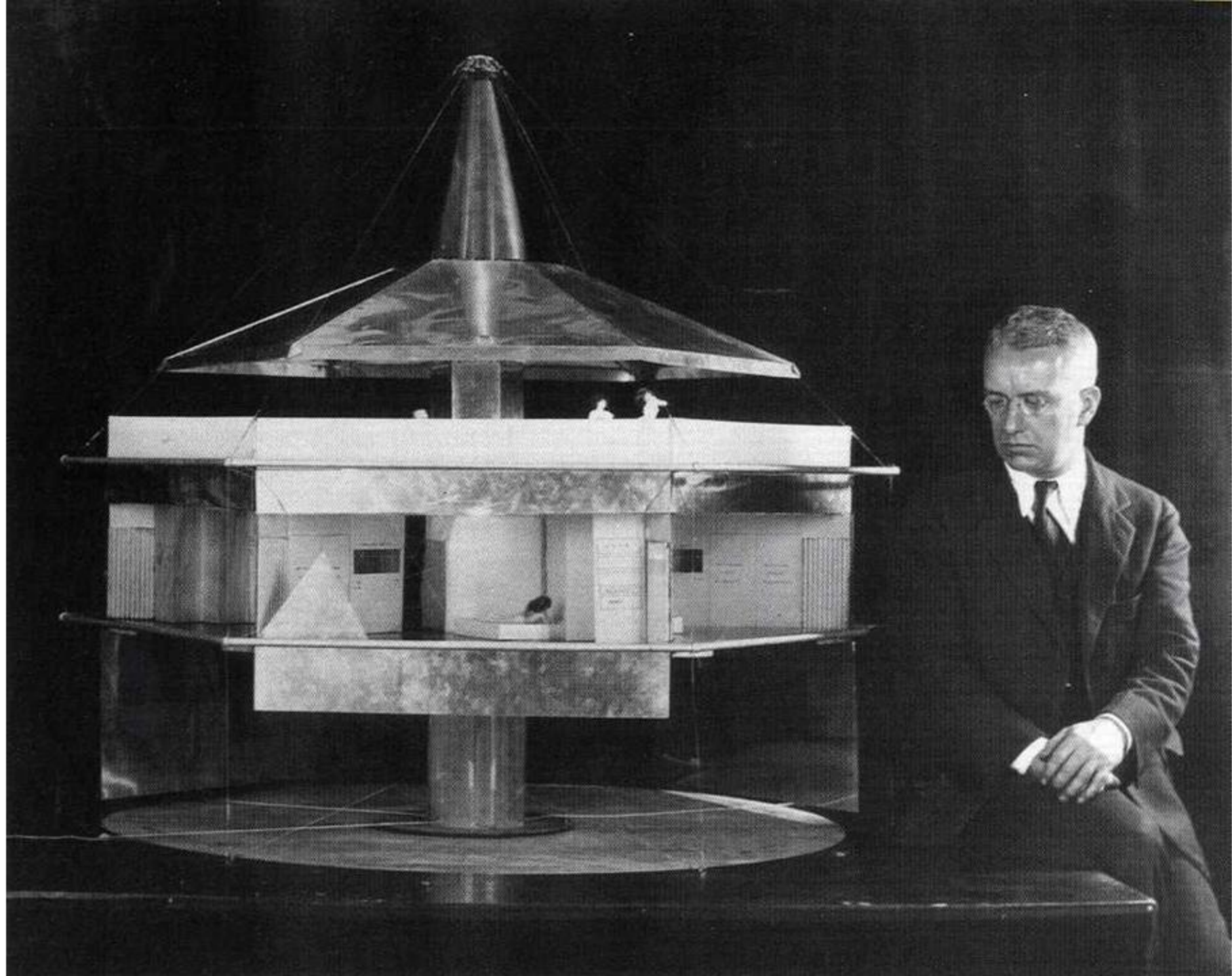
TIME BURSTING  
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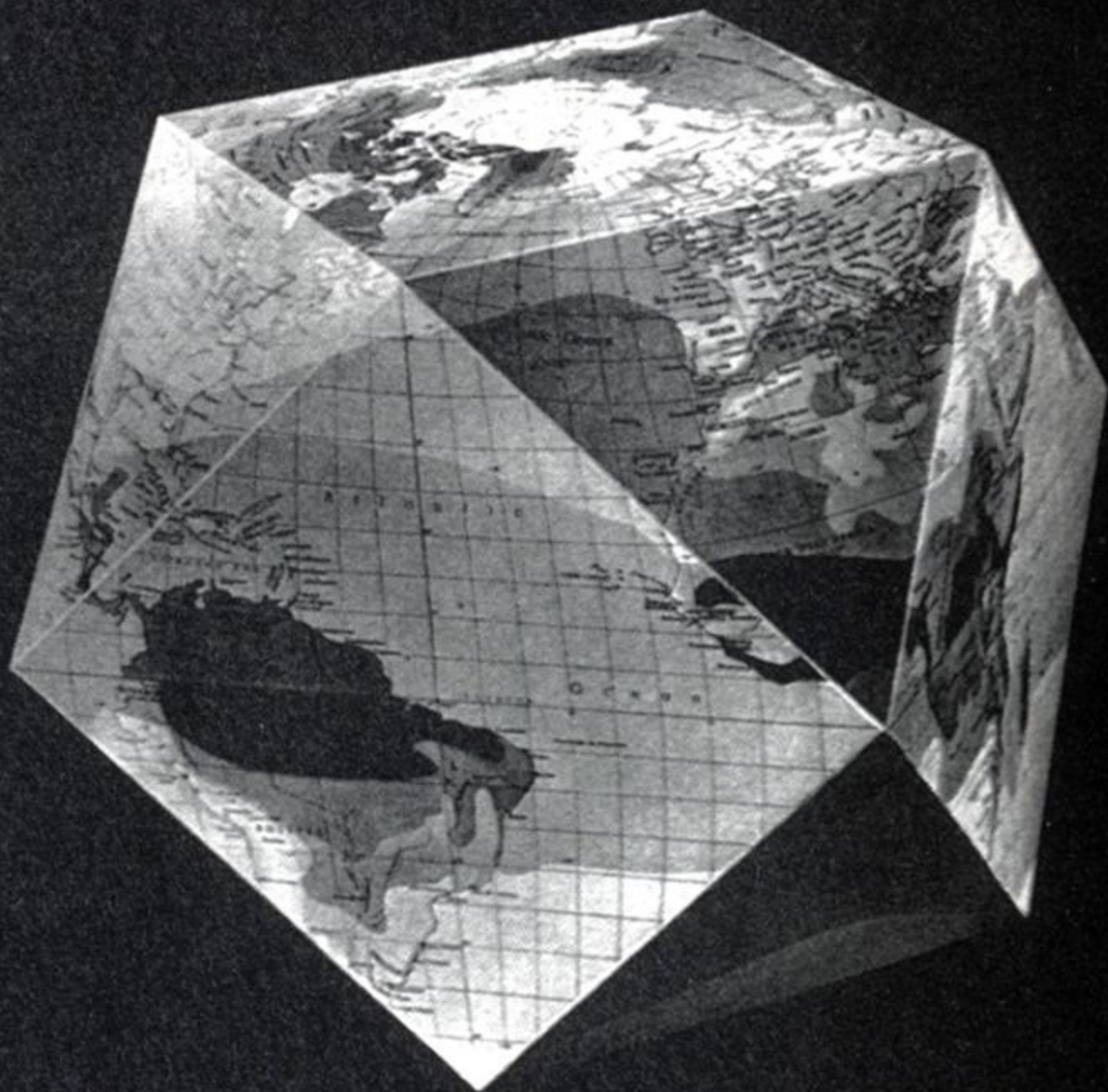
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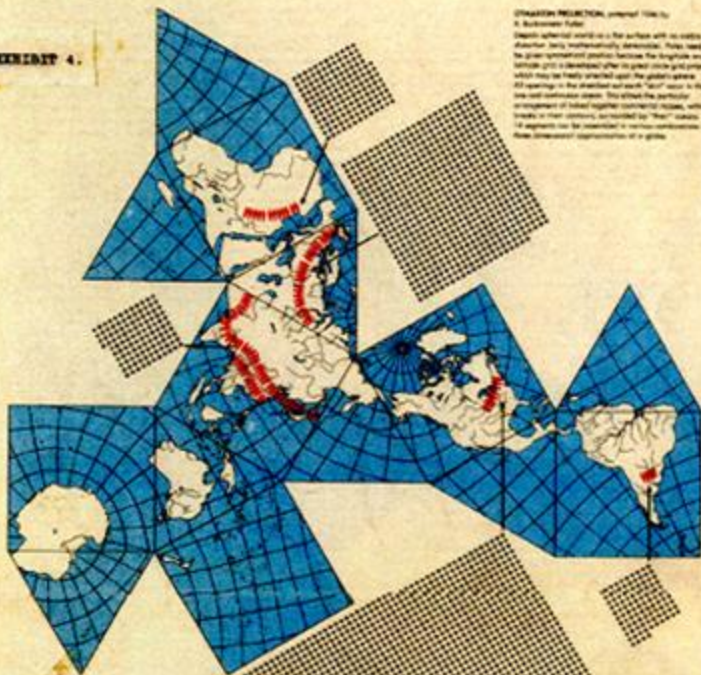






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## ANNEX 4.



## 1 - 1% OF WORLD ENERGY CONSUMPTION

The shaded area of each continent depicts the total population of that continent.

1% OF WORLD ENERGY CONSUMPTION IS USED BY 1% OF THE WORLD'S POPULATION.

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## CONSERVATION POLICY, IMPROVED TYPE

## B. Background Data

Energy consumption in the world is the surface with its total abundance fairly mathematically determined. Thus, need for the plan conservation policy because the magnitude and variety of it demands other measures such as grid computing, which may be fairly applied after the plan given. It is pointing to the situation that "grid" data is the one and conservation policy. This is the particular arrangement of total energy consumption, which results in their conditions, according to "grid" data. It appears that the conservation is various combinations of the conservation representation of a grid.

## WORLD ENERGY USE

## 1970 Background Data

Based on world and non-world population percentages of world population living in each region.

World energy use is estimated as follows:

One kilowatt hour (kWh) is the approximate 100,000 foot pounds of work (one foot pound = energy required to lift one pound one foot vertically).

1970 world consumption of energy from several fuels and conversion from existing energy sources is estimated at 10.5 billion kWh per year. Estimated total world population efficiency is about 10%.

10% of consumed energy becomes the work, the net amount is 1.05 billion kWh per year.

Dividing the figure of 1.05 billion kWh per year by 250 million people energy within of one year, the result is 4.2 billion kWh per year per person of work done by machines and plants. These equivalent to net "energy done" per year.

1.05 billion kWh per year = 4.2 billion kWh per person

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Region	% OF WORLD POPULATION	ENERGY USED (KWH)	% OF WORLD ENERGY USED	PERCENTAGE OF ENERGY USED BY REGION	
				PERCENTAGE OF ENERGY USED BY REGION	PERCENTAGE OF ENERGY USED BY REGION
ASIA	55	1,000,000,000	10	18	18
EUROPE	24	10,000,000,000	10	40	40
AFRICA AND LATIN AMERICA	12	1,000,000,000	10	10	10
NORTH AMERICA	8	10,000,000,000	10	27	27
SOUTH AMERICA	4	1,000,000,000	10	10	10
OTHER AMERICA	1	1,000,000,000	10	10	10
ALL OTHERS	1	1,000,000,000	10	10	10
	100%	10,000,000,000	100%	100%	100%

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10 1/2"

this area

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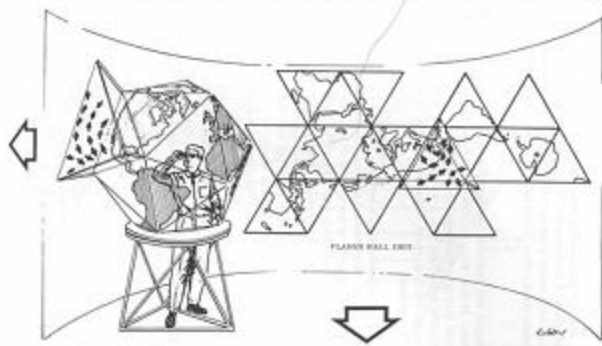
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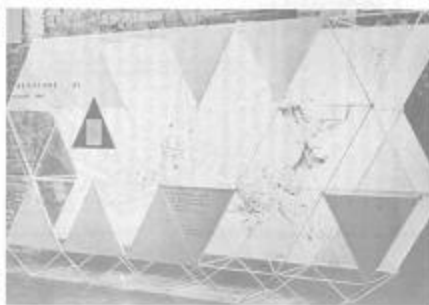
View through tetrahedral unit



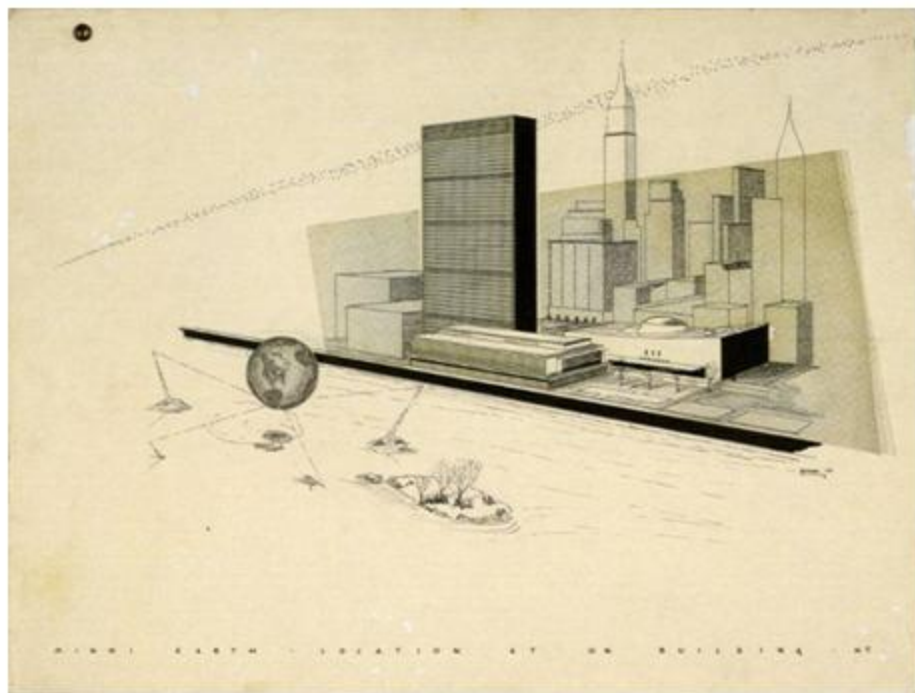
Geoscope, University of Colorado, 1964. Close up view through various data plane levels—from atmospheric wind patterns on the upper level, to air and sea routes and principal cities on the earth plane, and below earth level mineral resources data.

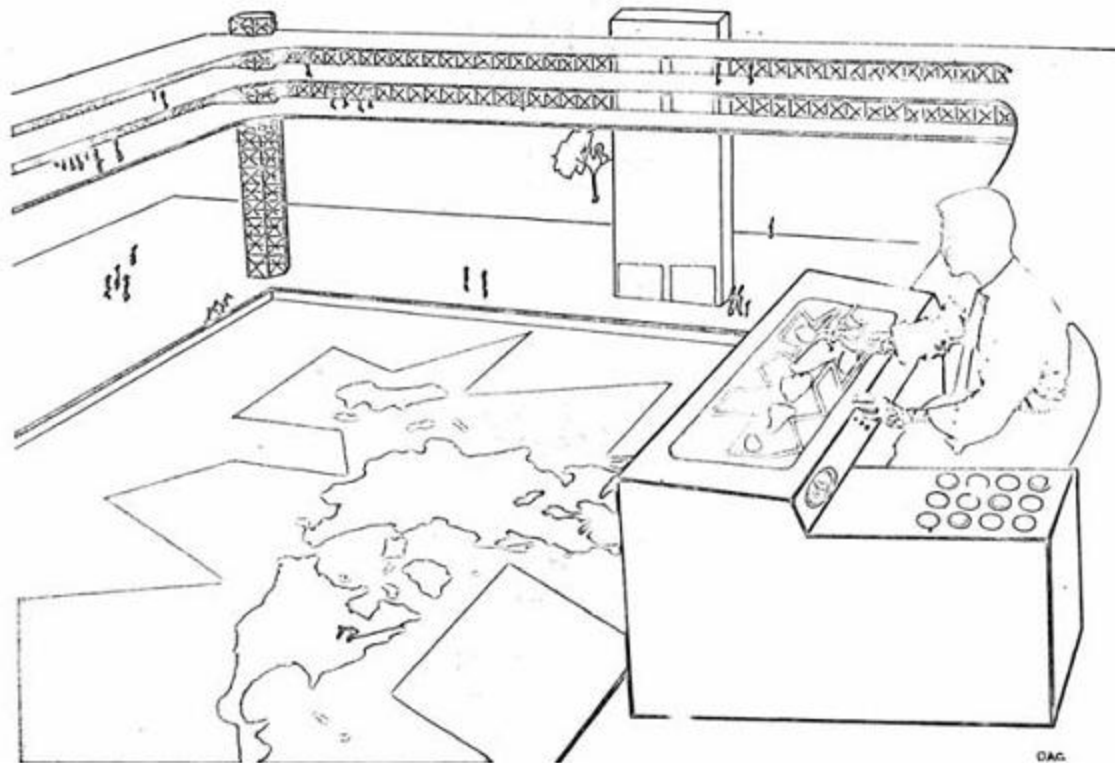
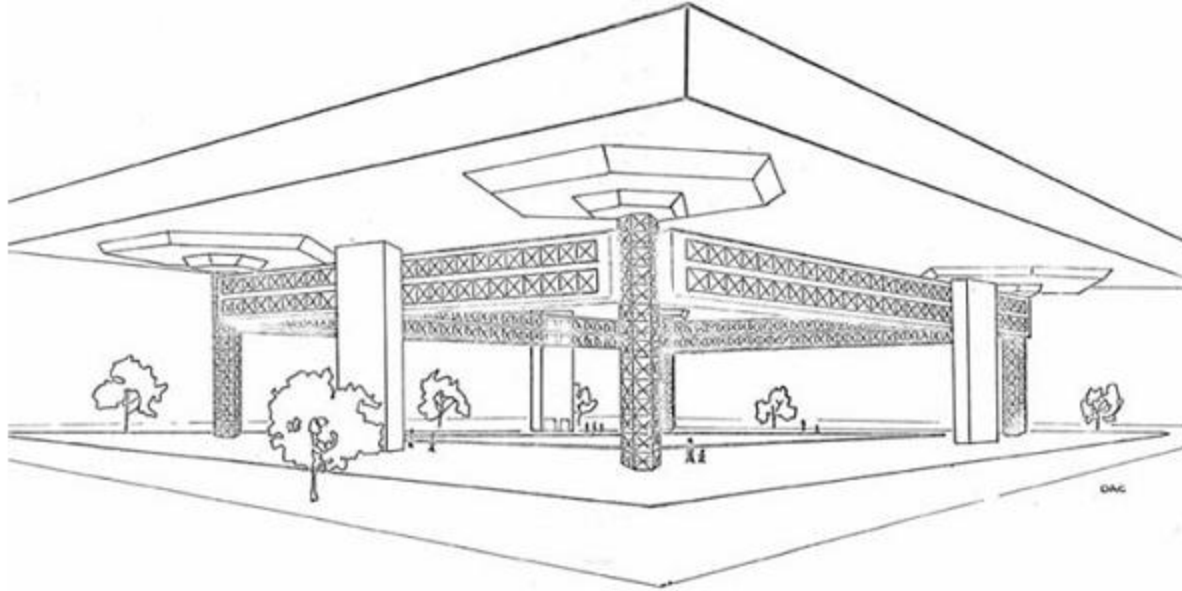


(above) Drawing of tetrahedral unit data planes being viewed from within and planar wall unit in background.



Geoscope, planar wall unit, University of Colorado, 1966. Data display: World Population.

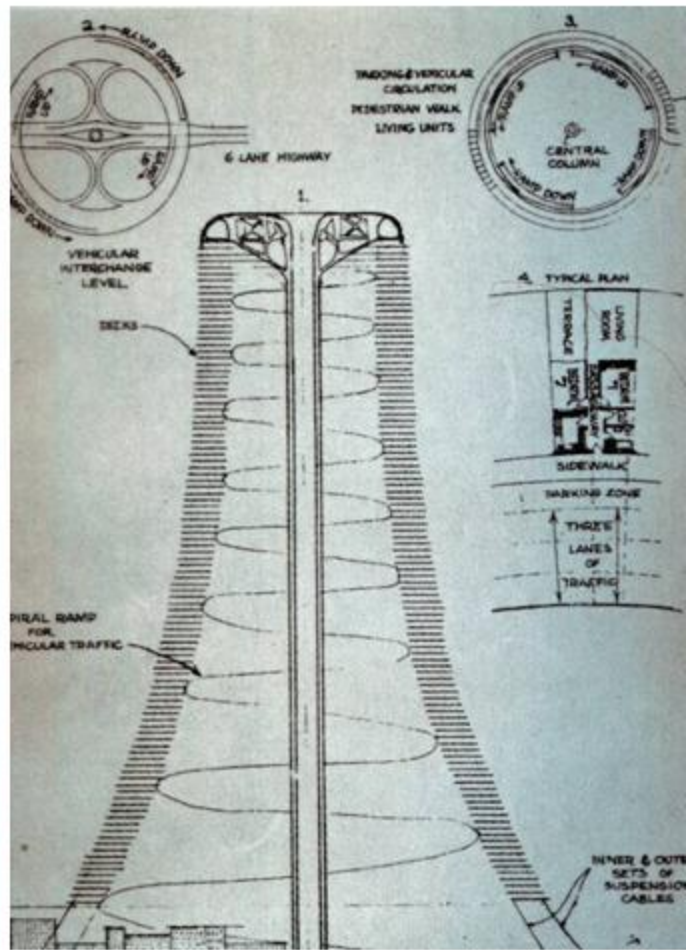




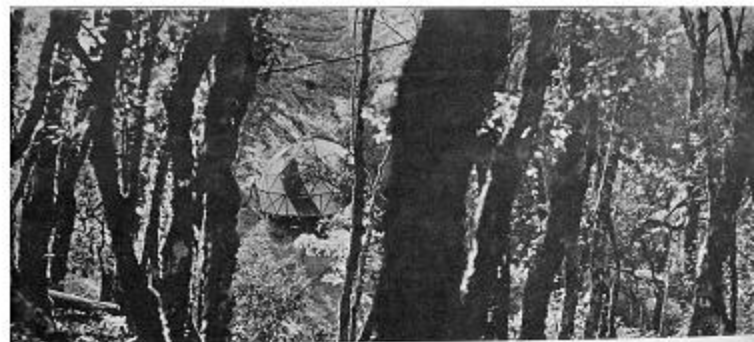












DOMEBOOK ONE



\$3



# Operating Manual for Spaceship Earth

R. Buckminster Fuller

A bold blueprint for survival that diagnoses  
the causes of the environmental crisis



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