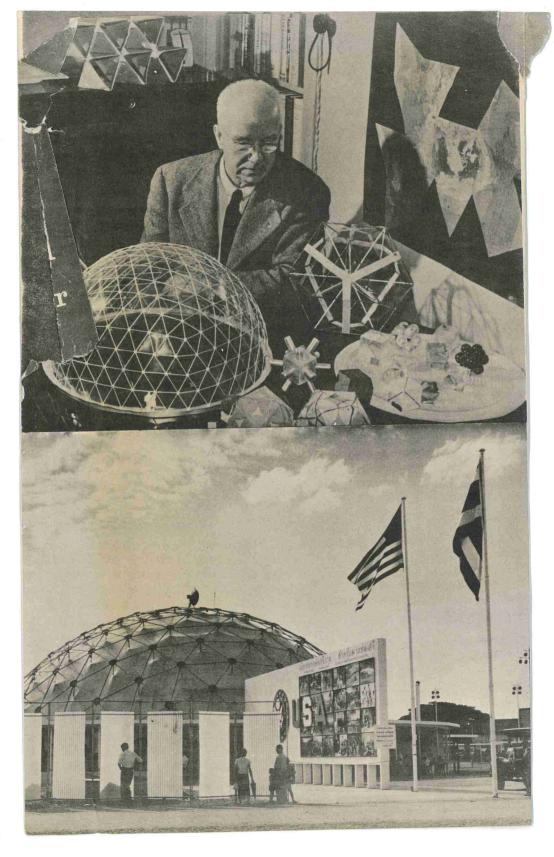
## Magical Geodesics

BOSTON ARCHITECTURAL CENTER

The wonderful world of Buckminster Fulle

An Exhibit February 1958

The Brooklyn Center LONG ISLAND UNIVERSITY



## MAGICAL GEODESICS: The Wonderful World of RBF

## By NATHAN RESNICK

Thirty years before sputnik, R. Buckminster Fuller was already talking in terms of the "world's energy needs" and advancing novel designs for space age living. From his drawing boards came rotating "dymaxion" dwellings lofted from masts; also three-wheeled "dymaxion" automobiles of great maneuverability.

Fuller's explosive new concepts in mathematics, called by him "energetic and synergetic geometry," led him to uncover still other secrets of nature relating to structure. The latest fruit of Fuller's "comprehensive design" is the "geodesic" dome.

A "geodesic" dome spans a given area with a web of relatively light and delicate material. Yet, because it is created with a concern for great circles (which is what "geodesic" means), it achieves enormously powerful advantages derived from the arrangement of the materials in triangles, tetrahedra, octahedra or other geometric patterns mathematically evolved.

All of Fuller's investigations follow the elemental precept that in a rational world rational action should be based on the principle of getting the most energy from the least effort. This "dymaxion" (he invented the word) approach should be fundamental, he feels, in every social, scientific and economic effort by man.

While most of the world was gaily entertained by the imaginative creations of Buckminster Fuller, they promptly—if not smugly—labeled them "impractical" and dubbed him "visionary"... That is, until they found them to be anything but that! Until they found it profitable to borrow an idea here or nibble away an idea there from a man who set forth to design for mankind and not for profit!

Now the world is just beginning to realize that geodesic domes have practical use. The U.S. Marine Corps is using them in place of tents. The U.S. Government Fairs at Poznan, Kabul and elsewhere have featured them as America's bold thrust at economical shelter for a brave new world. American industry is paying from \$3,000 to \$100,000 for single domes. Some perceptive folk are even now beginning to adjudge "dymaxion dwellings" as quite, quite practicable, too. And, as parking the "modern" car on city streets becomes just a wee bit more difficult, the dymaxion automobile may yet be rediscovered, sputnik notwithstanding.

