RICHARD BUCKMINSTER FULLER

DOMES AND *ARCHIVES*, 1960, 1965

COLLECTION
of the
Lyon Museum
of Contemporary Art

PRESS RELEASE

Richard BUCKMINSTER FULLER, *Bear Island Dome*, **1965**
Larch wood, Ø 9m
Biennale de Lyon 2011, Courtesy The Estate of R. Buckminster Fuller
Collection mac[LYON]
© photo Blaise Adilon

28.09 > 30.12.2012

Press visit

Wednesday, September 26 2012 (afternoon)

Preview

Thursday, September 27 2012 at 6.30 pm

Opening Hours

Wednesday - Sunday, from 11 am to 6 pm

Press Contacts

Muriel Jaby / Élise Vion-Delphin
T +33 (0)4 72 69 17 05 / 25
communication@mac-lyon.com

High resolution pictures (300 dpi) are available on request.

Lyon Museum of Contemporary Art
Cité internationale
81 quai Charles de Gaulle
69006 LYON
France

T +33 (0) 4 72 69 17 17
F +33 (0) 4 72 69 17 00

www.mac-lyon.com

mac
musée
d'art contemporain
de Lyon

RICHARD BUCKMINSTER FULLER

DOMES AND *ARCHIVES*, 1960, 1965

28.09 > 30.12.2012

musée d'art contemporain de Lyon

THE EXHIBITION

Initially created in 1960 and 1965, two domes by Richard Buckminster Fuller (reinstalled for the 11th Biennale de Lyon; *A Terrible Beauty is Born*) have found a final resting place in the collection of macLYON (donated from the Buckminster Fuller Estate).

The multi-skilled architect and designer Richard Buckminster Fuller is above all known for his forward-looking vision of world problems and the solutions he put forward to resolve these. In the 1930s, he developed theories inspired by an ongoing exchange with nature, based on his observations and research into balance or equilibrium. This work has often been qualified as utopian. However, some of his global predictions have been proved correct and a number of his solutions have been implemented. In many respects, the geodesic dome is his most famous invention. This dome derives its strength from the interconnected triangles closed into a spherical shape, an architectonic feature that Fuller saw reflected in the natural world. The two domes—now part of the museum's Collection—have been constructed using local materials in order to limit their environmental impact and are the perfect example of Fuller's work.

Richard BUCKMINSTER FULLER, *Bear Island Dome*, 1965
Larch wood, Ø 9m
Biennale de Lyon 2011, Courtesy The Estate of R. Buckminster Fuller
Collection macLYON
© photo Blaise Adilon

The two works given to the museum are variations on the **geodesic dome**, one of Richard Buckminster Fuller's major inventions. Used in the construction of civic buildings, protest camps, military radar stations, children's games or exhibitions, these structures are based upon geometric principles developed by Fuller inspired by his observations of nature. The inventor applies the concept of the geodesic line (the shortest line joining two points on a surface) to construct the most balanced, lightweight and resistant structure possible. His domes are a synthesis of all of the inventor's fundamental precepts, combining a reasoned and aesthetic use of technological progress with a holistic conception of man's relationship to nature. Such was the reputation of the inventor in the scientific domain that a family of carbon-based molecules with a geodesic structure was named after him: Buckminsterfullerenes, later changed to fullerenes. Many of these molecules have played a role in recent nanotechnology discoveries.

Richard BUCKMINSTER FULLER, *Great Circle Dome*, 1960
Chestnut and hazel wood, Ø 6m
Biennale de Lyon 2011, Courtesy The Estate of R. Buckminster Fuller
Collection macLYON
© photo Blaise Adilon

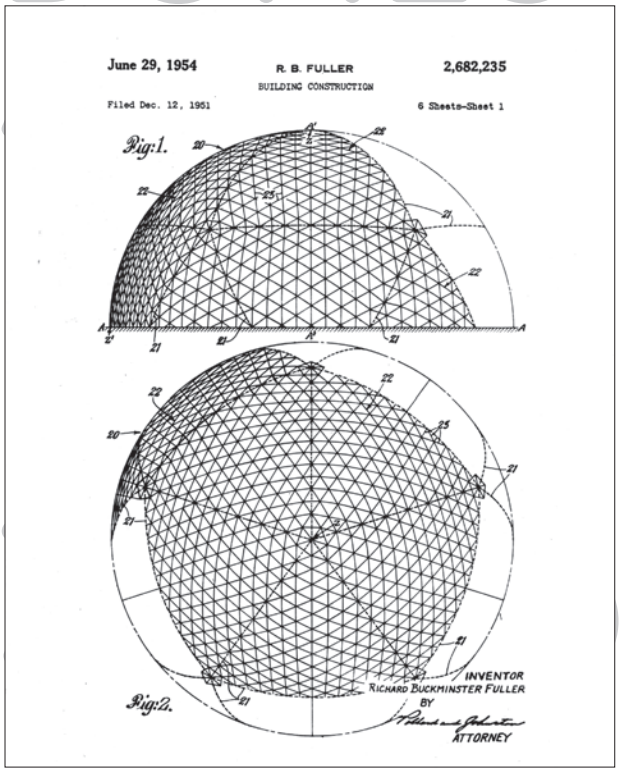
The geodesic dome was also used to house the American Pavilion at the 1967 World Fair in Montreal, where the famous Biosphere is now located.

The two domes were constructed according to the guidelines of Jaime Snyder (the grandson of the inventor and co-founder of the Buckminster Fuller Institute) and architect, Deacon Marvel. They represent the inventor's main principles as well as embodying Buckminster Fuller's theories; **the domes are at once an architectural project, a utopian form, a work of art, a sculpture and a structure**. The documents and archives of the Fuller estate allow his works to be inscribed into the realm of prediction, despite their utopian concepts: the artist's visionary projections can be seen as ideals of his integrative approach.

THE PHILOSOPHY OF BUCKMINSTER FULLER

In 1927, following the bankruptcy of his stepfather's construction business, Richard Buckminster Fuller decided to withdraw from the world in order to meditate on his relationship with and place in the universe. He came out of this reflection period with the conviction that an individual's initiatives can play a vital role in improving society and that he should devote himself to finding the solutions to mankind's problems.

Deciding to begin with fundamental issues such as food and housing, in 1927 he undertook detailed research about the production and distribution of food, which led him to predict from as early as 1959, the spreading of poverty on a worldwide scale by the year 2000.



Blueprint of the patent for a geodesic dome in 1954
The works of Buckminster Fuller,
Courtesy The Estate of R. Buckminster Fuller.

Richard Buckminster Fuller was born into a family of numerous activists committed to improving all aspects of society. He was influenced by the transcendental movement, of which his great aunt was an important figure. This quintessentially American, philosophical and cultural movement driven by Emerson in the 1830s, affirms the essential unity of the universe integrating man into the natural world. Intuition and experimentation are the privileged tools for the development of knowledge. Fuller's vision of nature was an all-encompassing one, at the heart of which man must find his place. But his confidence in technology led him to envisage it as a part of the solution to the world's problems. Notably, he viewed technology as a solution to balancing the consumption and production of resources and as a means of replacing fossil fuels that were destined to run out.

Whether he turned his attention to transportation, accommodation, education, or the responsible use of natural resources, Richard Buckminster Fuller reconstructed man's relationship with the physical universe. All his work bears witness to the same philosophy. Fuller extols a systemic or holistic vision of the world which he detailed in a large body of writings and conferences. His idea of "**doing more with less**" was based on a high level of awareness of the limits of the physical potential of the planet, as well as on a solid faith in man's commitment. For Richard Buckminster Fuller, awareness of the ephemeral didn't lead to discouragement: forever full of projects and author of numerous prototypes, the artist never ceased to put his inventiveness to the service of improving the processes of production, as well as man's living conditions on what he referred to as "Spaceship Earth".

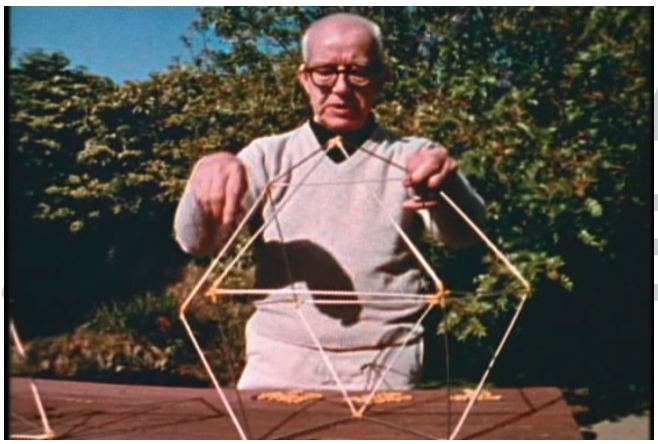
/ "Synergy is the only word in our language that means behavior of whole systems unpredicted by the separately observed behaviors of any of the system's separate parts or any subassembly of the system's parts. There is nothing in the chemistry of a toenail that predicts the existence of a human being." /

Richard Buckminster Fuller

Operating manual for spaceship earth, series edited by Jaime Snyder. Reprint. Lars Müller Publishers, Baden, 2010, p.80

BIOGRAPHY

Richard Buckminster Fuller (12 July 1895, Milton, Massachusetts – 1 July 1983, Los Angeles) is an American architect, designer, inventor, author and futurologist. He published over 30 books, inventing and popularizing such terms as "Spaceship Earth", "ephemeralization" and "synergetic". He also developed numerous inventions, principally in the field of architectural design, the most well-known being the geodesic dome.



Richard BUCKMINSTER FULLER
Extract from *The World of Buckminster Fuller*, 1971-2008, DVD, 80 min
Courtesy The Estate of R. Buckminster Fuller

Fuller was the grandnephew of American transcendentalist Margaret Fuller. He spent part of his youth on Bear Island in the Bay of Penobscot on the coast of Maine. He had difficulty with geometry and was incapable of representing a point marked in chalk on the blackboard as a mathematical point, or a clumsily-drawn line with an arrow at the end as a symbol of infinity. However, the applied optics work of German Walther Bauersfeld in the field of astronomy inspired Buckminster Fuller to design the geodesic dome.

Richard Buckminster Fuller often made objects using materials he brought home with him from his walks in the forest and even designed tools out of these. He also experimented with the design of a new propulsion apparatus for small boats. Years later, he realized that such experiences aroused in him not only an interest in design, but also a familiarity with and knowledge of materials that would later help him in the realization of his future projects.

Enrolled in Harvard in 1913, he dropped out to work as a mechanic in a flour mill. He developed his interest in technology during his time in the US Navy at the end of the First World War, when he invented a winch that was strong enough to retrieve planes that had crashed into the sea.

In 1926, his engineering skills were highlighted when he patented a new method of producing reinforced concrete elements used in building. From 1927 onwards, he put an emphasis on developing the use of technology in improving housing. He created "Dymaxion House", a low-cost house, using factory-made material that was easily-transportable. The term "Dymaxion" can be applied to a number of other projects in order to summarize Richard Buckminster Fuller's radical aim to "do more with less". In 1946, he contributed to a globalized view of humanity's problems using the "Dymaxion Map", a flat map without distortion, representing all of the different continents and countries, in such a way that they could all equally be considered the centre of the planisphere.

After 1947, the invention of the geodesic dome was the high point in his career as an architect. A lightweight structure, with a very favourable materials-efficiency ratio, easily assembled, the geodesic dome enables a large open space to be covered without prohibitive domestic charges. Balancing the forces of compression and traction at work within any building, it is also capable of withstanding even the most extreme climatic conditions. For this reason, the dome caught the attention of the American Army who became one of Richard Buckminster Fuller's principal clients. Patented in 1954, the geodesic dome had been previously designed and constructed for the Ford Motor Company in Dearborn, Michigan in 1953.

Throughout the 1950s, Buckminster Fuller, inspired by his observations of nature, developed his concept of "Spaceship Earth" in order to refer to a globalizing and systemic design of the functioning of the planet and the human race that inhabits it.
At the end of the 1960s, Richard Buckminster Fuller was very involved in the creation of World Game®, a large scale simulation accompanied by experimentation workshops that he designed on the basis of a "Dymaxion Map" in order to help humanity better understand and use the earth's resources.

/ "Mr. Fuller, fortunately, is not an architect. Still more fortunately, he is not an engineer. But he began to philosophize on housing, on the proper kind of a machine to adequately serve for living purposes without any preconceived notions either of architectural forms or habits or of customs or practices which have come down through the centuries." /

Harvey W. Corbett president of the New York Architectural League introducing Richard Buckminster Fuller to his colleagues, in the summer of 1929

VISITOR INFORMATION

Exhibition

Curator: Thierry Raspail, Director of mac[LYON]
Head of project: Hervé Percebois
Exhibition assistant: Olivia Gaultier
Registrar: Gaëlle Philippe

Press contacts

Muriel Jaby / Élise Vion-Delphin
T +33 (0)4 72 69 17 05 / 25
communication@mac-lyon.com

Address

Musée d'art contemporain de Lyon
Cité internationale
81 quai Charles de Gaulle
69006 LYON
France

T +33 (0)4 72 69 17 17
F +33 (0)4 72 69 17 00
info@mac-lyon.com

www.mac-lyon.com

Opening hours

Wednesday - Sunday, from 11 am to 6pm

Access

By car:
- along "Quai Charles de Gaulle", follow "Cité Internationale", carparks

By bus, stop Musée d'art contemporain:
- Line C1, Gare Part-Dieu/Cuire
- Line C4 Jean Macé/Cité internationale change with metro Foch line A or metro Saxe-Gambetta lines B et D
- Line C5, Bellecour -Terreaux/Rillieux-Vancia

By bike:
- Several Velo'V stations are located around the Museum.

The two domes, installed outside the museum, can be viewed at any time.

The documents and archives on display in the entrance hall of mac[LYON] are available (free of charge) during the museum's opening hours (Wednesday to Sunday from 11am to 6pm).

+ COMPLETE PROGRAM OF GUIDED TOURS: FOR ADULTS, IN FAMILY, IN ONE HOUR...

RICHARD BUCKMINSTER FULLER
DOMES AND ARCHIVES
28.09 > 30.12.2012

/WE HAVE DISCOVERED THAT WE HAVE THE INHERENT CAPABILITY AND INFERENTIALLY THE RESPONSIBILITY OF MAKING HUMANITY COMPREHENSIVELY AND SUSTAINABLY SUCCESSFUL./

—R. BUCKMINSTER FULLER

Operating manual for spaceship earth, series edited by Jaime Snyder. Reprint. Lars Müller Publishers, Baden, 2010, p.129

Simultaneously:

CAGE'S SATIE: COMPOSITION FOR MUSEUM
LA MONTE YOUNG & MARIAN ZAZEELA
GEORGE BRECHT

mac
musée d'art contemporain de Lyon