

BRIEF TWO : BURN



You have now rigorously explored the work of Buckminster Fuller and Frei Otto both digitally with the use of Parametric tools and through extensive model making. You have extracted and analyzed two of their experiments and have developed your own interpretation of these systems.

Until our Unit Trip complete your brief 01: LEARN research and portfolio with the feedback you got from the Interim Crit. This is your last chance to finish your models and documentation and to enrich your experiments with more digital knowledge. Study and use structural analysis tools such as Karamba, GSA (Geometry Gym or Ansys Workbench and environmental simulation tool such as Geco, Winrair or Ansys CFD. For students looking into growth start using scripts with Hoopsnake, VB.net and Python for Grasshopper or Processing.

The catalogue of design languages and experiments explored, and the digital techniques learnt, should form the basis of a small scale temporary proposal in the Arizona desert, through which context and environmental parameters will be further explored. It's time to start designing :)

You will explore the social phenomena that is Burning Man festival, a week long event held in the Nevada desert where fifty thousand participants gather to create a temporary city, dedicated to community, art, self-expression, and self-reliance, departing one week later, and leaving no trace.

Radical Inclusion. Anyone may be a part of Burning Man. We welcome and respect the stranger. No prerequisites exist for participation in our community.

Gifting. Burning Man is devoted to acts of gift giving. The value of a gift is unconditional. Gifting does not contemplate a return or an exchange for something of equal value.

Decommodification. In order to preserve the spirit of gifting, our community seeks to create social environments that are unmediated by commercial sponsorships, transactions, or advertising. We stand ready to protect our culture from such exploitation. We resist the substitution of consumption for participatory experience.

Radical Self-reliance. Burning Man encourages the individual to discover, exercise and rely on his or her inner resources.

Radical Self-expression. Radical self-expression arises from the unique gifts of the individual. No one other than the individual or a collaborating group can determine its content. It is offered as a gift to others. In this spirit, the giver should respect the rights and liberties of the recipient.

Communal Effort. Our community values creative cooperation and collaboration. We strive to produce, promote and protect social networks, public spaces, works of art, and methods of communication that support such interaction.

Civic Responsibility. We value civil society. Community members who organize events should assume responsibility for public welfare and endeavor to communicate civic responsibilities to participants. They must also assume responsibility for conducting events in accordance with local, state and federal laws.

Leaving No Trace. Our community respects the environment. We are committed to leaving no physical trace of our activities wherever we gather. We clean up after ourselves and endeavor, whenever possible, to leave such places in a better state than when we found them.

Participation. Our community is committed to a radically participatory ethic. We believe that transformative change, whether in the individual or in society, can occur only through the medium of deeply personal participation. We achieve being through doing. Everyone is invited to work. Everyone is invited to play. We make the world real through actions that open the heart.

Immediacy. Immediate experience is, in many ways, the most important touchstone of value in our culture. We seek to overcome barriers that stand between us and a recognition of our inner selves, the reality of those around us, participation in society, and contact with a natural world exceeding human powers. No idea can substitute for this experience.

This small scale project should focus on architectural qualities, as much as numerical quantities, as well as providing a hugely interesting social and cultural backdrop, and should allow explorations of self sufficiency, economies of material, urban development and deployable temporary structures. Structural notions of temporality and economy of material should be explored as well as rapid deployment and suitability to the environment.

As a social experiment, the creation of a temporary city of 50,000 people with a distinct social agenda, such as cooperation, and a place of zero fiscal transactions, where everything is based on trades alone, as well as having to bring everything you need with you, water, food et al, introduces the concept of closed loop systems, autonomous living, radical self reliance in extreme environments.

Proposals should each have an embedded program and be closely linked to the extreme environmental conditions on site.

Programme

Choose a programme which relates to your Brief 1 research and allows for closed loops systems requiring very little external input in terms of materials, energy and financing. The Programme and structure can change throughout the event and your building could be interactive, your portfolio and models should clearly describe its evolution. Proposals may be event architecture, sitting somewhere in between architecture and sculpture. The harsh environment and lack of resources should reflect in programmatic choices.

Fabrication

Develop a low cost fabrication logic which can be easily assembled and disassembled and takes advantage of the existing context. The system should be digitally calibrated through the use of environmental and structural analysis. Understand material systems chosen, think about how your proposal is transported, how it is unpacked etc.

Aims

Knowledge of social experiments / contextual program.

Micro economics / trade systems / community interaction / symbiosis

Temporality.

Pop up architecture / programs / rapid deployment / zero footings / grown buildings

Autonomous buildings / Radical self reliance.

Water / electricity / food

Designing in extreme environmental systems.

Sun / sand storms / arid environments.

Structural logic.

Economy of material / temporal innovative construction techniques / assembly logic

Suggested reading

Burning man:

Tribes of Burning Man, Steven Jones

Afterburn, Lee Gilmore

Enabling creative Chaos, Katherine Chen

This is burning man, Brian Doherty

Buckminster Fuller.

4d Timelock: (Privately published 1928, Chicago, Illinois; 200 copies), Biotechnic Press, Lama Foundation, Albuquerque, New Mexico (1,000 copy edition). c1929, 1970. c1972, paperback.

Nine Chains To The Moon: J. B. Lippincott Company, Philadelphia, New York, London, Toronto c 1938, hardback; republished Doubleday & Company, Inc., Garden City, New York. c1963, paperback.

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Untitled Epic Poem On The History Of Industrialization: Simon & Schuster, New York. c1962, hardback, paperback.

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No More Secondhand God: Doubleday & Company, Inc., Garden City, New York. c1963, paperback.

World Design Decade Documents: Seven publications from the World Design Science Decade 1965-1975 series. Doc. 1: "Inventory of World Resources, Human Trends and Needs," by R.B. Fuller; Doc. 2: "The Design Initiative," by R.B. Fuller; Doc. 3: "Comprehensive Thinking," by R.B. Fuller; Doc.4:: "The Ten Year Program," by J. McHale; Doc. 5: "Comprehensive Design Strategy," by R.B. Fuller (published in UTOPIA OR OBLIVION); Doc. 6: "The Ecological Context," by J. McHale; Doc. I: "The World Game," by R.B. Fuller.

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Utopia Or Oblivion: Bantam Books, New York. c1969, paperback.

The Buckminster Fuller Reader: Edited by James Meller. Jonathan Cape, UK., London. c1970, hardback. Penguin Books, Ltd., Middlesex, England. c1970, paperback. (available only in the UK).

I Seem To Be A Verb: With Jerome Agel and Quentin Fiore. Bantam Books, New York. c1970, paperback.

Intuition: Anchor Press, Doubleday & Company, Inc., Garden City, New York., paperback; Impact Publishers, San Luis Obispo, California, paperback.

Buckminster Fuller To Children Of Earth: Text by Fuller, compiled and photographed by Cam Smith. Doubleday & Company, Inc., Garden City, New York. c1972, paperback.

Earth, Inc.: Anchor Press, Doubleday & Company, Inc., Garden City, New York. c1973, paperback.

Synergetics: Explorations In The Geometry Of Thinking: In collaboration with E.J. Applewhite. Introduction and contribution by Arthur L. Loeb. Macmillan Publishing Company, Inc., New York. c1975, hardback; paperback.

And It Came To Pass—Not To Stay: Macmillan Publishing Company, Inc., New York. c1976, hardback.

Synergetics 2: Further Explorations In The Geometry Of Thinking: In collaboration with E.J. Applewhite. Macmillan Publishing Company, Inc., New York City, New York, c1979, hardback; paperback.

Frei Otto.

IL 1 Minimalnet, *Institute for Lightweight Structures*, University of Stuttgart, 1969

IL 2 City in the Arctis, *Institute for Lightweight Structures*, University of Stuttgart, 1971

IL 3 Biology and building 1, *Institute for Lightweight Structures*, University of Stuttgart, 1971

IL 4 Biology and building 2, *Institute for Lightweight Structures*, University of Stuttgart, 1971

IL 5 Convertible roofs, *Institute for Lightweight Structures*, University of Stuttgart, 1972

IL 6 Biology and building 3, *Institute for Lightweight Structures*, University of Stuttgart, 1973

IL 7 Shadow in the desert, *Institute for Lightweight Structures*, University of Stuttgart, 1974

IL 8 Nets in nature and technics, *Institute for Lightweight Structures*, University of Stuttgart, 1975

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IL 10 Grid shells, *Institute for Lightweight Structures*, University of Stuttgart, 1974

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IL 15 Air Hall Handbook, *Institute for Lightweight Structures*, University of Stuttgart, 1983

IL 16 Tents, *Institute for Lightweight Structures*, University of Stuttgart, 1976

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- IL 23 Form-force-mass 3 Construction**, *Institute for Lightweight Structures*, University of Stuttgart, 1992
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- IL 35 Pneu and bone**, *Institute for Lightweight Structures*, University of Stuttgart, 1984
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- IL 37 Ancient architects**, *Institute for Lightweight Structures*, University of Stuttgart, 1994
- IL 38 Diatomeen 2 Shells in nature and technics III**, *Institute for Lightweight Structures*, University of Stuttgart, 1994
- IL 39 Non-planned settlements**, *Institute for Lightweight Structures*, University of Stuttgart, 1992
- IL 41 Building with intelligence**, *Institute for Lightweight Structures*, University of Stuttgart, 1995