

An Annotated Bibliography of Books by R. Buckminster Fuller

Nine Chains to the Moon. Philadelphia: Lippincott, 1938. The original printing was 5000. Republished in paperback by Southern Illinois University Press in 1963. Republished in paperback by Doubleday Anchor in 1971.

The title derives from a statistical cartoon: "If . . . all of the people of the world were to stand upon one another's shoulders, they would make nine complete chains between the earth and the moon. If it is not so far to the moon, then it is not so far to the limits—whatever, whenever or wherever they may be." This is Fuller's first book and one of the few he wrote as a book and not as a composite of articles, transcripts, or letters. Many of his original and lifelong metaphors and strategies were introduced in this volume. A projected final chapter, "From Bible to Bible to Babble," was rejected by the publishers because its concrete poetry format was deemed too radical for inclusion in a trade book. The end papers anticipate the Dymaxion airocean world map. There are five appendices documenting Fuller's virtuosity in large patterns: (1) on the chronology of scientific events from the ancient world to 1936; (2) coincidence of U.S. population centers with isotherm of 32° F; (3) U.S. to become world's greatest exporter; (4) world copper production and consumption; and (5) growth of U.S. industry correlated with inventions.

Untitled Epic Poem on the History of Industrialization, with an introduction by Russell Davenport. Published in two separate paperback original edi-

tions from the same plates. Both now out-of-print.

(1) Highlands, North Carolina: Jonathan Williams, publisher, the Nantahala Foundation (Jargon Series 44), 1962 (\$3.50).

(2) New York: Simon and Schuster, 1962 (\$1.95).

Jonathan Williams and Fuller became friends at Black Mountain College in North Carolina in the 1930s. Williams was delighted when in 1962 Fuller offered him a grant to help bring out this long poem in the Jargon Press series. Williams knew nothing about the concurrent Simon and Schuster edition until some years later when he came across a copy in a bookstore. Given Fuller's casual approach to the publishing process this kind of funny coincidence was not unusual.

Russell Davenport was an editor at *Fortune* magazine during the period from 1938 to 1940 when Fuller was a consultant. (Davenport was later national campaign manager for Wendell Willkie in the Republican campaign of 1940.) Almost buried on the back of the folded inside flap copy of the Jargon edition is Fuller's statement that he and Davenport closely collaborated on the *Industrialization* piece: "About 10 percent of the wording was Davenport's" and ". . . neither of us ever hoped it would find a publisher." In the introduction Davenport describes Fuller as "not a poet in words" but "a poet in science," and he had once described Fuller in *Fortune* as "the first poet of industrialization."

Hugh Kenner has characterized this anthem to American industry as "our only readable didactic poem."

Education Automation, Freeing the Scholar to Return to His Studies. Carbondale: Southern Illinois University Press, 1962. Hardcover (\$2.00). Republished in paperback by Doubleday Anchor (A0-30), 1971. Republished in London in hardcover by Jonathan Cape, 1973.

A transcript of Fuller's discourse to a university planning committee.

No More Secondhand God, and Other Writings. Carbondale: Southern Illinois University Press, 1963. Hardcover (\$4.00). Republished by S.I.U. press in the Arcturus paperback series in 1967 (\$2.45). Republished by Doubleday Anchor (A0-33) in 1971 (\$2.95).

Vernon Sternberg of the S.I.U. Press was responsible for bringing out the first edition of this collection of occasional pieces. In addition to the title piece, written in 1940, it includes other blank verses: "Machine Tools," 1940; "The Historical Attempt by Man to Convert His Evolution from a Subjective to an Objective Process," 1948; "Universal Requirements of a Dwelling Advantage," 1917-62; "The Fuller Research Foundation," 1946-51; "A Comprehensive Anticipatory Design Science," 1956; and two prose essays with geometrical diagrams and tables, "Introduction to Omnidirectional Halo," 1959, and "Omnidirectional Halo," 1960.

I once asked Fuller whether *No More Secondhand God* meant secondhand as in clothes or second hand as in watch? He seemed bemused by the question and answered with a casualness I found suspect—"Now that you mention it," he said, "I suppose both."

Ideas and Integrities: A Spontaneous Biographical Disclosure. Englewood Cliffs, N.J.: Prentice-Hall, 1963. Republished in paperback by Collier Books, 1969.

A major compendium of occasional writings with photographs and an index. I was able to establish dates for most of the chapters as follows: (1) "Influences on My Work," January 1955; (2) "Later Development of My Work," June 1958; (3) "Margaret Fuller's Prophecy," November 1932; (4) "The Comprehensive Man," January 1959; (5) "I Figure," December 1942; (6) "Fluid Geography," April 1944; (7) "The

Cumulative Nature of Wealth," from *Earth, Inc.*, 1947; (8) "Domes—Their Long History and Recent Developments," first published 1963; (9) "Comprehensive Designing," 1 June 1949; (10) "Design for Survival—Plus," January 1949; (11) "Preview of Building," 1 April 1949; (12) "Total Thinking," May 1949; (13) "Prime Design," May 1960; (14) "The Architect as World Planner," July 1961; (15) "World Planning," September 1963; (16) "The Long Distance Trending in Pre-Assembly," no date established; (17) "The Future," no date established; (18) "Continuous Man," 1963; (19) "The Designers and the Politicians," 1962.

The essay "Total Thinking" in this volume is a dense rhapsody ranking with "Omnidirectional Halo" (in *No More Secondhand God*) as one of the two most concentrated expositions of the major psychological and philosophical themes in Fuller's work, including man's conscious participation in his own evolution and the concentric organization of individual and group observations of experience.

"Total Thinking" and "Omnidirectional Halo" depart from the common pattern of transcripts of extemporaneous oral discourse; they show the kind of writing that Fuller is capable of when he is alone with his thoughts and putting it all down in longhand with no one else's assistance whatever.

Ideas and Integrities was organized and edited by Robert W. Marks who also contributed an introduction and participated in the initial royalties.

Operating Manual for Spaceship Earth. Carbondale: Southern Illinois University Press, 1969. Hardcover (\$4.25). Republished by Simon and Schuster as a Clarion paperback, 1970 (\$1.95). Republished as a Pocket Books paperback, November 1970 (\$1.25). Republished as an E. P. Dutton paperback, 1978 (\$2.95).

Of all of Fuller's books this is the simplest introduction to his thinking and the most accessible for the general reader. It is a transcript of a lecture that Fuller gave to a meeting of the American Institute of Planners in Washington, D.C., in October 1967. A member of the institute, William R. Ewald, Jr., and his wife edited the tape from a faulty transcript and prepared it for initial publication in *Environment and Change*, issued by the Indiana University Press.

Utopia or Oblivion: The Prospects for Humanity. New York: Bantam Books. Paperback original, December 1969. Republished in hardcover in London by Allen Lane, The Penguin Press, 1970.

A substantial compendium of transcripts of lectures during the period from 1964 through 1967. The individual transcripts were edited and this anthology was organized by Robert W. Marks who was science editor of Bantam Books at the time. Marks also contributed a signed introduction.

The Buckminster Fuller Reader, edited and introduced by James Meller. London: Jonathan Cape, 1970.

This anthology—available only in England—recapitulates all of the essays in *Ideas and Integrities* except for the three chapters 9, 14 and 17. It also contains "Universal Requirements of a Dwelling Advantage" from *No More Secondhand God*, and two pieces not elsewhere published in book form: "Buckminster Fuller Chronofile" and "Designing a New Industry."

Intuition. Garden City: Doubleday, 1972. Hardcover (\$5.95). Revised edition in Anchor paperback (A0-58) (\$2.95).

In 1970 and 1971 Fuller was concurrently composing a poem suggested by his new Morgan sloop "Intuition" and rewriting, with my collaboration, the projected first chapter of *Synergetics* called "Brain and Mind." Fuller agreed with my suggestion that this first chapter had an integrity of its own separate from the rest of the *Synergetics* manuscript, and he felt that both of these works had an urgency that argued for their publication at the earliest possible date. With the help of Bill Whitehead, our editor at Doubleday, they were combined in *Intuition*, the first of his two books of blank verse.

Earth, Inc. Garden City: Anchor Press/Doubleday, 1973. Paperback original (A0-62).

A collection of occasional polemical pieces on the continuing theme of making the world work.

Synergetics: Explorations in the Geometry of Thinking, in collaboration with E. J. Applewhite. Preface and contribution by Arthur L. Loeb. New York: Macmillan, 1975. Third printing, 1978. Macmillan paperback edition, 1982.

And It Came to Pass—Not to Stay. New York: Macmillan, 1976. Hardcover (\$6.95).

Seven compositions in blank verse form. The best known of these poems is not the title work but the often-cited "How Little I Know" and "What I Am Trying to Do."

Tetrascroll: Goldilocks and the Three Bears. Published jointly by Universal Limited Art Editions (ULAE) and St. Martin's Press, New York, 1977.

A series of twenty-one original triangular lithographs (with narrative captions) which may be displayed in a helical scroll of linked tetrahedra. They were executed during the years 1975 and 1976 under the guiding light of Tatyana Grosman (to whom Fuller had been introduced by Edwin Schlossberg) at her ULAE print workshop in West Islip, Long Island. In something of a publishing innovation this trade book was brought out concurrently with a limited edition of the signed original lithographs. Michael Denny was the editorial impresario at St. Martin's and Ronald Feldman Fine Arts handled the exhibition of the lithographs.

Fuller composed the *Tetrascroll* between the publication of *Synergetics* in 1975 and *Synergetics 2* in 1979. He had been frustrated by the rigid structure of the *Synergetics* books which, despite certain advantages, he felt robbed the work of spontaneity and narrative force. To compensate for this Fuller worked feverishly on the *Tetrascroll* as a free-form obbligato to the *Synergetics* books. He explained to me at the time, "The empirical, the scientific way to present the argument of *Synergetics* is the way I am doing it in *Goldilocks*."

Synergetics 2: Further Explorations in the Geometry of Thinking, in collaboration with E. J. Applewhite. New York: Macmillan, 1979. Macmillan paperback edition, 1983.

Synergetics 2 contains a ninety-page index to both volumes. They comprise a single

work with the sequence of paragraphs numbered to dovetail in a single integrated narrative. They should eventually be published as a single work eliminating the artificial division into two volumes resulting from the chronology of their composition.

Critical Path, with Kiyoshi Kuromiya, adjuvant. New York: St. Martin's Press, 1981. In both paperback and hardcover (boxed).

A mature summation in one volume of all of Fuller's lifelong design artifacts and planning strategies. It has an introduction on the "Twilight of the World's Power Structures" and presents a systematic critical-path analysis of the crisis of humanity in this century—his most urgently polemical prescription for the geosocial revolution. As the book went to press he told me fervently that *Critical Path* was by far his "best and most important book because it has everything you wouldn't let me put in *Synergetics*."

Grunch of Giants. New York: St. Martin's Press, 1983. Hardcover (\$8.95).

Grunch stands for "Gross Universal Cash Heist," a graphic turn of phrase intended to excite and admonish. This is a hortatory sequel to *Critical Path* and its program for individual dedication to strategies for making the world work. Kiyoshi Kuromiya's role in helping Fuller prepare this book for publication was equal to if not greater than his contribution as adjuvant—Fuller's term—in *Critical Path*.

Inventions: The Patented Works of R. Buckminster Fuller. New York: St. Martin's Press, 1983.

An oversize volume presenting photographs and facsimile drawings of twenty-eight of Fuller's patented inventions from 1927 to 1983. It contains an autobiographical introduction, "Guinea Pig B"—"B" is for "Bucky," who always said "I'm the only guinea pig I have." An appendix recapitulates Fuller's honorary doctorate citations with notes by St. Martin's editor Michael Denny whose close collaboration with Fuller included review of the final galleys, which was not completed until after Fuller's death. 356 pages with 75 photographs and more than 400 drawings.

The Artifacts of R. Buckminster Fuller: A Comprehensive Collection of His Designs and Drawings in Four Volumes. Edited with descriptions by James Ward.

Volume One. *The Dymaxion Experiment, 1926–1943*

Volume Two. *Dymaxion Development, 1927–1946*

Volume Three. *The Geodesic Revolution, Part 1, 1947–1959*

Volume Four. *The Geodesic Revolution, Part 2, 1960–1983*

New York: Garland Publishing, Inc. 1985.

Engineering and architectural drawings from the Fuller archives. In addition to the editor's introduction, Volume One contains a chronology of Fuller's career and a bibliography. A profile of Fuller written by Calvin Tomkins, "In the Outlaw Area," which originally appeared in the *New Yorker* (8 January 1966), is reprinted here in full at the suggestion of Mr. Fuller's daughter Allegra Snyder and through the courtesy of Mr. Tomkins.

A Special Note:

The Dymaxion World of Buckminster Fuller, by Robert W. Marks. New York: Reinhold Publishing Corp., 1960. Republished by Southern Illinois University Press, 1969. Republished by Anchor Press/Doubleday in paperback (A0-35), 1973.

This book by Robert W. Marks is a special case as strictly speaking it doesn't belong in a bibliography of books by R. Buckminster Fuller since it is a book about him. But it is almost a book by Fuller, for Marks says in a prefatory note that there are many quotations and paraphrases based on personal conversations with Fuller, and besides, when the book was in galleys, Fuller intervened and rewrote and amplified many of the captions.

The Dymaxion World of Buckminster Fuller is copiously illustrated. It was for many years the only available introduction to all aspects of Fuller's work and it remains the most comprehensive and sympathetic one.

It should be noted for the record that the S.I.U. Press edition of 1969 is not a "second printing" as indicated in the front matter, but actually a second publication after the Reinhold edition had gone out-

of-print. To make the S.I.U. Press re-publication possible, Marks was reluctantly persuaded to relinquish his rights in the book to Fuller. To confound matters further, the revised Anchor Press paperback edition of 1973 was brought out without consultation with Marks and (though throughout the text it consistently refers to Fuller in the third person) it lists Fuller first on cover and title page as co-author.

Over the years a number of other books have appeared that give Fuller's name as co-author. I have omitted them from this listing as his connection with such works was invariably too casual or too remote to implicate him in the result.

When Fuller died he left behind for us a virtually completed manuscript for his posthumous work *Cosmography*, and when that eventually appears in print it will become the nineteenth and final book in the Fuller canon.