FUNCTION

The WHOLE EARTH CATALOG functions as an evaluation and access device. With it, the user should know better what is worth getting and where and how to do the getting.

An item is listed in the CATALOG if it is deemed:
1) Useful as a tool,
2) Relevant to independent education,
3) High quality or low cost,
4) Easily available by mail.

CATALOG listings are continually revised according to the experience and suggestions of CATALOG users and staff.

PURPOSE

We are as gods and might as well get good at it. So far, remotely done power and glory—via government, big business, formal education, church—has succeeded to the point where gross defects obscure actual gains. In response to this dilemma and to these gains a realm of intimate, personal power is developing—power of the individual to conduct his own education, find his own inspiration, shape his own environment, and share his adventure with whoever is interested. Tools that aid this process are sought and promoted by the WHOLE EARTH CATALOG.

RETAIJING SUBSCRIBERS

Mark Albert
John Doss
Edmund Scientific Company
Henry Jacobs & Associates
Edward Rosenfeld
St. George Bryan
Gwefrey Gates
Peter Cornell
San Francisco, California
San Francisco, California
Barrington, New Jersey
Sausalito, California
New Yark, New York
Maui, Hawaii
New York, New York
Berkeley, California

Second Printing August 1969
© 1969 Portola Institute, Inc.
All rights reserved under Pan-American and International copyright conventions.
# CONTENTS

## Understanding Whole Systems
- Buckminster Fuller
- The Population Bomb
- Farnese 1970
- The Times Atlas of the World
- Population, Evolution, and Birth Control
- Man's Domain
- Cosmic View
- Apollo 8
- Earth Photographs
- Full Earth
- Exploring Space With a Camera
- The World From Above
- Surface Anatomy
- Geology Illustrated
- Sensitive Chaos
- Human Use of the Earth
- The Sciences of the Artificial
- Synthesis of Form
- On Growth and Form
- The Ghost in the Machine
- The Year 2000
- The Futurist
- Doer Publications
- Good News
- The Shell
- A Year From Monday
- Psychological Reflections
- The Human Use of Human Beings
- Tantra Art
- Purposive Systems
- Aspects of Form
- General Systems Yearbook
- Process and Pattern in Evolution
- Man Adapting
- The Phenomenon of Man

## Shelter and Land Use
- Space Grid Structures
- The Dymaxion World of Buckminster Fuller
- Fuller Sun Dome
- Tensile Structures, Volume One
- Tensile Structures, Volume Two
- Architecture Without Architects
- Archigram
- Architectural Design
- The Japanese House
- The Owner-Built Home
- Tour Engineer's House
- House Carpentry Simplified
- Simplified Carpentry Estimating
- Plumbing and Wiring Books
- Audel Guides
- Glue-nailed Roof Trusses
- Village Technology
- Adobe Construction Methods
- The Wilderness Cabin
- The Indian Tipi
- Tipi
- Aladdin Kerosene Lamps
- Man's Role in Changing the Face of the Earth
- Two Mushroom Books
- Instant Weather Forecasting
- The Elements Rage
- Climates of the States
- Organic Gardening & Farming Magazine
- Encyclopedia of Organic Gardening
- Organic Gardening
- Farms of Forty Centuries
- How to Have a Green Thumb
- Without an Aching Back
- Soil Test Kit
- Seeds and Trees by Mail
- Agricultural Publications

## Industry and Craft
- The Way Things Work
- Introduction to Engineering Design
- Direct Use of the Sun's Energy
- Structure, Form and Movement
- New Scientist
- Scientific American
- Product Engineering
- Tech Notes
- Designcourse
- Popular Science
- Popular Mechanics Projects
- Clearinghouse
- Science and Civilization in China, Volume IV, Part 2
- Mechanics
- The Biology of Work
- Handbook of Chemistry and Physics
- Human Engineering Guide
- New Science of Strong Materials
- Van Waters & Rogers
- Woodcraft Supply
- How to Build Your Own Furniture
- Thomas Register of American Manufacturers
- Plastics
- Silver Catalog
- Surplus Center Equipment Catalogs
- Whittling & Woodcarving
- High Grade Tool Chests
- Snap-on Tools
- Brookstone Tools
- Jensen Tools
- Miners Catalog
- Mendocino
- Mecano
- Machinery's Handbook
- Model & Allied Publications
- Allen's Tool & Supply
- Solider Kick Wheel
- Buckskin
- Adhesive Products
- A Sculptor's Manual
- Creative Glass Blowing
- Classic Guitar Construction
- Creative Photo Micrography
- Knots
- Zone System Manual
- Macramé, the Art of Creative Knotting
- The Complete Book of Progressive Knitting
- Leather Loom
- Pioneer Loom
- The Techniques of Rug Weaving

## Communications
- Understanding Media
- Cybernetics
- Cybernetic Serendipity
- A Model of the Brain
- 64-5 Mathematics
- Data Study
- McBee Keysort System
- Design for a Brain
- Information
- 9100 A Calculator
- Thinking With a Pencil
- Maps and Diagrams
- Hornung's Handbook of Designs and Devices
- Eye and Brain
- GZA Magazine
- Behrend's Book
- American Cinematographer
- American Cinematographer Manual
- The Technique of Documentary Film Production
- The Technique of Television Production
- Film Making in Schools
- Moog Synthesizer
- Music by Computers
- Tape Recorders
- Colour Guitar
- A Karol Records
- Allied Radio
- Heathkit
- Tektronix Catalog
- The Radio Amateur's Handbook
- Education Automation
- American Booksellers Association
- Subject Guide to Books in Print
- Part Prints
- Bookkeeping
- Printing as a Hobby

## Community
- Village Planning in the Primitive World
- Kibbuts: Venture in Utopia
- Dune
- The Politics of the Barrios
- The Venetians
- Communities
- The Office: a facility based on change
- Synectics
- The Modern Utopian
- The Realist
- Urban Revolution
- Booffers
- Person to Person
- Sauna
- Massage
- Dr. Dear Hippocrates
- The Merck Manual
- Emergency Medical Guide
- Large Medical Encyclopedia
- Champagne Living on a Beer Budget
- Unity Buying Service
- Sears/Wards mail order
- The Armchair Shopper's Guide
- Consumer Reports
- Lee Electric Flour Mills
- Ball Blue Book
- Truck Repair Manual
- John Holt's List
- Fieldbook for Boys and Men
- Tools for Progress
- Government Publications
- Government Printing Office
- Federal Domestic Assistance
- Surplus Defense Supply

## Nomadics
- The Complete Walker
- Trout Fishing in America
- Cameron and Woodcocks
- Light Weight Camping Equipment
- How to Make it
- Kalibab Boots
- L. L. Bean
- Recreational Equipment

## Learning
- Dr. Spock
- Creative Playthings
- The Psychology of Children's Art
- Guides to Drawing
- Books on Education
- Push Back the Doors
- Teacher
- How Children Learn
- Teaching As a Subversive Activity
- Programmed Reading
- Thinking Straighter
- Media & Methods
- Scientific American Offprints
- Educator's Guide to Free Films
- Krazy Leg
- Index to 16mm Educational Films
- Encyclopedia
- The Black Box
- We Built Our Own Computers
- Paper Airplane Book
- Classified 1000
- THIS Magazine is about Schools
- Cusenaire Rods
- ITA
- Life Science Library
- Kaiser Aluminum News
- American Boys Handy Book
- Pioneer Posters
- Guinness Book of World Records
- The English Duden
- Using Libraries Effectively
- Edmund Scientific
- Outward Bound
- An Introduction to Scientific Research
- Altered States of Consciousness
- Sense Relaxation
- Luck Trust Library
- Meditation Cushions and Mats
- Self-Hypnosis
- Aladdin Kerosene Lamps
- Computational Mathematics
- A Yau's Way of Knowledge
- Fundamentals of Yoga
- Creative Art
- Ching

## Other
- Advertisements
- CATALOG costs
- Whole Earth Truck Store
- Subscription forms
- Portola Institute
CATALOG procedure

Ordering from the CATALOG

Address orders to the supplier given with the item (unless you know of a better one if you do, let us know).

If the price listed is not 'postpaid', consult post office or express agency for cost of shipping from supplier's location to yours.

Add state sales tax if transaction is within your state.

Send check or money order with your order.

Blank order envelopes are provided at the back of the CATALOG for your convenience and so that suppliers have some idea of the CATALOG's effect on their business — strong enough it may result in price or service advantages to CATALOG users.

If the supplier gives you poor service, let us know. That information can be added to his review.

With some indicated items the CATALOG also will ship. There is no price difference with the service; the CATALOG gets the markup instead of the other guy, is all. For west coast orders it may mean faster service.

Generally, the closer the supplier is to you, the quicker and cheaper the shipping will be. If the item you're getting is dearer or if you are in a hurry, air express is a good deal. Anything overseas do by air, unless you want to wait a month or so for delivery.

Subscribing to the CATALOG

$8.00 per year. This includes fall and spring issues of the CATALOG and four Supplements. Subscription forms are at the back. Memorize your zip code.

Suggesting and Reviewing

The validity of the information in the CATALOG is only as good as the transmitted experience of users. What would you add to the current CATALOG?

The CATALOG pays its reviewers $10 an item for: getting familiar with the item, its usefulness, and its competition; evaluating the item; selecting samples of graphics or text (with page references) for the review; writing a 100-300 word review.

Reviewers and first-suggestors of items are credited in the CATALOG. When requested, the reviewer's or suggestor's address may be included.

We invite reviews that improve on present reviews or accompany suggestions for new items. On acceptance for publication reviewers are paid $10 per accepted review. Unused reviews are not returned. Appearance of submitted material doesn't matter unless it is meant to be camera-ready.

Corresponding

Commentary from CATALOG users that is of general interest, and not a specific review, is published in the CATALOG. Unsolicited comments, new design processes, no-cash techniques, news of specific enterprises, useful fantasies, design student work, time and trouble shortcuts, new uses for common or exotic materials, other rashness for the CATALOG to consider, etc., etc. — welcome.

Donating

Portola Institute, Inc. is a tax-exempt, non-profit corporation. Donations to Portola or the CATALOG may be deducted. Retaining subscriptions to the CATALOG are $25 for one year ($17 tax deductible). Sustaining subscriptions are $100 per year ($22 tax deductible). Names of retaining and sustaining subscribers are given in the CATALOG.

Gifts and Informal Resale

CATALOGs and supplements are available in quantities of 5 or more at 25% discount. Thus you can get 5 CATALOGs for $15, sell four, keep one, and come out $1 ahead. There is no quantity discount on subscriptions.

Formal Resale

At present the CATALOG and supplement is distributed by Book People, 2010 7th St., Berkeley, CA 94710 (415 549-3033). Terms are 30% in Northern California, 40% elsewhere (the difference is to help defray shipping costs).

The WHOLE EARTH CATALOG is presently in the market for a national distributor.

Advertising

Suppliers, manufacturers, creators of listed items are eligible to advertise in the CATALOG. They may advertise only an item listed or their own catalog. All ads are placed at the back of the book. There are no ads in the Supplement.

CATALOG Policy with Suppliers and Users

The CATALOG is under no obligation to suppliers. Users are under no obligation to the CATALOG.

Suppliers (manufacturers, creators, etc.) may not buy their way into the CATALOG. Free samples, etc. are cheerfully accepted by CATALOG researchers, response not predictable. No payment for listing is asked or accepted. We owe accurate information exchange to suppliers, but not favors.

Our obligation is to CATALOG users and to ourselves to be good tools for one another.

This issue of the CATALOG, the second, was put together by:

Stewart Brand

Jackson Cote

Annie Goodell

Lobby Kahn

Sarah Shugart

Hal Hershey

Lola Brand

Mia

with

Morton Grover

Sarah Kahn

David Gear

Lloyd Martin

Dave Guard

Bennett Gourd

Reid Shugart

Michael Rosenthal

Eugene Schlossfeld

J. Baldwin

with

Morton Grover

Sarah Kahn

David Gear

Lloyd Martin

Dave Guard

Bennett Gourd

Reid Shugart

Michael Rosenthal

Eugene Schlossfeld

J. Baldwin

Chap Echappel

Larry Molchoff

William Berry

Brenner Horn

Jeff Schlierger

Dale Reed

Bennett Gourd

Reid Shugart

Michael Rosenthal

Eugene Schlossfeld

J. Baldwin

Connie Duckworth

Sarah Kahn

Lloyd Martin

Dave Guard

Bennett Gourd

Reid Shugart

Michael Rosenthal

Eugene Schlossfeld

J. Baldwin

Eugene Schlossfeld

Joe Bonner

Carol Goodell

Sarah Kahn

Michael Rosenthal

Gretchen Guard

Dave Guard

Diana Shugart

Lloyd Martin

Dave Guard

Bennett Gourd

Reid Shugart

Michael Rosenthal

Eugene Schlossfeld

J. Baldwin

The WHOLE EARTH CATALOG and Difficult But Possible Supplement are published at Portola Institute, 558 Santa Cruz, Menlo Park, California 94025 on the following schedule:

CATALOG — November

Supplement — January

CATALOG — May

Supplement — July

CATALOG — March

Supplement — September

Preparation of the Supplement was done on an IBM 360/95 system and a Polaroid MP-3 camera with instant half-tone system.

Novel Publications, Marko Park, printed the contents, and East Wind Printers, San Francisco, printed the cover.
Whole Systems

Buckminster Fuller

The insights of Buckminster Fuller initiated this Catalog.

Among his books listed here, his most recent is probably The Buckminster Fuller Best Introduction. It's a succinct summary of what's been going on in his mind for many a year and what's on his mind now: how he maintains and arranges his interest. Operating Manual for Spaceship Earth.

Of the other, larger, books, Nine Cities to the Moon is his earliest and most openly metaphysical, The Uninhabited Island his most, and Ideas and Integrities his most personal. No More Secondhand God the most beautiful. Nine Chains to the Moon is his most recent, and his most destructive tactics. Fuller's lectures have a casual, spontaneous, self-contained air. He talks about a lot of things, and because the same notions take on different uses when re-appropriated from different angles or with different contexts, Fuller's lectures have a rich repetitiveness which continues endless improvisation full of convergent surprises.

Some are put off by his language, which makes demands on your head like suddenly discovering an extra engine in your car—do you ever do it, and if you do, Fuller says it's well. He's spent two years silent, and the other language got him in trouble, and he returned to human communication with a redesigned instrument.

I am God in the instrument and the mechanisms that you see. I am the vast, infinite, more infinitely than the limited sensory departments of the human observer. And that thing observes the causation of man's most developed and his most effective image. This is the way I see the world through sufficient love.

For I am love as well as in whom which mechanisms are, unseemed, unbounded, unbrided, unnumbered, untrained tongues, untaught, unnumbered, untrained tongues, spontaneous and autonomous radiant.

The instrument has come to see on fire from the trees. It has seen aridity, weather the expressions, teach, teach, rules will be understood. Only last year's sports and the perennials' dead and the soil will not be there when the next spring brings fresh growth and the free-spirited flowers.

Hate is a God-purpose for God, it works, and is very well, too, with its purpose or improper, the instrument is an instrument, not the art, objective or intuitive. It is blocky, not the abstractions love commanded or construed, is not knowledge, not love, not the imagination, not the presentation, not the consciousness, not sociable passion, not God, the wielder, the instrument, the conduction of the unharmed recording of the about. unlimited, unknown of the energy, and there is some sense of a great need, not outside of a material or emotional aura but out of meaning, into meaning, into meaning, into meaning, into meaning, into meaning. Necessary is love.

The only thesaurus and antithesis are dispelled. And the Thought utilized through to tomorrow which is one today. The thinking of the I and you and I, and I think Buckminster is to be Christopher or to be a mind. The answer is Buckminster Fuller is to be a mind. And the I and you aren't being fantastic? And Buckminster Fuller isn't I.

All expressions instant of the past were inherently developed into the present. I am language into a "second-hand" instrument. Therefore it will be an entirely new era when the instruments are confronted with direct experience with an objective purpose. The instrument is a mythological antecedent that is all that he is discovering. [No More Secondhand God]

I am God in the instrument and the mechanisms that you see. I am the vast, infinite, more infinitely than the limited sensory departments of the human observer. And the instrument has come to see on fire from the trees. It has seen aridity, weather the expressions, teach, teach, rules will be understood. Only last year's sports and the perennials' dead and the soil will not be there when the next spring brings fresh growth and the free-spirited flowers.

Hate is a God-purpose for God, it works, and is very well, too, with its purpose or improper, the instrument is an instrument, not the art, objective or intuitive. It is blocky, not the abstractions love commanded or construed, is not knowledge, not love, not the imagination, not the presentation, not the consciousness, not sociable passion, not God, the wielder, the instrument, the conduction of the unharmed recording of the about. unlimited, unknown of the energy, and there is some sense of a great need, not outside of a material or emotional aura but out of meaning, into meaning, into meaning, into meaning, into meaning, into meaning. Necessary is love.

The only thesaurus and antithesis are dispelled. And the Thought utilized through to tomorrow which is one today. The thinking of the I and you and I, and I think Buckminster is to be Christopher or to be a mind. The answer is Buckminster Fuller is to be a mind. And the I and you aren't being fantastic? And Buckminster Fuller isn't I.

All expressions instant of the past were inherently developed into the present. I am language into a "second-hand" instrument. Therefore it will be an entirely new era when the instruments are confronted with direct experience with an objective purpose. The instrument is a mythological antecedent that is all that he is discovering. [No More Secondhand God]
null
The Population Bomb

There’s still time coming. Not a nice clean earthquake or satisfying revolution but pain in new dimensions: world pain, as communities that struggle and co-exist that can’t avoid each other. The consequences will follow our lives. In the heart of the problem are the solutions, and the sooner we’re clear about what’s happening the sooner the solutions can work their way out. This book is the best first hard look at this. The author is a well-regarded young population biologist and ecologist who freaked out of his lab hard look that’s around. The author is a well-regarded young

lives. In the heart of the problem are the solutions, and the

sub-continents that starve and sub-continents that eat unable

satisfying revolution but pain in new dimensions: world pain,

The Population Bomb

Famine 1975!

Population Bomb has the

time, is what this book is all about.

The battle to feed all of humanity is over. In the

1970’s the world will suffer famines—hundreds of

million people are going to starve to death in spite of all

sympathy programs embarked upon now. At this late date, the

only programs will only provide a stay of execution unless they are

decorated by determined and successful efforts at population control. Population control is the

conscious regulation of the numbers of human beings to permit the needs of the needs of the

individuals and the individual families, but of society as a whole.

Nothing could be more misleading to our existence than our present
trend of unrestrained population growth. They will inherit a

totally different world, a world in which the

standards, prices, and economics of the 1960’s are

dead. As the most powerful nations in the world today, and the largest consumer, the United States
cannot stand isolated. We are today in the event leading to tension; tomorrow we may be

constrained by its consequences.

We are today in the event leading to tension; tomorrow we may be

constrained by its consequences.

Remember also that in virtually all underdeveloped countries, people have gotten the word about

the better life is possible to live. They have seen
colored pictures in magazines of the wonder

of Western technology. They have seen automobiles

and airplanes. They have seen American and European

movies. Many have seen refrigerators, stoves, and—
even TV sets. Almost all have heard transistor

radios. They know there is a better life is possible.

They have what we like to call "kitchen expectations." If these are

many people are as to be happy, the miracle

of doubling what they now have will not be enough.

It will only maintain today’s standard of living.

There will have to be a real growth over the years. Needless
to say, they are not going to be happy.

I think that the rate of soil degradation will

accelerate as the food crisis intensifies. Ecologists

will be ordered more and more as things price, it is

safe to assume that our use of synthetic pesticides,

already massive, will increase.

Coverage over all of OPU has been included on 10" x

category many squares miles of miles. It includes

reviews relates to the number. The numbers which are the most

are listed in the book, but the others were not

the OPU. There you have a list of points, and

more profits for the agricultural chemist industry

fighting these environmental groups on their own creation.

What’s more, time is a growing problem. The

world has developed with which to do better

in God, wonderful livestock—cattle, producing

The Times Atlas of the World

"A world removed must be a world removed." That

intelligent dictum was issued in the end of World War II by Lord

Northcliffe, projector of The Times of London. It didn’t

work for some who did not. The Times Survey

Agent of the world, with cartographic by John Bartlett of

Edinburgh, was issued in 1891, and was recognized

immediately as one of the finest efforts ever printed. The

tradition has been continued, and the Times

Comprehensive Edition—"the best place for an English-

reading person to find where in the world something

is located. The book also has a unique quality to convey the

feel of the world. It measures 10” x 12” x 7”, weighs 11

pounds, and contains 588 pages, of which 240 are
double-page spread of superb color and beauty. The index

gazetteer includes more than 200,000 entries, incomprehensible

more any other atlas of the world, and the entries are

tabled by individually most words by

latitude and longitude as well (a feature offered by no other

atlas). Despite the huge number of places named, the

maps are extraordinarily light, and they are most clearly free of the

pink purple-wash political emphasis offered by older
cartographers. Some of the place names may seem strange
to American readers, because the atlas follows the rules of the

Permanent Committee of Geographical Names. This

national-body political strictly that places should be

places, and all other names are used as they are

generally is unfamiliar, the traditional anglicized name

is also given, in parentheses.


published in the United States by Brighton

Company, Boston, Massachusetts. It is duplicated, by

generous permission, by Her Majesty Queen Elizabeth II, and

found in an appropriately grandiose limp and claimed.

It costs $45, and it will make anything else on your coffee

table seem puny, as the whole world shows.

The Population Bomb

Dr. Paul R. Ehrlich

$0.95 postpaid

Can’t-be-saved

Can’t-be-saved
Population, Evolution, and Birth Control

Once you’ve woken up to the population squeeze and the brinkness of coast of your fellow men, it’s worth looking around. Garrett Hardin has assembled a strong selection of eyes to look around with. Here are the ingredients for understanding. Now, how do we get the mule’s attention?

The rest of the night I lay there sleepless, trapped between the quavering human cry in the night and the cold fact that forced me to know I could not save him of the thousands of others whose cries I could not hear. The next morning they came and told us that the beggar was dead.

Gerald Warfield

Man’s Domain

I scarcely believe it. An inexpensive, paperback, lightweight but complete World Atlas that skips all the political planetary purple stuff and goes straight to the guts: climate, minerals, agriculture, population, languages, food forms, ocean forms—all the remorseless facts that have been invisible to most of humanity until recently. Nice work, McGraw-Hill, you whipped McLean-Hill, you whipped Rand-McNally and Hammond at their own game. Now here about a globe that does the same thing? (Like it’s physical geography with the inside light off; dynamic geography-climate, immigration, population—when you turn the light on.) Hmm, I see they do have a Geographic System—consisting of sets of transparencies for overhead projection onto a 36-inch inflatable outline globe. We’re going to press, too, to check it.

Iii

Population, Evolution, and Birth Control

Garrett Hardin, ed. 1964; 688 pp.

$2.95 postpaid

from

WHOLE EARTH CATALOG

Cosmic View

"The Unseen in 40 Jumps" is the sub-title of the book. It defines.

The man who conceived and rendered it, a Dutch scholiast named Kees Boeke, gave years of work to perfecting the information in his pictures. The result is one of the most splendid, most thorough, inescapable mind blows ever printed. Your mind and you advance in and out through the universe, changing scale by a factor of ten. It very quickly becomes hard to breath, and you realize how magnitude-bound we’ve been.

Kees Boeke

$4.50 postpaid

from

WHOLE EARTH CATALOG
Apollo 8

One of the best films we've ever seen is available on loan free from NASA. It's called "Debrief: Apollo 8," it's 28 minutes long, 16mm, color, sound. (But skip the sound—pedestrian and obvious; instead put something rich on the record player—Steve Miller's "Children of The Future" makes exquisite synch with "Debrief: Apollo 8"). The film is well shot and superbly edited. In it are transcendent sequences of weightlessness, remote blue Earth, Nevada Moon travelling by. The splashdown on dawn Pacific is mythic.

Inquire at nearest NASA offices, or write Les Gaver Chief, Audio Visual Branch Public Information Division National Aeronautics and Space Administration Washington, D.C. 20546

Earth Photographs

NASA SP-129 is a half of a book. Two hundred forty-three full page color photographs of our planet from the Gemini flights of 1965. If it were a Sierra Club book, and it could be, it would cost $25. It costs $7.

There are numerous discoveries in the book. One is that this beautiful place is scarcely inhabited and scarcely inhabitable.

Full Earth

Mandela Earth, the high noon color Image shot from a synchronous satellite over South America on November 1967, available as a poster from WHOLE EARTH CATALOG for $2. It's the same as the cover of the Fall '68 CATALOG, only 22" x 27". An order for five or more gets 50% discount.

Earth Photographs from Gemini III, IV, and V.

Exploring Space With a Camera

The Gemini photos book (above) is purer, but this new book of pictures from NASA really is better for understanding the whole systems of Earth, Earth-Moon, and Solar System. All of the outstanding photographs, color and black & white, up through Apollo 7 are here in one family album, with unusually complete information on what can be discovered in the images. It's NASA's bid for your interest in next steps in the real space odyssey. It's convincing.

Exploring Space With a Camera

The Gemini photos book (above) is purer, but this new book of pictures from NASA really is better for understanding the whole systems of Earth, Earth-Moon, and Solar System. All of the outstanding photographs, color and black & white, up through Apollo 7 are here in one family album, with unusually complete information on what can be discovered in the images. It's NASA's bid for your interest in next steps in the real space odyssey. It's convincing.
The World From Above

Close-up glamor shots of the Earth. Mystery shots (What is that? What's our altitude above it, 10 feet or 10,000?) (Fold out captions tell all.) Good traffic flow pattern shots; surface anatomy of civilization. Not a bad compendium; it'll do until they reprint E.A. Gutkind's Our World From the Air.

$7.50 postpaid

Hill and Wang, Inc.
141 Fifth Avenue
New York, N.Y. 10010

or

WHOLE EARTH CATALOG

Hannes Reich

1966; 88 pictures

Surface Anatomy

This book is included as a companion piece to the Earth picture books. The whole lovely system of the human creature, seen from without, surface by surface, is here. One of its main revelations is how cliché ridden our usual views of ourselves are — we are still not good with mirrors (satellites were up 10 years before we got a full view of the Earth). Posing friends and neighbors, with a simple light set-up and a damn camera, Joseph Royce has shot the most beautiful human album I know.

$12.50 postpaid

F.A. Davis Company
1914 Cherry Street
Philadelphia, Pa 19103

or

WHOLE EARTH CATALOG
PORTOLA INSTITUTE was established in 1966 as a nonprofit corporation to encourage, organize, and conduct innovative educational projects. The Institute relies for support on private foundations and public agencies, to whom specific project proposals are submitted.

Because Portola Institute is a private organization with no need to produce profits or guarantee "success", it can experiment with new and unusual educational projects that would be difficult to administer within more structured organizations. For this reason the staff and facilities of the Institute are deliberately kept small and flexible.

Within its framework a wide variety of projects dealing with innovative education can be created as people with ideas are able to interest people with funds. New projects are always being considered, both within the existing divisions and programs, and within as yet unexplored realms of the learning experience.
"The flow of energy through a system acts to organize that system."