Nem PRESENTS:
DIMENSION DEMENTIA

FREE! BRING ART / BRING FRIENDS

SATURDAY 25 SEPTEMBER 2 TO 5 PM

AUDITORIUM / CALIFORNIA COLLEGE OF ARTS AND CRAFTS

GARY ZELLERBACH

shows Holograms/ "TURNING THE SPHERE INSIDE OUT", a film/ 4-D: THE HYPERCUBE movie/ and more!

0-D, 1-D, 2-D: SCOTT KIM pulls something out of a hat / Between 1-D & 2-D: DAVID THORNBURG shows Fractals / 3-D: GARY ZELLERBACH
calendar

Now - Sept 24 FROM BYTE TO LYTE - Milton Kamisar, Kinetic light sculpture, Syntex Gallery, 3401 Hillview Ave., Palo Alto during business hours. (415) 855-5525.

Now - Sept. 30 INNER SPACE—Geoffrey Chandler; paintings of vibrations and glowing cosmic dust. Palo Alto Medical Foundation, 300 Homer Ave., Palo Alto.


Now - Nov. 21 POTENTIALS - Creators and Innovators of Our Time, Channel 18, Los Angeles. A 13-week documentary 9:30 PM Sundays featuring the ideas and insights of leaders in the field of creative change. Write in for "Connections" kit to POTENTIALS, PO Box 2173, Palos Verdes, CA 90274. Info: Charlie White (202) 966-8776.


Starts Immediately

THE VISUAL ASPECTS OF SCIENCE - a NEXA course (science in the humanities) at San Francisco State University, 1600 Holloway, San Francisco 94132.

Now - Nov 30 LUX HUMANA - Arte Conner, A collection of rainbows and reflections, Holas Gallery, 1792 Haight St., San Francisco. Info: (415) 668-HOLO.

Sept 12 2:30 PM
YLEM PROJECTS PLANNING MEETING, Potluck wine and cheese at the home of Helen King, 670 Covington Rd., Los Altos. (Near Springer and Foothill Expressway. From 280, take Magdalena Exit.) Info, directions: (415) 856-9593, ask for Trudy.

Sept 13 7:30 PM
ART AND COMPUTERS IN EDUCATION (A.C.E.) will meet at the home of Lillian Gurrke, 20251 Reinell, Cupertino. Info: (408) 446-4310

Sept 25 2-3:30 PM
DIMENSION DEMENTIA - YLEM MEETING, California College of Arts and Crafts Auditorium, Broad way at College in Oakland. Park on nearby side streets, go up wooded hill to the West.

Sept 29-Nov 17 ART AND COMPUTERS COURSE - Lawrence Hall of Science. Each person will have his own computer.

Weds. 7:30PM One class for adults, one for kids 11-14. 8 classes, $40. Info: Batya Friedman. (415) 642-3167.


OPPORTUNITIES

Deadline NOW
THE VOICE IN THE MACHINE - computer graphics show. Send slides, SASE. Show dates, Nov. 5-24, Mercer Co. Community Coll., PO Box B, Trenton, NJ 68890. Info: Martha Cahn, 609) 866-6800 x 388.

Sept. 17 science teachers for after school classes at Palo Alto Jr. Museum, 1451 Middlefield Rd., P.A.

Physics fun for 9-11 year-olds, kindergarten science. Info: (415) 329-2111.

Sept 30 JOB AS SILKSCREEN SHOP MANAGER - Kainos Cottage, a home and training center for retarded adults.

Jefferson, Redwood City, 94062. Info: (415) 363-2423.

Oct. 1 $4,200 for a work of art for the state office data center at Juneau. Site is 7X25 ft. sheetrock wall.

Send 10 slides of work, resume, proposal mounted on 14 X 18" cardboard to "1 % - Juneau Data Center", Alaska State Council on the Arts, 619 Warehouse Ave. #220, Anchorage, AK 99501.

Also, THE ART OF COMPUTER GRAPHICS, a book-in-progress, seeks computer graphic works of all sizes of systems. Write Peter Dean at Cucumber Studios, 21 Heddon St., London W1, U.K. ... Crystal Haze, 214 Valencia, S.F. fabricates glass and neon with CAD. Recently hosted an illuminated sculpture show, and may be interested in more of the same. ... LEONARDO MAGAZINE's editor has moved to San Francisco. It may become easier to submit manuscripts to this prestigious journal. Find a copy at your college library. It is a small-circulation circulation magazine with high subscription fee.

Contact through Bryan Rodgers, Art Dept., SFOU, 1600 Holloway, San Francisco.

MEMBERS IN THE NEWS: Elaine Hindin will be a CAC "Artist-in-Community" at Louden-Nelson Center in Santa Cruz, where she will do a multi-media installation piece called "Flea Market", and teach a Wed. night class in multi-media happenings. She's looking for laser and computer resources for this. ... Lucia Grossberger and Harry Vertesley showed their "Designer's Toolkit" software for the Apple II and Lucia's graphics done with it at the US Festival on Labor Day.

Prepared by Tonia MacNeil
RUTH ASAWA uses the approach of Josef Albers, which is to probe and prod a material until a novel application reveals itself. Ruth has teased wire, an essentially one-dimensional material into three dimensions. Although the technique is similar to knitting, the stiffness of the wire permits airy structures and interpenetrating planes. (see back page). While it is true for all creators that THE IDEA is only the beginning, it is truely true for sculptors: "There isn't much to say about working, only that it is monotonous and endless. I usually think about what to cook and dream about the day's events." Many of her wire sculptures were done while raising a large family. In San Francisco the art-and-money-starved schools have been blessed with her interest. Years ago she and other parents started the Altarado Arts Workshop. Among other things, it has promoted school mural projects, the "School for the Arts" within MaTeer High School (150 9th graders start this Fall), and is now raising funds to involve practicing artists with its students. Her Hyatt Union Square fountain was a collaboration with many folks, some of them kids. Her interest in people also led to her making a huge number of face casts, then to a recent series of portrait heads of celebrities, a commission for Macy's. She molded the three-foot diameter heads out of clay, coated this with elastis (a tough, lightweight plastic material), and removed the clay. This commission is finished, but she is now using the technique to do a big head of Buckminster Fuller. Fuller and Albers were teachers of hers at Black Mountain college in the Forties.

JEROME KIRK first learned metalworking as an apprentice toolmaker for Ford Motor Company. He fought in Europe in World War II, then studied engineering and humanities at MIT. In 1949 he saw Alexander Calder's mobiles for the first time. "From then on, I was hooked," Jerome says. In 1951 he began to make his own moving sculpture. That year he also went to work in industrial relations in the auto industry. He quit three years later, and moved to Greenwich Village to sculpt full-time. Financial pressures drove him back to industry. In 1963 he and his family moved to Los Angeles. By this time he had met Noguchi, Calder, David Smith, and Bertoia, and had heard Naum Gabo lecture. In spite of working full-time, he continued doing metal sculpture, and had his first one-man show at Feilgarten Galleries in 1963. He has done 15 major commissions in public places, including one at Bechtel Engineering Center at UC Berkeley. "It was many years before I shook off Calder's influence," he says. He now exploits a huge variety of kinetic effects. The moire effect shown here is but one. His trademark is shapes exquisitely balanced like beam-balances, often painted red. If time is considered a dimension, his work is four dimensional.

BOB ISHI has been involved with the visual aspects of science for a long time. He studied paleontology at Stanford, with forays into marine biology and design. This was followed by two years in the Peace Corps in India, first advising village craftsmen making products for export, then setting up a geology field work curriculum for university students. For 14 years he has been designing books for W.H. Freeman. One of the rewards of his job is seeing state-of-the-art science graphics and photographs. He designed the new Mandelbrot fractal book. At home, he experiments with moire and "game of life" patterns on his Apple II, exploiting rather than cursing the low resolution. The cover design was produced with a geologic contour mapping program, but instead of data points from mountains, he used ones from a plaster face.
SHORT STORIES

All Mimsy Were the Borogoves  Lewis Padgett
Short story reprined in the Science Fiction Hall of Fame, Vol. 1,
assembled by the Science Fiction Writers of America. The magic and mystery
of amusement parks dramatized through 4-d children's toys.

And He Built a Crooked House  Robert Heinlein
Short story reprined in
About a house in the shape of an unfolded tesseract. The collapsed.

BOOKS

Flatland  Edwin Abbott  1952 Dover (1884)
A classic fable that uses 2-dimensions as a metaphor for narrow-mindedness.

Sphereland  Dionys Burger  1965 Thomas Crowell
A sequel to Flatland that explores more advanced ideas of curved space.

2-Dimensional Science and Technology  Dewdney
Ideas on how things would have to work in a real two-dimensional world.

Geometric, Relativity and the Fourth Dimension  Rudolf v. B. Rucker  1977 Dover
Takes Sphereland into space-time physics. With an annotated bibliography.

Geometry of Four Dimensions  Henry P. Manning  1956 Dover (1914)
A thorough visually-oriented mathematical treatment of 4-d shapes.

Hypergraphics: visualizing complex relationships in art, science and technology
Essays from the American Association for the Advancement of Science symposium.

Geometry and the Imagination  Hilbert and Cohn-Vossen  1952 Chelsea
Shapes and surfaces with outstanding visuals. Includes chapter on 4-d solids.

The Ambidextrous Universe  Martin Gardner  1979 Scribners
Well-researched essays on parity, chapter on turning right into left via 4-d.

Speculations on the Fourth Dimension  Charles H. Hinton  1960 Dover (1900)
Excerpts from his many writings. Colored cubes and spatial speculations.

Mr. God This is Anna  Fynn  1974 Ballantine
Biographical, includes 4-d as explained by a 6-year-old to a 19-year-old.

Four-Dimensional Descriptive Geometry  C. Ernesto S. Lindoren  1968 McGraw-Hill
and Steve M. Slaby
How to draw 4-d figures. A detailed generalization of drafting concepts.

Four Dimensional Space  Ludwig Eckhart  1968 Indiana U Press
Translation of the short hut systematic German book.

A Primer of Higher Space  Charles Bradon  1972 Omen Press (1913)
A lovely hand-drawn poetic analysis of 4-space as a metaphysical metaphor.

The Fourth Dimension Simply Explained  Henry P. Manning, ed.  1960 Dover (1910)
Essays from a competition organized by Scientific American. Many metaphors.

Four Dimensional Geometry: Introduction  1977 National Council of Teachers of Mathematics
Paperback, 92.45. 1996 Association of Reston VA 22091. 763-420-9860

Four Dimensional Tic-Tac-Toe  Don Burleson  1971 Educator Books
$4.95. Drawer 32. 10 N. Main. San Angelo TX 76901. 915-853-0152.

Four Dimensional Tooth Color  Mula  1981 Quintessence Pub.
System
B S. Michigan Ave. Suite 2301. Chicago IL 60603. 312-782-3221. (Don't
ask me.)
POLYHEDRAL RESOURCES, CONT.

Regular Polytopes H. S. M. Coxeter 19. Dover
Symmetry, kaleidoscopes, shapes. Partly anecdotal, mostly mathematical.

Regular Complex Polytopes H. S. M. Coxeter 19. Cambridge U
A richly complex sequel. Many finely printed mandalas.

A textbook written primarily for secondary school geometry teachers. Includes a chapter that extends the basic Euclidean postulates to 4 dimensions.

Escaping 3-dimensional Thinking

Solid Geometry L. Lines 1965 Dover
Chapters on polyhedra (with proofs of how many semi-regular polyhedra there are), space lattices, sphere-packs, and crystals.

Surfaces H. B. Griffiths 1976 Cambridge
A topological look at surfaces from an elementary point of view.

Patterns in Nature Peter S. Stevens 1974 Little, Brown
Attractive "synthesis of art and science".

Experiments In Form Peter & Susan Pearce 1980 Van Nostrand
A Foundation Course In Three-Dimensional Design
Reinhold Co.

Structure and Counterpoint Arthur L. Loeb 1976 Addison-Wesley
Structure of geometric models. Worked with Buckminster Fuller.

Synergetics: Synergetics II R. Buckminster Fuller 1975 Macmillan
Lots of ideas, sometimes hard to get at. A classic. The first is now in paperback.

On Growth and Form d'Arcy Wentworth Thompson 1942 Cambridge
A classic. Patterns in nature.

Order in Space Keith Critchlow 1965 Viking Press
A design source book.

Fractals Benoit B. Mandelbrot 1977 Freeman
Form, Chance, and Dimension

Geometric Exercises in Paper Folding T. Sundara Row 1966 Dover

Curiosities of the Cube Ernest R. Ranucci 1977 Crowell
Everything you wanted to know about cubes.

Cubeid David S. Fieker 1965 Cambridge
Pamphlet. Preceding book has more.

Mathematical Models Cundy and Rollett 1961 Oxford
Classic model building book.

Polyhedron Models Magnus J. Wenninger 1971 Cambridge
For building cardboard models of most of the regular, semi-regular, and star solids.

Mathematical Recreations & Essays H. S. M. Coxeter 1974 U. of Toronto

Mathematical Curiosities I & II Tarquin Books, Stradbroke, Diss, Norfolk, England
2 books of models to cut and put together. Models include hexaflexagons, Klein Cube, Mobius Strips, Hypercubes, & more.

Make Shapes: Mathematical Models Tarquin Books
3 books of polyhedral models. 19 simple ones in the first, 3 intricate ones in the third.

Pholdit S. Goldberg 1977 Billiken
Cutout and fold models of basic figures: Pyramid, cube, diamond, crystal, 24-pointed star, and a few others.
Send to Ylem, 967 Moreno, Palo Alto, CA 94303

I would like: ( ) to receive a sample issue. ( ) a year's membership. $10 is enclosed. ( ) newsletter only, since I live more than 100 miles from both San Francisco and Palo Alto. $5 is enclosed.

Name
Address
City, Zip
Phone (

My needs, interests, specialties:

Suggestions, other interested artists:

YLEM IS the Primordial Stuff out of which the universe emerged. The emerging art-and-science group, Ylem, meets bi-monthly, alternating between Palo Alto and Oakland. (It's pronounced eye'-lum).

HOW TO KEEP Ylem rolling along was the subject of the August 15th meeting at Jerome Kirk's studio. The discussion was almost as lively as Jerome's sculptures, which no one could resist setting in motion. The most practical observation was that we are a spread-out group, frustrating those of us who want to get acquainted with each other's ideas, works, and lives. Three people offered to call people in their area and arrange for some get-togethers there: Ken Herrick (Oakland), Louis Reill (San Francisco), and Judy Spencer (South Bay). North Bay and Peninsula, anyone? Meeting when we have an upcoming show could result in some fascinating collaborations. Louis described such a show by Experiments in Art and Technology (EAT) in N.Y. and L.A. in the 60's and 70's, and we wondered how we could profit from its experience. Sites for shows were suggested. While Merry Menk, exhibit scout, is in Contessa for eight months, Eleanor Kent will look for a gallery, but could see some help. Trudy Mystragoon, who has written the newsletters and arranged the programs, will be away January to April as well. Anyone who can help with either of these may call her at (415) 856-9593. Since this is such an intensely busy group of people, she suggested that we all be on the lookout for interested students and retired people who can help. Louis offered to lead a tour of the Imaginarium at Stanford. Still need is a tour arrange for our third Silicon Gulch graphics tour. The last one, which Eleanor led, cost $5, and visited Crenosco and Via Video, where the artists were allowed to try the system. Ways to liaison with other groups were suggested: contacting the editor of Leonardo Magazine who is moving to San Francisco; exchanging newsletters with similar groups; developing an ongoing arrangement with a non-commercial gallery to do periodic performances and shows. Louis offered information on the gathering about obtaining non-profit status should we ever need to apply for a grant. Bob Ishi has access to some stunning fractal patterns If we want to raise several hundred dollars by selling Ylem T-shirts or other items.

On Sunday, September 12, 2:30 PM, peninsula members will have a chance to discuss future plans at 670 Covington Rd., Los Altos. Bring some wine, cheese, or nibbles.

Eleanor Kent
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San Francisco, CA 94114

967 moreno, palo alto ca 94303
address correction requested
first class - return postage guaranteed

meinda (Gallery for Ylem)