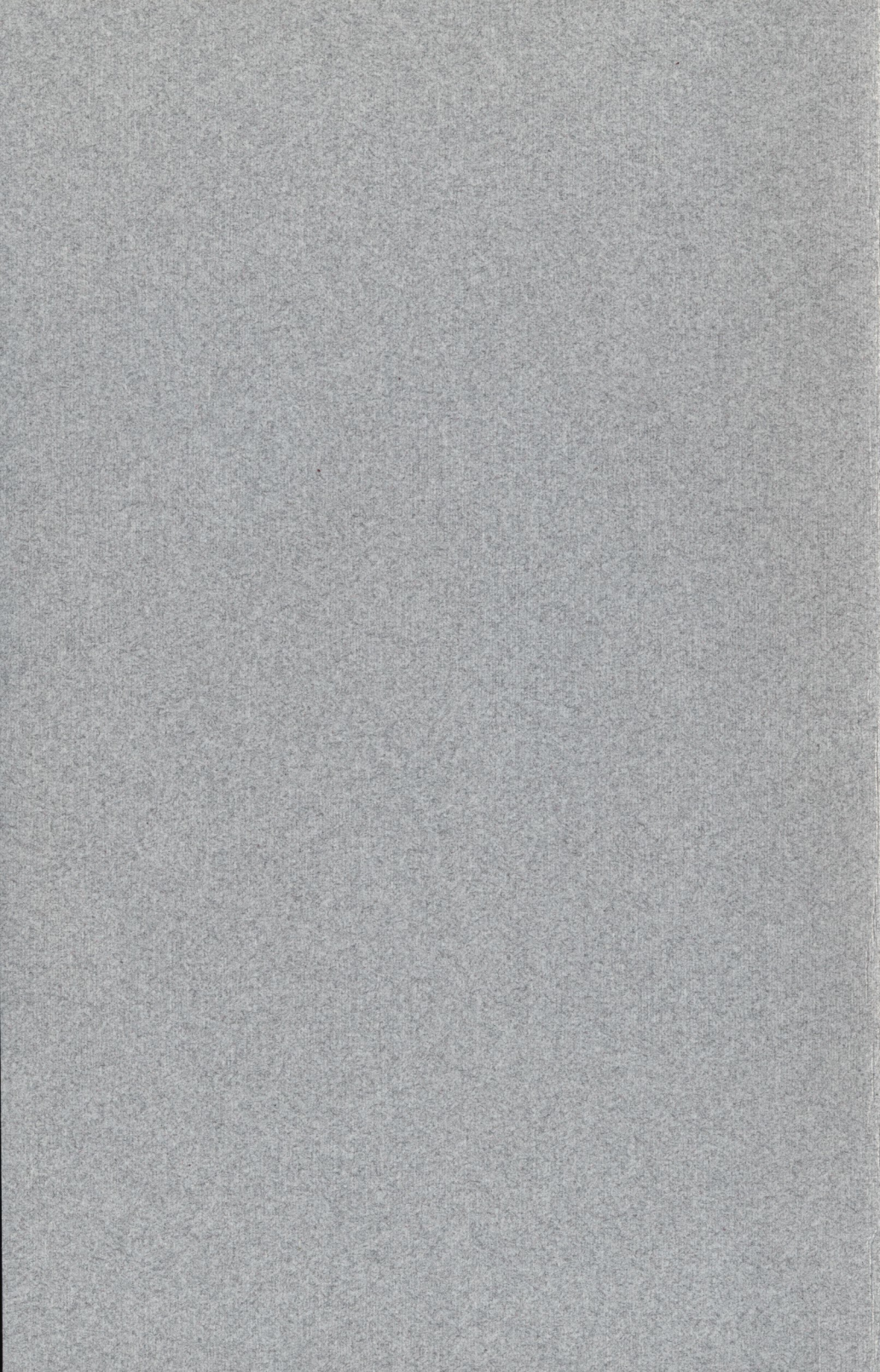




# CONTACT

CULTURES OF THE IMAGINATION



# CONTACT VIII



March 7-10, 1991

Caravan Inn  
Phoenix, Arizona

sponsored by...

CONTACT, INC.  
and  
THE CENTRAL ARIZONA  
SPECULATIVE FICTION SOCIETY, INC.

# WELCOME TO CONTACT VIII

CONTACT is a national academic conference which brings together some of the nation's foremost scientists, science fiction writer and artists to exchange ideas, explore possibilities and stimulate new perspectives about humanity's future. Our goal: To encourage serious and creative interdisciplinary speculation guided by the principles of science.

Each year we meet at CONTACT to promote the integration of human factors into space age research and policy, emphasize the interaction of the Arts and Sciences and their technologies, and envelope ethical approaches in cross-cultural contact, whenever and wherever it occurs.

**SYMPOSIA:** Interdisciplinary forums in which professionals - scientists, writers, and artists - present scholarly papers for publication and for discussion with the audience.

**THE BATESON PROJECT:** A seminar of invited experts each year addressing a selected topic of academic and public interest relating to our future on Earth or in space.

**CULTURES OF THE IMAGINATION:** An experiment in creation - participants design an integrated world, alien life forms and culture, and simulate contact with a future human society.

**WORKSHOPS:** Educational mini-courses directed by professionals provide theoretical background and "hands-on" experience in world construction, bioform design, culture building, and inter-cultural contact.



# GREGORY BATESON

Even during the earliest stages of planning several years ago for a conference linking speculative anthropology with speculative fiction, it seemed clear that the guest of honor should be University of California Regent and teacher Gregory Bateson. Anthropology claimed him because his focus was ever on the human being. But no single discipline could circumscribe his intellect. His early commitment to the natural sciences was basic to anthropology, but also to psychiatry, communications, cybernetics, and perhaps some fields that, as yet, have no names. His range of interest is illustrated by his major works: *Naven*; *Balinese Character: a Photographic Analysis*; *Communication: the Social Matrix of Psychiatry*; *Steps to an Ecology of Mind* and *Mind and Nature*.

As a scientist, he showed a genius for abstracting principles from data. As an academician, he challenged intellectual complacency and mediocrity whenever he found them. And, in his wake, he left expanded perspectives. Though his death on July 4, 1980 has made it inconvenient for him to join us in person, his tradition of exploring possibilities and stimulating ideas is still with us. He has led us to a more comprehensive vision of our place in nature and what it means to be human. Thus, it is to Gregory Bateson that CONTACT is respectfully dedicated.

- Jim Funaro -

## PRODUCERS OF CONTACT VIII, 1990

### CASFS, INC.

Douglas Cosper, Coordinator  
Bruce Farr, Hotel Liaison, Banker  
Cinder Smith, Hospitality  
Eileen Phillips, Registration  
Matthew Frederick and  
Margaret Grady, Publications  
Dan Smith, Computers

### CONTACT, INC.

Jim Funaro, Symposia Coordinator  
Barbara Joans, Coordinator, COTI  
Henry Vanderbilt, Track Manager,  
SolSys 3 (Bateson Project)  
Aleta Jackson, Program Coordinator

Special thanks to Kim and Julie for (once again) letting Bruce & Doug live (it might have been a mercy if they didn't); and to everyone above with CONTACT and CASFS who worked on this year's Conference.

# CONTACT VIII

## SCHEDULE OF EVENTS

### THURSDAY

AFTERNOON Art Show set-up  
KASHMIR TERRACE ROOM (2nd. Floor)

9:00-10:00PM Orientation:  
Briefing and Get-together for Program Participants  
BALLROOM 1

### FRIDAY

10:00-10:30AM Welcome and Introduction to CONTACT VIII — Funaro  
BALLROOM 1

10:30AM COTI Teams Meet and Retire to Alien Planet  
ROOMS 100, 102, 104, 106, 108

10:30AM SolSys Meets and Retires to Cis-lunar Space  
ROOMS 200, 202, 204, 206, 210

10:30AM Mars Team Meets and Retires to Mars  
BONANZA ROOM (2nd. Floor)

10:30AM Art Show Opens  
KASHMIR TERRACE ROOM (2nd. Floor)

10:30-NOON Symposium 1: EDUCATION FOR THE FUTURE: I

- Bob Tyzzer:  
"Science Fiction in the Anthropology Classroom"
- Arthur Niehoff: "Teaching with Good Medicine:  
from Science Fiction to Science"
- Larry Victor: "Beyond Teaching"

BALLROOM 1

2:00-3:30PM Symposium 2: MACHINES AND US: PARTNERS IN TIME

- Jim Funaro: "Robotics and Humanics: Do Machines  
Make Us More Human, or R Tools Us?"
- Al Harrison: "Cyborginization Combining Humans,  
Automation, and Telecommunications for the  
Exploration of Space"
- Barbara Joans:  
"Four Cultures of the Contemporary Imagination"

BALLROOM 1

4:00PM	COTI Open Presentation BALLROOM 1
4:30PM	COTI Invitational Presentation BALLROOM 1
5:00PM	SolSys Presentation BALLROOM 1
5:30PM	Art Show Closes KASHMIR TERRACE ROOM (2nd. Floor)
8:00PM	Reception: "Meet the Sophonts" party. "CarboNation," a play by Dennis Rohatyn, performed by the Cabrillo Players BALLROOM 2

## SATURDAY

9:30AM	COTI Teams Begin Meeting ROOMS 100, 102, 104, 106, 108
9:30AM	SolSys Council ROOMS 200, 202, 204, 206, 210
9:30-11:00AM	Symposium 3: EDUCATION IN THE FUTURE: II <ul style="list-style-type: none"> <li>• Greg Barr: "COTI, Jr.: A Report on CONTACT's Educational Curriculum for Middle Schools"</li> <li>• Tom Zane: "Promoting Space Technology through Pre-service and In-service Experiences in Elementary and Middle School: NASA Attempts to Influence Future Scientists and Voters"</li> <li>• Donald M. Scott: "One Planet from Two Perspectives: An Educational Model for the Third Millennium"</li> </ul>
9:30-11:00AM	BALLROOM 1 Mars Colony "Show-and-Tell" BALLROOM 2
10:00AM	Art Show Opens KASHMIR TERRACE ROOM (2nd. Floor)
11:00AM	COTI Open Presentation (optional) BALLROOM 2
11:30AM	COTI Invitational Presentation (optional) BALLROOM 2
12:00 NOON	Solsys Presentation (optional) BALLROOM 2
12:30PM	Mars Team Presentation (optional) BALLROOM 2

2:00-3:30PM	Symposium 4: EDUCATION FOR THE FUTURE: OPEN DISCUSSION, Mel Neville and Reed Riner: Moderators BALLROOM 1
5:00PM	Art Show Closes KASHMIR TERRACE ROOM (2nd. Floor)
8:00PM	Special Presentation by Wayne Barlowe BALLROOM 1

## SUNDAY

10:00AM	Both COTI Teams Meet ROOMS 100, 102, 104, 106, 108
10:00AM	SolSys Council Meets ROOMS 200, 202, 204, 206, 210
10:00AM	Mars Team Meets BONANZA ROOM (2nd. Floor)
10:30AM	Art Show Opens KASHMIR TERRACE ROOM (2nd. Floor)
1:00PM	SolSys Wrap-up BALLROOM 1
2:00PM	Mars Wrap-up BALLROOM 1
3:00PM	COTI Wrap-up BALLROOM 1
4:00PM	Art Auction (after COTI ends) BALLROOM 1

**REGISTRATION:** Located in the Kashmir Terrace Room on the second floor, off of the hotel's lobby. After hours Registration will be located in the Hospitality room (the hotel rooms 260, 262, and 264).

**ART SHOW/DEALERS:** Located in the Kashmir Terrace Room. Books, Etc. will be selling convention-related material, including Wayne Barlowe's new book.

**HOSPITALITY:** Hospitality food and beverages are free to all convention members. The hours are posted outside the room (which is in hotel rooms 260, 262, and 264).

**DINING:** The hotel does not have its own restaurant. However, a bit over one block due west of the hotel is a Denny's. More highly recommended, about a mile east (obviously, don't try walking it - especially as this isn't the neighborhood for casual, unarmed strolls) is Bill Johnson's Big Apple.

# PROGRAM PARTICIPANTS

**KAREN ANDERSON.** A writer, editor, and well-known personality in the science fiction community. Among her areas of expertise are mythology, ancient histories and cultures (human), and the ferreting out of exotic recipes. She speaks and writes several languages, including ancient and modern Greek.

**POUL ANDERSON.** One of the world's most prolific, respected, and honored writers of science fiction and fantasy. Winner of 6 Hugo Awards and 2 Nebulas, he has written over 50 novels and novelettes, and hundreds of shorter pieces, which range from "hard" SF to heroic fantasy.

**WAYNE DOUGLAS BARLOWE.** An artist, whose work has appeared on over 200 book and magazine covers, Wayne Barlowe (age 32) also conceived, illustrated, and co-authored *Barlowe's Guide to Extraterrestrials*, which was published in 1979. Nominated for The American Book Award and the Hugo Award, Barlowe's Guide was chosen Best Book for Young People by the American Library Association and Best Illustrated Book of 1979 by the Locus Poll. Currently over 176,000 copies of *Barlowe's Guide* are in print. Having attended both the Art Student's League and the Cooper Union, Wayne Barlowe has exhibited his paintings at the Bronx Museum of the Arts, the New Britain Museum of American Art, the Society of Illustrators, the Atrium at Park Avenue, and the Hayden Planetarium. He was also instrumental in organizing and co-chairing the first Science Fiction show in the history of the Society of Illustrators in 1984. He is the creator of a line of toys called the "Power Lords," which had been produced by Revell. Wayne Barlowe is also a member of SFWA. He lives in New Jersey with his wife, Shawna McCarthy, and daughter Cayley.

**GREG BARR.** He holds a lifelong interest in science fiction and space development. This interest has led to positions as Administrator of the L5 Society and Deputy Executive Director of the National Space Society. He is currently occupied as the Development Director for Action on Smoking and Health. He is also coordinating a project to bring COTI to schools, called "COTI Jr."

RICK COOK. An author of science fiction and fantasy novels and short stories, his published works include *Wizard's Bane*, *Wizardry Compiled*, and *Limbo System*.

JAMES J. FUNARO. The founder of CONTACT, he is an instructor of anthropology at Cabrillo College, Aptos, California, where he teaches courses in futures studies that use science fact and science fiction as tools in building perspectives and exploring possibilities. He is a published poet. A recent publication is "Anthropologists as Culture Designers" in *Case for Mars III*.

ALBERT A. HARRISON. A professor of psychology at the University of California, Davis. For 10 years, his primary research interest has been the psychological and social aspects of space flight. Al organized the recent NASA-NSF conference entitled "The Human Experience in Antarctica: Application to Life in Space," and chaired the Human Factors sessions at *Case for Mars III*. He has published the book, *Living Aloft: Human Requirements for Extended Spaceflight*, and most recently completed a section on human factors for the Martin Marietta manned Mars mission study.

BARBARA JOANS. An anthropologist and head of the Anthropology Program at Merritt College in Oakland, California. She is also Director of the Merritt Museum of Anthropology. She has been an urban consultant for the City of San Francisco Planning Department and an Oakland job developer. Dr. Joans has long been interested in fantasy and science fiction. She says, "Living in New York City...Santa Cruz, and San Francisco can bring out the Alien in anyone."

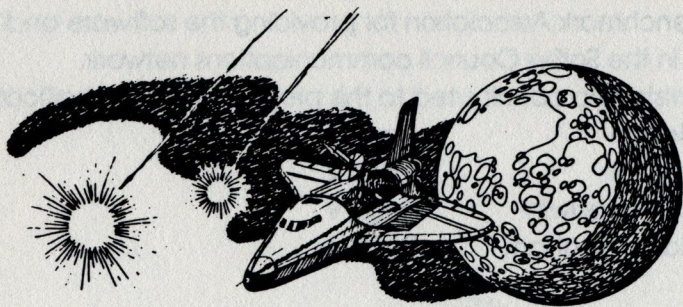
PETER L. MANLY. An astronomer and technical writer with a degree in physics. His prime interests are in occultation photometry, telescope design, and eclipse chasing. He spent a decade in the military and another in the aerospace industry designing computers, communications systems, and sensors. He has also been published in science fiction and fantasy.

MARY MASON. She has a bachelor's degree in psychology from CSUS. She has taught classes in brain dissection at the college level and at SF Conventions. She has done research for numerous writers on psychopharmacology, neurology, and related topics. She currently lives in Sacramento and is working on books and other projects with her husband, Stephen Goldin.

LARRY NIVEN. Known for designing extremely reasoned aliens and alien cultures, Larry is the winner of five Hugos and one Nebula Award. His "Known Space" series includes *Neutron Star*, *Tales of Known Space*, *World of Ptavvs*, *Protector*, *A Gift From Earth*, *Ringworld*, and *Ringworld Engineers*. Perhaps his best known writings include those written with Jerry Pournelle, such as *Lucifer's Hammer*, *Footfall*, and *The Mote in God's Eye*.

JERRY POURNELLE. Dr. Jerry Pournelle was recognized in 1972 as the Best New Writer for the year by winning the John Campbell Award. Computer columnist, Political Science professor (now retired — he also spent years in the aerospace industry and, as Robert Bloch described it, "some people claim it's a damned good thing he never got into aircraft construction, because if he designed a plane it would only have a right wing"), award-winning science fiction author, and collaborator with Larry Niven on many of the best SF novels of recent years. An ardent pro-space activist, his books also emphasize military and survivalist themes. He is perhaps best known for designing, with Larry Niven, extremely reasoned aliens and alien cultures.

REED D. RINER. A pioneer in social-scientific research. He edited and published *Cultural Futures Research* for 5 years. He also organized and chaired seven symposia and two extended simulation exercises on future research. He teaches anthropology at Northern Arizona University in Flagstaff.



DONALD M. SCOTT. After coming of age in San Francisco, I chose to pursue three career goals: to be a teacher, ranger, and space voyager. So far, two of these goals have been achieved. I teach photography at a local college and works as a National Park Ranger on Alcatraz Island. The organization I represent, Wider Focus, seeks to bring together Earth-based and space-based agencies with similar interests. Wider Focus has had success in developing innovative research and educational partnerships which involve NASA and other organizations. The Wider Focus work has thus far resulted in successful ecological and human factors research, and the production of some very fine work of interpretive art. Meanwhile, I am still working on that third goal.

WILLIAM "CHIP" STREET. Art Director of CONTACT, known for his depictions of the "aliens" of Cultures of the Imagination. He received a degree in art from the University of California, Santa Cruz. A freelance artist, he also specializes in local college education workshops.

LAURENCE J. VICTOR. He describes himself as an Extra Temporal, leader of Expeditions in Time. He is a designer of Learners for Quality Education and Expedition SEMEN. He also teaches psychology, futurism and learning to study at Pima Community College in Tucson, Arizona.

THOMAS L. ZANE. He's interested in how crews can be trained for maximum productivity on long-duration space flights. He holds a Ph.D. in psychology with a specialty in experimental psychology. He recently worked on a NASA project concerning the effect of isolation and confinement on work productivity and socialization at John Hopkins School of Medicine.

## CONTACT & CASFS would like to thank...

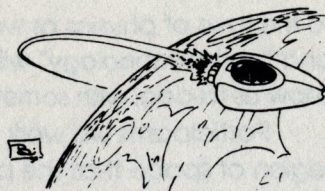
The Benchmark Association for providing the software and hardware used in the SolSys Council communications network.

The artists who contributed to this program book, specifically:

Joel Hagen	Page 1
George Barr	Page 2
Michael Goodwin	Page 9
Donald Birmingham	Page 11

# THE THIRD CONTACT SOLAR SYSTEM COUNCIL

The Bateson Project - SolSys 3



by Henry Vanderbilt, this year's Track Manager

SolSys 3 is a role-playing exercise, aimed at exploring how human societies might adapt to living in space. The time is the middle of the next century, and the people of Earth are doing very well indeed. They've enjoyed a generation of sustained economic growth, fueled by the plentiful, cheap energy beamed down from a sky full of solar-power satellites. World population has stabilized; Third World growth rates tapered off as most of those countries left poverty behind. Humanity has been smart enough and lucky enough to avoid major war or planetary ecodisaster. The people of Earth are richer and freer than ever before.

Our future Earth has made steady progress in the theory and practice of space travel. By 2053, the time of our scenario, people are living and working across the inner Solar System. Explorers have reached Mercury and the moons of Saturn; there are science outposts around Venus and Jupiter. Low Earth orbit manufacturing and tourism thrive. There are numerous permanent settlements in space — free-floating at L5 and elsewhere, on Luna, on the Earth-crossing asteroids, on Mars, and increasingly in the main asteroid Belt.

The older settlements are well into their second space-born generation. Some have populations in the thousands. The majority are self-supporting and self-ruled. A few of the largest and oldest are officially sovereign and independent. The space settlements have become new societies, linked to — but no longer of — Earth.

The main purpose of this exercise is to explore the effect on human societies of expansion into the Solar System. Stretching our minds, learning from each other, and just plain having fun are part of the process, too. With a bit of luck, we might even come up with results worth publishing!

## THE WAY IT WORKS

In the SolSys 3 technological background, space travel and life support are based on a mildly optimistic projection of current and near-future technologies. Technologies in general will be expected to conform

to the laws of physics as we know them. Progress in computers, biotech, and "nanotechnology" will be assumed to have slowed down, if only to allow us to deal with something still recognizable as human society.

Participants will work in loose teams, according to the general region of space that the participant's society occupies. There will be up to five of these teams. One each for:

- Earth and Earth-controlled space enterprises — LEO manufacturing, scientific outposts, etc.
- Cislunar space (including the L5 port complex)
- Luna
- Mars
- The Belt (deep-space asteroid, comet, and moonlet settlements)

Starting Friday morning, the teams will be presented with a series of "events". Some of these "events" will be presenting the teams with problems to solve, generally being designed to stress the societies and their interrelationships.

Each team will have a designated team leader. Each leader's level of authority and the team decision-making mechanism will be up to them to decide, in consultation with the team leader.

Individual team members are expected to pursue the best interests of their respective societies to whatever extent each deems reasonable. This may lead to occasional difficulty in arriving at a team consensus...

Each team will have its own room to work in. Communications between teams and between individuals on different teams will be by computer (if available) - otherwise by paper messages. The Scenario Control crew will handle all message transfers and will keep copies of all messages for the record.

Teams will be encouraged to take notes and keep records of their internal goings-on. Face-to-face discussions of the scenario with members of other teams are discouraged, but are impractical to prohibit; participants engaging in such should write down what information was passed and what deals were made, and submit their notes to Scenario Control HQ soonest to be copied for their record.

There will be a wrap-up session on the last day of CONTACT. Each team will have a chance to explain how it saw events and why it took its particular actions.

