

NETWORKING a GLOBAL CIVIL SOCIETY

VOL 5, NO 1 \$3.95

EDGES

NEW PLANETARY PATTERNS

Electronic Democracy

HOWARD FREDERICKS

PETER RUSSELL

High Tech—Low Consciousness

Tales from the Web

MAUREEN JAMES

Songs of the Universe

IORELLA TERNZI

Alberto Krygier's
Hyperconnections

VOLUME 5 NUMBER 1



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JULY-SEPTEMBER 1992

Edges and ECO-ED welcome the world!

From October 17-21, 1992, Toronto will host ECO-ED an official follow-up Congress to the United Nation's Earth Summit.

The Earth Summit in Rio was only the first of several peaks on the mountain of care. With the ECO-ED Congress, we get down to the business of establishing new planetary patterns of communication and action.

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welcomes all participants to
the ECO-ED Congress in
Toronto.*

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issue of Edges
magazine in
October 1992!**



WORLD CONGRESS FOR EDUCATION & COMMUNICATION ON ENVIRONMENT & DEVELOPMENT
October 17-21, 1992
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Edges Magazine
577 Kingston Road, Suite 1
Toronto, Ontario
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Dear Mr. Staples,

We are delighted that the fall issue of Edges Magazine will be devoted to ECO-ED, the World Congress for Education and Communication on Environment and Development.

* Over 4,000 people will attend this official follow-up event to the United Nation's Earth Summit. Edges Magazine can play an important independent role in helping people understand the urgency of the issues which are the context of the Congress.

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I understand that the ECO-ED issue of Edges magazine will be off the press in time for a major media campaign before the Congress and will be distributed freely to participants at ECO-ED.

Yours sincerely,

Charles Hopkins,
Chairman, ECO-ED

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Networking a Global Civil Society

You don't have to sell your soul to a political party to get governments to change their policies. In fact, the emerging global civil society is creating a whole new set of ways to get things done.

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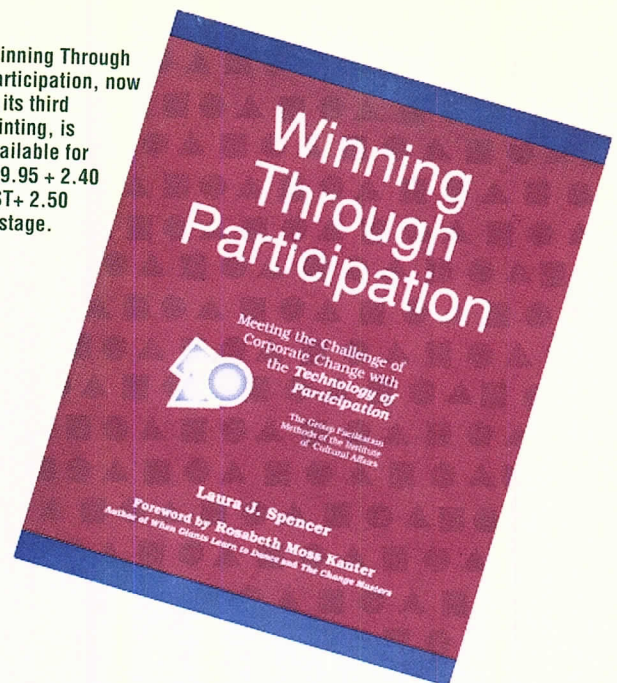
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EDGES

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Statement of Purpose A wave of change sweeping through societies has shaken the foundations of civilization. Every facet of existence is being challenged to evolve into new planetary patterns of knowing, doing and being. The Institute of Cultural Affairs weaves new relations between individuals, organizations and communities. At the core of ICA's work is spirit, sustained by the myths and techniques of many cultures, helping to shape social transformation. ICA's research, education, organizational change and international linking programs work together to elicit new planetary patterns.

The opinions in *Edges* articles do not necessarily represent the policies or views of ICA Canada.

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Editorial

All over the world, people are sitting in front of screens, movie screens, TV screens, computer screens. "The screen world" says Jean Houston, "has become the enveloping presence, and the replacement for the traditional world."

In the villages of India, two signs are common: one shows a happy man and woman with two smiling children— "Family Planning." The other sign says, "Go to Computer School!" Time after time the message gets dinned in, "Within five to ten years, if you can't use a computer, you will be in the dark ages, and you won't be able to get a job." Computers are in.

And, so it appears, is something called computer-assisted communication.

This issue is about computer communication and networking and how they are rapidly putting the world in a state of hyperconnectivity. Using a computer, a modem, a piece of software, a phone line and single or multiple connecting points, it is possible to "reach out and (electronically) touch" millions of people similarly equipped, either to share mail, send communiques, participate in discussions, or access databases.

Large corporations, military research complexes and university campuses have been doing this for 30 years. Then came the cooperative, worldwide networks such as UUCP (Unix to Unix Copy Program, 1978), USENET (User's Network, 1979), BITNET (Because It's Time Network, 1983), and FidoNet (1983) that made wider access possible. Finally, in the mid-80s, organizations like APC (the Association for Progressive Communications) provided the connections and membership options for NGOs, voluntary organizations and individual users. Now, the public at large is getting into the act.

Since then, participating bodies experience that they have an extra eye, ear, arm and leg, so to speak. They can send messages to each other by e-mail (as opposed to what some call "snail-mail"; they can discuss policies and strategies on line such as peace marches, whistle-blowing and human rights protests; organize campaigns such as Earth Day; have access to a gold mine of news, facts, and op. ed. pieces on the spectrum of social issues; provide alternative news services on what's happening worldwide; and read on line electronic, paperless magazines. Now, there are millions of hackers talking to each other all over the world. And much of this has happened in the brief space of seven years.

Daily, through Web, a network run by Toronto's NirvCentre, we at *Edges* inspect the electronic mailbox for messages from Europe, Taiwan, Rio, Japan, or North America. And several times a week we scan 180 conferences, bulletin boards, and magazines to see which way the world is swinging. A friend of mine in South-East Asia, conducts business there for ten months of the year and goes online to check signals daily with his wife living in the US. Kids across the world are getting linked up and talking to each other. In Moscow, 11-year old Sveta Alexandrova is telling her friends far away about her cat, how much she likes



Edges magazine is printed on paper which contains over 50% post-commercial and 10% post-consumer waste. The printing inks contain more than 60% pine resin or vegetable oils.

Japanese spaghetti, and her vision of an Earth in green colours without ecological catastrophes. A young woman in Tokyo, who used to go to the beach to meet her friends tells how she has found a new beach using her computer and modem. She is chatting to a Brazilian, logged in from Curitiba, and promising to arrange accommodation for him and access to a language school when he comes to Tokyo. A raunchy cab-driver in New York is telling the world what it's like to drive a cab in New York, and, in the next breath, doing a wow review of a red-hot virtual reality show he witnessed the night before.

Every day, millions of messages are criss-crossing the globe, requesting this and that, exchanging ideas and visions, making plans, swapping news, organizing campaigns and movements, doing business, and people are talking, discoursing, speaking on screen. On the human side, friendships and courtships bloom on-line, marriages get made, and divorces, and family relationships cool (many a wife

has lost a husband to a computer terminal, and vice versa).

Dave Hughes, a cowboy, literal and metaphorical, of the electronic frontier in Western USA gets hold of the mood of the cybernetic merry-go-round: "If you do not live in the future, then read my cursor. I am always on line singing my ascii songs—whether riding hard to the electronic assistance of one of my sons in China at the height of Tianamen Square by alligator clips, cursor, Kermit and Procomm; or connecting up my tiny granddaughters in Seattle to global Barbie Net; determining the outcome of elections in Colorado Springs by acts of electronic democracy exercised from the 1st booth in Rogers Bar (equipped with RJ11 jacks at the booths); or dialing into the Well in California to take back the best ideas to apply to my neighborhood; or in summer, riding in the high country above Cody, Wyoming, with my western saddle, equipped with an LCD on the top of the roping horn, buttons on each side,

and pocket radio in the saddle bags."

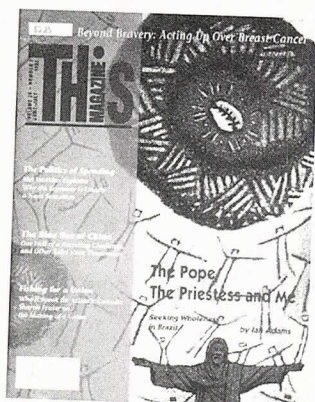
This issue looks at the efforts of non-profit non-governmental organizations (NGOs) to create a worldwide electronic network for what Howard Frederick calls, in the lead article, "the global civil society."

Maureen James, from Web in Toronto shares some of the juicy underside of what can happen on-line. Peter Russell reminds us that hyper-excitement about the technical medium may be getting ahead of the message in "High-Grade Tech: Low Grade Consciousness. In case all this makes you ask, "What on earth are they talking about," our resident 'tekky', Bill Staples, brings it down to earth.

This summer, we are intensely engaged in refocussing our editorial content. We place a high value on your opinions, so please go to the special survey on page 21 and send it in right away. We will publish the results in a later issue. Drop us a line with your thoughts on this and anything else. ♦

—Brian Stanfield

Sample THIS



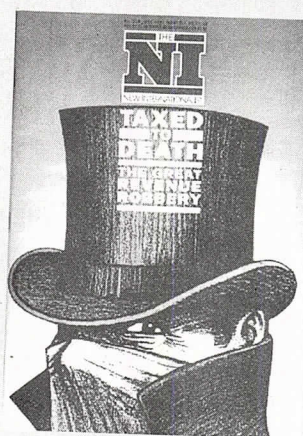
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LETTERS

Reading Feminist Literature

Your issue "The Goddess and the Wild Man" (*Edges*, Sept. 1991) got me reflecting on my own journey.

I have never been a feminist. However, in the last few years, as many of the "trance states" of so-called normal society have been broken for me and I have gained a wider understanding of who I am and what reality options I have before me, I have begun to read feminist literature.

I am writing to recommend this to all women who wish to discover themselves or anything of relevance about the world around them.

I am not advocating feminism *per se*. I am advocating a serious study of the classic literature—of Mary Daly, Sonia Johnson, Carol P. Christ, Starhawk and Kim Chernin, to name only a few who have helped me sort out some of the radical inconsistencies of my life.

I would hope that many who have feared the label "feminist" and those who wear it would open their minds enough only to listen. I do not ask belief or even acceptance. Merely openness. I have found my own story in the pages of their books. And I have found some of the clearest thinking imaginable. I have not burned my bras (running isn't a woman's sport without one), nor thrown out my husband, nor lectured my two daughters. But I have begun to change my life in subtle, yet almost unimaginably radical ways.

For those looking for how to break an addiction and live in a different paradigm, I am convinced the feminist thinkers of our time have much to offer and thus I recommend them to those who would truly heal our planet.

Linda W. Jones
Boulder, CO

What Is More Brutal?

I would like to draw attention to the closing statements of an otherwise inspiring article by Lynn Margulis and Dorion Sagan, "Life After Competition" (*Edges*, Dec. 1991). It focuses on symbiotic versus competitive existence.

The authors point out the merits of small farming—that is, the symbiotic nature of not destroying "a chicken or a cow for a single feast," but rather caring for these animals and consuming their eggs and milk. They go on to note that this consumption of the livestock's "dispensable parts" and repaying the animals by "helping them live" is a sign of "species maturity."

According to the authors, this rule of domestication is why *agriculture*, which consumes the fruit but stores the seed, is "more effective" than the "simple" gathering of plants. The authors associate the latter with greed and gluttony, the former with mutualism.

From an anthropological vantage point, one may view the "more effective" agriculturists as the groups that tend towards greed and gluttony, with surplus (the storage of seeds) resulting in competition for stores, social stratification and unequal access to resources. It seems, however, that the simple gathering of plants and the cultures associated with this activity promotes a less gluttonous and more mutual relationship with surrounding organisms in the environment.

The closing sentence of the piece states the truth—brutal destroyers *do* always end up destroying themselves. But who is more brutal?—the domesticating master of plants and animals, "helping them live," or the gatherer who only takes what is necessary in sustainable quantities?

Corey Pressman
Uniontown, WA

Can We Get There From Here?

It's 2:30 in the morning and it's storming, so I got up and have just read the article, "Fierce Gentlemen" (Sept. 1991), which suggests that now is the time to push hard toward an altruistic world.

How is the pushing to be done? If it is to be successful, it *must be done everywhere* successfully—in all strata of society, in every part of the world, *and* in every family.

It won't work with one belligerent

country in the world, unless the other nations have the military power to contain it, or preferably to conquer it and re-educate it. But who will be reeducated in this way without, in time, becoming resentful and aggressive all over again?

Sam Keen's other point is about caring for the environment. Out here in British Columbia we have a lot of environmentalists trying to stop logging. But does this get to the root of the problem? How do we reduce the desire all through society for more and bigger houses, paper, books, etc? Any success there would be reflected in the amount of wood cut. But I don't see the environmentalists attempting to reduce desire. I feel they lack perspective.

How can the desire for more be held back in the developing and undeveloped countries when the developed have so much? How can the wealthy be persuaded to greatly reduce their standard of living? Would the writer of the article work for less, except in isolated cases?

How can we stop the increase in mob and gang troubles?

And so on, *ad infinitum*. Who can make an impression on the total picture?

To bed again. ♦

Terence C. Holmes
Victoria, B.C.



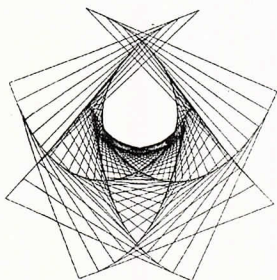
The End of the Soviet Union

While watching the Soviet flag being lowered over the Kremlin: "Damn the totalitarian empire, but will this be the end of the only country in the world where millions of people recite poetry by heart, like a prayer, where they listen to poetry readings in stadiums, where a book of verse can still sell 250,000 copies?"—Andrei Voznesensky in *Time* magazine.

The World's Largest Banks

(For those with a yen to know)
Ranked by assets as of Dec. 31, 1990, the world's big banks are:

1. Dai-Ichi Kangyo, Tokyo
 2. Sumitomo, Osaka
 3. Mitsu Taiyo Kobe, Tokyo
 4. Sanwa, Osaka
 5. Fuji, Tokyo;
 6. Mitsubishi, Tokyo
 7. Crédit Agricole, Paris;
 8. Banque Nationale de Paris
 9. Industrial Bank, Tokyo
 10. Crédit Lyonnais, Paris;
 11. Deutsche Bank, Frankfurt
 12. Hongkong Midland Bank.
- American Banker



Roach Zapper

The Globe and Mail reports on an electronic cockroach zapper by an Australian inventor. Lured by a dab of luscious food, the roach scuttles into the zapper. When its feet touch the bottom plate and its feelers tickle the top plate, the roach becomes the unwilling recipient of 6,000-volts. Mr Jefferys' company is flooded with orders from abroad. But having learned to live with Raid, radiation, Chinese chalk and roach motels, surely the canny critter can find a way round the zapper?

Going on a Diet?

The Journal of the American Dietetic Association has some bad news for dieters: only five per cent of dieters achieve lasting results. Dieters tend to fall off the wagon on two kinds of occasions: when they're unhappy and alone, and when they're happy and not alone. Chronic dieters tend to relapse even when they enjoy exercising and don't feel hungry. The authors of the study recommend gradually changing what we eat (e.g., less fat, more vegetables) rather than abruptly changing how much we eat.—Health and Wellness: Top 40 Research Report, Tapestry Press, Inc., Springville, UT 84663, USA.

Desktop Virtual Reality for Schoolkids

You've seen or heard of it in games arcades. Computer-assisted construction of virtual reality in cyberspace. You don a headset and gloves attached to a computer program and your senses are opened up to a completely artificial reality. Now, it's starting to show up in schools. A West Denton School in Newcastle on Tyne has become the first school project in Europe for a Virtual Reality system. In a £100,000 project between the Department of Employment and British firms, the school will test-drive a desktop VR system and various bits of software. The trials will be open to any A-level design, art, physics and computer science student. During the year three projects will cover health and safety in industry, foreign languages and town planning.—*Electronics Weekly*

RoboCat

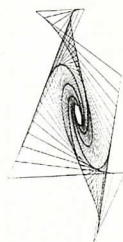
Well, having become familiar with Robots, Knowbots, Serbots and Cyborgs, we now have RoboCat—a robotized, mechanized feline developed by Takara Ltd. of Japan—where else? Apparently, there is a demand in Japan for artificial cats as house pets.—The Globe and Mail

The Shrinking Computer

Coming soon—a credit-card-sized computer for your wallet: you write on it with a pen; it will save the handwritten message and convert it to printed text. You can also send fax messages with it, and send and receive text and graphics from all other fax-equipped PCs regardless of whether or not they are compatible. The "pentop" is designed round a dime-sized silicon chip. IBM, Sony and Momenta Corporations are working on it. Anticipated time of arrival? Within the next five years.—*Canadian Business*

Sports Team's Logos

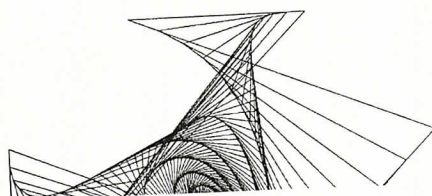
In the United States, Washington area WTOP radio (1500 AM) has banned the name "Redskins" from broadcasts, along with references to the "Braves" of Atlanta and the "Fighting Irish" of Notre Dame, as names offensive to minority groups. Discussion on the issue began during the last-season baseball playoffs and World Series when Native American groups staged protests and indicated they did not want their race used as logos and symbols for sport teams. The Oregonian newspaper in Portland decided recently to ban "Redskins," "Braves" and "Chiefs" from its pages.—*The Washington Post*



The Hajj and the Earth Summit

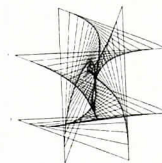
Responding to a request by a group of 46 Muslim states, the UNCED conference may suspend sittings of the Earth Summit this June for a day. The Islamic religious festival of *Eid-ul-Adha*, is the time of the *Hajj*, the annual pilgrimage to Mecca, Saudi Arabia, by millions of Muslims from around the world.

Depending on the visibility of the moon in Saudi Arabia, the *Hajj* is to be celebrated either on the 11th or 12th. The Earth Summit is scheduled for June 1-12 in Rio. The proposed one-day suspension, which is being viewed as a compromise, will permit delegates from Muslim countries to attend festival prayers at a local mosque in Rio de Janeiro. (An apocryphal report says George Bush breathed a sigh of relief at the prospect.)—*Inter Press Service (IPS)*



Fond of clean air?

Former NASA biochemist, Bill Wolverton, reports that plants are potent air-cleaners. They are effective low-tech filters of toxic gases that might be evaporating from furniture, carpets, paints and paper products inside your home and office. One potted plant can clean 100 square feet of indoor floor space. Ten plants can clean all the air in an average house. They need not be blooming. High honours go to the Boston fern, aloe vera, English ivy, spider plant, daisy, dracaena, peace lily, bamboo palm, potted mum, and mother-in-law's tongue.—*The Sunday Sun*



Commentary: the Visionary Bankruptcy of Capitalism

"Capitalism needs new moral arguments and spiritual dimensions if it is to endure; efficiency is no longer defence enough. This is more a task for the theologians than for the economists. If no such spiritual endorsement is forthcoming, capitalism could end up winning the war with communism but losing the peace."—

Robert Henry Nelson in *Reaching for Heaven on Earth: The Theological Meaning of Economics* (Lanham, MD: Rowman & Littlefield, 1991)

Heaven on Earth near Niagara Falls

Magician Doug Henning and transcendental master Maharishi Mahesh Yogi have reported on plans to build a \$1.5 billion theme park that promises to bring peace in the world and heaven on earth. The theme park will include a courtyard of illusion with a building that levitates 14 feet (3.5 metres) above a pool of water. The building will be filled with illusions that will teach distrust of the senses. A Magic Flying Chariot Ride will take participants down inside the molecular structure of a flower. The project will also include a business conference centre. Maharishi Veda Land is expected to open in 18 months.—*The Globe and Mail*

The West reunited—against Who?

BRIAN GRIFFITH

According to a prevailing myth of Good vs. Evil, for 1500 years the Western world constantly polarized itself into pairs of enemy camps. A series of great ideological walls rose across what used to be called "Christendom." First, the Roman Empire split, dividing Europe into East vs. West. The Protestant-Catholic wars set North against South. Then came the autocrat vs. democrat wars. Most recently, the West split over the seemingly practical issue of who should control industrial production—and Europe was almost burned to the ground in the Fascist vs. Communist crusades. For all those centuries, the Western world was engaged in an arms race, furiously evolving the methods of total war.

Perhaps now, only one great dualism

remains in Western minds—

white Westerners on one side and the

rest of the planet on the other.

Now, perhaps that stream of nightmares is done. The most recent wall has fallen down, leaving a kind of reunion by default of all Western people. This is why Western leaders talk of a new world order—not because of any changes in Asia or Africa, but because Russia and the US can suddenly unite on foreign policy. Perhaps now, only one great dualism remains in Western minds—an even older division of white Westerners from the rest of the planet. Now, for the first time since the division of the Roman Empire, all the West finds itself in one basically undivided predicament. With the dissolving of ideological walls, there is suddenly a shared mental vacuum across all of what used to be called Christendom.

With this end of ideology, one kind of Western identity is taken away. But the need

remains for some kind of group identity, and for some understanding of mutual self-interest. Perhaps if the old ideologies no longer meet those needs, Westerners will fall back on even older habits of mind. In the proclaimed New World Order, white Western leaders like Yeltsin, Bush and Kohl find themselves emphasizing ties to fellow Westerners. Eastern Europe is suddenly top priority for investment and aid. North America, the European Community, and Eastern Europe are striding towards economic, perhaps even military, integration. At the same time, Western resentment grows against Japanese penetration of those same markets. In Germany, France and England, hostility builds against non-white "guest workers," be they legal citizens or not. The pattern resembles something very old. It looks like a

banding together with one's own kind of people. And the danger is real that this new Western unity will stand against the rest of the world.

During the many centuries of Western division there was always a dream that unity would "return." The wars between Roman and Orthodox, or Catholic and Protestant, were fought to force all Westerners into one fold again. There were also movements for Christendom to unite voluntarily against an external enemy. And the external enemy of choice was generally Islam. Perhaps only by extension was the crusading spirit applied to all other non-white "infidels," be they Native Americans, Africans or Chinese.

The practical problem is this: if the great Western military powers now stand united, they can now control the United Nations. Of course Westerners represent a minority of earth's people. But the UN, as it is, is hardly a planetary democracy. The UN charter names four Western belligerents of WWII as permanent members on the executive Security Council, with veto power. Previously, Eastern or Southern "non-aligned" nations could often band together for some deciding influence, as in several General Assembly resolutions against Israeli policies. But now the Security

Council can unite easily—where common Western interests are involved.

The stance of the US and the former USSR against Islam is already on record in Afghanistan, Libya and Lebanon.

In Afghanistan, the Soviets responded to rebel terrorists with massive, virtually indiscriminate firepower. They made whole regions into free-fire zones in which the "innocent" and "guilty" alike were slaughtered. They spray-killed the crops of impoverished villages, seeking to stop "criminals" by killing or driving away the entire local population. This kind of police action, as the Russian coup-attempt illustrated, would be utterly unacceptable within modern Russia or Ukraine.

During the same years, the USA sent its military forces into Lebanon to keep the peace. However, when the Muslim and Druze militias threatened to win the civil war, the Americans showed their Judeo-Christian sentiments by opening heavy naval gunfire on Muslim and Druze controlled areas. It was largely to avenge this assault that a Muslim suicide bomber blew up the Marine compound in Beirut.

In 1986, terrorists from Libya murdered a number of people in Germany, includ-

ing some US military staff. As the suspects were Libyan, the US unleashed its Air Force on several Libyan cities. If the same standards of law enforcement were applied between Western nations, we might see the British RAF scatter 1000 pound bombs through the streets of Boston because certain Irish Americans supported the IRA.

Now the Western powers stand basically united and in control of the UN Security Council. Western interests can freely pass as the will of the world government. In keeping with the habits since the Crusades, it is Islamic people whom the West seems most concerned to control.

When UN forces devastated Saddam Hussein's army and rolled into southern Iraq, a fundamentalist Muslim resistance rose up attempting to overthrow Hussein's dictatorship. The UN army halted and stood aside, allowing Hussein's forces to massacre the rebels. It was a situation similar to the summer of 1944, when the Red Army arrived at the Vistula River opposite Warsaw. The Polish resistance rose against the Nazis. But the Russians stayed on the other side of the river for months, till the Polish resistance was virtually exterminated. Iraqi and Iranian fundamentalists concluded

that the UN would rather deal with a military dictator like Hussein than an Islamic state. In fact, when Hussein attacked Iran in the early 1980s, rather than being condemned for aggression, he received American intelligence and training support.

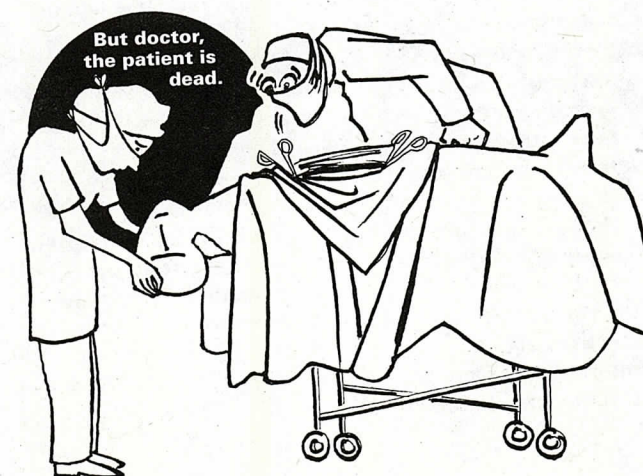
In 1992 there are several test cases for the "world government" to demonstrate whether it can operate with equal regard for Westerners

and for others.

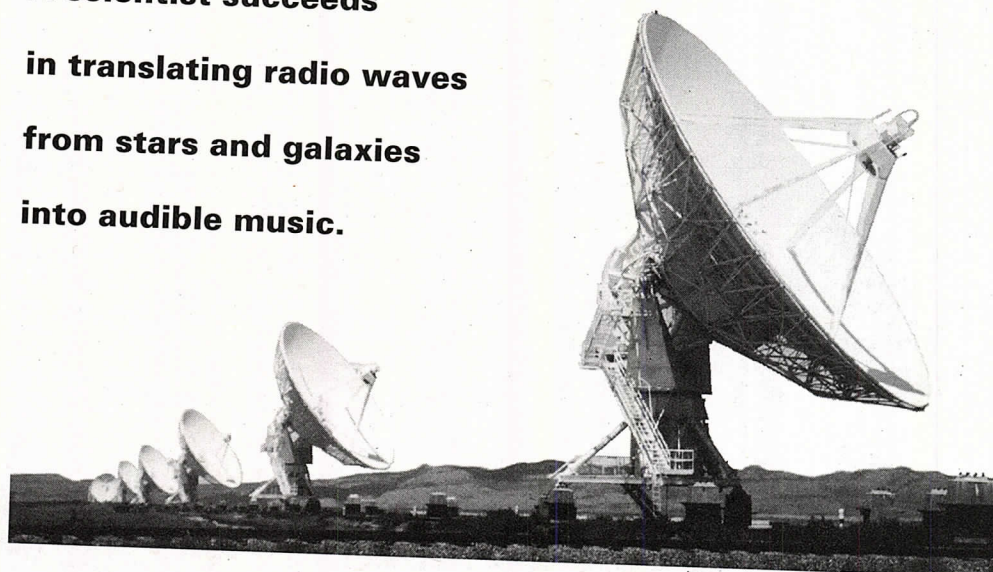
In the Arab-Israeli negotiations, the world will see if concerns for Israeli security are allowed to preclude any Palestinian security.

In the new Commonwealth of Independent States there is talk of preventing the rise of new Islamic states. We will see if, in the new commonwealth, popular Islam is still treated

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**A scientist succeeds
in translating radio waves
from stars and galaxies
into audible music.**



Listening to the Songs of the Universe

FIORELLA TERENCE

At night, we look up at the sky. We watch the stars, we observe the Universe. I believe we can also listen. I believe we can hear the stars and the cosmos in the same way we see—reaching out into the night sky with our ears, to hear the everlasting songs of the Universe.

Through the centuries, we have listened, on occasion. Pythagoras believed that the motion of the planets and the corresponding numbers represented the perfect universal harmony

and that that harmony was represented by and contained in sound and music. During the Middle Ages, Kepler was inspired to elaborate musical scales by mapping the distances of the planets. And Holst and many others have composed music based on their feelings about the objects in the sky. But all these attempts presented human interpretations or representations of the actions of the stars.

I wanted to listen directly.

My first experimental subject was a galaxy invisible to our eyes. It hides in the darkness far away in the direction of Coma Berenices, between Virgo and Leo, under the handle of the Big Dipper. Galaxies we cannot see rarely earn beautiful names, and so this one is known simply as radio galaxy UGC 6697.

The natural radio waves from stars and galaxies are produced by the chaotic motion of high energy electrons: countless "particle collisions and accelerations." After it had travelled 180 million light-years, the radiation from UGC 6697 was col-

lected in huge radio and optical telescopes by staffs of researchers and astrophysicists at sites around the world.

As part of my doctoral research in physics, I developed a way to transform galactic radiation into sound. Working at the University of California (at San Diego's Center for Music Experiment) and at the University of Milan, I used very powerful computer sound synthesis software called "cmusic" to translate the stream of numbers representing the celestial radiation into sound. I shifted the very high frequency vibrations of the cosmic data down into human hearing range—from billions or thousands of billions of cycles per second down to 20 to 20,000 cycles per second. This elaborate acoustic description could only have been realized in the last few years.

After this transformation, the sound derived from the galaxy can be played through conventional loudspeakers or recorded onto digital tape or compact disk. I translated about four hours

of galactic sound—the sound of UGC 6697 from 180 million light-years away—to create for the first time a Sonorous Universe. The sound of this galaxy is very complex. Low and dark frequencies loop for the entire duration of the sample.

Upon this background, high and light frequencies appear, simulating a circular sound dynamic. There are some interesting musical aspects to the galactic sounds. Some parts seem to be well tuned around B flat or D minor, and new harmonies, linked together following their special sidereal rules, can be recognized. The galactic sound can be relaxing and ethereal, but can also provoke deep sensations, sometimes affecting us even when we do not consciously hear them. During performances of the galactic music, people were taken into a deep state of trance by the sound, especially when played in association with sitar and tambura.

In future, I hope to develop a new way to study celestial radiation to be used in addition to present techniques. I want to apply this

LEFT: Very Large Array (VLA) Radio-telescopes in Socorro, New Mexico.
BELOW: Radiogalaxy UGC 6697.

method to other stars and galaxies, to explore the ways in which sound represents the Universe around us and to identify stars and galaxies based on their sonic signature. ♦

Dr Fiorella Terenzi received her doctorate specializing in astrophysics from the University of Milan. She also studied music, opera and composition at the Conservatorio in Milan. Text synthesis of this article is by David Reisner, president of David Reisner Consulting. Music from the Galaxies, in CD or cassette, can be found at well-stocked record stores. For more information or mail order contact: Terenzi Music, PO Box 34182, Los Angeles CA 90034-0182 USA.



Alberto Krygier's Hyper-connect-ions

BRIAN STANFIELD

Alberto Krygier is the president-elect of the World Management Council—a world-wide federation of national councils of management. Mr Krygier has his own set of “megatrends” he believes will be decisive in the upcoming massive reorganization of life on this planet: This article is based on a speech given by Mr. Krygier at a recent Council meeting.

We are making history faster than we can assimilate it. Induced by an astounding accumulation of knowledge and hyperconnectivity on a global scale, this acceleration of history leads us to abandon the word “change” for “transformation” or even “mutation.” Modern societies are going through a mutation on all levels—a process whose repercussions we do not yet understand. The forces shaping this mutating world will reach a critical level by the end of this century. Once they begin to dovetail, their full unfolding will be realized with amazing speed in economic, managerial, technological and cultural globalization. The following phenomena will be decisive in the upcoming massive reorganization of

life on this planet:

1. The acceleration of interfaces, dialogues and antagonisms between nations
2. The transformation of industrialized nations into post-modern societies
3. The gradual movement by countries toward a unified understanding of the ecosystem
4. The onset of cultural massification causing a breakdown in traditional value systems
5. The transformation of social relationships through the rise of feminist movements
6. The convergence of modern science and the spiritual wisdom of the great civilizations of the past
7. The radical mutation of sensitivity in democratic industrial societies
8. The shift in the image of the individual from being a social atom to being part of the community.

Mr Krygier envisions that these forces will create a high level of tension on a global scale, particularly within nations, and sees that the contemporary dichotomy between poor and rich nations holds a potential for unlimited conflict between the haves and the have-nots. Science, he says, may be creating new frontiers in information technology, new materials, biotechnology, immunology, space exploration, medicine, electronic and agricultural genetics, but political techniques to manage collective problems remain static. “Even though the nature and dimension of problems have changed substantially and have increased in complexity, governments and politicians keep returning to the formulas and remedies of 50 years ago. In most nations, political power functions as a tribute system—power is used for per

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Computer networking organizations like the

Association for Progressive Communications (APC)

Electronic

are encircling the world with webs of information flow.

They bypass information monopolies and bridge the gap

Democracy

*between info-rich & -poor nations, giving birth to a "global
civil society" beyond the power of markets & governments.*



HOWARD H. FREDERICK

What follows are possible opening lines of what might be called a Charter of Communication Interdependence of the global non-governmental movements for peace, human rights and environmental preservation.

WHEN IN THE COURSE OF HUMAN EVENTS it becomes possible to dissolve the communication frontiers that have divided peoples one from another and to assume among the Powers of the Earth the interdependent and balanced communication relations to which the Development of Technology has entitled them, WE HOLD THESE TRUTHS TO BE SELF-EVIDENT, that all human communicators are created equally, endowed with certain Unalienable Rights, among them the right to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers. The Right to Communicate includes the right to be informed and well as to inform, the right to reply as well as to listen, the right to be addressed as well as to speak and the right for communication resources to satisfy human social, economic and cultural needs.

THAT TO SECURE THESE RIGHTS, a global computer communications network has now arisen benefiting the Common Good of Humankind by loosing the bonds of the marketplace and the strictures of government on the media of communications and allowing that part of human endeavour known as global civil society to communicate outside the barriers imposed by commercial or governmental interests.

Electronic Web

What we call "community" used to be limited to face-to-face dialogue among

people in the same physical space, reflecting mutual concerns and a common culture. For thousands of years, people had little need for long-distance communication because they lived very close to one another. Most medieval peasants spent their entire lives within a radius of twenty-five miles from their place of birth. Even at the beginning of our century, the average person still lived in the countryside and knew of the world only through travelers' tales.

Today, of course, communications technologies have woven parts of the world together into an electronic web. No longer is community or dialogue restricted to a geographical place. With the advent of the fax machine, telephones, international publications and computers, people can maintain personal and professional relationships irrespective of time and place. Today we are all members of many global "non-place" communities.

Global Civil Society

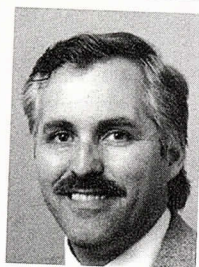
In the last decade there has emerged a new kind of global community, one that has increasingly become a force in international relations. The emerging global civil society is that part of our collective lives that is neither market nor government but is so often inundated by them. Still somewhat inarticulate and flexing its muscles, global civil society is best represented in the global NGO movement—non-governmental organizations and citizens' advocacy groups uniting to fight planetary problems whose scale confound local or even national solutions. Previously isolated from one another, NGOs are flexing their muscles at the United Nations and other world forums as their power and capacity to communicate increase.

The concept of "civil society" arose with John Locke, the English philoso-

pher and political theorist. It implied a defence of human society at the national level against the power of the state and the inequalities of the marketplace. For Locke, civil society was that part of civilization—from the family and the church to cultural life and education—that was outside of the control of government or market but was increasingly marginalized by them. Locke saw the importance of social movements to protect the public sphere.

From the industrial age to the present, mercantile interests and power politics pushed civil society to the edge. In most countries, civil society even lacked its own channels of media communication. It was speechless and powerless, isolated behind the artifice of national boundaries, rarely able to reach out and gain strength in contact with counterparts around the world.

What we now call the NGO movement began in the middle of the last century with a trickle of organizations and has now become a flood of activity.



Dr. Howard H. Frederick has taught communications and international relations for more than a decade. Recently he was Fulbright Professor of Communication at the University of

Salzburg in Austria. Previously he taught at Ohio University, Mary Baldwin College, San Francisco State University and California State University. He is the author of Global Communication and International Relations (Brooks-Cole, 1992), Cuban-American Radio Wars (Ablex, 1986) and numerous articles, and has lectured and worked in Europe and Latin America. Frederick directed PeaceNet before taking charge of news services at the Institute for Global Communications, a worldwide computer network based in San Francisco. He is President of the International Communication Section of the International Association for Mass Communication Research. He advises the Center for Media and Values in Los Angeles, and Radio for Peace International in Costa Rica. He lives in Los Angeles and works in San Francisco. This article was presented at the Annual Conference of the Peace Studies Association in Boulder, Colorado on Feb. 28, 1992. It will appear in Globalizing Networks: Computers and International Communication, eds. Linda Harasim and Jan Walls (Oxford, forthcoming).

NGOs today encompass private citizens and national interest groups from all spheres of human endeavour. Hamid Mowlana has pointed out that their huge increase in number and power is due in no small measure to the development of globe-girdling communications technologies.

Dutch social theorist Cees J. Hamelink has written that we are seeing a new phenomenon emerging on the world scene—global civil society, best articulated by the NGO movement.² New technologies now facilitate communication among and between the world's national civil societies, especially within the fields of human rights, consumer protection, peace, gender equality, racial justice and environmental protection. From Earth Summit to GATT, from the United Nations General Assembly to the Commission on Human Rights, NGOs have become the most important embodiment of this new force in international relations.

The development of communications technologies has vastly transformed the capacity of global civil society to build coalitions and networks. In times past, communication transaction clusters formed among nation-states, colonial empires, regional economies and alliances—for example, medieval Europe, the Arab world, China and Japan, West African kingdoms, the Caribbean slave and sugar economies. Today new and equally powerful forces have emerged on the world stage—the rain forest protection movement, the human rights movement, the campaign against the arms trade, alternative news agencies and planetary computer networks.

Information Monopolies

The continued growth and influence of global civil society face two fundamental problems: 1) increasing monopolization of global information and communication by transnational corporations; and 2) the increasing disparities between the world's info-rich and info-poor populations. Global computer networking makes an electronic "end-run" around the first problem and provides an appropriate technological solution to overcome the second.

Hamelink has also observed that the very powers that obstructed civil society at the national level—markets and governments—also controlled most of the

Major News Agencies

(millions of words per day, 1986-87)

17	Associated Press (AP)
14	United Press International (UPI)
4	TASS
1.5	Reuters
1.0	Agence France Presse (AFP)
0.5	EFE (Spain)
0.3	Agenzia Nazionale Stampa Associata (Italy)
0.115	Deutsche Presse Agentur (Germany)
0.15	Inter Press Service (Rome, New York)
0.1	Non-Aligned News Pool
0.075	Telegrafiska Agencija Nova Jugoslavya (Tanjug)
0.025	Caribbean News Agency
0.020	Pan African News Agency
0.018	Gulf News Agency

Sources: *World Communication Report*, UNESCO, 1988 (draft) and 1989. ♦

communication flows at the global level. Government monopolies still control a huge share of the world's air waves and telecommunications flows. Even worse, a handful of immense corporations now dominate the world's mass media. If present trends continue, Ben Bagdikian has predicted that, by the turn of the century, "five to ten corporate giants will control most of the world's important newspapers, magazines, books, broadcast stations, movies, recordings and videocassettes."³ This gloomy account also includes telecommunications infrastructures and data networks. Today's "lords of the global village" are huge corporations that "exert a homogenizing power over ideas, culture and commerce that affects populations larger than any in history. Neither Caesar nor Hitler, Franklin Roosevelt nor any Pope has commanded as much power to shape the information on which so many people depend to make decisions about everything from whom to vote for to what to eat."⁴

Why is this happening? The most fundamental reason is that fully integrated corporate control of media production and dissemination reaps vast profits and creates huge corporate empires. Already more than two-thirds of the American work force is now engaged in information-related jobs.⁵ Almost half the Gross National Product of the 14 most indus-

trialized countries and one-quarter of all international trade, comes from services, according to a study by Meheru Jussawala.⁶ Telecommunications services grew by 800 percent worldwide in the 1980s. According to UNESCO, the total world information and communication economy in 1986 was \$1,185 billion, about 8 to 9 percent of total world output, of which \$515 billion was in the United States.⁷ Growth in this sector is accelerating and it is no surprise that a few large corporations now dominate the world's information flow. While there are more than one hundred news agencies around the world, only five—Associated Press, United Press International, Reuters, Agence France Presse and TASS—control about ninety-six percent of the world's news flows.⁸ Such corporations as Sears, IBM, H&R Block and Lockheed control the bulk of the videotex information markets.

Info-Rich and Info-Poor

In addition to transnational control of information, global civil society and the NGO movements confront the increasing gap between the world's info-rich and info-poor populations. In virtually every medium, the disparities are dramatic.

Even within the United States we have the info-rich and the info-poor. From the streets of Manhattan to the barrios of Los Angeles, from the homeless to the immigrant populations, from Appalachia to the inner cities, there are millions upon millions of Americans who cannot read or type, have no access to computers, do not consume newsprint, cannot afford a book.

To counter these twin trends that threaten to engulf civil society with highly controlled commercialization, there has arisen a worldwide metanetwork of highly decentralized technologies—computers, fax machines, amateur radio, packet data satellites, VCRs, video cameras and the like. They are “decentralized” in the sense that they democratize information flow, break down hierarchies of power, and make communication from top and bottom just as easy as from horizon to horizon. For the first time in history, the forces of peace and environmental preservation have acquired the communication tools and intelligence gathering technologies previously the province of the military, government and transnational corporations.

The Birth of the APC

Many people, organizations and technologies are responsible for this development, but one organization has distinguished itself by specializing in the communication needs of the global NGO movement. The history of the Association for Progressive Communication (APC) dates back to 1984, when Ark Communications Institute, the Center for Innovative Diplomacy, Community Data Processing and the Foundation for the Arts of Peace—all located in the San Francisco Bay Area near Silicon Valley, California—joined forces to create what was then called PeaceNet, the world's first computer network dedicated exclusively to serve the needs of the movements for peace, human rights and social justice. In 1987, PeaceNet became a division of the San Francisco-based Tides Foundation, and the Institute for Global Communications (IGC) was formed to direct and support its activities.

Parallel to this, with seed money from Apple Computer and the San Francisco Foundation, the Farallones Institute created EcoNet in 1982 to advance the cause of planetary environmental protection and sustainability. Farallones transferred EcoNet to the newly-formed Institute for Global Communications in 1987.

ConflictNet, dedicated to serving

nonviolent conflict resolution, dispute mediation and arbitration, joined IGC in 1990. Together, these three networks—PeaceNet, EcoNet and ConflictNet—make up what we now refer to as the IGC Networks, the largest computer system in the world dedicated to peace, human rights and environmental preservation.

Inspired by the technological success of establishing these networks in the United States, the Institute for Global Communications began collaborating with a similar network in the United Kingdom, London-based GreenNet. To raise funds, rock stars Little Steven and Peter Gabriel performed two “Hurricane Irene” concerts in Tokyo in December 1986. Thus we can say that the idea of a global network for peace, human rights and the environment was born in Peter Gabriel's New York hotel room in 1987 when the money was distributed and the original charter was drafted on a laptop computer.

With this impetus, GreenNet and the IGC Networks joined together seamlessly. This transatlantic link was so successful that, with the support of the MacArthur, Ford and General Service foundations and the United Nations Development Program, IGC helped to establish five more networks. This quickly led in 1990 to the founding of the Association for Progressive Communications (APC) to coordinate

Stats: Info-Rich and Info-Poor

- 95% of all computers are in the developed countries.
- While developing countries have 75% of the world's population, they can manage only 30% of the world's newspaper output.
- About 65% of the world's population experiences an acute book shortage.
- Readers of the *New York Times* consume more newsprint each Sunday than the average African does in one year.
- The only Third World country to meet UNESCO's basic media standards for per capita numbers of newspapers, radio and cinema is Cuba.
- Only 17 countries in the world had a GNP larger than total US advertising expenditures.
- The United States and Commonwealth of Independent States, with only 15% of the world's population, use more than 50% of the geostationary orbit (satellite transmissions). The Third World uses less than 10%.
- Ten developed countries, with 20% of the world's population, accounted for almost 75% of all telephone lines.
- The US had as many telephone lines as all of Asia; the Netherlands and Tokyo, each as many as all of Africa; Italy, as many as all of Latin America.
- There are more than 100 news agencies around the world, yet 5 transnational news agencies controlled about 96% of the world's news flows. ♦

—Howard H. Frederick

**While the Pentagon
censored mainstream
channels of
communication,
APC Networks carried
accurate reports
on the Gulf War.**

this global operation. Today, more than 15,000 subscribers in 90 countries are fully interconnected through low-cost personal computers and software provided free of charge to APC partners. These groups constitute a veritable honour roll of non-governmental organizations working in these fields, including Amnesty International, Friends of the Earth, Oxfam, Greenpeace and many labour unions.

The APC Networks

APC members are fond of saying that they "dial locally and act globally." Today, there are APC partner networks in the United States, Nicaragua, Brazil, Russia, Australia, the United Kingdom, Canada, Sweden and Germany; there are affiliated systems in Uruguay, Costa Rica, Bolivia, Czechoslovakia, Kenya and other countries (see "APC Network Topology"). The APC can boast of providing the first free flow of information between the United States and Cuba in thirty years through its affiliated network in Cuba. Dozens of FidoNet systems connect with the APC through "gateways" located at the main nodes. At the hub of this system is APC's largest computer, known as "cdp" or Community Data Processing, located in California's Silicon Valley.

The APC Networks can now set up complete electronic mail and conferencing systems on small, inexpensive appropriate-technology microcomputers for between \$5,000 and \$15,000 with software developed since 1984 and available to partner systems at no charge. Individual users typically make a local phone call to connect to their host machine, which stores up mail and conference postings until contacted by a partner computer in the network, typ-

ically about every two hours. Aside from its low cost, this technological configuration is appropriate for countries whose telecommunications infrastructure is still poor. The file transfer protocols used between the computers have a high level of resiliency to line noise and satellite delays, and if an interruption does occur, they are able to resume a transfer right at the point it was interrupted. This is particularly important for transporting large binary files, when the chances of losing the connection over poor quality telephone lines is significant.

Within the APC, main nodes at London (GreenNet), Stockholm (NordNet), Toronto (Web) and San Francisco (IGC Networks) bring the communication flow in from regional nodes. Messages are then exchanged and distributed around the world so that a message from Australia can end up on a screen in Estonia in two to four hours. Messages can be sent through these machines to outbound fax and telex servers, to commercial hosts such as Dialcom and GeoNet, and to academic networks such as Janet, BitNet, EARN and UseNet/UUCP. The entire network is funnelled on to the Internet through the IGC Networks, which are a full Internet host (*igc.org*). The price is low by any standard; in the United States hourly connect charges range as low as \$3 per hour.

Unlike systems used by the large commercial services, the APC Networks are highly decentralized and preserve local autonomy. One micro-computer serves a geographical region and is in turn connected with other "nodes." The local node collects the international mail, bundles and compresses it, then sends it to the appropriate foreign messaging system for distribution using a special high-speed connection.

In addition to e-mail, the APC Networks also oversee about 900 electronic "conferences"—basically collective mailboxes open to all users—on subjects from AIDS to Zimbabwe. It is here that people can publicize events, prepare joint proposals, disseminate vital information and find the latest data. APC conferences carry a number of important alternative news sources, including InterPress Service (the Third World's largest news agency); Environmental News Service (Vancouver), the United Nations

The following abbreviated international messages were downloaded from Toronto's Web bulletin board service. They include title, sender's e-mail address, electronic conference name and date.

Zen Jokes

IGC:BSTAUFFER gen.humor Apr 22, 1992
Two examples of Zen humor told to me by a wise old six-year-old. What do a pig and a fish have in common? They both have gills except the pig. What is the difference in a duck? One of his legs is the same.

Campaign Against Herbicides

IGC:PANNA ax.amlatina Jan 17, 1992
The Colombian government wants to begin a major marijuana eradication program involving the aerial spraying of 2,4-D and Roundup (glyphosate.) Ms. Amparo Cardenas has requested well-documented, thoughtful letters to Colombian officials, from individuals and organizations in the United States, emphasizing the hazards of spraying herbicides to human health, wildlife and ecosystems.

Host requested for Ukrainians

IGC:BAIKAL cdi.sovsis Mar 22, 1992
Ukraine group, club, business, social or other organization requested to host twelve Ukrainians arriving SFO some time in April. These visitors are a group of new entrepreneurs arriving as members of a business association. If you wish to extend a welcoming hand please email Allan Affeldt at peacenet:om

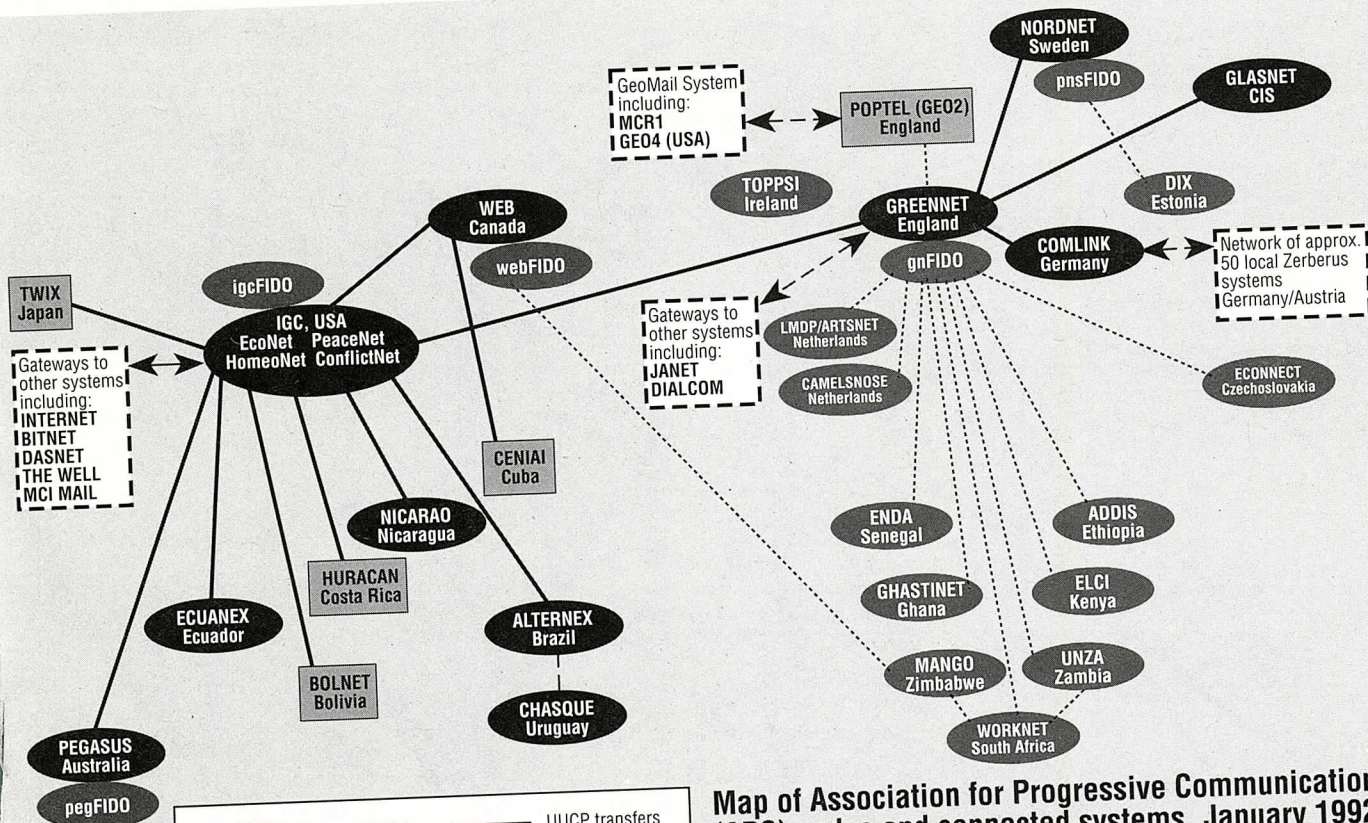
Petrozavodsk/Karelia

GLAS:PETROZ en.ussr Apr 30, 1992
The city of Petrozavodsk, USSR together with the Republican Union of scientific and engineering organizations is going to conduct an auction-fair of ecologically clean materials, technologies goods and products from October 20-23, 1992. Applications for advertising are gladly accepted.

Information Centre news service; Agencia Latinoamericana de Informacion (Ecuador); Alternet (Washington, DC); Moscow News (Russia); New Liberation News Service (Cambridge, MA); Pacific News Service (San Francisco, CA); World Perspectives Shortwave Monitoring Service (Madison, WI); and Yugofax Information Services (London).

Large-Scale Impact

The first large-scale impact of these decentralizing technologies on international politics happened in 1989. When the Chinese government massacred



Map of Association for Progressive Communications (APC) nodes and connected systems, January 1992

All of the systems shown here are "nodes." If you have a computer and modem you can log on to any of them and exchange messages with other users anywhere over the whole network. For most systems you will need to have an account so you have your own special identity on the system. Some FIDO systems only accept calls from other FIDO systems, but you can run FIDO software on your own computer. APC Secretariat, 18 de Boom Street, San Francisco, CA 94107, USA. Tel. (415) 442-0220. FAX: (425) 546-1794. e-mail: apcadmin@apc.org

Post-referendum statement

GN:WACC reg.safrika Mar 23, 1992
Post-Referendum Statement by the Rev. Dr. Frank Chikane. We are relieved that the majority of voters in Tuesday's referendum chose to vote "yes" to the continuation of the process of reform in this country. It is now clear that the majority of South Africans are against apartheid. The March 17 whites-only referendum must be the nation's last racialistic vote.

Women: Equal Responsibility & Benefits

AX:CAFONSO ax.fondad Mar 9, 1992
The IDB has adopted a new plan of action for promoting the role of women in economic development. ... Credit programs will be analyzed to determine if their regulations directly or indirectly exclude women. Do loan applications, for example, require a husband's signature or collateral that only men typically can provide?

Bantering Winds

AX:GHOLLAND io.yacht Mar 4, 1992
We have lived on a yacht for 13 years and we are now at Thursday Island, waiting out the wet to go west. The above address will always find us. Looking forward to hearing from you.

some of its citizens near Tienanmen Square, Chinese students transmitted the most detailed, vivid reports instantly by fax, telephone and computer networks to activists throughout the world. They organized protest meetings, fundraising, speaking tours and political appeals. According to John Quarterman their impact was so immense and immediate that the Chinese government tried to cut telephone links to the exterior and started to monitor the Usenet computer conferences where much of this was taking place.¹⁰

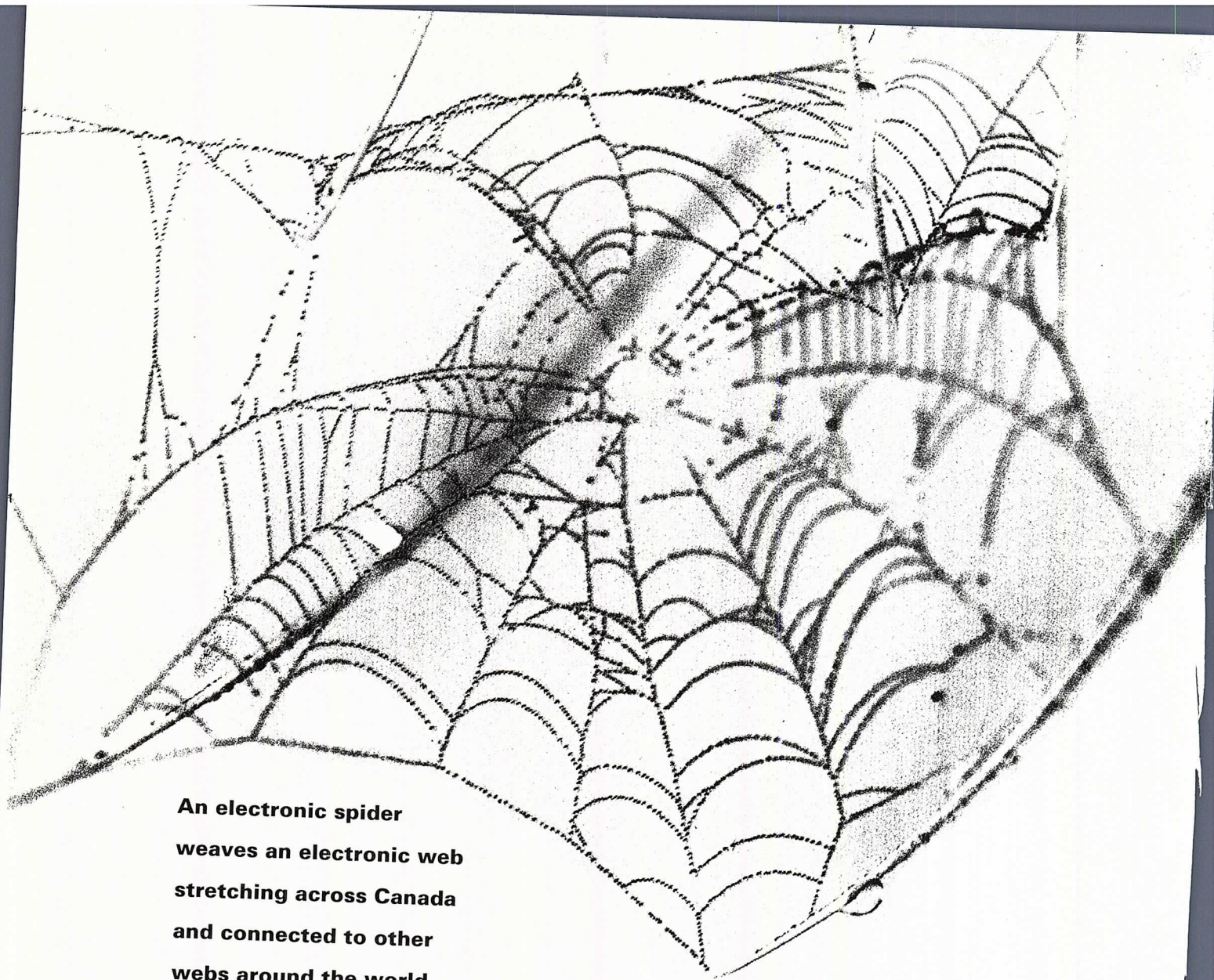
Another example is the 1991 Gulf War, where computer networks such as

PeaceNet and its partner networks in the APC exploded with activity. While mainstream channels of communication were blocked by Pentagon censorship, the APC Networks were carrying accurate reports of the effects of the Gulf War on the Third World, Israel and the Arab countries and the worldwide anti-war movement. For a movement caught off-guard, amazingly smooth coordination took place rapidly across the US and the world. Competing groups agreed on common platforms, set synchronized action dates, and planned large-scale events across vast distances. Computerists seized the technology

and made it work.

During the attempted coup in the Soviet Union in August 1990, APC partners used telephone circuits to circumvent official control. Normally, the outdated Russian telephone system requires hordes of operators to connect international calls by hand and callers must compete fiercely for phone lines. But the APC partner networks found other routes for data flow. While the usual link with Moscow is over international phone lines, APC technicians also rigged a link over a more tortuous route. That plan saw Soviet news disas-

continued on page 34



**An electronic spider
weaves an electronic web
stretching across Canada
and connected to other
webs around the world.**

Tales from a Spider

MAUREEN JAMES

How can I describe what it's like to metamorphose into a spider over three years? How can I relate the changes to my once normal existence? How can I explain that my job as a spider is integral to the global environmental and social change movement? It gets even more complicated. When you hear me, you won't believe I'm a spider.

Truth be told, I'm not a conventional spider but an electronic one with an electronic web. It's bigger than the biggest web you can imagine and stretches across Canada, attached to webs just like it all over the world. The electronic web I call home is called simply, Web, which I share with thousands of people who aren't spiders. These are people who are concerned about the environment,

international development, peace, health, social justice and just about anything else. Whether they are working towards global goodness or light, or even fluffy pancakes, they're welcome at Web.

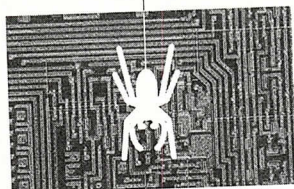
They don't have to go far to get to Web...it's in their computer, usually in their home or office. They use their computer and a modem to talk to each other, and there's lots to talk

about because Web is Canada's non-profit electronic communication system. It gets downright riotous at times but you can't hear a thing, except the hum of a computer and fingers clicking away at the keyboard, and of course the occasional guffaw or sigh, depending on what the day's stories are.

I wasn't always a spider. I graduated from Environmental Studies at the University of Toronto in 1988, did volunteer work for a while, and ended up on Web's doorstep. They offered me computer training in exchange for working as a "Web information officer." I left my existence as a normal human being and, over time, devoted myself to becoming the best little spider around. I'm the person to turn to if you're having trouble using Web, and my e-mail or electronic mail address is *web:spider*.

Web is great for sharing social change information, but it also has a lot going in just plain human (and spider) communication.

There are, for instance, people who fall in love by electronic mail. No, Web is not a subterranean adults-only BBS (electronic bulletin board service). But people working closely together on issues they care about are bound to find things in common, even if their closeness is unconventional and electronic. I know of two committed environmentalists from the West coast who worked together, using Web as their means of communica-



tion. At first, they just exchanged information. Then, as often happens, their electronic conversa-

tions strayed into other more personal areas. Soon they were sending torrid notes to one another at all hours of the day and night. (That's the beauty of Web—you can talk any time you want and it won't bother a soul). Eventually, they met face-to-face, fell in love, and lived happily ever after...so far. Of course, I couldn't read their mail—that's private—but they divulged their romantic story to me last time I was in Vancouver.

Another couple spend six months of every year in different provinces: one in Ontario, the other in British Columbia. They are very committed to each other and also to their political work, so they keep in touch by e-mail, as well as work with their activist community, Peace Brigades

International. It makes a spider feel good inside to hear stories like that.

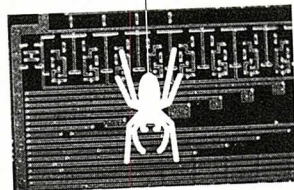
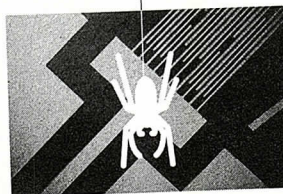
Families use the system to keep track of each other. One of the original instigators of Web has been constantly on the move for the past five years. He's in Africa at the moment setting up another system, but most of the time his family doesn't know exactly where he is. But his sister needs only remember his Web e-mail name for messages to be posted on an electronic bulletin board and reach him wherev-

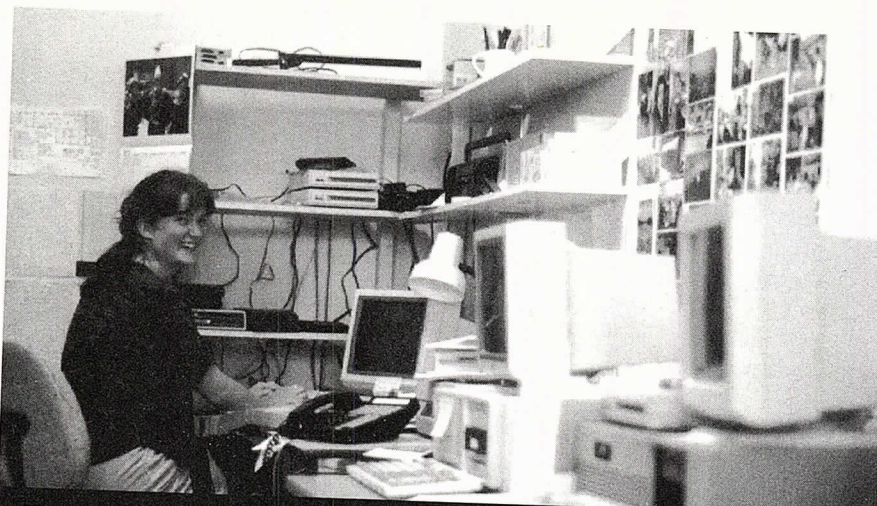
er he is.

In a Web like mine, it's rare to see the people you communicate with. You learn to be satisfied with the impression you can piece together from the odd mail message, or somebody's contribution to a group discussion on ozone or nuclear disarmament. Face-to-face encounters are extremely special. Imagine the thrill of finally meeting someone you've only corre-

sponded with electronically over the years. How exhilarating it must have been for our two byte-crossed West coast lovers to finally see each other in person.

About a year and a half ago I started exchanging routine administrative messages with a couple of guys from the Canadian Council for International Co-operation in Ottawa. We sent messages about bills, how to send mail, setting up special private discussion areas...all boring but essential. After a while we started to hit it off. Reading mail from either of them became a joy for me. I looked forward to my regular chuckle about this or that. Just last February, Nirv Centre (the organization that sponsors Web) invited a large group to a public forum on global networking. Much to my sheer delight these two people responded to the invitation. It's hard to believe, but I really got excited at the prospect of finally meeting them. The meeting served to confirm the wonderful electronic impression I already had. The report is now complete and I know what their electronic smiley faces





The Nirv Centre

Above: Maureen James at work

Toronto's Nirv Centre or "Web" opened in May 1987 as a totally voluntary project of the Ontario Environment Network working out of the Bathurst Street United Church. The next year was full of ups and downs, moving to another office, hiring part and fulltime staff, becoming independent from OEN, losing all equipment in a computer robbery. During 1989 it became a full partner of an international network. By March 1990 Web had 400 users. Since September 1991 Web has witnessed a veritable explosion of interest, and now has nine staff and well over 1,200 users. New users now come especially from group accounts, custom networks and from schools. Web is currently connected with 30 systems, such as PeaceNet and EcoNet in the US, GreenNet in UK, Pegasus in Australia, Alternex in Brazil, and the recently opened Ecunex in Ecuador. The Nirv Centre lives at 401 Richmond Street West, Toronto, Ontario M5V 3A8, and the voice phone is (416) 596-0212. [Ed.: The e-mail address for Edges is WEB:ICATORONTO. Drop us a line.] ♦

look like in real life!

Never seeing the people you communicate with can make things easier to express. Participating in an electronic discussion or "conference" with several individuals is very different than sitting in a meeting room with that same group...especially if you are intimidated by addressing a crowd. One advantage of electronic conferencing is that there are no physical cues to keep you from saying what you want. You can't see if someone is rolling their eyes to the ceiling when you share your feelings, or whether they're nodding off in their chair. And since writing takes longer than speaking, messages are often better thought out and constructed.

Electronic conferences allow many-to-many participation, rather than the one-to-one participation of e-mail. We have a wide range of conferences on Web—about 1000 at the moment—on desertification, global warming, East Timor, food irradiation, nonviolent action, conflict reso-

lution, and the list goes on. Serious work gets done in these conferences by individuals and groups from all over the world: letter-writing, information exchange, agenda-building, demonstration planning, petitions, surveys and much more.

From time to time it's nice to take a break from the dramatic issues and drop by some of the "different" conferences for diversion. They don't have as defined a focus as the issue-oriented conferences. There's the poetry conference where people contribute their own or comment on someone else's. In the collective novel writing conference each person adds a section to the text of the last person to build up an entire novel. In the cafeteria conference they swap opinions about the decor, the coffee or the houseplants, or add a line to the limerick-in-progress.

There are also personal ads for single people. It's all strictly confidential, of course, and it's nice to think that progressive people can meet and

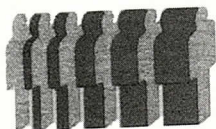
mingle electronically and perhaps eventually find a lifetime partner on the system.

My favourite place on Web was born out of a three-month heated debate about whether or not it should exist. I consider it more a shelter or haven than a discussion area. It's a conference where access is limited to women only. There already was a women's issues conference for everybody, male and female, to participate. But we noticed that it wasn't terribly active except for news items. We wanted a positive, nurturing place to heal, share fears and triumphs and growing pains. The theory arose that perhaps the conference was so quiet because women in general felt uncomfortable expressing their innermost feelings about women's and other issues when there were men's responses and replies. A general consensus emerged that without the input from men, women in the conference would be more willing to share openly. Quite a discussion ensued and some men were strongly opposed to the idea. Men and women alike wondered aloud whether or not segregation would help the women's movement as a whole, if men couldn't share in the discussions. It was eventually decided to give it a try and see what happened.

The result has been a great success. A lot of serious, fundamental questions are asked in the women-only conference, and the answers are explored in great detail. For example: Is sexism as much of an issue in progressive organizations as it is elsewhere in the working world? (It is.) Why not define our personal understanding of feminism? What are the differences between pornography and erotica? As a result of this women-only discussion, some women have been able to affirm their positions on issues or discover them for the first time in a co-operative communication environment. They can take these stronger positions out into the unsegregated world and live them.

There is now the beginning of a movement to set up a similar men-

INFORMA INC.



Dear *Edges* reader,

Edges magazine has asked us to design a questionnaire to help them gain a better understanding of how *Edges* fits into your quest for knowledge and consequently, how to serve your interests better. We hope that you will devote a short time to completing this questionnaire and return it to us as soon as possible. We promise that all responses will be treated in a confidential manner. In advance, we thank you for your kind assistance. *Edges* magazine has provided a gift for us to give to you, when you return the survey.

Yours sincerely,

Hélène St. Jacques,
President, Informa Inc.

READER SURVEY

1. How did you obtain this issue of *Edges*?

By subscription

☐ Go to Q. 2

At newsstand/bookstore

☐ Go to Q. 3

Other (Please specify) _____

2. How long have you subscribed to *Edges*?

1 year ☐

2 years ☐

3 years ☐

4 years ☐

3. Have you ever subscribed to *Edges*?

Yes ☐

No ☐

4. *Edges* publishes 4 issues per annum.
How many issues of *Edges* have you read
in the past year?

1 ☐

2 ☐

3 ☐

4 ☐

5. Which statement most accurately reflects
your pattern of reading *Edges*? Choose
more than one if applicable.

Read all at once

☐

Read over a period of time

☐

Scan and keep for reference

☐

Other (Please specify) _____

6. Thinking about how much of each issue
of *Edges* you normally read, which is
the most accurate statement?

Read all

☐

Read about half

☐

Read less than half

☐

READER SURVEY

7. Each issue of *Edges* deals exclusively with a specific theme. Do you think this is:

- ☐ A good idea
☐ Not a good idea

Please explain: _____

8. Please rate *Edges* coverage of the following topics using a 5 point scale where 5 is excellent and 1 is poor.

	Poor					Excellent	
	1	2	3	4	5		Don't know
Culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Economics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Ecology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Ethics	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Gender issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Health	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Science	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>
Spirituality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>

9. Do you belong to any associations which are related to the issues listed above?

- ☐ Yes ☐ No

If Yes, please list no more than 3

Please circle any of these organizations that might have a natural linkage with *Edges*.

10. How many people, including yourself, saw your last copy of *Edges*? Count yourself as one.

- ☐ 1 ☐ Don't know
☐ 2
☐ 3 or 4
☐ 5 or more

11. Do you find that you refer to *Edges* to help you in any of the following:

	Yes	No
Personal growth	<input type="checkbox"/>	<input type="checkbox"/>
My work	<input type="checkbox"/>	<input type="checkbox"/>
My volunteer activities	<input type="checkbox"/>	<input type="checkbox"/>
My education	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify) _____		

12. Please complete the following sentences.

What I dislike most about *Edges* is _____

What I like most about *Edges* is _____

13. Do you read other magazines that provide you with material similar to *Edges*?

- ☐ Yes ☐ No

What are they? _____

READER SURVEY

14. Please indicate whether you agree or disagree with the following statements about *Edges*:

	Agree	Disagree
It provides unique content in a magazine format.	<input type="checkbox"/>	<input type="checkbox"/>
Its layout and appearance need to be improved.	<input type="checkbox"/>	<input type="checkbox"/>
Its point of view is too naive.	<input type="checkbox"/>	<input type="checkbox"/>
It both informs and stimulates my thinking.	<input type="checkbox"/>	<input type="checkbox"/>
It is too abstract.	<input type="checkbox"/>	<input type="checkbox"/>
Each issue is of the same consistent quality.	<input type="checkbox"/>	<input type="checkbox"/>
It should have shorter articles.	<input type="checkbox"/>	<input type="checkbox"/>
It should have regular columns.	<input type="checkbox"/>	<input type="checkbox"/>
It should have more letters to the Editor.	<input type="checkbox"/>	<input type="checkbox"/>
It should contain more stories about people and groups who are making a difference.	<input type="checkbox"/>	<input type="checkbox"/>

15. Have you ever been a member of the Institute of Cultural Affairs (ICA)?

- ☐ Yes ☐ No

16. Have you ever taken part in any of the following:

- ☐ An ICA workshop/training program
☐ An ICA sponsored conference
☐ None of the above

17. As *Edges* moves into the 90's new communication methods are being explored.

Please indicate if any of the following would be of interest to you.

- ☐ Videos on specific topics.
☐ *Edges* on computer disk.
☐ *Edges* online through an electronic bulletin board.
☐ *Edges* conferences.
☐ Meeting with *Edges* readers.

FOR FORMER EDGES SUBSCRIBERS ONLY

18. Would you please select the statement(s) which most accurately reflect why you no longer subscribe to *Edges*.

- ☐ Financial reasons
☐ Reading time too limited
☐ Shift in personal interests
☐ Editorial content
☐ Better periodicals/reading options available
☐ Other (Please specify) _____

This is the reverse side of your free gift coupon.

READER SURVEY

INFORMATION ABOUT YOURSELF

19. Do you own or rent your own home?
Own ☐
Rent ☐
20. How many overnight pleasure and business trips have you made in the past 12 months?
Pleasure _____
Business _____
None ☐
21. How many of these trips were by air? _____
22. Do you use a computer at home?
Yes ☐ For business? ☐
No ☐ For personal use? ☐
23. Do you own any of the following?
Car make _____ Model _____ Year _____
Bicycle ☐
Personal computer ☐
VCR ☐
Camera ☐
Life insurance ☐
24. Do you do volunteer work for a non-religious organization?
Yes ☐
No ☐
25. What are your top two TV programs?

CLASSIFICATION DATA

Please answer the following questions to help us classify our results.

Your age: _____

Your gender _____

What is the number of occupants in your household?

Number of adults _____

Children under 16 yrs _____

What is your occupation? _____

What level of education have you completed? _____

What is your:	Total annual household income	Personal annual income
Under \$20,000	<input type="checkbox"/>	<input type="checkbox"/>
20,000-29,999	<input type="checkbox"/>	<input type="checkbox"/>
30,000-39,999	<input type="checkbox"/>	<input type="checkbox"/>
40,000-49,999	<input type="checkbox"/>	<input type="checkbox"/>
50,000-59,999	<input type="checkbox"/>	<input type="checkbox"/>
60,000-69,999	<input type="checkbox"/>	<input type="checkbox"/>
70,000 and over	<input type="checkbox"/>	<input type="checkbox"/>

Please indicate where you live.

Full address not necessary to classify results.

City/Town _____

Province/State _____

Country _____

THANK YOU FOR HELPING US!

In return for your assistance, we would be pleased to send you a free issue of Edges magazine. Just fill in your mailing address below. This information will be detached from the questionnaire upon receipt, as all survey responses are confidential.

To get your free issue, please return the completed survey by August 25, 1992.

Name _____

Street _____

Town _____ Province/State _____

Country _____ Postal Code _____

If you have mislaid the return envelope, please return the survey to:

Informa Inc.
495 Queen St. E.,
Toronto, Ontario
Canada M5A 1V1

Which one issue may we send you free of charge, with our thanks?

- ☐ Medicine in the 90s
- ☐ Global Change, Gently
- ☐ Turning Leadership Inside Out
- ☐ Constellations of Spirit
- ☐ Judged by Art
- ☐ Ecocity and Beyond
- ☐ The Fusion of Nature and Culture
- ☐ The Goddess and the Wild Man
- ☐ The Best of Edges
- ☐ Aligning Environment & Development

only conference. There is already a public "maleness" conference on Web where men have been actively exploring aspects of their maleness. Little or no female input seems to have been a tacit decision of the female network users, though not an explicit rule, so a men-only conference may not appear for a while.

Heated discussions take place in our suggestion box conference called "ideas," where new conferences emerge if there is enough interest. People let down their hair and add their two cents' worth on just about any topic. A general broadcast message about the recent abortion trial in Ireland was posted, asking conference users to fax their support. And a stirring exchange on addiction recovery developed out of a simple request about where to find recovery information online.

Because of our connection to the academic communications system used by universities and research institutions (Internet), some Web users keep in touch with their sons and daughters, nieces and nephews. On many occasions I've helped link parents and their children through electronic mail. My own best friends is doing her PhD at Western University in London. She's getting married in the fall and has asked me to be her best woman. We're doing much of the planning electronically, without resorting to expensive long distance calls.

Opportunities like this have changed the way I communicate with my friends and family. I used to give out-of-towners a call every now and then. More rarely, I'd actually pick up a pen and write a letter. However, working for a non-profit organization means my budget is limited, and if I must choose between dinner and phoning my brother in Ottawa, well....Recently, my brother bought a fax machine and it's made a huge difference in our relationship. I now direct e-mail messages to his fax number. Whenever I have an idle moment and feel like dropping him a line, I can just type it up and off it goes. He gets to see a whole different

side of his spider-sister and when I come in to work the next morning, there's usually a fax waiting for me. I often phone my mother right away to pass on the news. I've found out more about my brother in the past two months than I've known for years, and it's much cheaper than a 45-minute phone call.

The vocations of the users of Web and our sister networks have a lot to do with its success as a communications tool. These people care enough to make it work and their campaigns have become dependent on it. They have created a special international electronic social-change community that is business-like in its efforts, but also makes space for human communications. A while back, on a conference about healing, a cry from the heart was posted by a person who had befriended a woman with lupus. The woman's condition was no longer in remission. She was in constant pain, had only her son to take care of her, and was rapidly losing her will to

carry on. Since then, several people have responded with the names of self-help groups as well as suggestions for improving her care.

With electronic communications there is much less interpersonal distraction until you get hooked on someone in e-mail, and then you're checking for messages in your mailbox every chance you get. But the techno-visionaries are now talking about crossing the frontier into video images of the communicants. When that happens my spider days will be over. I prefer anonymity and invisibility. It allows me to assume many different characters and modes of expression. I'm infinitely less interesting in real life and a lot more shy. But you wouldn't know that from my electronic incarnation. My Web is a wonderful window on the social change world, and I get to work with caring, committed people all over the globe. I hope you'll reflect on this next time you're about to annihilate a spider. ♦

The Phenomenon of *Flaming*

Electronic mail messages can stir the emotions. Something in the wording of a message gets misinterpreted by a reader who fires off an angry or disrespectful response—a phenomenon which in the trade goes by the name of "flaming".

Why does this happen so often? The cues we rely on in talking to each other—tone of voice, facial expression, body language—are quite lacking when communicating on a computer screen. It is also difficult to determine how formal or informal a message is by its appearance. Then again, attempts at humour, irony or joviality are often taken awry by the reader. And the ease of an immediate reply to a message makes it very tempting to fire off an off-the-cuff reply.

What to do? Those with long experience in using computer mail make these recommendations:

- Label messages that have a deliberate emotional content, for example, "Your final argument for windpower over solar power was full of mouldy old data, argumentum ad hominem and hot air (flame! flame!)."
- Say "no!" to that part of yourself that wants instant vindication by responding immediately to a message without weighing up your reply. Why not process your response then sleep on it overnight? Next day, refreshed, you can re-read the original message that so peeved you and reconsider your response.
- Use other media such as a phone call or personal conversation to punctuate the cycle of message-response, so that other cues to emotional tone can come into play. ♦

Adapted from Toward an Ethics and Etiquette for Electronic Mail written by Norman Z. Shapiro and Robert H. Anderson, prepared for the National Science Foundation and published by The Rand Corporation.

The Gift of Spiderwoman Legend

NOEL BENNETT

Serape style blanket, Navajo, 1840-60

In days of old
White-Shell-Woman dwelled
Perfect white she wore
With perfect grace she walked
A perfect vessel she was Essential
Womanliness.

One morning walking about
in the white of dawn
She came upon a stream of smoke
wafting skyward
from the ground.
With wonderment she approached
the Earth-hole.
Innocently peered within.

There in dusky depths
There in musty dimness
an Old-One worked
tying a thread
weaving a web.
This was the home of Spiderwoman.

Down
in her earth-lined chamber
as Spiderwoman wove
a shadow blocked her light above
an astonished face looked in.

"Come down into my home,"
Spiderwoman directed.
"It is too small,"
White-Shell-Woman objected.
"It is big enough,"
Dark-Black-Weaver insisted
and so saying
began to blow.

At the hole
she blew—
At the entrance overhead.
Again and again she blew.
Four times in all
It is said.

*Magdalena
Abakanowicz,
Seated Figure,
1974/77.*

With each puff the portal opened
widened, grew and swelled
Until a passageway stood large enough
And four ladders lined the walls.
On the East was a ladder white
with rungs of shell—
the colour of dawn.
On the South was a ladder blue
with rungs of turquoise—
the colour of sky at noon.
On the West was a ladder red
with rungs of abalone—
the colour of the setting sun.
On the North was a ladder black.
Its rungs were jet.
—for such is the colour of night.

Descending
into the damp dimness
the woman looked around her.
Woven forms
surrounded her.
Beautiful to behold!

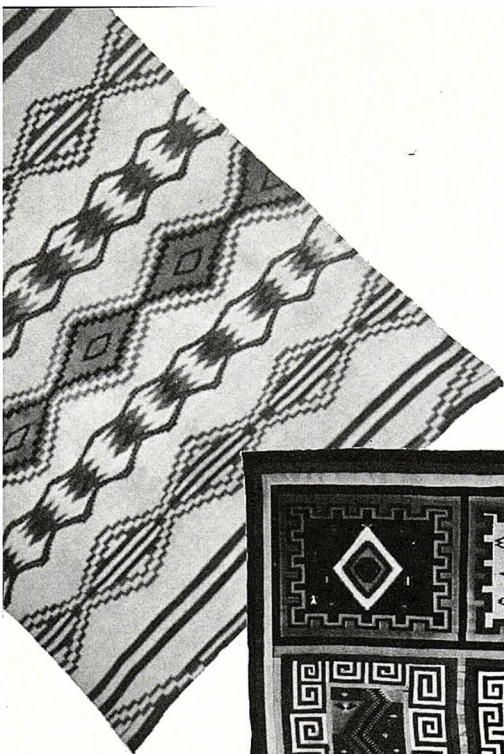
"Yes, I made them all.
That's what I do.
And WHAT do YOU do?"
Inquired the Dark-Black-Weaver.

White-Shell-Woman considered
the question with care:
She thought about the way she had lived
for so long
She thought about the corn she had
ground for so long.
She thought about the empty void she
had felt for so long.

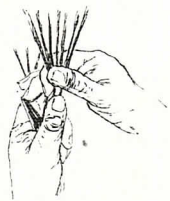
"It's not good doing nothing."
White-Shell-Woman concluded
sitting down wistfully.
"It's not good doing nothing."
Spiderwoman repeated
and retreated to her web.

White-Shell-Woman watched
the quiet twining
fingers working
designs unfolding
She sensed here—Vital Being
She sensed here—Basic Meaning.





Rug, Navajo, 1885-95

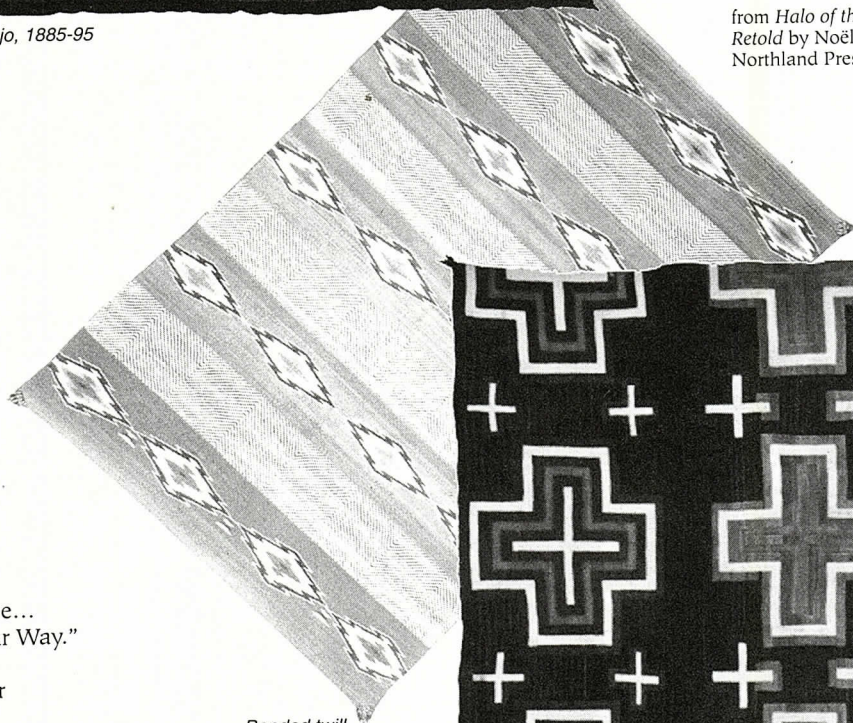


Something
for the hand to do
for the eye to see
for the mind to hold.

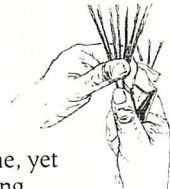
"Maybe,"
she ventured
"If I watch you weave
see you do it
twine the thread."
"Maybe
If I watch you now
join the colour
shape the whole."
"Perhaps with Time..."
"Perhaps with Patience..."
I, too, could learn Your Way."

There came no answer
No response
The hands continued weaving.
Yet rhythm and sound were enough
to impart a hopeful feeling.

Banded twill
blanket,
Navajo,
1875-85



Moki serape,
Navajo, 1865-75



This Way is not for everyone, yet
you show Courage by coming.
This Way is not an easy one, and yet
there's patience in your Being.
This Way is not for all
yet I sense
Insight and Knowing.

In this way
Acceptance came
to stay
to watch
to learn.

From Master-Weaver herself it came
From Seer-Beyond-The-Time.

Four days White-Shell-Woman stayed
and watched
with patience and
understanding.
And in this time that she stayed
And in this way that she watched
She was given the Knowledge of
Weaving.

from *Halo of the Sun: Stories Told and
Retold* by Noël Bennett (Flagstaff, AZ:
Northland Press, 1987). © Noël Bennett.

MODEMS:

WHAT'S ALL THE FUSS ABOUT?

BILL STAPLES

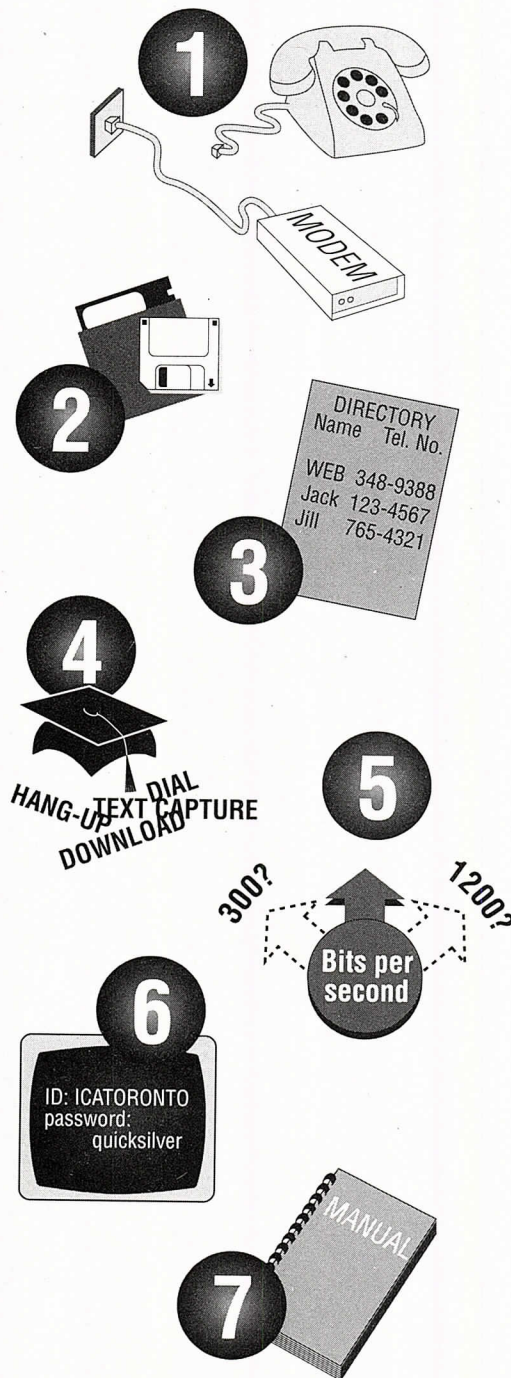
If you already surf through electronic networks like a pro, this piece is not for you. But some readers are sure to be asking, "What is all this network stuff about?"

If you own any kind of computer, you are eligible to participate in computer-assisted communication.

You can communicate with another person by dialing their number, and then sending messages or documents to them over the phone lines. The communicating software will have to have the right electronic "parameters" before you start cosy-ing up to someone else's computer.

Instead of dialing directly to another person, you can piggyback your message on a network, such as WEB in Canada, or PeaceNet in the US. You pay your initial membership fee, get an ID and choose a password. You can then put your message on an electronic bulletin board and direct it privately to any one individual (e-mail), or publicly to anyone who cares to look (conferences). You can also gain access to a dizzying array of "conferences" loaded with news, discussions and resources. You can scan, read and contribute online to any conference which is not private. There are rules of etiquette for conference yakking which, when followed, will save you from consciously or unconsciously making online enemies. You can send electronic mail to anyone else using that network, and receive e-mail in return. You may come to enjoy the easy informality and brevity of e-mail.

You can connect with hundreds of other networks depending on your budget, and the potential for new acquaintances and different sources of



data can expand exponentially. But be warned; getting the right "gateway" to route you across different systems may test your patience sorely, in the beginning.

The aficionados of computer networking will tell you it's simple. (Anything is simple to those who have come to know.) But connecting your brain and computer to a modem and a telephone line, with the right software and network password, using the procedures in your software and network manuals, all with your self-confidence intact, is somewhat of a challenge for most of us, and a deterrent to many. But once you make a start, you will find online resources that can sort out the glitches and help you along the way.

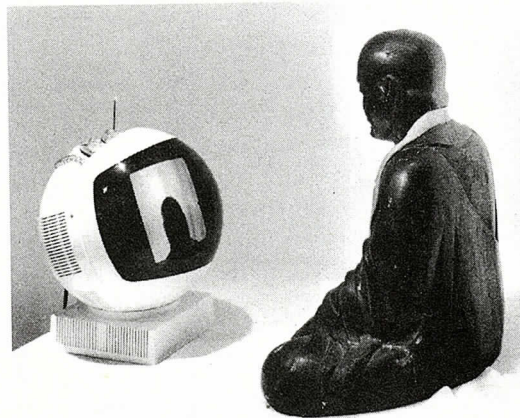
You will need a friend or professional to help you with the following things:

- 1) a cheap modem and the proper connecting cables
- 2) inexpensive software—you can always get free "shareware."
- 3) someone to call online and/or membership in a network (Web is \$15 a month)
- 4) a quick lesson on your computer software commands, or a manual
- 5) your network's "protocol" or electronic parameters
- 6) an ID name and a password
- 7) a lesson or manual on your network's rules of operation.

The best start comes from a friend who knows and who is patient. Once you've got enough basics to send your first few messages and browse through a few computer conferences, you can let your skills grow like a coral reef, rather than trying to master all the manuals. That's how most of us learn and it's worth the effort. ❖

High-Grade Tech, Low-Grade Consciousness

PETER RUSSELL



Nam June Paik, TV Buddha, 1974. Video installation with statue. Stedelijk Museum, Amsterdam.

When computers came along 40 years ago, they were imaged as electronic brains—a big misnomer, as they were really only glorified adding machines. Because they did arithmetic faster than we could, we thought they were very clever. But mental arithmetic is one of the simplest functions of the human brain, involving only one or two instructions per second. So when computers began doing a thousand instructions per second, we thought they were marvellous—until we tried to get them to do things other than arithmetic. Then they proved to be pretty dumb and inefficient. Even computers which work at 10 million

instructions per second (10 MIPS in computer language) find it very difficult to recognize a simple object like a glass of water. They'll spend about ten minutes. Maybe they'll get it right, maybe not. The most sophisticated robots now can drive along a road, provided there's a white line painted down it and the line is consistent in intensity with no shadows falling across it. Otherwise, they veer off the road.

Nevertheless, some people project that in another ten years, computers will begin to see as we humans do, and perhaps another ten years after that, computers will begin to have the intellectual functions that we do. Then intelligent robots will begin

taking over many of our normal functions in life—we are already seeing this in automated factories. Computers and robots will gradually free us up from physical toil.

Then there is Virtual Reality. In the place of stereo headphones will be stereo goggles, which will permit participants to walk around in an artificially generated reality. In five or ten years it may be hard to tell whether the "reality" is real reality or artificial reality. Virtual reality will begin to affect society in all kinds of ways, and will probably be much more powerful than television; it may be online before the end of the century. It is already showing up in games arcades.

On one level, we might consider

Ways of Waking Up

Many people today are using multiple ways of getting out of the collective trance and waking up—to the full reality of our times, to their own potential, to the need of others and to the demands of the future. Here are some of those ways tried by various Edges staffers. What are your ways?

Δ Gardening

Δ Working in soup kitchens, or better yet, delivering coffee, sandwiches and used clothing to street people on cold winter nights.

Δ Visiting sacred sites

Δ Learning new languages, especially ones which require you to learn brand new rules of grammar, syntax and pronunciation.

Δ Participating in proactive groups

Δ Journal writing or the disciplined recording of dreams immediately upon waking up in the morning.

Δ Buying eco-friendly products

Δ Overland trekking

Δ Holidaying in 3rd-world villages or at least visiting village cultural festivals during international holiday treks.

Δ Rock climbing

Δ Experimenting with celibacy

Δ Working for the elderly house-bound which may include simple jobs like shopping or making tea.

Δ Working with a mentor

Δ Watching a master at work

Δ Looking for dozens of little ways to cut down on consumption for ecological reasons rather than economic ones.

Δ Retracing family roots

Δ Working with alien archetypes

Δ Creating a sacred space on a small corner table or on a shelf in your home or office

Δ Drumming

Δ Tuning in to unusual music

Δ Cooking multicultural cuisine

Δ Pondering who were the likely inhabitants 300 years ago of the spot where you are now sitting.

this outlook bad—computers doing everything for us. But, really, we've been trying to do this for ages. Just about every invention that has caught on has saved human beings time. We don't like having to do this work—we want to escape from it and do something different. Now, part of the problem with computers these days is that people don't know what else to do with the time saved, except sit around and play video games. We don't consider *why* we want to be free of the physical world.

The technological possibilities will have the effect of freeing our senses and time in a new way. From this technological/material side, these are exciting times.

They are also very dangerous times, for we may never get to actualize these potentials—the economic system could collapse tomorrow. I found out recently, for example, that a six-foot shift in rock in the San Andreas fault would send more than San Francisco tumbling down. The insurance companies of the world would also collapse, since San Francisco is insured for more than the insurance companies can bear. If you follow the ramifications through our whole economic system, it makes for a horrific scenario. That's how fragile the whole of society is at present.

We can also look at the inequality between North and South. Imagine a little community of 100 people with four people living on top of the hill with all the gold under their beds and all the guns. Most of the other people are living in the mud at the bottom of the hill trying to survive, while 30 of them have no fresh water. This is a situation which is begging for revolution. Now, we in the West are part of the aristocracy sitting on top of that hill protecting our comfortable little nest. The potential for global revolution is just around the corner.

Then there is the environmental crisis. Some things we know about, but it is the things we don't know that are really going to stump us. Take the whole business of the ozone layer. The ozone hole, discovered in 1988, had been growing for years, but the

computers studying the atmosphere were programmed to look for general decreases in ozone, not for a hole. When the computers (working at 10 MIPS) did discover a hole, they threw out the evidence. So the hole was ignored for about five years. It was a total surprise when the news hit. More surprises are in store, as we discover the effects of the damage we have done to the environment.

We have the potential to fulfil the things people have dreamed for centuries in our own lifetimes. At the same time we could foul the whole thing up and wipe ourselves off the planet. Never before, as far as we know, has a species arisen which has threatened not only its own existence, but the life of many other species. So it is an exciting time to be alive, but it is also a very precarious time.

Beyond all this, something is happening in the realm of spirit. We are standing on the threshold of a time towards which evolution has been building almost since life began. I see evolution as the unfolding of consciousness—which biologists tend to ignore. I see evolution as much more than genes, species characteristics and survival of the fittest. Before Darwin came along, "evolution" was used in a much broader sense to indicate the whole evolution of the cosmos—an unrolling of the universe into other forms and higher orders.

I understand consciousness as the field within which experience takes place. I'm not talking about it as a particular social consciousness or high or low forms of consciousness, but about what we all have as living, experiencing beings. I think Descartes was getting at this when he said, "I think; therefore I am." The human being has a very rich consciousness in terms of its sensory apparatus, but probably no richer than a dolphin's or a dog's.

Human beings have added new dimensions to their consciousness, for example, language to share experience and ideas. This means that we can learn from everybody else's experience. With language, we began to evolve as a collective learning system

and we've applied an array of technology to increase that—writing, printing, telephones, photocopiers, radio, television. Our telecommunications networks are increasing our ability to understand and learn about our environment. Now, we are not just experiencing the world—we can experience almost anything anywhere on the globe.

That has made for a tremendous enrichment of our consciousness. We're also becoming aware of what's happening down at microscopic levels; we are aware of bacteria and viruses and what's happening in our bodies. Recently we've become aware of the whole image of the Earth. Here we are living on this blue planet in space.

We also have a new perception of time—we can think ahead and make decisions about the future in a way that other creatures cannot. We also become aware of ourselves as individual conscious, thinking, feeling, experiencing entities. We have developed a self-consciousness that other creatures have not.

We also have thumbs, which allow us to make very fine movements. All our technology amplifies the thumb's ability to begin to manipulate the world and change our surroundings.

If you combine all that with an intelligence that can begin to understand the structure of matter and to think about the future, then a whole new creativity is unleashed on the planet.

By helping the sick and caring for the disadvantaged (to some extent), we have slowed the pressure for genetic change. We have made the step from genetic into conscious evolution. We know that what determines our future as a species is not what happens in our genes, but in our consciousness, our ideas, what's going on inside us. That big shift has also affected our consciousness itself, because our ability to create and change the world has given us a sense of control over the world. We know we can change things, that we can satisfy our desires.

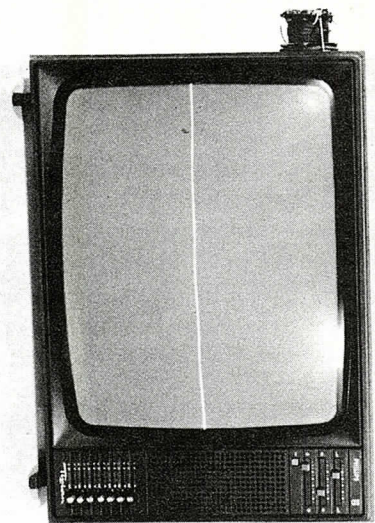
Now on one level that's a positive

thing. But we have got so caught up in the idea of controlling the world and so enmeshed in our power over material, that we have been seduced into thinking that the material world is all there is. If you say the word "consciousness" to most scientists, they say: "Don't use words you can't define. And anyway, consciousness is nothing but an epiphenomenon of brain activity." Ask them what brain activity is, and they say, "Well, it's neurons, it's biochemical information, electrical signals." And if you say, "What's that?" they respond with, "Well, it's wave equations and it's eigen values etc.—mathematical quantum physics." And if you ask about all that, they say, "Well, it's a concept in the human mind"....And they think they can explain consciousness!

But that's the trap of our society—that the material world is reality and that consciousness is something we don't quite understand. It has led to what I call the fundamental operating system of our society. If you're not happy, do something—go get a new job, go talk to so-and-so, buy yourself a new set of clothes. The assumption is that if we changesomething in the world, we'll make ourselves happy—the premise being that if we're not happy, then there's something wrong in our surroundings.

This basic operating system makes consciousness a victim of the world. We allow the world to determine how we are inside. At one level, we know this isn't true, but we get seduced into behaving as if it were. What comes through the media, for example, is a kind of hypnotic seduction that says, "Look, you haven't got enough; you need more; if you just had this nice late-model Porsche, you'd be happier than you are now." Inside, we know this isn't true. But most of us go on gathering, doing things and following this hypnosis that flows through our society. It is this belief system that underlies most of our materialism, our love of the material world.

This trance-like state means that we are very seldom in the present moment, very seldom here in the now.



Nam June Paik, *Zen for TV*, 1963-75. Television set modified to show only a vertical line. Museum Moderner Kunst, Vienna.

Speaking for myself, I know that most of the time a voice in my head chatters away about how things will be. If you're in conversation with someone, a voice in your head chatters away about what might happen, what they might think, what's going to happen to the world economy, the housing market. We're thinking about the future most of the time. We are seldom in the present moment. We are so caught up in this addiction to the material world. We forget that the real world is the world of spirit, the world of mind, the world of consciousness,



Peter Russell holds degrees from Cambridge in theoretical physics, psychology and computer science and is well known for his explorations of the potential of human consciousness. In 1988, he gave the closing address at the symposium "Man, Health, Environment" in the European Parliament in Luxembourg. His books include *The White Hole in Time* (Harper Collins, 1992), *The Creative Manager* (1989) and *The Awakening Earth* (1982). His video *The Global Brain* won both the gold medal and Grand Prix at a Swedish international audio-visual festival. Peter Russell lives in London, UK. This article is from a talk he gave to the Lucis Trust in December 1991.

whatever you want to call it.

But there's an interesting thing about this hypnotic trance. It's only skin-deep, so to speak. We know that happiness is not related to having a certain kind of car or a new suit of clothes. We know inside basically whether or not we are at peace, whether or not we are happy, whether or not we feel fulfilled. And we know that peace, happiness and fulfilment have to do with how we see the world, and with our own attitudes and perception. But we keep forgetting. The hidden observer gets pushed out.

I see humanity's task at the present time as one of waking up out of the trance and becoming fully awake to the inner observer, to that hidden level of truth, the inner truth we all share, as well as being awake to the outside world. But we're almost asleep, almost living in a dream when it comes to the inner world of mind, consciousness, spirit. And that is the challenge that is facing us.

Any crisis is a sign that the old way

The assumption is that if we change something in the world we'll make ourselves happy.

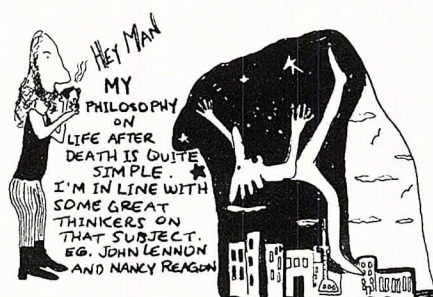
no longer works and something new is required. I see the economic, the political, the environmental crises all as results of being only half-awake as a species. We are being challenged to awaken to our inner reality, to the inner truth. The crises we are facing are pointers to an old social system and a pattern of materialist consciousness which no longer work. The crises say to us: "Wake up! Wake up before it's too late."

But waking up that inner reality is hard work. There are times when we forget what it's all about. There are

times when we get so sucked into society's state of trance that we totally forget it, and we start panicking about money or job, or falling behind in the latest fashions. We also have to recognize that maybe we can't do it on our own—that we need each other. As much as we are here on earth to evolve, to expand our consciousness to spiritual levels of awareness, I think we are also here to help each other along that path. And that comes back to sharing our learnings and helping each other make the transitions.

If we can do that, the children of the 25th century will look back in their history lessons (if they're still concerned about the past) to the end of the 20th century as some time of great transformation, a time when human beings finally got it—after all those years of struggle and pain and self-torture, they finally got it. They got enough distance from the material world to actually ask, "OK. What's it all about?" ♦

MEN ABOUT TOWN *Broderick © 1990*



When

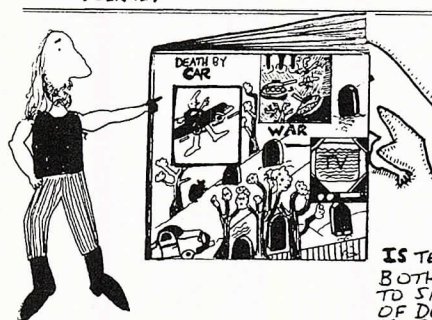
WE PASS THROUGH THIS LIFE FOR JUST A BRIEF MOMENT. THEN OUR SPIRIT IS FREE TO ROAM THE EARTH WITH AN INCREDIBLE NUMBER OF TRAVEL POINTS.



IT HAS BEEN SCIENTIFICALLY PROVEN THAT PARANORMAL ACTIVITY IS AS COMMON AS THE COLD. WHY DO YOU THINK EINSTEIN WAS SO BRILLIANT? HE RELIED ON THE OTHER SIDE TO FEED HIM A LOT OF THE NUMBERS THAT MADE UP HIS EQUATIONS. HE WAS NO DUMMY. REALITY TAKES ON A MULTI-DIMENSIONAL LOOK.



LOOK MAN, I AM SEEKING THE TRUTH. AND THE BEST WAY TO DESCRIBE IT IS: MY LIFE IS LIKE A STATE-OF-THE-ART 24 TRACK MIXING BOARD. I MEAN YOU CAN PLUG INTO ONE CHANNEL AND LIVE YOUR LIFE OR BLAST OFF INTO THE OTHER 23. LET'S JUST SAY I'M INTO FULL PRODUCTION VALUE.



IN OTHER WORDS, LIFE IS TEEMING WITH ACTIVITY ON BOTH SIDES OF THE FENCE—SO TO SPEAK. A VERITABLE BUFFET OF DELECTABLE SPIRITUAL EXPERIENCES.



THE WEST REUNITED

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as a subversive ideology from an enemy "Islamic block."

In Algeria, the ambivalent Western response to a suspension of democracy sends another mixed signal. The "world government" seems to strongly support democracy over military rule, except

when democracy would produce an Islamic state.

Perhaps the experience of planetary power will broaden Western attitudes. But it could also corrupt. Either way, the UN charter needs to change. The UN executive council cannot be safely entrusted to appointees from the biggest

military powers.

In the future, perhaps the West will reach beyond a racial sense of identity. That is possible. If Westerners are able to stop dividing themselves into warring good and evil halves, then they can also stop projecting an evil half outward on non-Westerners. ♦

Brian Griffith is a writer who has been featured regularly in Edges. He has studied history and done community development work in Canada, India and Kenya. As a writer, he is concerned with ethics and values in a planetary society. He seeks to combine inter-cultural studies with ethical reasoning in the discussion of current issues.

ALBERTO KRYGIER'S HYPERCONNECTIONS

continued from page 11

sonal gain and does not address serious problems. Power resting on the old habits of domination, control, retaliation and destruction will be sensibly influenced by new values that are emerging in a hyper-connected, complex and fragile world."

Alberto Krygier understands that something more than democracy, market economies and technology is needed. "I am thoroughly convinced that the most important phenomenon in this period of history is neither the collapse of Communist ideology nor the emergence of a global economy nor the presence of Japan as a decisive world force, but the degree of cultural connectivity in the world today—the dialogue, the exchange of information and the search for unifying concerns and objectives that is taking place between the cultures of our planet." He asserts that we have no way of knowing the full implications and consequences of this trans-cultural revolution.

In his view, complexity is a dynamic process whose behaviour and trajectory can be understood by only a few people. "As a result," he continues, "anything is possible and the occurrence of unusual, unpredictable and erratic behaviour is more and more



Alberto Krygier

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probable. And so every day human minds, institutions and governments are at the mercy of uncontrollable chains of events that convulse the planet at the least-expected moment. All human actions and process are firmly interconnected and the slightest change can have devastating consequences. For the first time, an individual's behaviour has the potential of affecting the

entire planet, and so we find ourselves responsible not only for the future of our families and our countries but also for the life of the planet Earth."

"In this context, business management faces five major new challenges in the decade ahead:

1. The development of an environmental conscience, as business is faced with increasingly more radical tactics from environmentalists.
2. The promotion of greater interaction between corporate and local cultures, which will, in the process, create a 'third' culture. This will be a real learning experience.
3. The increasing reliance of corporations on technological innovations and know-how for their profitability rather than on financial or operational strength. Organizations that best channel their R&D resources will maintain a competitive edge.
4. Preparedness for abrupt transformation: as the world becomes more and more interdependent, we will have to be prepared for turbulence, ruptures, the breakup of great nation-states, organized terrorism and other unforeseen events. Management will be challenged to steep itself in chaos theory and to understand the "global village" phenomenon.
5. The nurturing of corporate cultures that stimulate autonomy, initiative and commitment. Organizations with

rigid, authoritarian hierarchies that view the enterprise as a tool for sociotechnical engineering will not achieve or sustain excellence. Milton Friedman's precept that profit is a company's only business is no longer acceptable.

6. The implications of hypercommunication and the information explosion: information and communication systems are becoming omnidirectional. Business, education and the quality of life will undergo radical changes when the implications of this phenomenon are fully realized."

These new challenges, he says, will constitute demands and even threats for many companies. Many companies unprepared for them will probably disappear before the end of the decade. Business that can decodify the trends can, with appropriate leadership, experience continuous learning and adaptation: "Greater emphasis will be placed on processes rather than structures; on the psychodynamic quality of employees rather than their abilities and skills; on creativity rather than mechanical tasks; on organizational culture rather than material worth; and on greater answerability to society as a whole rather than to shareholders alone. Such a revolution implies a passage from rigidity toward creative chaos." ♦

SOME TERMINOLOGY

Machine: a computer of any size

Network: a set of computers communicating by common conventions (called protocols) over communications media.

Node: any machine on a network

Modem (modulator and demodulator): a hardware device that converts computer digital data into a telephone's analog signals

Host: a network node that has disks, user mailboxes or user accounts

Site: a building, company, or campus with a group of network nodes (can be a host on some networks)

Gateway: a special host that connects two or more networks

Local Area Networks (LAN): connects hosts inside single buildings or small areas

Worldwide Network: any network with large numbers of hosts on more than two continents, such as BITNET

Source: John S. Quarterman, *The Matrix: Computer Networks and Conferencing Systems Worldwide*, Digital Press, 1990.

patches gathered through a loose network of personal computer bulletin board systems in Moscow and Leningrad. The dispatches were sent by local phone calls to the Baltic states, then to NordNet Sweden, and then to London-based GreenNet, which maintains an open link with the rest of the APC.

The Association for Progressive Communications will play a major role in providing communications services for environmentalists, non-governmental organizations and citizen activists before, during and after the 1992 United Nations Conference on

Environment and Development (UNCED) in Rio de Janeiro, Brazil. The largest United Nations conference in history, UNCED is the first global gathering on the environment since 1972, and the first global summit to take place fully within the age of the NGO and computer technologies. APC maintains over 30 electronic conferences on UNCED documents, agendas, reports, discussion and debate. Official UN documents are thus accessible to citizens around the world, providing broader citizen participation in a heads-of-state summit than has ever been possible. APC's Brazilian network, AlterNex, was chosen to spearhead communications services for non-governmental organizations at UNCED itself.

Around the globe, other APC networks are working on issues of peace, social justice and environmental protection. In Australia, the members of the Pegasus network are working to hook up the 18 percent of the electorate that votes Green, a step which would really empower the party. Back in the United States, EcoNet is helping high school students monitor water quality in local rivers. One such experiment involved 50 students along the Rouge River in Michigan. When in 1991 neo-Nazi skinheads ransacked a Dresden neighbourhood populated by foreigners, users of the German ComLink posted news of the event. Soon Dresden newspapers were flooded with faxes from around the world deploring the action. All in all, tens of thousands of messages a day pass back and forth within the "APC village," and the number grows every day.

The partner networks of the Association for Progressive Communications have built a truly global network dedicated to the free and balanced flow of information. The APC charter mandates its partners to serve people working toward "peace, the prevention of warfare, elimination of militarism, protection of the environment, furtherance of human rights and the rights of peoples, achievement of social and economic justice, elimination of poverty, promotion of sustainable and equitable development, advancement of participatory democracy, and nonviolent conflict resolution."

The APC Networks are trying to make an "end-run" around the information monopolies and to construct a truly alternative information infrastructure for the challenges that lie ahead. By providing a low-cost, appropriate solution for non-governmental organizations and poor countries, they are attempting to make cyberspace civilized and democratic.

We are moving into a "new world order." The age of democracy may have had its beginnings in the French and the American revolutions, but only today is it finally reaching the hearts and minds of sympathetic populations around the world.

This "preferred" world order of democratic change depends heavily on the efficiency of communication systems.

Perhaps the most durable impact of the APC Networks is their promotion of that elusive phenomenon known as "world public opinion." One way that we can confirm the ascendancy of glob-

THE TALKING DRUMS OF AFRICA

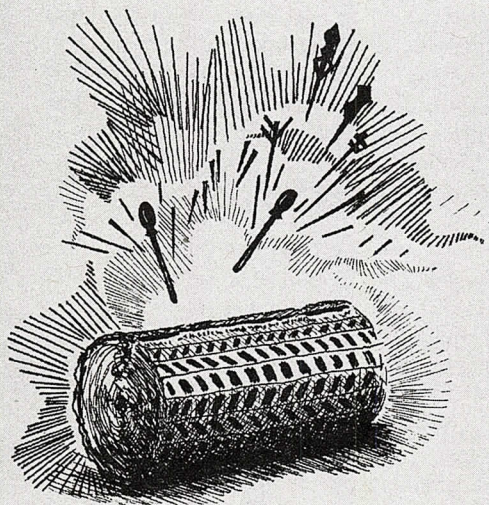
The language of the talking drums is based on the high-low musical intonation of many African languages. A fallen log is slit lengthwise and hollowed out unevenly. One lip of the slit is made higher than the other lip so "male and female" (i.e., high and low) sounds can be drummed out. Some tribes use two skin-topped drums, one for each tone. Working distance of a drum is usually six or seven miles at night-time, although important messages could be relayed over greater distances.

To send a message, the drummer begins with an opening signal followed by the name of the person to whom the message is being sent. Then comes the business of the message. This may be repeated several times to ensure delivery. The drummer may then end by adding the name of the person who has requested the message be sent, and conclude with a personal flourish.

Drumming language tends to be poetic, as in this Yaama invitation to friends to assist in hunting:

*to-day has dawned
let us go on a journey into the forest
with the net of the forest of trees and
mboloko and fambi [types of antelope]*

from Talking Drums of Africa by J.F. Carrington, New York: Negro Universities Press, 1969.



al civil society is to examine the accumulating evidence for world public opinion, a cosmopolitan convergence of interactively communicating national civil societies. The MacBride Report observed that world public opinion is "still in the process of formation, and thus fragile, heterogeneous, easily abused."¹¹

As we approach the third millennium, communications technologies such as the APC Networks are transforming international relations. They have greatly accelerated the rise of global civil society and the NGO movement. Not only do they report violations and victories of human rights; they demonstrate that communication and information are central to human rights and to the emergence of democratic, decentralized planet-loving movements. ♦

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¹⁰ John S. Quarterman, *The Matrix: Computer Networks and Conferencing Systems Worldwide*, 1990.

¹¹ International Commission for the Study of Communication Problems [MacBride Commission], *One World, Many Voices*, UNESCO, 1980. ♦

Have you Heard?

DON CAMPBELL



During the past year, the awareness of music and sound in hospitals, therapy practices and personal self-help programs has exceeded any expectation of the professionals. These short news clips give some of the bad news and the good news.

Dangers of sound and exercises. Wearing stereo headphones while you jog, cycle or do any aerobic exercise can lead to deafness, according to a study at the University of Louisville School of Medicine. During aerobic exercises, your body pumps blood and oxygen into your arms and legs leaving the delicate linings of your inner ears dangerously unprotected. Dullness and ringing in your ears are warning signs of a hearing loss.

The voice can trigger seizures. A neurologist reports in a prestigious medical journal that a woman got epileptic seizures by hearing the voice of "Entertainment Tonight" co-host Mary Hart. Symptoms included an upset feeling in the pit of her stomach, a sense of pressure in her head, and mental confusion, said Dr Vekai Ramani, who reported the case in *The New England Journal of Medicine*.

Clean up your neighbourhood with music. Music can do magical things, especially in Canada. First there was the 7-Eleven Store in British Columbia that piped Muzak into the parking lot to deter teenagers from loitering. Out blasted Mantovani and the kids scattered leaving only a wake of Slurpee cups. Now, downtown businesses in Edmonton, Alberta, are playing Bach and Mozart in a city park to drive away drug dealers and their clients. Police say that drug activity in the park has dropped dramatically since Johann and Wolfgang arrived.

Music therapists and Mickey Hart address Senate committee. Imagine a form of therapy which benefits nearly every user in terms of increased vitality, renewed motor skills, increased mobility and the easing of pain. Imagine, too, that it is able to reach some patients whose physi-

cal condition isolates and immobilizes them, and it can sometimes create a setting in which they are able to tap into remembered reserves of memory and ability, however transiently. Then imagine that it costs almost nothing. Such are the gifts of music therapy. Such a therapy would be worth investigating, and that is just what music therapists have requested in their first discussion of the subject with the Senate Special Committee on Aging, according to *The Journal of the American Medical Association*.

So, be aware of the times at hand. If you are interested in knowing more about your ears, music therapy, sound therapy and how to protect your sound environment, contact:

For hearing loss or ringing in the ear: The American Tinnitus Association, PO Box 5, Portland, OR 97207 USA, tel. (503) 248-9985.

For music's use in rehabilitation: The National Association of Music Therapy, 8455 Colesville Rd, Suite 930, Silver Spring MD, 20910 USA tel. (301) 589-3300, or The American Association for Music Therapy, PO Box 80012, Valley Forge, PA 19484, tel. (215) 265-4006, or The International Society for Music in Medicine, Dr Ralph Springe, Executive Director, Sportkrankenhaus Hellersen, Paulmannshofer Strasse 17, D-5880 Ludenscheid, Germany.

For book and references, please write: Institute of Music, Health and Education, IMHE Services, PO Box 1244, Boulder, CO 80306, USA. Tel.(303)443-8484.

Keep on the lookout for a safe hearing and listening environment. Over 28 million people in North America are suffering from hearing loss caused by rock concerts, headphones, rifle fire, airplanes and machine sounds. ♦

Don Campbell is a composer and researcher on sound, music and health and author of *The Roar of Silence* and *Rhythms of Learning*.

Anyone for a Bulletin Board?

Bulletin boards come in different flavors. There are the old familiar cork boards which require a ready supply of push pins. There are velcro press-on-letter boards. There are sticky ones which, in humid climates like Taiwan, have an adhesive half-life of about fifteen minutes. And now there is the electronic bulletin board system (BBS)—paperless and free of harmful substances—an environmentalist's dream.

One of ICA's objectives in Taiwan has been to expand people's access to environmental information and their participation in the dialogue about our planet's future. We have promoted EcoNet, the international ecology network, with some success. However, this new world of telecommunications and modems can seem intimidating to many, especially when you add in the substantial charges of international packet switching services.

Hence the bright idea of setting up our own local environmental bulletin board. It would avoid the complexity and expense of international connections, and most of the necessary technology was already in place. One of my odd assortment of hats is labelled Vice Chairman of the Taiwan Users Group (TUG)—the somewhat unfortunate name of our local computer club. TUG has long run its own BBS, through which members ex-



Members of environmental organizations, companies from the American Chamber of Commerce in Taipei and members of the Taiwan Users Group. SYSOP (System Operator) James Thomas is at the terminal in the ICA office demonstrating the use of the Proactive Environmental Conference.

change computer tips, frustrations and presumably non-copyrighted software. All that seemed to be required was a matchmaker to arrange the marriage.

Initial conversations with the computer club produced surprise, doubts, some affirmation and a certain degree of dour resistance. It became clear that it was not always love at first sight between hackers and environmentalists. The idea of opening the computer domain to who-knew-what alien fanatics took some time to swallow. The matchmaker was going to have to earn his pay.

In October of last year the marriage was consummated, and the Proactive Environmentalism Conference made its debut on TUG's electronic bulletin board. Anyone could participate by making a local telephone call from any PC. ICA assumed responsibili-

ty for facilitating the conference, which meant posting informative articles and responding to users' queries and comments.

With the system operational, the focus became promotion. Evangelical presentations were made to the Environmental Round Table and local chambers of commerce. Invitations to participate went out to the EPA, to ICA sponsors and client organizations and to local action groups. Cards were printed with the access numbers, and newspapers announced the island-wide availability of the new service.

The ICA office became the site of user demonstrations and orientation sessions. Some CEOs known to be heavy users of e-mail services in the privacy of their corporate offices were smoked out and shamed into participating. High school students logged on from their

classroom and home computers with high energy and enthusiasm. More people began to share concerns, questions and opinions. While still in its early stages, the conference is beginning to be a place where people in Taiwan expect to find local and global environmental news, reports, announcements and dialogue.

TUG's System Operator (SysOp) was an early believer in the project, and we used the occasion to rejuvenate our BBS. Since launching the environmental conference, we have added two additional telephone lines for new users, expanded from a 100 to a 700-Megabyte hard disk and created a way for people in other countries to join the conversation. More than a thousand people have already logged in on one or more occasions, and some 400 messages have been posted.

One reflection from our experience has to do with the struggle today to decide what it means to be environmentally "proactive." It's easy to say what we don't like or want changed. Saying how we individually or corporately intend to make a serious contribution is more difficult. People who make such declarations can be criticized or attacked. As a result, companies hesitate to call public attention even to their positive corporate environmental policies and practices out of fear of becoming a target. Local environmental groups often display related anxieties.

We are generally less at risk

when we play the role of opposition than when we assume the role of leader. This is especially true in environmental affairs, with all its complexity, seemingly conflicting (and rapidly changing) information and dizzying diversity of perspectives, values and interests. Yet we need individuals and organizations that dare to declare what they are doing and why they are doing it. The electronic bulletin board has offered us a fine opportunity for both expanding and deepening the crucial dialogue about our common future.

—Gordon Harper

Junk Mail: Freedom to Choose

Canadians receive 3.5 pieces of junk mail per household per day (1990 figures). That adds up to a staggering 13 billion pieces of junk mail per year, requiring three million trees. But be of good hope, the winds of change are blowing. In the summer of 1990, a small neighbourhood of concerned citizens circulated a petition to 442 homes in Waterloo, Ontario. The results were astounding: 97 percent of householders supported the call to end junk mail deliveries. It was a clear message. The vast majority of Canadians want to be able to choose whether or not they receive junk mail.

As a result of this grassroots action, a national campaign, "No Junk Mail: A Matter of Choice" was launched. The

campaign is organized by Maple Key, a non-profit organization that has produced "No Junk Mail" kits to help householders exercise their right not to receive junk mail. Paul Psutka, organizer of the petition, defines junk mail as all unaddressed, unsolicited mail. This means that flyers, coupons, catalogues and non-subscription magazines that do not carry your name and address are defined as junk mail. Solicitation from any charities that you support will still be delivered since they bear your name and address.

The "No Junk Mail Kit" offers easy-to-follow, effective advice to empower you to choose which mail to receive.

According to Maple Key, the Canada Post Charter requires Canada Post to deliver only "deliverable letters."

"Undeliverable letters," as defined by the charter, are those "refused by the addressee." You have the right to refuse junk mail and to return it to the sender. The kit contains multiple strategies for ending junk mail. It encourages you to stamp junk mail "Return To Sender" and to remail it. "Junk-Mail Free Zone" stickers for regular and super mailboxes are provided. Form letters, protesting the universality of junk mail to the Prime Minister of Canada, the Minister responsible for Canada Post and to the Canadian Direct Marketing Association are enclosed in the kit. No postage is required to send letters to Members of

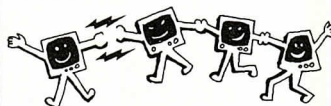
Parliament.

In exercising our right not to receive junk mail, we will be part of the solution. We will be saving many hectares of forest, saving energy used in paper product manufacture and saving difficult-to-find landfill sites.

The kit costs \$3.50 and is available from: Maple Key, 428 Westvale Drive, Waterloo, Ontario, Canada N2T 1T5.

—Jim Hollingworth

Dr Hollingworth is a family physician in Goderich, Ontario, who believes that each one of us can be a guardian of our forests.



KIDLINK and the KIDS FROM KANATA

KIDLINK is an extraordinary grassroots telecommunications project involving children from ages 10 to 15 in more than 35 countries using their classroom or home computers to share their visions of the future and the steps they can take to make this a better world.

In its first year (1990-1991), 2,600 youth participated from 31 countries. The effort received worldwide media attention, including a front-page story in *The Globe and Mail*, when children in Haifa, Israel used the international KID-CAFE to share their experiences of the Gulf War—as it happened.

Teachers around the world

found ways to integrate KIDLINK into geography, language, current events, math, science and other classes, introducing a new level of meaning and excitement to traditional subjects.

Now in its second year, this completely decentralized and unfunded project is in full swing and promises to involve many more youth and offer even more teaching opportunities. Every May, KIDLINK youth participate in a world-wide multimedia extravaganza over a two-day period, using many new technologies to communicate "live" with others who have been part of KIDLINK during the year.

Ironically, although KIDLINK originated on a Canadian educational computer network, the participation of Canadian youth and teachers has been limited to date.

THE KIDS FROM KANATA is an initiative built on the same technology and approach as KIDLINK, but specifically targeted at Canadian youth. The project will involve young people from 10 years of age to adulthood in all parts of Canada and from different cultural backgrounds.

Participants meet other young Canadians to form friendships and share their experiences of being Canadian. Older students will engage in active Canada-wide discussions about the nation's future. And thanks to the wonders of modern technology, none of the participants will have to leave

home or classroom to do it.

The state-of-the-art computer technology they use transcends many barriers to communication—such as geography and physical appearance—and allows the students to raise their heads above the walls of the classroom and travel from sea to sea and back in the blink of an eye. When they arrive home again, they may see themselves with new visions. Seeds from far away gathered on the trip will grow and flourish on local ground. Strange ideas and strange peo-

ple become familiar. The students see how different things and people are, but also how much the same.

For more information, contact: John Ord at PLAN-IT-EARTH Communication, 339 Wellesley St. E., Toronto, Ontario, M4X 1H2. Tel: (416) 922-7001.

The Natural Step in Sweden

The Natural Step, initiated in Sweden by Karl-Henrik Robert, is a network of experts from various fields who are attempt-

ing to find out how much can be accomplished by using scientific consensus as the basis for decision-making in human society. The network includes scientists, economists, teachers, environmental activists, politicians, business leaders, artists and others who are all contributing to a mutual effort for a future based on respect for natural laws. The irritant that produced this pearl of a cooperative project is found in the all-too-common response to environmental policy-making: "different authorities have different and often conflicting findings in this arena of ecology, so, until they agree, why throw money away on preventive projects on which there is no consensus?"

And so, the ultimate purpose of the Natural Step network is to find the common ground where all sorts of people—right- and left-wingers, employers and employees, atheists and believers, etc.—can meet. When they can all agree on a set of scientific facts, and on the logical implications of those facts, the way is cleared for future action.

Karl-Henry Robert, MD, PhD, is one of Sweden's leading cancer researchers as well as a former national karate champion. The interview of Dr Robert was a joint project of Robert Gilman, the founding editor of In Context, and Nikolaus Wyss, a Swiss journalist.

This excerpt from the interview is quoted from an article

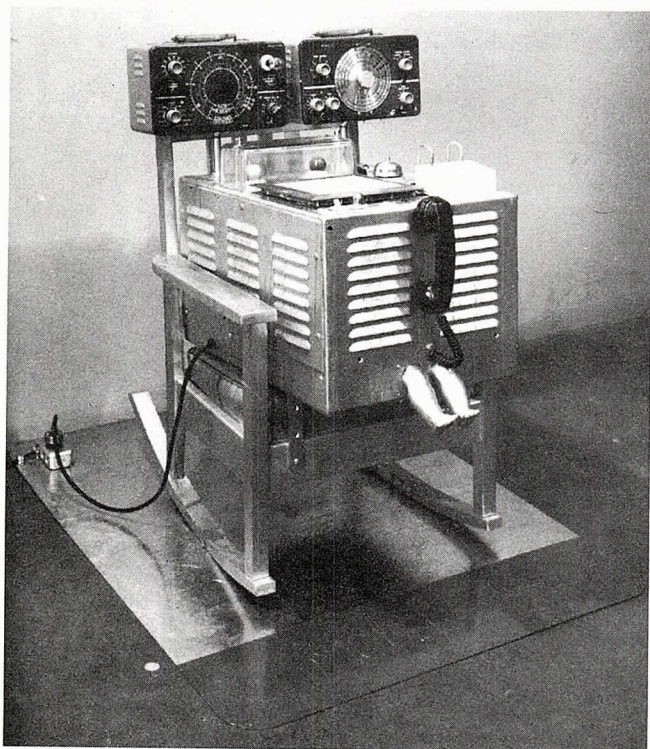
that appeared in In Context magazine no. 28 (Spring 1991).

To me, it's just obvious that there must be some truth about our environmental problems that is true for everyone, whether they're left- or right-wingers. There must be some truth that we could define together based on knowledge, and I wanted to know where this knowledge was. How much could we agree upon from the facts?

But all I saw was this arguing going on—it was like watching a house burn down while the fire brigade was arguing about how the fire brigade should be organized. I felt, "God! Couldn't we agree upon something, and see how much we could start doing on that basis?"

That was when I became a slave to what became The Natural Step. I started to write the consensus report—which was only a consensus in my own brain, but I tried to foresee the problems that people had when they wanted to reach consensus. For example, if I wanted to get rid of nuclear power, I tried to understand how intelligent people who want nuclear power would argue. I did my best, then I sent this report to the best scientists in Sweden—communists as well as conservatives. I asked them, "Could you please find the errors in this for me?"

If there is anything that unites professors, it's that they can't help finding errors in what others have done, so they



Edward Kienholz. The Friendly Gray Computer, Star Gauge Model #54. 1965. Collection, The Museum of Modern Art, New York.

helped me very well. I got the document back, solved the problems they had pointed out to me, and sent out a second version.

I did this 21 times.

The final report is the 22nd version of the first consensus report. This was very challenging to industry and to a lot of organizations, because at last somebody had gathered a consensus about what we should do. I managed to raise money to distribute this report to every Swedish household and every school—4.3 million copies. The package comes with an endorsement from the King, and it employs a very simple pedagogical method: an audio-cassette tape talks along with the pictures and explains what is wrong—the systemic errors that make up the trunk and the branches of the pollution tree—and finishes by explaining what we must do if we want both to survive and to keep our wealth, which really amounts to the same thing.

Wealth is based on structure, and we are tearing down structure. I explain this in a way that makes it very easy to understand, and I explain the tests that have been done. And now, together with the Green movement and the adult education network, we have started study circles all over Sweden with this report as a basis.

When I travel to Hungary, Poland and Switzerland, I tell them the same thing: you must identify the slave who doesn't want to have power in any re-

spect except to be the glue between powerful and intelligent people. If you can identify him and make him work, there is tremendous power in this idea, because almost everyone who can think would like consensus to appear when it's about survival and natural resources.

I don't believe that the solutions in society will come from the left or the right or the north or the south. They will come from islands within those organizations, islands of people with integrity who want to do something. They will expand and they will become more and more powerful. It's like the Trojan Horse. In a big oil company, for example, I know that there are people with integrity who think about the future, who want to protect kids, who would like to do something. We can use their skills to do something within the company. We educate them when we find them.

This is what a network should do—identify the people who would like to do something good. And they are everywhere. This is how the change will appear—you won't notice the difference. It won't be winning over anyone. It will just spread. One day you don't need any more signs saying "Don't spit on the floor," or "Don't put substances in the lake which can't be processed." It will be so natural. It will be something that the intelligent people do, and nobody will say that it was due to The Natural Step or your magazine. It will just appear.

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A Therapy That Helps Everyone

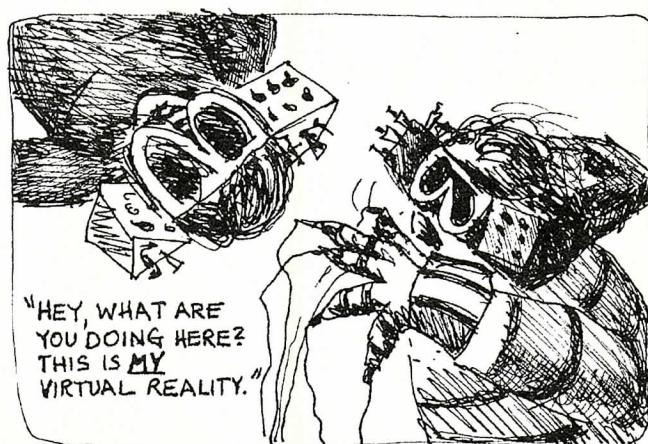
People differ in their health needs, but at the geriatric day hospital of the University of Texas Medical Branch at Galveston, one therapy seems to help everyone: music.

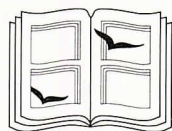
The patients don't merely listen to music—they dance to it, they reminisce about it (the music comes from their genera-

tion), and sometimes they sing it themselves or even play it on the kazoo.

Experience at this hospital and others sparked such interest in music therapy that the Senate Special Committee on Aging convened a hearing on the topic. Committee members heard testimony about patients with Parkinson's disease who can't walk, yet dance perfectly well as soon as the music begins. They heard testimony about other Parkinson's patients who can't talk, yet sing to the music with no problem at all. One patient plays the piano beautifully, yet remains otherwise unable to move. The same patient shows coma-like EEG readings until she imagines herself playing Chopin music; then her readings become normal again. ♦

Journal of the American Medical Association, summarized and reprinted in Health and Wellness: Top 40 Research Report.





Good Reading

SUPERMEMORY: The Revolution

by **Sheila Ostrander and Lynn Schroeder**

New York: Carroll and Graf Publishers Inc., 1991. Hardcover, 432 pages, US\$21.95. Can\$28.95.

The authors who gave the world *Psychic Discoveries Behind the Iron Curtain*, still in print in Japan and Germany, and then the Superlearning textbook and audio-cassette tapes, now gives us a fascinating overview of memory in *Supermemory: the Revolution*.

Authors Ostrander and Schroeder take us on a worldwide tour of laboratories and the discoveries of those who have dedicated their lives to understanding human memory: how it can be enhanced, how the ancients used it, how diet, sound, near-death experiences, tension, sound therapy, multiple personalities and anti-gravity underwater births influence memory. Their observations also bring us news of how the ideal use of memory can take the stress out of learning, revitalize the personality, stimulate creativity and facilitate its expression, as well as release painful childhood memories.

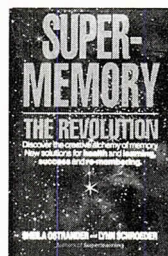
Memory, say the authors, is more than stored data. It is a gift to be exercised and kept lively for a lifetime of "personal best." It is a renewal of a primal power familiar to the Greek mystery school of Pythagoras, when memory was used to transform the self

to newness—to "re-member" the being—a power familiar to brilliant achievers over the years. *Supermemory: The Revolution* makes these techniques available to the reader.

Schroeder and Ostrander are finding "baby boomers" among their most interested readers. Why should this age group be concerned about their memory loss? Is there a memory pollutant on the loose? Are memories becoming foggy from electromagnetic and other forms of planetary pollution?

"It's not clear why memory loss is occurring in such a young age group. But it may be related to information overload, stress unrelieved through exercise and meditation, or perhaps tension from life within the computer," the authors said in a teleconference.

Supermemory: The Revolution also includes an update on how the techniques of *Superlearning* are being used. It's a master memory system that lets one learn two to five times faster than ordinarily and with less stress. Over 20 years ago, the authors brought this system of streamlined learning from the Soviet bloc to the West. Today this form of accelerated learning is used on five continents and is ever-expanding, being sought by the growing numbers of unemployed and educators concerned about high dropout rates. Medical students, interns and resident



physicians find *Superlearning* helps them to cope with retaining and recalling the vast stores of information they process.

Dr Jane Bancroft uses *Superlearning* to teach French at Scarborough College. She observed how the Russians, using these special techniques,

will attend night school after a long day's work and still remain alert and energetic. Dr Bancroft suggests that possibly social turmoil, junk food, rock music, pollution and TV contribute to short attention spans. Added to these insults are "crowded, noisy, ill-ventilated classrooms, chairs seemingly designed for bad posture, and learning methods from the Middle Ages," says Dr Bancroft.

Compared to our early ancestors, who had only a scroll or a wax tablet and who had to remember everything else, we who have books, TV, cameras, calculators and computers have comparatively little memory. When classical civilization passed, "learning went on a narrow retreat into monastic cells, memory as an ancient art sank into darkness."

In *Supermemory: the Revolution*, Schroeder and Ostrander share some of the ancient secrets that powered the old, memory-mystery schools of Aristotle, Plato and Pythagoras, who believed that memory is a gift from God.

—Robina Salter

EMPOWERING LEADERSHIP

by **Gordon L. Harper**

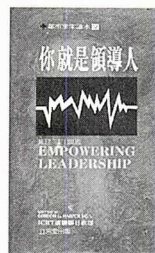
Taipei, Taiwan: Proverbs Publishing Company, 1991. Paperback, 279 pages. US\$15.00. Postage paid for North American purchases. Copies may be obtained from: Empowering Leadership, 7065 Wooden Shoe Rd., Neenah WI 54956 USA.

Empowering Leadership is a brief little book that plays a creative role in guiding changes in both Western and Eastern styles of doing business. Originally presented on the international community radio station in Taiwan as a daily series of

thought-provoking insights called "Meet the Future" for business managers, the book consists of 120 succinct statements on leadership, each printed in both Chinese and English.

Gordon Harper has lived in Asia since 1976, and has been Executive Director of the Institute of Cultural Affairs in Taiwan since 1982. He began this radio series in 1987 in cooperation with NEC.

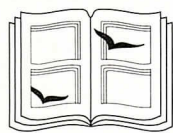
As the introduction states, the book offers ways of empowering both the



reader's own leadership and the leadership of others. The first section contains images of the essentials of the changing roles of leadership in our time. Part Two emphasizes "coaching" as a style of leadership. Part Three gives many suggestions on support systems to sustain the new

leader.

As a consultant, I found many of the insights in the first section invaluable ways of describing the leadership styles that my clients are finding themselves



Good Reading

required to pick up. An example: "We recognize leadership in those people who take full responsibility for the direction of their own lives and work, without waiting to be told to do so. They don't blame others for problems they encounter; they take responsibility for finding solutions." Another example: "We are all participating in a great transition from the top-down style of directive management to a more participatory and fluid style of leadership. This new style of leading people in

today's workforce is coming to be called coaching." As the book progresses, Harper offers practical suggestions for adapting one's own leadership style to changing situations and for being sustained as a leader.

Each of these two-paragraph homilies presents a thought-provoking insight. This is both the book's gift and its weakness. A number of statements in the book seemed like conclusions drawn from experience that there was no room to share. I wanted to under-

stand the whole context of those statements, or have some real-life examples. Such are the limitations of radio time-slots.

For me, the book is very useful as a "meditations" book: a short quote to read every morning or at the beginning of a session to provoke thought. It could benefit from reflective questions to evoke responses, practical examples, and an insight or question that readers will take with them into the day.

—Jo Nelson

HEALTH & WELLNESS: Top 40 Research Report

Edited by Dean Black

Springville, Utah, USA: Tapestry Press, 1992. Subscription rates: US—1 year \$24, 2 years \$44; Canada—1 year \$28, 2 years \$52; Other countries—1 year \$32, 2 years \$60. Write or call Tapestry Press Inc., P.O. Box 653, Springville Utah 84663. Tel. (toll-free) 1(800) 333-4290.

This 8-page monthly newsletter is a gem for anyone who wants to keep abreast of developments in wellness

technologies. Clearly and artfully laid out, "Top 40" presents 40 findings from multiple medical and scientific sources, including the National Library of Medicine's MEDLINE database, selected major news sources, and English abstracts of articles published in foreign languages.

Dean Black shows great skill in stepping down the language level used in standard academic journals to present

HEALTH & WELLNESS Top 40 Research Report



clearly worded, somewhat colloquial summaries of papers that range from "The Perils of Nastiness," "The Healing Power of Gardening" and "Mission Impossible" to "Support for High Vitamin C Doses," "Two Approaches to Osteoporosis" and "Garlic's Beneficial Effects."

So three cheers for a readable, even entertaining, medical newsletter.

—Brian Stanfield

CREATING THE FUTURE: Perspectives on Educational Change

**compiled and edited by Dee
Dickinson**

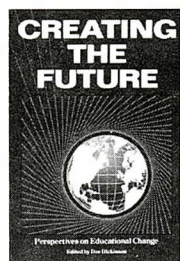
Aston Clinton, Bucks UK: Accelerated Learning Systems Ltd., 1991. Soft cover, 223 pages. US\$14.95.

In *Creating the Future*, Dee Dickinson has put together 25 short essays of leading-edge ideas in education. These ideas question the "industrial style classroom" most of us grew up in—the one in which the desks were all in straight lines and the student was seen but not heard—unless called upon. External control by the teacher and total obedience by the students were the criteria for a healthy successful learning environment. In this book, the first 12 essays lay out a theoretical basis for an integrated learning environment with priority on releasing human capac-

ities. Such people as Jean Houston, Luis Machado, Reuven Fuerstein, Barbara Clark, Marion Diamond, Howard Gardner and Robert Sternberg share their research and experience.

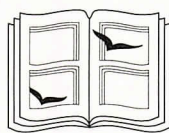
The next four articles explore motivation. Joy in learning is much more important to success than are extrinsic rewards, according to Mihaly Csikszentmihalyi, while culturally diverse content that enables students to identify with the curriculum is a "must" for Asa Hillard. Paul Messier maintains that the inner world of each person is important and a unique gift. Honouring and encouraging that world is just as important as giving young people the outer "objective" world.

His example is a helpful one. He was watching his daughter Rachel who is in the first grade and is identified as gifted. Before she started school, she



had a lot of confidence in herself. Now he was helping her prepare balloons for her birthday party. He asked her to cut some string in the middle for the balloon. She took her scissors and anxiously moved them back and forth until she stopped and asked him if that was the centre.

He said it was. Paul suddenly became clear that Rachel was becoming doubtful about her own judgment. If Rachel had been at school, she would have asked her teacher to show her where "the centre" was. Rachel would have been rewarded for being careful and thoughtful about following directions. He realized that Rachel was being taught that the truth resided outside of herself in an authority or world of things. Her world of truth was to be set aside. She was being trained to distrust her own inner wisdom and seek the truth "out there."



Good Reading

The next five reflections look at practical elements in a new learning environment. Robert McClure and Malcolm Knowles explore the restructuring of education systems in which faculty, parents, students and communities have the opportunity to put their creativity into lifelong learning centres. Charles Fowler, Colin Rose and Linda Tsantis talk about how to release passion, intuition and creativity through: (a) the arts which develop our emotions and allow us to talk to ourselves and to others; (b) technology which gives us access to global "mindpower;" and (c) accelerated learning techniques in which the learning situation and the teaching styles match the learning styles.

The last six articles of *Creating the Future* focus on what it takes to become change agents who create learning environments to meet the challenges ahead.

Shirley McCune talks about moving from an industrially based education system to one appropriate to an information society. She looks at how whole systems change. Bruce Campbell shares his experiences of creating an empowering learning environment in which all seven of the intelligences identified by Howard Gardner are actively taught every day in his classroom. Linda MacRae-Campbell presents guidelines for facilitating change in the schools, and Dee Dickinson summarizes and looks ahead to the future.

I definitely recommend *Creating the Future* to those parents, students, professional educators and community workers wrestling with questions about the necessary directions for education. You will be introduced to new sciences of learning and will have to decide what approaches make sense in the 90s. If you wish to explore learning sciences

further, there are many references to additional books and projects. You may decide to seek out one of the authors and practitioners. Many of them offer regular workshops in addition to their published research. You can do your own research on learning in your workplace, your community or your family.

For those already involved in testing this new science of learning, *Creating the Future* will be a helpful compendium. A gift of this book may make it easier for you to share some of what you are doing with colleagues and family.

Perhaps down the road a bit, a similar resource book will be written to share the visions and research of business people, parents, youth and communities participating in creating lifelong learning environments. When that begins to happen, the new learning system will truly be on its way. ♦

—Jeanette Stanfield

ESSAY

continued from page 44

relationships with those we love, and to immerse ourselves in the re-creation and regeneration of life on earth.

As she says:

"We can bring sacredness to our sacred places. By the time you get to fifty, it's time, and you will have time, and you will have all the strength it takes to do it, and you will have a new kind of constancy in your life that hasn't been there since you were a little girl. At first you will be disoriented; you won't recognize the landscape. But then you will realize that it is the real landscape of your heart and soul and that you really belong in that landscape."

I'm starting to find it in the strangest of places.

Surprisingly, I have become an avid gardener, planting and tending to vegetables, flowers, shrubs, fruit trees and native plants. I have

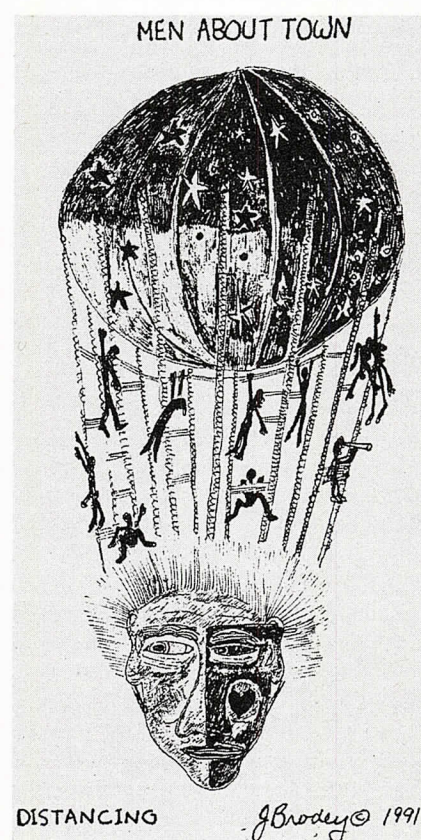
learned about creating small clusters of beauty, about feeding the soil, about how each bird and insect plays its part, about the companionship of some plants with each other so that they are mutually supportive, about the value of a single dead leaf as mulch and food for the next crop. Coincidentally, I have learned to appreciate death, decay and rebirth differently from before. There is freedom of a different kind here: the freedom not to be afraid of ageing and death; to see life as regeneration after regeneration and to find my creativity blooming. This is my 50-year-old freedom.

And Germaine concludes:

"And your heart will sing, and it really doesn't matter if no one else can hear the tune." ♦

—Julie Miesen

Julie Miesen is a typesetter by trade and an environmentalist by avocation. A long-time staff member of ICA, she lives in Brisbane, Australia.



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Jeanette Stanfield, ICA's learning design specialist, has a Master's degree in education, and 25 years of applied research experience with empowering self-image and human growth. She has taught more than 2500 people of all ages and from many cultures.

Toronto: August 22, 1992; October 3, 1992; November 28, 1992.

rites of passage JOURNEY 1993

This 22 day journey is filled with outdoor adventures. Girls and boys from 11-13 years old experience it as a symbol of their passage from childhood to youth. The trip challenges new youth to discover new strengths and skills, learn teamwork, respect the earth, and become a youth. July 1993 in Killarney, Manitoulin Island and the Bruce Peninsula. Cost is approximately \$1500 + GST.

INTERNATIONAL EVENTS

1992 ICA Global Conference in Prague, Czechoslovakia
"Exploring the Great Transition...Our One World"

Location: Charles University, August 30 - Sept. 6, 1992

Make this your summer to visit Europe—with a purpose.
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THE HERO'S JOURNEY VIDEO

This unique presentation explores the archetypal journey of humankind, inspired by Joseph Campbell's best-selling classic *The Hero with a Thousand Faces*. All of us participate in parts of the hero's journey in our life-long quest for a personal and sustaining vision. This video is especially helpful for those interested in new images of leadership.



"The Hero's Journey" is available on VHS video for \$24.00 plus \$2 postage and handling. ICA Member's discount is 20%.



EDGES MAGAZINE

Edges: New Planetary Patterns anticipates the trends of the future with exclusive articles from an international network of leading-edge thinkers. Subscriptions to this quarterly ICA publication is \$25 per year. Ask for *Edges* at your favourite bookstore.

The Best of Edges, a special anniversary issue, is an exciting collectors item compiled from three years of *Edges* magazines. *The Best of Edges* can be purchased singly at \$6.95.

THE SPACE BETWEEN

On site in Peru, Mexico, or Guatemala, "The Space Between" is a trek through time examining past civilizations and the disparities which exist between cultures. Learn what it is like to live in a small village. Seize the chance to visit the rural, urban and the "sacred space" of a nation. Converse with people from all strata of a culture. Witness the dignity, pride and joy of people creating new lives in the midst of crushing poverty. Experience the realities and find an appropriate response within the soul. There is a special focus on women, education and development. This trek is under the sponsorship of ICA Chicago. ICA Chicago direct line is (312)769-6363.

Location: Mexico

Nov. 1-14, 1992

FUTURE BUILDERS

Future Builders is an Education-Life Integration Project. An upcoming program is a provincial forum "Integrative Learning Centres" in October 1993. There will be a Public Presentation on August 12. The first Sharefair will be September 26, 1992. Contact Barbara Stocking 691-7743 for details.

For more information on any of the above programs call ICA Canada, 577 Kingston Road, Suite 1, Toronto, Ont. M4E 1R3. Tel. (416)691-2316.

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And for something completely different...ICA Canada's Annual General Meeting, October 17, 1992

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A Female Facing Fifty



ESSAY

A few months ago, I celebrated my 49th birthday. I told my friends that this was one milestone I had not anticipated celebrating with any joy.

But something else was happening to me. I have always been deeply interested and active in the printing business that my husband and I have built up over ten years. I loved the cut and thrust of printing industry politics and beating out our competitors. I anticipated each business day with pleasure and hated the weekends. Now, suddenly, I wanted to take time off work, was more and more bored each day with everything I did, and then resentful when asked to do anything new. I was ready to flee, to travel anywhere, to change jobs, to take up the latest activity that promised fulfilment. That none of these moves was financially expedient really changed nothing; it was the constancy of the yearning that made me restless.

I've been through this kind of upheaval before, I thought to myself. When I turned 30, I was amazed at the changes that came over me and the need for excitement in my life that toppled my security, broke up my marriage and labelled me as a rebel in my community. And now here I was again! Did I learn anything the last time? Well, maybe enough not to panic this time; maybe enough to try to build rather than demolish. Then, it was sexual freedom I thought I wanted; now sex has little to do with it. Rather, what I want is the freedom to create a life that matters.

So, what do I do with my new freedom? Do I concentrate on health and beauty like so many women in my age group? Do I want to be like Britt Eklund, also edging 50, who said recently that she could look young forever with exercise and diet (and probably the help of some good cosmetic surgeons)? I found myself appalled that she was driven to look as fit, elastic and sexually desirable at 50 as she was at 30. What a burden to place on oneself, and what a waste of energy! Or, must I be like Cher who allegedly adores being madly in love and hopes it will keep happening to her forever. I am quite clear that the only relationship worth having is one of partnership, and the only way to conduct that is with honesty and integrity.

Romantic love, based on an illusion, is an anathema to partnership. We convince ourselves that we are in love because of needs in ourselves that we think are being fulfilled in the romantic state. But one day we wake up with a nasty shock to find that we loved him not for himself but only for what we thought he was—the fulfilment of our needs; and that's the end of the relationship.

The alternative to all that is to become the true, aging, flabby, wrinkled, overweight woman who's been clamouring to be let out for years. But this is the woman nobody looks at. Shop assistants, bus drivers, people in the street act as if you're invisible. Facing the fact that I wasn't very attractive any more was a heavy blow to my vanity, but now there's some comfort in it, and I can have a bit of fun with it as well. I answer the phone in our office with my fairly low melodic voice which immediately attracts enthusiastic responses from male callers. I have come to enjoy the strange look on the faces of the ones who eventually meet me in person as they are confronted with a body and face they were not expecting.

The difficulty in choosing to be the one you are is that society programs us into assuming that a taut figure and a pretty young face are the goals to achieve and keep, but, given the inevitability of ageing and the power of gravity, that goal is impossible except for a very few years of our life. It follows that we assume that life is over when we begin to sag. Well, not for me. Wouldn't it be interesting if we all revolted against the current standards and made grey-haired, wrinkled, sagging and wise the model for looking good. It would eliminate the need to forever be "looking our best," always needing to impress those around us. It would strike another blow for our freedom.

Germaine Greer was in our city recently. There are many ideas she espouses that I disagree with, but the underlying theme of her new book, *The Change*, is this freedom that women over fifty can experience—permission to be ourselves, to use the wisdom we have gleaned, to be emotional, vulnerable and compassionate at the same time, to reject attitudes and actions that are an affront to our integrity, to want something different in our

continued on page 40



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Group Facilitation	July 30-31; Sept. 17-18; Nov. 19-20
Winning Through Participation	Beginning Oct. 8, for ten Thurs. evenings
Community Development	October 1-2

Facilitation Skills seminars can also be held on location.

Call Jo at (416)691-2316 or write ICA Canada, 577 Kingston Rd., Toronto M4E 1R3

TRAINER: Jo Nelson, a senior consultant with ICA Canada, is a highly skilled trainer and group facilitator. She is a graduate in education and anthropology. Her professional background includes 20 years in education and developing human resources with ICA in 6 nations.

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Watch for Fall 1992 articles on ECO-ED, a world congress for education and communication on environment and development.

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