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RAIN

AUG./SEPT. 1980

Energy Co-ops

Changing the Rhetoric

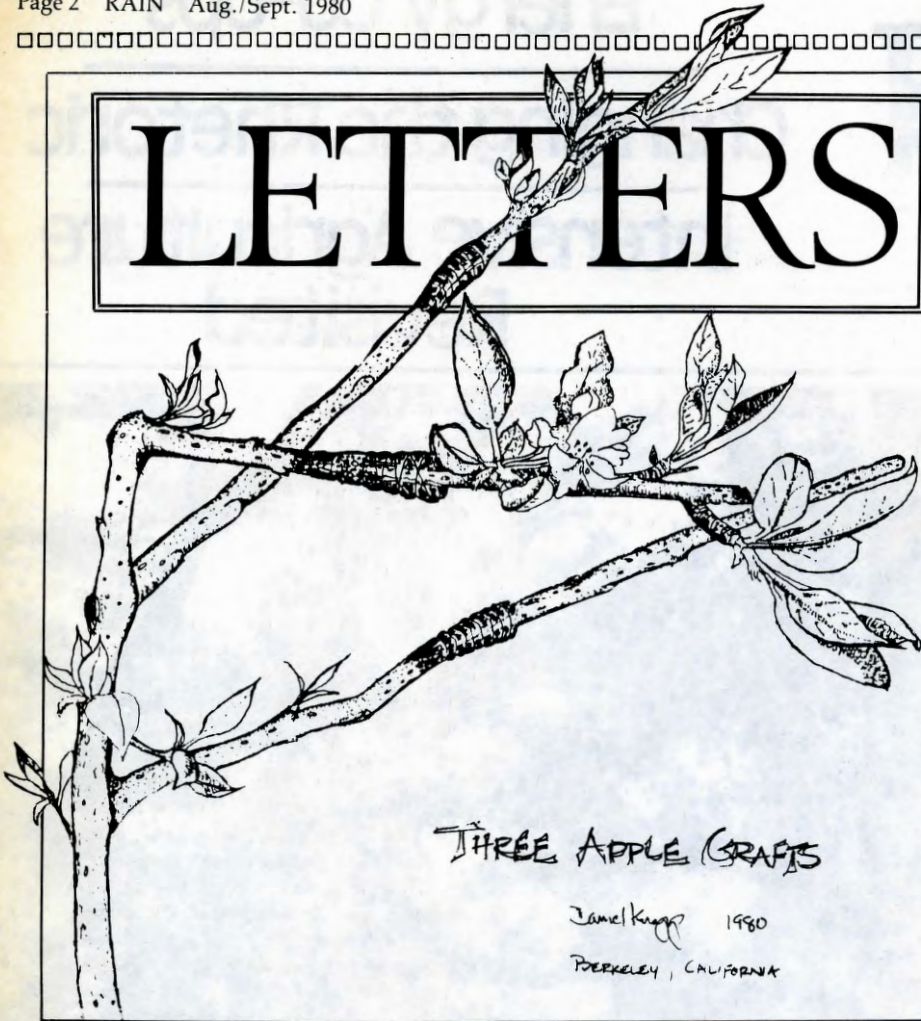
Intensive Agriculture
Revisited



VOLUME VI NO 10

\$1.50 No Advertising

LETTERS



THREE APPLE GRAFTS

Daniel Knapp 1980
BERKELEY, CALIFORNIA

Dear Rainy Folk:

Well, your back cover of the May issue inspired me to take up pen and ink and do some art again, and the above is the result, so I decided to send it to you for whatever use you may make of it.

The three grafts are of wood from three different trees. They were put on this spring with wood I brought down from Oregon. One was blooming, and will probably bear apples this year; a second has turned out to have pretty reddish leaves and will bloom and bear too. Both are two- or three-year-old wood. I've got more than

a dozen kinds of apples on a couple of full-grown trees up in Oregon. One first-year graft bore 25 golden delicious apples last year.

Dan Knapp
Berkeley, CA

Dear Mark,

Thanks for the good review of our study, *Absentee and Local Ownership of Maine Manufacturing* in RAIN's July issue. For

your information, there is a charge of \$3.50. The copy you received was a free press copy.

Hope your work is going well.
Russell Libby
National Center for Economic
Alternatives
122 State St.
Augusta, ME 04330

Dear RAIN,

In the note after the Illich article (July), you indicate that *Toward a History of Needs* is published by Pantheon. I suspect that this edition may not be available.

But the book has been re-issued by Bantam Books Inc. (666 Fifth Ave., New York, NY 10019)—\$2.95 (cat no. 12276-2). It has just been published in a new series called "New Age Books."

Sincerely,
Lee Hoinacki
Cobden, IL

RAIN:

To update your Alcohol section, June issue: I ordered from most sources listed, with the following results:

AAA (Texas) replied saying there would be a delay on supplies.

DESERT replied: The \$6.95 quoted should be \$9.95.

RUTAN replied: Out of print, new version: \$8.00 and offered AAA book from stock, but at \$4.00 (other titles at high rates).

Biomass and ACR haven't replied yet (but only 10 days gone by).

Mother Earth News (not in your review) delivered their \$15.00 plans in 25 days but with sheets missing.

Various suppliers in *Popular Science* and similar mags' classified ads replied quickly enough, but supplied only Xeroxed rubbish.

Better news: The DESERT book and the AAA book are available from EARTH MOVE, Box 4167, South Bell, WA 98225, for \$7.95 and \$2.75 postpaid, respectively. They have others too. The DESERT book is

RAIN

Journal of Appropriate Technology

RAIN is a national information access journal making connections for people seeking more simple and satisfying lifestyles, working to make their communities and regions economically self-reliant, building a society that is durable, just and ecologically sound.

RAIN STAFF: Carlotta Collette, Mark Roseland, John Ferrell, Jill Stapleton, Laura Stuchinsky, Kiko Denzer

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\$10.95 from TMEN [*The Mother Earth News*] and \$12.00 from Rutan. I hope you'll have more (good) sources of material next issue.

Rich Miller
Everett, WA

Dear RAIN,

I had to respond to Stan Knapp's defeatism with regard to controversy in RAIN, and to the inevitability of war (RAIN Letters, July '80). It would be foolish to think that we can isolate ourselves in our organic ghettos and escape the effects of the manipulations of corporations and governments. As long as groups like RAIN don't think that they should (or even can) remain apolitical in a society in which every decision has political implications, we will have a chance to avoid the military madness that Knapp accepts as inevitable.

Thanx,
Jim Elleson
Madison, WI

Dear RAIN folks,

Enclosed is my renewal check.

I want to thank you for the articles by Murray Bookchin (April), Donna Warnock (April), and Gerri Traina (December). They have helped me sort out a big patch of thought I had forgotten was there. I also appreciate the access to social change resources, especially being turned on to the *Journal of Community Communications*. The dialogue on population has been refreshing: both in itself and for being accorded generous space by your editors.

Please continue your ecological analyses and commitment to sociable (appropriate) technology.

The mailings I've gotten via your list exchanges have been interesting, not "so much junk mail," but alas for their senders haven't collected much money.

You have my best wishes for happy labors and play.

Peace,
Gordon Pederson
Minneapolis, MN

Dear Friends:

Congratulations on your most recent issues of the magazine. RAIN is consistently one of the most thought-provoking magazines to pass through our office, and it is well read by our staff. As a fellow editor, I know the frustration of working hard on a publication and then not knowing whether people out there really like it. Rest assured: many of us like what you are doing. (Now: before your heads get too swelled, please do not run any more three-page interviews with former VITA [Volunteers in Technical Assistance] staffers and then forget to identify them!)

I hope you can help me with something. Where is Lloyd Kahn these days? Many of us really liked his article, "A Hard Look at How-To," which ran last December. I'd like to get in touch with him. We are thinking of running a similar type of article, only with the focus on energy gizmos that are now being oversold by the AT crowd to developing countries (e.g., not mentioning how expensive windmills are, ignoring the land ownership problems of small-scale hydro, etc.). I want to get Lloyd's reaction to this. Who else do you suggest as good people to contact for an article like this? Who might be a good lead author? Suggestions are most appreciated!

Once again, keep up the good work. I hope we will stay in contact in the future!

Yours,
David Jarmul
Managing Editor, VITA News
3706 Rhode Island Ave.
Mt. Rainier, MD 20822

David—Thanks for your kind words. We're sending you Lloyd's address plus names of other people to contact. Perhaps some of our readers will send you suggestions also.

Dear RAIN,

When I first began working with solar heating, I fell in love with natural convection. Warm air rises, cold air sinks. Where such self-operating systems work it seems a shame to install fans. It took a long time to understand how to build efficient solar air collectors that would store the sun's heat in rocks during the day and then shut themselves off at night.

The first investigations of these systems were conducted by what today would be judged improbable investigators at improbable sites. Berry Hickman, Ed Heinz, John Curl and I finally got a good system working in September, 1968. I remember the date because it was during the Democratic National Convention in Chicago. This first successful installation was made at Drop City, Colorado. Drop City became known as a hippie commune—it wasn't long before the founders abandoned the place to drifters, dope addicts and alcoholics. The solar heated dome burned to the ground a few years later. Who cares? What difference does this make?

I am trying to understand what is going on. What does it mean that recently 65,000 people assembled in Washington, D.C., to protest against nuclear energy and the speakers I saw on television spoke of how delighted they were to have the "Movement" underway again. What is this "Movement"? I know that in the late '60s and early '70s I felt that many of my friends and I were involved in a very important project. It was quite simple—we were going to remake the world. Our mission was so important that I for one had nothing but disdain for those who didn't

understand. What the hell is wrong with those idiots?

I would like to come at least part way to a conclusion concerning the "Movement" and solar energy. The Solar Lobby and the "Movement" frighten me. What are they after? Couldn't all this energy and excitement be used to build houses and other equipment that is more to this group's liking? I am also jealous, how can Dennis Hayes and Tom Hayden be the solar big shots while people like me and my fellow solar workers are uninteresting to the newspapers, television and magazines? Why don't they ask Harry Thomason his opinion? Why not ask Harold Hay?

In 1969, six months after we had finished the solar heating system at Drop City, Berry Hickman, Ed Heinz and I started Zomeworks. . . . I'm glad we went into business. I am part of a movement—the production of useful goods, the economy, the human race, life.

I recommend business for other great idealists, dreamers, people who have endless ideas and good advice for others. The whole adventure can even have some of the delights and beauties of the natural convection system. If you have something that is useful to others they will want to trade with you and, like the warm air, your business will rise. "Yes—it sounds like a lot of hot air," you may say, because you know that the businessmen are cheaters, greedy for profits. Well, plenty of businessmen are narrowminded and greedy for profits and some are cheaters, too. They are people.

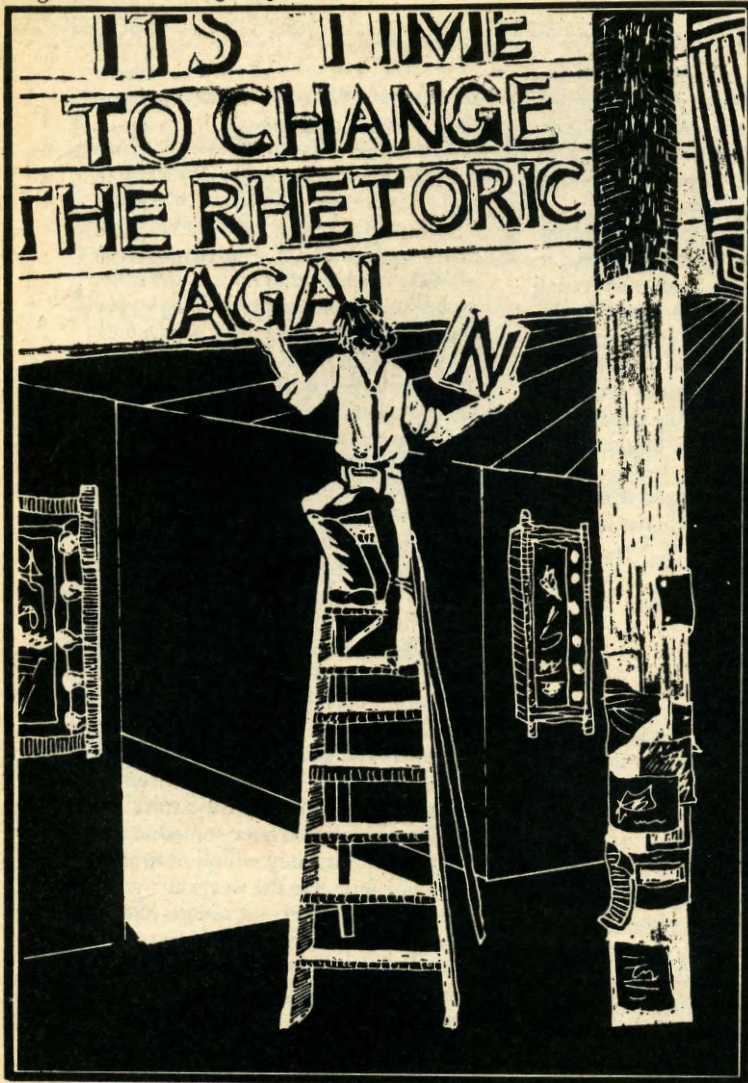
But if you want a new world—with many of today's conveniences—that runs on solar energy, there is a lot of work to do and it may be a good idea to try and do some of this work one's self—directly—instead of insisting that others do it for you. It is possible that forming lobbying groups, striking poses, and demonstrating against "bad things" will bring this world into being, but I wouldn't give these tactics very good odds.

Steve Baer
Albuquerque, NM

Hi,

Loved the article (July) about the Aborigine Peace Corps by Ianto Evans, especially the statement "we have answers to their problems (many of which were caused by us in the first place)." However the final statement—"perhaps we can show them (the poor) some of us are less ugly than others"—disqualified the article for me. Again we have a split, a division, a power struggle as one tries to play God and decide who is ugly and who is beautiful?

Paula Finek
Pittsburgh, PA



Jill Stapleton



Byron Kennard

A couple of months ago I happened to watch Dick Cavett's television program as he interviewed Dr. Freeman Dyson, the distinguished physicist from Princeton University. Cavett asked Dyson what he was working on these days and, so help me, the good doctor quickly replied, "I'm now interested in *appropriate technology for national defense*." Once I picked myself up off the floor, I limped in to bed in a vain effort to ward off memories of the old days when we "Small Is Beautiful" freaks were struggling to shove the phrase "appropriate technology" down the throat of an Establishment unwilling to swallow it. Now it seems we succeeded all too well.

Appropriate technology for national defense? How easily the academic elite rips off the new rhetoric, fresh thinking and innovative approaches generated by the counterculture. One can only sit back and watch in horrified amusement. And when they chew it up and digest it, they excrete it in perverted forms we never imagined in our worst dreams. But Dr. Dyson's new interest hits an all-time low. "Appropriate technology for national defense" is the ultimate debasement of the beautiful vision we had of a technology purposely planned to be nonviolent and life-enhancing. Now here is this eminent professor talking on national television about weapons of death and destruction in the name of appropriate technology. E.F. Schumacher must be spinning in his grave!

My friends, it's time to change the rhetoric again. While visions of renewable resource bombs and locally produced, easy-to-maintain missiles lurched in my head, I dreamed up a new phrase (new to me, anyway) to describe our program/philosophy/vision. But before I unveil it for you, let me admit my reservations about the phrase "appropriate technology," the banner under which many of us have been marching these last few years. (I freely confess that I am one of the people who bears some responsibility for the widespread use of this phrase. I am quite proud of this work and these comments are intended in no way to disparage the A.T. community or its success in promoting a new philosophy of science and technology under the rubric of "appropriate technology.")

My first reservation is the simple, obvious and oft-heard objection to the word "appropriate." It is simply too fuzzy a word and it

BIOFUEL

The Do's and Don'ts of Methane, 2nd ed., by Al Rutan, 1979, 160 pp., \$15.00 (paper) ppd. from:

Rutan Publishing
P.O. Box 3585
Minneapolis, MN 55403

All that the bacteria want is an air-tight tank, an occasional gentle mixing motion and constant even body warmth. Given these three conditions and sufficient nutrition, you will have the happiest bacteria in the world. But without these three conditions the bacteria are left very much unimpressed by all types of costly machinery and complicated engineering.

This book describes how to keep the conditions in a digester ideal for methane-producing bacteria. The author discusses in

detail a large, continuous-feed digester, and the adjustments he made over several years to produce this system design, such as using solar energy and insulating materials to keep the tank warm. If you're tired of alternative technology books where the author is so infatuated with the gadgetry that s/he forgets what it's attached to, then read this book. —Gail Katz

RESOURCES

Sources of Corporate Information, 1977, 7 pp., \$.50 ppd., from:

Pacific NW Research Center
(PNWRC)
P.O. Box 3708
Eugene, OR 97403
503/686-5125

Activists and researchers, take note! This chintzy little mimeographed bibliography is one of the most valuable keys you're apt

to find for unlocking the secrets of your local conglomerate. It tells you where to look to research financial and general information; company history; domestic plants and subsidiaries; foreign operations and overseas subsidiaries; bibliographic information on directors and offices; stock ownership; and brand and trade names—most of which should be available at your local business school library or by mail. Resources listed range from Security and Exchange Commission reports and company proxy statements to the *Directory of Corporate Affiliations* and a book called *Who Owns Whom*.

The information is in outline form, but it is not annotated, which may present some problems if you're new to this kind of investigating. But not to worry! Though staffed irregularly, PNWRC is good at answering correspondence. They also have substantial files dating back about eight years on environmental issues, disarmament, energy, multinationals active in the Northwest, etc. While not a lending li-

has caused us much trouble down through the years despite all the elegant justification we whipped up for it. The only reason we got the word in the first place was that Schumacher got so much flak over his original phrase, "intermediate technology," that he decided to change it to admit the possibility of both *small* and *large-scale* technology (where "appropriate") into his philosophical framework. Since Schumacher was willing to alter his rhetoric, I think we should be willing to change ours too.

My second reservation about the phrase has to do with the word "technology." For our purposes, the word has turned out to be a bumner. In contemporary civilization, "technology" is something that belongs to the technologists, the credentialized elite with a vested interest in the mystification of science. Ordinary people can't have any "technology" unless it is provided for them by the technologists, unless the tool bears the elite's seal of approval.

I remember once talking about this to a member in good standing of the science policy fraternity. Although he was quasi-sympathetic to the cause of appropriate technology, he said to me, "Byron, I don't care a whit that these ideas came from Gandhi or Tolstoy or whomever. What I care about is seeing the cost/benefit analyses and engineering studies on these things." To me it matters a great deal that these ideas were handed down through time by great leaders, artists and radical organizers. Scientists may not know it, but the vision of what the human community could be if we shared more and cooperated better is as old as humanity itself. What we have been calling "appropriate technology" is only the latest update on this ancient ideal, rendered in our time perhaps more practical and achievable than ever before through the realization that our technological prowess might be used to reinforce community values rather than disrupt them. Armed with this vision and this practical possibility, I don't see why we have to wait around for the mandarins of science to lay their approving hands on "appropriate technology." In truth, who needs them? They can't help very much, but they can hurt a lot. So let them keep their grubby little word "technology." We can do better than that. We can steal the march on them.

I propose a new description for our program/philosophy/vision. I propose that it be called community-based innovation. That's it.

Three words. Community. Based. Innovation. Why do I propose this? Let's start with the word "community." Now this is one of our words, one that the technologists will never get their hands on no matter how hard they try. (Yes, I know some A.T. people have used "community technology" to describe their work and the phrase used to attract me. But still it uses that dreadful word "technology" and knowing what we know now I think rules it out.)

Now let me skip to the word "innovation." Innovation is a hot word in America. It conjures up images of progress and well-being. American know-how at work. Yankee ingenuity. Better mouse-traps and all that. But the word doesn't possess the drawbacks that afflict the word "technology." True, the technologists would love to control the word and actually they try hard to, but they always fail for one simple reason. Innovation, of course, can mean social as well as technological change. And all we ever meant by "appropriate technology" was 90% social innovation and 10% hardware! Now social innovations, as luck would have it, are much harder to come by than technical ones. This is why the technologists shy away from politics and social change and why they crowd around to play the numbers game. Numbers are ever so much more manageable than people. But community organizers, almost by definition, are *social* innovators. It is our expertise. So we are the ones who deserve to wield the innovation rhetoric, not the technologists.

This brings me to the word "-based". Community-based innovation. I put this word in simply to emphasize that new innovations should grow out of the community; its needs, values, culture, aspirations, locale, ecology and unique assets and liabilities. It's okay with me, of course, if people want to produce innovations for innovation's sake; in the name of intellectual freedom, I would not suppress it. But what we need now is *community-based innovation*. Let's seek it by shedding that outworn phrase, "appropriate technology." In the process, I think, we'll get not only a new measure of protective coloration which will allow our work to go forward safely beneath the contempt of the technologists, but our movement will get a new lease on life as well.

Byron Kennard is a community organizer. Most recently, he served as chair of Earth Day '80.

brary, they are glad to xerox and send information at cost.

PNWRC not only conducts research for community groups and others, but attempts to demystify research by teaching others the methods they employ and by imparting an enthusiasm for discovery. They recently published a full length study on *Zirconium Hazards and Nuclear Profits* (\$4.95 plus \$.65 postage). — MR

Alternate Currents, bi-monthly, \$6.00/yr. from:
156 Fifth Avenue, Suite 404
New York, NY 10010

Aimed principally at New York City residents, this lively appropriate technology magazine is loaded with ideas and inspiration for transforming urban communities everywhere. Recent A.C. articles have focused on the installation of a 40-kilowatt wind generator in the South Bronx, the operations of fuel co-ops and consortiums for apartment dwellers, the changing atti-

tudes of New York architects toward passive solar design, and the maneuvers of Consolidated Edison to protect New Yorkers from "the evils of cogeneration." We heartily congratulate A.C.'s staff on their recent decision to move the magazine "up from glossy to recyclable." Write them for an introductory copy (free). —JF

The Directory of Directories, edited by James M. Ethridge, 1980, 722 pp., \$56.00 from:
Gale Research Company
Book Tower
Detroit, MI 48226

This remarkable volume lists, describes, and thoroughly indexes more than 5000 directories of all kinds. It may just be the next best thing to *Rainbook* when it comes to uncovering mountains of fascinating information about organizations, agencies, individuals and companies involved in every conceivable activity. If your library doesn't already have a copy, talk to them about getting one. —JF

Co-op Directory, 1980, pp. 143, \$5.00 (non-profits, co-ops and "living lightly" individuals; \$10.00 professionals, businesses, libraries) from:
The Cooperative Association
P.O. Box 4218
Albuquerque, NM 87196

Published yearly, the 8th edition of the *Cooperative Directory* lists over 4,500 co-ops throughout North America. The directory is chock full of useful information and easy to use—once you decipher their coding system. Entries are listed state by state, with information on each organization's ownership model (collective, member-operated or board run), identity (food, book, housing co-op . . .), volume of sales, and age. There are several chapters devoted to resources (technical and financial), information (educational centers and newsletters), and regional contacts. Interspersed between the listings are ads for various co-ops and illustrations. The directory is a must for cooperatives, and its sliding-scale price makes it accessible to individuals on a tight budget as well. —LS

ENVIRONMENT

"The Spiderwort Strategy" (poster), 1980, \$2.00 from:
Friends
P.O. Box 663
East Quogue, Long Island, NY 11942
U.S. EPA Environmental Research Center
Research Triangle Park, N 27711
919/541-4577

Like a modern-day version of the coal-miner's canary, the spiderwort is becoming the flower of the anti-nuclear movement. Researchers at the EPA's Health Effects Research Laboratory are experimenting with a hybrid *Tradescantia*, the spiderwort plant that commonly grows wild in certain parts of the country.



Tradescantia looks like a normal houseplant with long, grassy leaves; waxy, knobby stems; and tiny bluish-lavender flowers. The experimental strain of *Tradescantia* is a cross between a blue-flowering and a pink-flowering spiderwort, with blue being the dominant color. In the presence of mutagenic substances a change occurs in the gene that determines the color of the stamen hair cells of the flower, causing the recessive color—pink—to appear 5 to 17 days after exposure. This change is visible with a low-power microscope. The flower petals themselves do not visibly change color, though pink spots have been seen on some flowers in Japan. According to the poster,

This process indicates a frequency of mutation which is used as statistical data to graphically challenge the myth of "acceptable standards." . . . The Spiderworts will show in a short time what would take years to appear in the affected population.

The poster people point out, though,

that "for the strategy to work it requires many plants 'encircling the site' to collect enough data to then make conclusions about radiation in the environment." To speed up the lengthy examination of the flowers under a microscope, the EPA researchers are trying to automate the process; they are also studying the pollution-detecting abilities of *Arabidopsis* (of the mustard plant family), barley, and corn. Eventually they hope to develop "a battery of mutagen-sensitive bioassays, including plants, for monitoring environmental quality," with a variety of test systems to detect different chemicals.

The spiderwort poster is both eye-pleasing and informative. It includes a listing of the Spiderwort Strategy nuclear site monitoring projects going on in North America. These projects are totally dependent on community support, so purchasing the poster helps to finance the monitoring as well as to spread the word.

One final note: Since the spiderwort used in monitoring is a non-seed bearing hybrid (propagated by root divisions and cuttings *only*), do not be taken in by the advertisements of fast-buck companies for spiderwort seeds, "Nuclear Plants," or "Geigercounter flowers." —MR

Nukebuster, from:
Solar Electronics
56 Drakes Lane
Summertown, TN 38483

Three Mile Island made the danger of depending upon "assurances" of utility and government officials quite clear. It also made people understand the psychological nightmares of dealing with invisible clouds of death released by nuclear accidents. One wise alternative for individuals, neighborhoods and communities is to have their own independent radiation monitoring systems, evacuation alerts and procedures. The anti-nuclear activists at The Farm in Tennessee have made available a profitable 12-volt alpha, beta, gamma and X-ray detector, with AC and battery adaptors available, which can form the base for such independent community survival systems. Prices for various options run from \$200 to \$300. —Tom Bender

Volcanic Ashfall, 1980, free from:
Federal Emergency Management Agency
Region X
Federal Regional Center
Bothell, WA 98011

Some of you who only have to put up with ordinary, run-of-the-mill natural disasters like droughts and blizzards and tornadoes

may be curious about how we in the Pacific Northwest deal with Ma St. Helen's volcanic eruptions. The feds managed to get this little pamphlet into every mailbox for hundreds of miles. It explains what volcanic ash is, how to prepare for it, what to do during an ashfall, and ways to protect your home, car, kids and pets (in that order). Most of it seems pretty sensible, but there are a few gems. For example:

• *Don't panic. Stay calm.*

• *You may eat vegetables from the garden, but wash them off first. The grit is harmless.*

Don't believe everything you read. —MR

SOLAR

Solar Law Reporter, bi-monthly, \$15.00/yr. from:
Superintendent of Documents
U.S. Govt. Printing Office
Washington, DC 20402

Suppose you or your organization erects the first wind generator in town. Does the local height ordinance for buildings apply to your tower? What rights do you have if the neighbors complain to the city council that you are erecting an "eyesore"? Knowing what other people in other places have done in your situation could be very helpful, and that's why you should know about the *Solar Law Reporter*. Each issue of this SERI publication provides 200 solid pages of information of interest to anyone (not just lawyers) concerned with legal barriers or incentives to renewable energy development. Included are abstracts of recent federal and state legislation, solar news items from around the country, and articles on such topics as solar zoning restrictions, product liability for wind machine manufacturers, legal aspects of biomass energy conversion, and implementation of solar financial incentives. The *Reporter* is a potentially valuable tool for the solar activist, businessperson, or homeowner. —JF

Solar Energy and Jobs (Report No. 49), July 1980, 11 pp., \$1.25 prepaid from:
Citizens' Energy Project
1110 Sixth Street N.W., Suite 300
Washington, DC 20001

This just in: Solar doesn't create jobs.

Not by itself, anyway.

Sure, there's lots of *potential* for solar-related employment. But Ken Bossong's latest eye-opener shows that the present direction of solar commercialization will only serve to frustrate the promise of solar jobs.

Bossong's report looks at the role of labor unions (which have been trying to block non-union solar construction projects), workplace hazards in solar manufacture, and the inadequacy of most solar job-training programs. Touchy stuff, and of critical importance to a movement which has been hesitant to confront it. Some other highlights:

- Few job opportunities for low-income and minority group members are being opened up, especially in the inner cities, because current solar development efforts are focusing on the installation of expensive, highly engineered hardware on new, single-family, suburban homes.

- With the assistance of the federal government, big business is rapidly moving into the solar marketplace and introducing mass production, capital-intensive manufacturing techniques that are reducing the potential number of solar jobs.

- Federal funding is being channeled into large-scale, capital-intensive solar technologies that produce far fewer jobs/dollar than decentralized solar technologies.

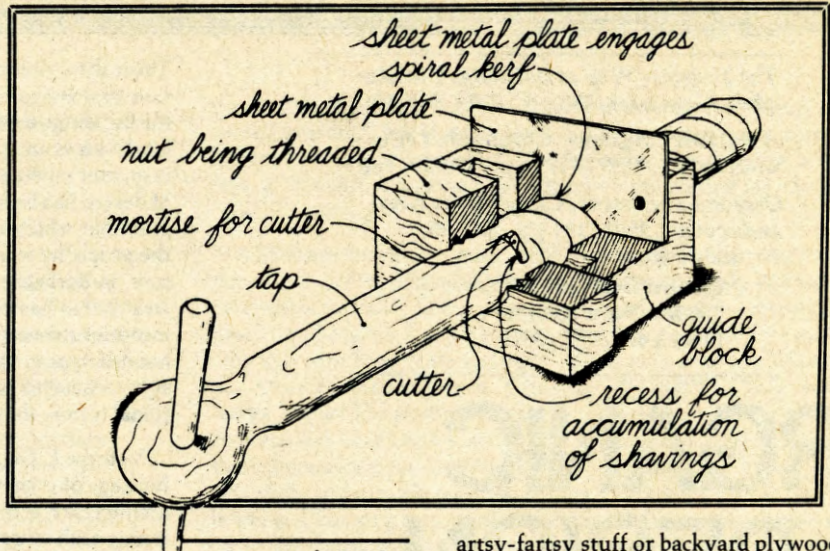
Included in the study are a series of recommendations, including a greater focus on low-income urban applications of solar technologies; restrictions on union and big business involvement in solar; and a shift of emphasis from large-scale solar hardware to distributed, small-scale energy technologies.

Hmmm . . . —MR

HANDS ON

The Work Book, Ken Kern and Evelyn Turner, 1979, \$7.95 from:
Owner Builder Publications
 Box 817
 North Fork, CA 93643

Kern and Turner add a new look at the psychological costs and benefits of owner building to their previous work on the technical, legal and economic dimensions of that process. Considerable family stress is common during the often prolonged, exhausting and scary process, often becoming the final straw causing break-ups of relationships. On the other hand, gains in self-confidence, skills, and sense of achievement can add immensely to personal and family life. A good warning to potential owner-builders of lurking pitfalls and problems to be weighed in deciding whether or not it is right for you. —Tom Bender



from Woodworking Techniques

Tage Frid Teaches Woodworking: Book 1 — Joinery, \$11.95; Fine Woodworking Biennial Design Book, \$8.95; Fine Woodworking Design Book Two, \$15.95; Fine Woodworking Techniques, \$13.95; all available from:

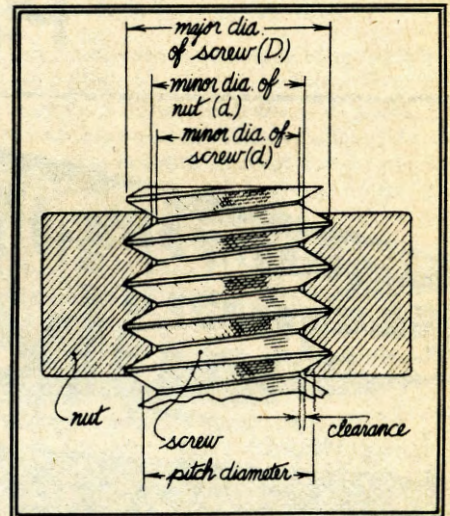
The Taunton Press
 52 Church Hill Road
 Box 255
 Newtown, CT 06470

Tage Frid Teaches Woodworking is the first of three books on furniture-making by a Danish master cabinetmaker. Frid's explanation of why joints work or don't work, clearly presented details of how to make joints, outstanding sections on materials, tools, jigs, production techniques and how to salvage mistakes make this the finest book on basic woodworking I've yet seen. Frid feels that with judicious use of both hand and power tools, attention to the basics of business operation, and elimination of factory overhead and middleman markup by working directly with customers, good quality individually-designed furniture can compete well with mass-produced furniture. Highly recommended for any woodworker.

Biennial Design Book and *Design Book Two* together contain over 1750 photographs of some of the finest woodworking being done in America today. Not just

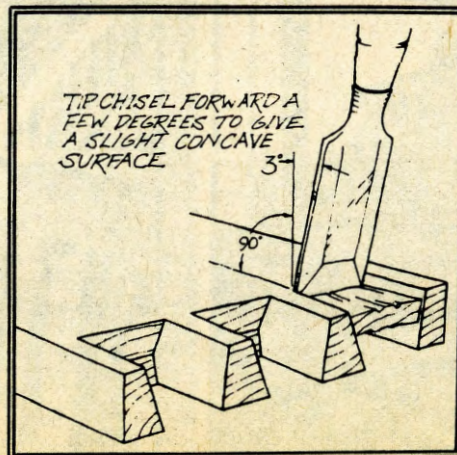
artsy-fartsy stuff or backyard plywood specials, but a revival of good solid construction, sensitive design and good use of materials. A gallery of ideas, dreamstuff and accomplishments with which to measure what you see, buy or make.

Fine Woodworking Techniques contains fifty of the best technical articles from the first seven issues of the magazine. Making tools, solar lumber drying, gluing technol-



ogy and techniques, hand dovetails, technical considerations of various finishes, why certain woods were traditionally used in different parts of chairs, the basics of bowl turning, using spalted wood, restoration techniques and special hints and tools that make work better, easier and faster.

Together, these books, along with *Fine Woodworking* magazine itself, document one sector of our economy moving to the durable, good quality, creative local production necessary for a sustainable society. And they're all done with the same thoroughness, accuracy, clarity, attention to detail and quality as the woodworking they cover. If the publishers ever put together a report on the economics and operation of small production woodworking shops, they will have made available the basic resources for small-shop furniture production! — Tom Bender



The Timeless Way of Building, Christopher Alexander, 552 pp., 1979, \$19.50;

A Pattern Language, Christopher Alexander et al., 1977, 1171 pp., \$39.50; *The*

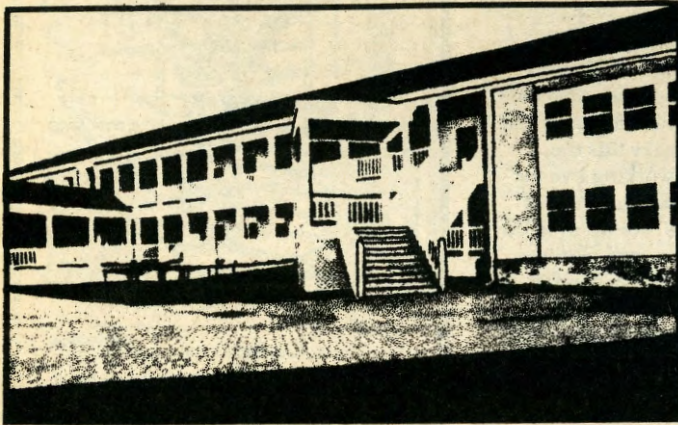
Oregon Experiment, Christopher Alexander et al., 1975, 191 pp., \$17.95.

Available from:

Oxford University Press.
200 Madison Avenue
New York, NY 10016

ORGANIC DESIGN

Facilitating Community Planning



photos by Richard Hersh, School of Ed.,
U. of O., Eugene, OR



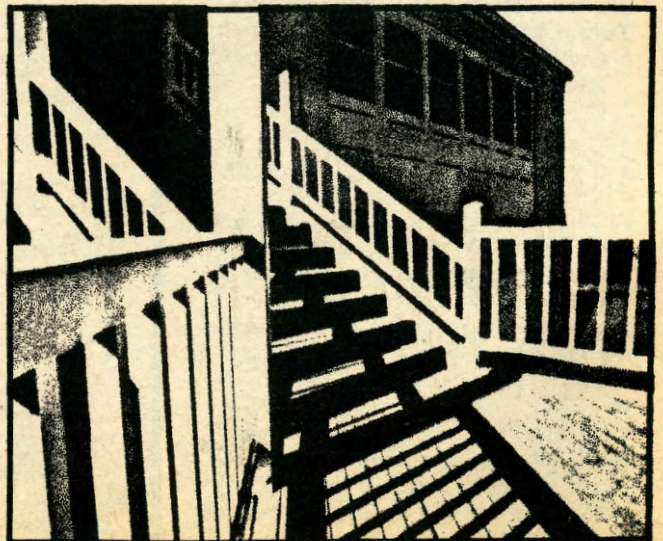
These three volumes are undeniably valuable—as tools, as inspiration, as a way of making connections between the way we live and the buildings that we live in. “Language” is the tool for *all* our work—it is only through words that the “designer” can tell the carpenter where to put the bathroom. But our common knowledge of design has been usurped by a technical vocabulary and an elite grammar which are beyond the reach of most folks. Alexander and the people he works with at the Center for Environmental Structure, in Berkeley, CA, are trying to save that aspect of our common wealth that has nearly been lost. In homes, in workspaces, in communities the work of *designing* our own environments is invariably handed over to “professionals”—but planners, architects and designers need to be able to work *with* the people whom, in conventional terms, they are working *for*.

Volume I, *The Timeless Way of Building*, describes the global heritage of man-made environments. The “Timeless Way” is an architecture without ego—it is what *I* make, added to what *you* make, each one allowing for the other’s presence. When we build, we should do so according to the real needs that we *feel* every day (we need sunny places, quiet places, places to work, to play, to make noise, to make love . . .). If we can build with this in mind we may discover what Alexander calls a “pattern which lives”: This discovery “is not different from the discovery of any profound thing. It is a slow deliberate process, tentative, in which we seek to discover something profound, and where we recognize that we shall usually be wrong to start with, and that we may only approach a proper formulation slowly.”

The second volume of the series, *A Pattern Language*, is the meat of the series. It describes in detail 250 or so “patterns” each of which examines a problem and a solution. The work is unusual in that each pattern is inextricably connected to all the others. It is this richness of connections that, in the end, satisfies our basic needs and our desires for “community.” Take, for example, Pattern 21, Four Story Limit: *There is abundant evidence to show that high buildings make people crazy*. The evidence is extensively documented. The pattern itself is cross-referenced to many others that concern urban environments and the people that live in them. The children of Glasgow have a song about tenements that they can’t live in because they can’t get their daily snack when it’s thrown from a 20-story window:

The Jeely Piece Song, by Adam McNaughton (from *A Pattern Language*)

*Oh, ye canny fling pieces oot a twenty-storey flat,
Seven hundred hungry weans will testify tae that,
If it’s butter, cheese or jeely, if the breid is plain or pan,
The odds against it reachin’ us is nintey-nine tae wan.*



Volume III, *The Oregon Experiment*, is the slimmiest of the books and describes Alexander's vision for a process by which the University of Oregon at Eugene could avoid haphazard, ill-planned and out-of-scale "growth."

These books have been out for several years now and they have been extensively reviewed. But what is in the books is *theory*—at the U of O in Eugene, people have been attempting to put the theory into practice. Several projects have gone forward, despite problems, and their success is visible. To the campus planners, the experiment has been "proven" now, for some time.

In the early '70s the university's planning staff became dissatisfied with their "Master Plan." Typically, it was a set of maps that showed existing buildings and then a future "planned" campus that would consist of an orderly "whole"—large, new structures built according to the standard cast concrete and glass formula with little or no consideration for the land, the community, the users of the building, or the relationships between them.

The university made known its desires for a new "plan" and Alexander was chosen, from a competing group of design consultants, to help formulate one that would respond to expressed needs and that would create a *cooperative way* of meeting those needs. Language is the key he uses to open up the process of design. Alexander's particular language depends on differentiating between two kinds of order. "Totalitarian" order (the bad kind) is a whole that exists only on paper or in the minds of the planners—it is a simplified answer to bureaucratically defined problems such as "statistical need," "projected growth," and "available funds." The other kind of order is "organic" (the good kind). Organic order is like a shell that grows in increments, in proportion, and according to the shape of preceding sections. And like a shell, growth does *not* go on forever.

The school has created channels so that faculty, students and community members can become involved, but these integrated "committees" inevitably find their creativity and efficacy hampered, not only by a bureaucratic, "big is better" funding process but also by the split structure of the "community."

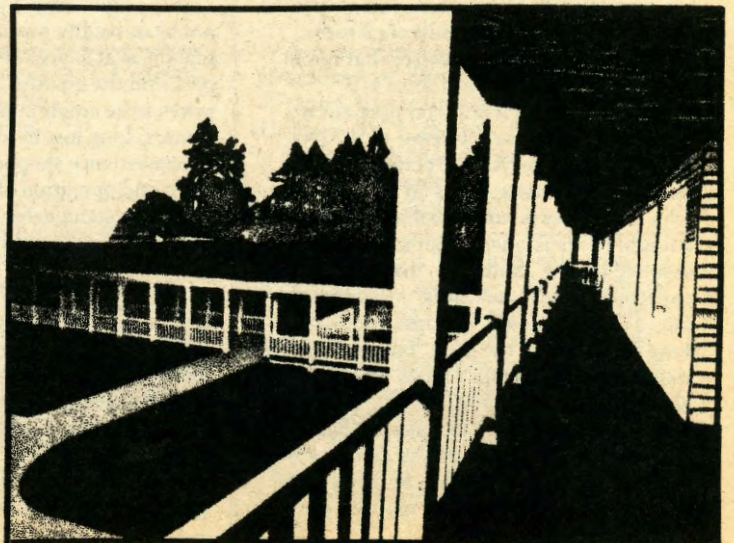
Universities, however, are towns; they have economies, they have a politically organized, diverse population (consider the supporting staff and maintenance crew; the college town that depends on college dollars; and the increasing number of older people who are going back to school part-time). Such places offer a broadly supported, well funded and universally recognized opportunity to grow truly *organic* communities, but

the effort will require not only a renewed interest on the part of "apathetic" students, but also new *spaces* for "learning," that won't separate it from "real world" activities. It will also require a change in our concept of "school" as a camp in which youth are trained for entry into "useful" society.

As is true of most residential universities and colleges, the university population is fragmented into a transient student body and the more permanent faculty and administration. Students don't normally put too much emphasis on "making where they live a paradise" since they are only there for four years and since they also have to *pay* to be there. You pay, you expect to be *served*; that's the way that the "free" market works, right? The architecture student I talked to noted a trend that has received lots of attention lately, in the media and in educational institutions themselves: students seem to be more concerned with getting *saleable* skills and a *marketable* degree than they are with the qualities of a living and learning community. Students who "get involved" often become frustrated and "burn out," as this one did, when they see their work in the community conflicting with the "education" they are paying for. Burn out fosters cynicism. "Involved" students find that their "interests," as defined by narrow-minded curriculums and credit requirements, are at odds with the interests of the faculty and administration, who have longer-term concerns at stake, who are *paid* for their community efforts and who have the continuing support of their peers in working towards a well-defined set of goals. Within the student body itself, another division occurs—student "representatives" and the students they represent find that concerns of "community" and concerns of credit requirements rarely coincide on a day-to-day basis.

The planning committees continue to work despite various hindrances and have, in spots, succeeded admirably. The new addition to the School of Education is the best example of the whole *process* of diagnosis, problem solving, coordination and construction. That the building is satisfying, and that it works, both inside and outside, is *not* due to the control and "vision" of an artistic "genius." In fact, the architect for the School of Education yielded his own professional vision to a *method* that allowed the "user" group to work with the "designers." They created not only a beautiful (and passively heated and cooled) building, but also a charming courtyard and a pleasantly warm atmosphere to work in. Individuals are very important. This architect was important because of his own long experience in "user-initiated design."

The concept itself, as I learned, does not originate with Alexander's books. However, Alexander's work with language, and the effort to put it into practice at Eugene, are significant steps in a broader effort to nurture the qualities that could make an "organic" civilization out of "totalitarian" societies. —KD



CONSUMER

Consumer Sourcebook, 2nd ed., edited by Paul Wasserman and Jean Morgan, 1978, 2 vols., 1,623 pp., \$64.00 from:
Gale Research Company
Book Tower
Detroit, MI 48226

Expanded to almost three times the size of its first edition (published in 1974) the *Consumer Sourcebook* is a comprehensive guide to information in almost every area of consumer concern: finance, health, safety, environmental standards, social welfare, and more. Hundreds of governmental and non-governmental agencies are described, together with consumer-oriented newspaper columns, radio programs, television shows, books, and audiovisual materials. The largest section is a directory of more than 17,000 companies which provide consumer goods and services.

Very well organized, concise and clearly written, the *Sourcebook* is an invaluable resource, both for full-time consumer activists and for individuals with personal "lemon" laments. Tell your reference librarian about it. —JF

PERSPECTIVE

Ways of Seeing, John Berger, 1973, \$2.50 from:
Penguin Books
7110 Ambassador Rd.
Baltimore, MD 21207

Ways of Seeing was originally a four-part series made for British television. Only later was it made into a book. It is very short, very readable and full of pictures. The words describe the pictures but not in the empty, stilted style of most art "critics." Berger's words complement his "critique" with his *experience* of the pictures. John Berger is an art critic, but in a much broader sense. He is an interpreter who recognizes *meaning* behind the huge amount of visual media that most of us are assaulted by (TV, billboard, magazine & supermarket ads; postcards; newspapers, etc.) I understood the pictures implicitly long before I read the book, but that kind of understanding ("I don't know anything about art, but I know what I like") doesn't give a person a chance to *respond*. Being subject to assault without any defenses is debilitating and oppressive. Berger's writing is an *active* reply to our globally common, commercial "culture."

Visual literacy is an important tool not only for art critics. Technology affects our environment by its pictures as well as by its machines, and if a picture is worth a thousand words we need to be able to see very clearly.

(The film series is available for rental in 16mm prints, in color, 4 programs of 25 minutes each for \$35.00 per program; or as a series for \$120.00; from Time-Life Multi-Media, 100 Eisenhower Dr., P.O. Box 644, Paramus, NJ 07652. Berger's other writings include: *Art & Revolution*, 1969, 191 pp., \$2.95; *About Looking*, 1980, 198 pp., \$4.95; *The Success & Failure of Picasso*, 1965, 210 pp., \$4.95; all available from Pantheon Books, 201 E. 50th St., New York, NY 10022). —KD

AGRICULTURE

Farmers Markets of America: A Renaissance, Robert Sommer, 1980, 94 pp., \$6.95 from:
Capra Press
P.O. Box 2068
Santa Barbara, CA 93120

This short but impressive book draws its strength both from the author's vision, commitment and love, and from his hard and convincing evidence. After a short history of food marketing and the development of consumerism, Sommer makes a strong argument for the social, political and economic benefits of direct farmer's markets. "Like any other single measure, it cannot solve all the problems that have developed. On the other hand, the establishment of local markets is clearly a progressive step that can accomplish as much by example as by its tangible benefits to small growers and consumers." While the "fancy" and "large" grades of produce may not be as readily available at a farmer's market as at a large chain store, most shoppers find the quality, diversity and lower prices to be ample compensation. Personal contact, long lost to the streamline process of convenience shopping, is essential to the spirit and operation of these markets. "Farmers stand behind their produce literally as they sell it and morally because they grew it."

The second half of *Farmers Markets* is devoted to the fruits and vegetables themselves: how to choose them, when to buy them, and how to cook them. There is also a helpful chapter on how to organize a market in your own community. In its entirety, this book is an excellent source of information on community markets and the important roles they can and do play. —LS

COMMUNITY

The Help Book by J.L. Barkas, 1979, 667 pp., \$19.95 hardcover, \$9.95 paper, from:
Charles Scribner's Sons
597 Fifth Avenue
New York, NY 10017

How can you sue someone without a lawyer? Who will listen to your complaints about air pollution? Where can you learn about travel services available to people with handicaps? These are the kinds of questions addressed in *The Help Book*, which is really 52 short directories under one cover, each containing basic information in a particular area of concern: alcoholism, child abuse, crime prevention, employment, family planning, etc. With its emphasis on low and no cost services available from public and private agencies, *The Help Book* can be a valuable first-stop reference for facing many kinds of problems. —JF

"When They Close the Factory Gates," *The Progressive*, August 1980, \$1.50 from:
408 W. Gorham St.
Madison, WI 53703

"The 2000 largest [U.S.] firms—about 1% of all the manufacturers—control 88% of manufacturing assets and make 90% of the manufacturing profits; the other 99% share 10% of the profits." These guys have it so wrapped up that even when they lose money they make money! U.S. Steel, for example, with \$261 million in earnings last year, will also be receiving millions of dollars in tax rebates for 1979. Get this: "the corporation's net profits will actually exceed its gross profits." The reason? The Internal Revenue Service, the national tax collector, offers "tremendous, often irresistible incentives" to big businesses to shut down plants. Hence, the government has actually *encouraged* the epidemic of plant closings!

Other articles in this set look at the Youngstown situation, problems facing the leadership of the United Auto Workers, and a critique of *Time* magazine's recent attempt to modernize Social Darwinism by blaming the victims of our economic and energy crises.

(In June I attended a terrific conference in Portland on plant closures. "Shattered Factories, Shattered Lives" was sponsored by the Int'l. Woodworkers of America and several other groups and unions. We hope to be running regular material on developing alternatives to plant closures as we come across it.) —MR

You may remember Debra Whitelaw's name from her work last year as a RAIN intern or from her article in our Feb./Mar. 1980 issue, entitled "Elderly & Energy." Debra is presently lending her talents to the New York Statewide Senior Action Council and to *Alternate Currents* magazine (see access this issue). —JF

AGING

by Debra Whitelaw

The number of elderly people in our midst is accelerating rapidly. There are now approximately 25 million senior citizens in the United States, accounting for 11% of the population.

It might be redundant for some to be reminded of the pathetic treatment our senior citizens have received in this youth-oriented culture. In every possible aspect (housing, employment, recreation, medical treatment, etc.) aging persons have been pushed aside and forgotten because of their closeness to the greatest question people have ever feared and faced: the end of existence. Instead of offering the elderly greater comfort, security and warmth as the cycle draws toward its close, we do the opposite. We alienate and make the final stage of life for our elderly a frightening, disgraceful and ugly experience. Thankfully, interests in gerontological studies are on the rise—schools are offering courses and degrees, books are being written and read, but most importantly the seniors of our country are speaking out and working for a more dignified lifestyle.

We can hope that with an increased awareness of gerontology the fears attached to aging will be diminished. The study of aging is a study for all, for if there is one condition all living things share, it is aging.

***Unloving Care: The Nursing Home Tragedy*, by Bruce C. Vladeck, 1980, 266 pp., \$13.95 from:**

**Basic Books, Inc.
10 East 53rd St.
New York, NY 10022**

This moving and highly informative book realistically examines the \$12 billion private nursing home industry, which provides housing for more than one and a quarter million Americans. Public policy is the main culprit and contributor to the failures of many nursing homes according to the author. He believes the "real issue is not how poor government performance is, but why it is as poor as it is, where it may be better than it looks, how it might be improved, and whether or not there is any



Ken Walker

alternative." Among the alternatives discussed are congregate living (i.e. group homes), day care centers, and home health and help services. *Unloving Care* presents constructive criticism and viable options for the future care of our senior citizens.

***Aging: Its History and Literature*, by Joseph T. Freeman, 1979, 161 pp., \$13.95 from:**

**Human Sciences Press
72 Fifth Avenue
New York, NY 10011**

Gerontology is certainly an area that has been overlooked in the chronicles of many a historian. This book allows the reader to catch up on all that has been ignored over the years. *Aging: Its History and Literature* traces the study of aging from ancient times to the modern era. Distinguished works and institutions offering gerontological studies are also listed, as are noted journals on aging. A handy book on many aspects of the study of aging.

***Geriatric Psychotherapy*, by T.L. Brink, 1979, 304 pp., \$9.95 from:**

**Human Science Press
72 Fifth Ave.
New York, NY 10011**

Aging and grace do not necessarily go hand in hand. This book addresses the many elderly who have approached their later years without the peace of mind that, hopefully, a long, fruitful life can bring. *Geriatric Psychotherapy* is a comprehensive guide to the diagnosis and treatment of mental disorders in elderly persons. Various theories are illustrated, including Freud's attempt to show that senility was due to a sexual disturbance (not too surprising for a Freudian theory!)

As psychiatric analysis, encounter sessions and group therapies gain increased usage, the particular concerns of seniors should be given careful consideration.

***The Rights of Older Persons*, by Robert N. Brown, 1979, 433 pp., \$2.50 from:**

**Avon Books
The Hearst Corporation
959 Eighth Avenue
New York, NY 10019**

This handbook, one of a series put out by the American Civil Liberties Union, is a straightforward account of legal issues and rights of concern to the elderly. Everything from Social Security benefits to Medicaid/Medicare eligibility, from private pensions to age discrimination in employment, is covered. *The Rights of Older Persons* is objectively written and presented in a clear, question/answer format. An excellent source to acquaint you with programs, bureaucracy and benefits involving the senior citizen.

***Handbook of Human Services for Older Persons*, by Douglas and Monica**

**Holmes, 1979, 288 pp., \$16.95 from:
Human Science Press
72 Fifth Avenue
New York, NY 10011**

This handbook is filled with resources (i.e., contact people, agencies, attached bibliographies) relating to the eight services for the elderly which it covers: information and referral; multipurpose senior centers; homemaker and home health; legal; residential repair and renovation; employment; day care; and nursing home advocacy. *Handbook* is a very helpful publication for those who wish to be helpful to others.

PERMANENCE



In June, Laura and I spent an amazing weekend at the Farallones Integral Urban House in Berkeley participating in a series of workshops organized by Farallones staffers Robert Kourik and Page Nelson. The workshops afforded an opportunity to bounce ideas and experiences off of Bill Mollison (author of *Permaculture I & II*), Earle Barnhart (New Alchemy), Richard Merrill (Cabriol College), Larry Korn (editor of *The One Straw Revolution*), Isao Fujimoto (U. C. Davis), Tom Fox (Bronx Redevelopment Corp.), and a dozen or so other alternative agriculture activists from around the country. There was time for each of us to hear about and tell about work we've been engaged in, in some cases, for many years. There was also solid feedback and real criticism as well as encouragement and concrete information to take back to our work places.

The structural focus of the weekend's dialogues was the question of sustainable agriculture, one that is not dependent on petrochemicals and constant maintenance. This was sometimes referred to as Permaculture, after the Mollison books, sometimes labeled Edible Landscaping, often simply called Tree Cropping; the ideal being a system for producing food, harboring beneficial insects, and maintaining and regenerating topsoil in ways which most reflect

Un-TILL Tomorrow

by Michael Stusser

critiquing intensive agriculture

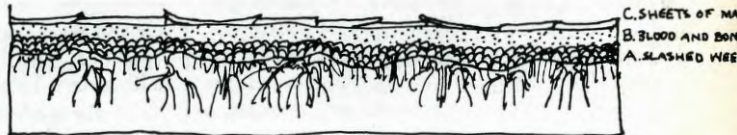
One of the more widely heralded approaches to gardening, which has been popularized over the last twelve years, is the Bio-dynamic/French Intensive (BFI) method synthesized by Alan Chadwick. This method is said to be more efficient than industrial agriculture, to give four times the yield per area or more, to use less water, no chemicals or machinery and to be economically viable. Claims have been made that BFI will play a crucial role in the solution to many socio-economic problems including world hunger, energy depletion and unemployment.

The basics of the methods themselves are represented in *How to Grow More Vegetables on Less Land Than You Ever Imagined*, by John Jeavons, (see RAIN Vol. II, #5). It is this work that in large part has popularized Chadwick's methods.

Probably the single most characteristic quality of BFI is the use of raised beds. This term refers to a planting area which is deeply loosened to provide good aeration. The planting area, or bed, is mounded up above the existing soil level and filled with organic materials and nutrients. The mounding is accomplished by deep, or double digging, which serves to break the hardpan, allowing one to incorporate quantities of organic material and give the plants access to sub-soil minerals. The basic concept is to induce the soil to breathe, allowing the free flow of water and plant nutrients. The



1 ROUGH ORIGINAL SURFACE WITH WEEDS, SHRUBS, GRASSES. STIFF PLANTS ARE SLASHED AND LAID FLAT.



2 AREA IS STRINKLED WITH BLOOD AND BONE, DECAYED LEAF OR THIN SCATTER OF FOOD WASTES PLUS SOME LAWN CLIPPINGS. THEN CARPETED WITH OVERLAPPED UNDERFELT, OLD CARPET, OLD LINQ, CARDBOARD, NEWSPAPER 3 OR 4 LEAVES THICK, OLD COATS AND CLOTHES, HARDBOARD, SOFTBOARD, GYPSUM BOARD OR LIKE MATERIALS. CRUSHED OR DARK-ENED GRASSES AND WEEDS YELLOW AND DIE, WORMS START WORK.

soil warms and drains more quickly and provides a fertility base that will support a large quantity of plants in a small area. This in turn decreases the total space required and the amount of water necessary.

The clearest advantages in following this method have proved to be generous yields, excellent drainage and the capacity to work the soil at times of the year that would otherwise be unfeasible. Having the planting medium mounded up above the level of existing soil keeps it from being waterlogged during periods of extended rain and standing water. The increased organic material and pore space allows water to pass through quickly, making it possible to plant in early spring when first crops need to go out and conditions are still quite wet.

But there are some clear disadvantages to the BFI method. Many people lack the time, energy, and dedication to make such elaborate preparations for their gardens. Besides, such emphasis on double digging is uncalled for as it is possible to achieve similar soil conditions with a good composting program. One problem with double

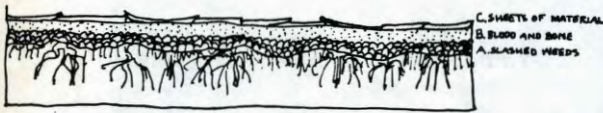
natural forest succession. It seems curious to me to reflect back on the numerous "methods" and "systems" we've developed to improve on nature. The whole concept of agriculture, the science and art, seemed to come full circle in those meetings. We had studied and practiced often very technological agricultural paths. Now we were back, looking at the edges of forests, seeing grains and shrubs, root crops and small trees integrated and enhanced by our studies but mirroring instead the unstudied.

That weekend the metaphor of harmonic growing environments became symbolic for our meetings themselves and the larger communities we'd return to. What we'd come to understand about gardens extends to our understanding of ourselves and our separate but shared work. "The most stable systems are the most diverse—the most fully occupied." "Every part should serve several functions—that is the essence of stability." The individual pieces of the plan only work if they are inter-dependent—it is the linking that makes for permanence.

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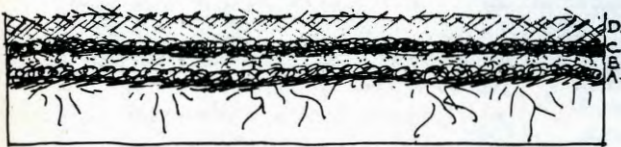


from Permaculture I



- 3 A: LAYERS AS PER 2.
 B: 75MM OF SEAWEED, STABLE SWEEPINGS OR MANURE.
 C: "HARD" LAYER OF PINE NEEDLES, SEA GRASS
 D: COSMETIC LAYER OF CHIPS, BARK, SANDUST, COCOA BEAN HUSKS, RICE HUSKS ETC.

ALL WEED FREE



- 4 APPEARANCE OF PLANTED AREA, FIRST YEAR
 A TUBERS, B LARGE SEEDS, C SEEDLINGS AND HERBS, D TREES AND SHRUBS ALL NEWLY PLANTED AS SOON AS MULCH IS COMPLETED.

digging, in fact, is that manures and compost often end up too deep to be employed to their best advantage. Most microbiological activity takes place close to the surface of the soil where the habitat is ideal in terms of temperature, oxygen and moisture. If compost or manure gets buried deeper, it will decompose very slowly and be unavailable for use by the most active and helpful soil organisms. As an initial procedure, this deep cultivation at the right time of the year is beneficial and will enable the energetic gardener to obtain good results quickly; but once good tilth is achieved, the repeated deep digging can have the effect of working against itself. After good aggregation and stabilization of soil is established with lots of pore space, good drainage and thriving soil biota, continued double digging can expose stable humus to unnecessary oxidation, destroy earthworms and their tunnels, and break down soil aggregates.

Another drawback is the amount of organic material required by this system. Resourceful gardeners can locate grass clippings, kitchen wastes and other constituents for compost, but for many, especially in urban and suburban areas, the quantities required are

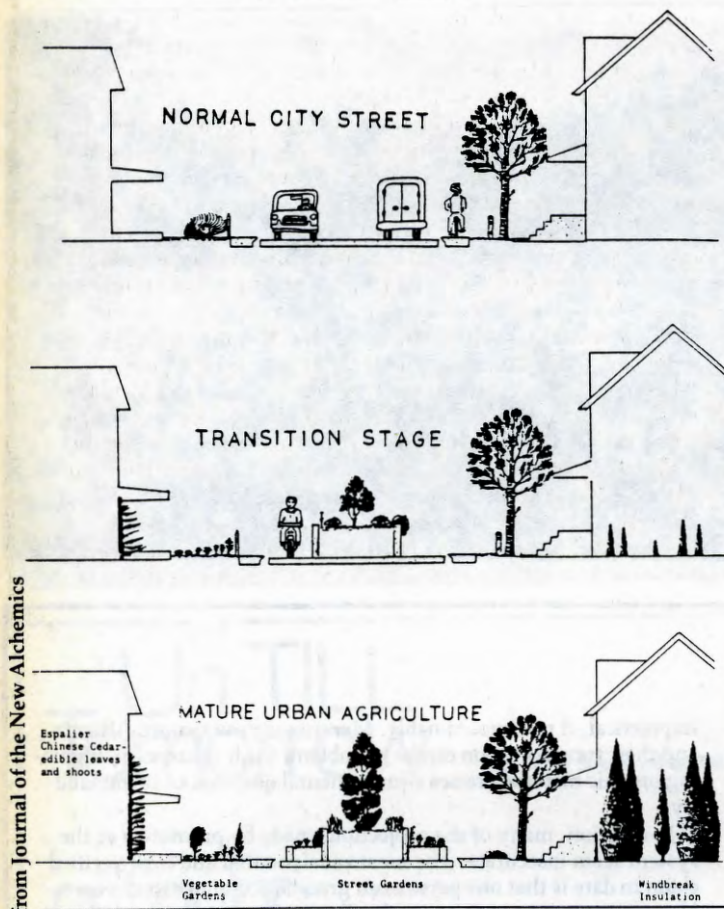
impractical, if not unobtainable. Manures are even more difficult and their transportation can be a problem. Such reliance on importing organic materials raises a fundamental question of sustainability.

In addition, many of the projections made by promoters of the system seem inaccurate. The most widely touted and least verified claim to date is that one person can grow \$20,000 worth of vegetables per annum on 1/10 acre and still take a four month vacation. A number of major demonstration gardens have been developed in the past decade, but not one of them has been able to support itself through product sales. At a ten-year project in Santa Cruz and here at Farallones Rural Center, where several experienced people have been working hard for years at market gardening on plots twenty-five times larger than 1/10 acre, we have yet to see gross income even approach \$20,000. Such claims, along with statements from popular garden and back-to-the-land publications, have helped to foster the illusion that food and economic self-sufficiency lies in the backyard. This has the effect of discrediting the whole system in the minds of people who know enough about agriculture to recognize quickly the improbability of these claims.

A complete perspective on BFI must include the understanding that the way we approach the garden is at least as important as the methods employed. Chadwick insisted that horticulture is a craft and an art. By taking a mindful creative approach to a thing so comprehensible in scale as a garden, we make the vital first step toward creating places of health, beauty, and permanence, where our relationship with the earth is one of stewardship and symbiosis rather than possession and domination.

Utilizing units of production as small as gardens poses a radical change in our approach to food production and culture. The implication points to a value system where the level of consumption is more consistent with our real, personal ability to produce, where work is more directly connected to our sustenance, and where the dignity of self-reliance and the opportunity for self-expression are considered meaningful.

PERMANENCE CONT.



from Journal of the New Alchemists

access

The Journal of the New Alchemists #6, edited by Nancy Jack Todd, 1980, \$9.95 paper, from:

The Stephen Greene Press
Fessenden Road at Indian Flat
P.O. Box 1000
Brattleboro, VT 05301

Still doing some of the most exciting work with permanence in mind, the alchemists have entered their tenth year and have a lot to share with us. Most relevant to permanent agriculture in this volume is Earle Barnhart's piece on *Tree Crops*. Like Mollison, Earle includes a valuable resource list and credits the people whose work predicated his own. "The concept of using perennial plants, particularly trees, to produce human food and animal feeds while they protect the soil has been proposed by historians of agriculture like F.H. King, geographers of soil erosion like J.R. Smith, and economists to whom people matter, like E.F. Schumacher. A landscape of perenn-

nials is the method nature has evolved for soil protection for most of the biogeographical regions of the earth that are now farmed." Urban applications of the dream of edible landscapes are explored and there is more specific information on propagation of tree crops and how to obtain native food-plant stock. —CC

Permaculture I & II, 1978, 79, by Bill Mollison, are available in Australia, but #II is distributed here in the states, at \$10.95/copy (40% off on 10 or more for distributors) by:

Tagari Publications
P.O. Box 888
Winters, CA 95695

The two Mollison *Permaculture* books are excellent resources for students of a permanent way of gardening. The books stress the design and ordering of plants interacting within specific contexts. For example there are schemes for arid lands, for tropics and for beaches. There are models for plants and animals sharing spaces. The goal is diversity and interdependence, synergy within ecosystems. The texts are clarified with illustrations, references and annotated bibliographies.

Bio-dynamic/French Intensive (BFI) gardening took a beating in our workshops. Sometimes referred to as "French Expensive" or "French Pretentious" (I privately called it Bio-maniacal) it was perhaps the most structured and manipulated system looked at, but also practiced, at one time or another, by most of the people in attendance. One can't wholly criticize BFI, throwing out the proverbial baby with the bathwater, because there is much to be learned and much to be gained from aspects of it. Still a cool evaluation is in order, and Michael Stusser, horticulturist at Farallones Rural Center and former co-gardener with Alan Chadwick (The acknowledged synthesizer of BFI), has given us just that. Michael's been working the land at the Rural Center for all of its five years. Most of his work has been with BFI and the modified version of it he's evolved over time. His comments are excerpted from the Farallones 1980 Annual Report—*On Growth and Form*. The report is a gift to members of the Institute. Memberships cost \$10/students, \$25/associate members. Write them for more information. The Integral Urban House, 1516 Fifth Street, Berkeley, CA 94710, or The Rural Center, 15290 Coleman Valley Road, Occidental, CA 95465.

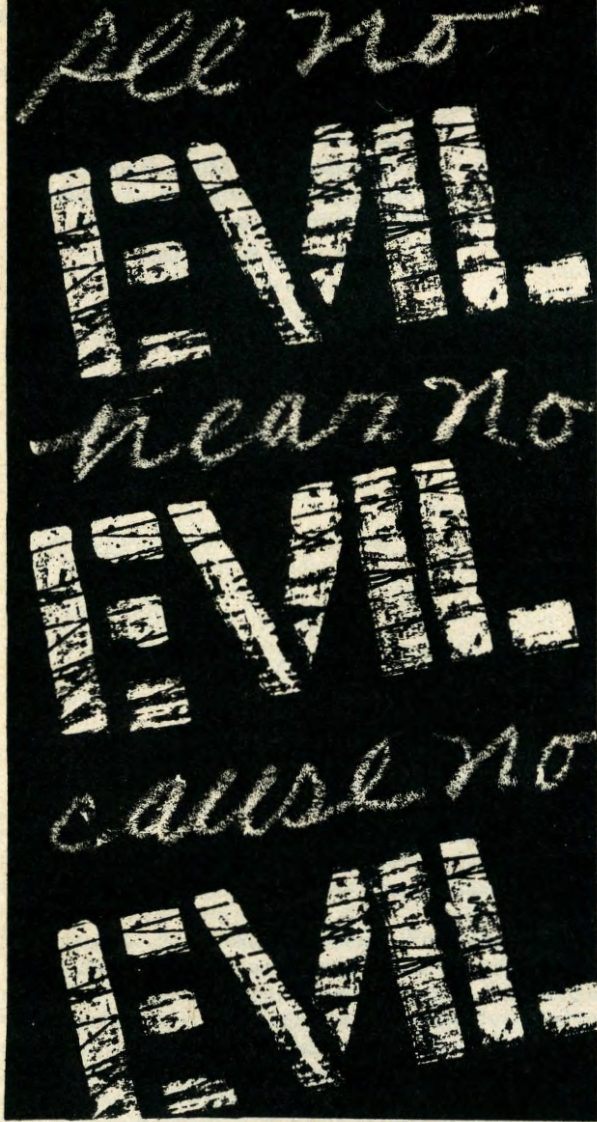
Michael's references to a "good composting program" can be followed up on in two very useful articles. The *AERO Sun-Times* for "late May/early June" carried an excellent overview. The article, *All About Composting*, is from their fact sheets and is probably available separate from the magazine itself. Write them at AERO, 424 Stapleton Building, Billings, MT 59101. (By the way, the *Sun-Times* is also feeling the crunch these days so send money with your request.) The other article is for real bug lovers. It's an August 1980 *National Geographic* spread on the micro-biological interactions in compost, replete with glossy color enlargements of very tiny critters. Beautiful and informative like every issue of the *National Geographic*. Vol. 158, No. 2, \$1.45, \$13/yr from the National Geographic Society, 17th and M Street N.W., Washington, D.C. 20036. —CC

Like BFI, Permaculture is not a new concept but rather a synthesis of several approaches and influences. Credit is paid where credit is due, with kudos to Ruth Stout for developing the "sheet compost method" expediting the garden preparation process, and Masanobu Fukuoka of *The One Straw Revolution* (RAIN Vol. IV: #10) for streamlining the whole endeavor even further and stretching minimal energy agriculture to encompass grain growing.

In addressing the design of agriculture systems and habitation systems Mollison makes clear his own bias; "it is essential that new buildings are so constructed as to supply their own heat and at least some food." The shelters he briefly describes are in most cases very minimal. Their surroundings, however, are elaborate, beautiful and incredibly diverse; all describing "an integrated evolving system of perennial or self-perpetuating plant and animal species useful to man [sic]." —CC

There will be an American reprinting of #1 this fall which will also be distributed by Tagari. We'll keep you posted.

Jill Stapleton



by Tom Bender

Last issue featured articles by Ianto Evans and Winona LaDuke on foreign and domestic colonialism of energy resources, and a related article by Ivan Illich. Here Tom Bender takes us another step, exploring the connections between U.S. exploitation of underdeveloped nations and corporate/government attempts to control solar energy development in this country. In his article Tom makes reference to two books: Noam Chomsky and Edward Hermans's *The Washington Connection and Third World Fascism* and Ray Reece's *The Sun Betrayed* (reviewed and excerpted in RAIN Jan. '80). Both books were published last year and are available for \$5.50 each from South End Press, Box 68 Astor Station, Boston, MA 02123.—MR

It is perhaps ironic that the contemporary American economic empire must rely on terrorism and brutal suppression more than did the old and openly colonial empires. To keep the trappings of democracy at home and to prevent overwhelming reaction to U.S. practices abroad, information on those practices must be kept from seeping out. Excessive repression is the only means to stop that information. Even if we condone the use of such practices elsewhere at the fringes of the empire, the dark truth is that such excesses come home to roost. We are finding out the foreshadow of that truth in the beating of anti-war demonstrators, murders of Black

Panther and Native American activists, infiltration of dissident organizations, FBI complicity in political assassinations, Korean bribing of U.S. government leaders, the Letelier-Moffitt assassinations on the doorsteps of our own Capitol, and the growing ruthlessness of Big Business practices within the U.S.

All this is so at odds with what we've been led to believe that I found it nearly essential to read the whole extensively documented story in *The Washington Connection* for it not to seem the demented ravings of some radical zealot. My old image of the world, though long strained, was one of a basically honest, sometimes naive, misguided, or frustrated U.S. government that generally tried to do good. What I gained to replace that image was one of a government virtually indistinguishable from corporate America and coldly and calculatedly using and supporting murder and torture on a worldwide basis to further the aims of that corporate world. I learned the details of a "Free Press" that wraps a blanket of silence around these nefarious events while inciting us to condemn the non-existent or blown-up evils of other nations not within our power. I discovered the ease with which we in the heart of this empire turn a deaf ear to its operation and effects. And most thankfully, I learned that those who wield this vast power are deeply frightened and threatened, and that behind their facade of invincibility lies a difficult but open path to return our country to the humane and lofty values upon which it was founded. As the dust settled inside my head, I felt drained, but also more deeply encouraged than I have ever been. A crack had become visible that offered a very real ray of hope. . . .

Similar collusion exists between government and big business to support the faltering nuclear power industry. They also attempt to belittle and retard the development of solar energy and to distort its development to bring it under the control of the oil companies, the utilities, and other large corporations. This has been well documented in Ray Reece's *The Sun Betrayed* and elsewhere. But in light of U.S. activities in the Third World, it is obvious that the government's actions are part of a consistent policy to retain the power and control which government and corporate leaders hold in our society and to prevent people from regaining control over their own lives.

There is, however, a particular undertone to the often irrational and contradictory government and corporate responses to events such as Three Mile Island and to successful challenges to nuclear power by community and environmental groups. The government/corporate world is frightened, deeply frightened, by the sun.

The government/corporate world fears the sun because it makes them vulnerable. In spite of governmental ridicule of individual efforts, grassroots energy conservation and conversion to solar energy have already created a far-reaching threat. We have reduced our energy use so much, causing so much excess capacity to exist in our electrical systems, that it is possible today to shut down all except four nuclear power plants in the country without eliminating needed reserve capacity. Solar energy at its best is a decentralized technology, one which can and is being implemented rapidly at community levels in spite of government attempts to retard its development. It is a technology that is teaching people that there are viable alternatives to the present perverted control and use of our economic system—alternatives that don't need big business or big government, nor the effects of their control on the economy. It is a technology that is reminding people at the grassroots level across the country that *we* can call the shots, not just corporate America, and we would be better off to do so. It is threatening the basic authority of the corporate/government world—the authority of being needed.

cont. next page

THE DREAM OF A COMMON

The Dream of a Common Language, Poems 1974-1977, by Adrienne Rich, 1978, 77 pp., \$3.95 paper, from:

W.W. Norton & Co., Inc.
500 Fifth Ave.
New York, NY 10036

On Lies, Secrets and Silence, Selected Prose 1966-1978, by Adrienne Rich, 1979, 310 pp., \$3.95 paper, from:

W.W. Norton & Co., Inc.

Of Woman Born, Motherhood as Experience and Institution, by Adrienne Rich, 1976, 328 pp., \$2.95 from:

Bantam Books, Inc.
414 East Golf Rd.
Des Plaines, IL 60016

I first heard of Adrienne Rich from a friend, someone who dragged me to hear her talk at one of the innumerable political and scholarly conferences that occur continuously in Amherst, Massachusetts. Later, driving cross-country with another friend, I read out loud as she drove and she read as I drove, from books that were important to us. The shared reading was a new way to learn. Misunderstandings were clarified as they came up and new ideas grew as fast as the scenery changed. Learning has since become a joint effort, something we share around the kitchen table after dinner. —KD

* * *

It's been many years since my friend Anne and I read Adrienne Rich to each other, one of us painting or planting while the other read—that summer of "ah ha's!" when we discovered each other through this poet. One of the first things Kiko said as he jumped back into our life here was, "I want to work on this Adrienne Rich stuff I'm reading," and he brought out this satchel of Rich's books that we've been reading our way through ever since. —CC

So often feminism is misconstrued as an aggressive attempt to separate women from men, but the work of feminists is to rediscover and describe the other half of a "conversation" that has been, in fact, for so long a soliloquy.

The work of this woman has become important, in various ways, to many people. Adrienne Rich is published and recognized by the academic community, sponsored by and invited to the very institutions she denounces—and at the same time surrounded by and involved with a very strong and political group of women. Adrienne Rich the scholar/poet and Adrienne Rich the radical feminist is rebuilding language—making it complex and specific to the woman half of the dialogue.

*... what in fact I keep choosing
are these words, these whispers, conversations
from which time after time the truth breaks moist and green.*

These lines come from her poem "Cartographies of Silence," in a collection titled *The Dream of a Common Language*. The title is apt; the poet's primary effort is not expended in an attempt to achieve "the revolution"—nor is it rhetoric for a "new" society or a more "just government"—her work (prose as well as poetry) is addressed instead to the tools with which we go about trying to teach, to grow, to understand—and to make real change. Language is the "technology" with which we build all other technologies; what we shape with our hands we shape first with our words.

It is time that we frame our own questions . . . and that we do so with a full recognition of the weight of the language, theodicy, and politics that would obstruct our doing so.
(LSS, p. 16)

EVIL CONT.

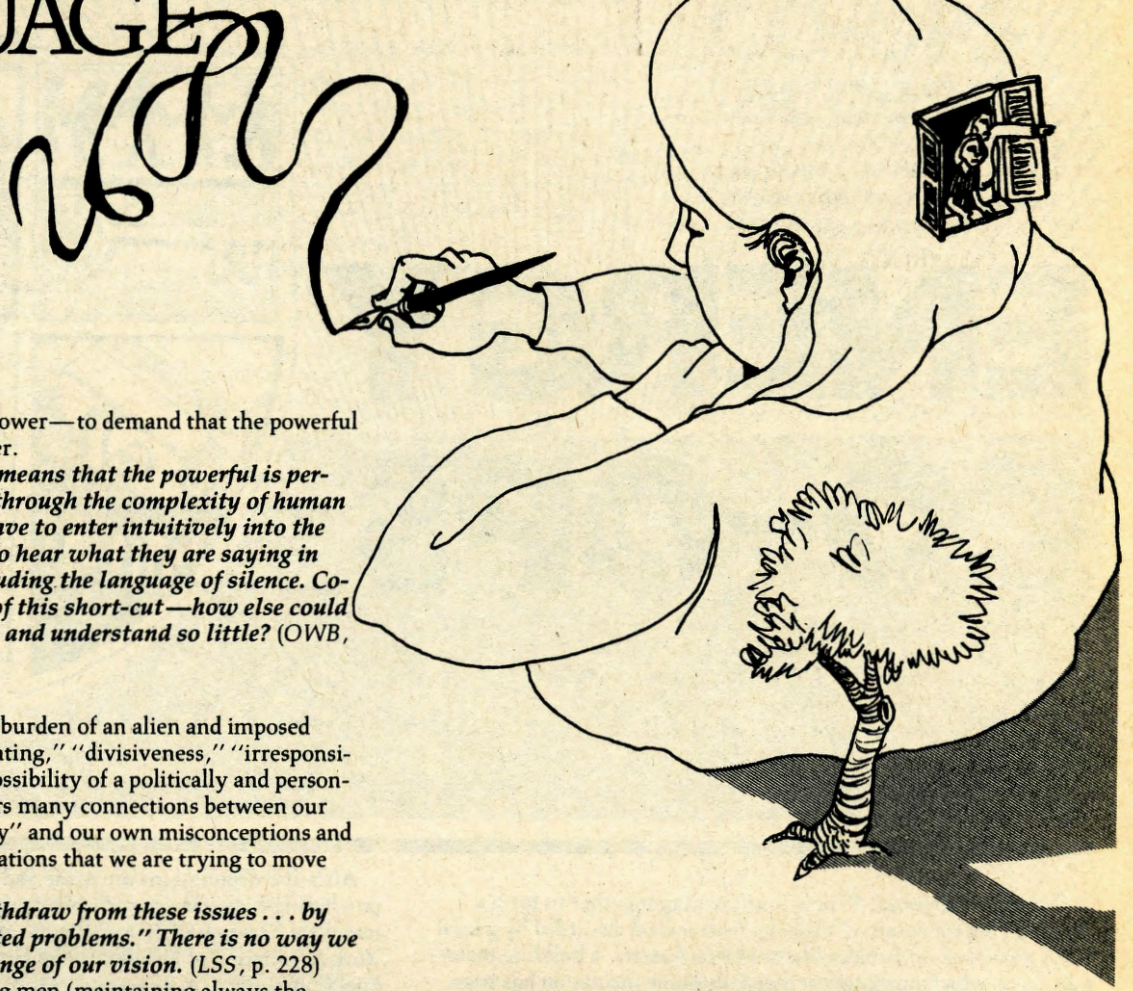
Grassroots anti-war activism during Vietnam has left both an unfinished legacy and a warning to today's soft energy path advocates and anti-nuclear activists. The legacy is the yet-in-process empowerment of people against a power structure whose vision has died and whose strength has turned to abuse. The lesson is that we must not only deal with nuclear or solar power, but with their roots in and implications for our individual and collective values, strengths and weaknesses, and organizational structures. The implications of a technological change go far beyond the technology itself. As centralizing and decentralizing forces work toward their divergent goals within our energy adjustments, the goals, implications, and capabilities of each are becoming clearly visible, and a vast shift in credibility, confidence, support and accomplishment is taking place. The future is taking form in our every act.

In an important way, understanding the depths of the corporate/government efforts to exploit us at home and abroad makes it easier to deal with specific social problems. The failures of government efforts to solve urban, energy, housing or agricultural problems no longer gives a sense of frustration, of impotence, or of the labyrinthine complexity of the problems. As we realize that there was never any intention to solve them, we realize that the "solutions"—from urban renewal to low-income housing to deregulation

tion of oil to "bailouts" of the finances of New York City, Cleveland or Chicago, are all frauds set up to exploit further the situations behind a facade of solving them. Once we understand that, it also becomes obvious that where we've been looking is not where the problems are. And we now know where to look for them—in the financing, tax, regulatory, credit, and legal rackets that have been set up to assist the corpo-rape of America. Already some real answers are emerging.

To realize that both domestic and foreign problems stem from a deep and pervasive abuse of our political and economic system is ironically reassuring. For any system can be corrupted, and most every system goes through cycles of integrity and decay. At the zenith of their power and seeming invincibility, all things carry the seed of their own destruction and the seed of what will replace them. One looks powerful, the other frail. But one is waxing and the other waning. It is appropriate that at the moment corporate America seems most victorious and unassailable, and when our will to counter it is weakest, that the opportunity to do so opens its way. The process will not be easy—power once obtained is seldom relinquished willingly. But we can be thankful that our democratic tradition allows us to expect better than what we have, and hope that it will be strong enough to allow a relatively non-violent return of power to the people and restoration of our institutions to humane and life-enhancing operation.

LANGUAGE



Ownership of the language is power—to demand that the powerful listen is to challenge their power.

To hold power over others means that the powerful is permitted a kind of short-cut through the complexity of human personality. He does not have to enter intuitively into the souls of the powerless, or to hear what they are saying in their many languages, including the language of silence. Colonialism exists by virtue of this short-cut—how else could so few live among so many and understand so little? (OWB, p. 49)

Feminism, if released from the burden of an alien and imposed dogma (accusations of "man-hating," "divisiveness," "irresponsibility to the race") offers the possibility of a politically and personally active outlook that uncovers many connections between our attempts to build a "new society" and our own misconceptions and misunderstanding of the foundations that we are trying to move from:

There is no way we can withdraw from these issues . . . by calling them "man-connected problems." There is no way we can afford to narrow the range of our vision. (LSS, p. 228)

That vision, while not excluding men (maintaining always the choice of separatism) does underline the very special qualities of working within a "womyn's" community, a feminist working context.

*I have never seen
my own forces so taken up and shared
and given back*

(from "Phantasia for Elvira Shatayev," DCL, p. 5)

Expanding the vision further, she speaks of a "Woman-Centered University" in which:

Women . . . [will] need to address themselves—against the opprobrium and obstruction they do and will encounter—to changing the center of gravity of the institution as far as possible; to work toward a woman-centered university, because only if that center of gravity can be shifted will women really be free to learn, to teach, to share strength, to explore, to criticize and to convert knowledge to power. It will be objected that this is merely "reverse chauvinism." But given the intensive training all women go through in every society to place our own long-term and collective interests second or last and to value altruism at the expense of independence and wholeness—and given the degree to which the university reinforces that training in its every aspect—the most urgent need at present is for women to recognize, and act on, the priority of recreating ourselves and each other, after our centuries of intellectual and spiritual blockading. A by-product of such a shift in priorities will of course ultimately mean an opening-out of intellectual challenges for men who are emotionally mature and intuitively daring enough to recognize the extent to which man-centered culture has also limited and blindered them. LSS, p. 128

It isn't, strictly speaking, a credo that she's writing, but sometimes (particularly in her poems) elements of a creed emerge. In the beautiful poem "Paula Becker to Clara Westhoff" she says:

*How we used to work
side by side! And how I've worked since then
trying to create according to our plan
that we'd bring, against all odds, our full power
to every subject. Hold back nothing
because we were women.*

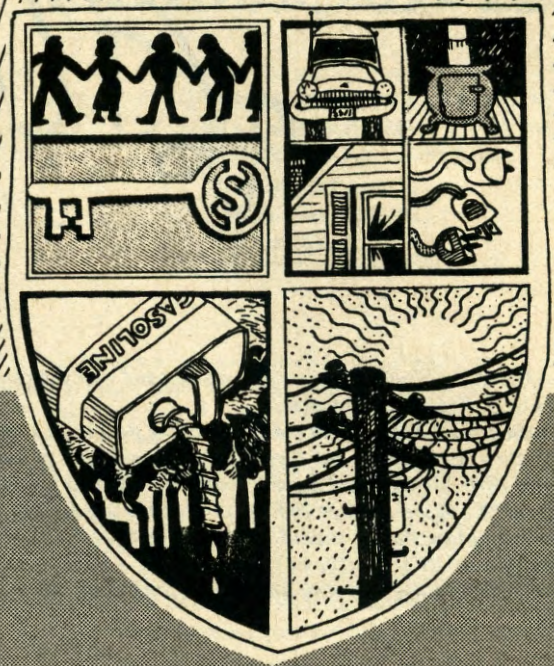
(DCL, p. 44)

Rich the scholar speaks in behalf of "research for" rather than "research on" human beings. Rich the poet, in "Natural Resources," says:

*My heart is moved by all I cannot save:
so much has been destroyed
I have to cast my lot with those
who age after age, perversely,
with no extraordinary power,
reconstitute the world.*

(DCL, p. 67)

ENERGY CO-OPS



In Duluth, Minnesota, 48 people are joining together to form a wood buying cooperative, utilizing waste wood discarded by a local wood processor. In Jamaica Plain, Massachusetts, a building materials co-op which purchases and installs home insulation has been operating since April 1978. Both of these new cooperatives are part of a growing trend of "energy cooperatives" forming throughout the continent. By pooling resources and purchasing in volume, homeowners, co-op apartment owners, and renters have been able to enjoy a savings on energy costs unavailable to individuals. Like most cooperative ventures, the immediate "drawing card" is an economic one. Bulk buying, whether it be for oil, wood or insulation, puts members in a bargaining position for reduced prices and occasionally increased services. Energy co-ops have taken a variety of forms—from centrally administered programs (such as fuel-buying consortiums) to member operated and run businesses. With the exception of wood-purchasing co-ops in the Northwest, most energy co-ops have focused on conventional, non-renewable sources of energy. That trend is beginning to change. While the immediate concern is to provide basic needs at lower prices, the long-term potential of energy co-ops to advocate development and use of renewable energy sources and appropriate technologies is only now being realized.

Similar in style to food cooperatives, oil purchasing co-ops / consortiums operate by utilizing the leverage of numbers. The more members (volume) that a cooperative can sustain in a concentrated geographic area, the better the deal that can be negotiated with the local wholesaler—in this case an oil distributor. Greater volume in a concentrated area, and reduced paper work (some co-ops handle their own paper work for the distributor) are the prime motivators for distributor interest—reputed to be high in most cities. While the particular structures may vary, the establishment of a self-sufficient base is a major consideration of every co-op. The investment of unused funds (such as the summer payments of a co-op which utilizes a year-round payment plan) in a high interest savings account is one strategy that co-ops use to accrue savings for operational expenses.

After the negotiations are made and the contract is signed, oil purchasing cooperatives and consortiums are able to offer their members a savings of 10 to 20 cents on each gallon of oil. The New York Association of Neighborhood Housing Development (ANHD) Fuel Consortium, in its second year of operation, acts as a liaison between the fuel supplier and member buildings. Over 23 buildings, scattered through Manhattan, Brooklyn and the Bronx, participate in the program. Their goal for this next heating season is 125 buildings, including low, moderate and high income buildings. Eventually they hope to diversify their services to include purchase plans for building supplies and storm windows—major needs for inner-city apartment buildings.

Last fall in Philadelphia, a food co-op and credit union organized a fuel co-op for their members. With only 50 participants, the Weaversway co-op is planning a dramatic expansion this year. Instead of soliciting individual memberships, Weaversway Fuel co-op will include organizations as members—community organizations, neighborhood groups and religious institutions. Similar to the ANHD model, Weaversway will contract with a local distributor for a discount on services provided to members. A capital investment of \$50 by each organization will enable all of its members to benefit from the services of the cooperative. The discount they have negotiated is lower than the consortium's 3 cents/gallon, but no paperwork is involved. Lower operating costs, the initial capital investment, and a larger number of experienced members may enable this co-op to achieve financial stability somewhat sooner than the consortium. Their future goals include operating an energy audit service and group purchases of conservation and solar materials.

While the focus in the north has been predominantly on home heating, some warmer states, such as California, have focused on transportation costs. In January of this year, the Sacramento City Fuel co-op incorporated with approximately 75 members, to form a gasoline co-op. The initial groundwork for the co-op includes the purchase of an "out of the way" gasoline station and increasing membership. By buying wholesale and operating on a non-profit basis, the co-op will be able to provide gasoline at 20 cents a gallon less than standard gas stations (wholesale prices are 25% less than

What Community Energy Cooperatives Can Do:

- **Bulk Fuel Purchasing.** Not only substantial cost savings can be achieved through bulk fuel purchases, but "level payments" on a year-round basis and surplus revolving funds invested in interest bearing accounts can supply end-of-the-year rebates to co-op members.

- **Boiler Maintenance and Repair.** Because of the non-profit nature of the cooperative, standard service contracts and preventive maintenance services can be supplied at a lower than market rate to co-op members.

- **Energy Auditing and Weatherization.** The cooperative could supply auditing services at a small charge or as part of its weatherization program which through a community-wide purchasing network could offer a variety of energy services and goods to its membership.

- **Leasing and Installation of Alternative Energy Systems.** With direct Co-op Bank financing for solar energy installations and other alternative technologies, the individual consumer would not be required to cover the up-front capital costs of initial installations and at the same time pay less for monthly fuel charges.

- **Education and Job Training.** With Co-op Bank financing the cooperative would be in a position to attract local CETA job training funds as well as provide other job training and community education of its own.

- **Energy Planning and Economic Development.** The cooperative could undertake comprehensive studies of energy needs, usage and development strategies on the local level. The Co-op Bank is authorized to spend up to 10% of its assets with the possibility of leveraging much more for producer- and worker-owned cooperatives.

Reprinted with permission from The Co-op Bank Monitor, May, 1980

CO-OPS access

Following is a list of cooperatives and resource groups from whom more information on how to organize and operate an energy co-op can be obtained.

ANHD Fuel Consortium
115 E. 23rd St.
New York, NY 10010
Contact: Toby Sanches

Publication: *Cheaper by the Million: how to start a joint fuel purchasing consortium*, \$3, available from the above address.

Housing Energy Alliance for Tenants (HEAT)

156 Fifth Ave.
New York, NY 10010
212/675-1920

Contact: Roy Battiste

Operating as a fuel buying co-op for a low-income community on the lower east side, HEAT is considering the purchase of their own fuel truck. They estimate a net savings of 10% can be achieved through fuel costs alone. Conservation methods could bring this figure up to 25-40%.

N.Y. PIRG (Public Interest Research Group)

5 Beekman Street
New York, NY 10038
212/349-6480

Contact: Pam Fairclough

An energy consortium for homeowners and non-profit groups operated through the Citizens Alliance—a statewide community-based organization focusing on environmental quality, energy costs and neighborhood preservation. This is their first year in operation.

Peoples Community Enterprises
206 W. 4th St.
Duluth, MN 55806
218/727-6690

Contact: Cheryl Jensen

A wood co-op that is in its initial organizing stages. Presently offers a referral service to local vendors and organizes work parties to cut and transport local wood.

Sacramento City Fuel Co-op
c/o Wilford Hill
2591 Redding
Sacramento, CA 95820
916/452-0825

A gasoline co-op offering 10-20% savings to members. Contact Wilford Hill for information on this and an alcohol fuel co-op that is now being organized in that city. Both co-ops are seeking additional members.

retail prices on the average). The pumps will be run automatically except for 4 hours during the day, when they will be operated manually by senior members of the cooperative. Shares in the co-op are \$105 per person (\$5 for registration and advertising costs). While gasoline is a very conventional energy source, the economic model being developed and demonstrated is quite unconventional.

The grandmother of the "new wave" energy co-ops is the Ottawa Consumers Energy Co-op. The co-op was recently renamed as the "Appropriate Home Energy Co-op" to "reflect the desire of the leadership to diversify into solar, wind and biomass" energy sources. Organized as a block buying club, it began two years ago as a fuel co-op. Operating on a yearly rebate system, the co-op was able to return 8 cents per gallon to its members last year. Half of this rebate, upon membership approval, can be withheld (nearly \$40,000 in 1979-80) for use by the co-op. Future possibilities include buying into an established conservation business (home insulation, storm windows and doors, wood stoves, etc.) and becoming a lending institution for its members.

As these new and innovative energy co-ops gain momentum, experience, and financial stability, their potential and immediate impact has begun to be recognized. The newly opened National Consumer Cooperative Bank (NCCB) has established an Energy Office whose financial and technical assistance may have far reaching effects on the future of energy co-ops. At the present time the bank will most probably be a conservative lender, considering that it must return to Congress for funding next year. Depending upon the outcome of conflicts presently surrounding the bank, NCCB has the potential to foster and support—both financially and technically—the development of co-ops utilizing renewable energy sources and conservation measures. Energy co-ops can and do address the urgent needs of low and moderate income communities, most hard-hit by increased energy costs. Beyond this immediate and vital function, energy co-ops also serve a broader and more fundamental purpose. By advocating renewable energy sources and conservation measures, energy co-ops act as a countervailing force to the large-scale, centralized and capital intensive direction of our national energy policy. —LS

cont.

cont.

Appropriate Home Energy Co-op
Cornerstone Non-profit Consumer Corporation
P.O. Box 2503, Station "B"
Kitchener, Ontario, CANADA N2H 6M3
Contact: Ken Pope, 613/234-227
A fuel buying co-op that is expanding to include renewable energy sources and conservation techniques.

Weaversway Fuel Co-op
559 Carpenter Lane West
Philadelphia, PA 19119
Contact: Vince Piere
215/548-1430
Fuel buying co-op for community organizations.

Boston Building Materials Co-op
52 Plimpton St.
Jamaica Plain, MA 02130
Contact: John Powse or Mordechi Liebling
617/426-0931
Buys and installs conservation materials, conducts classes in Spanish and English on home conservation strategies. Future plans include a full-scale lumber yard/hardware supply store, and a tool and book library. The BBMC has almost 110 members and is funded through a mixture of dues, grants and loans.

Resource Groups:

Conference on Alternative State and Local Policies
2000 Florida Avenue N.W.
Washington, DC 20009
Contact: Michael Freedberg or Bill Schweke
202/387-6030

A non-profit agency that acts as a clearing-house on up-to-date information specific to policy and program innovations, offers technical assistance and political advice to community groups, publishes reports on progressive policy initiatives, and organizes conferences and workshops on topics such as Energy, Land Use, Food, and Women and Employment. The Co-op Bank Monitoring Project and the Energy Project are two of the many valuable projects the conference is involved in. They are in the process of writing a handbook on how to organize and operate an energy co-op.

Neighborhood Information Sharing Exchange (NISE)
1725 K St. N.W.
Washington, DC 20006
800/424-2852
Contact: Susan Hyatt
Contact Susan for information relating specifically to energy and the Co-op Bank. If you hear anything especially interesting, pass it on. She'd appreciate a call.

Center for the Study of Responsive Law
Washington, DC 20002
202/387-8030
Contact: Paul Kreitner
Paul is conducting a survey of energy co-ops.

Articles

"An Innovative Approach to Community Self-Help: A Food and Fuel Cooperative for Cape Cod," by Gary Hirshberg, summer 1980 issue of *New Alchemy Newsletter* \$1 from:

New Alchemy
P.O. Box 47
Woods Hole, MA 02543

"The Neighborhood Energy Co-op" by Michael Freedberg, April 25, 1980, issue of *The Neighborhood Works*, \$1 from:

Center for Neighborhood Technology
570 West Randolph Street
Chicago, IL 60606

"An Educated Consumer Is Our Best Consumer," by Marilyn Archiron, spring 1980 issue of *Alternate Currents*, \$1 from:

Alternate Currents
156 Fifth Ave., Suite 404
New York, NY 10010

"Focus on Energy Co-ops," by Elena Jones, April 1980 issue of *Jam Today: California Journal of Cooperation*, \$1 from:

Jam Today
P.O. Box 195
Davis, CA 95616

The Co-op Bank

After months of Congressional meetings and public hearings, the National Consumer Cooperative Bank (NCCB) was officially inaugurated this past May. Designed to provide financial and technical assistance to both new and established cooperatives, the bank is experiencing a slow and controversial start. Recent policy changes and a lengthy delay in hiring a director for the Title II Office of Self-Help Development and Technical Assistance have caused a substantial setback for low-income and minority communities who would seek to use the bank. Continued delay by the White House in appointing a director may prevent the Self-Help Office from establishing a significant track record by the time the bank returns to Congress next year for appropriations. Already the Senate Appropriations Committee has recommended cuts from the Self-Help Office budget for this year.

Within the bank there is also dissension. There are those who feel that the bank should be a more conservative lender in its first years, as it establishes itself as an independent financial institution. Others argue for a mixture of "high" and "low" risk loans to ensure low-income and minority groups access to the bank's funds.

There are three excellent groups which are particularly active in this struggle. The

Conference on Alternative State and Local Policies provides technical assistance to community groups and monitors the actions of the Co-op Bank. The conference takes a "carrot and stick approach," in the words of one of the staff, as it assists the bank toward developing a balance between the needs of the people and the bank's efforts to establish itself as a credible and financially solvent lending institution. Another agency which provides technical assistance—particularly to low-income and minority groups—is the Committee for Cooperative Development (CCD). Both the Conference and the Committee put out newsletters which are accessed below. Earlier this summer, together with the Committee for Consumer Cooperative Alliance, CCD sponsored a conference on the NCCB through which the "Action Committee for Cooperation" was born. While the former two groups provide technical assistance, the latter group is more action oriented, as its name implies. The Action Committee has submitted petitions, mounted demonstrations, and begun litigation to advocate the expeditious response of the bank to the unorganized but large numbers of people they represent. For information on the activities of each group, and up-to-date information on the status of the NCCB, contact:

The Conference on Alternative State and Local Policies
2000 Florida Ave. N.W.
Washington, DC 20009
202/387-6030
Contact: James Mayes
Publication: *The Co-op Bank Monitor*, available from address listed above for \$2/yr.

The Committee for Cooperative Development
1500 Massachusetts Ave. N.W.
Washington, DC 20005
202/293-1500, 303/322-2577
Contact: Jim Ellison
Publication: *The Bulletin of Cooperative Economics*, available from address listed above.

The Action Committee for Cooperation
c/o Jim Ellison/CCD
1500 Massachusetts Ave. N.W.
Washington, DC 20005

The National Consumer Cooperative Bank
2001 S. Street N.W.
Washington, DC 20009
800/424-2481 (This is a toll-free number for general information, loan application requests and technical assistance, and requests to be put on the bank mailing list.)

COMMUNITY ECONOMICS



Dorchester Com. News/cpf

Tom Bender

American communities are finally beginning to understand how their treasures are being emptied and their pockets picked by the financial chicanery of corporate and banking interests. The Institute for Local Self Reliance's study of energy self-reliance for Washington, D.C. (RAIN, May 1980) showed how our energy dollars are sucked out of a community, and what happens if solar and conservation investments are made within the community instead. David Moberg's excellent articles in *In These Times* have exposed the manipulations of the municipal finances of Chicago and New York to the profiteering of bankers. Communities such as Cannon Beach, Oregon, and Carmel, California, have banned franchise businesses to prevent their draining money out of a community. Two valuable recent publications add further pieces to the puzzle of how community economies are exploited and what can be done to restore their true health.

The Battle of Cleveland, by Dan Marschall (\$7.95 from the Conference on Alternative State and Local Public Policies, 2000 Florida Ave. N.W., Washington, DC 20009) documents the mayorial period of Dennis Kucinich, and the battle in Cleveland between corporate power and public interest. Blackmail of the city by a bankers cartel to force sale of the municipal electric utility to private interests; the tax giveaway to corporations by previous administrations that caused the city's financial problems; pressures on local media to keep the community from finding out the true picture; the exposure of the corporate shadow government that traditionally ran the city for its own profit; and alternatives put together by the Kucinich administration to reclaim the future of the city for the community are all laid out in the actual newspaper accounts, speeches and other records of that turbulent and vital period.

An Income and Capital Flows Study of East Oakland, California (\$10 from Community Economics, 6529 Telegraph Avenue, Oakland, CA 94609) doesn't question as deeply the economic assumptions be-

neath the financial cash flows of the community, but does make clear the impact of finance patterns and absentee ownership upon the economic life of the community. More than half of all rent money in East Oakland left the community in the pockets of absentee landlords. Two-thirds of the wages, rents, and profits generated by purchases at East Oakland stores went to non-East Oaklanders. More than 80% of home mortgage payments in East Oakland went for interest charges. A number of recommendations are made for changes in the housing, commercial and financial sectors to minimize those excessive costs and keep the money within the community.

Nature's Price, van Dieren and Hummelinck, 1979, \$6.95 from:
Marion Boyars, Inc.
99 Main Street
Salem, NH 03079

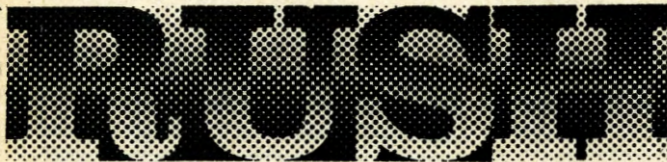
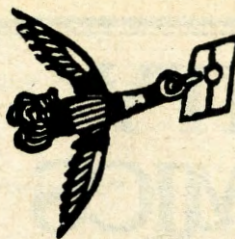
This book is a popular version of a study of the "economic" value of nature made by the Amsterdam Institute for Environmental Problems for the Dutch branch of the World Wildlife Fund. By attempting to put cash values on nature's gifts that make our life possible, it tries to shock us into perceiving not only the frightful cost of destroying natural systems and replacing their functions by engineered devices, but also the absurdity of our whole economic calculus. Air purification and oxygen production by trees, water purification by swamps, climate control by vegetation and many other examples are discussed in simple and understandable terms. A good introductory book to how we benefit from the work natural systems do. The technical study it is based upon is probably much more valuable and worth digging out. Though it is important to justify natural systems in traditional economic terms, it is even more important to change the terms of such dialogue and show the fundamental limitations of such economic analysis and why we need to move beyond it . . . a can of worms left unopened by this study.

Freedom Inside the Organization, David Ewing, 1977, \$3.95 from:
McGraw-Hill
1221 Avenue of the Americas
New York, NY 10020

Concepts of "freedom," "rights," and "responsibilities" are ever-changing things, and existing American patterns do not necessarily define the best options for a modern society. We've found that abolition of slavery, gaining of voting rights by women, and such things as rental contracts (that give both tenants and landlords a fair shake instead of considering only the landlord's self-interest) evolve new concepts of freedom and rights and can make a better society. Similar concerns promise further progress toward the democratic principles upon which our country was founded. One of the largest "black holes" remaining is in the area of people's rights in their workplace, which have generally been non-existent. Ewing documents numerous successful experiments in expanding and securing worker's rights, and shows how they can contribute to rather than destroy good business operation. His proposed Employee Bill of Rights, ensuring due process, freedom in outside activities, free speech, freedom from unwarranted search or invasion of privacy, privacy of records and employee rights to challenge data in personnel files has solid precedent and real need. It should be adopted in every state!

Japan as Number One, Ezra Vogel, 1979, \$12.50 from:
Harvard University Press
79 Garden St.
Cambridge, MA 02138

Japan is number one in quality of secondary education. The U.S. is thirteenth. Japan's crime rate is less than one-fifth that of the U.S., and Japan requires only 7% of the lawyers per capita as the U.S. Their education, health and welfare ministries have a bureaucracy only 1/15th that of ours. Worker satisfaction and productivity, product quality and business competitiveness is far superior to that in the U.S. Similar successes have occurred in government operation, politics and democratic decision-making. There is no magic involved—only a determination that organizations be designed and operated to serve the public good, that people and organizations deal with responsibilities to each other and not just their rights. Japan's careful and thorough evaluation and selection from systems used elsewhere stands as an example to us as much as the success of the choices they've made. A good, thought-provoking call-to-question of many of our basic assumptions.



The National Center for Appropriate Technology has developed a ten-lesson curriculum for grades 5 and 6 which focuses on the changes in lifestyles and technologies which today's students will experience as they grow to adulthood. For further information and a sample lesson write: Appropriate Technology Curriculum, NCAT, P.O. Box 3838, Butte, MT 59701.

A task force at the Solar Energy Research Institute is giving consideration to the use of annual tree crops as feedstock for fermentation to alcohol or for integration in other farm energy systems. They would welcome correspondence with individuals or organizations who have knowledge of, or are active in promoting, tree crops for small-scale energy systems. Write to Tom Milne, Tree Crop Task Force, SERI, 1617 Cole Blvd., Golden, CO 80401.

Massachusetts Fair Share, a statewide citizens' action organization concerned with organizing low-income families to fight for social justice, is looking for organizers, organizer trainees, canvassers, researchers, and administrative support people. Contact MFS Personnel, 304 Boylston St., 2nd fl., Boston, MA 02116, 617/266-7505.

The Harvard Graduate School of Design is offering a number of non-credit evening courses, beginning in October. Course titles include "Improving Urban Business Districts," "A Beginner's Guide to Landscape Design," "A Study of Japanese Gardens," and "Solar Energy and Energy Conservation." For a brochure and application form, contact Carol Lee Kort, Continuing Education, Harvard Graduate School of Design, Gund Hall L-37, Cambridge, MA 02138, 617/495-2578.

Western SUN, the U.S. Dept. of Energy, and the Utah Energy Office will be the sponsors of the "1980 Solar Update" to be held Sept. 25-26 in Salt Lake City. The event will feature presentations on the practical aspects of the design and construction of solar installations, solar financing, conservation, and earth-sheltered design. For a copy of the Solar Update program, contact MCC Associates, 1533 Red Oak Drive, Silver Spring, MD 20910, 301/589-8130.

Organizations and agencies interested in developing farm energy programs are invited to take advantage of a new training institute established by the Small Farm Energy Project. Seminars, hands-on workshops, and one-to-one consultation with program staff of client organizations will be available. Contact Rob Aiken, Energy Project, Box 736, Hartington, NB 68739, 402/254-6893.

The Safe Energy Communication Council is about to launch a campaign to challenge radio and television advertising on behalf of the nuclear industry. They need the assistance of many citizen volunteers to monitor local stations and keep track of any pro-nuclear ads that might be run. For details of how you can help, contact Whayne Dillehay, SECC, 1536 16th St. N.W., Washington, DC 20036, 202/546-4790.

A survey to determine the use of information technology in neighborhood planning and policymaking is currently being conducted by faculty of the University of Pittsburgh. They would like to hear from people who have knowledge of neighborhood projects which utilize automated information clearinghouse services, telephone conferencing, teletype, microfilm, or microcomputers. Contact Clark Rogers or Cheryl Paine at 3L24 Forbes Quadrangle, University of Pittsburgh, Pittsburgh, PA 15260, 412/624-3606.

The Santa Barbara Center for Bio-Intensive Agriculture offers a variety of courses for beginning and experienced gardeners, ranging in length from one day to seven weeks. The bio-intensive approach uses intensive planting in raised beds, with deeply prepared soil, simple hand tools, organic fertilizers, and inter-planting techniques. Contact Santa Barbara Center, Community Environment Council, 924 Anacapa Street, Suite B4, Santa Barbara, CA 93101.

"Minority Focus on Solar Energy" is the title of a national conference to be held Sept. 15-17 in Arlington, Virginia. Among the many sponsors of the event are SERI, the Navaho Nation, La Raza, the National Urban Coalition, and the NAACP. For further information call toll-ree 800/424-2885.

The Golden Gate Energy Center, a public benefit organization devoted to the study, demonstration and advancement of renewable energy sources, is currently interviewing candidates for the following staff positions: technical manager, technical assistant, program assistant, and secretary. If interested in applying, please submit resume including salary history and references to Tom Javits, Golden Gate Energy Center, Bldg. 201, Fort Mason, San Francisco, CA 94123, or call 415/556-0560.

The Fifth National Passive Solar Conference will be held Oct. 19-26 in Amherst, Massachusetts. A "Women in Solar Energy" program will be offered Oct. 20-21 in conjunction with the conference. Contact Passive Solar 1980, Box 778, Brattleboro, VT 05301, 802/254-4221.

NASCO (North American Students of Cooperation) is looking for groups interested in co-sponsoring its two-day training course for co-op directors. The course focuses on the legal, cooperative, and organizational responsibilities of co-op boards, and provides directors with tools to clarify and simplify their tasks. Contact NASCO Training for Co-op Directors, P.O. Box 7293, Ann Arbor, MI 48107, 313/663-0889.

The Energy Show, a forum on energy issues for Canadians, will be held Oct. 23-26 in Saskatoon, Saskatchewan. The show will include a two-day conference, an exposition featuring hundreds of energy exhibits, and a series of workshops on energy applications in housing, agriculture, and transportation. Contact The Energy Show, 230 23rd Street East, Saskatoon, Saskatchewan, S7K 0J4 CANADA, 306/652-2063.

Commercial and industrial solar systems will be explained from an operation and cost-effective perspective at seminars to be conducted by Jordan College in cooperation with the federal government, Oct. 27-29 in Denver, Nov. 10-12 in Chicago, and Dec. 8-10 in Orlando. For further information contact Linda Bouwkamp, Asst. Director of Energy Programs, Jordan College, 360 W. Pine St., Cedar Springs, MI 43919, 616/696-1180.

CORRECTIONS

We inadvertently omitted the following access information from "The Aborigine Peace Corps" in the last issue.

Aprovecho is a Spanish word meaning: I make the best use of. Ianto Evans is a part of the Aprovecho Institute, a small group of people from several countries who are working to demonstrate locally appropriate technologies, egalitarian working and living arrangements, and to rekindle local pride in techniques, ways of organization and means of livelihood. They develop small-scale technologies and natural energy tools and consult locally on energy-related matters. Ianto is also the author of *Lorena Owner-Built Stoves*, 1979, \$3.00 from Appropriate Technology Project, Volunteers in Asia, Box 4543, Stanford, CA 94305. The Aprovecho Institute is at 359 Polk Street, Eugene, OR 97402.

RAINDROPS

You might recall our financial report of a year ago. We were flush, we thought, so we patted ourselves on the back and raised our salaries (to \$115/wk.). Then we embarked on a promotional campaign (exchanging mailing lists with other magazines and direct mailing of sample copies). Now our subscriptions are up, but so are rent, printing, postage and supply costs. We're running a monthly deficit that has forced us to forego salaries since June, cutting life a lot closer to the bone than is comfortable even for seasoned "living lightly" types like ourselves.

At first we thought it was just us. Then we noticed that nearly every other magazine we read is pleading for assistance. *WIN* is on the brink, and so is *In These Times*. *Seriatim*, *New Times*, *People & Energy* and *Seven Days* are only a few of the casualties that have folded recently. Then we watched as *Harper's* went under, despite its 130-year history and 300,000 readers.

"The small press is in an even worse position than magazines like *Harper's*," write our partners in poverty at *In These Times*, as it has to derive its income from circulation which, in turn, is limited primarily to subscriptions. In other words, "the small press must rely on the least profitable source of publishing revenue."

We need your help. The next few months are crucial. We've been surviving off of savings, consulting contracts, and part-time gigs while we develop plans and write proposals to strengthen *RAIN's* economy. We might as well be blunt about it—



WATCHING AND WAITING.

we need your money (we are tax deductible)—but we need other kinds of support too.

Show *RAIN* to a friend. Or tell us the names of friends who might be interested. We'll send them a flyer. In fact, we'll send you a bundle of flyers if you can help us by distributing them in your workplace, community, on campus, at energy fairs, etc.

We know that *RAIN* often gets passed from hand to hand, and we appreciate that extra distribution—but perhaps the last person on the line could get his/her own subscription and start yet another distribution chain? (Besides, then you'd get to see *RAIN* first!)

Other magazines are often our best resources. Reviews of *RAIN* by other magazines that find us helpful would likely boost our subscriptions too.

And like we said, we need money—whatever you can spare.

If you've been "living lightly" as a *RAIN* subscriber we're sorry to say we're raising that rate to \$9.50/year. It's still a bargain. If you really can't swing the new rate send us a letter and maybe we can work something out.

If you represent an institution (library, government agency, solvent community group, etc.) we're setting a higher *institutional* rate for you. Them that's got can give a little more for them that's not.

"The small press," concluded our compatriots at *In These Times*, "is the only medium where serious analysis and programs can be presented and discussed, and where the germs of future movements can be nourished." It is ironic that the same recession that has thrown into question the viability of our economic system may simultaneously destroy the means by which to create alternatives to it.

This issue marks the end of our sixth year in print and we hope to see *RAIN* continue for at least another six. For all our financial worries, we're feeling really good about the magazine and about our work together. Like grass growing through cracks in concrete, we're not about to give up easily. When we're not putting together the magazine we're doing whatever we can to make *RAIN* viable (e.g., writing proposals, strengthening our ties with other groups, pursuing consulting contracts . . .). Now we're looking forward to hearing from you . . .

RAIN

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A RAIN SURVEY? . . . Not really. We aren't trying to get demographic statistics, though they might be interesting. What we're really looking for is some useful dialogue. While it's not as simple to work with, thoughtful commentary on what we write clarifies our style and sense of purpose, and sharpens our whole focus.

We hope that RAIN can be a tool for active use. We don't want to let it slip into any kind of empty editorializing or random "access." But our concept of the nature of that tool, and its "appropriateness," may differ from yours.

Let us know . . .

GENERAL QUESTIONS

We would like to get an idea of why people read RAIN, or perhaps more importantly, *how* they read it . . .

- Do you use RAIN in your day-to-day work? As a reference? For ideas?
- What would you like the magazine to provide more of? less of? (Reviews, political criticism, Rush, letters, technical info . . .)
- Is there anything RAIN *should* be including but is not?
- Do you ever search out books or access that you find in the magazine?
- Could you pinpoint any favorite articles/pieces from past issues? Why were they favorites?
- Have you noticed any changes in the magazine's format (graphic, editorial or other)—were they for better or worse?
- How do you define "appropriate technology"? Where and how does your definition compare with what you find in the magazine?

SHORT & SIMPLE QUESTIONS

- Is any percentage of your livelihood maintained through self-sufficient means (i.e., barter, farming, etc.)?

Yes No _____%

- What do you do? (profession/occupation/vocation/avocation) _____

- Your political affiliations, if any _____

- Where/how did you first see/hear of the magazine? _____

- How long have you lived at your present address? _____

- How long in the same state? (Just curious as to how permanent or restless you may be) _____

If you haven't noticed, we're not providing any return postage for this "survey." To be perfectly honest, we can't afford to. Instead, we are asking you to stamp your own envelope and to use your own paper—thanks very much, it really does help! (Return postage would cost us a quarter a piece, above and beyond the initial permit fee.)



RAIN

2270 NW Irving, Portland, OR 97210