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RAIN

JULY 1980

*Showdown in
Navajo Land*

*Ivan Illich on Tools
for Subsistence*

*Packing Your
Pedals*



VOLUME VI NO. 9

\$1.50 No Advertising



COMMUNITY ACCESS

Absentee and Local Ownership of Maine Manufacturing, by Jeff Faux and Russell Libby, 1980, 29 pp. (free?) from: National Center for Economic Alternatives/Augusta Office
122 State Street
Augusta, ME 04330
207/622-5683

Another good report from NCEA, this study shows that an economic development strategy based on local ownership may be the key to long-term employment growth in Maine. Its major conclusions are:

1. At least 55 percent of Maine's 212 manufacturing firms with 100 or more employees are absentee-owned.
2. Absentee ownership is concentrated among the larger firms.
3. Despite their smaller size, firms that were locally owned throughout the past ten years created 1391 new jobs, while absentee-owned firms reduced their work force by 1387. If we exclude the particularly hard-hit shoe industry, Maine-owned

firms created a net 3341 jobs compared with a reduction of 677 jobs by absentee-owned firms.

4. The state government could take at least 13 specific steps to assist locally owned business investment and expansion.

These last include ways to generate equity capital and stimulate bank credit for local entrepreneurs, assist producer cooperatives, tighten up on plant closings, and encourage employee ownership in cases where a local Maine business would otherwise be sold to an out-of-state corporation.

Detailed and well-documented like other NCEA reports, the study may prove useful to people in other parts of the country working to create locally resilient economies. —MR

1980 Shareholder Campaign Interfaith Center on Corporate Responsibility (A Sponsored Related Movement of the National Council of Churches)
475 Riverside Drive, Rm. 566
New York, NY 10027
212/870-2293

• School Sisters of Notre Dame, WI, has 13,500 shares worth \$178,875.00 invested in Madison Gas and Electric. In April the church filed a resolution with the utility calling for: 1) a halt to further planning

and construction of nuclear power plants, and 2) immediate steps to develop energy conservation and alternative energy programs, with annual reports on program development.

• Priests of the Sacred Heart, Sisters of Mercy (Chicago), and a handful of other religious organizations have a combined total of 8,862 shares valued at \$485,194.00 in General Electric. At GE's annual meeting in April the churches filed a resolution to: 1) prohibit sale of the Morris, Illinois, nuclear waste storage facility to the federal government, 2) develop plans to phase out the facility, and 3) develop evacuation plans in the event of an accident at the facility or at one of six nearby nuclear reactors.

These are only two of over a dozen such resolutions filed for the first time this spring by church shareholders to utilities, investment firms, and corporations. Several church bodies have adopted policies concerning nuclear energy in relation to health, safety, and environmental issues. In addition, many churches have also produced statements on the risks of nuclear weapons proliferation resulting from commercial nuclear power use, and on the consequent need to develop benign alternatives.

If your church isn't involved yet, maybe it's time to pound the pulpit, don't you think? —MR

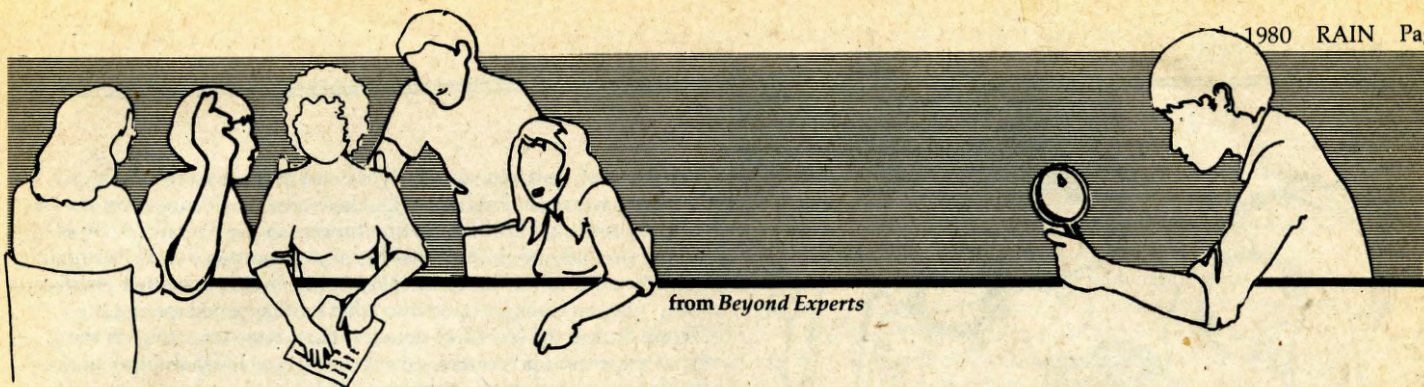
RAIN Journal of Appropriate Technology

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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from *Beyond Experts*

Beyond Experts: A Guide for Citizen Group Training, by Duane Dale with David Magnani and Robin Miller, 1979, \$5.00 plus \$.50 postage, prepaid from:

Citizen Involvement Training Project
138 Hasbrouck
University of Massachusetts
Amherst, MA 01003

Beyond Experts: A Guide for Citizen Group Training is a manual designed to "help citizens prepare for a broader and more influential role in public policy decisions." Advocating self-reliance and a departure from the traditional dependence on "experts," the manual is aimed at putting information into the hands of the community, encouraging community groups to plan and run *their own* training programs. The material is organized to take the group through the steps of assessing needs (be it fundraising, group process, or technical information), developing learning activities (speakers, films, role-plays . . .), and evaluating the results. There is an abundance of exercises, work sheets, diagrams and discussion questions to help structure the process. A resource list is included with an index to the seven other manuals that CITP has written on organizing; media and public relations; citizen involvement mechanisms; federal, state and local government; group process; and program planning and evaluation.

Beyond the obvious skill and information needs of citizen groups, the authors recognize the importance of other problems faced by citizens—particularly discrimination. "The people most prone to get involved in citizen groups are the ones who are relatively advantaged already, in terms of education and other status measures. . . . The point is this: *People who need help to be powerful won't get it if we work only with present participants in citizen groups.*" Dissemination of information, and thus power, is clearly an effective means of encouraging citizen involvement. But, just as the needs and experiences of

people vary, so also does there need to be a variety of strategies for making that information accessible. In many instances individual contact—a facilitator rather than an "expert"—can transfer information and tools more effectively than a manual or book (see Paulo Freire's work *Education for Critical Consciousness and Pedagogy of the Oppressed*). CITP has taken an important step in presenting this information to the public. The task is now for us to implement and interpret this material—both orally and in written form—to better suit our needs and the needs of our respective communities. —LS

NEXUS: resources for persons and politics, 1979, \$5.50 from:

**Self Determination:
A Personal/Political Network**
P.O. Box 126
Santa Clara, Ca 95052

For Californians only. This directory is part of the Self Determination Network, a California-wide effort to promote decentralist and cooperative processes to "encourage self-reliance, personal responsibility, and mutual interdependence." (They also used to put out the now-defunct *Self Determination Journal*.) The goal of the Network and the directory is to create what they call natural helping networks: "You won't find 'experts' on these pages; what you will find are people who are attempting to make their own changes in the world, and who are willing to help you do the same."

NEXUS covers the same basic topics as most *People's Yellow Pages* (see *Rainbook*, pp. 86, 102), listing individuals, organizations, and publications. In addition, there are short articles on alternatives in education, energy, health/mental health, media, networking, computers, mailing lists, politics, and work.

—MR

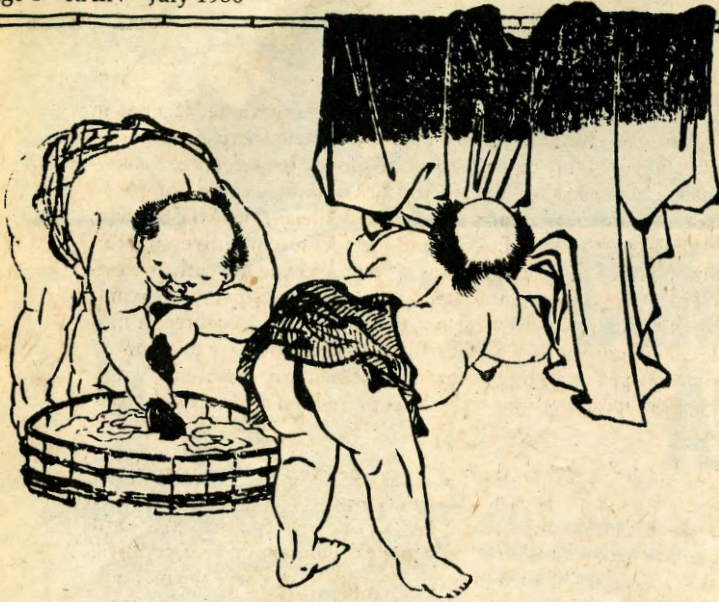
The YAT Manual, by Craig A. Sundlee & Willie Stapp, 1979, \$4.00 from:
Social Action Research Center
18 Professional Center Park Way
San Rafael, CA 94903

The *Youth Action Team (YAT) Manual* is both a primer for youth activism and youth employment. The authors draw from their own experiences as members of a team in San Rafael, California. Taking advantage of California's 1976 Independent Study Legislation, the team combines both accredited academic learning and social action. YATs have worked on projects as diverse as a youth-operated and managed recycling center, a Youth Employment Planning Team, and a Youth Advocacy program in social and legislative issues. Teams are composed of 8-12 members between the ages of 12 and 21. Two coordinators assist with group facilitation and structuring the academic component of the project. The authors stress the importance of having a group represented by people of varying ages, races and economic background to "encourage members to confront their personal biases and stereotypes of others."

A particular emphasis throughout the book is the desire to "develop the individual's capacity to think for herself." All of the structures within the team support this aim. The manual includes extensive information on decision making, establishing learning contracts, and developing strategies. Resources and references are listed throughout the book. Program development is by far the strongest aspect of the book; other sections are weak by comparison.

All in all, the manual provides some valuable information for those working with or who are themselves youth activists. Rather than diffusing the focus by trying to meet a variety of interests, the authors could have more effectively directed the manual to the needs of youth activists themselves, and dealt with the problems of coordinators in a supplement. Nevertheless, *The YAT Manual* is a good beginning in an area that needs much more attention.

—LS



TOOLS for subsistence

TOOLS for production

by Ivan Illich

As a historian, I am used to looking back and viewing events which distance has put into some perspective. Personally, I most enjoy exploring the shadow just outside the powerful searchlights of other historians who use their precision instruments to zoom in on towns and councils, markets and churches, great men and wars. I want to understand what has happened with customs and superstitions, with curses and gestures, with water, soap and bed, with beggars and women. I want to find out about the tools by which most people provided for most of their livelihood, together with the folkways within which these tools were used. I am less interested in kings, wars, treaties, and the prices of goods which were always reserved for the few. This is why I collect proverbs and riddles and the rare records of the actual speech of poor people that I find embedded in the court testimonies given by witches and rogues. These are some of the faint traces which the past of the poor has left. But most of what the great majority of people lived and experienced has blown away, rotted with their bones or been buried by the powerful feats of the rich.

Because of research done during the last twenty years, we can now reconstruct the ways people felt and looked at their world—how people in the Neversais washed themselves and their clothes, how Welshmen cooked, how Alsatian men began to be careful when sleeping with their wives, as previously they had been only with virgins or prostitutes. Such history alone can sharpen our eyes for the enormous variety in which subsistence flowered in Western

societies before it was ruthlessly mowed down between the enclosure of pastures in England and today's total enclosure of reality on TV. By reading *l'histoire des mentalités* in the *Annales de Strasbourg* or studying the feminist history on women's work during the confinement to the domestic sphere of the newly invented "weaker sex," we can reach insights into what has happened around the world during the last three decades. Historians reporting on the first great war on Western subsistence—waged by absolute monarchs and nation states with their witch hunts, universal conscription, and construction of tenements, hospitals and jails—speak mostly of the progress of these institutions, while covering with a layer of silence the competencies forgotten and the tools lost. From the second war on subsistence, now worldwide in its reach and all-inclusive in its scope, in which the bulldozers and computers of development have displaced a much more variegated pattern of subsistence activities, the reports—now written by social scientists—would have us believe that subsistence has disappeared forever, never to be recovered. This view, I submit, is a stupid error due to a very special kind of arrogance.

I would like to look at this modern war on subsistence. But on such recent events, I cannot report as a historian. Indeed, I myself was stuck in such battles, up to my neck. I was carried along by them, and only an occasional plank allowed me to lift myself above the stream and catch a short glimpse about. I now need to find the language which befits my afterthoughts, as I speak out of sadness of options that we may have lost forever, and out of hope that new and more difficult options may yet be open.

Perhaps this is the time to revive an old tradition that distinguishes between research into the way *things are* and research into the ways *things can be done*. Let me call research into the nature of things *science*, and research into decisions about the use of things *technology*. Technology thus always implies an ethical stance, because things cannot be used without affecting me and all others. Further, we have learned that the same scientific insight can be applied with either of two different attitudes on the use to which things ought to be put. Let me call the first a *productivist* framework of technology, and the second, *convivial*, each at the opposite end of a spectrum. In a productivist framework, tools enable people engaged in wage-work primarily to increase the output of goods and services. In a convivial framework, tools enable people primarily to achieve satisfaction from what they do with them, rather than contributing to the market economy. Research which applies science to the increase of productivity is generally called R&D. Research which applies science to increased independence from the market has been called by me and others *counterfoil research*.

A decade ago, many of us sought to encourage counterfoil research. "Poor" countries could thus develop the means to avoid being saddled with the bills for the terminal paroxysms of industrialization among the "rich." We defined counterfoil research as people-based, disciplined and critical inquiry into modern alternatives to commodity-intensive life styles. We argued that poor countries, where the experience of an active domestic economy is still relatively widespread, could modernize their subsistence activities and thus outwit the developed nations. We insisted that such research could equip the poorest countries with the kinds of industry and service organizations whose main purpose would be to enhance the ability of people to satisfy many of their needs and desires by modernized activities. The outcome of these activities would be free from, because outside of, the formal economic sphere.

During the past decade, much of this research has been done. A recently published guide for librarians (*Guide to Convivial Tools*, see RAIN April '80) provides a good survey. This work contains about 450 items that are usually missing from librarians' reference sections. Each of the items lists research and experiments that deal with modern processes and tools which are so constructed that peo-

ple can, by their use, unplug themselves from commodity circuits. They are reference books on technology that help people to become more active rather than more consumptive. I take these reference works as evidence that research on technical progress is no longer exclusively at the service of what Karl Polanyi called the dis-embedded sphere of formal economic growth. People seeking to heighten their satisfactions in ways that reduce consumption have increased in number and maturity. They are the ones who in ten years have found it necessary to print 450 bibliographies, abstracting services, journals, review media, reports on meetings and directories. A population that needs 450 reference books to find out what others are reading, writing and doing can be called marginal no longer.

This new kind of research is highly decentralized. It is meagerly financed, does nothing for the producer of new commodities, but does provide directions for the group engaged in unpaid activities and self-help. I have looked into most of these reference books. The authors, besides knowing the gray literature in their own field (often self-published in small numbers for free distribution or voluntary contributions), have practical experience. In addition, these authors are well acquainted with the standard indices, journals and library resources that are used in ordinary science and economics, insofar as these touch on *their* fields. Some as gate-crashers, some as laureates, many of the new authors feel quite comfortable in the Halls of Academies which ignore their work. Not surprisingly, such is not true for their counterparts, the conventional information specialists whose works now fill our public and scientific libraries. I have checked a dozen large collections, and rarely found more than a very few of the reference books that I speak about in such places. When asked and pressed, the librarians offered one of three excuses: they were unaware of the existence of these new kinds of references, unable to obtain them since they were not available through the ordinary trade channels, and finally, that they were uncertain under what heading to classify them. Under creative writing? Under anarchy or political science? Under hobby or technique? Under deviance or sociology? Or on the shelves of anatomy—where Dewey places women's studies?

From these experiences, I reached certain conclusions about the status of the "radical" wing of counterfoil research. First, it is distinct from the corporate enterprise that we call R & D. It is different in objective, method and recruitment. Its objective is not productivity but the substitution of subsistence activities for commodity-dependence. Its method is validation by reference to the satisfaction of a concrete, small group rather than operational verification. And its recruits—no matter how much or how little previous academic qualification they possess—are usually autodidacts in the chosen field of research. Second, counterfoil research on use-value oriented techniques is a radically new form of technology, but not a new form of science. It draws from ordinary science the data that it then applies within a revolutionary paradigm about the purpose of technique. R & D improves the efficiency of tools that produce standardized goods and services, and increases thereby the universal need for both. Counterfoil research improves those tools and processes that enable people to obtain more satisfaction from their actual use than they could ever derive from the substitution of such actions by consumer goods. Therefore, counterfoil research thrives best when it is conducted by people who themselves enjoy living an independent and simple life validated by a small, consensual group. And such research is always hampered and usually corrupted when the technical expert, with his clinical perspective, succeeds in foisting his services on it. The third conclusion I reached is that this new kind of research, which substitutes unpaid activities for the consumption of commodities, is complementary to the R & D which seeks the development of goods and services which can be produced for people. For the time being, however, this distracting complementarity is understood from one side only.

This bias is clearly illustrated by the above-mentioned lacunae in the reference section of modern libraries. But how explain the empty shelves? Librarians always find money for reference books, no matter how odd the subject. And lack of money could not explain a phenomenon equally true of the Bodleian, the MIT System, the U.S. Department of Energy and the Technische Universität in Berlin. None of these major sources could provide me with any evidence of a two-volume annotated bibliography of small-scale windmills, published two years earlier, the author a retired director of a national laboratory. It would be silly to ascribe this gap to some kind of conspiracy among librarians. From all my experience with academics, librarians appear the least prejudiced against Don Quixote. . . .

Quite clearly, technical progress can develop in one of two directions: it can evolve as part of a society whose values are centered on survival in small group subsistence, or of a society oriented towards large-scale production for people made dependent on commodities. The first kind of society and progress will occur where the manual work of all the society's members is held in high esteem. The second occurs as the inevitable outcome of a social structure where the status and self-esteem of a man are a function of how little he has to use his hands; that is, of how many slaves, serfs, women or machines do his work.

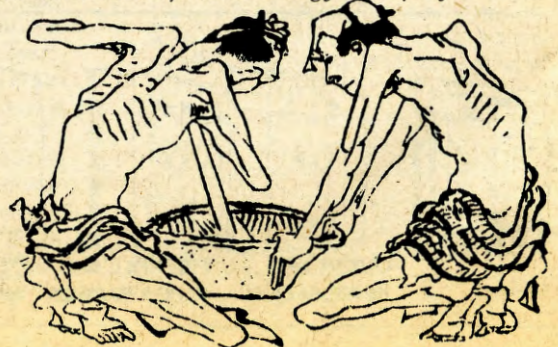
In the last few centuries the elite disdain for physical labor was slowly but inexorably rationalized into elite responsibility for the development and management of so-called productive forces. Progress was identified with the replacement of people's subsistence activities by goods and services which could be mass produced. And this kind of progress has occurred.

There are, however, significant events and developments, like counterfoil research, which make me believe that the tradition of small-scale subsistence may now come to the fore as an adequate countervailing force replacing the industrial system's hegemony—that technology by people may soon be understood as the necessary and equally important complement to technology for people. ●

For over a decade Ivan Illich has written cogent and provocative essays on the industrial mode of production and the modernization of poverty, assailing an age that creates false needs at the expense of real problems and creates professional elites to perpetuate those needs. Austrian born, since 1960 Illich has made his home in Cuernavaca, Mexico. He is the author of Celebration of Awareness (1969), Deschooling Society (1971), Tools for Conviviality (1973), Energy and Equity (1974), and Medical Nemesis (1976). Tools for Conviviality is a seminal work in the literature of appropriate technology. The article printed here is slightly abridged from its original form.

Those interested in reading more of Illich's writings would do well to get hold of Toward a History of Needs (1978, 145 pp., \$7.95 from: Pantheon Books, 201 East 50th Street, New York, NY 10022). This collection contains three illuminating essays on development, education, and medicine, and a previously unpublished essay called "Useful Unemployment and Its Professional Enemies." Also included is Illich's famous "Energy and Equity."

—MR



INSULATION

Thermal Shutters and Shades, by William A. Shurcliff, 238 pp., 1980, \$12.95 from:

Brick House Publishing Co. Inc.
 3 Main Street
 Andover, MA 01810

In 1977 I managed to get my hands on a bootlegged copy of the manuscript for the original version of *Thermal Shutters and Shades*. I was working in a program that taught people why and how to insulate their homes and provided them with the materials to do so. After attics and side-walls were insulated, doors and windows weatherstripped and caulked, and storm

doors and windows repaired or replaced, we got around to such innovations as insulated window coverings.

Shurcliff's manuscript was a gold mine of ideas and models. The new version is still that, with "over 100 schemes for reducing heat loss through windows," but he's improved his appendices to include equally valuable references and lists of materials, equipment and suppliers.

I have two criticisms, however. His description of the electromagnetic spectrum and radiant heat loss is still too complicated (though I can't imagine a way to simplify it) and his "Conclusions" are so important that I'd have suggested they be "Introductions" instead. A good example of this is his inclusion of "Priorities" in Conclusions. The "Priorities" are "the cheapest and easiest first," i.e.: 1) turn down the thermostats and dress more warmly, 2) insulate the attic or roof, 3) "stop air-leakage at windows, outer doors, attic and basement," etc.

Anyone preparing to make or buy insulating covers for their windows should first read Shurcliff's "Conclusions," then his chapter on the "Economics of Shutters and Shades." Remember, too, that the economics can be greatly improved by buying materials in very large quantities. Start a block club to buy in bulk. Contact manufacturers and try to get special deals. We found that we could get bolts of "irregular" Polarguard for much less than the retail cost. The irregularities were slight but the savings were not. — CC

Movable Insulation: A Guide to Reducing Window Heat Losses in Your Home, by William K. Langdon, 1980, 400 pp., \$9.95 paper, from:

Rodale Press Inc.
 Organic Park
 Emmaus, PA 18049

William Langdon admits to having the benefit of Shurcliff's early version of *Thermal Shutters and Shades* to build on, and his own book is an excellent partner to its model. Both books cover the basics: the economics, how to calculate heat loss (the two have different methods, Langdon's is the more traditional), the basic design criteria, the basic drawbacks of using window insulating devices, and good bibliographies.

A note about those drawbacks: none of the higher R factor (more insulating) rigid board type materials can be considered safe in your home regardless of manufacturer hype. *Thermax*, for example, is an isocyanurate foam product (similar to that used in airplanes as insulation) and when burned it gives off lethal cyanide gas. *Ther-*

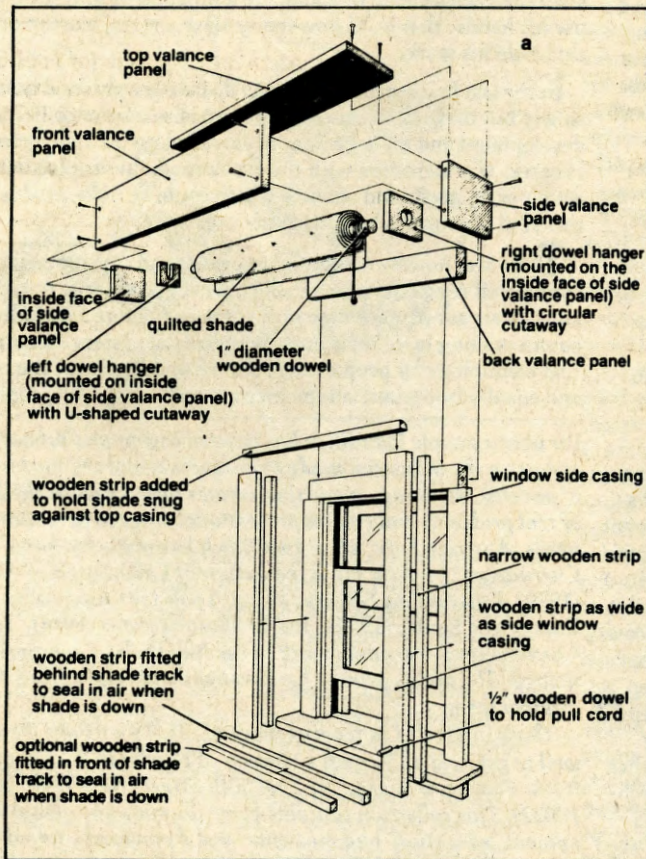


Figure A1-2a: Exploded views of valance and shade track.

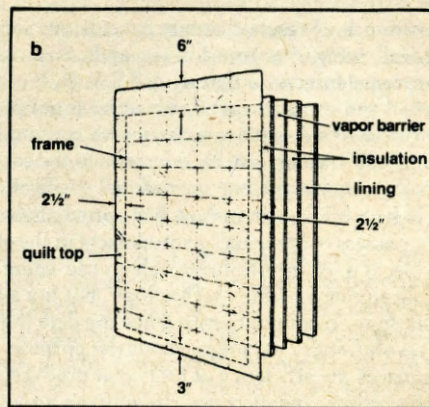
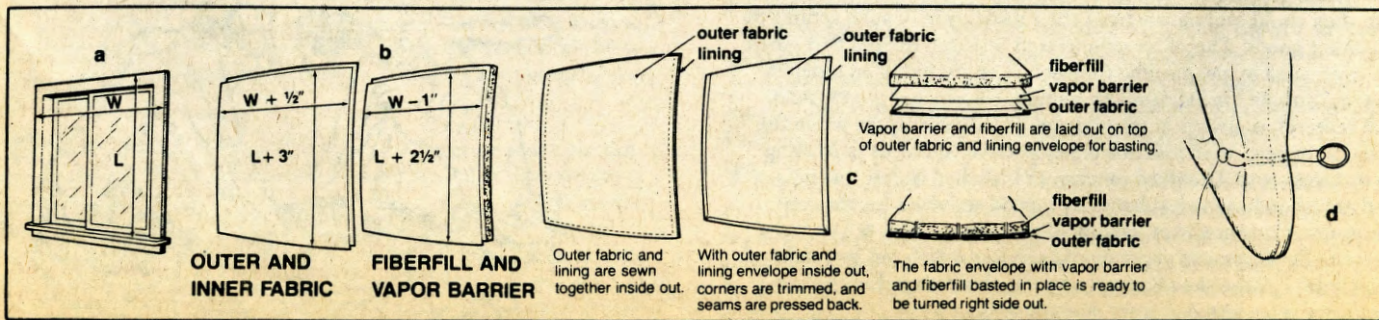
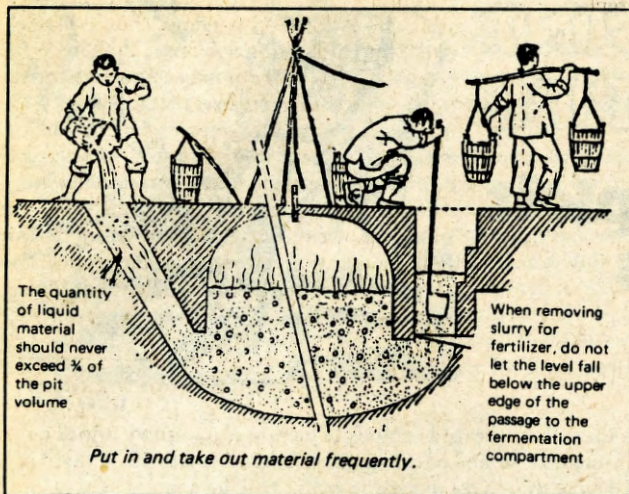


Figure A1-2b: Exploded view of shade fabric.

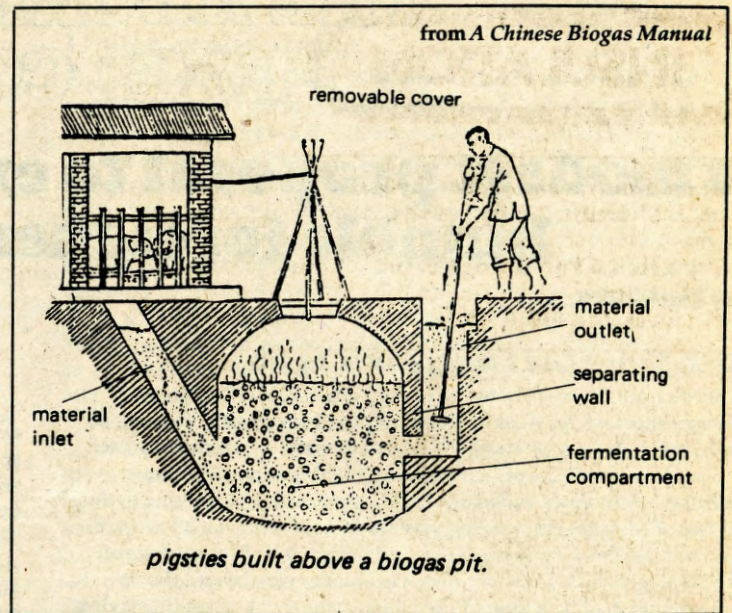
from Movable Insulation



from Movable Insulation



from A Chinese Biogas Manual



max has a lot to recommend it as a shutter material, but that's some drawback it's got there! Both Langdon and Shurcliff note these problems, but each of them tries to go on with the business of promoting their use anyway. (It's easy to argue that we are surrounded by equally dangerous products in all of the plastics, adhesives, etc., with which we fill our homes. Most of these also give off toxic gases when they burn. There are no pat solutions.)

Langdon actually does less to promote products and more to promote self-reliance. Many of the curtains he describes were designed and fabricated by community groups and local self-help enterprises. He pays credit to these in one of his Appendices. He also provides details for constructing three of the models he describes and lists sources for many other sets of plans so you can save a bundle by making your own. —CC

Windows, free from:
Energy Efficient Windows Program
 c/o Stephen Selkowitz
 Bldg. 90, Rm. 311
 Lawrence Berkeley Laboratory
 1 Cyclotron Road
 Berkeley, CA 94720

The Lawrence Berkeley Lab is managing DOE's Energy Efficient Windows Program. They offer this magazine to "accelerate exchange of information" recognizing that much of the technology has been developed but needs to be communicated. A magazine is much more immediate for this sort of transfer than a book would be. Besides, it's free and therefore more accessible to everyone. In this issue several window insulating products are described (some clear enough you can make your own), legislation pertaining to energy efficient window systems is outlined, and there are lists of reference materials to turn to. Send for your copy.

—CC

BIOGAS

A Chinese Biogas Manual, translated from the Chinese by Michael Crook, edited by Ariane van Buren, 1979, 135 pp., \$11.95 from:

ISBS, Inc.
 P.O. Box 555
 Forest Grove, OR 97116

Available overseas from:
 Intermediate Technology
 Publications Ltd.
 9 King St.
 London WX2E 8HN
 England

This book presents a sharp contrast to biogas books written in the West. The Chinese have made biogas work throughout the rural provinces, and they have done it mostly without electricity, mechanical feeders, agitators, pumps, piping, metal containers, or external heat sources. Building the digesters involves using local materials and labor intensive construction techniques. They run their digesters on local waste plant materials and local animal manure (in many instances they build chutes directly from the barns to the digesters). The digesters themselves are buried to tap into the relatively constant ground temperatures. Caring for the biogas pits and their contents is done entirely by hand.

You should read this book even if you don't want to build a biogas generator just to see a very different approach to A.T. Biogas in China is a luxury (as a cooking fuel and as a source of light) as well as a means to control the spread of disease which traditionally has been transmitted by nightsoil. For us, it is a return to an awareness of the cycle of living organisms. — Gail Katz

Methane Digesters for Fuel Gas and Fertilizer, The New Alchemy Institute, Newsletter #3, Spring 1973, 47 pp., \$3.00 from:

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

This book helped start the wave of interest in biogas production in America. It is still the best basic introduction if you're toying with the idea of building a methane digester, but don't know if it's right for your situation. You'll learn what you need to put into a digester and what you can expect to get out. — Gail Katz

The Compleat Biogas Handbook, by d. house, 1978, 400 pp., \$8.00 (\$9.00 outside the U.S.) from:

At Home everywhere,
 c/o VAHID, Rt. 2
 Aurora, OR 97002

Please write to the attention of Rita Dog for quantity prices and special discounts

Once you've decided to build a methane digester and want to know all the details of putting one together, you should read this book. It is a basic, step-by-step description—what happens (and what can go wrong) in the digester; what you need to do to the mixture; how to decide what to put in and what not to; how to use the gas; advice on various decisions that will have to be made; how to trouble-shoot; and discussions of equipment and designs. The author's bias is towards a highly efficient, mechanized system, but he has included enough basic information on all types of systems that the book will serve as a useful source of information no matter which way you decide to go. — Gail Katz

THE ABORIGINE PEACE CORPS

a modest proposal to exploit humble foreigners

by Ianto Evans

That Boring Old Energy Crisis Again

There's nothing new about the energy crisis. There has been an energy shortage for most of humanity in every culture through all of history. As long as energy was hard to come by, humanity used it as any scarce resource, with care and deliberation. So in most cultures, techniques evolved slowly for conducting life along paths of least resistance; in general, ways didn't survive which involved any but the most conservative use of energy, resources and force. Technologies followed their own evolutionary paths and the unsuited ones died by a kind of Darwinian selectivity when it was clear they couldn't be sustained. Above all, societies evolved inbred cultural constraints to limit the rate of change: inbuilt change valves that could hold the flow of innovation to a rate at which it could be assimilated.

The Petrochemical Flash

Our culture and our time are aberrants. It is only in the past 50 or 60 years that the dim flame of our hard-won fuel supply has flared up bright and dazzling, so much so that we have used piledrivers to crack peanuts and lit forest fires to fry eggs, in a wild and childish exuberant potlatch of waste. And in these two or three generations all of the native ingenuity, the carefully accumulated heritage of skills passed down through the centuries, has been forgotten in a buzz of silly toys. Who knows now the basic skills of our grandparents—who can milk a cow, dig a neat ditch, lay elegant brickwork? Most of us have forgotten even the primary basics like how to maintain a small cooking fire, how to grow food, to wake without an alarm clock, or beat eggs without a blender. When I ask my neighbor to lend me a saw he emerges with a chainsaw; his children have forgotten how to walk three blocks to our neighborhood store and his wife is appalled that I wash my clothes by hand.

Astonishingly, we have scrubbed even the language clean of the words we once used. Do you know the meaning of *hod*, *coulter*, *cooper*, to *darn*, to *ted*, to *tup*, or what a sagger-maker's bottom knocker is? These were common parts of our language even in 1920. We have replaced basic skills with mechanical tools, small-scale with big, and local self-reliance with dependence on the vague and uncontrollable manipulations of a worldwide consumer society. And the whirlpool of our own accelerating technical change sucks us down into places we don't want to be but see no way out of.

Now as the American belt starts to cinch up again, we're frantically racing to salvage what little we have left. All over the country we're writing Foxfire books, recording the voices of the aged. And what ten years ago seemed a dilettante interest in cataloguing the past now has a new urgency. If we really want to deal gracefully with a more labor-intensive future, we can see that we must remember again how to do things for ourselves with less oil, fewer chemicals and more human care.

For the great majority of the world's population, the 6% of us who live in these United States offer a confusing example. We never cease to rub in the irritating message that we are still the richest nation on earth, as we flaunt our affluence before them.

The U.S. is stereotyped as immensely wealthy, wasteful and arrogant. People in the poorer countries (and that's almost all of them) have little firsthand experience of us. They watch our worst TV, read of our worst politics, see our worst tourists.



from Minka

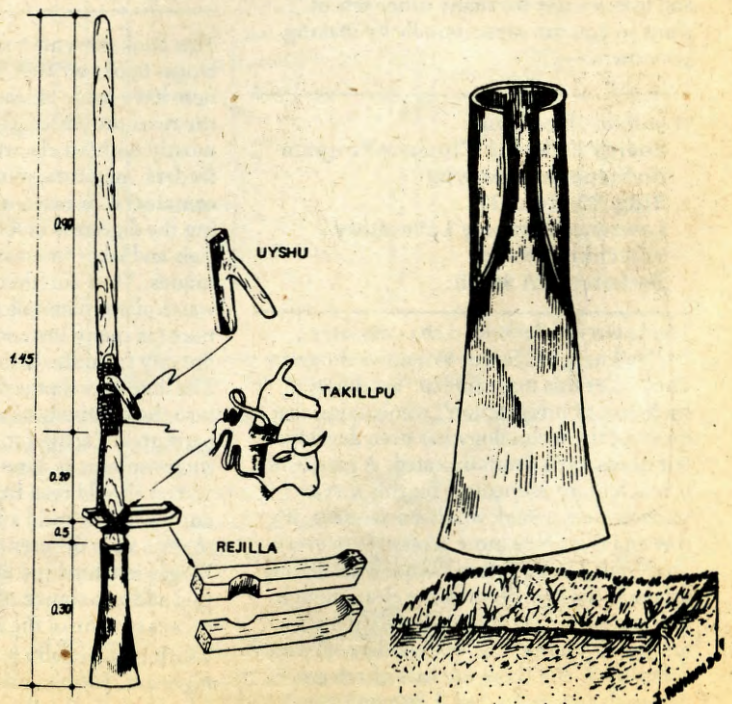
Together, these create a composite picture of a country few of us would recognize: a land of continuous violence where brash insensitives devote their lives to getting richer with an aggressiveness and machismo that would disturb a Mexicali truck driver. Everyone lives in penthouse apartments connected by 10-laned freeways. They know we all drive 100 mph through the streets of San Francisco (Steve McQueen to blame for that one), that the government buys you everything for free (personal conversation with a Costa Rican peasant), and that we throw away everything continuously to make way for the new waves of shiny fresh goods (hmm . . . that one's not so far off . . .).

Despite all the help we gave them, much of the world never really took a liking to us. Bite the hand that feeds, lock up our loyal embassy folks. . . . When we tell them that small is beautiful and that there is no way we can all make it with two cars and a power boat they get strangely resentful.

How can we expect them to settle for "second rate" smaller technologies when they see us happily getting bigger and richer all the while?

Foreign Aid and Cocacolonisation

Well, for a little while now we've had an edgy feeling that all is not well out there. We live a life of privilege yet there are those disturbing photos of thin kids in Africa or somewhere and we've been sending them help. I mean, the government gives away all that foreign aid; it must go somewhere, right? For a long time the na-



ture of "Aid" was comfortingly vague, but in the '60s it got clearer that military assistance helped mainly us, not them, and that what they really needed was food. Then the "help the poor to help themselves" gang took over (Green Revolution and The Pill), and most recently we've seen our mission as being to help them technologically. The bulk of technological aid has concentrated on creating dependencies on the multinationals, the rich countries and the U.S.

Partly this was intentional in the name of expanding overseas markets, partly unintentional in that we naively tried to help the only way we knew how, showing them how we do it here. We were told in Guatemala in 1975 that in the whole country, with all its monoculture-based insect pests, that there were no free-lance entomologists. Every last bug expert worked directly for the chemical companies' agricultural pesticide divisions.

Much of the aid we gave primed pumps which kept on pumping in imports long after our people had gone back home. Following the 1976 earthquakes, Guatemalans were handed out, for free or at a subsidy, huge quantities of corrugated steel roofing, imported from the U.S. A country of traditional thatch and tiles throws up a tin roof landscape overnight. Ostensibly this was a boon. Lightweight steel roofing isn't so likely to kill anyone in later earthquakes and lighter roof structures mean less drain on scarce forest reserves. On closer examination we see a clear chain of consequence. Look carefully: (1) disbandment of the local tile industry, which had used only local resources; (2) built-in obsolescence (steel lasts 10 to 25 years, tiles are good for several centuries); (3) repeat orders in a generation's time from people who have by then forgotten how to make tiles; (4) emulation of earthquake-styled houses by folks in unaffected areas ("they came from the U.S. so this is how Americans roof their homes . . ."); (5) a new balance of trade which demands further exports from a country with few natural resources except labor; and (6) depression of the national labor market, keeping wages down and tying workers to employment in export-based industries.

The social consequences of each rapid technical change are far reaching and one can extrapolate whole webs of disturbance caused in a traditional society by this kind of example. We are left in a situation where traditional tile makers with no demand for their skills must pick cotton far from home on the steamy lowlands for \$1.25 a day. Foreign corporations control the land use, the crop, the export facilities and the price.

Gringo as Superbeing

Native ingenuity has solved problems well for a long time. Local people are usually adept at dealing creatively with their extreme shortage of resources. Yet a sinister effect of our influence is the undermining of native peoples' self-confidence in their own abilities to be creative. They come to expect that our ways are somehow better than theirs, that we have answers to their problems (many of which were caused by us in the first place) and worse still that they should tackle problem-solving in the way we do. We reinforce the illusion that we know and they don't by sending missionaries (who know the *real* God), military advisers (to help them hate each other), technical salesmen ("these gooks don't *know* how to farm"), and technical volunteers ("I wanted to go to New Guinea to teach them organic gardening").

Consistently in poorer countries you will hear local products and methods put down in favor of ours: "oh, that's just an old bike I made into a knife sharpener; don't even look at it; I'm sure you have more modern tools in the U.S." "We have to apologize for the bathing facilities; they're very simple (an ingenious rock bathtub cut into a tropical flower glade) but we're just poor people and we can't afford *anything better*" (my italics)—both real quotes from Central America.

Let's Sum It Up

Living in Guatemala in 1975-77, we constantly found ourselves discussing the seeming hopelessness of the situation. Basically what we came up with was:

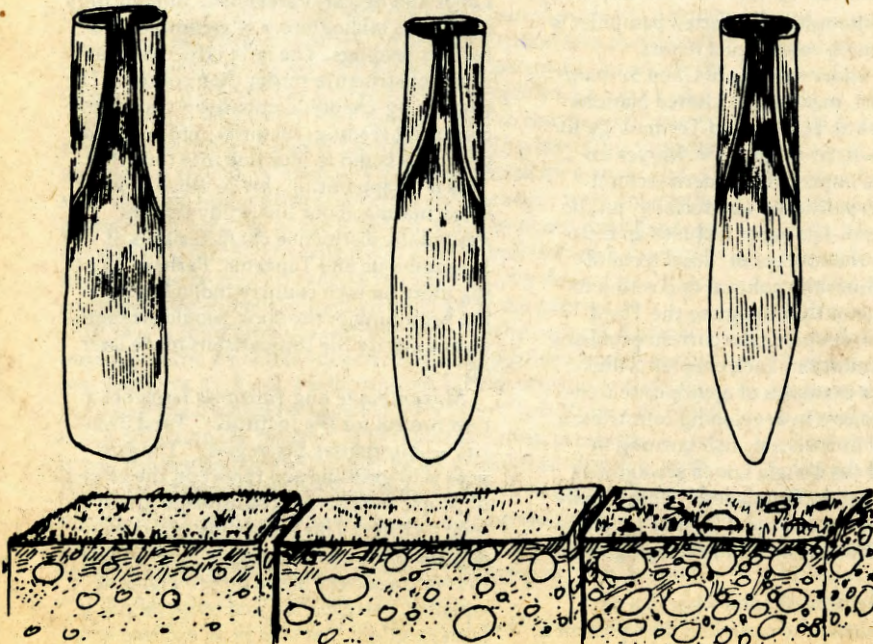
1. There are more of them than us.
2. We're changing as stuff runs out.
3. We're smarter than we look to them.
4. They're *a lot* smarter than they look to us.
5. We undermine their self-confidence by teaching *our* stuff.
6. They know stuff we've forgotten.
7. *We'd like to know some of that stuff because we're going to need it and it's a good time to take some of it home and spread it around if they'll only teach us so we'd better ask them politely cause there're an awful lot of them and they're real hungry yet they need to be needed like us all so maybe they'll say yes then perhaps we can show them some of us are less ugly than others.* ●

foreign access

"Mechanization is Progress? For Whom?" from *Minka*, Vol. I, No. 2, \$8 (U.S.)/yr., from:
 Apartado 222
 Huancayo, Peru

Minka is a Spanish language popular technology magazine published by a Peruvian organization called Talpu. In this, their second issue, they describe the effects on a small agricultural town when the local cooperative buys a tractor.

Two centuries ago, everybody in the world either used plows with draft animals . . . or where the land did not permit plowing, it was worked with pickaxes, sticks, shovels, or chaquitacla [a traditional Peruvian implement, see illustration]. Either way was entirely controlled by the peasant . . . He was able to plow the fields not according to a uniformly excellent



from *Minka*

cont.

foreign access cont.



standard, but according to the condition of his own land. . . . This labor corresponded with the need to conserve the fertility of his soil, thinking of the future of his children and grandchildren. . . . Each peasant has developed from an empirical understanding and his ancestral heritage an approach which is adapted to his own condition, his own land, and to the surrounding environment. As a result there still exist thousands of individual solutions to very specific problems.

The tractor put an end to a passing era in order to increase the productivity of North American agribusiness, which must satisfy with little manual labor the increasing needs of the new city. Since production has to be uniform, continuing, and of high volume, the tractor comes to be associated with chemical fertilizer, insecticides, herbicides, and other poisons which remain in the soil, penetrate the plants, and through his food, reaches man.

Talpu is a group working in the Peruvian Sierras to explore existing "popular technologies" and to help facilitate local people's resistance to Americanization in terms of new technologies which do not serve the people and culture. "Popular technology" is defined by them as "a position and process which respects the relationship between technique, knowledge, and creative skills for the majority of the population and which fires progress in the creativity of the people." Thanks to Dayle Stratton for translating *Minka* and Talpu's brochure for us. —CC

The Centre Report, \$50/yr. to int'l. organizations, or nat'l. organizations in developed countries; \$25/yr. to nat'l. organizations in developing countries, from:

**Environment Liaison Centre
P.O. Box 72461
Nairobi, Kenya
Tel. 24770**

We were quite impressed upon our recent receipt of a copy of *The Centre Report*. It looks like an excellent publication for anyone interested in appropriate technology in developing nations, particularly African, from an indigenous perspective. The Environment Liaison Centre was set up in Nairobi in 1974 by nongovernmental organizations (NGOs) concerned with environment, development and human settlements. Its purpose is to serve as a liaison

with the United Nations Environment Programme (UNEP) and the U.N. Centre for Human Settlements (both headquartered in Nairobi) on behalf of NGOs around the world, and to work with NGOs in developing countries. They publish *The Centre Report* periodically throughout the year to advise NGOs on positions being taken by the UN agencies, and to act as a "community meeting place" where NGOs around the world can share information and strategies. Included are articles on soft energy paths, OPEC, Chinese biogas, education, U.S. energy gluttony and bicycles, plus reviews of publications and periodicals.

—MR

**Earth Garden, \$2.25/issue ppd., from:
P.O. Box 378
Epping, NSW
Australia 2121**

Curious about A.T. Down Under? *Earth Garden*, a magazine for Australians interested in self-sufficiency, is back in print after a year's rest. "We have survived for eight years as possibly the only 'little' journal in Australia which does not get a grant, has no well-heeled sponsor and runs no advertisements." Sound familiar? Articles on agriculture, owner-builders, energy, land use and recycling, with lots of access. Sort of an Australian cross between *RAIN* and *Mother Earth News*.

—MR

**The Poor Man's Wisdom: Technology and the Very Poor, by Adrian Moyes, 1979, 70 pence from:
Oxfam
274 Banbury Road
Oxford, England OX2 7DZ**

This brief though well-written pamphlet is an abbreviated version of a report, published under the title of *Good Servant, Bad Master*, made at the United Nations Conference on Science and Technology for Development in August '79. Moyes examines the impact of "modern technology," both politically and socially, on the Third World. His paper includes an introduction to the concept of "local technology," outlines the political opposition to the transfer of technology to the Third World, and discusses the current problems in communication. Each chapter is illustrated with examples of appropriate technology projects in developing countries: a water mill in Malawai, fish farming in Zaire, and the Bengla Loo (a sewage disposal system) in Bangladesh. Unfortunately, none of the examples include projects done by or for women in developing countries.

While exhibiting somewhat of a patronizing tone, the pamphlet does present a compelling argument for how, why and

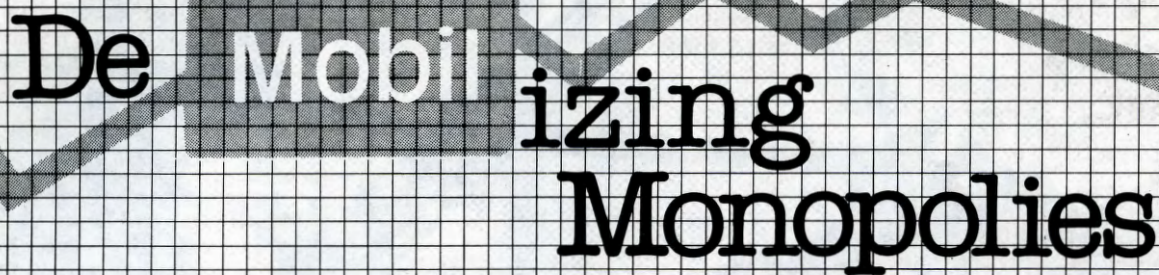
where Britain and other Euro-American countries can assist in technology transfer. The goal, says Moyes, is to help "the very poor to develop the technology that they possess already, and to 'transform' the new technology they need." A good introduction to a variety of the issues and projects in the field. —LS

Mozambique and Tanzania: Asking the Big Questions, by Frances Moore Lappé and Adele Beccar-Varela, 1980, \$4.75 from:

**Institute for Food and Development Policy
2588 Mission Street
San Francisco, CA 94110**

"This project reflects our belief that a prime test of the effectiveness of any economic and political system is whether or not the people are achieving food security." With this statement Frances Moore Lappé and Adele Beccar-Varela begin their study of two newly independent African countries: Mozambique (1967) and Tanzania (1961). Using first-hand observations and interviews with village leaders and agricultural officials, they examine the differing "socialist" paths of development taken by the two countries. The book begins with a profile of each country: its history, resources and geography. The authors compare each in terms of leadership, citizen participation, and foreign assistance in order to clarify the conceptions of development held by each nation's leaders. The analysis is a penetrating though sensitive interpretation of the problems, perspectives and accomplishments of both nations. The questions posed, both to the reader and to the leaders, are particularly insightful. Lappé and Beccar-Varela have thoughtfully included a bibliography of recommended further readings. The only criticism I have is one of structure rather than content. The chapter-by-chapter comparison makes for confusing reading; histories, projects and problems begin to blur one into the other. This is disappointing, for so much of what is fascinating about this study centers around the distinctive characteristics of Mozambique and Tanzania. Perhaps focusing more on each country individually, at the beginning of the book, would strengthen and clarify the comparisons made later on.

Mozambique and Tanzania launches a new project for the Institute: "Food Security—Alternative Strategies." The purpose is to examine and report on the efforts of people in different countries to attain food security. This first study offers valuable insight into the struggle of all people to create a society based on principles of equality, participation and cooperation. It is an excellent first step in an exciting and worthwhile project. —LS



De Mobilizing Monopolies

Inflation, unemployment and the energy "crisis" have affected all of us, but certain parts of the country have been particularly hard hit. Detroit, capital of the auto industry, is one such place. The unemployment rate there has been conservatively quoted at 18-19% and is rising; unemployment lines are filled with all types of workers as the entire city feels the pinch.

In October of 1979, inspired by the National Day of Protest Against the Oil Industry, a coalition of workers, religious leaders and community organizers formed the People's Energy Committee (PEC). Their ultimate goal is a "people's takeover of the oil industry." Their immediate goal is to place that idea before the people for a popular vote. PEC organized a drive to gain support of its petition:

We, the citizens of Detroit, believe that the oil should belong to the people and not to the private oil companies which make enormous profits while we pay enormous prices for energy.

The undersigned are joining efforts with a nationwide petition drive calling for this issue to be put before the entire country for a vote.

We are duly petitioning the City of Detroit to place this issue before the people of this city for a popular vote in the August 5th, 1980, primary election.

More than 15 cities around the country are participating in this campaign. While most are focusing on the national elections in November, Detroit's ballot laws may enable it to vote on the question in its local primary elections.

This March, after four months of petitioning and a virtual media blackout on the issue, PEC submitted 11,300 signatures to the Detroit City Clerk. On March 26th the City Council made the petition official for the Detroit primary. When the petition was transposed into legal language by the City Research Department, however, the meaning of the draft was altered from a "people's takeover" to a "government takeover." PEC objected, and so the proposal was rewritten. Another Council meeting was held where both the original and the second, altered copy were submitted for a vote. This time the vote was split with several previous supporters now voting against *both* versions of the proposal. Curious about this change of heart, PEC did some investigating. They found that each Council member had received three to five calls from the American Petroleum Institute discouraging their support of the petition.

In May a third proposal was submitted to the council. A public hearing on the issue was suggested by a supportive Council member, Kenneth Cockrell. Public support for the petition was strong, yet when the Council reconvened for a vote it only drew a tie, effectively defeating the measure. PEC plans to continue efforts to put the petition on the August ballot through an alternate route. In essence, they are challenging the City Clerk to "show cause": why aren't the people being allowed to vote on the question? Working toward a national focus, PEC will join groups around the country in an effort to get the President and Congress to put this issue on the ballot for the November elections.

While getting the measure on the ballot would be a considerable achievement in itself, the actual impact of the ballot may be less so.

The petition is an attempt to bring the *idea* of a "people's takeover" of the oil industry to an eventual national vote. The actual structure of this takeover has been left purposely vague so as to allow for the development of an appropriate plan. A number of organizations and individuals are supporting the petition and the idea of a "takeover," including the American Federation of State, County and Municipal Employees, Locals #2435 and #457; Garland Jagers, Office for Black Catholic Affairs; Detroit chapter of People United to Save Humanity (PUSH); Joe Martic, president of Local #698, International Association of Machinists; Pete Goldstein, national representative of Amalgamated Clothing and Textile Union; and Concerned Citizens for Equal Justice. A few local radio stations, the Detroit Free Press, and channel 62, Detroit's black TV station, have been publicizing PEC's activities. Certain other political groups, such as the Detroit Alliance for a Rational Economy (DARE), have chosen to support the petition indirectly, preferring to focus instead on other issues.

A number of questions come to the surface as this campaign gets underway: how much impact will this measure have, how far will it be able to go, how effective is its approach? Whatever the answers, the fact remains that PEC has created an active and broad-based coalition of people determined to make changes. This campaign and its effects will be worth watching, for what they can accomplish both directly and indirectly. If you are interested in getting involved, there follows a list of cities and contact people. If a contact person is not listed for your city or if you would like to begin organizing in your community, contact the Detroit PEC at 229 Gratiot, 3rd floor, Detroit, MI 48226, 313/962-4979.

—LS

"Oil Belongs to the People Campaign"

1. People United for Justice—Phil, Alan or Laurie F., 234 7th Ave., New York, NY 10011, 212/255-0352.
2. People's Energy Committee—Lydia Bayanetta, 656 S. Avenue, Rochester, NY 14620, 716/442-1290.
3. People's Energy Committee—Debbie, 359 Niagara, Buffalo, NY 14201, 716/855-3055.
4. People's Energy Campaign—Diane Methiowitz, 1257 Glenwood Avenue S.E., Atlanta, GA 30316, 404/627-3093.
5. People's Energy Committee—Dick, 419 Boylston St., Rm. 204, Boston, MA 02116, 617/247-1778.
6. People's Energy Committee—Julius Corpus, P.O. Box 6504, Austin, TX 78762.

Other cities participating in the campaign but for which information on contact persons was not available as we went to press:

- Chicago, Illinois
- Cleveland, Ohio
- Milwaukee, Wisconsin
- Tucson, Arizona
- Washington, D.C.
- Greeley, Colorado



SYNFUELS REARS ITS HEAD

Occupation on the Reservation

© Winona La Duke

Where will we all be 20 to 25 years from now when all the coal has been consumed and the companies operating these gasification plants have cleaned up and moved away? There will be nothing there; they will be working elsewhere, and we will be sitting on top of a bunch of ashes with nothing to live on. . . .

Lucy Keesewood, Coalition for Navajo Liberation, 1975

While a final decision on coal stripmining at Burnham, New Mexico, is in the judge's hands, Consolidation Coal Company of Pittsburgh has begun grading land and moving earth just 200 yards from the Burnham Chapter house on the Navajo reservation. Within a few hours, the company had desecrated five graves. Lawyers for the Burnham residents obtained a temporary restraining order on April 14, but the company continued operations. The bright orange stripmining machine known as a "dragline" was assembled, and the company's project office stabilized. On April 18, four days after the restraining order had been issued, the company leveled an area for incoming equipment.

"It has always been our position to meet with the local people either at the chapter house, or our offices in Farmington," said Dennis O'Neil from Consolidation headquarters in Pittsburgh.

For the Burnham residents, there was nothing to talk about—the company was operating in violation of a temporary restraining order. The Burnham residents called for support from the American Indian Movement and surrounding communities. Within hours nearly 20 persons, Burnham residents and supporters, arrived at the Consolidation mine site. Within minutes, 27 police cars and twice that number of personnel surrounded the occupation site.

After discussing the situation, the protesters moved 100 yards east and began setting up a camp. "We decided that to get arrested now would not be effective," said Laura Villegas, one of the protesters. The camp overlooks the Consolidation mine site, sitting between two hills. The occupation is directed from a canvas tent supplied by the Burnham residents. A sign on the tent welcomes visitors to the "Commission on Whiteman Affairs" area office. At the camp, meetings are held between the 30-plus occupiers and the Burnham residents, at least 1000 of whom face relocation for the project.

It's not a chance occurrence that pits a 60-year-old Navajo (Dine) woman against the country's number two coal producer, the Navajo police department and the Department of Energy. Years of legal battles and promises from Navajo officials appear meaningless in the face of the Energy Mobilization Board. The only recourse seen by the protesters is what the Department of Energy terms "local resistance."

In December of 1968, Consolidation Coal Company (a subsidiary of Continental Oil) entered into a project with El Paso Natural Gas. The company received a lease approved by the Department of Interior and the Navajo Tribe for 40,000 acres. Pacific Lighting Corporation, known for its interests in the Pt. Conception (California) and the Crow (Montana) coal gasification plants, entered the deal with Texas Eastern Transmission. Western Gasification Company (WESCO) was formed, and plans emerged for a mammoth coal gasification complex—six of the largest and best-ever-built plants.



Photographs from Black Hills Alliance

With promises of money and jobs spilling out of four-color public relations pamphlets, WESCO courted the Navajo Tribal Council. Supported by Tribal Chairman Peter MacDonald, the company worked its way through the Navajo Tribal Council offices, the Burnham Chapter house, and the halls of Congress. Neither the company nor MacDonald, however, could sell the coal gasification complex to the Burnham people or the Navajo Tribal Council.

On August 24, 1976, about 75 Burnham residents occupied the Navajo Tribal Council headquarters in an attempt to express their reasons for opposing the gasification complex. The next day, 18 Burnham people were arrested by the Navajo police and charged with unlawful assembly. A year later, the 18 were cleared of their charges. MacDonald, regardless of Burnham sentiment, retained an interest in coal gasification, and was active in lobbying for HR 12112, the forerunner of President Carter's synfuels bill.

In a May 28, 1976, letter to the House of Representatives, the majority of the Navajo Tribal Council expressed their opposition to MacDonald's actions:

"We have recently read where Peter MacDonald, Chairman of the Navajo Tribal Council supported the proposed legislation HR 12112, to provide federal loan guarantees for synfuels, specifically coal gasification. Evidently Mr. MacDonald would have you believe that this is the official position of the Navajo Tribe.

"We as elected officials of the Navajo Nation have serious reservations concerning any federal loan guarantees that will hasten the exploitation of our resources for quick cash and nominal job opportunities. We do not believe that large-scale energy development of this type would be as beneficial to the Navajo people as some would have us believe.

"While the people of the Burnham and Shiprock areas, who would be most directly impacted by the proposed synfuels developments, have passed resolutions against coal gasification and ex-

panded stripmining, there is, as yet, no official position of the Navajo Tribe. Until the full Navajo Tribal Council considers these proposals, we, the undersigned, as members of the Navajo Tribal Council, stand opposed to HR 12112."

The letter was signed by 41 council members.

In February of 1978, Burnham residents and the National Indian Youth Council hired the Albuquerque law firm of Leubben, Hughes and Kelly to initiate litigation against the U.S. government to stop the mining. Paleontologists hired by Consolidation had uncovered the skeletal remains of two dinosaurs at the site, and legal action was taken based on the National Environmental Policy Act, the National Historic Preservation Act, and the Historic Archeological Data Preservation Act. Attorney John Kelly charged the Secretary of Interior, who had approved the leases, with violation of these acts. In November of 1978, Consolidation Coal and El Paso Natural Gas (now known as CONPASO) intervened in the suit and became defendants. The case was heard by Judge Santiago Campos in Santa Fe, NM, early this year, and the Burnham people, CONPASO and the lawyers have been awaiting a decision.

CONPASO remained relatively quiet until early this year. In January, a "Pre Blast" survey was undertaken by the company. In a complaint issued April 21, Burnham residents stated that "many local residents are concerned about company employees who have often entered property and structures of individuals without their knowledge or permission when they were not at home. Pictures have been taken without their knowledge or consent." The company hopes to assess the current situation of Burnham homes to protect itself from any damage suits being filed as a result of dynamiting the area.

While this was going on, rumors of a coal gasification complex resurfaced as the Council of Energy Resource Tribes (headed by Peter MacDonald) announced "what may become the U.S.' first operating 'synfuels' facility . . . the Indian contribution (to the National Energy Policy) . . ." What the Council of Energy Resource Tribes (CERT) was talking about was a coal gasification complex on the Crow reservation in Montana, currently in the advanced stages of planning. It appeared that Peter MacDonald was not about to be outdone. In the March 24 issue of *Business Week*, CERT outlined a plan for "What Indians Hope to Build." The article includes plans for a coal gasification complex on the Navajo reservation. According to *Business Week*, the Flour Corporation, the construction firm which made coal gasification possible in South Africa (the SASOL plants), is now involved in the project and also has interests in the Crow gasification complex. *Business Week* also notes that the "feasibility study" on the Navajo plants is completed, a surprise to both Burnham residents and their attorneys.

Meanwhile, back at Burnham, company and tribal police prowled the area, protecting the Consolidation colony. Telephone calls are cut off at the discretion of police officials, persons coming in and out of the area are harrassed, and spotlights focused on the "Commission on Whiteman Affairs Camp" make it look like daytime in the middle of the night.

Judge Campos recently ruled in favor of Consolidation Coal. Burnham residents responded by filing an appeal. As of this writing the confrontation is at a standstill, and the Indian people are asking for reinforcements.

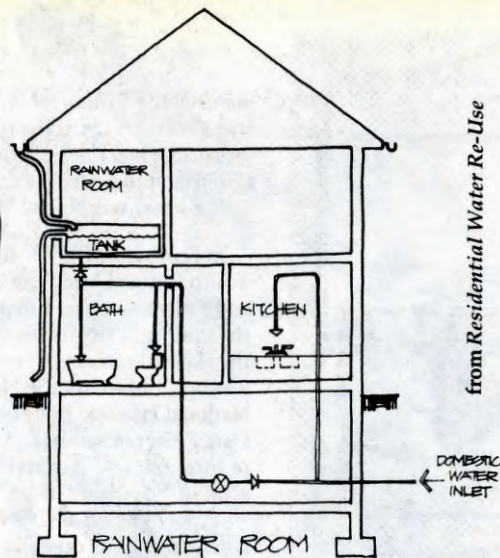
Ironically, in the Department of Energy report on Synfuels, the agency identified "local resistance" and "community opposition" as "the major impediment to a large-scale synfuels industry." It appears that the DOE, President Carter and Peter MacDonald are getting a taste of the opposition. Neither the Burnham residents nor their supporters intend to move. ●

Winona La Duke is a founder of Women of All Red Nations and a member of the Black Hills Alliance (see interview in Feb./Mar. '80 RAIN). Currently she is working against uranium mining and synfuels development in New Mexico.

WATER

Residential Water Re-Use, by Murray Milne, 1979, 553 pp., \$10.00 from: California Water Resources Center University of California Davis, CA 95616

In 1978 California found itself in the midst of one of the worst droughts in that state's history. Confronted with the drying up of one of their most crucial resources, Californians learned about conserving, the fast and hard way. But California is known for its innovations and "Save water, shower with a friend" was only the beginning. In *Residential Water Re-Use* a group of graduate students in Architecture and Planning at UCLA have compiled some of the water saving systems people came up with, plus a comprehensive discussion of rainwater, groundwater, garden re-uses, and re-use system components. The descriptions of tried and proposed systems will stimulate ideas of your own and are specifically aimed at "the layperson who has some experience in home maintenance" rather than an engineering or plumbing background. All of the systems described utilize readily available equipment and are inexpensive, easily maintained and designed for residential scale usage. One concern we have is



from Residential Water Re-Use

that although the potential problems of water re-use are basically introduced they are not explored in great depth. There are, however, pages of references at the back of the book that would be good to turn to with specific concerns such as virus and bacterial content of grey water, scum and particulate build-up in systems, problems with odors, etc. The book provides good technical information and an excellent overview, including some little historical/political tidbits like the story about the Manhattan Company. Maneuvering of a dubious nature by one Aaron Burr (a New York assemblyman at the time) resulted in the water works for the Big Apple being chartered to the Manhattan Company (which Aaron Burr controlled). Profits from the delivery of water were turned into the Bank of the Manhattan Company, which in 1955 was to merge with the Chase National Bank to become the Chase Manhattan. Anyway, this is a very good book! —CC with John Harland

John is an engineer with many years of experience on water and waste water treatment projects, including water re-use systems.

***Water Fit to Drink*, by Carol Keough, 1980, \$5.95, 280 pp., from: Rodale Press Inc. Emmaus, PA 18049**

How safe is the water we drink? How much do organic chemicals in drinking water contribute to increased cancer death? Are we and our children about to experience water-borne toxic chemical-caused disease epidemics comparable to the cholera and typhoid of a century ago? After reading *Water Fit to Drink* by Carol Keough, it is easy to conclude that we should not be taking what comes from the faucet for granted.

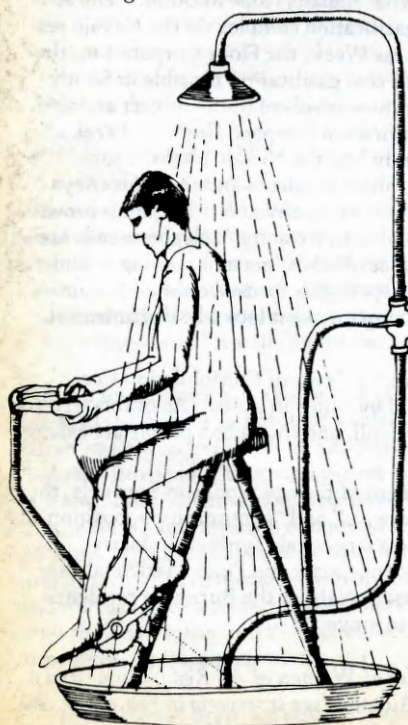
The book begins by presenting some past cases of water contamination and government response, or lack thereof. There is a

host of well-researched examples showing how widespread, diverse and horrifying the problems and potential problems are. Water, after all, is not just water. It also may contain salts, bacteria, viruses, organic chemicals, trace metals vital to life, toxic metals, asbestos fibers, nitrates and radioactive elements. It may be hard or soft, acidic, neutral or alkaline. Each condition is described in detail along with its benefits and problems. For example, soft water may become acidic and corrode pipes, adding metals such as lead, iron and asbestos to the distribution system. While hard water may cause scum around the bath, magnesium (one of the main constituents of hard water) may help prevent heart attacks and hypertension. Iron and zinc may prevent poisoning from toxic cadmium metal.

Water Fit to Drink helps you examine your tap water to find which pollutants may be contaminating it, and how to get it tested at a reasonable price. If your water is contaminated, the book, true to Rodale Press philosophy, will tell you what to do about it. —John Harland

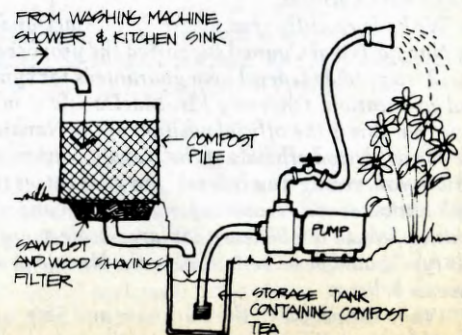
***Compost Toilets: A Guide for Owner-Builders*, 1979, 51 pp., \$2.00 from: National Center for Appropriate Technology P.O. Box 3838 Butte, MT 59701**

The prospective compost toilet builder who reads this NCAT report will find no promises of a rose garden—or even of a usable fertilizer to spread on one. The writers are matter-of-fact about compost toilets being a good idea with a high potential for headaches, and their clear descriptions of what to expect in the way of pathogens, insects, and liquid build-up provide valuable forewarning for those of us accustomed to dealing with a simple flush rather than a complex ecosystem. This is not a construction manual, but it can familiarize you with the basic cost, design and construction considerations for the various kinds of home-built toilets (slant-bottom, drum privy, vault-type, etc.) and provide you with a number of references to more detailed sources of information. —JF



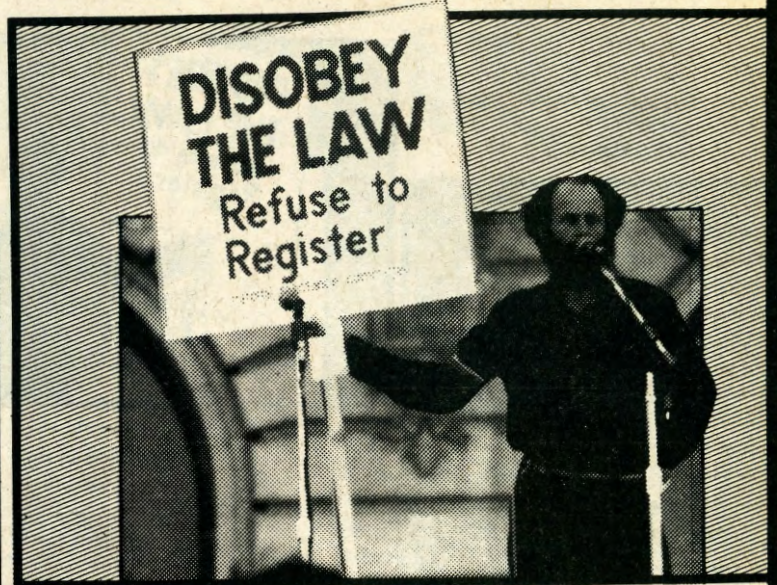
VELOCIPEDE RECYCLING SHOWER

from Residential Water Re-Use



THE CLANCY SYSTEM

A CALL FOR RESISTANCE



from Resistance News

“Whenever people take control of their own `vital interests` and deny the government’s claim on their lives, that is a beginning of the self-reliant power of the people”

Something really exciting is coming together across the land! In the April RAIN Dave McFadden established the connection between energy and American security, and the need for safe-energy and anti-war/draft groups to form alliances nationwide. In response to the nuclear warriors in Washington there’s now an organization with a comprehensive analysis calling for unified non-violent direct action of all draft opponents to stop draft registration. This new organization, the National Resistance Committee (P.O. Box 42488, San Francisco, CA 94101, 415/781-5839), can supply you with materials, organizational support, and speaker suggestions. They publish Resistance News (send whatever you can) and are working on an organizing manual. The NRC (oh, the atom-pushers are gonna love this acronym!) works closely with Peacemakers (P.O. Box 627, Garberville, CA 95440), active in draft and war tax resistance since 1948, and publishers of The Peacemaker (same price as Resistance News!).

Recently I spoke with Fred Moore, a member of the NRC board along with others such as Karl Hess, David Harris, and Daniel and Phillip Berrigan. Fred spent 17 months in Allenwood Federal Prison for refusing the draft. He has and will continue, he says, to advocate draft resistance, refusing registration, and total noncooperation with any form of conscription. What follows is pieced together from our conversation and the materials cited above.

—MR

RAIN: How does the NRC differ from other anti-draft/war groups?

Moore: For one thing, we hope people will consider reducing their energy and material consumption in recognition of the knowledge that overconsumption is a major cause of war.

For another thing, we see conscription not only as totalitarian, immoral, and a form of slavery, but as patriarchal. Hierarchical decision making and submission to an authoritarian structure are keystones in patriarchal societies. Military might (death force and destructive power) sustains male supremacy throughout the world in nation-states, war being the ultimate expression of this macho violence and domination. It is rape of both Mother Earth and mother beings. It is an attempt to conquer and subdue nature and the plurality of social cultures. It dehumanizes and divides people into “this side and that side, either friend or foe.” It is a denial of the maternal values: caring, comforting, nurturing, healing, and love.

A third point has to do with our approach. You don’t persuade the government by anti-draft petitions and pleading, but by withdrawing your consent and cooperation.

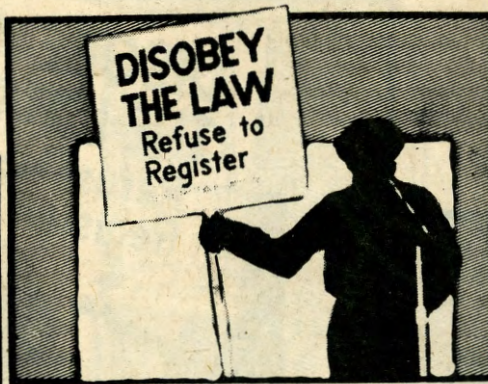
RAIN: Why are you concentrating on registration?

Moore: In addition to the standard arguments about registration leading to draft leading to war, the bottom line is that by registering you are psychologically acknowledging the government’s power and authority over you. You are giving up your independence to question, think for yourself, and act on your own. This is what submission means. Registration becomes a denial of your sovereignty over your own body.

RAIN: What exactly do you mean by resistance?

Moore: Resistance means taking a personal stand of noncooperation with the Selective Service System. It means saying NO publicly, clearly, and meaning it. Resistance means taking personal responsibility for your actions—for your life.

The personal act of resistance is an act of personal liberation that diminishes at once the coercive power of the government. When-



cont.

ever people take control of their own "vital interests" and deny the government's claim on their lives, that is a beginning of the self-reliant power of the people.

RAIN: What is the NRC? What does it hope to accomplish?

Moore: The National Resistance Committee is a network of individuals and organizations who are committed to stopping draft registration. Our purposes are:

1. To resist current U.S. preparations for conscription and war by encouraging those of draft age to refuse registration.
2. To sponsor and promote nonviolent demonstrations and civil disobedience at U.S. Post Offices during the draft registration weeks in the summer of 1980, and
3. To build a grassroots movement by collecting pledges of non-registration, distributing literature, holding public actions, forming support groups and working with existing organizations to resist registration.

RAIN: What's the story with the Post Office actions?

Moore: The Carter administration proposes to begin face-to-face draft registration of all 19- and 20-year-old males at U.S. Post Offices during an initial two-week period [the specific dates have not been announced as we go to press]. On these registration weeks hinge the future of the draft in this country. If the mass sign-ups are a success, the draft will become an entrenched part of American society, with ominous consequences for peace abroad and freedom at home. If, on the other hand, young people refuse to register, and if resistance is organized and widespread, the draft will fail. That's why the National Resistance Committee is committed to unifying all draft opponents around a common and narrowly defined goal: stop registration.

RAIN: How's the health of the resistance movement today?

Moore: The current resistance movement is a beautiful expression of people in voluntary autonomous associations claiming their independence from conscription and war procurements. This is a do-it-yourself movement. The time and effort and funds we all put in come from our commitment to stopping registration.

RAIN: How can concerned people help in the resistance movement?

Moore: Organize in your community. Time, energy and money are, of course, always welcome. Also, rainbow armbands are being worn as a symbol of draft resistance. Get them from us or go to your local notions store, buy your own rainbow ribbon (Offrey #8141 width #9), cut it to 13" length, and attach with a small safety pin. ○

DRAFT

The War at Home (movie), 1979, at movie theaters, produced and distributed by:

Catalyst Films
1301 E. Washington Ave.
Madison, WI 53701
608/251-6987

"Remember the war?" asked a Vietnam vet at a recent anti-draft rally in Portland. "All that bombing and shooting and rioting—and in Vietnam it was even worse!"

The War at Home is a documentary chronology of an era. From the first isolated voices of the early sixties to the mass movement a decade later, the film tells the story of the Vietnam anti-war movement by focusing on its development in Madison, Wisconsin. Between clips of glibly reassuring presidents, congressmen, university officials and corporate recruiters are spliced frames of the struggle in Vietnam and at home—in Madison and Chicago, at Kent State and Jackson State.

Many of the same questions about resistance, strategy, tactics, and so on are cropping up again. This film sharpens our memories so that we can better learn from our experience. It is especially valuable for those of draft age as a way of providing a fuller context for understanding what's happening now. Ask your local theater to get it, publicize it, and show it! —MR

CONSUMER

Reckless Homicide? Ford's Pinto Trial, by Lee Patrick Strobel, 286 pp., \$4.95 from:

and books
702 South Michigan
South Bend, IN 46618

In August 1978 three teenage girls in Elkhart County, Indiana, burned to death after their Ford Pinto burst into flames when struck from behind by a van. As county prosecutor Michael Cosentino studied the grisly details of the accident, he came to a matter-of-fact conclusion: Ford Motor Company had knowingly sold an unsafe product and should be charged with reckless homicide. "Mike, are you crazy?" exclaimed the prosecutor's assistant.

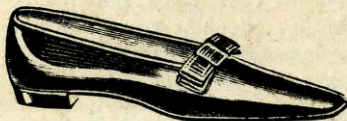


"When we're through with them, what are we going to do—take on the Soviet Union or Red China?"

But Cosentino plunged ahead with his unprecedented case. No American manufacturer had ever before been criminally charged with marketing an allegedly unsafe product, and Ford pulled out all the stops to defeat him. Star defense lawyer James Neal and an estimated one million dollar war chest were pitted against Cosentino and his paltry \$20,000 prosecution budget.

Author Lee Strobel, legal affairs editor of the *Chicago Tribune*, does a good job of conveying the drama of the uneven struggle which ensued (ultimately resulting in Ford's acquittal). While his sympathies are clearly with the prosecution, he presents the details of the trial in a crisp, reportorial style that allows his readers to draw their own conclusions, based on the evidence. Ironically, readers are placed in a better position than the jury, since Strobel draws on some especially damning Ford documents which the company successfully fought to keep out of evidence. These documents, which reveal that Ford had long been aware of the Pinto's defects and the means for correcting them, are included in an appendix which, even read alone, should provide you with sufficient incentive to keep out of Ford showrooms for the rest of your life. —JF

John owns a Pinto.



**Carcinogen Information Program
Center for the Biology of Natural
Systems
Washington University, Box 1126
St. Louis, MO 63130
314/889-5346 or 889-5367**

While information on carcinogens accumulates by the day, much of it is either contradictory or simply incomprehensible. The Carcinogen Information Program (CIP) was set up to provide reliable, understandable information about the occurrence, health impact and regulation of carcinogens. They'd like to hear your questions about carcinogens in food, water, air, your workplace and consumer products.

You can receive the CIP Bulletin at no cost by sending a long, self-addressed, stamped envelope to CIP. The May Bulletin (#11), for example, was on formaldehyde (CH₂O), one of the most commonly used chemicals in industry (e.g., insulation, particle board, soap, toothpaste, permanent press clothing). Adverse health effects in people as a result of exposure to

formaldehyde include difficulty breathing, rashes, headaches, vomiting and severe nosebleeds.

A good resource for those concerned with occupational and consumer health and safety.

—MR



**"Home Brew," in East West Journal,
May 1980, \$1.50 from:
17 Station Street
Brookline, MA 02146
617/232-1000**

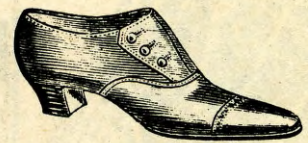
Additive-free beer (59 additives are legally allowed, unlisted!) made at home is a lot like home-baked bread—more nourishing and, with a little luck, better tasting than what's available on the market.

Rebecca Greenwood's article guides you through the foam with some basic, practical steps about equipment and technique. Intimidated? Don't get bogged down with too much information, she says. Pick a recipe and start! Not only tasty and nourishing, but "in 1978 it became legal (and tax free) for anyone over eighteen to brew 100 gallons of beer per year for consumption in his or her own home."

There's lots of books available on the subject. Greenwood suggests you pick any one that looks good to you. Her favorite is Fred Eckhardt's *A Treatise on Lager Beers* (\$1.95 from brewers' supply stores). She also recommends *ZYMURGY: The Journal of the American Homebrewers Association* (\$1.50/issue, Box 287, Boulder, CO 80306). A Portland supplier I talked to, Steinbart (526 SE Grand, Portland, OR 97214, 503/232-8793), thought *ZYMURGY* "wasn't much of a contribution," and instead suggested you check out *Home Fermenter's Digest* (\$6/6 issues, 2761 Teagarden St., San Leandro, CA 94577, 415/357-1137).

Most of the equipment you need is available at your local hardware store, a wine and beer brewers supply store, or through mail order. Two mail order businesses that carry both equipment and supplies are: The Country Store, Rt. 2, Box 168, Vashon, WA 98070, 201/463-9426; and Brick Store Brewer's Supplies, The Common, Strafford, VT 05072, 802/765-6941.

For you locals who want to know whether you're brewing it right, there's a panel of eminently qualified taste-testers on duty every summer afternoon in north-west Portland. Call the Rainhouse for directions. —MR



**"The Stylish Life," New Age, June
1980, \$1.50 from:
32 Station St.
Brookline Village, MA 02146
617/734-3155**

If you aren't "into" Bio-Energetics, Neuro-Linguistic Programming, TM, Arica, etc., surely you know someone who is. In fact, a generation of "therapy samplers" have now tried the whole gamut of psychic possibilities. Several books and articles have been written on the pros and cons of the new therapies but few have attempted to tackle the question Sam Keen presents us with: What do these therapeutic movements have in common and why have they so powerfully seduced the "lifestyle consumers"?

Our worship of style, whether of automobiles, clothing or personalities, has promoted us from the age of rugged individualism to a time of mass narcissism. "The marketplace . . . gives shape to our psyches, and buying has become our substitute for adventure." The common denominator of the new therapies is their starting premise of total individual responsibility:

The promethean exaggeration of the potency of the individual destroys the fragile balance between freedom and destiny. If I believe my whole world is self-caused, I lose any distinction between what I have the power to control and what I must accept, and then the only world I can control is one made up of my thoughts and fantasies. . . .

All the minor merchants of salvation seem to hypnotize and imprint people with a style of talk, dress and self-presentation, and to leave social and political values unquestioned. They change only the persona, not the self.

Ironically, Keen points out, whether John Birchers or Hare Krishnas, "the more a group preaches the total responsibility of the individual, the more it practices conformity." In the absence of an accepted and convincing definition of self, he concludes, we need to remember the heroic virtues and simple dignities which help "keep alive our rebellion against the dehumanizing forces of history." In particular these include *reason* ("a bullshit detector we need to sort out the propaganda from probable truth"), *commitment* ("Without decision there is no potency; without limits there is no freedom."), and *imagination* ("the practice of ubiquity . . . it is a close relative of humor.').

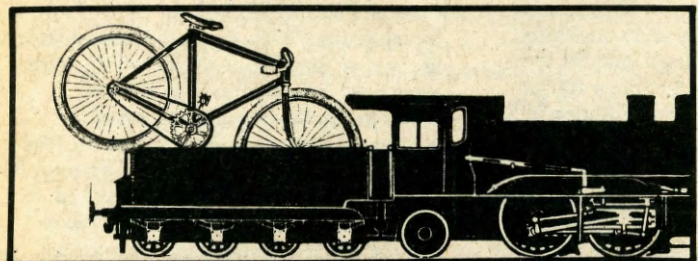
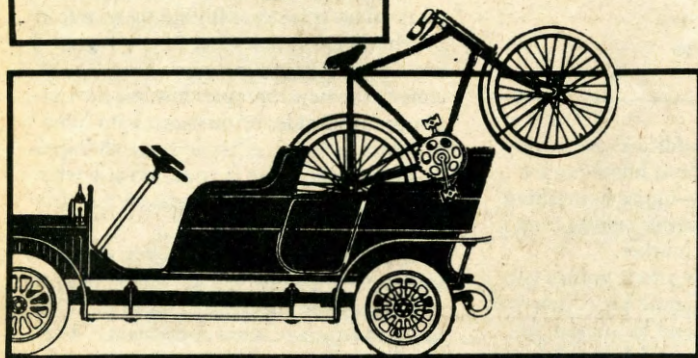
Recommended reading for gurus and anarchists. —MR



Pack up your PEDALS

With a little perserverance ... you can take your bike virtually anywhere.

by John Dowlin



"It is unfortunate," writes Raymond Bridge in the *Sierra Club Guide to Bike Touring*, "that very few buses, trains and planes are set up for transporting bicycles, since a bike is so beautifully complementary to public transit. With a little perseverance, though, you can take your bike virtually anywhere." By perseverance, of course, he means getting the right information, preferably in advance, and if necessary, developing the right strategy for taking along a bicycle—whether you're touring or commuting.

If properly combined, clean light-weight bicycles and clean modern transit are mutually reinforced and enhanced. But to insure a full and attractive partnership, however, more research is needed on how to get bicycles and crowded trains, buses and planes better equipped and designed for one another. What needs to be overcome is the familiar transition between a loaded bicycle that rolls and maneuvers easily and a dismantled, boxed bicycle plus baggage that doesn't. Clearly, the innovations are needed at both ends: public transit must be designed to accommodate passengers' wheels—bicycles as well as wheelchairs and baby strollers. Conversely, passengers' wheels must compact or collapse quickly and easily to occupy a minimum of space when catching a lift or when being stored at work or home. At least two bicycle manufacturers, Gitane and Fuji, have produced a prototype: the "Get-Away" and the "Feather," respectively. Hopefully, other bike manufacturers will rise to the challenge (soon, the demand) of marketing a light-weight, standard size, all-purpose *transit bicycle*, one with compacting handlebars and pedals, and quick release wheels that affix

ENERGY

"The Future of Synthetic Materials: The Petroleum Connection," by Christopher Flavin, *Worldwatch Paper #36*, \$2.00 from:

Worldwatch Institute
1776 Massachusetts Ave. N.W.
Washington, DC 20036

Overpackaging, breakable toys, polyester leisure suits: we tend to notice and comment on some of the more bizarre manifestations of the synthetics revolution, but the shift to imitation everything has been so gradual that it is startling to be reminded of just how far we have come. One-third of all fiber and 70 percent of all rubber produced in the world is now synthetic. Worldwide production of synthetics increased from ten million tons in 1960 to eight times that figure in 1979.

Is any of this good? Worldwatch researcher Christopher Flavin notes some serious problems: synthetics are often inefficiently produced and wastefully used. They are also difficult to recycle. Nevertheless, as fossil fuels and high grade mineral ores grow scarcer, synthetic usage will become increasingly vital. Plastics can substitute for copper, steel, and aluminum in a number of industrial applications and are less energy-intensive to produce and transport. Synthetics already have important uses in home insulation, in solar collectors, and in photovoltaic systems. "Paradoxically," says Flavin, "using the ultimate renewable energy resource could depend on synthetic materials."

The catch, of course, is that synthetics, with their dependence on petrochemical feedstocks, are themselves a nonrenewable resource, and their potentially significant role in the solar transition is threatened unless a system of priorities is worked out to assure that the remaining supplies of fossil fuels are not squandered on less essential uses. Our present use of petroleum

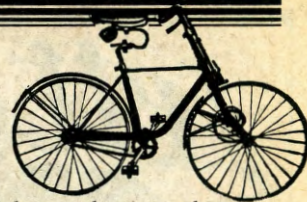
as a fuel is (in the words of a chemist quoted by Flavin) "akin to firing up a kitchen stove with bank notes." —JF

MEDIA

"Save the Planet," *Green Mountain Post Bulletin No. 2*, Spring 1980, 36 pp., free from:

Green Mountain Post Films
P.O. Box 229
Turners Falls, MA 01376

"Save the Planet," a montage film history of the atomic age and the debate over nuclear power, is the latest release by the anti-nuke filmmakers in Montague, and is among many featured in the newest GMP Films Bulletin. Other new releases include footage of the 20,000 people gathered at Seabrook in 1978, renewable energy use in



snugly to the bike's frame. A rugged but light-weight multipurpose carrying bag is equally needed and should be as common an accessory as a bell or rear carrier. The design and marketing techniques for bike-transit matchmaking is material for another article. What follows, in the interim, are a few tips for "bike transit maneuvers."

Catching the Bus

Greyhound will carry bicycles as checked baggage provided they are carried in "wood, leather, canvas, or substantial carrying case, which does not exceed 8" x 32" x 60" and which is securely roped, strapped, tied, or otherwise fastened." *Greyhound* accepts a bicycle as part of the regular baggage allowance of two checked pieces per person. To ship a bicycle as package express, it must be similarly enclosed so that the sum of the extreme measurements of length, width and height is 141" or less, with the longest measurement 60" or less.

Trailways and the Canadian *Voyageur* line policies are pretty much identical to *Greyhound's*, which makes the subject of a suitable bike bag an important one.

Mail Your Bike

Probably the cheapest and simplest method of shipping a bicycle long distance is by United Parcel or Federal Express, if you don't mind dismantling your bike to fit into a carton measuring 108 inches combined length and girth, or 100 inches combined for Parcel Post. UPS, for example, will ship a 30 lb. bicycle from Philadelphia, Pennsylvania, to Burlington, Vermont, for \$4.86, a fee which includes \$100 worth of insurance.

The Airlines

Eastern, Delta, United and National provide bicycle boxes at no charge. American charges \$3.50 for a box or poly bag. Like the bus lines, the airlines require that a bicycle be checked in a suitable package with the wheel(s) removed, the handlebars turned and the pedals reversed. Occasionally they'll accept an unpackaged bicycle, contrary to policy. As a rule, it's a good idea to let the air out of your tires to prevent a blow-out at high altitudes.

While most airlines are accommodating, a number of domestic airlines now charge a \$12 bicycle fee, so it's worth calling in advance and patronizing the airline that tries hardest!

Denmark, direct action at the Diablo Canyon nuclear plant, and the SUEDE (Solar Utilization, Economic Development and Employment) program in action in three New England counties.

You'll also find some old standbys among the listings: "Lovejoy's Nuclear War," on Sam Lovejoy's tower toppling and trial; "The Last Resort," on the birth and growth of the Clamshell Alliance; and a film on the Federation of Southern Cooperatives. One of the more curious is a recently acquired Danish film, "The Santa Claus Action" (1975). It's a true tale of the Christasmen, an army of 75 "Santa Clauses" who descend upon modern Copenhagen for a week of visits, gifts and dramatic street theater aimed at helping the poor and unemployed. It contains a scene of the Santas being arrested and dragged off by the police while wide-eyed children gawk in disbelief!

Order, rental, sale and other pertinent information included here make "Save the Planet" a useful resource and organizing tool. —MR

By Boat

Probably one of the nicest connections a bike traveler can make is by boat or ferry. The Vancouver Sea Bus on weekends and the Staten Island Ferry any time of day are two outstanding urban connections for touring as well as commuting cyclists. There are hundreds more, and cyclists can usually make the connections without much difficulty.

Getting a Lift

Hitchhiking with a bicycle is always possible and sometimes very necessary. One way to do it, if you need a ride in a hurry, is to hold up your front wheel. In Europe this is a familiar signal used by cyclists wanting a ride up a mountain, and it could catch on quickly in the U.S., with a little roadside practice! A cyclist holding up a front wheel tells a motorist that there's a problem: a flat tire, a departing ferry, an approaching thunderstorm, road construction, mountaintains. . . . In most cases a motorist will stop, particularly truck drivers or cars with empty trunks or a rear bike rack.

Train Your Bike

In the U.S., "training" your bike isn't easy. Amtrak requires that cyclists dismantle and box their own bicycles, using their own tools and tape, with the weight of a boxed bicycle not to exceed 75 lbs. Boxes are theoretically available at most Amtrak stations for \$4. When they're not, and you haven't a box of your own, you're out of luck. Feeling boxed in?

Travelers in Canada and Mexico have it easier since the bicycle policy for both VIA Rail (the National Canadian Railways) and the National Railways of Mexico is to carry bicycles on all trains with baggage cars at no extra charge. Cyclists should check in advance on the availability of baggage cars. ●

John Dowlin is secretary of the Greater Philadelphia Bicycle Coalition, a cycling activist organization. For further information contact GPBC at P.O. Box 8194, Philadelphia, PA 19101.

RESOURCES

Self-Help Health Resources (CEP report #65), 1980, 18 pp., \$1.60

Housing: Self-Help and Reinvestment Resources (CEP report #66), 1980, 22 pp., \$1.80

Alternative Education Resources (CEP report #67), 1980, 10 pp., \$1.15
prepayment required for all, available from:

Citizens' Energy Project
1110-6th Street N.W., #300
Washington, DC 20001
202/387-8998

Jan Simpson has compiled three more resource guides to add to the excellent Citizens' Energy Project collection. *Self-Help Health Resources* emphasizes wellness and self-care, with resources on holistic health, women, maternity and children's health and nutrition. About half of the 140 re-

sources listed are organizations, half are printed materials.

Housing Resources lists 125 organizations and published resources in self-help housing, housing and neighborhood rehabilitation and reinvestment, urban homesteading, cooperative housing, and intentional communities. It also covers successful community programs for saving and recycling existing housing stock, low-income programs, government-sponsored programs, technical assistance groups, national networking organizations, general community economic development, and housing design alternatives.

Alternative Education Resources concentrates on alternative and community schools, home study, experiential learning and adult education. It includes parent-organized schools, networking organizations, technical assistance groups, newsletters and books.

Clearly, this is a valuable collection for organizers, researchers and librarians.

—MR

Letters



Dear RAIN:

Thank you for the invitation to up-date your readers on "what's happening" in the Findhorn community. As always, a lot is happening, governed now as much as ever by our best efforts to be sensitive to the divine leading.

In particular, three very immediate considerations are shaping our growth:

- the need to remember our rootedness in the land, with renewed emphasis on the growing of food, organically and with appropriate technology, in the context of that attunement to the nature kingdoms on which this community is built;
- the need to develop according to the principles of "cellular evolution"—i.e. through small and highly energized cellular units within the larger Findhorn "village";
- the need to broaden our economic base, to become more self-reliant and less dependent on guest programs which are vulnerable in a volatile world economy.

Out of such considerations we have generated a new and most exciting project—seeded during the past two years and emerging now with recognizable shape—a Garden School (see Rush, June '80) centered at Cullerne (a ten-acre property adjacent to the Caravan Park and overlooking Findhorn Bay), it is "a school within a garden"—a learning environment where staff and students will grow food, flowers, and themselves. The garden is the classroom and the teacher, yielding food for soul and body, where we learn the skills and disciplines required for its care.

The courses themselves will be intensely practical and include many disciplines beyond horticulture—how to care for and repair small gasoline engines, how to fix broken digging forks, how to wire up a chicken unit or fix an electric fence, etc. If the property has it, the students will learn to use it and maintain it.

In a larger sense, the Garden School at Cullerne is pioneering a new venture for the community as we move towards a "cell structure" in which individual units take on responsibility for their own lives in a co-reliant system. So still another aspect of the School will be involvement in its management and exposure to the financial realities of life.

Enough! If you've never experienced the smell of a Scottish morning or felt the tingle of an unpolluted arctic airstream, we'd love to share that with you. And for any who are seriously interested in the school, I will be glad to send a detailed prospectus if you will write to me at The Findhorn Foundation, The Park, Forres, Scotland.

Blessings
Dick Barton

Dear Rainpeople:

As long as I have been aware of the necessity of "living lightly," many years, the basic requirement has always been to live in harmony with everything around, animal, mineral and vegetable. Perhaps it's an isolated example, but this April issue is nothing but controversy, from cover to cover. Somewhere, I think you have lost the thread.

I have no wish to criticize, so I would like to suggest that you devote your considerable talents to a more instructive end.

It is imperative that we all realize that no amount of shouting, breast-beating or blame-placing is going to change a thing. People will always be people, motivated the way their environment and their genes direct them.

Instead of recounting the horrors of today, why not emphasize the practical, economical, easy ways and reasons to do all the good things that you list in your masthead? Tell them, all you can reach, how to "build a society that is durable, just and ecologically sound," not by telling them what is wrong—they can see that themselves—but by teaching them how to influence their immediate group into learning the "simple and satisfying lifestyle" that is the way we would all like to go, but maybe don't know how or are afraid.

Finally, your article on the draft does not take into account the absolute necessity that we must have another war, and soon. Our type of society, good or bad, has gotten us to the point where the only way the public will accept the control necessary to deal with everything from racial problems to inflation and oil imports is to get a war started, repopularize (?) patriotism and national unity. I'm sure your crystal ball is just as cloudy, or clear, as mine, but that's what I see. It won't be a big war, and it will

probably be in a relatively unpopulated part of the world (1984?) but it will be enough to justify rationing, wage and price control, and all the rest of what we had in WWII. No? Wait and see.

Meanwhile, and I don't mean to preach, try the positive approach, not the negative. It's so rare today.

Whatever, good luck,
Stan Knapp
Sedro Woolley, WA

Dear Rain,
Since writing "Open Publishing" (May RAIN) I've learned of three endeavors somewhat similar to what I proposed.

The *Revolving Library* accepts and reviews all pamphlets or small manuscripts submitted by *Network: Quodlibeta* members. The materials can be borrowed for the cost of postage and photocopying. Founded in 1977 the *Revolving Library* presently contains about 100 items on a wide range of subjects concerned with alternatives. "*Network: Quodlibeta* is a means of sharing your ideas, projects, needs, etc." For information send a self-addressed stamped envelope to Bob Welke, 11100 SW 80 Ave., Miami, Florida 33156.

The *Light Living Library* accepts articles and plans concerned with camp living, portable homes and wildcrafting. It sells photocopies, giving authors 20% royalties. Although selective, it is "more open than a magazine or pamphlet publisher because we don't have the up front printing expense." For a catalog send a self-addressed stamped envelope to Hank Schultz, P.O. Box 190, Philomath, OR 97370.

The *Unpublished Library* was "to our knowledge . . . the only publishers who will print all writing without judgement, qualification, editorialism or censorship." A recent letter to their address, 170 Duane St., New York 10013, was returned undelivered.

Bob Welke has remarked in *Network: Quodlibeta* that not very many people are borrowing from the *Revolving Library* yet. This, plus the apparent demise of the *Unpublished Library*, indicates the wisdom of thinking small and not expecting fast growth when starting something that's new or different.

Pat Underhill
Philomath, OR

Ms. Collette:

I've been disturbed at the increasing frequency of articles on feminism, especially the April '80 article on "Feminist Roots." Why review books inferring that all witches are benevolent and equating feminism with healing? First of all, you're supposed to be a journal of appropriate technology. Secondly, as far as I can see, feminism has very little to do with healing. Healers gain

their power out of love for all humanity. As long as feminists claim that most of the evil in this world is generated by men and that women are the primary victims, they cannot be considered healers.

It's easy to make the simplistic equation that men rape women and the male hierarchy rapes the world of its natural resources. Well, it's only part of the picture; women also share the responsibility and the guilt. Behind most sexual rapists are non-nurturing, if not hateful, mothers who helped to further psychic violence. Little children do not grow up hating their mothers (and later all women) for no reason. Also, the American "consumer" supports the pillage of our natural resources and these consumers are often women. For example, men cruelly trapped the millions of mink, ermine and other small animals for furs in the early 1900s, but women wore practically all the fur coats and still do.

I do believe in women's rights and think women should share equally in the ecological movement, but I don't accept the parallel between feminism and ecology. Ecology is concerned with nurturing, fertility and the union of systems within systems. As long as feminism sees only the parts of the system that satisfy its own self-centeredness and projects blame onto men for all the faults in this system, it is divisive. It becomes no less concerned with power and status than the "male hierarchy," and no more fair or just. Feminist hatred of men festers wounds rather than healing them. As long as feminism downgrades the importance and privilege — for both men and women — of marriage and child rearing, it is non-fertile and non-nurturing and thus divergent from ecology. Women are not nurturing simply because they are female; they must actually nurture, and American

women have done far too little of this in the past decade.

Sincerely,
 Jeff Twine Publisher
 Synerjy/A Directory of Energy Alternatives
 New York, NY

P.S. To sharpen the perspective of Jeff's comments I want to add that I, too, have read your "Feminist Roots" issue and agree with his comments, having found my ire and gorge rise at the broad statements and casual connections made so frequently in feminist arguments. I most certainly recognize some gross inequities in our social system, but God help each one of us if we do not very soon find some way to breed true communication between men and women (and parents and children, and generation and generation) before bitterness and resentment separate us so from each other that re-union is impossible.

(Ms.) Scottie Twine

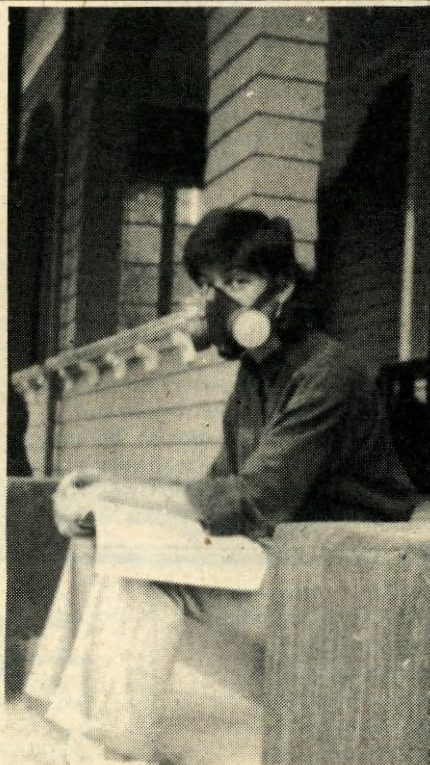
rain

Ah, Summertime! Picnics, hikes, falling in love, unscheduled vacations. 'Tis the season to grin and bare it. In Portland we started it off with a bang (uh . . . boom) and have been celebrating in style ever since. Gas masks are very chic, you know.

Truthfully, though, when we ran Ancil Nance's ominous photo of a brooding, smoking Mt. St. Helens on the cover of our May issue, we thought we were only in for . . . actually, we had no idea what we were in for. Mere entertainment no longer, the St. Helens saga has unfolded into a natural drama rivaling any of Shakespeare's. (When President Carter came out to survey the scene, he remarked that it made the moon look "like a golf course" in comparison. Perhaps for the first time, I found myself agreeing with him.)

As I write, the volcanic cloud that in May smothered our farmland with ash and threatened our bodies with silicosis has just returned from its first around-the-world tour. At least it's not radiation. Compared to radiation, ash is benign. The lesson is not lost on us.

Here in volcano valley, meanwhile, RAIN goes on. Oregonians will take that for the understatement of the century, but the rest of you know what I mean. You might recognize one of the names in the staff box this month, after a few months' absence. Kiko Denzer, who joined us last fall as an intern from Hampshire College in Amherst, has returned to spend the sum-



drops

mer with us. Also with us for a summer internship is Laura Stuchinsky, from Beacon College in Boston.

Laura and Kiko contribute enormously to the day-to-day operation of the magazine, which is now run—as it was in the early days—by a tiny core staff of Carlotta, John and myself, with Jill coordinating layout. With interns, a little help from our friends, and just a touch of luck we seem to be getting along OK, though we may not answer all your letters as promptly as we'd like to.

To lessen our load a bit we're computerizing our mailing list, starting (we hope) with this issue. You shouldn't notice much difference, except maybe a different kind of expiration code on your mailing label. If you find any other surprises, let us know—in the meantime we'll be busying ourselves with somewhat more creative drudgery.

Our next issue, by the way, will be a combined August-September issue, so don't automatically up and think the computer ran afoul or we're swimming in lava soup when your next RAIN doesn't appear until September.

If you make it to these parts (we do have one of the hottest sights around), be sure to drop in. Sometimes we have meetings away from the Rainhouse, so you might want to give us a ring first. Wherever you are, have a great summer!

—MR



Carlotta's portrait by John Ferrell

WISDOM

A "Women and Energy Conference" will be held in Portland, Oregon on August 2. Goals of the conference include educating women about political analysis of energy issues and finding ways to involve women in energy policy decisions. For information contact Nancy Cosper, Ratepayers Union, P.O. Box 14244, Portland, OR 97214.

Antioch University West in San Francisco offers a graduate program in Ecosystem Management and Appropriate Technology. Program areas for the 1980-81 academic year will include passive solar design, environmental planning, horticulture and landscape design, integrated pest management, habitat protection and restoration, and sustained agricultural development. For further information contact Director, Ecosystem Management Program, Antioch University West, 650 Pine Street, San Francisco, CA 94108.

The Freedom from Hunger Foundation, a private nonprofit international development organization, is seeking a Technology Program Director. Requirements include a food technology background, interest in small-scale food processing technology, and ability to work both as hands-on technologist and program director. Considerable overseas travel. Salary low '20s. Contact Dr. Hugh Roberts, Vice Pres. for Programs, Freedom from Hunger, P.O. Box 680, Santa Monica, CA 90406.

Solwest '80, a joint conference of the Solar Energy Society of Canada and the U.S. Pacific Northwest Solar Energy Association, will be held at the University of British Columbia in Vancouver, August 6-10. For information write Solwest '80, 504 Davie Street, Vancouver, BC V6B 2G4 Canada.

The Colorado Open Space Council, a statewide conservation coalition, seeks an executive director. Job will include administration, fundraising, policy intervention, and supervision of staff in areas of wilderness, mining, air, and water. Salary: \$12,000/yr. plus benefits. Deadline for resumes is July 7. Contact Clint Jones, Colorado Open Space Council, 317 South Ogden, Denver, CO 80209, 303/399-9453.

The University for Man, a free university that offers noncredit tuition-free education to the general public, seeks a director for its outreach program to develop and disseminate its free university model in Midwest rural communities. Position requires organizing ability, commitment to and familiarity with rural areas, experience with grant-writing and staff management, and a willingness to travel. Salary range is \$12-16,000/yr. Send resume and letter explaining your interest in job, postmarked no later than July 14, to Sue Maes, Director, University for Man, 1221 Thurston, Manhattan, KS 66502, 913/532-5866.

CORRECTION

The Trilateral Connection poster accessed in the Feb./Mar. RAIN is available for \$5.00, not \$3.50, from the Black Hills Alliance, Box 2508, Rapid City, SD 57709, 605/342-5127. The poster is a fundraiser for the Black Hills/Paha Sapa Report which provides information on the struggle against uranium mining in the Black Hills and on the International Survival Gathering July 18-27 in the Black Hills.

HELP WANTED

PRODUCTION MANAGER/ART DIRECTOR needed for lively Rocky Mountain newspaper with national readership. Design layout and supervise paste-up crew for 16-page tabloid. Some proofreading, ad production and work on promotion materials. Design and/or layout experience necessary; art skills helpful. Low salary. Health insurance. Application deadline Aug. 11; send resume and sample of work to Geoffrey O'Gara, High Country News, Box K, Lander, WY 82520.

"Through the '80s: Thinking Globally, Acting Locally" will be the theme of the First Global Conference on the Future, to be held in Toronto, Ontario, July 20-24. Among the many speakers will be Marshall McLuhan, Hazel Henderson, and Lester Brown. For further information contact World Future Society, 4916 St. Elmo Avenue, Washington, DC 20014, 301/656-8274, or Global Conference, Suite 1701, One Yonge Street, Toronto, Ontario M5E 1E6, Canada, 416/361-1080.

"Community Renewable Energy Systems (CRES): Solar for the Cities," a conference to stimulate the use of community renewable energy systems in urban areas, will be held Sept. 3-5 in Seattle. Among the topics to be discussed will be funding of local energy projects, renewable energy and economic development, land use planning for solar access, solar ordinances, and solar applications in the rental market. For information contact the Conference Group, Solar Energy Research Institute, 1617 Cole Boulevard, Golden, CO 80401, 303/231-1467.

CORRECTION

In our June issue we failed to note that the interview we excerpted from William Valentine and Frances Moore Lappé's *What Can We Do?* was with Nathan Gray of the Institute for Community Economics, 639 Massachusetts Ave., Cambridge, MA 02139.

"It's your gift to a nervous population on the verge of becoming responsible." That's how Joel Schatz described the beautiful recycling posters we showed you last month, and we agree. Recycling is shaping up nationally better than most other environmental programs, but it still needs direction and attention. Here's a quick, certain and rewarding way to give a boost to the recycling campaign—take the initiative yourself! Put these posters up in schools, libraries and other public buildings. They're not just beautiful artworks, but excellent educational tools as well.

It's your gift in another way, too. Your money goes to Transition Graphics and to RAIN. Transition Graphics, which was set up to print and distribute these full-size color originals, will use the money for future posters on solar energy and related subjects to support non-profit groups. RAIN will use our share of the money for sorely needed operating capital, so that we can promote our community resource library, retrofit the Rainhouse, and start a million other projects we've been dreaming about. If every RAIN reader bought a set of recycling posters (7 posters for \$18.00), we'd take in about \$19,000 (and faint!).

So send for your posters soon, OK? Use the order form in the last issue, if possible. Otherwise, contact Transition Graphics (P.O. Box 30007, Eugene, OR 97403, 503/364-0140). And tell 'em we sent you.—RAIN



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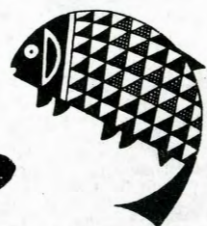
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