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# RAIN

Development For Whom?

The Anatomy of Freedom

What If: Women and Future Technology



VOLUME IX, NO. 4

\$2.00

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# RAIN: Journal of Appropriate Technology

Volume IX, Number 4  
April/May 83

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To Sarah Cook and Mary Vogel,  
whose energy added something  
unique and invaluable to the issue.

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RAIN Magazine publishes information  
which can help people lead more simple  
and satisfying lives, make their communi-  
ties and regions more economically self-  
reliant, and build a society that is durable,  
just, and ecologically sound.

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# IN THIS ISSUE...

## Articles

<b>The Anatomy of Freedom</b> — by Nancy Cosper .....	4
<b>The Need for Women in Power</b> — by Margie Hendriksen .....	5
<b>Sexism and Militarism: Some Connections</b> — by Ada Sanchez .....	8
<b>Development for Whom? Women's Unrecognized Role</b> — by Rosalind Grisby Riker .....	9
<b>Aprovecho: Approaching a Feminist Vision</b> — by Mary Vogel .....	10
<b>Women and Spirituality</b> — by Margaret McCrea .....	11
<b>Women Astronomers of the Scientific Revolution</b> — by Margaret Alic .....	14
<b>A.T. and AG: One Happy Marriage</b> .....	19
<b>What if: Women and Future Technology</b> — by Patricia Logan and Lisa Yost .....	23
<b>Some Thoughts About Reading About Technology</b> — by Lane deMoll .....	27

## Access Information

<b>Body &amp; Society</b> .....	16
<b>Good Things</b> .....	28
<b>International Development</b> .....	11
<b>Peace</b> .....	7
<b>Politics</b> .....	6
<b>Science</b> .....	15
<b>Spirituality</b> .....	13
<b>Technology</b> .....	27
<b>Women's Movement Organizations</b> .....	30

## Features

<b>Calendar</b> .....	37
<b>Pacific Northwest Bioregion Report</b> .....	31
<b>Raindrops</b> .....	3
<b>Rush</b> .....	38
<b>Touch and Go</b> .....	29

## ERRATA

### Self-Reliant Cities

One of the mysteries of doing a maga-  
zine: pieces of information just dis-  
appear. In our review of David Morris's  
*Self-Reliant Cities*, we omitted the basic  
access information. The book was pub-  
lished by Sierra Club Books, 530 Bush  
Street, San Francisco, CA 94108, 1982,  
256 pages, \$19.95 cloth, \$8.96 paper.

### Is There a Pothole in Your Fu- ture?

In the article in the Feb/March RAIN,  
"Is There a Pothole in Your Future?",  
we inadvertently credited a list of  
municipal services being carried by  
neighborhood groups to the National  
Association of Neighborhoods. The list  
was actually derived from Milton Kot-  
ler's "Community Service Partnerships".  
Milton Kotler also pointed out that it  
was not clear that the Center for Re-  
sponsive Governance is providing tech-  
nical assistance and conducting re-

search on the subject. They may be  
reached at 1100 17th St., N.W., Ste.  
313, Washington, D.C. 20036, 202/223-  
2400.

### Extending the Rain Family

We like to think of RAIN readers as a  
unique group, a family of people with  
similar interests and perspectives. With-  
out compromising our views, we also need  
to enlarge our family. We believe that the  
best source for new readers is our current  
family of subscribers. On page 38 we  
have provided a small form for you to  
give us names and addresses of your  
friends who might be interested in sub-  
scribing to RAIN. We will send them a  
complimentary copy. If you know of li-  
braries, bookstores, food coops, etc. that  
might like to carry RAIN, let us know  
about them, too. Gracias.

## Wilson Clark — An Appreciation

As a one-man show, Wilson Clark lacked the credibility of Harvard Business School. Clark's *Energy for Survival* became a reference work rather than a bestseller like *Energy Future*. But Clark's opus, published in 1974, brought encyclopedic knowledge of energy technology to bear on energy policy issues with an even-handed authority that has illuminated everything written on energy before and since.

Clark's circle was small, perhaps because he courted collaborators and backers more than followers. He did a stint as a Wilson Fellow at the Smithsonian and a few years as Jerry Brown's energy pointman in California. But he

seemed happy to function as a consultant and advisor — a strong indication that he cared more about promoting his ideas than promoting himself.

People close to Clark said he listened to everybody's stories and invested himself in their re-telling. Had he lived, that singular mountain-moving talent would have put even the younger Wilson Clark to shame.

*Energy For Survival's* subtitle is *The Alternative to Extinction*. In 1974, that seemed brash. But there may be no better epitaph for a man of ideas.

Adapted from *Wilson Clark-An Appreciation*,  
Kathleen Courrier



Donna Pollach

# RAINDROPS

Winter into spring is traditionally a time of awakening and insight. This harmony carries over with this issue of RAIN — a time to reflect on the women's movement and its connections to science, mythology, technology, spirituality, peace, and social change. This collection of voices, more than 30 contributors, resonates with strength and questioning simultaneously. Working with the RAIN staff and contributors as "guest" editor for this issue seems ironic — I've never felt more at home.

Let's see, beginnings. . . an early winter morning conversation with Nancy Cospers started our thoughts churning on what a RAIN issue about women would look like, interweaving RAIN values and visions. Our exchange continued through the season as our envisioned ideas became

tangible. We talked with dozens of women, asking them to share with us the questions they were asking themselves as women, the writings that had stirred their minds and hearts, and the organizations that had influenced their lives. Each woman connected us with another (sometimes many others), the network stretching across the topography. Each voice brought new questions, stirring thoughts and possibilities and support, the process teaching and nurturing us at the same time. It is in this spirit that we share these connections with you.

—Mimi Maduro

Mimi Maduro, a member of RAIN's Board of Directors, writes software and hardware manuals that people can understand.

# THE ANATOMY OF FREEDOM

by Nancy Cosper

Years ago I read a book picturing the universe in 40 jumps, through a series of drawings, beginning with the picture of a child in a chair. Each of the following pictures is a magnification ten times of the previous drawing, and the series examines life from both micro and macrocosmic points of view.

To read Robin Morgan's new book is to take that same journey — a dizzying, exhilarating trip between the microcosmic self and the macrocosmic universe. *The Anatomy of Freedom: Feminism, Physics and Global Politics* postulates that like contemporary feminism, quantum physics has altered our perception of reality.

New theories in physics — whose edges blur with traditional Eastern mystical thought — tell us that the universe is a dynamic, continuously moving wave of light and energy, and that matter is only its manifestation in space and time. No longer can we call ourselves mere observers, says Morgan; "the New Physics requires utterly new thinking, demanding our participation as much or more than our observation."

Because we are part of a whole which is continuously moving, to participate in that movement — even as observers — shapes what it becomes. "Such a tool," Morgan adds, "just might be powerful enough to help us reimagine men and women, and to conceive of freedom."

Rather than seeing freedom as a goal, albeit one that might be attainable, Morgan tells us that freedom, too, is analogous to the New Physics as both a state of being and "a process, a continually fluid, dynamic, surprising movement."

In her search to conceive of freedom, Morgan indeed dissects its anatomy, using feminism, physics and global poli-

tics as her surgical tools to cut to its heart. She writes in coded messages, dialogues with her Dream Self, prose maps, charts, poems, imagery, allegory and metaphor. She asks as many questions as she gives answers, and her best answers turn back into questions. "Whatever gives you the idea that you're awake when you have the idea that you're awake?" asks her Dream Self of her Real Self.

Morgan draws from classic literature, math, science, politics and religion, stringing her ideas like the shimmering beads in her own analogy of Indra's Net, a concept from Mahayana Buddhism in which time and space are woven endlessly across the universe and where all things interpenetrate.

"Women tend to see the connections, to notice, to estimate gains and losses," Morgan tells us. In *Anatomy of Freedom*, Morgan herself deftly makes connections. She moves through what she calls the holographic nature of feminism — a range of interrelated issues including technology, economics, racism, the environment, marriage and family, power and control, aging and death, violence and pornography, and the complexities of sexuality.

Morgan explores all of these issues in light of her own very personal experiences, because to her not only is the personal political, but the political has become deeply personal. Yet at the same time Morgan realizes that there are no personal solutions. We are all in this together; freedom, therefore, is something we must all achieve together. Nonetheless, her Dream Self admonishes, "Just because there aren't personal solutions doesn't mean there can't be personal attempts, changes, affirmations."

Morgan returns time and again to the vision of feminism as central to imagining freedom:

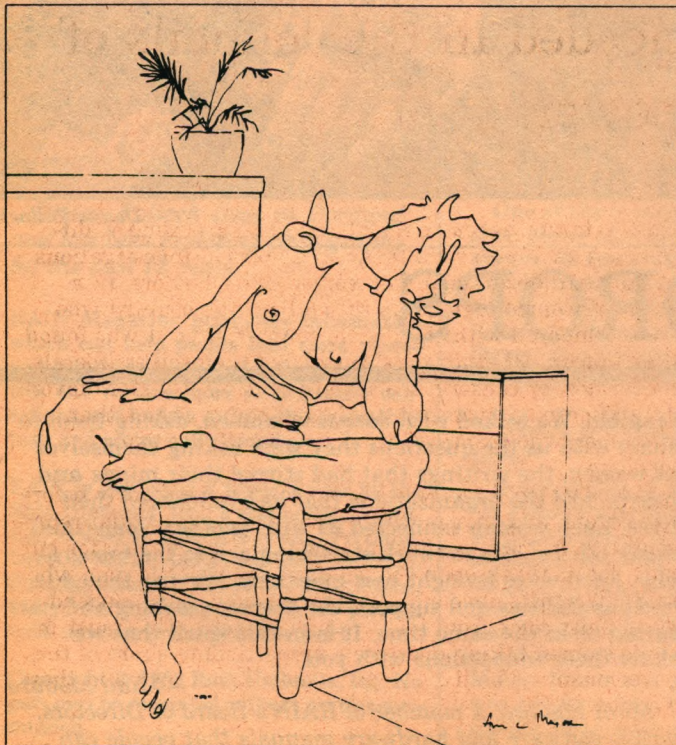
"...the real task of feminism is for each of us to understand her own human authenticity...feminism is inherent in Third World struggles...feminism is, at this moment and on this planet, the DNA/RNA call for survival and for the next step in evolution...feminism is the key to our survival and transformation..."

Like the proverbial blind men's elephant, feminism is all this and more.

"The time has come to give up dreaming of liberty and to make up one's mind to conceive of it," says Morgan quoting Simone Weil. Morgan has conceived of liberty, and she encourages us to do the same by consciously participating in our own evolution. But, if Morgan's book has any weakness, it lies in the fact that probably most of her readers are already participating in their own evolution to a greater or lesser degree. And unfortunately, they aren't always the ones who could benefit the most from hearing what she has to say.

Notwithstanding, *The Anatomy of Freedom* is an important book. As she has done for two decades, Morgan chronicles the Women's Movement from where she herself observes and participates. She does so for her own benefit and for ours: "to forget...experience can be to remain in its thrall forever; to remember may be the only way of surviving it, exorcising it..." Indeed, and to which I might add, evolving beyond it. □

*The Anatomy of Freedom: Feminism, Physics and Global Politics*, Robin Morgan, Anchor Press/Doubleday, 501 Franklin Ave., Garden City, NY 11530, \$16.95, 1982, 365 pp.



Annie Meyer: 1983 Women's Art Calendar

# THE NEED FOR WOMEN IN POWER

by Senator Margie Hendriksen  
District 20, Oregon

Women must assume their proportionate share of political power. At every level of government around the globe, governments are in the hands of and predominantly controlled by traditional male power elites. In many cases, these elites are not even representative of the full spectrum of the male population—young, poor, laboring, and minority men are underrepresented. In all cases, they are grossly underrepresentative of *any* sector of the female population. In 1983, the United States Senate was only 2 percent female and the House of Representatives was only 5 percent female. When one (particularly a female one) sees that 51 percent of the population is so underrepresented in positions of power, it is easy to figure out why women are faring so poorly in governmental priorities.

Women are not only scarce in the legislative branch, but also in the executive and judicial branches. Add to this the underrepresentation in top power positions in labor, commerce, academia, the church, etc., and you begin to fathom the problem. As one commentator put it, if you were to look at a picture of the top officials of the Vatican or the Politburo, they would appear much the same. It is no wonder that with such a narrow distribution of power to such a small and unrepresentative group, their world view, priorities, and problem-solving approaches have led us to a nuclear arms race, world-wide assault on the environment, and massive social and economic injustice in the allocation of resources.

This narrowly focused and unrepresentative male elite is epitomized by the Reagan administration, a power group which has not even attempted the pretense of trying to represent anything but the interest of wealthy, older, conservative, white males.

Fortunately around the world and in this country, women are beginning to assert themselves politically. Women voters in the United States in statistically significant numbers rejected Reagan more frequently than did their male counterparts. Polling showed that it was not merely Reagan's anti-women policies they were reacting to but also his aggressive military policies as well as his unresponsiveness to human needs. This difference in voting behavior has been denominated the "gender gap". The gender gap exists also in public office where women are not found in sufficient numbers to balance and to promote more humane and sane policies.

Although women have suffered from the restrictions of traditional role confines, our experience as nurturers is a positive attribute which is greatly needed in the councils of power. We must begin to place large numbers of women in power. Further, we must work to see that the women who represent us do indeed represent our values and are not females who, in order to get elected to office, accept the money and the value systems of the traditional male elite. The Right is well aware of the public's growing desire to see women in office and will put forth women who work against their own sex when put into power.

In 1983, women comprised 13 percent of states' legislators. As bad as this statistic is, it is a dramatic and rapid improvement in numbers and heralds better representation for the future. There were a number of fine progressive feminist women who sought federal offices in 1982. Unfortunately, most of these new candidates were not successful because of a shortage of campaign funds. But these losses

are only temporary set-backs. Many of these women will be back to fight another day and will win. The growing number of feminist women in local and state office will begin moving to higher office. New women will replace them. Through the ERA battles throughout the country to elect pro-ERA legislators and to defeat anti-women candidates, a great deal has been learned. Women are becoming a political force in the electorate and in public office. We have the potential to become a tremendous force for positive non-violent and dramatic change if we can effectively mobilize ourselves. Joining feminist organizations that have a political action component is very important.

The difference in attitudes between men and women in

Although some women have suffered the restrictions of traditional role confines, our experience as nurturers is a positive attribute which is greatly needed in the councils of power.

the electorate has been noted and, not surprisingly, differences have also been found in empirical investigations of the attitudes of men and women office holders. In a study of women legislators throughout the country who were compared with their male counterparts, it was found that women, whether they considered themselves liberals, moderates, or conservatives, were consistently more favorably disposed to women's needs and equity issues than were men who identified themselves with the same ideology.

Issues which directly affect women are constantly before legislators, and that is why women must have equal representation in making these decisions. To my sisters: for our part, let us think upon the words of Emma Goldman, who said, "Women's development, her freedom, her independence, must come from and through herself." This must include women taking over their proportionate share of the governments. The lives we save may be our own and those we love. □□

*Margie Hendriksen is an Oregon State Senator.*

## ACCESS: POLITICS

### **Women, Resistance & Revolution**

**Sheila Rowbotham**  
Random House, Inc.  
201 E. 50th St.  
New York, NY 10022  
\$2.45, 1973, 248 pp.

Sheila Rowbotham draws a map of sorts, winding her pathways along the Women's Movement from the thirteenth century through today, tying it together, inexorably, with the working-class' struggle.

She disclaims her work as "a proper history of feminism and revolution"; yet as a feminist and a Marxist, she "traces the fortunes" of women's liberation along with socialist revolution. The ideas and the facts are complex; but the touchstone throughout is that "the liberation of women necessitates the liberation of all human beings." She believes and carefully demonstrates that the roots of women's oppression lie within the isolation of women's consciousness.

She often illustrates female resistance through the writings of women like Mary Shelley, Mary Wollstonecraft, Mme. de Stael, George Sand, Flora Tristan, Margaret Fuller, and Emma Goldman. Wollstonecraft, in the *Vindication*, did speak for us all as she reflected, "I long for a little peace and independence. . . I am not fond of groveling."

Like other historians of the women's movement, Rowbotham sees that the key to freedom from domestic, economic, and sexual oppression throughout history has been the education of women, and that the methodical exclusion of women from society stems from being denied the means of supporting themselves. Equally, that as long as freedom is defined by men, and as long as we are defined by men—we are all incomplete. She implicates the inception of romanticism as the birth of the Barbie Doll consciousness, that the romantic woman cult of the eighteenth century was "a crop of egg-faced, ringleted, bonneted, fragile girls." They may have been more vulnerable, overall, than the skinny, long-legged cover-girls of today; but the dependence on male approval is still a strong motivator. Rowbotham views these Barbies as symbols of centuries of female subordination.

On one hand, she believes that feminism has been an influential imprint only as long as it has dovetailed with larger radical movements. On the other, she laments that the women's movement has often depended on the sympathies of sensitive, unintimidated men. "To take their conclusions as in any sense final would be to ignore this and to abstract them from their own space and time. Despite the depth of their historical analysis, the range of their knowl-

edge, and the extent of the commotion their writing has helped to create, Karl Marx and Frederick Engels were still a couple of bourgeois men in the nineteenth century." The real struggle has always rested on our own devices.

For myself, I was most taken with her assertion that we should stop sneering at other victims (men and other scoundrels) of a society and economic structure that is almost bigger than life itself. That while we should look out soundly for our own interests, the movement for peace and freedom depends on everyone's cooperation. For Rowbotham, "it is only when the feminist (or the Black or the working-class militant) understands, perceives, feels themselves as pitted against a total oppressive system rather than simply against the indignity which is done to them through subordination of their own kind, that a revolutionary political consciousness can start to grow."

I recommend this book to all women and men who participate in the struggle to find new ways of living and perhaps, most importantly, to those who do not.

—Camille Cole

*Camille Cole is a freelance writer and grant proposal consultant.*

### **Women's Reality**

**Anne Wilson Schaeff**  
Winston Press  
430 Oak Grove, Ste. 203  
Minneapolis, MN 55403  
\$6.95, 1982, 169 pp.

I've always suspected that women and men were grounded in very different cultures. I always had a nagging feeling that I was growing up in a foreign culture; one that didn't recognize my feelings, thoughts, perceptions, and values. This book was the first thing I have ever read that put all those feelings into words.

Anne Wilson Schaeff, a feminist therapist and theorist, contends that a female system co-exists with a white male system and several ethnic/racial systems. Her view is that the white male system is the dominant one in our society, permeating all of the processes and patterns of our lives. She likens the dominance of the white male system in our society to pollution.

*...when you are in the middle of pollution, you are usually unaware of it.*

*You eat it, sleep in it, work in it, and sooner or later start believing that that is just the way the air is...*

We are so accustomed to being a part of the white male system it is difficult to believe that there is any other way.

Yet women have always known that they had different perceptions about the

world. Wilson Schaeff describes the differences between the female system and white male system in their definitions of time, relationships, sexuality, and power. She is careful to emphasize that these systems are different, rather than right or wrong.

This book is not perfect, of course. At times it oversimplifies or introduces concepts that are not fully explored. But for me, it was an affirmation of something long believed—that, indeed, women and men are *culturally* different. Perhaps, in the acknowledgment of those differences, lies the potential for uncovering a new bit of truth about all of our lives.

—Linda Stout

*Linda Stout, a social worker living in Boise, hopes to survive Reaganism.*

### **Beyond the Fragments: Feminism and the Making of Socialism**

**Sheila Rowbotham, Lynne Segal, and Hilary Wainwright**  
Alyon Publications, Inc.  
P.O. Box 2783  
Boston, MA 02208  
\$6.95, 1981, 270 pp.

*Beyond the Fragments* explores the meaning of feminism and its relationship to the Left from the perspective of three British socialist feminists. Although the book describes the British reality, we can learn many things pertinent to this country. The issue of not being taken seriously as feminists by some male Leftists is still a problem. Many women, even politically conscious ones, still have self confidence problems, which according to Rowbotham is related to our powerlessness. On the other hand, some things have changed — activists have begun linking the issues of sexism, racism, and imperialism, and have begun working with the trade union movement.

The book is divided into three long essays — Sheila Rowbotham's "The Women's Movement and Organizing for Socialism"; Lynne Segal's "A Local Experience"; and Hilary Wainwright's "Moving Beyond the Fragments." Rowbotham's essay is the longest and the most interesting. She expands on some of the ideas developed in her book *Woman's Consciousness, Man's World*, blending keen political insight with personal experience.

The authors assert that socialists have much to learn from feminists. Many women have shied away from participating in politics because they haven't felt welcome in the male-dominated groups, where they feel they may be "used" by "cold socialists" who don't give people recognition for their individual efforts. Further, many women are put off by intellectual an-

alysis and its resulting personal distancing. The women's movement, emphasizing sisterhood, collectivity and personal experience, has given many women the confidence to change their lives, to begin to overcome the passivity, self-hatred, and lack of trust engendered by a capitalist system. Rowbotham believes the development of process to be one of feminism's biggest contributions. On the other hand, the women's movement has sometimes been too subjective, lacking economic theory. The solution is to join both movements together into socialist feminism.

As a North American socialist feminist, I appreciated hearing about some of the political problems I have in common with my British sisters. I also have been pleased to see how, over the years, things have changed in the Left — the mixed political groups I've joined have all been affected by feminism, promoting female leadership, emphasizing the importance of meeting process as well as content, and incorporating personal sharing into meetings and conferences. The women's movement gave me the courage to change, to develop my skills, and to get involved with mixed groups.

Working with political groups, I've experienced my share of frustrations, but I've also been able to develop my intellectual and communications skills, get support and recognition, and feel a part of history as we struggle through difficult economic and political times. Making changes — personal, social, political — isn't easy, but we can't do it alone.

—Natasha Beck

*Natasha Beck is a Portland socialist feminist activist who has done clerical work and currently teaches women's studies.*



## ACCESS: PEACE

**Report from Beirut: Summer of '82**  
22 minute videotape (1/2 or 3/4) or  
16mm film (color)

**Saul Landau, James Abourezk**  
American-Arab Anti Discrimination  
Committee

1731 Connecticut Ave. N.W., Ste.  
400

Washington, D.C. 20009

No charge for rental; no purchase available

Beirut is bombed and burning. Amal Shamma's face is thin and pulled tight, and the tension and sadness in her eyes is vivid. Berbir hospital where she is a doctor is being continually shelled by Israeli aircraft causing the war injured to be reinjured.

Dr. Amal Shamma is an American citizen working under dire conditions—hospitals under constant shelling and medical supplies cut off because the city is surrounded. She fears that the next loud explosion will be right where she has worked hours to save someone's life.

"Report From Beirut" documents the effects of this terror on the civilian population of the city. Families are separated, wandering through the rubble to find each other. The only water available is from a muddy bomb hole. Children sing loudly to drown out the sound of bombs. More than 18,000 civilians die; more than 30,000 are wounded. The impact of war becomes very real to those of us who have not known war.

The purpose of this film is world peace. Anyone who shares this goal

would do well to see this film and show it to others. Dr. Amal Shamma raises some penetrating questions about Reagan's power to stop the war, and the role of the U.S. in the Middle East. It is inspiring to see a strong woman at the heart of this film, going to the heart of an issue, a war—to work for peace.

—Linda Sawaya

*Linda Sawaya, a Lebanese-American and former RAIN co-editor and graphic designer, is a graphic artist at Oregon Public Broadcasting.*

**Reweaving the Web of Life:**  
**Feminism and Nonviolence**

**Pam McAllister, Editor**  
New Society Publishers  
4722 Baltimore Ave.  
Philadelphia, PA 19143  
\$8.95, 1982, 440 pp.

At "seven minutes to midnight" women are coming together with the rage of feminism and the compassion of nonviolence to mend and reweave a web of peace and of life. This collection of poems, essays, and songs by more than fifty contributors has taken the feminist community by storm, and is being reviewed by journals across the country. It challenges feminists to reclaim nonviolence in the face of nuclear war and sexual assault; it urges pacifists to struggle for the empowerment of women as the essential step toward rebuilding our world which has been so ravaged by patriarchy. In our attempt to understand the complexities of violence

and oppression in our society, we discover that our nonviolent feminist resources provide a radically effective means for change.

—Penny Fearon

*Penny Fearon is a former RAIN intern who is currently working with the U.S. Geological Survey.*

**Aint No Where We Can Run: A Handbook for Women on the Nuclear Mentality**

**Susan Koen and Nina Swaim**  
WAND of the Upper Valley  
Box 421  
Norwich, VT 05055  
\$3.50, 1980, 74 pp.

This book provides an excellent overview of the health, economic, social, and political effects of nuclear technologies on women. A strong feminist analysis coupled with well-documented technical information offers a personal and scientific understanding of nuclear weapons production and nuclear power plants. The authors explore the lives, feelings, and experiences of numerous women who are struggling against nuclear development. Local and national action suggestions and organizing strategies emphasize the wide range of women's activity on this issue. The book concludes with a list of groups and organizations involved in opposing nuclear technologies, as well as resource lists of relevant books and periodicals.

—Ada Sanchez



# SEXISM AND MILITARISM: Some Connections

by Ada Sanchez

As a brown woman, born and raised in the U.S., I find connections between racism, sexism, and militarism to be blatantly clear. The threat inherent in nuclear weapons, as with racism and sexism, results from a mentality referred to by Martin Luther King Jr. as a perversion of the "drum major instinct" — twisting natural desires for recognition into quests for superiority and domination. On a personal level, the obsession to possess leads to jealousy, servitude, and sadism. Politically and socially it leads to colonialism, torture, and war.

Wife and child beating are on the rise in the U.S., exacerbated by poverty and unemployment. Studies have shown numbers of beatings rising proportionately to increases in unemployment. One conservative estimate puts the number of badly-battered wives nationwide at well over a million. Other studies reveal that unemployment is directly related to high military spending, with women and people of color suffering the most. The resultant widespread cuts in education, health-care, nutrition, housing, crisis centers, aid for abortions, and inexpensive mass transit make the lives of women and poor people even more unbearable.

Is it coincidence that along with the escalating rape of the Earth for the mineral resources needed to maintain high technology energy and weapons systems, so too the rape of women is on the rise? According to the FBI, incidences of rape are jumping more quickly than the rate of any other federal crime.

Media, controlled largely by white males, sometimes glamorizes the pain of women just as it sometimes glamorizes the deadly effects that the production and use of weapons create. Violent "erotica" often don't feature sex, only domination and humiliation, similar to the fascinations necessary for sustaining a militaristic society. Mass marketing this imagery encourages aggression and brutality as acceptable ways to deal with "subordinates." One of the annual Arms Bazaars held in Washington, D.C., included a full-size mock blow-up poster of a woman in a bikini posing next to a cruise missile.

That poster all too clearly depicts the plight and role of women in America today. A woman's body is used to sell the newest generation of nuclear weapons, yet that woman's body is the same one that continues to suffer the most from radiation effects.

According to the Committee on the Biological Effects of Ionizing Radiation of the National Academy of Sciences, twice as many women develop cancer as men when one million people are exposed to one rad of radiation. When exposed to continuous doses of low-level ionizing radiation — such as that emitted from uranium mines and mills, nuclear power plants, nuclear weapons production facilities, waste dumps or transport routes, five times as many women develop cancer as do men.

The woman in the cruise missile poster is being used to sell weapons that will guarantee large profits for corporations that make nuclear weapons. Yet the cruel irony is that she is the one who suffers the most economically in a military-industrial culture. Military related civilian jobs — construction, engineering, physics, aerospace dynamics — are held predominantly by men. The capital-intensive,

rather than labor-intensive, nature of weapons building hurts the economy by causing high unemployment and takes money away from vitally-needed social programs.

Legislation that keeps women and people of color out of decision-making roles in industry, government, and religious institutions is as much a priority for sustaining the global military-industrial complex as the building of weapons and foreign bases. The latest versions of such legislative efforts are the Family Protection Act which calls for prohibiting federal funds for schools that teach children about alternatives to traditional sex roles; and the Human Life Amendment, aimed at charging women who have abortions with murder.

The advocates of authoritarian policies understand the interrelationship of the personal and the political all too clearly. To maintain their privileged status in society, men must maintain that dominant status in personal relationships as well.

Are women and men who work politically for drastic changes as dedicated to working on the power dynamics that make up our everyday lives? Too often it seems that the way we handle our personal relationships reflects a deeply rooted internalization of patriarchal oppression. An unconscious use of the same manipulative tactics that we abhor in societal and political arenas is oftentimes accepted in intimate relations and within ourselves.

In contrast to political changes that require a large collective effort, the realm of personal relationships is one of the few spheres in which we have free-will choice and the clear ability to follow through. The day-to-day reality of shaping relationships that are non-authoritarian, cooperative, and tender provides a milieu in which to prepare, experiment, and learn about creating the small changes that will ready us for the larger successes. Openness in relationships and efforts to confront our contradictions and our possibilities are ongoing processes; relearning takes time and practice. To believe that macrocosmic political-economic changes will occur without simultaneously changing ourselves is to ensure that the transformations will never come. The inner skeleton gives shape to the body just as our inner worlds will give shape to a radically different future.

Overcoming the existent power structure means living cooperation. Intimate relationships, group living situations, and political organizations are all places in which we can make progress.

Cooperatively, we can continue to pool our skills, our resources, and our insights to actualize the vision of a just, loving, equitable society. Food and housing co-ops have given us reason for hope, as have sexual politics groups, where women and men can explore some of the same issues that used to be almost solely discussed in women's groups. Those are steps forward. But we need to develop stronger political, social and economic infrastructures which encourage working together on related issues, while looking for the common denominators that will strengthen the political causes we have individually chosen to pursue.□□

*Ada Sanchez is a writer and speaker on military issues.*

# DEVELOPMENT FOR WHOM? WOMEN'S UNRECOGNIZED ROLE

by Rosalind Grigsby Riker

In the rural areas of the Third World live the poorest of the poor, the forgotten resource — women. Women, who provide much of the food, clothing and shelter for their families, are also responsible for potable water, primary health care, and fuel. Yet their work, categorized as only "household labor," goes unrecognized in development planning. Despite the fact that rural women in developing countries account for over 50 percent of food production, and that in Africa as well as in the Himalayan region 60 to 80 percent of all agricultural work is done by women, development plans do not reflect their prominent role.

For the past thirty years, development programs have been designed primarily by white, male experts in western countries for situations and societies distantly removed from them. Traditional sex roles and cultural differences have been overlooked. Because farmers and household heads are generally men in the United States and Europe (or at least that is the assumption, though many women hold these positions), agricultural programs for the Third World have been designed for men.

Development programs intended to increase food production have had a disproportionate effect on women. In traditional agricultural systems women tended to participate more than in the "modern" agricultural practices recently introduced in Third World countries. Yet the impact of the new agricultural programs is very complex. In some cases, women are relieved of their agricultural work, while in other situations women must carry a heavier workload.

When new technologies are introduced in work traditionally done by women (agricultural or non-agricultural), men invariably take control of the technology and displace women. This displacement has been seen in rice milling, weaving, pottery making, and other hand crafts. Consequently, women may lose their primary source of income for the family and are forced to labor longer hours in lower paid jobs to try to make up their lost earnings.

New technologies can also directly increase women's labor. For instance, the introduction of a tractor to a community may create disproportionate workloads. The tractor enables the men, who traditionally prepare the land for planting, to plow twice as much land in less time. However, the women, who do all the weeding, watering, transplanting, and maintenance, are now required to spend over 16 hours laboring in the fields each day during peak harvest times. Such increased workloads also occur when development programs encourage the cultivation of cash crops. Women must do much of the work needed for the commercial crops as well as cultivate the home garden for family consumption. This agricultural development tends to displace women from traditional income-generating activities, yet increase their work load on the small farm.

Because women are the focal point of household life, when their workloads are increased, there are repercussions for husbands and children. Family stability, nutrition, children's health and education, and fertility are all affected by women's status. The new demands on women's time have had an adverse impact on family nutrition as women substitute quicker but often less nutritious cooking practices for traditional preparation methods. Women may also select less labor intensive food crops, such as manioc



or other tubers, which have reduced nutritious quality. In addition to social pressures regarding family size, fertility may be increased by women's work loads. During the peak labor season, many women with infants are forced to stop breast feeding, which endangers the infant's health. Ending lactation hastens ovulation, and within a few months the woman becomes fertile and may conceive again. Then, next year during the peak labor period, the woman would be in an advanced stage of pregnancy, threatening her own health and the health of the unborn child. Infant mortality, a sensitive indicator of societal well-being, may increase under such circumstances. Children's health, directly related to maternal health and family nutrition, may suffer likewise. Under such stress, family stability may be undermined.

Recognizing some of the problems caused by development programs that have not considered the cultural specifics and women's status, the United Nations declared 1975-1985 the Decade for Women. The flurry of discussion and literature on women in the past eight years has enlightened us to their plight and increased development planners' awareness of the complexity of their work. The result of this has been a focus on "women's employment" programs. Yet these, too, disrupt women's lives, assuming that the "proper role" for women is in the cash economy. Though the intention of improving women's skills seems appropriate, that can only be decided in the specific context of the community.

Development efforts must focus on small-scale, self-reliant programs where the Third World people who experience the outcome of the program also participate in its design and implementation. The constraints on women must be considered, including legal rights of ownership, inheritance, divorce, and political participation, as well as social status, fertility control, and education. When the people who are affected by a decision have a voice in the decision-making, the negative impacts of projects may be lessened by their own insight. Women, who know their own needs and hardships, must be recognized for the vital work they do and must be incorporated into the process of meeting their needs. Isn't it time we understood the real value of women, their work, and their wisdom? □

*Rosalind Grigsby Riker is a Research Associate with The Institute of Sustainability in Davis, California. She spent last year in rural villages of Sri Lanka doing research on the impact of "green revolution" agricultural technologies on women.*

# APROVECHO: Approaching a Feminist Vision

by Mary Vogel

*The Aprovecho Institute in Oregon has given me a needed base from which to start connecting my global feminist consciousness with positive practical action to overcome the paralysis of analysis that had beset me.*

Margaret Thomas, one of Aprovecho's co-founders, came up with the name Aprovecho, Spanish for "I make the best use of", after working in Guatemala. Guatemala is where Margaret, along with a Welsh architect, Ianto Evans, another co-founder, first developed the vision for an institute to demonstrate alternatives to consumerism, act as a clearinghouse for information on less exploitive technologies, and do technical research and dissemination. In August 1978, Oregon was chosen as the home for Aprovecho "because it seemed that people were more open to our visions than anywhere else we had been. There seemed to be not only tolerance of but support for innovative social experiments."

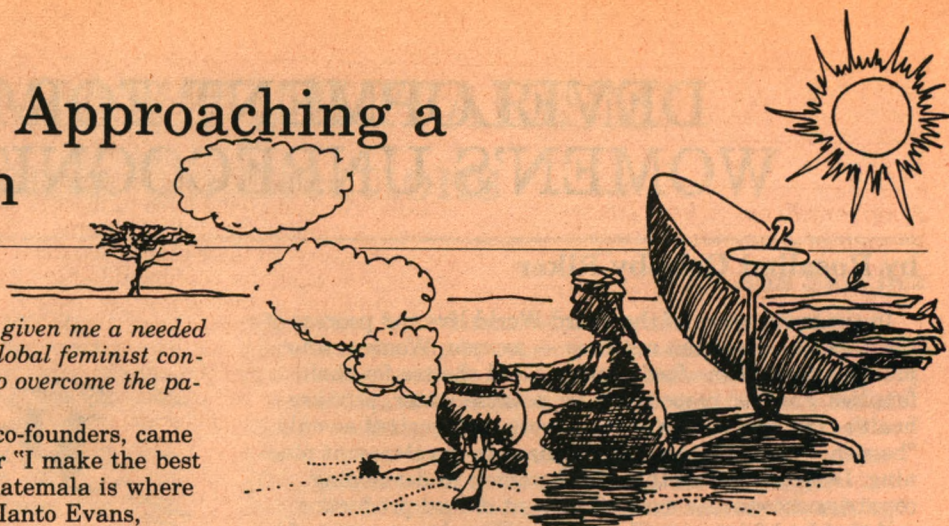
Just as the feminist movement helps women take pride in skills and qualities formerly devalued by our culture, so Aprovecho helps Third World people take pride in their indigenous cultures that may have been devalued or cast aside. Aprovecho seeks out indigenous technologies in poor countries for adaptation in rich countries, since people in poor countries have devised better strategies for dealing with the resource shortages we will all increasingly experience. Raising and experimenting with bamboo is one example. Bamboo is used throughout the developing world for everything from buildings to baskets to haubles. It's easy to propagate, quick to grow, and incredibly sturdy. Aprovecho is growing it at its Rural Center to develop and demonstrate its practical uses in the Pacific Northwest.

Aprovecho is best known for developing the Lorena system of fuel-conserving said/clay stoves, now used in a dozen countries. Members see improved stove technology as one element of the comprehensive planning needed to address the deforestation and desertification so rapidly spreading in Africa, Asia, and Latin America.

*I asked Elisabeth Gern, an Aprovecho member with experience working in Africa, how Aprovecho approaches the problem of stove development in poor countries and how this approach might be different than other development agencies in its impact on women.*

**Elisabeth:** First of all, we always work in male/female teams so we can reach both women and men. Then we always try to find good allies or counterparts within the culture. And we take the approach that as much as people need to economize on firewood, they also have a need to be respected as intelligent individuals capable of inventively solving their own problems. Whenever possible, we involve the village people in a process of solving the problems they see in their own lives. We can offer technical advice, systems for doing things that we bring from other places, but we see ourselves mainly as mail-carriers, never as overseers.

We don't expect to know more about their problems than they do. We might start by getting together with people informally to ask about firewood. Is it hard to get? How much does it cost? How long does it take to collect? We might talk about why heat radiation is lost on all sides of an open fire, then ask about wind blowing the heat away.



How can you stop the heat from escaping? In building stoves we seek their ideas, only helping them to learn the principles rather than giving rigid instructions. Stove technology cannot be successfully introduced without active participation of the village women. This way, not only does it accurately reflect their subtlest needs, but their sense of involvement in the project is essential to its success.

This model for stove development and dissemination of information is considerably different from the standard approach. We discovered that much of the guarded non-enthusiasm we were greeted with from officials in the first stages of our Senegal project was a result of attempts to pour in "appropriate technology" imported wholesale from other places.

A case in point is that of the solar cookers developed in India for totally different cooking conditions. These solar cookers were introduced to Senegalese villages without adequately involving the local people. They have not been accepted because they lengthen cooking time from around an hour to four or five hours.

We encourage local pride in locally-developed stoves and in a distribution mechanism to make innovations of one village available to others through an information exchange. Our model for stove development involves the user in an unending cycle of invention—testing—improvement—dissemination—testing—feedback—invention.

*I asked Elisabeth what impact Aprovecho's stove work tends to have on women's lives.*

**Elisabeth:** Women spend less time gathering wood or spend less money on fuel, so they have more time to learn other skills or more money to spend meeting other needs for themselves and their families. They have less smoke in the kitchen, lessening respiratory problems associated with smoke inhalation consequently lessening damage to their eyesight. Safety is improved since there are fewer burns from open flames and less chance of children falling into the fire or boiling pots. Cooking is more convenient since stoves can be made to any height and can have work space on the surface. If fewer trees are chopped down, this improves the climate and hydrology and decreases soil erosion. And stoves allow time for reforestation projects to gain a foothold and help to change the balance toward extending forested areas once again.□

—Mary Vogel

Aprovecho Institute, 442 Munroe St., Eugene, OR 97402, 503/683-APRO.

*Mary Vogel is a member of Aprovecho's Native American Project and Rural Center Management Board where she deals with a broad range of issues in natural resource and land use planning and community development.*

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## ACCESS: INTERNATIONAL DEVELOPMENT

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### *Fragment From A Lost Diary: Women of Asia, Africa, and Latin America*

Naomi Katz and Nancy Milton,  
Editors  
Beacon Press  
25 Beacon St.  
Boston, MA 02108  
\$4.95, 1973, 318 pp.

Western feminist scholars have filled many of the gaps in our knowledge of our ancestral sisters' history. However, a similar body of information about women of the Third World is not readily available to us. Where recorded history neglects to document the experiences and significance of women in a culture or society, we must rely on literature to expand our understanding. *Fragment From a Lost Diary* is an anthology of stories about the lives of Asian, African, and Latin American women by Third World women and men. Although many of the authors were educated in Western universities and belong to an intellectual class, they write with the cultural and social perceptions of insiders.

The first part of the anthology focuses on stories about women who suffer a cultural oppression over which they

have no control, save escape by suicide or exile. The underlying force in these stories, as in most Third World literature, is poverty. In these conditions, the value of the daughter is reduced to her bride price; the mother to provide wage-earning offspring. These tragic stories are particularly poignant because they are written about and through the eyes of girls who are so young that they are innocent of sexual double standards, the social effects of poverty, and women's expected roles.

The second part of the collection deals with the transition in women's lives that arises from changing social values, and the external forces of war and colonization.

The final section of stories is concerned with women's lives outside the traditional private realm. For these women of colonized Africa and Latin America, marital and familial oppression is incidental to the larger social forces of racism and class prejudice.

*Fragment From a Lost Diary* offers us the opportunity to define our feminism from an international, intercultural perspective, helping us understand the struggles of all women—a goal to strive toward.

—Penny Fearon

### *Development as if Women Mattered: An Annotated Bibliography With a Third World Focus*

May Rihani  
Overseas Development Council  
1717 Massachusetts Ave. NW  
Washington, DC 20036  
\$3.00, 1978

This is an excellent reference book for finding the key writers and thinkers about the issues of women and development. *Development As If Women Mattered* includes 287 studies with clear, concise summaries. Also, for articles that are not readily accessible, addresses are included for ordering by mail. The studies are collected under subject headings (such as agriculture, industry, health) as well as geographical categories. For the people who are new to the ideas of women in development, this is an invaluable guide for exploring areas of interest. For those who are already familiar with the literature in specific areas, this handbook can easily fill in the gaps.

—Rosalind Grigsby Riker

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## WOMEN AND SPIRITUALITY

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By Margaret McCrea

Questions, reservations, and ruminations about women's spirituality reveled within me. I had thought much about the subject, struggling to formulate my thoughts into words. With a sense of quest and thirst, I pursued the path of exploring the thinking and developments about women's spirituality. My search continued through several dozen books and periodicals. The highlights of this journey, I would like to share with you.

Naomi Goldenberg's *The Changing of the Gods: Feminism and the End of Traditional Religions* is a good place to start reading. This book does an excellent job, in a few words and pages, of stating the position of the women's spirituality movement in Western tradition as it now stands. Beginning with the statement that God the Father-Lawgiver is dead, dead, dead, Goldenberg goes on to say that, as when real fathers die, we lose a sense of an outer authority governing our lives and we are called upon to look inwards for spiritual guidance and understanding, which we gain from our own inner and outer experiences. The strength of this book is twofold: it is written in clear language — you won't find words like "ontological" and "patristic" here — and it introduces the reader to all the major current thinkers on women and religion — Carol Christ, Judith Plaskow, Rosemary Radford Ruether, Rita

M. Gross, and many others. After reading this book I returned the others I had borrowed to the library, as I felt that they were peripheral or that I/we had gone beyond them. The weakness of this book is that Goldenberg declares that not only is god dead, but so is religion. If religion has served the place of psychology for thousands of years, she reasons, then psychology will in the future serve the place of religion. That's all very well for a Jungian psychologist to say, and she's right as long as she's talking about personal exploration, but it leaves me feeling a little cold. Where do we put our need for celebration, for worship and ritual into this scheme? Somehow personal dream-analysis wouldn't seem to be the impulse that leads to the building of a cathedral to Notre Dame, or that would cause 600 people to stand up and sing an Hallelujah Chorus.

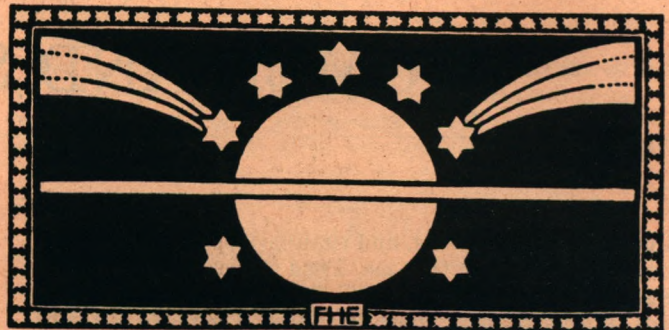
From Goldenberg I went to *Womanspirit Rising*, edited by Carol Christ and Judith Plaskow. This book is the basic textbook for women's philosophy/theology containing all the "must-read" essays that are the foundation of women's thinking in these areas. It is written almost entirely by women theologians. In spite of—or because of—that fact, these articles are courageous and radical. Stating that we have nothing to lose by abandoning men's religion and everything to gain by exploring our own, these women have

the courage to scrap men's definitions of the Divine, of grace, sin, and redemption, of religion, worship and mystics, and to explore what these words and concepts are for women, based on women's experiences. All the issues are hauled out without reservation and examined upside down and backwards. I often ran into my own half-expressed thoughts stated boldly—for example, that the Holy Spirit of the Christian Trinity is the deliberately forgotten Motherspirit of pre-patriarchal days. None of these writers is out to prove the rightness of her analysis and the wrongness of all others. The commonality is that we are in the process of exploration. The essays are mostly written with the assumption that although male definitions have nothing in them for women, the spirit of religions that we have known have at their philosophical core and in their traditions, histories, and to some extent in their practices, something of value for women. After all, women have often been the carriers of the spirit and values of the culture. A Jewish saying goes, "One learns Talmud from one's grandfather, but s/he learns Torah from her grandmother." None of these articles rejects the religious impulse itself, and in fact they reinforce our need to celebrate and be joyous. They explore new meanings for new rituals and try to describe what a womanspirit religion would be like. Unfortunately, the reader may sense some uncertainty here. The authors describe some of the qualities of a womanspirit religion as communal and non-hierarchical, based on our own experiences, stressing the unity of being and spirit, and allowing for constant change and growth within the individual and the community. None of the writers of these essays seems to have a very clear sense of what women's religion has been in actual historical practice — not a surprising situation within a patriarchy. They know we need to draw on it; they just don't know what it is.

For that I would recommend turning to a book called *Unspoken Worlds: Women's Religious Lives in Non-Western Cultures* for shedding of light upon our own culture — not Western culture but women's culture. For here is a description of women's religious lives as practiced for thousands of years in men's worlds. These individual case studies are written almost entirely by anthropologists. Through these essays we meet women from India, Africa, the Carribean, Nepal, Korea, Japan; we meet Hindus, Moslems, Buddhists, and North American Indians. It's a fascinating book full of vibrant, alive, courageous, intelligent women who are all faced with the dilemma of living with men's culture in both their everyday and their spiritual lives. This book states clearly that in order to understand women's religion, one needs to explore women's everyday lives and rituals, not the textbook religion or even what the textbook religion has to say about women. The pattern emerges: women's religion is focused around giving birth, nurturing, burying the dead, protecting family and crops and animals, holding family and community together. It is everything *Womanspirit Rising* said it would be and more — it is unconsciously communal, it celebrates the rhythms of birth and death and rebirth, it is passed orally from grandmothers to granddaughters. None of the women's rituals described here are to be found in a description of the major religion they are in theory practicing. It seems that women have kept on practicing their own ancient rituals while the men's religion has grown up around them. And excluded them. Interestingly, it is the older women who are the keepers of women's religious rituals, the ones who practice them and who teach the initiates. Not coincidentally, older women are the least valued members of a male-centered culture. Clearly their religious practices have played an important psychological role for women throughout the world. I came away worried that as women gain more

strength and visibility in our culture, that we will lose the impulse that kept us alive and strong for so many thousands of years. It is the experiences of oppression and the sense of nothingness that has caused women to have to hold onto the faith in order to nourish their families and keep themselves and their community alive. I wasn't sure I wanted all of our secrets rooted out and explored and pasted up on paper.

The final book in the journey that I recommend is *Diving Deep and Surfacing: Women Writers on Spiritual Quest*. This book explores the writings of Kate Chopin in *The Awakening*, Margaret Atwood in *Surfacing*, Doris Lessing in *The Four-Gated City*, Adrienne Rich in *Diving Into the Wreck* and *Dream of a Common Language*, and Ntozake Shange in *for colored girls who have considered suicide/when the rainbow is enuf*. I felt worshipful while reading this book. The others I underlined freely and used as textbooks, as motherlodes of information. This I read more as a sacred text, for these are the voices of our prophets and teachers, our visionaries and our mystics. These are the poets who tell us our story, of women awakened to their nothingness, who go on to affirm themselves, define their world, and insist on our right to live. This book made me realize just how necessary it is that women have the courage and the faith to use our power or the power to use our faith — to demand that the world change in our image. If we don't, the men's deathmachine will kill us all. If we are confused about "how to put together our spirituality and our politics," these books will confirm for us that our spirituality is a political act — it is the fundamental political act. Our spirituality is the grounding that will give us the courage to act, to find each other, to create the commonwealth here and now, to end the patriarchal war machine for once and for all. It's a task we must do; we have no choice. □



- Goldenberg, Naomi, *The Changing of the Gods: Feminism and the End of Traditional Religions*, Beacon Press, Boston, \$9.95, 1979.
- Christ and Plaskow, Ed., *Womanspirit Rising: A Feminist Reader in Religion*, Harper and Row, San Francisco, \$6.95, 1979, 287 pps.
- Falk and Gross, ed., *Unspoken Worlds: Women's Religious Lives in Non-Western Cultures*, Harper and Row, San Francisco, \$5.95, 1980, 291 pp.
- Christ, Carol P., *Diving Deep and Surfacing: Women Writers on Spiritual Quest*, Beacon Press, Boston, \$6.25, 1980, 150 pp.

Margaret McCrea, former owner of Garden Variety Produce, is currently a freelance political activist.

## ACCESS: SPIRITUALITY

### **Mother Wit: A Feminist Guide to Psychic Development**

Diane Mariechild  
The Crossing Press  
Trumansburg, NY 14886  
\$6.95, 1981, 154 pp.

This guide contains a series of practical exercises to aid in bringing forth woman's natural psychic and healing abilities. It is a primer for those who are brave enough to delve into their innermost being.

The exercises have evolved out of Diane Mariechild's experiences, and have been influenced by womancraft, witchcraft, mind games, the Seth books and hatha and kundalini yoga. Herein are her beliefs, those things that have proven true for her. As she says, "These beliefs are not absolute: they grow and change as I grow and change. Truth is not absolute or permanent."

In a culture that is almost wholly outer-directed and goal-oriented, women have received guidance only in doing and not in being. There exists little tradition for the truly mystical and religious experience.

To overcome this neglect in woman's education she details many exercises, affirmations, meditations and other psychic tools for healing, growth, and spiritual awareness. Deep relaxation is essential to receiving psychic and spiritual information and energy. It is necessary to clear the body of tension before embarking upon this journey which has no end.

She encourages women to make their egos more flexible, thus expanding their awareness to include all levels of existence. She expounds, "Spirituality isn't an escape from the world, but an expansion of the world. It enriches and sustains us—it does not limit or deny us." Mariechild also encourages the development of psychic awareness in children. In her chapter "Psychic Skills For Children" she gives different exercises to start a child on the road to inner awareness.

*Mother Wit* proclaims, "It is time to reclaim the spiritual quality of ourselves and re-establish our deep and loving connection with the universe." She stresses the fact we have within ourselves the power to transcend, to transform ourselves. Through this understanding of our inner lives we become centered, more whole and from this clear inner space, we can assume more control over our outer reality.

While these concepts will not be accepted by every woman, for those who are ready for this challenge it will prove to be an exciting, enlightening experience.

—Patricia Hogan

*Pat Hogan lives in Ridgefield, Washington. She views the individual as being responsible for her/his development.*

***Dreaming the Dark: Magic, Sex, and Politics***  
Starhawk  
Harper & Row, Publishers, Inc.  
10 E. 53rd St.  
New York, NY 10022  
\$7.25, 1982, 242 pp.

Do you believe in magic? Would you like to tap deep inner strengths, develop rituals for group bonding, build close communities with creative political goals? In *Dreaming the Dark*, Starhawk shows us how we can begin individually and collectively to shape our society based on "power-from-within."

Starhawk is a witch and a psychotherapist, a writer, teacher, political activist, nonviolence trainer, and a founding member of Reclaiming a center for feminist spirituality and counseling in San Francisco. Her magic is not the magic of control over nature. Quite the opposite, her magic invokes power-from-within, power to transform ourselves, our community, our culture. In the spirit of Native Americans and tribal peoples, Starhawk teaches us that the transformative power comes through an awareness of the immanence of all things, "an awareness of the world and everything in it as alive, dynamic, interdependent, interacting, and infused with moving energies: a living being, a weaving dance."

Throughout the book Starhawk weaves the personal and the political. As an example of a "magicopolitical event," she takes us through her participation in the blockade of the Diablo Canyon Nuclear Power Plant, a blockade which succeeded "not by physically stopping the workers, but by changing the reality, the consciousness of the society in which the plant exists." To show us how magic works in "reclaiming personal power," she super-claims personal power, she super-which succeeds in reintegrating her warring parts. In "cycles of group transformation," she shows us the structure and dynamics of her own circle "coven," a microcosm of constantly transforming, healing communities within society.

This witchcraft won't turn you into a toad or make you a prince. But reading this book can be a transformative process, invoking our power-from-within and our shared vision of hope for the future.

—Robin Havenick

*Robin Havenick is a feminist and a writer who lives in Northwest Portland.*

### **The Politics of Women's Spirituality**

Charlene Spretnak, Editor  
Anchor Books, Doubleday & Company  
501 Franklin Avenue  
Garden City, NY 11530  
\$12.95, 1982, 590 pp.

Two things about this book make it indispensable to any student of patriarchy — the beginning of the book and its ending. In the beginning (to coin a phrase), Spretnak gives a lengthy, but not too academic, accounting of some of the major threads of feminist thought and practice in regards to woman-centered spiritual consciousness. In the end, she argues with a Marxist-feminist, Sally R. Binford, about the necessity for such a study. Each of the women make a series of excellent points and I wish they would call it a draw, shake hands, and share a cup of tea or something.

Binford argues that religion of whatever ilk is still the opiate of the people, that the real need is for economic equality. Spretnak responds with the argument that "feminist spirituality contributes to a truly comprehensive analysis because it acknowledges the politics of the psyche in patriarchal oppression." This is the "my world view is bigger than your world view" wrangling that always reminds me of neighborhood disputes that would begin with "my daddy is bigger than your daddy."

Between these dialogues, the body of the book is a collection of poems, essays and critiques which describe "the what and why of women's spirituality." If you have read nothing about goddesses or witches or magic that made you feel good to be alive, read this book. What emerges is not only "sisterhood as cosmic covenant," but a model to take us beyond the constraints of patriarchal society, and a way of dealing with issues while affirming values imbued with the sacredness of life.

If we really intend to save our planet from ourselves, we might pause for a few hours to at least wonder about a time when there was harmony and peace, and what made it come and go. What have we got to lose?

—Carlotta Collette

*Carlotta Collette is a former editor of RAIN, who is currently a freelance writer and consultant.*

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***Descent to the Goddess, A Way of Initiation for Women***

**Sylvia Brinton Perera**

**Inner City Books**

**Box 1272, Station Q**

**Toronto, Canada M4T 2P4**

Emerging as a woman in the sixties and seventies. . . being cut loose from mother as role model. . . set free, but homeless. . . feeling power and independence, great surges of new possibilities. . . but a curious emptiness and betrayal. . . great confusion in partnering, a desire to be met. . . stirring of deeper instincts not honored. . .

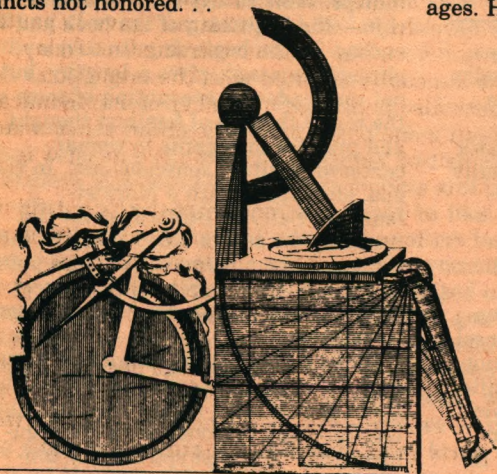
"The return to the goddess, for renewal in a feminine source-ground and spirit, is a vitally important aspect of modern woman's quest for wholeness." As "daughters of the patriarchy" we have achieved successful personae by adopting the logic of our time, but have sent the full mystery and potency of the feminine instinct and spirit-pattern underground. It is our work, then, to retrieve her, not merely for our own personal wholeness, but for a better balance in the world today.

How do we retrieve the feminine? As a therapist, Perera discovered echoes of the ancient Sumerian myth "descent of Inanna" in her clients' dreams and images. Her ability to highly personalize

these parallels is startling and illuminating. With the myth of Inanna as guide and support, Perera asks us to descend to the underworld of our psyche, where the dark and repressed aspect of the feminine resides. *Descent to the Goddess* provides both men and women with a sense of hope and purpose as we answer the challenge to honor the feminine in our lives.

—Mary Ramsay

*Mary Ramsay lives in western Massachusetts, teaches dance at a private high school, and is presently an intern at the Mary Whitehouse Institute where she studies authentic movement.*



## WOMEN ASTRONOMERS OF THE SCIENTIFIC REVOLUTION

by Margaret Alic

All abstract knowledge, all knowledge which is dry, it is cautioned, must be abandoned to the laborious and solid mind of man. "For this reason," it is further reasoned, "women will never learn geometry."

*Immanuel Kant*

Kant should have known better. Women natural philosophers of the seventeenth and eighteenth centuries contributed ideas that helped to shape the Scientific Revolution. And women continued to teach themselves geometry and the other branches of mathematics, as they had for centuries. By applying their mathematics to the study of the heavens, they helped to transform the science of astronomy from mystical speculation to an empirical body of knowledge. But the contributions of these women astronomers were in the realm of the mundane — the day-to-day drudgery of observation and calculation. Therefore, most women astronomers of the period have remained unrecognized and three hundred years later we still think of mathematics and astronomy as masculine pursuits.

A century before Newton, Copernicus revolutionized astronomy by placing the sun at the center of the universe, with the earth orbiting around it and spinning daily on its axis. Soon after, Queen Sophia of Denmark, herself an avid chemist and astronomer, built an observatory at Uraniborg for Tycho Brahe. It was here that Tycho's widowed sister Sofie (c. 1556-1643) taught herself astronomy. Although alchemy was her primary interest, Sofie worked in the observatory as Tycho's colleague for many years. Meanwhile, as Galileo took up the battle for the Copernican cosmology, Johannes Kepler utilized the Brahes' crucial

new observations to determine the elliptical orbits of the planets. Women mathematicians and observers then set to work filling in the details.

Maria Cunitz was the first woman to attempt to correct Kepler's *Rudolphine Tables* of planetary motion, a problem of major concern to seventeenth-century science. Born in Silesia in 1610, the eldest daughter of a physician, Maria exhibited an early interest in astronomy. At the age of twenty she married Elias von Löwen, a physician and amateur astronomer. With his encouragement, she set about making new reductions of old observations in order to simplify the *Rudolphine Tables*. Written in both German and Latin, it was published at Frankfurt in 1650. In an unusual reversal of roles, she acknowledged her husband's able assistance in the preface to her book.

Maria Cunitz died in 1664 while again fleeing the ravages of war. Already another Polish woman was making the new, more accurate observations needed to improve upon her work. At the age of sixteen, the beautiful Elisabeth Korpmann became the second wife of Hevelius, a wealthy Danzig engraver and amateur astronomer. Hevelius set out to construct a new star catalogue and revise Kepler's tables. Elisabeth worked at her husband's side for the next ten years, until 1679 when a great fire swept through Danzig. The observatory, all of their data and most of the printed copies of Hevelius' *Machinae Celestae* were destroyed.

With the advent of telescopic observations, illustrations became an important adjunct to astronomical treatises. Maria Clara Eimmart (1676-1707) was one of the earliest of these astronomical artists. The daughter of a successful painter, engraver and amateur astronomer, she used telescopic observations to illustrate her father's *Micrographia Stellarum Phases Lunae Ultra 300*. Their Nuremberg

workshop and observatory were home to a number of dedicated astronomers including the assistant engraver, Johann Heinrich Müller. After Maria's marriage to Müller, he became an astronomy professor at Altorf and Maria continued to use her engraving skills to depict comets, sunspots, eclipses, and the mountains of the moon — the observations that overthrew once and for all the "perfect and immutable heavens" of Aristotle.

Maria Müller died young, never achieving the renown of her contemporary, Maria Winckelmann Kirch. Born near Leipzig in 1670, Maria Margaret Winckelmann's early training came from Christoph Arnold, the "astronomical peasant." In 1692 she married Gottfried Kirch, an astronomer who had studied with Hevelius in Danzig. Settling in Berlin, Kirch directed his wife's studies as he had those of his three sisters. Even after his appointment as Royal Astronomer in 1700, the Kirch women continued to support themselves by producing calendars, almanacs and other books of observations and computations.

In 1702 Maria Kirch discovered a comet. It was not named for her and she never received recognition for the discovery. Thus her observations on the aurora borealis (1707) and her writings on the conjunction of the sun with Saturn and Venus (1709) and on the approaching conjunction of Jupiter and Saturn in 1712 (including the obligatory astrological predictions) became her most lasting contributions to astronomy.

Meanwhile, in Paris in the 1680s, Jeanne Dumée set out to prove that women "are not incapable of study, if they wish to make the effort, because between the brain of a woman and that of a man there is no difference." At the age of seventeen, having sent her husband off to war, Dumée was free to devote herself to astronomy. Her treatise, *Entretiens sur l'opinion de Copernic touchant la mobilité de la terre*, demonstrated how the observations of Venus and the satellites of Jupiter proved the motion of the earth and the validity of the Copernican and Galilean

theories. Her unpublished manuscript has survived in the National Library of Paris.

In 1757, astronomers were expecting the return of Halley's comet. Jérôme Lalande, director of the Paris Observatory, approached the mathematician Alexis Clairaut for help in predicting the comet's return by solving its orbit. Clairaut, who had previously collaborated with Emilie du Châtelet requested the assistance of Mme. Lepaute.

Finally, on November 14, 1758, they reported the dates for the return of the comet to the Academy of Sciences. It was the first time in history that scientists had predicted a perturbed comet's return to perihelion (the point of its orbit closest to the sun). And they were just in time. Halley's comet was first sighted on December 25th and it reached perihelion on March 13th — within the dates set by the team of astronomers. It was another triumph for Newtonian science. In his *Comets*, Clairaut gave Lepaute full credit for her work but he later retracted it. Today, Clairaut alone is usually credited with the prediction.

Mme. Lepaute also published a number of astronomical memoirs including one based on all the observations made of the 1761 transit of Venus. A crater on the moon was named in Lepaute's honor.

Women helped to put the astronomy of the Scientific Revolution on a firm foundation. Although today their names are unknown and their contributions forgotten, these women marked the beginnings of a trend. Unfortunately it was a trend embodying the attitude that women — with their mathematical abilities, infinite patience, and lack of opportunities for more creative scientific endeavor — were perfectly suited to the tedium of astronomical observation and calculation. This tradition of women astronomers was to culminate early in the twentieth century with the women of the Harvard College Observatory. □

*Margaret Alic is writing a book on the history of women in science.*

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## ACCESS: SCIENCE

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### ***The Death of Nature: Women, Ecology, and the Scientific Revolution***

Carolyn Merchant  
Harper & Row Publishers  
10 E. 53rd St.  
New York, NY 10022  
\$7.95, 1981, 348 pp.

*The Death of Nature* chronicles the philosophical transformation of Western cultures from viewing the earth and nature as a being with spirit and soul to be lived with and treated with respect to an inanimate object to be conquered and used. This scholarly book uses writings and case studies prior to 1700 to illustrate this transformation.

Most Western cultures up to the end of the Middle Ages viewed the world as a nurturing, female being—the proverbial Mother Earth. Early medieval society had rules restricting that the rate people took from the land must equal the rate that nature and humans

could replenish the land—the ideal sustainable agrarian society. Early ventures at mining came with moral and religious qualms about raping and pillaging the spirit of the Earth.

Toward the end of the Middle Ages increasing population pressure, increasing urbanization, and increasing dependence on a monetary capitalist economy caused existing societies to overuse and abuse the ecological system. The philosophical school of thought that viewed the universe as a series of discrete, inanimate particles governed by scientific laws of cause and effect was developed to support this abuse. Nature became something to be dominated and controlled instead of respected and lived with.

The role of women was changed by the increased urbanization and population pressures. This role change was supported by the new philosophy. Women as an embodiment of nature became a target for domination instead of cooperation. Bourgeois women living in urban environments were forced into the role of passive dependent rather

than active partner.

While some of the concepts in this book pose interesting points of view, there are two fatal flaws in the material. First the book was written as a history of changing attitudes about nature. The material presented on the changing role of women seems to have been retroactively grafted to the text. The observations about women tend to be fleeting and discontinuous. Second, the causal relationship which Merchant seeks to establish does not seem to be completely accurate. The changes which she implies could easily be effects of a single cause, i.e. the rise of a monetary economy.

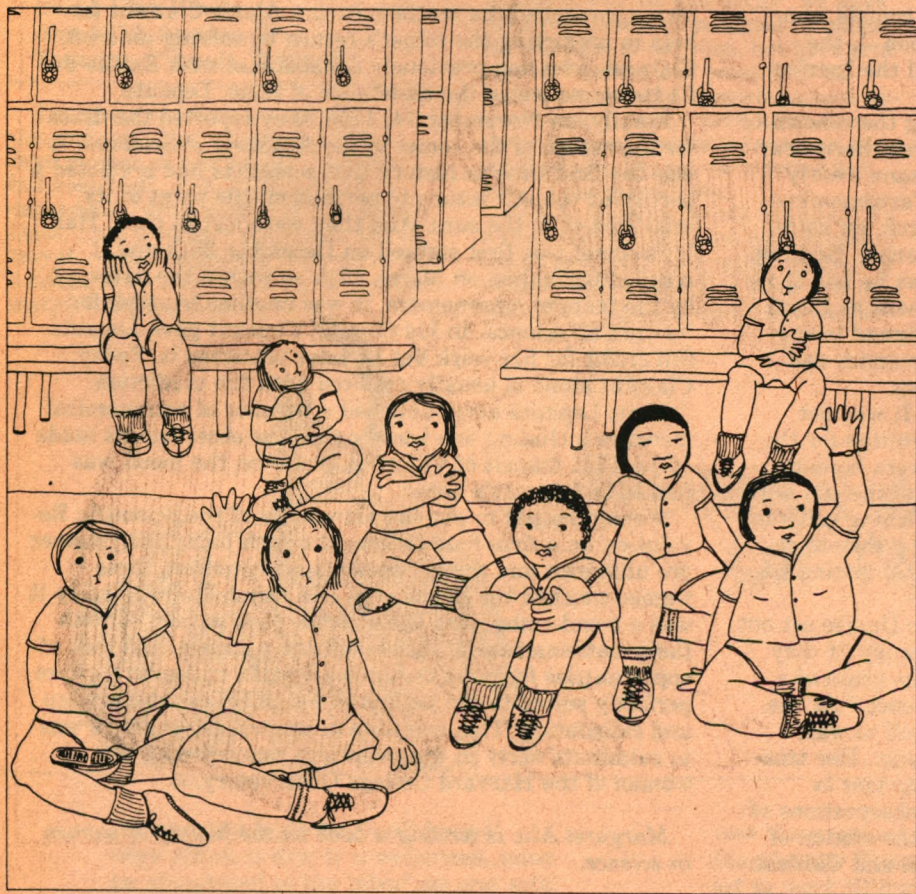
Merchant's academic work provides avenues to approaching the scientific revolution's effect on ecology. As to women's connection with the scheme of things, we must look elsewhere.

—Gail Katz

*Gail Katz, a regular contributor to RAIN, is a mechanical and electrical engineer.*



## ACCESS: BODY & SOCIETY



FROM: PERIOD.

**A New View of a Woman's Body**  
 The Federation of Feminist  
 Women's Health Centers  
 Simon and Schuster, Inc.  
 1230 Avenue of the Americas  
 New York, NY 10020  
 \$8.95, 1981, 167 pp.

In 1970 I saw my cervix for the first time. According to *A New View of a Woman's Body* my reaction was similar to many other women. "Why haven't I seen this before?!" This experience expresses the essence of the women's health self-help movement which spawned this book.

Starting in the early 1970's women began to take women's health care literally into their own hands. This started a movement based on the idea that women understanding their bodies would make them not only healthier but prouder and more self-confident women.

The Federation of Feminist Women's Health Centers has produced the *Gray's Anatomy* of the self-help movement in this fully-illustrated guide.

The book covers a broad range of topics from self-examination to birth

control to menstrual extraction. The text is accompanied by detailed illustrations of female anatomy. It also includes color photographs of women's sexual parts which illustrate a major point of the book—"celebrating the diversity and uniqueness of women's bodies: at the same time joyously asserting our commonality." The illustrations and photos are competent and apparently unique in the medical field. I wanted, however, a section of Betty Dobson's artistic celebrations of women's sexual organs to complement and lighten the clinical approach as the authors in *New View* used social commentary to complement the clinical text.

The most in-depth section and probably the most groundbreaking is entitled "The Clitoris: A Feminist Perspective." This section describes in detail the anatomy of the clitoris and the physiology of orgasm. No, the clitoris is not just a little button, it is a complex organ with legs stretching back along the vagina and numerous other parts which are all involved in our sexual response.

This book is definitely written from a self-help perspective. I expected, but didn't find, a cut out, fold on the dotted line speculum in the back! This

approach, which in the book leads you very specifically through self-examination, masturbation and self-remedies is great for that "we can do it feeling." Hopefully, it doesn't turn off a woman who uses aspirin for cramps but who should use the valuable information in this book to communicate with her gynecologist to get that "I have a right to know feeling."

This book is worth picking up even if to just look at the pictures.

—Beverly Stein

*Beverly Stein is a feminist and a socialist who is active as a lawyer and organizer in the Portland area.*

### PERIOD.

JoAnn Gardner-Loulan, Bonnie Lopez, and Marcia Quackenbush  
 Volcano Press  
 330 Ellis Street #518  
 San Francisco, CA 94102  
 \$7.25 ppd., 1981, 88 pp.

One of the best and possibly one of the worst things that can happen to a young teenage girl is getting her period, and some girls are more prepared than others. I'm preparing myself by reading *Period. Period* is an interesting, educational, fun-to-read book that discusses menstruation and the mental and physical changes related to it. In a pleasantly down-to-earth way, it talks about those changes and how to deal with them. It explains the parts of the body that deal with the menstrual cycle, and explains the cycle's process. Ms. Gardner-Loulan, Ms. Lopez, and Ms. Quackenbush express opinions and share personal adolescent experiences throughout the book, accompanied by Ms. Quackenbush's fresh, humorous illustrations. So whether you've had your period for days, weeks, months, years, or not at all, women of the world (men, too), read this book. And think about your period.

—Darcy Cosper

*Darcy Cosper is the 13-year-old daughter of one of RAIN's editors. If you have a children's book you would like reviewed, send it to her c/o RAIN.*

### Menopause: A Self Care Manual (Spanish edition available)

Santa Fe Health Education  
 Project  
 P.O. Box 577  
 Santa Fe, NM 87501  
 \$4.20, 1982, 52 pp.

This concise, helpful little book grew out of four years of workshops in north-

ern New Mexico, developed by six women who combined research and discussions of their personal experiences. Women from Hispanic, Native American, and Anglo cultures participated in the process. The booklet reflects this diversity as well as the spirit of self-help so vital to good health.

While the book describes some of the unpleasant symptoms, it aims to dispel the cloud of embarrassment, fear, and misinformation which has long characterized menopause. Combining essential facts, symptoms, and therapies with discussion of the psychological effects, the pros and cons of estrogen therapy are weighed to provide guidelines for safer use when a woman chooses that option. Alternatives to estrogen are encouraged. Several types of kegel exercises are described as a means of counteracting vaginal atrophy and dryness that sometimes accompanies menopause.

Yerbe de Zorillo, an herb recommended by a Santa Fe curandera (healer) may not be easy to find, but most of the herbs and vitamins described in the home remedy section are readily obtainable. Diet, hysterectomy, sterilization, birth control, breast exams, and pap smears are also discussed. Part II offers information for organizing menopause workshops and support groups and includes a bibliography. Personal anecdotes and friendly drawings contribute to the book's warm positive tone.

—Tevina Benedict

*Tevina Benedict is a New Mexico transplant who is raising her first child in the rain.*



FROM: *Menopause, a Self Care Manual*

***The Obsession: Reflections on the Tyranny of Slenderness***

**Kim Chernin**

**Harper & Row Publishers, Inc.**

**10 E. 53rd St.**

**New York, NY 10022**

**\$4.95, 1981, 206 pp.**

"This is a book about woman's obsession: in particular the suffering we experience with weight, the size of our body and our longing for food." The phrase sounds familiar. It has been echoed in any of the hundreds of books available on the newsstands today that address this culture's growing obsession with our bodies. The similarity ends there; this book takes us deeper into the meanings of the obsession.

As a therapist working with women around weight issues and as a woman involved with my own growing awareness of the effects of this obsession within myself, I found Chernin's book refreshing and insightful. She looks for the roots of the problem, asking why are we obsessed, analyzing the ways our culture feeds this obsession and what the impact is on the whole feminine psyche.

She states, "... a woman obsessed

may be experiencing the fact that she feels uncomfortable being female in this culture." She may also, "regard her emotional life... as dangerous, requiring control and careful monitoring." She is mostly a divided entity, an alien in her own culture and her own body.

Chernin drives home the point that the quest for thinness won't necessarily lead to increased power or fulfillment for women (a common belief among weight watchers and dieters), but rather the quest may create more alienation and separateness, more dependence on the externals which seek to define us in their image of woman.

I felt moved to tears, full of rage, and yet hopeful with the sensitive examination and powerful defense of the feminine nature. It is refreshing to explore the motivations and consequences of this insidious and destructive obsession. The book seeks to inform and incite its reader to question the things we take for granted. The obsession we, as women, face around our bodies and food needs to be assessed as to its long range effects on the feminine nature in our culture. Then questions need to be asked—"Will the obsession with thinness help us accept and learn to love women and their bodies more or will it help us move closer to disassociating

women from their bodies and thus destroying their spirit all together?"

—Jackie Holmes

*Jackie Holmes, a Portland native, is a therapist in private practice.*

***The Invisible Alcoholic***

**Marian Sandmaier**

**McGraw-Hill Co.**

**1221 Avenue of the Americas**

**New York, NY 10020**

**\$4.95, 1980, 298 pp.**

The Women's Movement has been the catalyst for women to speak more openly and with more dignity about our problems. *The Invisible Alcoholic* is a case in point. Previously, women's problems such as alcoholism, have been treated as less serious or more shameful than men's problems. Less time, money, and effort have been spent on studying and treating women's problems, and characteristically, our problems have not been approached from women's perspectives and life experiences, nor by women themselves.

In this book, Sandmaier turns that

cont.

around. She draws on her experiences and expertise as former Director of Women's Programs for the National Clearinghouse for Alcohol Information to present the attitudes, theories, and data concerning women alcoholics. These are made alive by anecdotes from real women's struggles with their disease. She also describes the differences between what men and women alcoholics experience and how our society views and treats them. That women suffer greater stigmatization than men and have less access to treatment are two of the many differences. Like men, however, women of all backgrounds, socioeconomic levels, and ages are alcoholic. Alcoholic women share certain experiences and attitudes, but they also have many differences. In several chapters, Sandmaier addresses the unique situations and needs of minority women, lesbians, housewives, teenagers, and skid road women.

This is not a depressing book. It is a book full of challenge and hope. Treatment and recovery are a reality for many women. I recommend this book for everyone because we all know someone who is affected by alcoholism.

—Peggy Hanley Hackenbruck, M.D.

*Peggy Hanley Hackenbruck is a psychiatrist in private practice.*

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**Getting Free: A Handbook for Women in Abusive Relationships**  
by Ginny NicCarthy  
Seal Press  
312 Washington St.  
Seattle, WA. 98104  
\$7.95, 1982, 304 pp.

Ten years ago an abused woman had no where to go, no one to talk with about her problems. Her experience was approached with skepticism, its severity denied with a variety of reactions ranging from "you must have asked for it" to prescribing tranquilizers so she could better fulfill her "proper" role. An abused woman's real choices were limited by a society willing to condemn her if she left ("How can you break up your family?"), or if she stayed ("Why do you put up with this? You must be masochistic.").

In these ensuing years much has changed. There are now over 300 shelters and other intervention and advocacy services in the U.S. Research has expanded the understanding of both professional and lay person to the issues and myths surrounding abuse. Laws have been rewritten. However, men are still abusing women physically, emotionally, and sexually. The corrosive effect of the abusive relationship continues to chip away at a woman's self-esteem and ability to make decisions. Shelters and feminist counselors work to promote positive decision-making and enhance a woman's feeling of self-power. But not all women find a shelter

or a counselor. Furthermore, the abused woman's needs often go beyond the short-term support of a shelter stay or counseling session.

*Getting Free* is a book that helps in the process of breaking away from an abusive relationship. Although each abusive relationship is unique, there are many commonalities, the knowledge of which can help dispel the isolation that abused women often feel. NicCarthy takes the experiences of many abused women and presents a coherent perspective of the fears involved and ways to face them. This approach is useful since many abused women feel overwhelmed to the point of inactivity.

The book is full of concrete, practical information such as how to make a budget or find a good lawyer. The emotional effects and feelings of ambivalence one may experience are also explored. NicCarthy does not use the "this is what is going to happen to you" approach, rather she emphasizes woman's self-discovery, highlighting what she can do to avoid slipping into the same or another abusive relationship. Chapters describing being your own counselor and avoiding similar relationships provide tools for a woman trying to rebuild her self and her life.

A good overview detailing the types of abuse and examining the sociopolitical basis of abusive relationships is presented in easily understood terms. The book's language is accessible to the woman who could benefit most from it—the abused woman herself. It is also a resource for anyone who comes in contact, either professionally or personally, with abused women.

—Linda Golaszewski

*Linda Golaszewski has been involved with issues concerning the basic rights of women to control their own lives and bodies for six years. She is currently director of Bradley-Angle House, a shelter in Portland, Oregon.*

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**Pornography and Silence: Culture's Revenge Against Nature**  
Susan Griffin  
Harper & Row, Publishers, Inc.  
10 E. 53rd St.  
New York, NY 10022  
\$5.95, 1981, 277 pp.

Before reading Susan Griffin's *Pornography and Silence*, I suppressed the power of pornography and naively narrowed its scope to an underworld of peep-shows, pornographic bookstores, magazine racks, X-rated movies—an industry which I thought didn't much affect my life. The figures Griffin cited were astonishing: "In 1977, pornographic films earned four billion dollars, as much as conventional films and the entire music industry combined." With compassion and depth, Griffin convincingly argues that pornographic images and fantasies are not an expres-

sion of human erotic feeling and desire, but an expression of fear of bodily knowledge and an attempt to silence eros. She dissects and analyzes the pornographic imagination, the process of transforming a natural sexual act into an act of aggression, rape and violence. Throughout her analysis one comes to fully realize the profound affect of a pornographic mythology in our lives. The pornographic underworld flips belly-up, laying the foundation for society's conventional images and dramas. "Everytime we raise our eyes from the page of the pornographic book, we find the same images in the culture which surrounds us. We even begin, like the pornographer himself, to confuse these images with reality."

Griffin analyzes the essential ritual of pornographic fantasy, which involves the sexual humiliation and silencing of a woman by a man. This ritual rests on three beliefs: that men are inherently violent; pornographic fantasies release men from an obsession with violence; that only violence will give the mind release from an obsession with violence. Is this obsession with violence simply a belief? Does this obsession reveal men's secret worship of themselves as violent and aggressive beings? Must women be made to mimic the object of pornographic fantasy and aggression?

Who suffers the impact of these beliefs and rituals? Griffin argues that pornography leads to violence against women. Put simply: "pornography endangers our lives." But it is important not to forget that the actual images of pornography degrade and humiliate women. Women are forced into the "masks and costumes of the female impersonator in order to survive economically." And at the other end of the spectrum, "a woman's very physical existence is predicated on her ability to resemble the pornographic ideal." Finally, both men and women suffer. Pornographic violence severs the connections between the mind and the body. Culture is set against nature, thoughts against feelings, the masculine against the feminine. We lose our own wholeness, our eros—"Not the sensation of pleasure alone, nor the idea of love alone, but the whole experience of human love."

Through her clear-sighted analysis, her depth and range, Griffin caused me to examine my own feelings about eroticism, sexuality, and violence. In the process of reading this book, I became more sensitive to the effects of pornography, the degrading poses of women in advertising, and the mini-dramas of humiliation and aggression played out between men and women in books and movies. I had to confront these images and dramas, argue with them, in order to finally reject them. I don't believe anymore, as I once did, that one can turn one's head, walk on the other side of the street, and effectively shut out pornography.

—Robin Havenick

# A.T. AND AG.: ONE HAPPY MARRIAGE

Energy use and food production in the United States rely heavily on limited fossil fuels. From natural gas-based fertilizers to petroleum-based harvesting and food distribution, agriculture's use of non-renewable resources has increased considerably. Fortunately, energy-efficient techniques are being tried on farms, in gardens, and in greenhouses—with encouraging success.

In an effort to assist experiments in energy conservation and renewable energy, the Congress created the U.S. Department of Energy Appropriate Technology Small Grants Program in 1978. The Oregon Department of Energy assisted the USDOE in administering the program, and in 1981 it contracted with Rain and Oregon Appropriate Technology (OAT) of Eugene, Oregon, to administer the State's part of the program. From the 1400 proposals submitted in Oregon from 1979 through 1981, 48 grants were awarded.

This is the second in a series of five articles that sketch notable USDOE A.T. Small Grants projects in Oregon. Six projects which demonstrate a variety of ways appropriate technology can be applied to food production are included in this issue.

## Farm Energy Self-Sufficiency

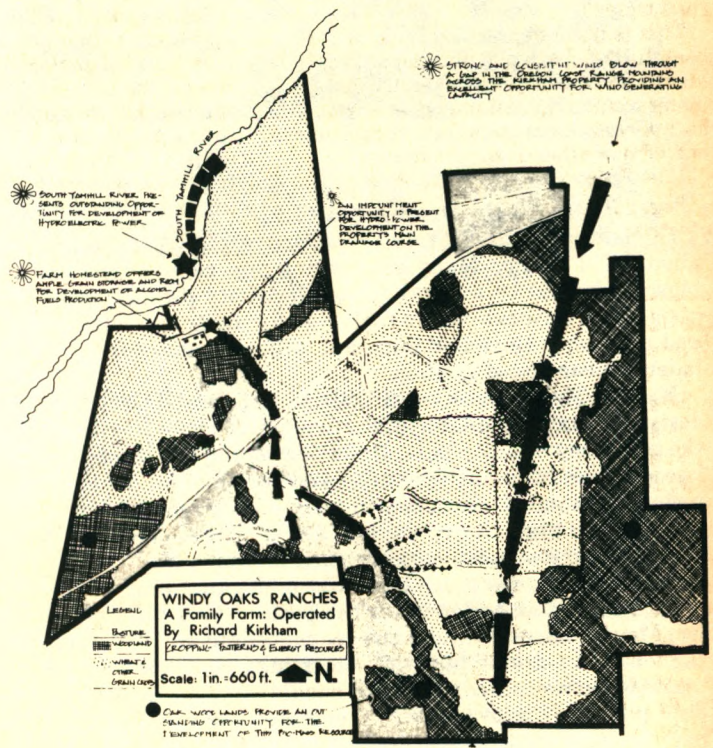
"Presently Oregon's farm economy is in total depression," maintains Richard Kirkham, owner of a 1,600-acre farm near Willamina. Coupled with increasing electricity and fertilizer costs, the incentive to minimize energy expenses has taken on new importance for him. Kirkham's A.T. Small Grant enabled him to develop a plan for making his farm completely energy self-sufficient.

With the assistance of the Oregon State University Agriculture Extension Service, Kirkham studied the feasibility of low-head hydro electricity, wind power, and alcohol fuel production. The low-head hydro assessment indicated the greatest potential. Adequate head and ten and one-half months of stream flow each year could be counted on to operate a system that would cost from \$25,000 to \$30,000. The study showed that enough electricity would be generated in ten years to pay for the cost of the project. "We could even feed electricity back into Portland General Electric," asserted Kirkham.

Because his stream dries up in summer months, virtually eliminating hydro power during that season, Kirkham realized that other sources of electricity would have to be developed. After a year and a half of wind monitoring, he found the average wind speed was 10 to 12 mph. To meet all summer electricity needs, a \$25,000 wind generator would need an average speed of 18 to 20 mph. Kirkham noted that a smaller wind system could be adapted to local wind conditions and supply a portion of the farm's electricity requirements.

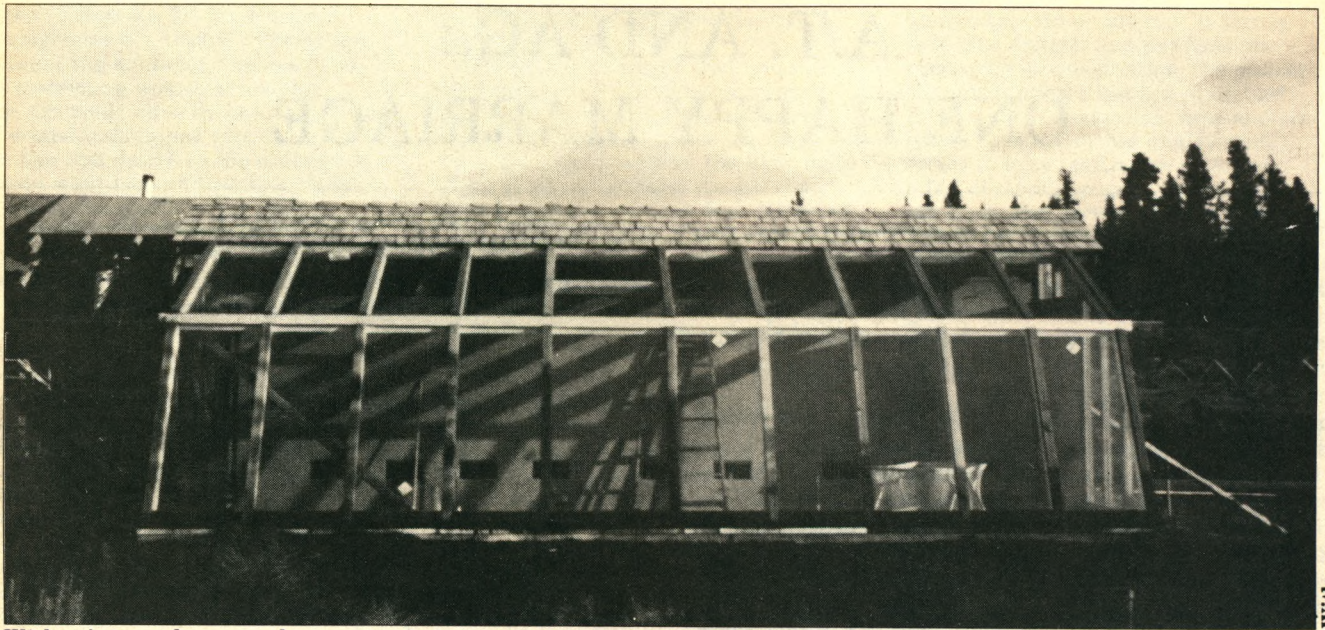
Meeting all the farm's fuel needs with on-site alcohol production appeared less promising. If wheat cost \$3.80 per bushel and gasoline cost \$1.30 per gallon, a small still would be cost-effective, with its alcohol production cost about \$1.75 per gallon, a competitive price for alcohol. This

price assumes cost savings gained by feeding the stillage, a high-protein by-product of the fermented grain, to the farm's sheep and cattle. Kirkham researched alcohol stills nationwide and concluded that "the technology is still in



Plan of Kirkham's farm showing cropping patterns and energy resources.

the biplane days." The complete study with a guidebook is available free from the Polk County Office of the OSU Agricultural Extension Service, 316 Main Street, Dallas, OR 97338. (Richard Kirkham, 9225 Steel Bridge Road, Willamina, OR 97396)



Withers

*Withers's greenhouse and eco-animal shelter in Sisters.*

### Grain Drying Bin Controller

Current methods of drying corn for grain consume large amounts of energy. Many corn drying bins rely on fans to blow air heated by natural gas or electricity through moist corn. Some farmers reduce fuel costs by using unheated air and manually controlled fans, but unheated, moisture-laden air can cause spoilage.

Nathan Meyers received a USDOE A.T. Small Grant to design a small, affordable computer controller to increase the efficiency of bin dryers. He is developing the computer hardware and the software necessary for ambient air monitoring and control. Sensors will measure air temperature and relative humidity in the bin, and a microprocessor will activate a supplemental heating system when ambient air has too much humidity to dry the corn.

In order to test and monitor the grain drying bin controller, Meyers hopes to find a site by this summer. He is looking for a corn drying bin with electrically controllable heat (gas or electric source). The site should have an indoor desk near the bin to house the computer and printer and a person who will periodically observe the system. The location may be either east or west of the Cascade Mountains. The monitoring will take place over one drying period, beginning this fall.

"This could be a genuine breakthrough," notes Meyers. "In agriculture, computers are now used to keep financial records and aid farm management. This is revolutionary in that it would be tried as an actual controller of an agricultural process; it holds a lot of potential for new applications in energy-cost reductions." (Nathan Meyers, 655 S.E. Bridgeway, Corvallis, OR 97333)

### Greenhouse/Animal Shelter Ecosystem

Central Oregon's growing season lasts just three short months or less. The air is dry, with the sun shining more than 300 days a year. Communities are dispersed and depend on distant food and fuel suppliers. Planning to lengthen the growing season to ten months or more, Bruce

Withers of Sisters has used his grant to construct an integrated animal shelter and passive solar greenhouse from which he is collecting light, temperature, and relative humidity data.

The greenhouse avails itself of unique, climate-enhancing techniques. Heat is stored in 12 inch-deep rock walkways, five gallon clear plastic containers filled with dark blue water—situated below the elevated container beds to keep roots and soil warm—and a special Trombe wall. The wall separates the animal shelter from the greenhouse, absorbing heat from the greenhouse during the day. Warm air passes through large openings at the top of the wall into the shelter. At night, the wall radiates heat both to the greenhouse and to the animal shelter. Heat generated by the animals and their waste products is transferred through the upper wall vents to the greenhouse by natural convection. As the air cools in the greenhouse, it drops and returns to the animal shelter through the lower wall vents.

The double glazing is insulated with roll-down window quilts at night. Ground-level vents in the south wall foundation and bamboo shades reduce summer temperatures. A thermally operated electric fan turns on at temperatures above 80 degrees. Withers has also planted Jerusalem artichokes and sunflowers along the southern and western walls for additional shading.

The goats and chickens present at night contribute two other valuable "fuels" to the greenhouse: carbon dioxide and humidity. The shelter collects carbon dioxide-rich air at night, gently "leaking" it to the plants during the day. Since the air around Sisters is quite dry, the added 10 percent humidity produced from the animals breathing and waste product evaporation encourages plant growth.

"This integrated design will extend the growing season considerably," says Withers. "We hope to grow greens and root crops throughout the winter." Sunlight, temperature, humidity, energy-use data, construction cost, and growing methods data will be available this fall. (Bruce Withers, P.O. Box 928, Sisters, OR 97759)

### Attic Solar Greenhouse

Responsible Urban Neighborhood Technology was given an abandoned house by the City of Portland in a low income neighborhood to be renovated as a community model of integrated energy self-reliance and food production. Renovation of the building began in February 1981. Now nearly completed with the help of many volunteers, the Eliot Energy House has been weatherized, and a wood stove and a solar hot-water system have been installed.

Like many older two- or three-story homes built close to one another, the Eliot Energy House's south side is shaded by a neighboring building. The organization resolved this problem by designing an attic greenhouse for passive solar heating and year-round growing. Grant funding is allowing greenhouse monitoring to determine optimal temperatures, adaptable plant types, and amount of heat that would be diverted to the house. Monitoring data are expected to be published by the spring of 1984.

The project also calls for community education on solar energy and the growing techniques being demonstrated at the house. Outreach and extensive media coverage brought over 150 people to the Grand Opening of the greenhouse. Three greenhouse gardening workshops have been conducted. Topics have included starting seeds, methods for extending the growing season, and transplanting. In the fall, Energy House staff will work with Portland Community College to teach a hands-on, ten week course in greenhouse gardening. The Eliot Energy House is often included in city-wide tours of notable solar energy applications.

The next phase for the project includes extensive use of the site to educate elementary, junior high, and high school students and community groups. In addition, it will serve as an urban food production and renewable energy information and demonstration center. (Eliot Energy House, 3117 N. Williams, Portland, OR 97212)



Water heater and plant starts in attic greenhouse at the Eliot Energy House.

### Backyard Organic Gardens

Coos Bay is no gardener's paradise. The coastal soil is sandy or silt loam, spring and summer winds keep temperatures below 70, and continual winter, spring, and fall rains limit sunlight. Eleanor Knapp's Home Garden Company confronts these problems routinely. The Home Garden Company received funding from the A.T. Small Grants

program to experiment with organic gardening techniques most suitable to local conditions and to expand local use of intensive gardening practices.

Knapp helped four families prepare, plant, and improve backyard gardens. With her assistance, one family located their garden adjacent to the house's light colored south side for reflection, and constructed an eight-foot high fence around the site for wind protection. These improvements raised the temperature 10 to 15 degrees around the plants.



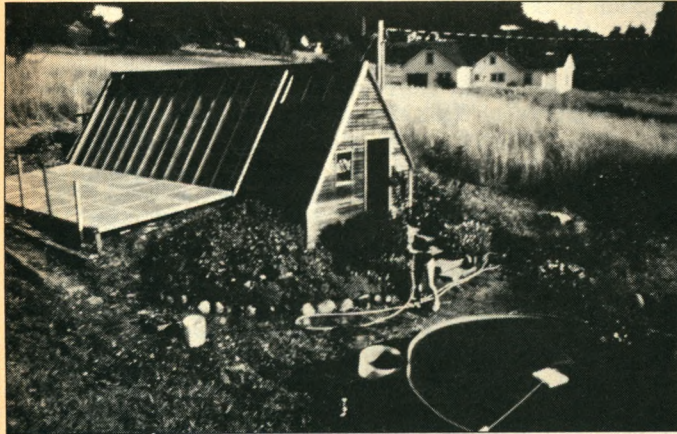
Eleanor Knapp rototilling her organic gardens.

At another site, the family increased compost temperature and reduced nutrient leaching from rain by covering the pile and locating it under an eave. Two other compost systems did not accumulate enough organic wastes to be useful. This was largely due to inaccessibility; they were sited at too great a distance from the kitchen in order to keep them out of the neighbor's view. "For success, esthetic reasons for locating compost often have to take a back seat to practical reasons; it's important to talk with your neighbors," concludes Knapp.

Knapp's grant also called for the construction of solar food dryers. Of the two constructed, the one mounted with a vertical steel shaft inside a pipe works best. With this method, the dryer is easily rotated to face directly into the sun.

Knapp also held five free workshops in Coos Bay, reaching over 70 people. She taught composting, mulching, companion planting, winter gardening, soil preparation, and how best to use raised beds. She also handed out 250 fact sheets on these topics at a local Self-Reliance Fair last June. Knapp hopes to build on the community's new gardening awareness with a seed exchange set up at the local food co-op.

Many persons cannot afford to pay for a gardening consultant. Knapp has consequently broadened her business, now calling it Home, Hearth, and Garden. Along with her consulting work, custom tilling, and workshops, Knapp hopes to sell organic fertilizers, biological pest controls, seedlings, tools, and insulated window shades. "Because of the gardening efforts enabled by the grant," Knapp explained, "there is now a lot of communication in the community about organic gardening." (Eleanor Knapp, 1425 Stock Slough Road, Coos Bay, OR 97420)



Amity's greenhouse showing reflective surface on fold-down night insulation with exterior fish tank in foreground.

### Solar Greenhouse/Aquaculture System

One good measure of food production efficiency is the ratio of protein to energy use. Inefficient food systems have very small ratios, consuming large amounts of fuels, sunlight, or electricity for a given quantity of protein. A major challenge for all food producers from backyard gardeners to corporate farmers involves improving protein production while reducing energy requirements. The Amity Foundation has turned this challenge into a frontier.

A nonprofit research and education organization in Eugene, Amity constructed a solar greenhouse in 1978 which houses a warm water fish tank. Acting as a 2000 gallon heat storage unit as well, the tank soon became an ideal habitat for channel catfish, tilapia, African perch, bluegill, and carp. In 1979, Amity's initial success brought it one of the first USDOE A.T. Grants in Oregon.

The project had three goals: to monitor and evaluate the 350 square foot passive solar greenhouse/aquaculture system; to aerate the tank with a Savonius windmill and chart its performance; and to develop locally grown fish feeds and test them. Together the results represent valuable empirical information for improving such interactive food/energy systems in the Pacific Northwest climate.

Amity monitored the greenhouse's light, temperature, and humidity, and the aquaculture tank's dissolved oxygen, turbidity, ammonia, nitrate, phosphate, hardness, and pH. Amity used the water quality data to set fish stocking densities and feeding levels. Fish health and weight gain singled out the species best suited to greenhouse/aquaculture systems. Similarly, fish feeds were tested by comparing the growth of fish fed easily available and inexpensive crops to growth of fish fed from a costly commercial menu.

Two remarkable fish which grow in a solar heated tank are tilapia and channel catfish. They permit greater stocking densities because the catfish inhabit the bottom layer and the tilapia occupy the high zones. Plump, tasty fish (½ to ¾ lb.) can be harvested in seven to nine months. Robust growth of tilapia can be encouraged by feeding them duckweed. This small, easy-to-grow aquatic plant compacts well into pellets and dries quickly with solar heat.

Other Amity efforts were equally fruitful. One finding particularly important for overcast locales showed that reflectors on the north interior wall of a greenhouse can increase the amount of useful winter light up to 25 percent

on a clear day. Water heat storage and insulating shutters brought the inside temperature up to the low 70s when outside winter temperatures were in the mid-30s to mid-40s. The Savonius windmill—the water tank's "solar lung"—aerated water with surprising efficiency above a 6 mph wind speed.

Perhaps the most laudable result of Amity's project is its educational and community outreach. By May 1981, over 3,000 people had visited the greenhouse during weekly tours, and 200 more literally got their hands wet in on-site workshops. Over 4,000 copies of Amity's book, *Fish Farming in Your Solar Greenhouse* (\$5.00) have been sold. And through participation in the Coalition for Self-Reliance, a consortium of university, governmental, neighborhood, and nonprofit organizations, Amity has catalyzed other greenhouse and gardening projects in the Eugene area.

### Horticulture Solar Technology

The Amity Foundation also found great interest in greenhouses and "mini-greenhouses"—coldframes and cloches. These are gaining wider use as low-cost, practical techniques for raising food a greater part of the year. Amity staff developed unique cloche designs and cold frame inventions, and received a second A.T. Small Grant to disseminate its horticultural information through a guide and through educational programs.

The guide, *Gardening Under Cover* (\$10.50) by William Head, Amity coordinator and horticulturist, will be published in June. This book thoroughly discusses ways to raise food year-round in solar greenhouses, coldframes, and cloches. It features detailed illustrations and instructions on soil horticulture, organic hydroponics, pest and disease control, and more.

The Amity Foundation has reached and inspired hundreds of people. Through weekly tours, a program with the Eugene School District, and a course with Lane Community College, its experience and research enjoy broad exposure. Its educational bonanza peaked with a half-hour program on the local cable TV station, emphasizing the possibilities for year-round gardening in the Pacific Northwest. And Amity staff attracted 100 farmers, local media representatives, students, and members of the local Tilth chapter (a Northwest organic growers association) for a seminar on integrating coldframes and cloches with greenhouse methods. (Amity Foundation, P.O. Box 11048, Eugene, OR 97440)



Amity cloche

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# WHAT IF: Women and Future Technology

by Patricia Logan and Lisa Yost

We have been thinking about technology. Two ideas have guided our thinking:

- Technology is both good and bad.
- We as women have to imagine our future, confront technology, if we are to control and shape our future.

We have not defined technology here, except by exploring examples. Rather, our thinking has been a synthesis of the work of others and of each other, pulled together in a new way.

In the text, the regular typeface is the voice of the present, of existing technology, of what *is*. That text in italics is the voice of future possibilities, both good and bad, of what *could* be.

We want to talk about women and the future. It is hard to, but try. Try to imagine. Imagine a future.

## Telecommunications

*By 1986 nearly 47% of the U.S. television homes will use one or more new electronic media (NEM) devices: cable, pay cable, satellite/cable, two-way TV, video-cassettes, and videodiscs.*

*By 1989 some 7% will use two-way television.*

*By 1991 about 56% will have some NEM technology.*

*Media Science Newsletter*

The first true modern computer, ENIAC, dimmed half the lights in Philadelphia when it was switched on at the University of Pennsylvania in 1946. Its 20,000 vacuum tubes filled a room. Once the technology switched to transistors, then to integrated circuits in the 1960s, computers became smaller and more manageable.

Entrepreneurs got rich quick selling programs and the business grew. Then the silicon chip — 64,000 bits of information contained in something the size of a baby's fingernail — catalyzed the second computer revolution.

Computers are now linked by satellite communications so that a signal can be sent up from New York and bounced via satellite to San Francisco. The satellite receives microwave signals from push-button telephones, television transmitters, and computers.

Direct satellite-to-home communications means we can have multibeam satellites providing ninety channels to be picked up on a normal TV set with a fourteen-inch diameter antenna. Replacing copper wire with optical fibre for cable transmission will produce twenty times more channels. This new technology allows linking of computer systems, electronic mail, shared mailing lists — the ultimate networking. Home computers are now available for \$600 or less. Large corporations are experimenting with electronic mail, and some communities, like Columbus, Ohio, have begun using two-way TV that allows viewers to "interact" with their sets.

*What if the women's movement had a central computer connected by satellite that local women's groups around the world could tap into for contacts and information? What if women had their own TV station, news service, legislative hotline? What if mailing lists could be constantly updated and shared? What if feminists could see and talk with each other, any time, immediately, via satellite?*

*Imagine: a world linked by telecommunications. With touch tone telephones and centralized computers, entire libraries are accessible from home. Newspapers and mail are replaced by video display terminals. What is done at the*

*office can be done at home, through a home terminal. People shop from home, bank from home. Both men and women stay home, work shorter weeks, share childcare, have more time for themselves, friends, lovers, and community. Populations decentralize, at the same time the most rural areas are no longer remote. More leisure time, more time spent on political activism and grassroots communications, less time spent on survival responsibilities, means faster social change. The world becomes more equal, more just.*

One reality: the conservatives are using computer technology very effectively to promote their own programs and ideas.

Richard A. Viguerie, electronic wizard of the right wing, presides over some 300 employees, two round-the-clock computers, and a direct mail list of more than 15 million names. His technology has generated more than 100 million letters and up to \$25 million a year for far-right candidates and causes. . . Viguerie calls his computer room (which gets a new combination lock every few days) "the most important room in America for conservatives." —Dana Densmore

Another reality: computer technology puts people out of work, particularly women in pink collar jobs.

A 1978 report to the president of France projected that by 1990, 30% fewer workers may be needed to produce a given volume of work in the banking and insurance industries. A German multinational projected that 40% of all office work could be automated by computers. The long-term career secretary will be obsolete. . . At the same time, workers in Singapore, Hong Kong, South Korea, and Taiwan assemble the circuit boards for computers for 22 to 80 cents per hour.

—John Murkoff and John Stewart

Another reality: computer technology invades privacy and allows political control.

The Committee for the Liquidation or Deterrence of Computers (CLODO) in France carries out search and destroy missions on computer systems, saying, "We are computer workers and therefore well-placed to know the present and future dangers of computer systems. Computers are the favorite instrument of the powerful. They are used to classify, control and repress." Members of CLODO and other anti-computer guerilla groups are being busted through a campaign centered in West Germany which fights crime with sophisticated centralized computers.

—Newsweek

Another reality: computer technology has not been made available to women.

In 1977-78 the National Women's Agenda worked at linking women's groups via satellite as part of an overall plan to connect public interest and community groups through an advanced telecommunications system. They wanted to do audio-teleconferencing, establish a news service, do facsimile transmission, and establish a computer databank for women. The project failed when male government engineers refused to plug the women's system into the satellite if the women persisted in discussing "all the issues," including lesbianism and abortion. —Jan Zimmerman

Because women have functioned as unpaid labor, surplus



labor, and the primary consumers in this society, they have been barred from technology. Women are left out when technology takes over — dairy and egg farming were women's domain until they became mechanized and profitable. Or women are relegated to disappearing technologies. The first typists were men because the typewriter was thought too complicated for women; then the women were typists while men ran the word processor; now women are trained for key punch and computer programming when systems analysis and engineering are the real power bases. Women sit at video display terminals (VDTs) all day entering data and soaking up radiation. Finally, computers harm or replace women workers.

*Imagine: a world linked by telecommunications—libraries accessible from home, newspapers and mail replaced by VDTs, office work done by computers, telecommunications substituted for transportation. Women, displaced by technology, stay home, shop from home, bank from home. The computer that registers their answers on two-way TV monitors their choices, profiles, and targets them for marketing and for political persecution. People have no need to go outside, to see their neighbors, to talk to bus drivers, bank tellers, or check-out clerks. Computers regulate the home, the clean American dream. Meanwhile, whole populations can be moved away and hidden. People need never see crime or oppression or poverty — and women comprise two-thirds of the 25 million living below the low-income level in the U.S. Fragmentation and isolation make social change impossible. Everyone is "safe," at home, with family. Women are where they are "meant" to be: isolated, alone, in the home, invisible.*

**"Back-to-the-land" for women often means "back-to-the-kitchen" or "back-to-feudalism."**

### **Technology—some assumptions**

Many women have anxiety about technology—any kind. It is a language we are not taught to speak, whether it is computers or carpentry. We have to fight to learn.

Machines can enable women to do what men do: chainsaws and power drilling equipment mean upper body strength is not a limit, and women work in timber industries and mining. Machines — appliances, cars — can free women in/from the home.

But men invent the machines. Men maintain the machines.

Machines can force women out of work. Machines can attack women's health and lives.

Technology is a double-edged sword. It is good and bad.

Technology does not mean things; it means **the way we do things**. In this country, whoever controls technology controls society. Technology is a tool — the issue is who devises it and controls its use.

Technology implements patriarchy, implements racism, implements capitalism. Technology implements andro-

centrism and domination of the earth. In a world where women are oppressed under the guise of "natural order," technology is neither "natural" nor "unnatural," and definitions of those words must always be questioned.

Technology is not value-free, is not neutral.

Technology is here and we have to face it. It affects women differently from the way it affects men.

There is a longstanding myth that traditionally female occupations are safe; however, workplace hazards jeopardize virtually every body system and organ. Nurses are exposed to radiation and infectious diseases, waitresses and maids use caustic cleaning agents and do heavy lifting, secretaries may inhale PCBs and carbon black, women in industrial laundries handle workclothes without knowing which of a whole range of toxic and/or carcinogenic chemicals may contaminate them, women working at home may be exposed to formaldehyde emitted from polyurethane insulation, and all of these women are likely to be affected by stress.

A safer workplace is something we must have and can get from technology. Exposures to toxic substances and radiation can be greatly reduced or eliminated by the use of closed systems, ventilation, and shielding. Woman-scaled machinery can be designed that will greatly reduce strain and hearing losses. Changes in workplace technology are termed workplace controls and represent the only real longterm solutions to occupational health hazards.

*What if we drink our water, eat our food, breathe our air without worrying what was in them?*

Add to these concentrated workplace exposures general environmental exposures. An estimated 75,000 chemicals are in common use yearly in industries, pharmaceuticals, food additives, pesticides. Close to 1,000 more are added each year. Most chemicals are considered safe, but adequate tests have yet to be performed on the 1,500 suspected carcinogens. Most chemicals are never tested for their potential to cause allergic, nervous, and other disorders.

Add to these exposures the proliferation of low-level radiation. According to the 1979 BEIR Report by the National Academy of Science, women are twice as likely to get cancer from low-level radiation as men are. Our risk of involuntary sterilization is greater.

Consider that the necessities of life — food, clothing, shelter, air, water — are all touched, and that the poor (the majority of whom are women) have the fewest options for how to avoid these hazards.

Consider that the hazards can act together in ways not predictable from how they act separately through complex interactions called synergisms. Substances can become toxic — or more toxic — in combination. Consider Love Canal. The overlapping of the teratogenic, mutagenic, and carcinogenic effects of environmental contaminants accounts for 60% of the birth defects due to "unknown causes." We are beginning to hear about "lifestyle cancers."

Consider that widespread disruption of habitats — through development, overuse, pesticides, dumping of toxics — is now the major destroyer of species. According to a report by the U.S. Council on Environmental Quality, 20% of all animal species on earth could become extinct during the next two decades, a loss "unparalleled in human history."

These extinctions include us. Environmental mutagens pose dangers for the entire human species. Mutated genetic material, whether it causes visible damage or not, adds its permanent changes to the total human gene pool. A mutation rate increased by the effects of chemical and radioactive toxins could not only produce a general decline in human genetic health, but could also threaten human existence.

### A solution, or another example? Appropriate technology

Technology is not value-free. The dominant male power structure controls society's values and the technologies that implement them.

Appropriate technology (AT) admits, by definition, to being value-laden. We know the tools of AT: small-scale and decentralized production of food and energy, recycling, conservation, renewable resources. What works in cooperation with nature is considered "appropriate": imitation of natural cycles, valuing wholes/ecosystems, and preserving and learning from them. AT is considered the "soft path," "gentle" to the earth, "natural." AT sounds good, sounds right; the assumptions are ours, the values are close to those of feminists:

The gist of appropriate technology, therefore, is a concern not so much with the quantity of things as with the quality of life; about relating to each other and the earth's resources with much more care. I think all of this is part of a more meaningful way to look at the world, guided by values such as self-reliance, decentralization, cooperation, and accountability. These are the values which are integral to appropriate technology and to the vision of a saner, more human world. —*Isao Fujimoto*

Appropriate technology reminds us that before we choose our tools and techniques we must choose our dreams and values, for some technologies serve them, while others make them impossible. —*Tom Bender*

But whose dreams, and who chooses?

Women can be, and have been, kept out of appropriate technology as they have been kept out of "inappropriate" technology. Women find it hard to get support or training; it takes "too long" to teach women. Women are still regarded as consumers and often even chastised by appropriate technologists for this role they have been coerced into, told that if they could just control their spending, stop using their Pampers and their microwave ovens, all would be well. Appropriate technologists often forget the first tenet of AT:

Since it deals specifically with questions of power and control, giving power to oppressed groups, including women, is a central issue within appropriate technology, because in order to be truly appropriate, something must be appropriate for everyone, not just for white males. If it's not appropriate for women, it's not appropriate. If it's not appropriate for poor people, for minorities, it's not appropriate, it's simply passing the oppression on from one group to another.

—*Elizabeth Copping*

What is appropriate for women? Our needs define what is appropriate, and in the United States:

- 51% of our population is female.
- 51% of all working women are married.
- 50% of widows and single women exist on poverty level incomes.
- 40% of mothers with children under six are working.
- 74% of all husbands default in the first year of court ordered child support.
- 36% of all black families, 21% of all Hispanic families, and 11% of all white families are headed by women. Woman-headed households are 15% of all families, but 48% of all poverty families.
- 50% less income is earned by women who head families than by males who head families.
- For every dollar a man earns, a woman earns 59 cents.

According to the U.S. Census Bureau, with labor-saving devices, the average woman at home with one child spends

more than eighty hours per week on household chores. In 1980 working women did an average of two hours and twenty-three minutes a day of housework, compared to twenty-five minutes a day for men, according to *The Washington Post*. The U.S. Bureau of Labor Statistics projects that by 1990 nearly two-thirds of women aged 20 to 34 will work outside the home.

Those women come home to tend house. Who will tell them to "save energy" — to stop using fast foods, perm-press fabrics, electric dryers, and microwave ovens? For many women, giving up the family's second car means giving up their mobility; for a poor woman, giving up her gas guzzler may mean her **only** mobility. For women doing double duty as a full-time worker and a full-time housekeeper, a microwave oven **may** be appropriate technology. "Back-to-the-land" for women often means "back-to-the-kitchen" or "back-to-feudalism." Even passive solar re-

## The dominant male power structure controls society's values and the technologies that implement them.

quires **active** human participation, opening and closing vents and shades. A wood or coal stove requires someone at home to feed it regularly.

High technology saves women time and minimizes the importance of muscle strength. As Judy Smith of the Women's Resource Center and the Women and Technology Network in Montana points out:

Certain high level technologies may be necessary for women's autonomy, and, if so, an emphasis on labor-intensive, decentralized technology could destroy women's chances to move out of their tradition roles. Some parts of the AT movement advocate abandoning centralized, energy-intensive technologies, while others prefer to maintain some of the technologies that characterize Western lifestyles. So far the effect of technology on women's role has not been included in AT theorists' determination of which technologies are appropriate.

Again, society has options for solving the technological problem. The typical pattern is to create more technology — nuclear power plants, synfuels, giant solar satellites — to perpetuate the existing system and keep women — and men — addicted consumers.

### Another option, social solutions to technological problems

*What if everyone had equal responsibility for child raising? What if we had a national policy for maternity, paternity, parenting leaves? For encouraging flexible working arrangements and part-time and shared employment? For child care for whoever needed it?*

Even the soft path requires more than alternative fuels and technological fixes. Separations between our homes, workplaces, and town centers — we live in separate residences, work in the cities, commute from the country — create environmental and energy problems. Classic American design, suburban sprawl and single family dwellings, reinforces a centralized living environment that is not only energy inefficient, polluting, and prohibitively expensive, but also keeps women at home, isolated, away from each other.

In this sense, even the solar alternative is nuclear: without a movement toward decentralized living communities, solar cannot solve the energy problem, and instead it reinforces the myth of the nuclear family, with all its problems of sex role stereotyping and child care. For women who want careers and families, for women who singly support families, for families who want to share home, working, and child-rearing responsibilities, for those who want to redefine "family," even solar — by itself — is no solution.

The key to energy and environmental problems is not the escapism of individual self-reliance or single family independence: a windmill in every backyard, an electric car in every garage. People could as easily fight wars over solar access as over Iranian oil wells.

But the village model, rational community-scale development with facilities for collective child care, laundry, cooking, and dining, frees all members of the community for equal participation in its activities as well as being the most environmentally stable and efficient design. Some recently planned solar villages incorporate this communal reorganization.

A truly "ecological" (remembering that "ecology" derives from the Greek word for "house") perspective would be both energy-efficient and feminist, emphasizing village and global cooperation (rather than national) and integrating not only people with nature but people with themselves, allowing new alternatives for lifestyles. It means that women share — and maybe even abandon — our individual kitchens.

*Imagine: a community living space, with kitchenless apartments connected to a central kitchen, dining room, and daycare center. Each resident has a private living space, but eating facilities are shared, and children are tended on the premises as a rotating chore. Shopping, gardening, and laundry are collective tasks assigned to other rotating teams. Every evening one team cooks for all the residents.*

In some cases social solutions may not be possible, and in some cases a technological solution may be best — heat sensors and simple computer technology could regulate passive solar homes, freeing everyone of this task. Technology is a tool. We need to integrate social and technological solutions.

### The control of technology

Technology alone, even alternative technology, will not significantly change our culture. A change of values will change our culture. For all the problems, the values — the potential — of appropriate technology are closer than those of high tech to the values of feminism. Do we have a choice, though, between AT and high tech?

At the Women in Solar Energy (WISE) conference in Amherst, Massachusetts, in October, 1980, Ynestra King pointed out that when Margaret Mead heard of the research being done at the New Alchemy Institute on "passive" solar, she asked the researchers if they could not change the name — men would simply never support anything named "passive." King pointed out that Mead's "capitulation" showed who sets the terms of discussion on technology, what the values are/will be. Associations with the

female are denigrated even if the name is accurate, on the misogynist social assumption that "it is not good to be female."

"What is the significance for women," King asked, echoing Susan Griffin, "of being identified with nature in a culture which devalues nature?" Should women accept that identification or not? T-shirts from the conference proclaimed "Passive solar/Active women" — what ambivalence/complication lies here? Will a technology labelled "soft" and "natural" ever succeed?

Not without the help of women.

The founder of "ecology" was a woman, Ellen Swallow, in 1892. She was the first woman student allowed into MIT, and the first woman to graduate with a science degree. She combined the study of nutrition, air and water pollution, transportation, architecture, waste disposal, and industrial safety and health. Her interdisciplinary environmental science was gradually eroded into now-scorned home economics courses while men carried on the "science."

Not only have her contributions been devalued, but so have many traditionally female skills. Yet women have always been technologists; most of what women have traditionally done enacts the principles of AT — small-scale, labor-intensive, using local resources, conserving resources. Think of organic gardening, canning and preserving, weaving, quilting, midwifery. Women developed the survival technologies — food, clothing, shelter, healing. Appropriate technologists often refuse to recognize women's contributions and skills just as their ancestors devalued women's work. Pottery and basketweaving are not considered as "important" as sculpture or painting, engineering or construction. AT cannot afford to make this mistake.

*What if technology was assessed on the basis of its impact on women?*

Judy Smith and the Women's Resource Center have been working on a feminist impact statement, to be applied like environmental impact statements. These women ask us to consider whether a technology reinforces restricted options or creates expanded options for women. They are designing a "feminist cost/benefit analysis," assuming that what expands women's options is the "best" technology. They analyze the impact of technology on all levels (individuals, institutions, communities, women as a class, and society as a whole), identify the significant effects of a technology, then evaluate the social impacts.

Meanwhile, women are "on the edge" as Marge Piercy says. We must imagine our future if we are to have any control over it.

When women think about our future, we tend to think of it in terms of social change.

Technology is a tool. Technology could implement feminism.

If women are going to transform the world, we have to transform all of it — we have to take on technology. Our future is a place where technology empowers women and is ecologically sound, where women can do everything — and anything.

*What if... ?* □□

*Lisa Yost is a lesbian feminist poet who works as a staff scientist on environmental and occupational health for a consulting firm in Washington, D.C. She worked with the National Women's Health Network.*

*Patricia Logan earns her living writing about cooperatives for a public interest group in Washington, D.C. She is a member of the Washington Women's Self-Help collective and is writing a section on environmental health for the current revision of **Our Bodies, Ourselves**.*

# SOME THOUGHTS ABOUT READING ABOUT TECHNOLOGY

by Lane deMoll

I have never been very enamored of the technical side of technology. I can explain roughly how a wind generator or a photovoltaic cell works to a real novice, but have never been moved to keep up with the finer points of their development. I have comforted myself that there are at least a few other women involved in that arena and so far I have stuck to the organizing and communicating side of the A.T. movement, finding this human aspect more interesting and at least as important. I am one of those who will have to be dragged kicking and screaming to a computer terminal.

Yet, inevitably in this age I am constantly confronted by the hardware, whether it's living with our own solar collector (the fiddlings with I mostly avoid) or trying to answer my four year old son's increasingly sophisticated questions about things mechanical (I've never even *thought* before about how a typewriter works). Thus it was with a sense of irony that I greeted the pile of material I was asked to review for this issue.

I'm rather tired of the hand-wringing articles about how women are going to lose their jobs when the computers take over and "How are we going to get more women involved in technology?" These are important issues but they've been covered a lot, even in the popular press. I know it's not simple, but it seems to me that creative involvement will follow as our daughters begin to take advantage of the opportunities this generation of feminists of both sexes is forging at home and in the workplace.

Still, I guiltily recognize myself in this quote from *Women, Technology and Innovation* and find I must think it all through once again:

*To return home to build a solar oven, to grow a garden and to bake bread, to retreat to self-sufficiency and labor-intensive survival in a beautiful, but small and unrealistic world — is to leave those who already hold the chips playing the game. It is to leave the weapons of female destruction in the hands of men whom history has shown willing to pull the trigger.*

(Jan Zimmerman, p. 366)

I trust that the work I am doing now raising my sons and being involved in a rather ordinary way in a small town community is contributing in the long run to a healthy, balanced society. As women and feminists, we need to be taking part in the technological decisions affecting our future, but we also need to remember that *magic* and people-centered peacekeeping remain vital parts of our world. In our rush to take hold of the men's realm of technology and science we must not forget the somewhat mysterious, but ever-so-practical skills of the herbal healers, midwives, witches and mothers that were so mercilessly put down by men who quickly lost touch with the natural rhythms of the earth. Nor must we lose sight of the fact that we must *humanize* those hands on the trigger so that to pull it — or even develop fancier triggers — becomes unthinkable. It is on all these frontiers that we must be visionaries.□□

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## ACCESS: TECHNOLOGY

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### *Women, Technology and Innovation*

Joan Rothschild, Editor  
Pergamon Press  
Maxwell House, Rairview Park  
Elmsford, NY 10523  
\$14.50, 1982, 88 pp.

This anthology of articles printed as a special issue of the *Women's Studies International Quarterly* has a bit of the hand-wringing I described above, but it also contains some gems which provide exciting visions for the future. It's encouraging to read about women's inventions, both prehistoric and in modern times. If you're starting a women and technology course work program, this book also contains a useful synopsis of several such programs, so you won't have to reinvent the wheel. (Was the wheel invented by a woman? Why not?!) Most inspiring is an article about the Shakers and their practical, comfortable approach to technology. They often de-

vised machines to help them in their work (a Shaker sister invented the circular saw), yet they maintained a sense of craft and meaningful work (what the Buddhists call "right livelihood") that many of us are searching for today. They understood that even repetitive or heavy work can be joyfully rewarding if done in good company and pleasant, healthful surroundings, while rotated with more creative tasks. Cooperatives and small capitalists should take note: factories don't have to be grim, dehumanizing enterprises.

### *Never Done*

Susan Strasser  
Pantheon Books  
Random House, Inc.  
201 E. 50th St.  
New York, NY 10022  
\$11.95, 1982, 384 pp.

I learned an incredible amount from this examination of the history of

American housework from the 18th century to the present — technology assessment in an area close to our hearts! What was the impact of the invention of the wood cook stove over the often dangerous practice of open hearth cooking? How were women's spring cleaning chores affected by clean electricity and gas in stoves and lights? What were the capitalist decisions regarding mass production of automatic washers that did in first the home laundress trade and then the small family commercial laundries? How did servants fit into the picture in various eras? How have women increased their isolation in the home when they no longer met at the community well or gabbed over the fence as they hung out the laundry? So many positives and negatives to questions I never even thought to ask, yet which affect us daily. Through this discussion of familiar technologies I gained insight into the development of "grand" inventions, as well as increased

cont.

identification with the lives of my foremothers. *Never Done* is well researched and well worth reading.

**Taking Hold of Technology: Topic Guide for 1981-83**

American Association of University Women  
2401 Virginia Ave. NW  
Washington, DC 20037  
\$4.00, 1981, 88 pp.

The AAUW has made "Women and Technology" a major topic issue for their branches to study and these materials are a good place to begin for women who are truly unfamiliar with the issues of technology assessment, energy and communication technology, and appropriate technology. This volume makes a good text for a study group or class. It includes bibliographies as well as project and study ideas and a good list of "found" women inventors.

—Lane deMoll

Lane deMoll, former RAIN editor, is mothering two sons on the Oregon coast.

**The Grand Domestic Revolution: A History of Feminist Designs for American Homes, Neighborhoods, and Cities**

Dolores Hayden  
MIT Press  
28 Carleton St.  
Cambridge MA 02142  
\$19.95, 1981, 375 pp.

For six decades, "material feminists" expounded one powerful idea: *that women must create feminist homes with socialized housework and childcare before they could become truly equal members of society.*

In *The Grand Domestic Revolution*, Dolores Hayden, a professor of Urban Planning at UCLA, gives us an in-depth look at a vital and lively tradition whose vision we would do well to revitalize today—not only within our own homes but in our neighborhoods and nation as well.

Hayden calls such vision seekers as Melusina Fay Pierce, Marie Stevens Howland, Victoria Woodhull, Mary Livermore, Ellen Swallow Richards,

Mary Hinman Abel, Mary Kenney O'Sullivan, Henrietta Rodman, and Ethel Puffer Howes "material feminists" because they dared to propose a complete transformation of the spatial design and material culture of American homes, neighborhoods, and cities. These women were either dynamic leaders in the communitarian movements of their own times or else they took much of their inspiration and example from this movement to promote solutions to women's economic dependence and exploitation at the hands of society at large. They were active at every political level, from the household and the neighborhood to the municipality and the nation. The example they set for those of us who see the need for our own vision to expand into one for a national land-use policy that promotes cooperation, conservation, and equality is outstanding. Never has the time been more critical for those of us taking positive action in these basic areas to instill new direction to national policy. *The Grand Domestic Revolution* helps us to see ourselves a part of a long and positive tradition.

—Mary Vogel

**ACCESS: GOOD THINGS**

**Zami: A New Spelling of My Name**

Audre Lorde  
Persephone Press  
P.O. Box 7222  
Watertown, MA 02172  
\$7.95, 1982, 256 pp.

"As for history and the daily tasks at hand, I was brought up in the middle of Harlem in New York City in the middle of the last depression. I write with my toes curled up very tightly and one eye on the nearest exit."

*Zami*, Audre Lorde's biomythography, is her growing-up story of being born in Harlem, of parents from Grenada in the West Indies. It is her story of coming of age in the 40's and 50's in New York City. Her relationship with strong women/her mother. School, black friends and white. Living through the degrading racist experiences that make up every black child's growing up in America. Being a "gay-girl," the bars, the wonderfulness of those first love affairs.

The textures, the smells, the five senses are engulfed in such vivid descriptions that they linger on long after the reading. Sharing her life history opens doors to all of our lost histories—of being black or white or gay in this country during those years before stonewall. The strength and courage on every page, the beauty of our differences, and the richness of black cul-

ture shared is like a bright landscape painting that draws us in and transforms our lives, making our awareness of the world larger.

—Sarah Cook

Sarah Cook is a cultural worker and a distinguished older dyke.

**MS.: Our 10th Anniversary—August 1982**

MS.. Foundation for Education and Communication, Inc.  
119 West 40th Street  
New York, NY 10018  
\$1.75, 1982, 266 pp.

Frankly, it is hard to believe it has been ten years. I, for one, was an avid MS. reader for about six of those years till I ran out of money to spend on magazines and decided to continue subscribing to RAIN instead of MS. and TIME. Sometime in those first six years, MS. had begun to confuse me as to the direction the publication was pursuing. Unfortunately, despite strong feminist goals, advertising became the same as in most women's magazines—women-oriented consumption of booze, insurance, panty hose, sanitary napkins, diamonds, cosmetics, and the like. Advertising aside, however, MS. in 1982 is still a leader in feminist culture and the politics of change in the real work-a-day world.

The anniversary issue exploded with news notes about successful women in politics, business, and the arts, as well as kudos for feminist men and short stories, poems, and photographs celebrating the feminist perspective.

The best thing about MS. is that everytime I open it, feminism in action comes pouring out. It is important for women and men to remember that we are all tied together in the same struggle for justice and equality. The 10th Anniversary Issue brought me home again.

—Jane Peters

Jane Peters, energy activist, is an urban studies graduate student.

**Prospering Woman: A Complete Guide to Achieving a Full, Abundant Life**

Ruth Ross  
Whatever Publishing  
158 E. Blithedale  
Mill Valley, CA 94941  
\$7.95, 1982, 224 pp.

*Prospering Woman* is like a cool hand on the fevered brow of a woman coping with change. Reading this book is like talking with a good friend who isn't necessarily any wiser than you are, but who is wiser and more grounded at the moment you seek her counsel. It is filled with simple, profound truths, and

with specific techniques to enable you to act on these truths in your daily life. According to the author, "prospering" does not mean simply earning a lot of money, although this may be a part of it for some women. Rather, "prosperity is experiencing balance in life; it is attaining what we want on mental, physical, emotional, spiritual, and financial levels. Prosperity is the natural result of opening our minds to our creative imaginations and being willing to act on our ideas."

I have a few minor criticisms of *Prospering Woman*. One is that the book is clearly aimed at women of a certain social class, yet this is never openly acknowledged. There is little here of immediate use to someone who is hungry or unable to pay the heating bill. Also, the author sometimes takes the concept of accepting responsibility for one's life too far. Letting go of blame is healthy, but I can't agree that "coming from a position of responsibility is to say 'I got my parents to treat me the way they did—given who they were.'"

In spite of these criticisms, I place this book alongside Anne Morrow Lindbergh's *A Gift From the Sea* as a bedside "bible" and source of inspiration. Whether I'm feeling on top of the world or confused and depressed, *Prospering Woman* offers me valuable encouragement to acknowledge and act on my inner strength and wisdom—the inner

strength and wisdom which Dr. Ross argues every woman possesses. As a tool for self-understanding and transformation, I highly recommend *Prospering Woman*.

—Barbara Snyder

*Until recently, Barbara Snyder was the Executive Director of Tilth, a Northwest agricultural organization. She feels most prosperous when she's learning a new language.*

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**Women and Men Speaking**  
**Cheris Kramarae**  
 Newbury House Publishers, Inc.  
 54 Warehouse Ln.  
 Rowley, MA 01969  
 \$11.95, 1981, 194 pp.

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*Women and Men Speaking* is a clearly written, well-researched book on the subject of language used by men and by women. The author, Cheris Kramarae, explores the questions of whether there are differences between men's and women's language, why differences might exist, and what the consequences of these differences might be. As the title suggests, the book mainly looks at spoken language. The author limits herself to the English language, but the research presented includes British, Canadian, and American sources.

A strength of the book is that Kramarae uses theoretical models drawn from several different academic disciplines and explicitly states what these models are. The first of these, the "muted group" approach, assumes that since men's and women's experiences are often different, they perceive the world somewhat differently. A further assumption is that since males are dominant in society, they have more control over language. This leads Kramarae to investigate whether it is more difficult for women to use language to communicate what they experience.

*Women and Men Speaking* manages to cover a great deal of ground. The research presented comes from many disciplines and includes studies on non-white and non-middle class subjects as well as much feminist scholarship. Kramarae seems to be writing for a mainly academic audience, and the reader can get lost in the mass of data and sometimes contradictory conclusions. It is frustrating, at times, that Kramarae sometimes seems more interested in posing questions for further research than she is in drawing any firm conclusions. For anyone seriously interested in the subject, however, this is a book definitely worth reading.

—Sara Gogol

*Sara Gogol is a writer and teaches English as a Second Language.*

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# TOUCH AND GO

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## Ear Transplants? A Small Part of the Nuclear War

In trying to track a suspected Soviet submarine last October, the Swedish Navy had difficulty finding sailors who could hear well enough to operate the listening devices. A Navy captain attributed the hearing loss to years of listening to loud rock music. (New York Times)

## But Do They Know What They Are Reading?

Each week, Cosmo (Cosmopolitan Magazine) women drink 10,789,000 glasses of wine, and 7,893,000 glasses of cordials or liquors. 3,837,000 of them drank vodka in the last six months. And they entertained at home 180,234,000 times last year.

## Suppose You Get Used To It

In Reagan's first 18 months in office there was an attempt or threatening on his life about once every 30 hours. That is to say, 284 people were arrested for threatening his life. According to the Secret Service, 95% of the people were prosecuted, convicted, and sentenced to serve time in prison or a mental hospital.

## Small Business Development

In a recent issue, the Conservative Digest published a surprising list of loans made by the Small Business Administration. These included a \$345,000 loan to Tom Brokaw (NBC News) to buy a South Dakota radio station, and a \$45,000 loan to Donald A. Nixon, nephew of the former U.S. president, who claims he was "socially disadvantaged". He used the money to buy a gold mine.



## The Last Word on M\*A\*S\*H

As you probably know, the last chapter of the popular TV show *M\*A\*S\*H* was viewed by the largest TV audience ever; therefore, it was one of the major events of history as measured by how many people simultaneously experienced it. Perhaps you didn't know that several months before the last chapter, Bob and Wanda Donahue in Wethersfield, Connecticut, were watching *M\*A\*S\*H* when their house was struck by a six-pound meteorite. Another meteorite weighing 12 pounds struck the same town in 1971.

## Quality of Life Index

Three out of four Americans alive in 1982 will die of cardiovascular diseases, cancer, accident, or violence.

## WOMEN'S MOVEMENT ORGANIZATIONS

*In the past few years, there has been a flourishing of networks and alliances for greater self-reliance and self-responsibility. The women's movement is no exception. Women are increasingly taking their individual and collective development into their own hands, not ignoring this responsibility by letting designated experts, "the system", and men decide and do everything.*

*In this era of escalated information exchange, women with motivation can educate themselves about a whole spectrum of issues pertaining to their own unique situations.*

*The following are just a sample of the broad spectrum of women's organizations. A more complete listing of women's movement organizations, gathered in the process of compiling this issue, is available for \$2.00 from RAIN.*

### INTERNATIONAL DEVELOPMENT

**Women's International Resource Exchange Service**, 2700 Broadway, Rm. 7, New York, NY 10025. WIRE functions as a clearinghouse and distribution center for evaluation and dissemination about women in the Third World and Third World women in the U.S. They publish a broad range of materials on an equally broad range of topics. Their catalogue is published in both English and Spanish.

**Women's World Banking**, P.O. Box 1691, Grand Central Station, New York, NY 10017. WWB, founded in 1979, is a non-profit financial organization concerned with helping women-run small businesses in developing countries to obtain credit, mainly through posting loan guarantees. WWB also helps to provide technical assistance for these businesses in order to keep them viable.

**International Women's Tribune Centre**, 305 E. 46th St., 6th Floor, New York, NY 10017. The IWTC publishes *The Tribune*, a women and development quarterly (\$5/yr.; free to women in Third World countries) published in English and Spanish. Each issue focuses on a specific topic with an extensive resource section, including groups and publications pertinent to the issue's topic. IWTC itself dispenses "information and technical assistance related to women-and-development activities." Besides *The Tribune*, IWTC publishes issue papers, resource books, and a training manual.

### SCIENCE AND TECHNOLOGY

**Women and Technology Project**, 315 S. 4th E., Missoula, MT 59801. The Project sponsors workshops, conferences, and publications concerning women and technology. The Women and Technology Network arm of the Project maintains a directory of people interested in and involved with this area, including personal skills and resources available for sharing.

**The Association for Women in Science**. AWIS, Suite 1122, 1346 Connecticut Avenue, N.W., Washington, DC 20036. Bimonthly newsletter. Membership dues on sliding scale.

**Women in Technological History**. Subgroup of the Society for the History of Technology. C/O Deborah Jean Warner, Museum of American History, Smithsonian Institution, Washington, DC 20560. Tri-annual newsletter. \$5.

### ECONOMICS AND WORK

**Women's Equity Action League**, 805 15th St. NW, Ste. 822, Washington, DC 20005. WEAL is a national membership organization dedicated to securing the economic and educational equity for women through legislative monitoring, public education, and litigation. Currently focusing on issues critical to the economic survival of women, they also train interns to provide research and legislative assistance on public policy issues affecting women.

**9 to 5, National Association of Working Women**, 1224 Huron Rd., Cleveland, OH 44115. 9 to 5 is a membership organization striving for improved working environments, increased rights, and greater respect for working women. They publish a bimonthly newsletter, reports, and educational resources of use to working women.

**Federation of Organizations for Professional Women**, 2000 P St. NW, Ste. 403, Washington, DC 20036. The Federation is the umbrella center for professional women's organizations. They "work to promote public policies that enhance the growth and recognition of professional women" by screening, monitoring, and channeling input on relevant legislation and regulations. The Federation also publishes special reports and holds seminars on topics touching the lives of professional women.

### SUPPORT FOR EQUITY

**American Association of University Women**, 2401 Virginia Ave. NW, Washington, DC 20037. AAUW is the largest and oldest national organization working for the advancement of women, having been founded over a century ago. AAUW works for greater equity for women, increased influence in public policy for positive social change, the continuing education of its members, and public interest research and projects. The Association offers many publications, including their bimonthly magazine, *Graduate Woman*.

**Women's Action Alliance, Inc.**, 370 Lexington Ave., New York, NY 10017. The Alliance is a network of women and women's organizations dedicated to full equality for women. They operate a national information service which includes publications such as *Women Helping Women: A State-by-State Directory*

*of Services*, a compendium of nontraditional counseling and shelter services across the country. Among the Alliance's other programs are the Economic Development Project, which assists women's organizations in upgrading management skills and undertaking income generation projects, and the Nonsexist Child Development Project, which encourages educators and parents to provide a bias-free environment for young children.

**New Directions for Young Women, Inc.**, 738 N. 5th Ave., Tucson, AZ 85705. New Directions provides support and guidance services to young women between the ages of 12 and 25. They facilitate dialogue on sexuality, cultural awareness, juvenile rights, teen pregnancy, and parenting. New Directions' National Female Advocacy Project seeks to remedy the unequal treatment of young women in the juvenile justice, social service, and educational systems through programs of education, coalition building, public policy action, and resource provision. The Project is using Oregon as a special focus and has an office here (N.F.A.P., P.O. Box 12571, Salem, OR 97309).

**Women's Legal Defense Fund**, 2000 P St. NW, Ste. 400, Washington, DC 20036. Since 1971, the WLDF has provided assistance to women with legal problems that affect them as women. Support services range from counseling in domestic relations, employment, credit, name change or retention; advocacy, community outreach and education through publications, seminars, and a speakers bureau; and litigation, particularly in discrimination cases. Publishes a quarterly newsletter (\$5 to non-members and organizations).

### INFOCOM and MEDIA

**National Women's Mailing List**, a project of the **Women's Information Exchange**, 1195 Valencia Street, San Francisco, CA 94110. A feminist model of the use of computer technology, this is a computer-based mailing list project designed to facilitate communications, outreach, networking, and resource sharing between feminists on a regional and national level. Send a SASE for more information.

**Women Against Violence in Pornography and Media**, P.O. Box 14614, San Francisco, CA 94114. WAVPM is a national non-profit organization which challenges cultural sexism and violence against women and is working to eliminate abusive media images of women and children used for entertainment or profit. They have produced a slide show and a directory of national feminist anti-media violence groups. They publish a monthly newsletter, *Newspage*, and their media protest packet is a fine example and case-in-point for how to write a protest letter.

# PACIFIC NORTHWEST BIOREGION REPORT

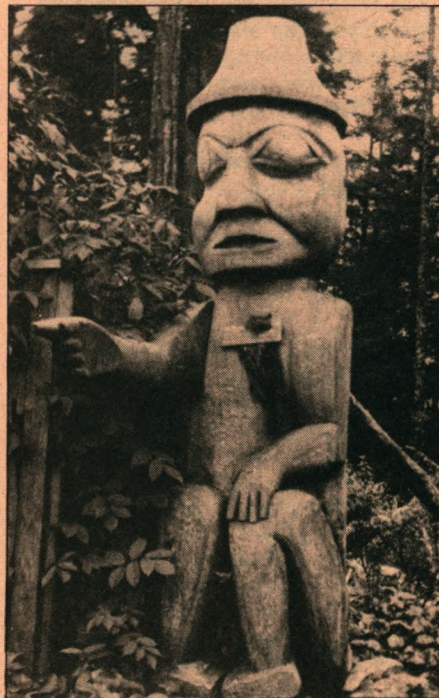
## PACIFIC RIM RAMBLE

All the news that's fit to print is a matter of taste. What is one person's pile of good information may be another's material for the recycling bin. This column, with information on everything from new road signs to albino frogs, may offer something for everyone's palate.

Radioactive waste, radio-wave pollution, and other concerns about hazardous substances are the focus of the RADIATION EDUCATION COUNCIL, which publishes a newsletter, (PO Box 705, Lakeview, OR 97630). . .Motivated by the idea that unemployed people can support each other, three southeast Portland women, with the assistance of Southeast Uplift, a neighborhood organization, have organized an UNEMPLOYMENT FORUM. The first forum focused on alternative methods for unemployment to meet basic needs, including food-buying clubs, energy assistance, and housing alternatives. . .Some people have discovered that the map is not always like the territory. The U.S. FOREST SERVICE has changed the number system on its 80,000 miles of roads in 19 National Forests in Oregon and Washington. The system is really simple. Well, kind of.

It is an arterial concept. Four-digit numbers are assigned to collector roads which branch off from the arterials. The first two digits of a collector are identical to the two digits of the arterial. For a description, write to the U.S. Forest Service, PO Box 3623, Portland, OR 97208. . .PORTLAND BY BICYCLE is a handy guide to bicycle routes and trips of various lengths in and around Portland, produced by the Bicycle Commuter Service, 1914 SE Ankeny, Portland, OR 97214. . .The NORTHWEST CHINA COUNCIL, a program of the World Affairs Council of Oregon, is a group focused on keeping the understanding of China's history, culture, and contemporary affairs, in the People's Republic, Taiwan, Hong Kong, and among Chinese-Americans. The group sponsors forums and work-

shops (1912 SW Sixth, #252, Portland, OR 97201). . .FROGONIANS has been organized to make Willie, an albino frog from Williams, Oregon, into a national water conservation symbol. The group presently has over 10,000 members. Find out more by writing to Ed and Bobbie Schmidt. (PO Box 94, Williams, OR 97544). . .The SEATTLE CREATIVE LISTING is a guide to media services in the Seattle area, including sections on film/video, audio-visual, radio/television, and writing. The cost is \$15 from Seattle Creative Listing. (PO Box 31667, Seattle, WA



98103). . .Congratulations to the Women's Place bookstore in Portland which has just celebrated its tenth year of being in business . . .Another in the growing number of BIOREGIONAL PLATFORM STATEMENTS was received from the Cascadian Commonwealth Movement, calling their geographic concern Cascadia. More information from Cascadian Commonwealth Movement, 2080 Riverview, Eugene, OR 97403. . .OREGON'S HAZARDOUS WASTE TREATMENT

FACILITIES is a new fact sheet available from the Oregon Department of Environmental Quality describing Oregon's facilities for dealing with hazardous materials (Solid Waste Division, DEQ, PO Box 1760, Portland, OR 97207). . .Saying that "Television is like an open sewer flowing through our living rooms," television's GALLOPING GOURMET, Graham Kerr, moved to Eugene to run the International Quality of Life Center, which encourages people to live better for less. . .The Oregon Nature Conservancy office received a \$20,000 grant from the Oregon Economic Action Council to establish an education and assistance program for owners of small timber stands in western Oregon. The Conservancy based their proposal to the Action Council on economic and employment returns to the state that would be gained by wise management of the resources. . .The Feminist Karate Union in Seattle, in existence for over a decade, is moving into larger quarters. The new space was designed by, and is being largely built by, female volunteer energy. The group is closely associated with an organization called Alternatives to Fear, which teaches self-defense to women, children, and senior citizens. (101 Nickerson, Seattle, WA 98109. 206 / 282-0177). . .On the top of Pacific Rim readers' lists this spring should be three books, which we received in one week, and which we will be reviewing in depth in next issue. *The Klamath Knot* by David Rains Wallace (Sierra Club Books) is a natural history of the Klamath Mountains with forceful insights about humanity's place on the earth glittering from every page. *The Mountain in the Clouds* by Bruce Brown (Simon & Schuster), a plaintive history of salmon in the Northwest, is a primer for the movement (growing by leaps and bounds) for sustainable fisheries in the Northwest. *The River Why*, the first novel by David James Duncan (Sierra Club Books), is an artful, uproarious novel about obsessed fisherpeople in the Northwest.

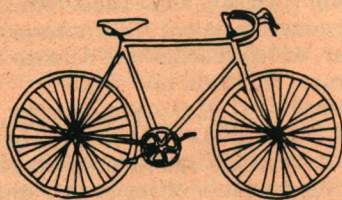


## A Territory Resource (ATR)

A Territory Resource (ATR) is a non-profit public foundation organized in 1978 to increase the funds available for social change activities in the Pacific Northwest and Northern Rockies. ATR supports projects that bring people together to work for social change and to confront the fundamental problems of American society.

In the Fall, 1982 funding cycle, ATR-funded projects included \$7,000 to the Montana Coalition Fund (Helena, Montana) to conduct workshops about economic alternatives for Montana; \$7,500 to the Northwest Conservation Act Coalition (Seattle, Washington) for continued work in monitoring the implementation of the Northwest Power Plan; and \$5,500 to the Powder River Education Project (Sheridan, Wyoming) to support research, development and advocacy for water policies that are environmentally sound and equitable to the people of Wyoming.

Grants usually range from \$1000-\$10,000, with proposals for spring grants being accepted up to February 1, and grants for the fall cycle being received up until September 1. For more information write to Greg Caplan "Tuke, A Territory Resource, 304 Lloyd Bldg., Seattle, WA 98101, 206/624-4081.



## Bellingham Cyclists' Union Rolling

Bellingham, Washington, suffers the second highest bicycle accident rate in the state. The Commuter Cyclists' Union (CCU) is working to change that—and more.

Formed in December, 1981, the CCU set out to improve dialogue with city officials on road and intersection safety, street markings, road and bicycle lane design, and bicycle regulations.

The group has developed several interesting programs. By maintaining an accident file, they identify

dangerous intersections and other patterns that tend to cause accidents. They distribute street maintenance cards to bicyclists who can then use them to report on street conditions to the city public works department.

They have also helped in the development of the Bellingham Bicycle Advisory Committee within the City's Planning Department, to advise public officials on ways to make the city more hospitable for cyclists. For more information write to the Commuter Cyclists' Union, 1011 Garden St., Bellingham, WA 98225, 206/734-7969.

## Portland Neighbors Learn How to Weatherize

Residents of the southeast Brooklyn neighborhood in Portland are participating in free weatherization workshops this March and April. The workshops are a pilot program which test the block-by-block approach to energy education, similar to the very successful Neighborhood Watch crime prevention programs.

Workshop participants learn how to conduct a simple energy audit on their homes, learn basic ideas for using less energy, and are informed about city and utility financial incentives for higher cost weatherization.

An added incentive to participating in the workshops is the availability of free weatherization kits for low and moderate income residents. These kits contain up to \$50 worth of materials — including several kinds of weatherstripping, caulk, and materials for plastic and wood frame storm windows.

The project is being carried out by the Community Energy Project Northwest, which has been offering weatherization workshops in Portland since 1981. The group is working closely with the Brooklyn Action Corps and has gained financial support for the project from the Portland Energy Office and the Bureau of Housing and Community Development.

Initial response by the Brooklyn workshop participants has been enthusiastic. When the project is completed in late April, an evaluation will help decide the future direction of the program and possible expansion of the program to other neighborhoods in Portland.

For more information contact the

Community Energy Project, 3116 N. Williams Ave., Portland, OR 97227, 503/284-7868.

—Annette Osso

## Northwest Indian Women's Circle

The Northwest Indian Women's Circle is a grass roots organization that acts as a communication vehicle for Indian women and sponsors educational events throughout the year. A recent packet from them provided news of the Indian fishing rights struggles, a summary of activities of the Circle, and a report on the First American Indian International Tribunal held in 1982 in California. For more information write to the Northwest Indian Women's Circle, PO Box 8051, Tacoma, WA 98408, 206/458-7610.

## Education For The Future

A new Masters of Arts Degree in Whole Systems Design has been announced by Antioch University in Seattle. The coursework includes training in social technologies such as strategic planning, conflict resolution, and organization development from a systems perspective. This fully accredited, individualized program is for those who want to understand and influence human systems while reflecting the values of service, unity, and planetary transformation. For more information, contact Joy Carey, Antioch University/Seattle, Seattle, WA 98109, 206/343-9150.

## Science in the Public Interest

Scientists/Citizens Organized on Policy Issues (SCOPI) is a Science for Citizens Center originally funded by the National Science Foundation to assist the community — especially low-income, elderly, and minority organizations — to understand and deal with scientific and technical aspects of public policy issues.

SCOPI works in a variety of ways to assist citizens with scientific and technical information needs. Utilizing an "experts network," a volunteer skills bank of specialists willing to provide information and consultation on a wide variety of subjects, SCOPI matches needs of citizens with appropriate specialists. They also develop, and in some cases fund, background research for com-

munity projects; sponsor meetings and forums on critical community issues; and publish reports of topics of concern to Seattle-area residents.

Recent projects included a Renter Weatherization Project at the request of the Seattle Tenants Union, to identify weatherization alternatives for renters; compilation of data on the history of Seattle's Urban Renewal Program; and a research project on health considerations in siting and planting urban gardens.

Several project reports are also available, including *Impacts of Downtown Development on Seattle Housing Costs; Downtown Jobs; and Land Use Planning and Social Services Planning for Downtown Seattle.*

For more information, contact Sue Walsh, Executive Director, SCOPI, 909 Fourth Ave., Seattle, WA 98104, 206/382-5013.

## Women and Politics in Oregon

Oregon has had a very fine tradition of electing progressive women to office. Of our six state-wide executive positions that are elected, two are held by women. We have a woman on the State Supreme Court and a woman on the Federal Court in Oregon. Our legislature is 22% women, which is one of the highest percentages in the country. Now in our legislature, women hold positions of real power, including Co-chair of the Joint Ways and Means Committee, House Majority Leader, House Majority Whip; House chairs of Education, Transportation, Energy and Environment, Human Resources; Senate chairs of Labor, Business and Consumer Affairs, Commerce, Banking and Public Finance, and Economic Activities.

Yet despite this impressive record, as well as Oregon's progressive women's rights legislation, we still have a long way to go toward equal representation and addressing the needs of Oregon women who earn 55 cents for every dollar Oregon men earn. As in every state, we have the phenomenon of the feminization of poverty; that is, more and more female heads of households are falling into poverty.

In Oregon, the Oregon Women's Political Caucus (OWPC) is working to help women gain political power. They provide information-filled workshops on how to work effectively on political campaigns, raise

money for candidates who support women's issues, and increasingly wield substantial political clout. For more information, write to Nancy Roche, President, Oregon Women's Political Caucus, PO Box 40465, Portland, OR 40465, 503/224-2588.

During the 1983 Oregon Legislative session, a coalition of women's groups will coordinate lobbying efforts on women's issues. Write or call Women's Rights Coalition, Sherry Oeser, Lobbyist, 1311 Peace St., Suite 12, Salem, OR 97302, 503/364-9410.

—Elaine Zablocki, Margie Hendriksen



## Restaurant Pioneers Means to Dreams

How does a struggling restaurant collective raise enough capital to buy a larger space? Bake sales? Dance benefits? Donations? Zoo Zoo's Natural Foods Restaurant Collective in Eugene, Oregon, tried all these with moderate success. Yet more funds were needed to finance the move to a new space.

They devised a simple method to not only generate capital but also to help ensure that they would have customers. By selling vouchers for \$4 that were redeemable a year later for meals up to \$5, Zoo Zoo's

could use the money now, and pay it back later — an informal lending institute made up of customers.

So, does it work? Testimony for its success can be seen in Zoo Zoo's new restaurant space. Collective member Robyn Braverman cautions, however, that careful planning is crucial for the voucher system to work. She notes that the vouchers must be dated for redemption on a staggered basis, so they all don't come back at once. The "currency" requires systematic records to avoid bookkeeping tangles. They also kept their advertising expenses minimal by using small posters and word-of-mouth.

Used locally, and in good faith, the Zoo Zoo's example holds promise as a simple cooperative way of raising capital. For further details, contact Zoo Zoo's Restaurant, 454 Wilamette St., Eugene, OR 97440.

## Barter Group Eyes Northwest

What started as a small fund-raising project in Seattle has grown to encompass western Washington, from Vancouver to Bellingham. The Bartering Alliance, a nonprofit organization, was originally intended to raise funds for the Utter Project (UP), a day care pre-school service in Seattle, but it also spawned a valuable work exchange for hundreds of people, many unemployed.

The focus of the Bartering Alliance's work is the publication of *The Bartering Directory*. The Directory, which offers free listings for people wanting to barter, is used on a direct exchange basis: participants contact each other through the directory, without involvement of the Bartering Alliance. "The idea is to make the system as independent as possible," concluded former Tacoma area coordinator Shawn McCarton.

The Alliance is planning to expand listings in the directory to include residents of Oregon and Idaho. To submit an entry, order a directory, or find out more, contact Kathy McCarton, The Bartering Alliance, PO Box 25192, Seattle, WA 98125.

## Seattle Institute Spinning Northwest Web

The Institute of Cultural Affairs in Seattle works as one of 86 region-

cont.

al offices in 35 countries, mostly in the Third World. They facilitate self-development programs that "move individuals, communities, and organizations toward self-sufficiency and self-confidence." The ICA operates self-help programs in over 1,000 villages with 10,000 volunteers and 30,000 colleagues planet-wide.

The Institute organized a region-wide conference on human development in the 1980's called "Passages: Northwest". Their planning was truly participatory. From December 1980 to April 1981, ICA staff conversed with community leaders in 144 towns in the three Northwest States (Oregon, Washington, Idaho). A two-day regional symposium in Pendleton, Oregon, outlined local approaches to issues facing the Northwest's future. Following local practicum events in seven geographic divisions, a two-day Directions Assembly in Vancouver, Washington, proposed ways to implement new projects throughout the region.

A major project in the ICA's shift

from coordination among neighborhoods and communities to workplace communities was a Puget Sound area conference: "Society and Engineers, Building the Future Together." Held March 25-26 in Seattle, participants took steps to "organize a group for deciding how engineers can work toward an appropriate future."

Another such effort is developing in the form of an Entrepreneurial Guild in Seattle. Meetings have included a report on marketing and discussions about Marilyn Ferguson's *The Aquarian Conspiracy* and Peter Drucker's *The New Economics*. A Futures Symposium to explore opportunities in the entrepreneurial revolution is being planned.

The Institute offers participatory management seminars, a speaker's bureau, and intensive workshops from "Getting Things Done: A Course in Productive Leadership" to "Cultural Revolution: Understanding Paradigm Shifts." The full-time staff live cooperatively in family units, together forming an intentional

community. They also operate an intern program. For more information write or call The Seattle House, 1025 First Ave., W., Seattle, WA 98119, 206/282-3166.

## Oregon Legislative Research

The Legislative Research Office of the Oregon Legislative Assembly has announced current research projects which include gathering information about Ireland's Cottage Industry Laws; determination of whether a portion of a county has ever seceded and formed a new county; gathering information on the number of cable television companies in Oregon, how many are not regulated by local jurisdictions, and other states' laws regarding such unregulated cable television companies; and determining the effects of legislation concerning employees' right to know of the dangers of toxic substances in workplaces. For information write to Legislative Research, S-420 State Capitol, Salem, OR 97310.

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## REGISTRY OF NEW PERIODICALS

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**CLINTON STREET QUARTERLY**, 2522 S.E. Clinton, Portland, OR 97202. Quarterly, \$5/year. The Clinton Street Quarterly continues to offer a voice for artists and a place for news not covered by traditional newspapers. With intentions of expanding their coverage beyond Portland, they recently opened a Seattle office.

**COMMUNITY OPTIONS**, 3138 Overhulse Rd., NW, #96, Olympia, WA 98502.

A new contributor-written monthly that spans most aspects of community life in Olympia, including health, education, environment and agriculture.

**HOBO NEWS**, Burnside Community Council, Inc., 313 East Burnside, Portland, OR 97214.

A newsletter devoted to news in Portland's oldtown/skid road area. A voice for the hobos!

**MULTNOMAH MONTHLY**, 3036 SE 33rd, Portland, OR 97202. Monthly, \$10/year delivered. The Monthly has been around for a couple of years. It is, like the Clinton Street Quarterly, an alternative voice for the Portland area, with news, fiction, reviews, regular columns, calendar of events.

**NEW COMMUNITY NEWS**, P.O. Box 3083, Wenatchee, WA 98801.

A journal with news and information about community, art, natural resources, and personal growth.

**THE NEWSLETTER WITHOUT A NAME—YET**, Portland Cable Access, Inc., 5345 SE Foster Rd., Portland, OR 97206.

A new newsletter that reports on Cable-TV activities in Portland. The Portland Cable Access, Inc. is the organization that oversees instrumentation of public access to the cable system.

**THE NETWORK NEWS**, A Food Network Publication, PO Box 12391, Salem, OR 97309 (current subscription rates under review).

A jam-packed newsletter of the Food Network in Salem, OR, that reports on news in the food cooperative and natural foods business, and agricultural policy issues.

**OKANOGAN NATURAL NEWS**, P.O. Box 139, Tonasket, WA 98855.

In its second year, a monthly tabloid with news from the Okanogan area of Washington. Interesting supplement is the Okanogan Sundial Almanac.

**OREGON COAST MONTHLY**, P.O. Box 18000, Florence, OR 97439.

A slick new effort (several others have failed in recent years) to bring the Oregon Coast up a peg or two (class!). Full-

color photo spreads. Includes Oregon Coastal Zone Management newsletter.

**PACIFIC BUSINESS**, 10350 S.W. Fifth Street, Beaverton, OR 97005.

A new glossy 62-page bi-monthly covering news and developments in Pacific Rim trading, with articles such as "Pacific Northwest Winter Recreation: Cold, Hard Cash."

**SOUTHEAST UPLIFT NEIGHBORHOOD PROGRAM NEWSLETTER**, 3534 S.E. Main, Portland, OR 97214.

If you want to know about current and upcoming community-based activities in Portland, the simple (8½ x 14 typed and fast-printed) and jam-packed newsletter from this southeast Portland neighborhood office is an excellent source. The newsletter shows how useful a simple neighborhood newsletter can be.

**TRANSFORMATION TIMES**, P.O. Box 12290, Portland, OR 97212.

\$9/yr. Portland's contribution to the growing network of transformation/spiritual evolution periodicals around the country.

**WHOLE LIFE TIMES NORTHWEST**, P.O. Box 20728, Seattle, WA 98102.

A wide ranging transformational tabloid. The September 1982 issue had a guide to intentional community life in the Northwest. (\$8/9 issues)

# ADVERTISING

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### RAIN Advertising Policy

RAIN accepts both classified and display advertising. Classified ads cost 30¢ per word. As a special service during these times of high unemployment, work-related ads (see "Worthy Work") are only 15¢ per word.

All ads are accepted at RAIN discretion. The advertising of products and services in RAIN should not be considered an endorsement. RAIN is not responsible for product or service claims and representations.

For information on display ads or a rate sheet contact: RAIN Advertising Dept., 2270 NW Irving, Portland, OR 97210; 503/227-5110.



Now there is a newsletter that shows you how to succeed in a sideline business of your own. Here is your chance to add \$1,000, \$2,000, \$5,000 or more to your regular annual income from your own part-time business.

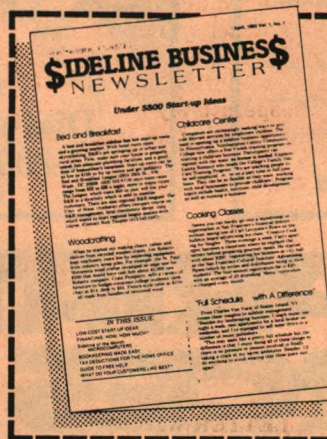
**SIDELINE BUSINESS NEWSLETTER** pinpoints new opportunities that are opening up in new age and traditional areas. You'll find out how to

start a sideline in computer services... solar energy...crafts...food catering... consulting...self-publishing...childcare services...business services and more.

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Gain security and independence in your own sideline. Start with **SIDELINE BUSINESS NEWSLETTER**—mail the coupon today.

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## CLASSIFIEDS

**COMPOSTING TOILETS:** Washington-approved. In use throughout the Northwest. Odorless, waterless, nonpolluting. For brochures send \$2 to CTS, Rt. 2, Dept. RJ, Newport, WA 99156.

**THE AQUARIAN SOCIETY** is being formed. Divine healing center. New World order. For information send dollar and LSASE to the Aquarian Center, P.O. Box 706, Trinidad, CA 95570.

**SELF-RELIANT VILLAGE:** Join our existing intentional community in stable rural setting for more secure, satisfying future. Stressing individual freedom, sustainable gardening, energy-efficient houses, cooperative projects for mutual benefit. (Not a commune nor religious cult.) Ponderosa Village, Rt. 1 #17-6, Guldendale, WA 98620; 509/773-3902.

**TIPI FOR SALE:** Made by Nomadic Tipi Makers (Bend, Oregon), 20 ft. Sioux tipi with door cover (liners not included), \$300 practically new. Call Mimi 503/282-6842 (Portland area, evenings) or write Deb Swink, Rt. 1, Alco, Arkansas 72610.

**EDUCATIONAL TOYS:** Outstanding creative selection for children of all ages. Catalog, \$2.00, refundable. Discovery Toys, 73 Putnam St., Buffalo, N.Y. 14213.

### Worthy Work

**COMMUNITY:** Woman inspired by Fukuoka's "One Straw Revolution" seeks welcoming community practicing permaculture/sustainable agriculture. Kathryn Beaton, RR#9 Peterborough, Ont. K9J 6Y1 Canada. Tel. (705) 742-1266.

**RAIN INTERN PROGRAM:** Rain has an on-going intern program which enables staff interns to gain a thorough knowledge of magazine publication and resource center operation. The work is a mix of activities including promotion, research, editorial work, production, library and office maintenance, information requests, publicity, and local educational or organizing efforts. Applicants must be self-motivated and able to work with minimum supervision; technical skills are appreciated though not necessary. A three-month commitment is required. Benefits include a stipend of \$40 per week and the excitement of being in touch with the latest information from around the country. Send resume to Nancy Cospers at RAIN.

## NEED HELP SURVIVING THESE HARD TIMES?

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SURVIVAL PLANNING FOR THE '80s:

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A publication of COMMUNITY CAREERS RESOURCE CENTER and the NATIONAL NETWORK OF GRANTMAKERS

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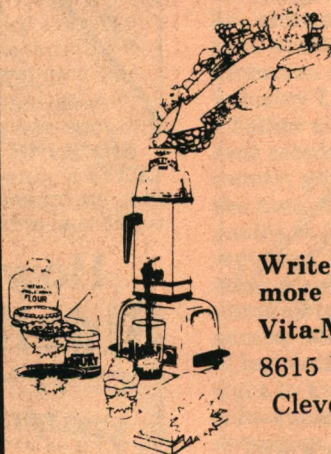
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# APPROPRIATE RESOURCES

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### Gardening For All Seasons

The New Alchemy Institute  
A guide to home food production that includes information on community gardening, tree crops, aquaculture and much more. \$10.95 paperback.

### Nothing Can Be Done, Everything is Possible by Byron Kennard.

Former National Co-Chair of Earth Day '80 and Sun Day '78 writes on "the zen of social activism". \$9.95 paperback.

### Brittle Power: Energy Strategy for National Security by Amory and Hunter Lovins.

A brilliant study of America's energy vulnerability commissioned by The Federal Emergency Management Agency. \$8.95 paperback.

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# CALENDAR

**JOBS WITH PEACE**, a nationwide campaign to divert federal funds from nuclear weapons to housing, education, transportation, and human services, is sponsoring Jobs with Peace Week, April 10-16. For information contact peace groups in your area or the national office, 2940 16th St., #1, San Francisco, CA 94103, 415/558-8615.

**WAR RESISTERS LEAGUE's** 60th annual national conference will be held July 14-17, at Lafayette College in Easton, PA. Write to the War Resister's League, 339 Lafayette St., New York, NY 10012.

**The 14th NATIONAL CONFERENCE ON WOMEN AND THE LAW** is being held in Washington, DC, April 7-10. Unity and Empowerment is the theme of this year's conference. For more information write to 2633 16th St., NW, Washington, DC 20009, 202/745-0033.

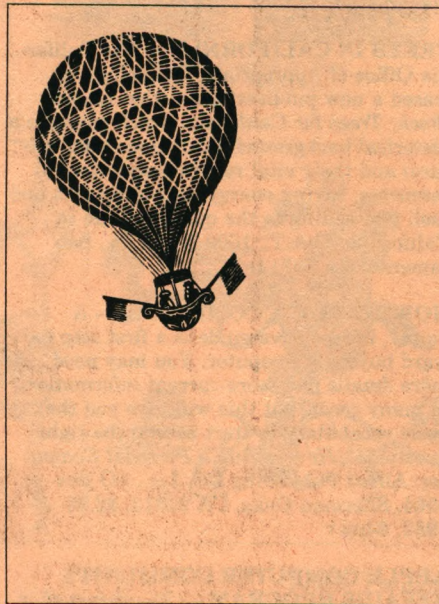
**The 5th ANNUAL INTERNATIONAL ENERGY TRADE SHOW/CONFERENCE**, sponsored by the Ohio Hardware Association and the National Energy Journal, will be held June 7-9 at the Ohio Center in Columbus, Ohio. For more information contact the National Energy Journal, PO Box 15035, Chesapeake, Virginia 23320, 800/446-8303.

The American Solar Energy Society will be conducting its 1983 Annual Meeting and **SOLAR TECHNOLOGIES CONFERENCE AND PRODUCTS EXHIBITION** at the Minneapolis Convention Center, May 31 to June 4. The Sixth Biennial **WIND ENERGY CONFERENCE AND WORKSHOP** will be held in conjunction with the conference. For more information contact Karen George, American Solar Energy Society, 1230 Grandview Ave., Boulder, CO 80302, 303/492-6017.

The Energy Bureau has announced three conferences on energy topics: **ENERGY DEVELOPMENT ON FEDERAL LANDS** will be held May 23-24 in Denver; a conference on the impact of **INTERFUEL COMPETITION** will be held May 9-10, in Arlington, Virginia; and **FINANCING ALTERNATIVE ENERGY DEVELOPMENT** will be held June 13-14 in Arlington, Virginia. For more information contact the Energy Bureau, 41 East 42nd St., New York, NY 10017, 212/687-3177.

**The Eight NATIONAL CONFERENCE ON NEIGHBORHOOD CONCERNS** is scheduled for May 24-28 in Cincinnati, Ohio. The conference is sponsored by Neighborhoods, USA, and will contain practical information for neighborhood organizers. For more information contact Sherry Kelley Marshall, Department of Neighborhood Housing and Conservation, 415 W. Court St., Cincinnati, OH 45203, 513/352-4910.

To help meet the needs of the working woman by providing information necessary for enhancing her skills and introducing her to a significant representation of employers, the second annual **ROCKY MOUNTAIN REGIONAL WORKING WOMEN'S EXPOSITION** is being held June 17-18 in Denver, Colorado. For more information contact Consultants for Business Meetings, 9108 W. Radcliffe Drive, Littleton, CO 80123, 303/979-1580.



The Chinook Community is sponsoring a conference entitled **BUILDING A PLANETARY VILLAGE**. The conference will bring together people from around the world who are committed to working in their home communities to build villages that ecologically sound, personally nurturing, and globally responsible. John Todd, Sim Van Der Ryn, Eileen Caddy, and Betty Didcoct will be among the workshop leaders. For more information contact The Chinook Learning Community, PO Box 57, Clinton, WA 98236, 206/321-1884.

In the summer of 1983, the relationship between **FEMINISM AND ECOLOGY** will be examined at the Institute for Social Ecology from July 15-August 6. More information can be obtained by writing to Gloria Goldberg, Summer Program Coordinator, Institute for Social Ecology, PO Box 89, Plainfield, VT 05667.

**EARTH SHELTERED ARCHITECTURE** is the subject of a conference to be held June 10th at the Cape Cod Community College near Hyannis, Massachusetts. Workshop leaders will include Don Metz, Dr. Raymond Sterling, Malcolm Wells, and David Wright. For more information write to Solar/Earth Shelter, PO Box 1149, Brewster, MA 02631.

**TOOLS FOR COMMUNITY SELF-RELIANCE** is the title of a seminar on community self-financing techniques sponsored by the E.F. Schmacher Society in conjunction with the Center for Neighborhood Technology of Chicago. The conference is scheduled for June 9-15 in Chicago. For more information write or call E.F. Schmacher Society, Box 76A, RD 3, Great Barrington, MA 01230, 413/528-1737.

The Center for Urban Education will co-sponsor and coordinate the annual convention of the **NATIONAL FEDERATION OF LOCAL CABLE PROGRAMMERS** which will be held in Portland, Oregon, July 14-16. For more information contact Center for Urban Education, 0245 SW Bancroft, Portland, OR 97201, 503/221-0984.

**The FINDHORN FOUNDATION's GARDEN SCHOOL** has announced its projects and courses for this summer season. The educational program uses practical work projects as a focus for acquisition of skills for caring for the earth and working together as a team in a community setting. Courses are continuous with a minimum commitment of twelve weeks. For more information contact Vance G. Martin, Findhorn Foundation Garden School, The Park, Forres, Scotland IV 36 OTZ.

To help people explore the possibilities of the future, spring and summer **FUTURES STUDY GROUPS** are being formed by Portland futurist Ruth Miller. The fee for a ten week course is \$45. For more information contact Ruth Miller, 515 NE Brazee, Portland, OR 97212, 503/281-8193.

**The KANSAS AREA WATERSHED COUNCIL** will meet April 29-May 1 near Topeka, Kansas, to further develop an ecological framework for sustainable life in Kansas area bioregion. For more information contact Kelly Kindscher, KAW Council, c/o Appropriate Technology Center, 1101 1/2 Massachusetts St., Lawrence, KS 66044.

**The GLORIETA SCHOOL** has announced a series of workshops and a one day overview workshop about **GARLIC**. Everything you might want to know: preparation and planting, pest and disease control, harvesting, and marketing. The one-day session is May 14 near Carlton, Washington. For more information write to Bob Elk, Star Rt. Box 31, Pateros, WA 98846.

**REAGANOMICS AND WOMEN** is the theme of a forum being sponsored by the Red Rose School, in Portland, Oregon, May 13, at the Friends Hall, 4312 SE Stark. The workshop leader is Vice Chair of Democratic Socialists of America, Barbara Ehrenreich. For more information write to Red Rose School, c/o George Potratz, 5215 NE 30th, Portland, OR 97211.

# RUSH

**NEIGHBORHOOD BUSINESSES** — The American Planning Association has a booklet that outlines how to examine retail opportunities in a neighborhood. The publication, *Analyzing Neighborhood Retail Opportunities: A Guide for Carrying Out a Preliminary Market Study*, by Wim Wiewel and Robert Mier, sells for \$10.00; available from APA, 1313 60th St., Chicago, IL 60637.



## HELP WANTED

RAIN needs your help to increase our circulation — which is vital for RAIN to continue publishing. Please send us names and addresses of friends who may want to subscribe to RAIN. Also, if you know of bookstores, food coops or libraries that may want to carry RAIN, send their addresses as well. We will send all of these people a complimentary copy of RAIN. Use the coupon, or a separate sheet, for names and addresses. Thank you!

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**ALTERNATIVES TO SITTING IN COLLEGE FOR FOUR YEARS** — We recently heard from Cornelius Bull, who has started the Center for Interim Programs (233 Mt. Lucas Rd., Princeton, NJ 08540), designed to assist students who are looking for alternative methods of education and training that take them off campus and into the "real" world. For a fee, the Center evaluates the student's work and helps locate unique positions for the students as an employee or apprentice to others.

**TREES IN CALIFORNIA** — The California Office of Appropriate Technology released a new publication entitled *Growth Stock: Trees for California*, which presents a historical background about trees (and culture) and their vital role in conserving oil resources, saving energy, providing food and fuel, and adding to the quality of life in California. (O.A.T., 1600 Ninth St., Sacramento, CA 95814)

**HOW TO BUY A COMPUTER** — A handy, inexpensive guide is a first step toward buying a computer. You may need more details and more current information in many cases, but this will give you the basic vocabulary to start asking the right questions. (*How to Buy a Personal Computer*, Alfred Publishing Co., Inc., PO Box 5964, Sherman Oaks, CA 91413, \$2.95, 1982, 64pp.)

**APPLE COMPUTER COMMUNITY AFFAIRS PROGRAM** — The thrust of this program is to support the development of micro computer-based networks between community groups, facilitating cooperative effort through better communication and information sharing. Applications for proposals for assistance, including computer hardware and software, are accepted on a quarterly basis, with the next dates being May 15, August 15, and November 15. (Community Affairs Program, Apple Computer, 10525 Mariani Avenue, M/S 9L, Cupertino, CA 95014, 408/996-1010)

**CREATIVITY AND INNOVATION NETWORK** — The Network has been around for a number of years, but starting with the January 1983 edition, their newsletter has become a journal. It promises to be an interesting vehicle for information about innovative ways to run human affairs, and will be especially valuable for finding interesting business management innovations. (Creativity and Innovation Network, Room 3.1, Manchester Business School, Booth Street West, Manchester, England M15 6PB.)

**NITROGEN FIXING TREE ASSOCIATION** — Group conducts research on nitrogen fixing woody plants. Membership costs \$5.00/year. (Dr. James L. Brewbaker, Nitrogen Fixing Tree Association, PO Box 680, Waimanalo, HI 96795.)

**1981 TAX ACT** — A new booklet prepared by United Way of America explains how charitable organizations and nonprofits can take advantage of provisions of the 1981 Tax Act. It costs \$1.50 plus 50 cents postage. (United Way of America, 801 N. Fairfax St., Alexandria, VA 22314.)

**COMPREHENSIVE GUIDE TO ALTERNATIVE ENERGY** — Some things endure. Jeff Twaine has just kept at it over the years, publishing an index to articles, reports, and books published in alternative/renewable energy development, appropriate technology, and related subjects. It's good work, deserving of continued support. You can get the most recent edition (July 1982) for \$7.00 or subscribe on an on-going basis. (Synerjy, PO Box 4790, Grand Central Station, New York, NY 10017.)

**THE UNIVERSITY OF CALIFORNIA APPROPRIATE TECHNOLOGY PROGRAM** has moved from the Davis campus to the Berkeley campus. New funded research projects include an Investigation of the Potential for Agroforestry in California; Renewable Energy Sources and Institutional Factors Affecting A.T. in California — An Annotated Bibliography; and Strengthening a Link Between Municipal Waste Processing and Agri/Horticultural Production. (UC Appropriate Technology Program, Bldg. T-4, Rm. 100, University of California, Berkeley, CA 94720.)

**KANSAS BIOREGIONAL GROUP** — We received Konza, the newsletter of the Kansas Area Watershed Council, with news about building bioregional awareness in the Kansas area of the great grasslands bioregion of North America. (Send contribution for newsletter to Dan Bentley, Appropriate Technology Center, 1101½ Mass., Lawrence, KS 66044.)

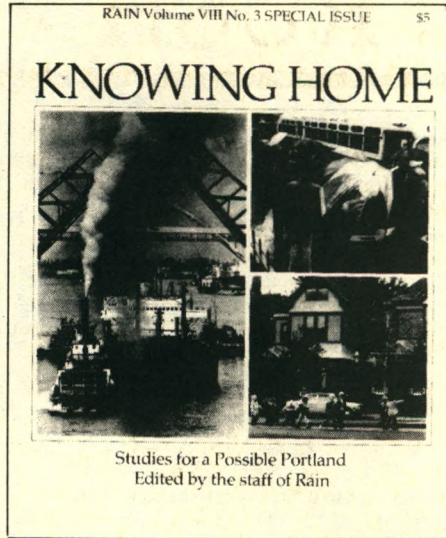
**INTERNSHIP PROGRAM FOR ALASKA** — The Internship Program for Alaska is a cooperative effort of a wide variety of Alaskan non-profit organizations. (If you are interested in internships with community groups in Alaska, write to them at 1069 6th Ave., Anchorage, AK 99501, or call 907/274-3621.)

**FEDERAL EMPLOYEES CAN'T SUPPORT CHARITIES CONCERNED WITH WOMEN, MINORITIES AND THE POOR.** A new Executive Order would greatly diminish the right of government employees to donate on-the-job funds to groups that try to affect public policy in any way. The regulations complement similar ones being drawn up to make it difficult for groups that advocate/lobby to receive ANY federal support. (Olga Corey, National Coalition to Expand Charitable Giving, Rm. 408, 810 18th St., NW, Washington, DC 20006, 202/347-5340.)

# Add A Little RAIN To Your Spring!

**URBAN ECOTOPIA POSTER**, 22" x 33", 1976; **SUBURBAN ECOTOPIA POSTER**, 22" x 30", 1976; **STEPPING STONES POSTER**, 21" x 24", 1978, \$3.60 each. **COMMUNITY ALERT** 32" x 44" (full color) \$6.00, all by *Diane Schatz*.

The first exciting glimpses of an Ecotopian vision. Posters that portray an urban, a suburban, and a bio-regional landscape. The scenes give literal expression to the idea of community self-reliance — where cottage industries, cooperative institutions and appropriate technologies combine to make cities, suburbs and the land habitable and happy places to be. All three of these linedrawn posters are rich in detail and perfect for coloring. Community Alert vividly shows how any town can mobilize for an energy emergency, before it strikes.



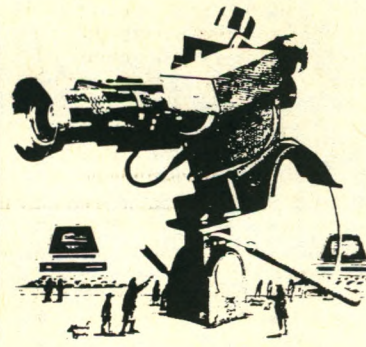
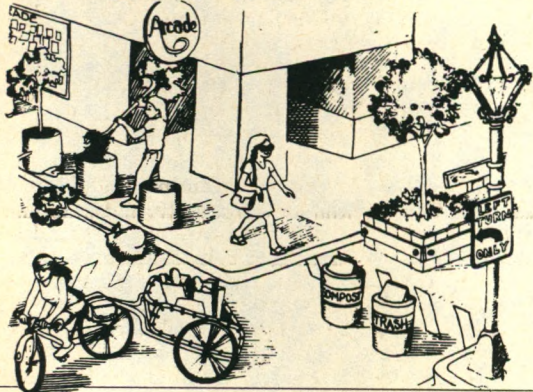
**KNOWING HOME: Studies for a Possible Portland**  
*Editors of RAIN*  
88 pp., 1981, \$6 ppd.

An inspiring model for other cities and towns as well as an excellent way to introduce friends and family to community self-help, this beautifully illustrated book includes articles on the history of self-reliance in Portland, a bio-regional map, our sense of place, strategies for a sustainable city, life support systems, profiles of community self-help projects, plus visions for an ecologically and socially balanced future.

### INFORMATION AND COMMUNICATION TECHNOLOGY FOR THE COMMUNITY

*Steve Johnson*  
33 pp., 1982, \$6.00

Where else would you find the latest community oriented information on computer conferencing, information utilities, community electronic bulletin boards, informed citizen involvement, electronic publishing, videotex, and telecommunications plus extensive resource listings? Use this book to guide your community group through the maze of modern technological information!



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- 1 year/living lightly rate ..... \$ 9.50 \_\_\_\_\_  
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(including Canada and Mexico; inquire for air rates)

#### RAIN Back Issues (postpaid)

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  - Complete guide to back issues, Volume I-VIII ..... \$ .50 \_\_\_\_\_
- \*(Does not include Vol. VIII, No. 3, Knowing Home)

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- Knowing Home ..... \$ 6.00 \_\_\_\_\_
- Stepping Stones ..... \$ 7.00 \_\_\_\_\_
- Rainbook ..... \$ 7.00 \_\_\_\_\_
- Consumer Guide to Woodstoves ..... \$ 3.60 \_\_\_\_\_
- Stepping Stones Poster ..... \$ 3.60 \_\_\_\_\_
- Urban Ecotopia Poster ..... \$ 3.60 \_\_\_\_\_
- Suburban Ecotopia Poster ..... \$ 3.60 \_\_\_\_\_
- Community Alert Poster (in color) ..... \$ 6.00 \_\_\_\_\_
- Helping Ourselves ..... \$ 6.00 \_\_\_\_\_
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***The Maid of the North: Feminist Folk Tales from Around the World***

**Ethel Johnston Phelps  
Holt, Rinehart, and Winston  
383 Madison Avenue  
New York, NY 10017  
\$10.95, 1981, 176 pp.**

I always rued the fact that traditional fairy tales portray beautiful princesses who are passive and obedient, while clever strong women are usually wicked witches or jealous stepmothers. In an attempt to balance this, contemporary tales give women the role of heroine, shaping the stories around feminist values of our time, but these modern tales often lack that special magical quality that comes out of long-standing oral tradition.

Hooray! Ethel Johnston Phelps has collected twenty-one traditional stories, primarily from the nineteenth century, representing a wide variety of ethnic cultures, to provide us with model heroines who are "resourceful girls or women" of independent spirit. These women "take action to solve a problem posed by the plot" rather than meekly accepting the dilemmas they face.

In Phelps' stories, Woman as heroine goes beyond stereotype; she is depicted through many images. In addition to the title story about a maid of the North country who is determined to marry whom she will, there is a young Irish mother bravely confronting the Fairy Queen to recover her stolen child; a clever peasant woman who outwits the devil himself to enhance her social status; an old Japanese woman who escapes from a tribe of ogres; a young troll woman who is able to incorporate into her own way of living a thing or two she learns from humans; and the beautiful and moving story of Lady Ragnell and the knight Gawain who solves a mysterious enchantment by his understanding of what it is that a woman desires above all else.



FROM: *The Maid of The North*

Phelps' rediscovered heroines contribute to our growing awareness of women as multifaceted beings rather than as the one-dimensional figures

that oft' told tales would have us believe. And the awareness of this reality can enable women to discover the heroine within herself. —NC

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