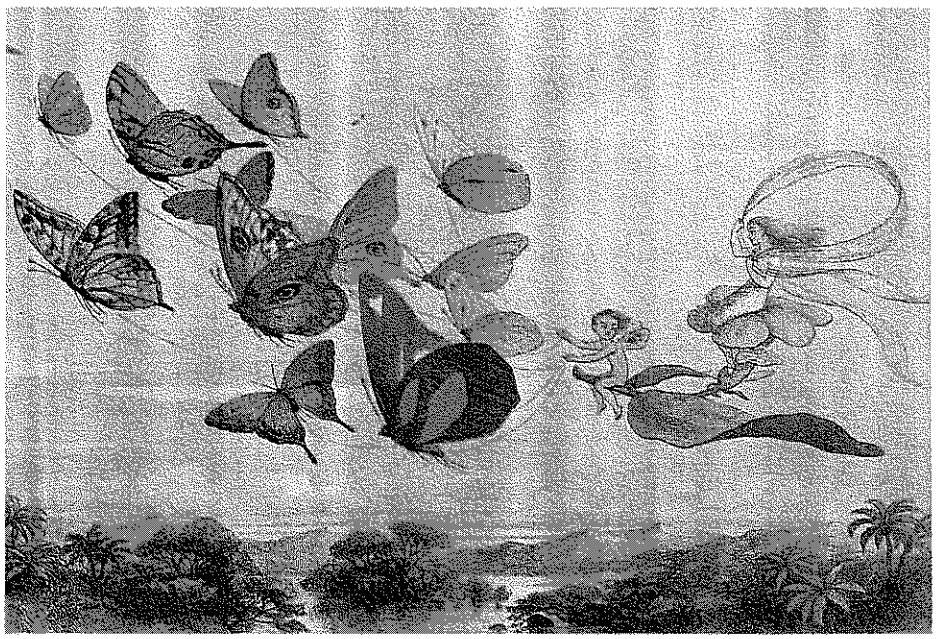
TERRA FEMINA



Carolyn Merchant

Corinne Kumar D'Souza

Maria Mies

Rosiska Darcy de Oliveira

Tereza Santa Clara Gomes

Thais Corral

Vandana Shiva

TERRA FEMINA

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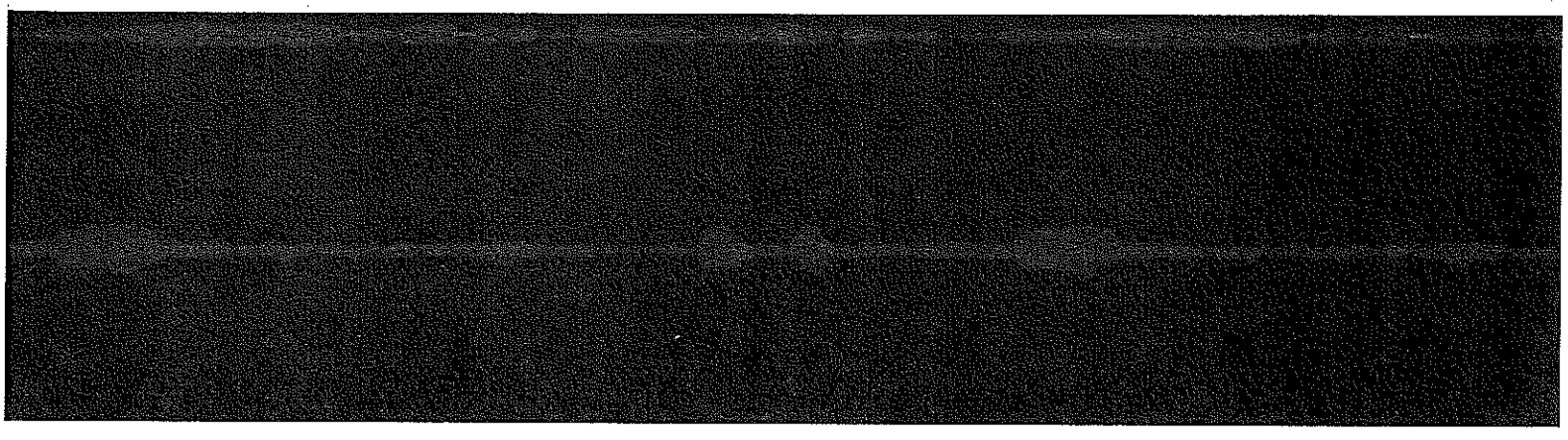
Organizers: Rosiska Darcy de Oliveira
Thais Corral



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Organizers: ROSISKA DARCY DE OLIVEIRA and THAIS CORRAL
Graphic Design by MARCUS MORAES and MICHEL LENT
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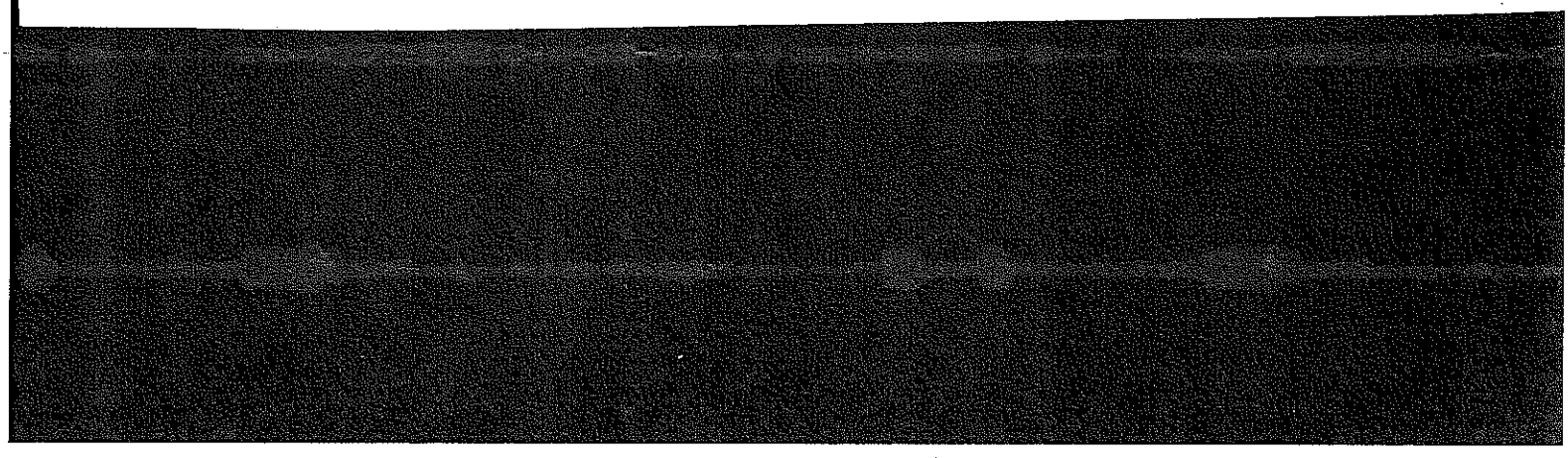


INTRODUCTION

TERRA FEMINA, TERRA INCOGNITA. Protest and reinvention. UNCED 92 calls for both. Protest against the one-dimensionality of a human history written by one sex which dictates the destiny of the other, by races which dictate the destiny of others, by cultures that believe to be the Culture. Reinvention of the fabric of life, of the world's texture.

The essays presented in this collection are the expression of this search. They are an attempt to draw from the experience, the knowledge, the life of some women a new vision which challenges the onedimensional standpoint from which the future has so far been envisaged as an improved version of the past.

This is also a search for new words to write a new text.

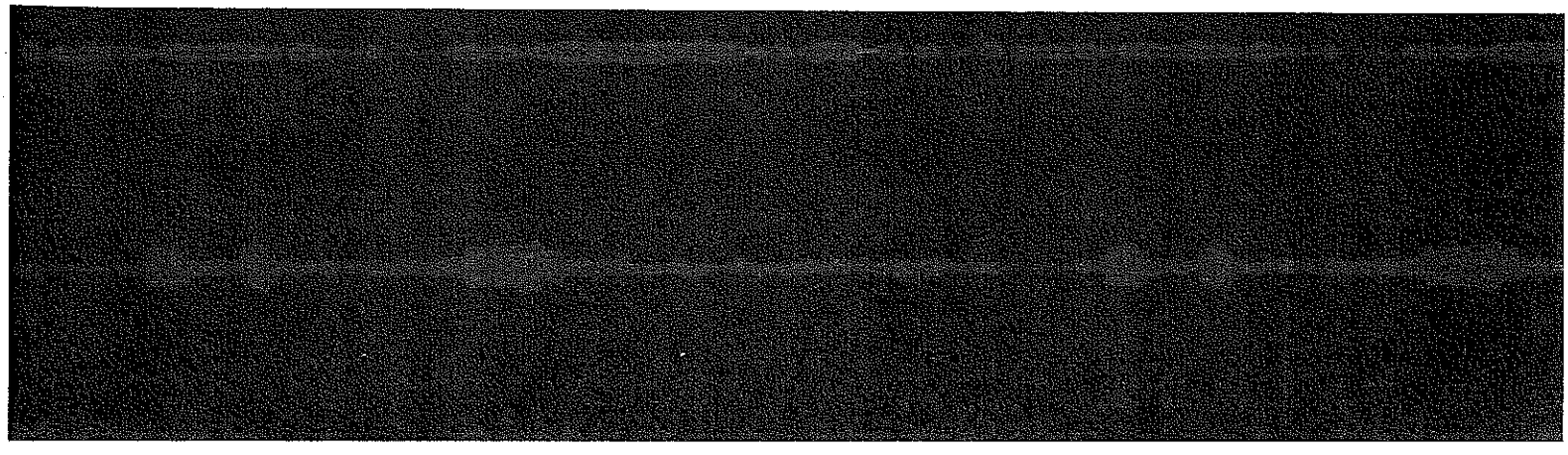
But this text weaves a historical pattern, made out of personal stories from Brazil and elsewhere of women who, barely knowing each other, do belong to a time of disruption and challenge which is shattering ancestral beliefs. Dead end of a civilization.

The quest for happiness in a wholesome and harmonious world is negated by an all-pervasive model of development which pretends to embody the quintessence of human progress. But can indeed the unlimited consumption of material goods ever fulfill the most basic human needs? We, Brazilian women, are convinced that the opening up of a radical debate around these questions is an imperative priority. Accordingly, in October 1991, REDEH convened in Alto da Boa Vista, Rio de Janeiro, the International Conference on Women, Procreation and the Environment, thus providing a first opportunity for an in-depth dialogue and interaction between Brazilian women and the international women's movement on the critical questions we are all facing at this turn of the century.

The Brazilian women's movement, represented at the Brazilian NGOs Forum by IDAC, stressed women's voice, experience and concerns in all the preparatory stages leading to UNCED 92, thus giving visibility to the aspirations nurtured in the Terra Incognita, in the unexplored territories of the feminine.

IDAC and REDEH have now jointly undertaken the organization of this publication, welcoming the participation of women from all over the world who share with us the common desire for a more compassionate world. A world where the winds from the South will blow freely, spreading over the edith the seeds of Feminine Creativity whose roots are local but whose outreach is global. In this task we are guided by an Utopian vision which far from being ashamed of itself is rather proud to follow the compass of moral and ethical values which, through-out the ages, enabled women to ensure the permanence of Love as the matrix and fulfillment of human life.

Rosiska Darcy de Oliveira
Thais Corral



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CAROLYN MERCHANT

Ecofeminism

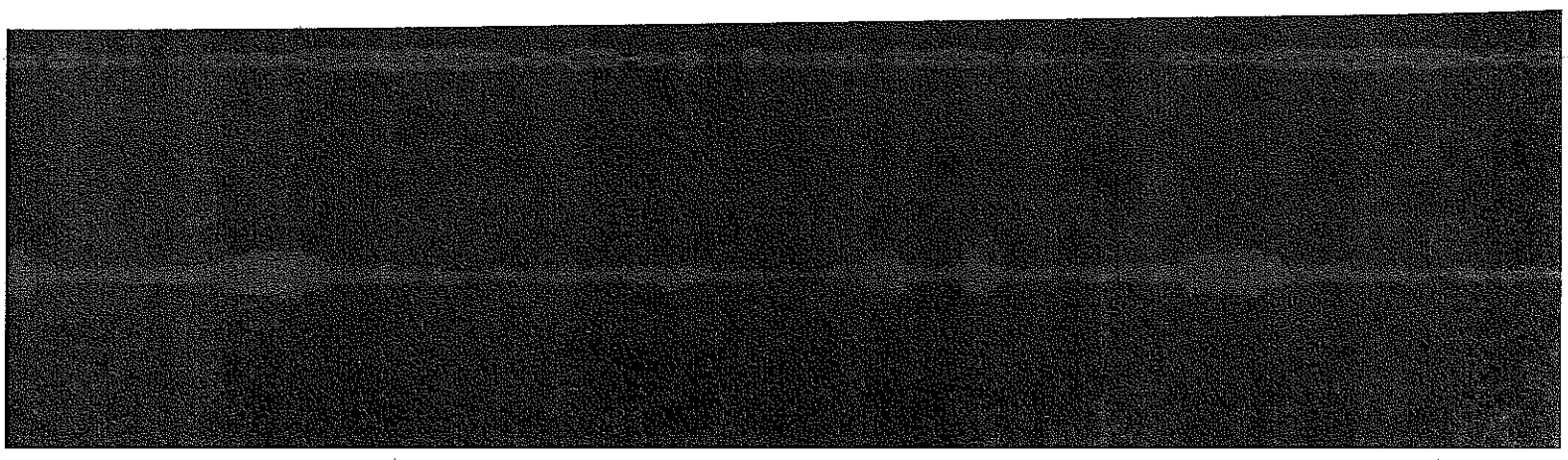
In Kenya, women of the Green Belt movement band together to plant millions of trees in arid degraded lands. In India, they join the chipko (tree-hugging) movement to preserve precious fuel resources for their communities. In Sweden, feminists prepare jam from berries sprayed with herbicides and offer a taste to members of parliament: they refuse. In Canada, they take to the streets to obtain signatures opposing uranium processing near their towns. In the United States, housewives organize local support to clean up hazardous waste sites. All these actions are examples of a worldwide movement, increasingly know as "ecofeminism", dedicated to the continuation of life on earth.

Ecofeminism emerged in the 1970s with an increasing consciousness of the connections between women and nature. The term, "ecofeminisme", was coined by French writer Françoise d'Eaubonne in 1974 who called upon women to lead an ecological revolution to save the planet. [1] Such an ecological revolution would entail new gender relations between women and men and between humans and nature.

Developed at the Institute for Social Ecology in Vermont around the same time, the concept became a movement in 1980 with a major conference on "Women and Life on Earth" held in Amherst, Massachusetts and the ensuing Women's Pentagon Action to protest anti-life nuclear war and weapons development. [2] During the 1980s cultural feminists in the United States injected new life into ecofeminism by arguing that both women and nature could be liberated together.

Liberal, cultural, social, and socialist feminism have all been concerned with improving the human/nature relationship and each has contributed to an ecofeminist perspective in different ways. [3] Liberal feminism is consistent with the objectives of reform environmentalism to alter human relations with nature from within existing structures of governance through the passage of new laws and regulations. Cultural ecofeminism analyzes environmental problems from within its critique of patriarchy and offers alternatives that could liberate both women and nature.

Social and socialist ecofeminism ground their analyses in capitalist patriarchy. They ask how patriarchal relations of reproduction reveal the domination of women nature by men, and how capitalist relations of production reveal the domination of nature



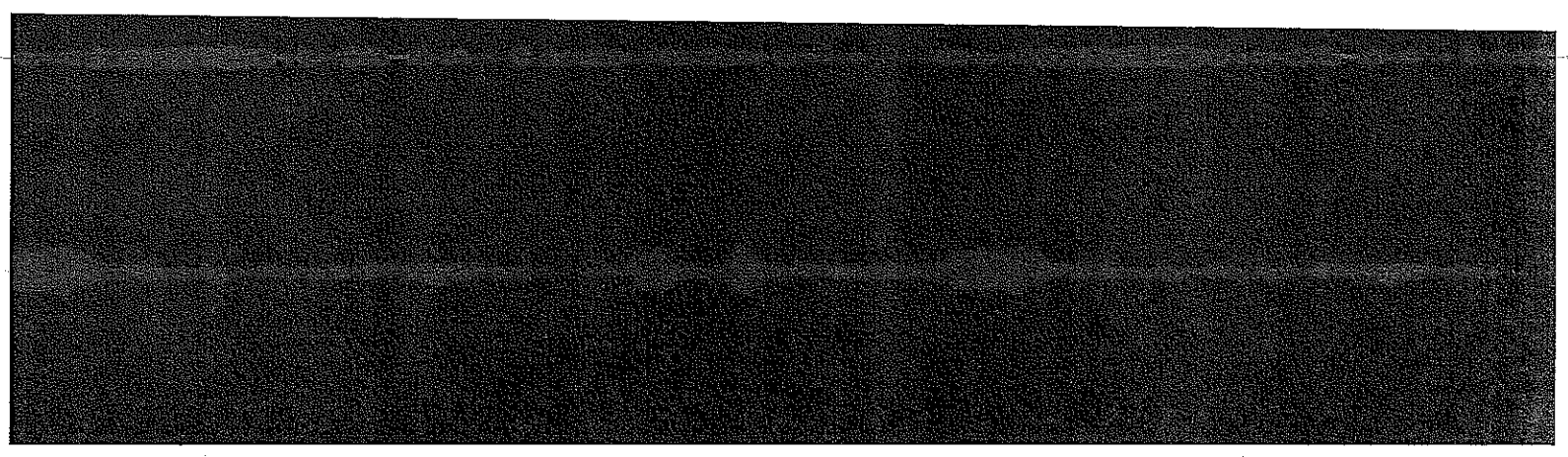
by men. The domination of women and nature inherent in the market economy's use of both as resources would be totally restructured. Although cultural ecofeminism has delved more deeply into the woman-nature connection, social and socialist ecofeminism have the potential for a more thorough critique of domination and for a liberating social justice.

Ecofeminist actions address the contradiction between production and reproduction. Women attempt to reverse the assaults of production on both biological and social reproduction by making problems visible and proposing solutions. When radioactivity from nuclear power-plant accidents, toxic chemicals, and hazardous wastes threaten the biological reproduction of the human species, women experience this contradiction as assaults on their own bodies and on those of their children and act to halt them. Household products, industrial pollutants, plastics, and packaging wastes invade the homes of First World women threatening the reproduction of daily life, while direct access to food, fuel, and clean water for many Third World women is imperiled by cash cropping on traditional homelands and by pesticides used in agribusiness. First World women combat these assaults by altering consumption habits, recycling wastes, and protesting production and disposal methods, while Third World women act to protect traditional ways of life and reverse ecological damage from multinational corporations and the extractive industries. Women challenge the ways in which mainstream society reproduces itself through socialization and politics by envisioning and enacting alternative gender roles, employment options, and political practices.

Many ecofeminists advocate some form of an environmental ethic that deals with the twin oppressions of the domination of women and nature through an ethic of care and nurture that arises out of women's culturally constructed experiences. As philosopher Karen Warren conceptualizes it:

> *"An ecofeminist ethic is both a critique of male domination of both women and nature and an attempt to frame an ethic free of male-gender bias about women and nature. It not only recognizes the multiple voices of women, located differently by race, class, age, (and) ethnic considerations, it centralizes those voices. Ecofeminism builds on the multiple perspectives of those whose perspectives are typically omitted or undervalued in dominant discourses, for example Chipko women, in developing a global perspective on the role of male domination in the exploitation of women and nature. An ecofeminist perspective is thereby ... structurally pluralistic, inclusivist, and contextualist, emphasizing through concrete example the crucial role context plays in understanding sexist and naturist practice."* [4]

An ecofeminist ethic, she argues,



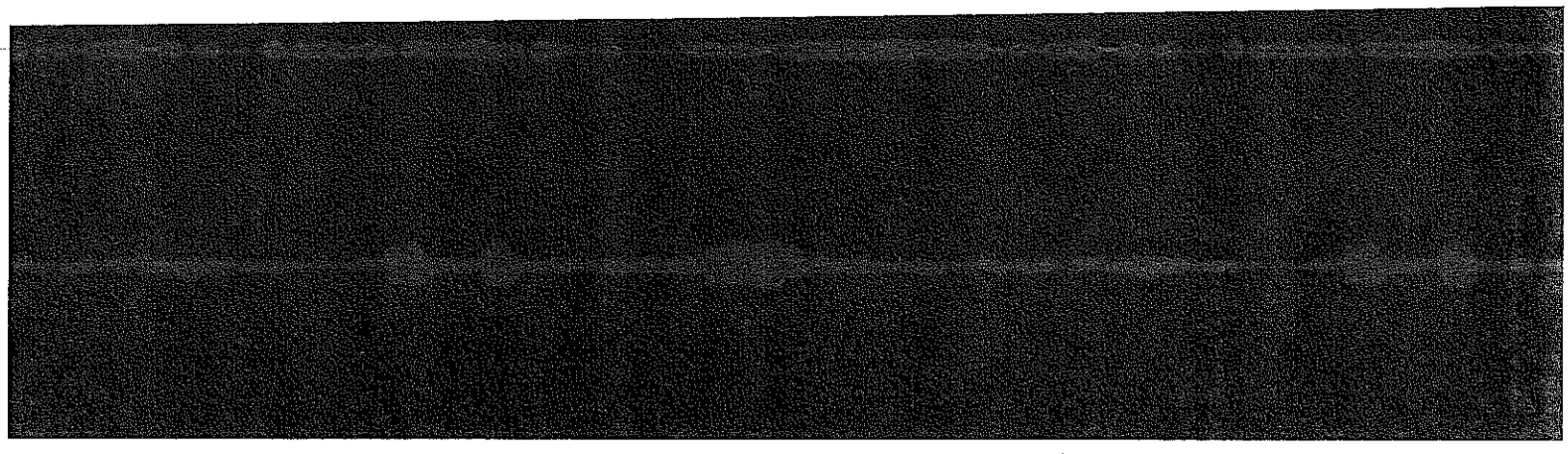
would constrain traditional ethics based on rights, rules, and utilities, with considerations based on care, love, and trust. Yet an ethic of care, as elaborated by some feminists, falls prey to an essentialist critique that women's nature is to nurture. [5]

An alternative is a partnership ethic that treats humans (including male partners and female partners) as equals in personal, household, and political relations and humans as equal partners with (rather than controlled-by or dominant-over) nonhuman nature. Just as human partners, regardless of sex, race or class must give each other space, time, and care, allowing each other to grow and develop individually within supportive nondominating relationships, so humans must give nonhuman nature space, time, and care, allowing it to reproduce, evolve, and respond to human actions. In practice, this would mean not cutting forests and damming rivers that make people and wildlife in flood plains more vulnerable to "natural disasters"; curtailing development in areas subject to volcanos, earthquakes, hurricanes, and tornados to allow room for unpredictable, chaotic, natural surprises; and exercising ethical restraint in introducing new technologies such as pesticides, genetically-engineered organisms, and biological weapons into ecosystems. Constructing nature as a partner allows for the possibility of a personal or intimate (but not necessarily spiritual) relationship with nature and for feelings of compassion for nonhumans as well as for people who are sexually, racially, or culturally different. It avoids gendering nature as a nurturing mother or a goddess and avoids the ecocentric dilemma that humans are only one of many equal parts of an ecological web and therefore morally equal to a bacterium or a mosquito.

LIBERAL ECOFEMINISM

Liberal feminism characterized the history of feminism from its beginnings in the seventeenth century until the 1960s. It is rooted in liberalism, the political theory that accepts the scientific analysis that nature is composed of atoms moved by external forces, a theory of human nature that views humans as individual rational agents who maximize their own self-interest, and capitalism as the optimal economic structure for human progress. It accepts the egocentric ethic that the optimal society results when each individual maximizes her own productive potential. Thus what is good for each individual is good for society as a whole. Historically, liberal feminists have argued that women do not differ from men as rational agents and that exclusion from educational and economic opportunities have prevented them from realizing their own potential for creativity in all spheres of human life. [6]

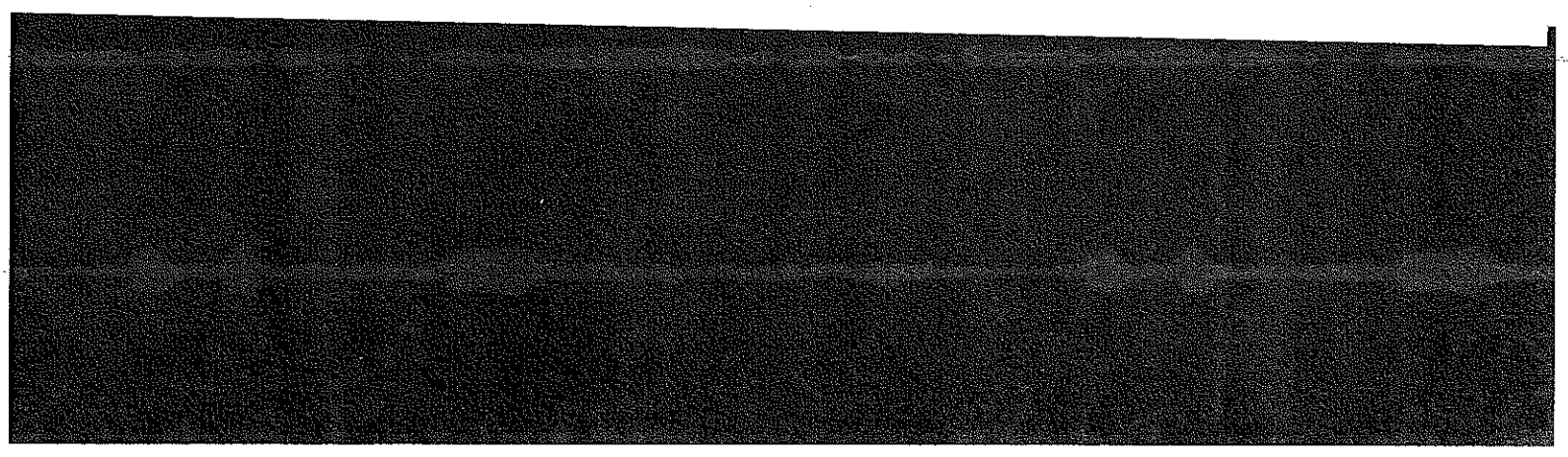
Twentieth century liberal feminism was inspired by Simone de Beauvoir's "The Second Sex" (1949) and by Betty Friedan's "The Feminine Mystique" (1963). De



Beauvoir argued that women and men were biologically different, but that women could transcend their biology, freeing themselves from their destiny as biological reproducers to assume masculine values. Friedan challenged the "I'm just a housewife" mystique resulting from post-World War II production forces that made way for soldiers to reassume jobs in the public sphere, pushing the "reserve army" of women laborers back into the private sphere of the home. The liberal phase of the women's movement that exploded in the 1960s demanded equity for women in the workplace and in education as the means of bringing about a fulfilling life. Simultaneously, Rachel Carson made the question of life on earth a public issue. Her 1962 "Silent Spring" focused attention on the death-producing effects of chemical insecticides accumulating in the soil and tissues of living organisms - deadly elixars that bombarded human and non- human beings from the moment of conception until the moment of death. [7]

For liberal ecofeminists (as for liberalism generally), environmental problems result from the overly rapid development of natural resources and the failure to regulate pesticides and other environmental pollutants. The way the social order reproduces itself through governance and laws can be meliorated if social reproduction is made environmentally sound. Better science, conservation, and laws are therefore the proper approaches to resolving resource problems. Given equal educational opportunities to become scientists, natural resource managers, regulators, lawyers, and legislators, women, like men, can contribute to the improvement of the environment, the conservation of natural resources, and the higher quality of human life. Women, therefore, can transcend the social stigma of their biology and join men in the cultural project of environmental conservation.

Within the parameters of mainstream government and environmental organizations, such as the Group of Ten, are a multitude of significant opportunities for women to act to improve their own lives and resolve environmental problems. Additionally, women have established their own environmental groups. Organizations founded by women tend to have high percentages of women on their boards of directors. In California, for example, the Greenbelt Alliance was founded by a woman in 1958, the Save the Bay Association by three women in 1961, and the California Women in Timber in 1975 by a group of women. Yet most of the women in these organizations do not consider themselves feminists and do not consider their cause feminist. Feminism as a radical label, they believe, could stigmatize their long term goals. On the other hand, groups such as Friends of the River, Citizens for a Better Environment, and the local chapter of the Environmental Defense Fund employ many women who consider themselves feminists and men who consider themselves sensitive to feminist concerns, such as equality,



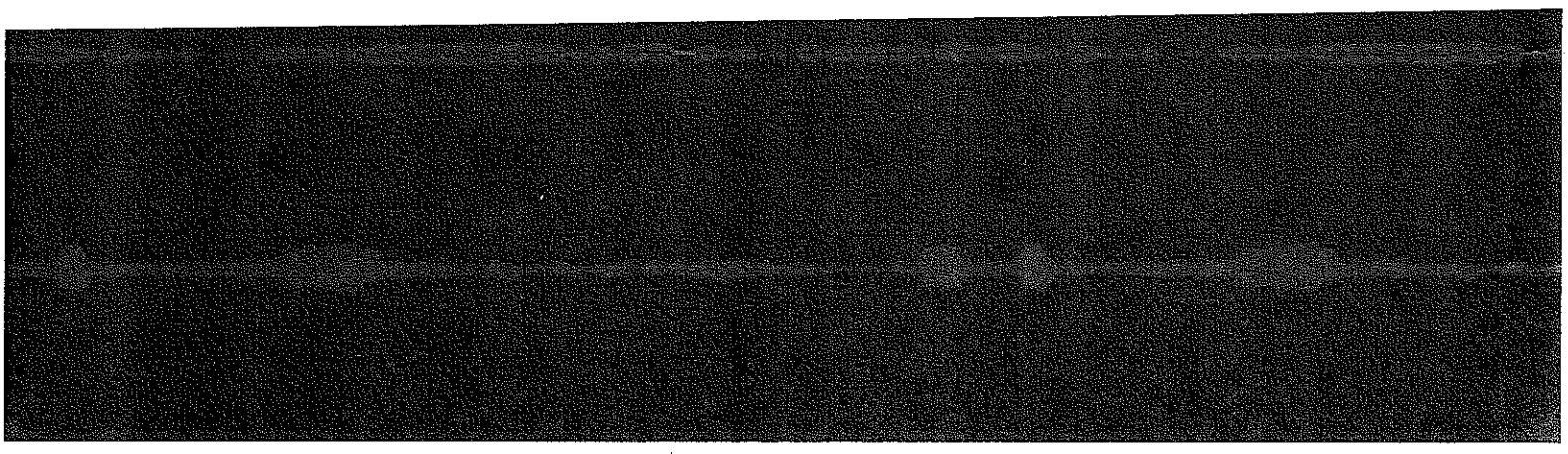
childcare, overturning of hierarchies within the organization, and creating networks with other environmental organizations. [8]

CULTURAL ECOFEMINISM

Cultural feminism developed in the late 1960s and 1970s with the second wave of feminism (the first being the women's suffrage movement of the early-twentieth century). Cultural ecofeminism is a response to the perception that women and nature have been mutually associated and devalued in western culture. Sherry Ortner's 1974 article, *"Is Female to Male as Nature is to Culture"*, posed the problem that motivates many ecofeminists. Ortner argued that, cross-culturally and historically women, as opposed to men, have been seen as closer to nature because of their physiology, social roles, and psychology. Physiologically, women bring forth life from their bodies, undergoing the pleasures, pain, and stigmas attached to menstruation, pregnancy, childbirth, and nursing, while men's physiology leaves them freer to travel, hunt, conduct warfare, and engage in public affairs. Socially, childrearing and domestic caretaking have kept married women close to the hearth and out of the workplace. Psychologically, women have been assigned greater emotional capacities with greater ties to the particular, personal, and present than men who are viewed as more rational and objective with a greater capacity for abstract thinking. [9]

To cultural ecofeminists the way out of this dilemma is to elevate and liberate women and nature through direct political action. Many cultural feminists celebrate an era in prehistory when nature was symbolized by pregnant female figures, trees, butterflies, and snakes and in which women were held in high esteem as bringers forth of life. An emerging patriarchal culture, however, dethroned the mother goddesses and replaced them with male gods to whom the female deities became subservient. The scientific revolution of the seventeenth century further degraded nature by replacing Renaissance organicism and a nurturing earth with the metaphor of a machine to be controlled and repaired from the outside. The ontology and epistemology of mechanism are viewed by cultural feminists as deeply masculinist and exploitative of a nature historically depicted in the female gender. The earth is dominated by male-developed and male- controlled technology, science, and industry. [10]

Often stemming from an anti-science, anti-technology standpoint, cultural ecofeminism celebrates the relationship between women and nature through the revival of ancient rituals centered on goddess worship, the moon, animals, and the female reproductive system. A vision in which nature is held in esteem as mother and goddess is a source of inspiration and empowerment for many ecofeminists. Spirituality is seen as a

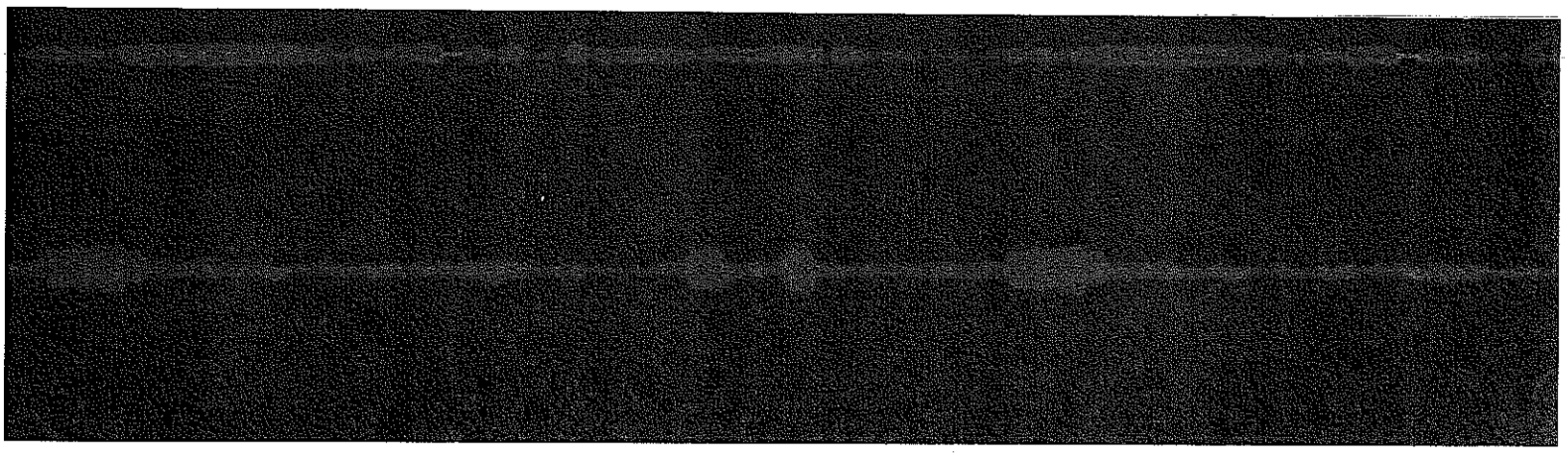


source of both personal and social change. Goddess worship and rituals centered around the lunar and female menstrual cycles, lectures, concerts, art exhibitions, street and theater productions, and direct political action (web-spinning in anti-nuclear protests) are all examples of the re-visioning of nature and women as powerful forces. Cultural ecofeminist philosophy embraces intuition, an ethic of caring, and web-like human-nature relationships. [11]

For cultural feminists, human nature is grounded in human biology. Humans are biologically sexed and socially gendered. Sex/gender relations give men and women different power bases. Hence the personal is political. The perceived connection between women and biological reproduction turned upside down becomes the source of women's empowerment and ecological activism. Women's biology and Nature are celebrated as sources of female power. This form of ecofeminism has largely focused on the sphere of consciousness in relation to nature - spirituality, goddess worship, witchcraft - and the celebration of women's bodies, often accompained by social actions such as anti-nuclear or anti-pornography protests. [12]

Much populist ecological activism by women, while perhaps not explicitly ecofeminist, implicitly draws on and is motivated by the connection between women's reproductive biology (nature) and male-designed technology (culture). Many women activists argue that male-designed and produced technologies neglect the effects of nuclear radiation, pesticides, hazardous wastes, and household chemicals on women's reproductive organs and on the ecosystem. They protest against radioactivity from nuclear wastes, power plants, and bombs as a potential cause of birth defects, cancers, and the elimination of life on earth. They expose hazardous waste sites near schools and homes as permeating soil and drinking water and contributing to miscarriages, birth defects, and leukemia. They object to pesticides and herbicides being sprayed on corps and forests as potentially affecting children and child bearing women living near them. Women frequently spearhead local actions against spraying and power plant siting and organize citizens to demand toxic clean-ups. [13]

In 1978, Lois Gibbs of the Love Canal Homeowner's Association in Niagara Falls, New York, played a critical role in raising women's consciousness about the effects of hazardous waste disposal by Hooker Chemicals and Plastics Corporation in her neighborhood of 1,200 homes. Gibbs, whose son had experienced health problems after attending the local elementary school, launched a neighborhood campaign to close the school after other neighborhood women corroborated her observations. A study conducted by the women themselves found a higher than normal rate of miscarriages, stillbirths, and birth defects. Because the blue collar male population of Love Canal found it difficult to accept the fact that they could not

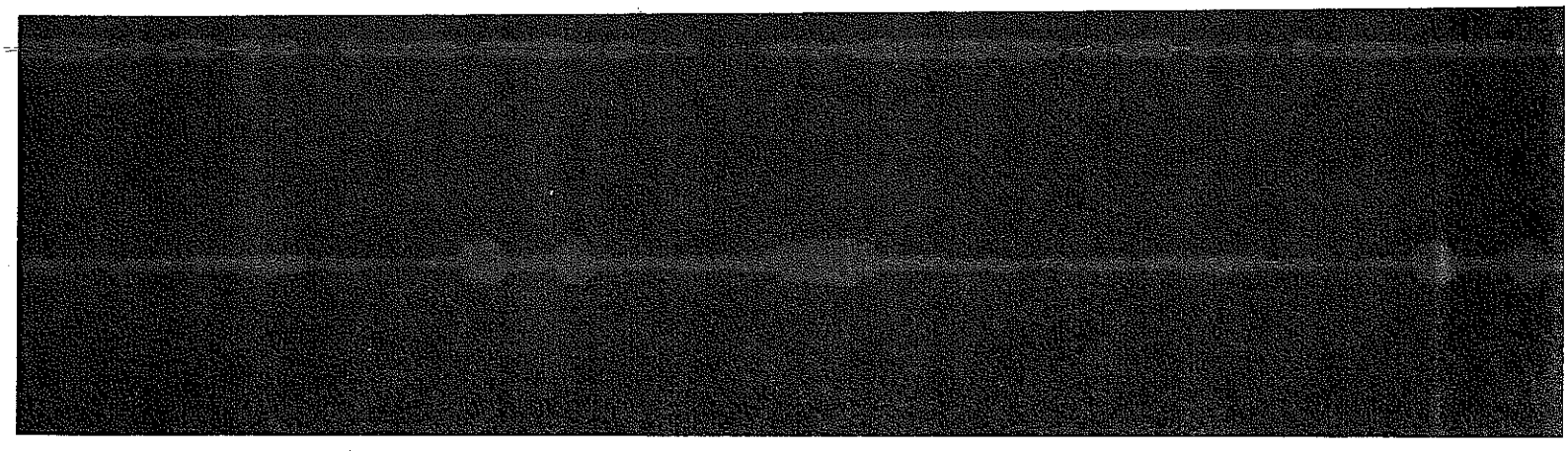


adequately provide for their families, the women became leaders in the movement for redress. Love Canal is a story of how lower-middle-class women who had never been environmental activists became politicized by the life-and-death issues directly affecting their children and their homes and succeeded in obtaining redress from the state of New York. *"The women of Love Canal"*, said Gibbs at the 1980 conference on Women and Life on Earth, *"are no longer at home tending their homes and gardens ... Women who at one time looked down at people picketing, being arrested, and acting somewhat radical are now doing those very things."* [14]

The majority of activists in the grassroots movement against toxics, are women. Many became involved when they experienced miscarriages or their children suffered birth defects or contracted leukemia or other forms of cancer. Through networking with neighborhood women, they began to link their problems to nearby hazardous waste sites. From initial Not in My Backyard (NIMBY) concerns, the movement has changed to Not in Anybody's Backyard (NIABY) to Not On Planet Earth (NOPE). Thus Cathy Hinds, whose well water in East Gray, Maine was contaminated by chemicals from a nearby industrial clean-up corporation became "fighting mad" when she lost a child and her daughter began to suffer from dizzy spells. She eventually founded the Maine Citizens' Coalition on Toxics and became active in the National Toxics Campaign. Her motive was to protect her children. Women, she says, *"are mothers of the earth"*, who want to take care of it. [15]

Native American women organized WARN, Women of All Red Nations to protest high radiation levels from uranium mining tailings on their reservations and the high rates of aborted and deformed babies as well as issues such as the loss of reservation lands and the erosion of the family. They recognized their responsabilities as stewards of the land and expressed respect for *"our Mother Earth who is a source of our physical nourishment and our spiritual strength"*. [16]

Cultural ecofeminism, however, has its feminist critics. Susan Prentice argues that ecofeminism, while asserting the fragility and interdependence of all life, *"assumes that women and men ... have an essential human nature that transcends culture and socialization"*. It implies that what men do to the planet is bad; what women do is good. This special relatioship of women to nature and politics makes it difficult to admit that men can also develop an ethic of caring for nature. Second, ecofeminism fails to provide an analysis of capitalism that explains why it dominates nature. *"Capitalism is never seriously tackled by ecofeminists as a process with its own particular history, logic, and struggle. Because ecofeminism lacks this analysis, it cannot develop an effective strategy for change"*. Moreover, it does not deal with the problems of poverty and racism experienced by millions of women around the



world.[17] In contrast to cultural ecofeminism, the social and socialist strands of ecofeminism are based on a socioeconomic analysis that treats nature and human nature as socially constructed, rooted in an analysis of race, class, and gender.

SOCIAL ECOFEMINISM

Building on the social ecology of Murray Bookchin, social ecofeminism envisions the restructuring of society as humane decentralized communities. *"Social ecofeminism"*, states Janet Biehl, *"accepts the basic tenet of social ecology, that the idea of dominating nature stems from the domination of human by human. Only ending all systems of domination makes possible an ecological society, in which no states or capitalist economies attempt to subjugate nature, in which all aspects of human nature - including sexuality and the passions as well as rationality - are freed"*. Social ecofeminism distinguishes itself from spiritually oriented ecofeminists who acknowledge a special historical relationship between women and nature and wish to liberate both together. Instead it begins with the materialist, social feminist analysis of early radical feminism that sought to restructure the oppressions imposed on women by marriage, the nuclear family, romantic love, the capitalist state, and patriarchial religion.

Social ecofeminism advocates the liberation of women through overturning economic and social hierarchies that turn all aspects of life into a market society that today even invades the womb. It envisions a society of decentralized communities that would transcend the public-private dichotomy necessary to capitalist production and the bureaucratic state. In them women emerge as free participants in public life and local municipal workplaces.

Social ecofeminism acknowledges differences in male and female reproductive capacities, inasmuch as it is women and not men who menstruate, gestate, give birth, and lactate, but rejects the idea that these entail gender hierarchies and domination. Both women and men are capable of an ecological ethic based on caring. In an accountable face-to-face society, childrearing would be communal; rape and violence against women would disappear. Rejecting all forms of determinism, it advocates women's reproductive, intellectual, sensual, and moral freedom. Biology, society, and the individual interact in all human beings giving them the capacity to choose and construct the kind of societies in which they wish to live.[18]

But in her 1991 book, "Rethinking Ecofeminist Politics", Janet Biehl withdrew her support from ecofeminism, and likewise abandoned social ecofeminism, on the grounds that the concept had become so fraught with irrational, mythical, and self- contradictory meanings that it undercut women's hopes for a liberatory, ecologically-sane society. While

early radical feminism had sought equality in all aspects of public and private life, based on a total restructuring of society, the cultural feminism that lies at the root of much of ecofeminism seemed to her to reject rationality by embracing goddess worship, to biologize and essentialize the caretaking and nurturing traits assigned by patriarchy to women, and to reject scientific and cultural advances just because they were advocated by men .While Biehl's approach is a much-needed critique of the inconsistences within ecofeminism, it fails to recognize the historicity and different political bases of the various strands within ecofeminism, feminism, green politics, and social ecology and to allow for a political and self critical development of the emerging ecofeminist movement. [19]

SOCIALIST ECOFEMINISM

Socialist ecofeminism is not yet a movement, but rather a feminist transformation of socialist ecology that makes the category of reproduction, rather than production, central to the concept of a just, sustainable world. Like Marxist feminism, it assumes that nonhuman nature is the material basis of all life and that food, clothing, shelter, and energy are essential to the maintenance of human life. Nature and human nature are socially and historically constructed over time and transformed through human praxis. Nature is an active subject, not a passive object to be dominated, and humans must develop sustainable relations with it. It goes beyond cultural ecofeminism in offering a critique of capitalist patriarchy that focuses on the dialectical relationships between production and reproduction, and between production and ecology.

A socialist ecofeminist perspective offers a standpoint from which to analyze social and ecological transformations, and to suggest social actions that will lead to the sustainability of life and a just society. It asks:

1. What is at stake for women and for nature when production in traditional societies is disrupted by colonial and capitalist development?
2. What is at stake for women and for nature when traditional methods and norms of biological reproduction are disrupted by interventionist technologies (such as chemical methods of birth control, sterilization, amniocentesis, rented wombs, and baby markets) and by chemical and nuclear pollutants in soils, waters, and air (pesticides, herbicides, toxic chemicals, and nuclear radiation)?
3. What would an ecofeminist social transformation look like?
4. What forms might socialist societies take that would be healthy for all women and men and for nature?

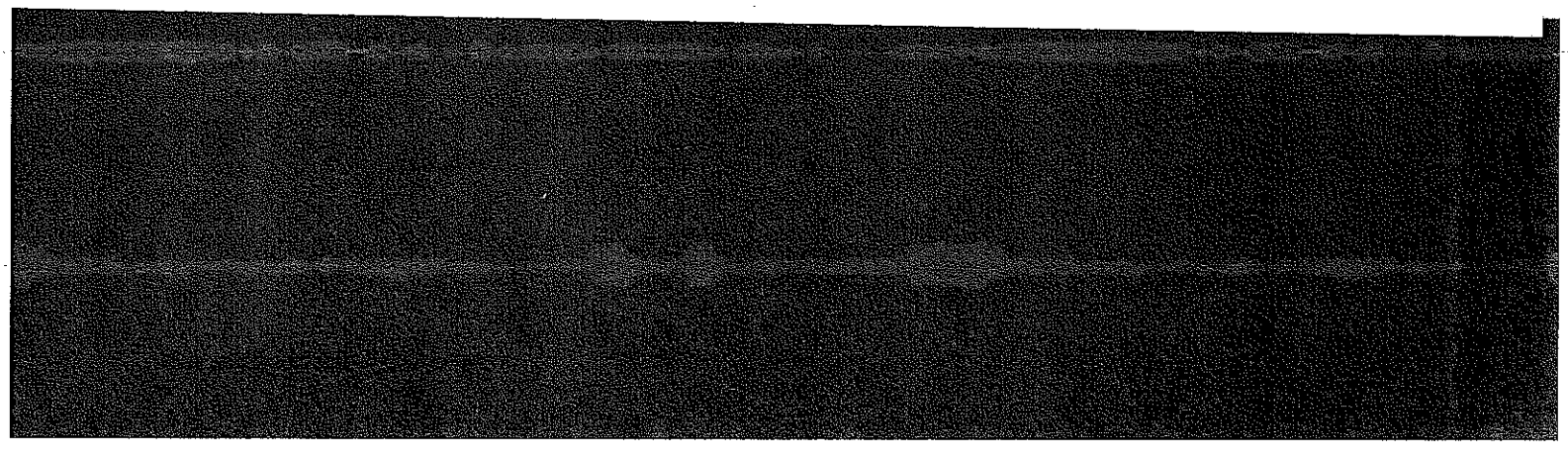
In his 1884 "Origin of the Family, Private Property, and the State", Friedrich Engels wrote that *"the determining factor in history is, in the last resort, the production and reproduction of immediate life... On the one hand, the production of the means of subsistence... on the other the production of human beings themselves"*. In producing and reproducing life, humans interact with nonhuman nature, sustaining or disrupting local and global ecologies. When we ignore the consequences of our interactions with nature, Engels warned, our conquests *"take ... revenge on us"*. *"In nature nothing takes place in isolation"*. Elaborating on Engels' fundamental insights, women's roles in production, reproduction, and ecology can become the starting point for a socialist ecofeminist analysis. [20]

SOCIALIST ECOFEMINIST AND PRODUCTION

As producers and reproducers of life, women in tribal and traditional cultures over the centuries have had highly significant interactions with the environment. As gatheres of food, fuel, and medicinal herbs; fabricators of clothing; planters, weeders, and harvesters of horticultural crops; tenders of poultry; preparers and preservers of food; and bearers and caretakers of young children, women's intimate knowledge of nature has helped to sustain life in every global human habitat.

In colonial and capitalist societies, however, women's direct interactions with nature have been circumscribed. Their traditional roles as producers of food and clothing, as gardeners and poultry tenders, as healers and midwives, were largely appropriated by men. As agriculture became specialized and mechanized, men took over farm production, while migrant and slave women and men supplied the stoop labor needed for field work. Middle-class women's roles shifted from production to the reproduction of daily life in the home, focusing on increased domesticity and the bearing and socialization of young children. Under capitalism, as socialogist Abby Peterson points out, men bear the responsability for and dominate the production of exchange commodities, while women bear the responsability for reproducing the workforce and social relations. *"Women's responsibility for reproduction includes both the biological reproduction of the species (intergenerational reproduction) and the intragenerational reproduction of the work force through unpaid labor in the home. Here too is included the reproduction of social relations-socialization"*. Under industrial capitalism, reproduction is subordinate to production. [22]

Because capitalism is premised on economic growth and competition in which nature and waste are both externalities in profit maximization, its logic precludes sustainability. The logic of socialism on the other hand is based on the fulfillment of people's needs,



not people's greed. Because growth is not necessary to the economy, socialism has the potential for sustainable relations with nature. Although state socialism has been based on growth-oriented industrialization and have resulted in the pollution of external nature, new forms of socialist ecology could bring human production and reproduction into balance with nature's production and reproduction. Nature's economy and human economy could enter into a partnership.

The transition to a sustainable global environment and an equitable human economy that fulfills people's needs would be based on two dialectical relationships - that between production and ecology and that between production and reproduction. In existing theories of capitalist development, reproduction and ecology are both subordinate to production. The transition to socialist ecology would reverse the priorities of capitalism, making production subordinate to reproduction and ecology.

SOCIALIST ECOFEMINISM AND REPRODUCTION

Socialist ecofeminism focuses on the reproduction of life itself. In nature, life is transmitted through the biological reproduction of species in the local ecosystem. Lack of proper food, water, soil chemicals, atmospheric gases, adverse weather, disease, and competition by other species can disrupt the survival of offspring to reproductive age. For humans, reproduction is both biological and social. First, enough children must survive to reproductive age to reproduce the community over time; too many put pressure on the particular mode of production, affecting the local ecology. Second, by interacting with external nature, adults must produce enough food, clothing, shelter, and fuel on a daily basis to maintain their own subsistence and sustain the quality of their ecological homes. Both the intergenerational biological reproduction of humans and other species and the intragenerational reproduction of daily life are essential to continuing life over time. Sustainability is the maintenance of an ecological-productive- reproductive balance between humans and nature - the perpetuation of the quality of all life. [22]

Biological reproduction affects local ecology, not directly, but as mediated by production. Many communities of tribal and traditional peoples developed rituals and practices that maintained their populations in a balance with local resources. Others allowed their populations to grow in response to the need for labor or migrated into new lands and colonized them. When the mode of production changes from an agrarian to an industrial base, and then to a sustainable production base, the number of children that families' need declines. How development occurs in the future will help families decide how many children to have. A potential demographic

transition to smaller population sizes is tied to ecologically sustainable development.

Ecofeminist political scientist Irene Diamond raises concern over the implications of "population control" for Third World women. *"The 'advances' in family planning techniques from Depra- Provera to a range of implanted birth control devices, banned in western nations as unsafe, reduce Third World women to mindless objects and continue the imperialist model which exploits native cultures 'for their own good'"*.[23] Second, with the availability of prenatal sex identification techniques, feminists fear the worldwide "death of the female sex" as families that place a premium on male labor opt to abort as many as nine out of every ten female fetuses. Third, feminists argue that women's bodies are being turned into production machines to test contraceptives, for *in vitro* fertilization experiments, to produce babies for organ transplants, and to produce black market babies for sale in the northern hemisphere.

Reproductive freedom means freedom of choice - freedom to have or not to have children in a society that both needs them and provides for their needs. The same social and economic conditions that provide security for women also promote the demographic transition to lower populations. The Gabriella Women's Coalition of the Philippines calls for equal access to employment and equal pay for women, daycare for children, healthcare, and social security. It wants protection for women's reproductive capacities, access to safe contraception, and the elimination of banned drups and contraceptives. It advocates equal, nondiscriminatory access to education, including instruction concerning consumer rights and hazardous chemicals. Such a program would help to bring about a sustainable society in which population is in balance with the fulfillment of daily needs and the use of local resources, a society that offers women and men of all races, ages, and abilities equal opportunities to have meaningful lives.

A socialist ecofeminist movement in the developed world can work in solidarity with women's movements to save the environment in the underdeveloped world. It can support scientifically-based ecological actions that also promote social justice. Like cultural ecofeminism, socialist ecofeminism protests chemical assaults on women's reproductive health, but puts them in the broader context of the relations between reproduction and production. It can thus support point of production actions such as the Chipko and Greenbelt movements in the Third World (see below), protests by Native American women over cancer-causing radioactive uranium mining on reservations, and protests by working class women over toxic dumps in urban neighborhoods.[24]

WOMEN IN THE THIRD WORLD

Many of the problems facing Third World women today are the historical result of colonial relations between the First and Third Worlds. From the seventeenth century onward, European colonization of lands in Africa, India, the Americas, and the Pacific initiated a colonial ecological revolution in which an ecological complex of European animals, plants, pathogens, and people disrupted native peoples' modes of subsistence, as Europeans extracted resources for trade on the international market and settled in the new lands. From the late eighteenth century onward, a capitalist ecological revolution in the northern hemisphere accelerated the extraction of cash crops and resources in the southern hemisphere, pushing Third World peoples onto marginal lands and filling the pockets of Third World élites. In the twentieth century, northern industrial technologies and policies have been exported to the south in the form of development projects. Green Revolution agriculture (seeds, fertilizers, pesticides, dams, irrigation equipment, and tractors), plantation forestry (fast-growing, non-indigenous species, herbicides, chip harvesters, and mills), capitalist ranching (land conversion, imported grasses, fertilizers, and factory farms) and reproductive technologies (potentially harmful contraceptive drugs, sterilization, and bottle feeding) have further disrupted native ecologies and peoples.

Third World women have born the brunt of environmental crises resulting from colonial marginalization and ecologically unsustainable development projects. As subsistence farmers, urban workers, or middle class professionals, their ability to provide basic subsistence and healthy living-conditions is threatened. Yet Third World women have not remained powerless in face of these threats. They have organized movements, institutes, and businesses to transform maldevelopment into sustainable development. They are often at the forefront of change to protect their own lives, those of their children, and the life of the planet. While some might consider themselves feminists, and a few even embrace ecofeminism, most are mainly concerned with maintaining conditions for survival.

In India, nineteenth century British colonialism in combination with twentieth century development programs have created environmental problems that affect women's subsistence, especially in forested areas. Subsistence production, oriented toward the reproduction of daily life is undercut by expanding market production, oriented toward profit-maximization. To physicist and environmentalist Vandana Shiva, the subsistence and market economies are incommensurable:

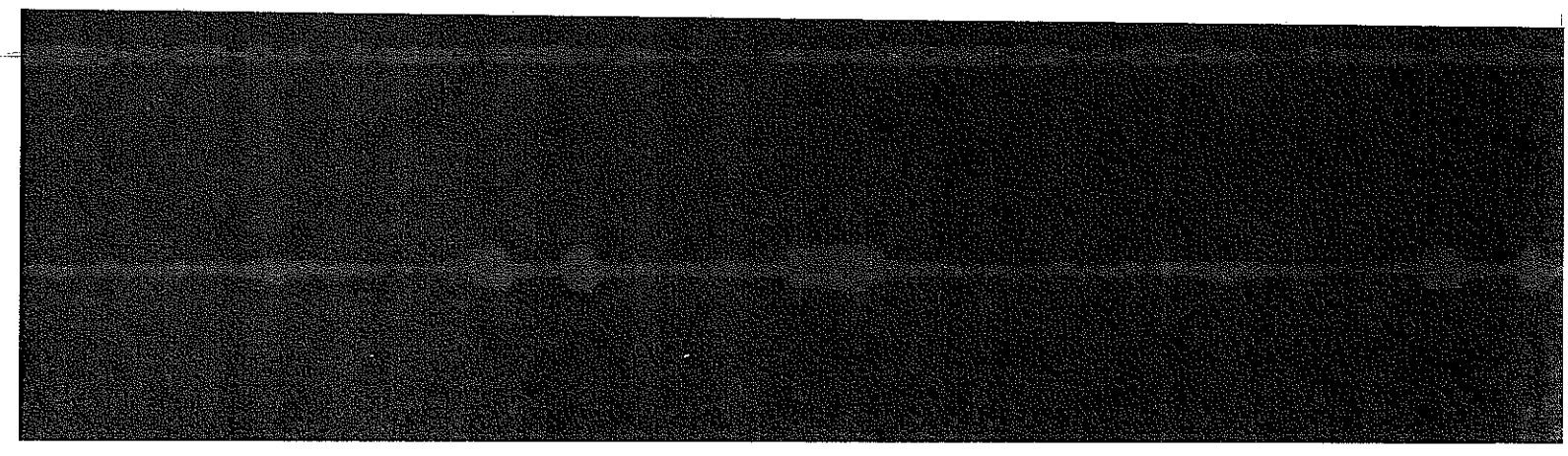
"There are in India, today, two paradigms of forestry - one life-enhancing, the other life-destroying. The life-enhancing paradigm emerges from the forest and the feminine principle; the life-destroying one from the factory and the

market ... Since the maximising of profits is consequent upon the destruction of conditions of renewability, the two paradigms are cognitively and ecologically incommensurable. The first paradigm has emerged from Indian's ancient forest culture, in all its diversity, and has been renewed in contemporary times by the women of Garhwal through Chipko." [25]

India's Chipko, or tree-hugging, movement attempts to maintain sustainability. It has its historical roots in ancient Indian cultures that worshipped tree goddesses, sacred trees as images of the cosmos, and sacred forests and groves. The earliest woman-led tree-embracing movements are three-hundred years old. In the 1970s women revived these chipko actions in order to save their forests for fuelwood and their valleys from erosion in the face of cash cropping for the market. The basis of the movement lay in a traditional ecological use of forests for food (as fruits, roots, tubers, seeds, leaves, petals and sepals), fuel, fodder, fertilizer, water, and medicine. Cash cropping by contrast severed forest products from water, agriculture, and animal husbandry. Out of a women's organizational base and with support by local males, protests to save the trees took place over a wide area from 1972 through 1978, including actions to embrace trees, marches, picketing, singing, and direct confrontations with lumberers and police. [26]

The Chipko movement's feminine forestry-paradigm is based on assumptions similar to those of the emerging science of agroforestry, now being taught in western universities. Agroforestry is one of several new sciences based on maintaining ecologically viable relations between humans and nature. As opposed to modern agriculture and forestry, which separate tree crops from food crops, agroforestry views trees as an integral part of agricultural ecology. Complementary relationships exist between the protective and productive aspects of trees and the use of space, soil, water, and light in conjunction with crops and animals. Agroforestry is especially significant for small farm families, such as many in the Third World, and makes efficient use of both human labor and natural resources. [27]

In Africa, numerous environmental problems have resulted from colonial disruption of traditional patterns of pastoral herding a governments imposed boundaries that cut off access to migratory routes and traditional resources. The ensuing agricultural development created large areas of desertified land, which had negative impacts on women's economy. The farmers, mostly women, suffered from poor yields on eroded soils. They had to trek long distances to obtain wood for cooking and heating. Their cooking and drinking waters were polluted. Developers with professional training, who did not understand the meaning of "development without destruction", cut down trees that interfered with highways and electrical and telephone



lines, even if they were the only trees on a subsistence farmer's land.

Kenyan women's access to fuelwood and water for subsistence was the primary motivation underlying the women's Greenbelt Movement. According to founder Wangari Maathai, the movement's objective is to promote *''environmental rehabilitation and conservation and... sustainable development''*. It attempts to reverse humanly-produced desertification by planting trees for conservation of soil and water.[28]

The National Council of Women of Kenya began planting trees in 1977 on World Environment Day. Working with the Ministry of the Environment and Natural Resources, they continued to plant trees throughout the country and established community woodlands on public lands. They planted seedlings and sold them, generating income. The movement promoted traditional agroforestry techniques that had been abandoned in favor of ''modern'' farming methods that relied on green revolution fertilizers, pesticides, new seed varieties, and irrigation systems that were costly and non- sustainable. During the past ten years, the movement has planted over seven million trees, created hundreds of jobs, reintroduced indigenous tree species, educated people in the need for environmental care, and promoted the independence and a more positive image of women.[29]

''The whole world is heading toward an environmental crisis'', says Zimbabwe's Sithembiso Nyoni. *''Women have been systematically excluded from the benefits of planned development... The adverse effects of Africa's current so-called economic crisis and external debt... fall disproportionately on women and make their problems ever more acute''*. Twenty years ago there was still good water, wood, grass, and game even on semi-arid communal lands and women did not have to walk long distances to obtain subsistence resources. But the introduction of Green Revolution seeds and fertilizers required different soils and more water than found on the common lands. The poor, primarily women, have born the brunt of development that has proceeded independently of environmental consequences.[30]

According to Zimbabwe's Kathini Maloba, active in both the Greenbelt Movement and the Pan-African Women's Trade Union, many farm womem suffer loss from poor crops on marginal soils, lack of firewood, polluted water, poor sanitation, and housing shortages. Women have suffered miscarriages from the use of chemical fertilizers and pesticides. In 1983, 99 percent of all farms had no protection from pesticides. Only 1 percent of employers heeded pesticide warnings and used detection kits to test pesticide levels in foods and water.

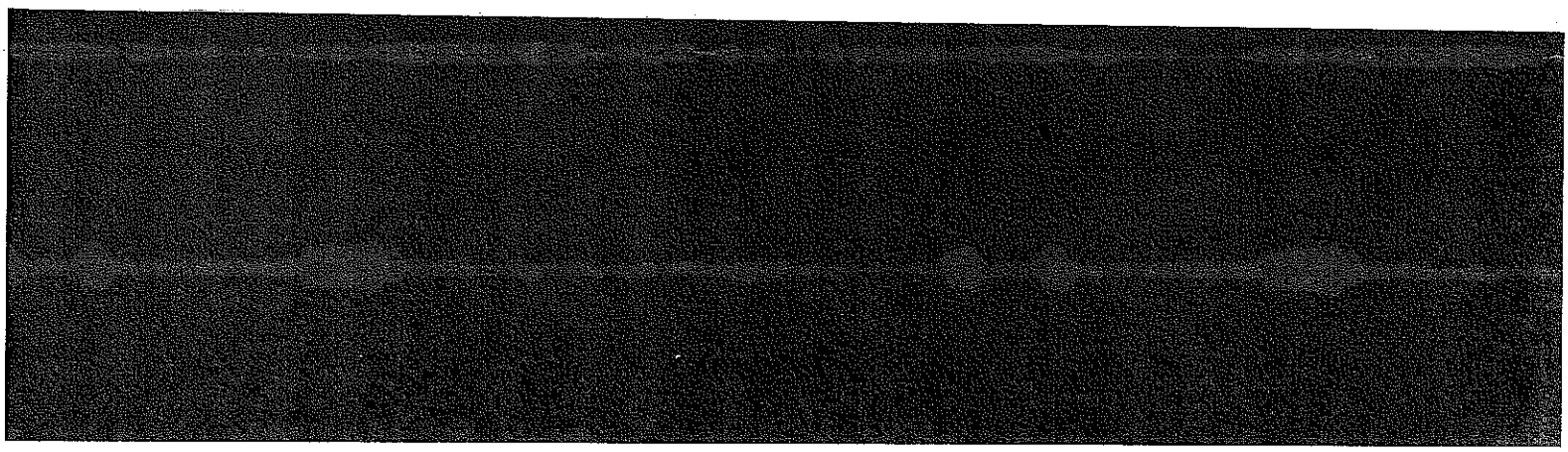
Development programs that emphazise people's needs within local environmental constraints would include: water conservation through erosion control, protection of natural springs, and the use of earthen dams and water tanks; in agriculture, the reintroduction

of traditional seeds and planting of indigenous trees; in herding, the use of local grasses, seeds, and leaves for feed and driving cattle into one place for fattening before market; in homes, the use of household grey water to irrigate trees and more efficient ovens that burn less fuelwood. 31

Latin American women likewise point to numerous environmental impacts on their lives. Both Nicaragua and Chile are countries in which socialist governments have been opposed by the United States through the use of economic boycotts and the funding of opposition leaders who supported conservative capitalist interests. Maria Luisa Robleto of the Environmental Movement of Nicaragua asserts that women are fighting to reverse past environmental damage. In Nicaragua, before the Sandinista revolution of 1979, many women worked on private haciendas that used large amounts of pesticides, especially DDT. Since the revolution the position of women changed as part of the effort to build a society based on sustainable development. In part because of male engagement in ongoing defense of the country and in part because of the efforts of the Nicaraguan women's movement, women moved into agricultural work that was formerly masculine. Women were trained in tractor driving, coffee plantation management, and animal husbandry.

According to Roberto, women agricultural workers in Nicaragua have twenty times the level of DDT in their breast milk as non-agricultural workers. They want equal pay and an end to toxic poisoning from insecticides. If breast feeding is promoted as an alternative to expensive formula feeding, there must be a program to control toxics in breast milk. In a country where 51 percent of the energy comes from firewood, 39 percent of which is used for cooking, there must be a forestry and conservation program oriented to women's needs. A grassroots movement is the spark for ecological conservation.

Chile's Isabelle Letelier of the Third World Women's Project (widow of the Chilean ambassador to the United States assassinated in 1976 by Pinochet agents after the overthrow of the socialist Allende government in 1973), speaks of the power of compesina women who created life and controlled medicine and religion. The global society, she says, is out of control. The round planet must be saved. Women must take charge, since men are not going to solve the problems. They must construct a society for both women and men. The rights of the land, the rights of nature, and women's rights are all part of human rights. Santiago is now one of the most polluted cities in the world. There are children who receive no protein and who resort to eating plastic. There is a television in every home, but no eggs or meat. There are colored sugars, but no bread. In 1983, says Letelier, women broke the silence and began speaking out for the environment. Without the help of telephones, they filled a stadium with 11,000 women. They established

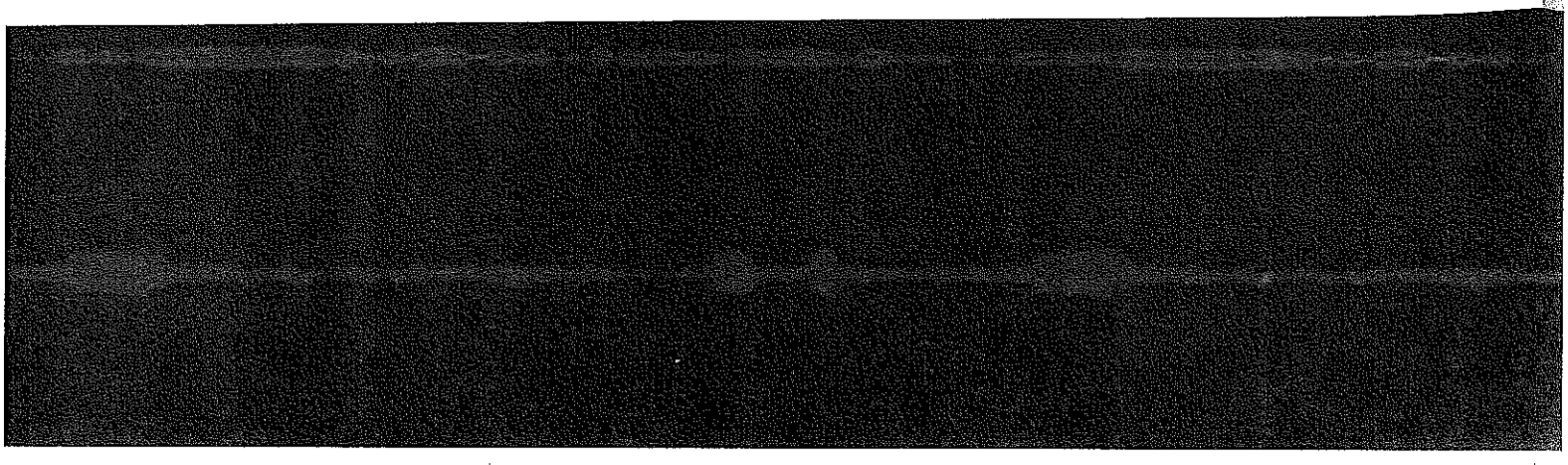


networks as tools; they learned to question everything, to be suspicious of everything. They learned to see. *"Women give life"*, says Letelier. *"We have the capacity to give life and light. We can take our brooms and sweep the earth. Like witches, we can clean up the atmosphere with our brooms. We can seal up the hole in the ozone layer. The environment is life and women must struggle for life with our feet on the ground and our eyes toward the heavens. We must do the impossible"*.

Gizelda Castro, of Friends of the Earth, Brazil, echoes the ecofeminist cry that women should reverse the damage done to the earth. *"Men"*, she says, *"have separeted themselves from the ecosystem"*. Five hundred years of global pillage in the name of development and civilization have brought us to a situation of international violence against the land and its people. The genetic heritage of the south is constantly going to the north. Women have had no voice, but ecofeminism is a new and radical language. Women must provide the moral energy and determination for both the First and Third Worlds. They are the future and hope in the struggle over life. [31]

In Malaysia, which received independence in 1957 as the British empire underwent decolonization, many environmental problems have resulted from a series of five-year development plans which ignored both the environment and conservation, especially the impact of development on women. *"The rapid expansion of the cash crop economy which is hailed as a 'development success story' has plunged thousands of women into a poisonous trap"*, argues Chee Yoke Ling, lecturer in law at the University of Malaysia and secretary general of the country's chapter of Friends of the Earth. As land control shifted to large multinational rice, rubber, and palm oil plantations, women's usufructory rights to cultivate the land were lost to a male-dominated cash-exporting economy. They became dependent and marginalized, moving into low paying industrial and agricultural jobs. Women workers constitute 80 percent of those who spray chemical pesticides and herbicides such as paraquat on rubber and palm plantations. They pour the liquid, carry the open containers, and spray the chemicals without protective clothing, even when pregnant or nursing. The workers are usually unaware of the effects of the chemicals and often cannot read the warning labels on the packaging. Protests resulted in loss of jobs or transfer to even less desirable forms of labor. In 1985, Friends of the Earth Malaysia began to pressure the Ministry of Health to ban paraquat. They called on plantation owners and government agencies to stop using the chemical for the sake of human right to life as well as the life of waters and soils. [32]

Third World women are thus playing an essential role in conservation. They are making the impacts of colonialism and industrial capitalism on the environment and on their own lives visible. They are working to maintain their own life-support systems



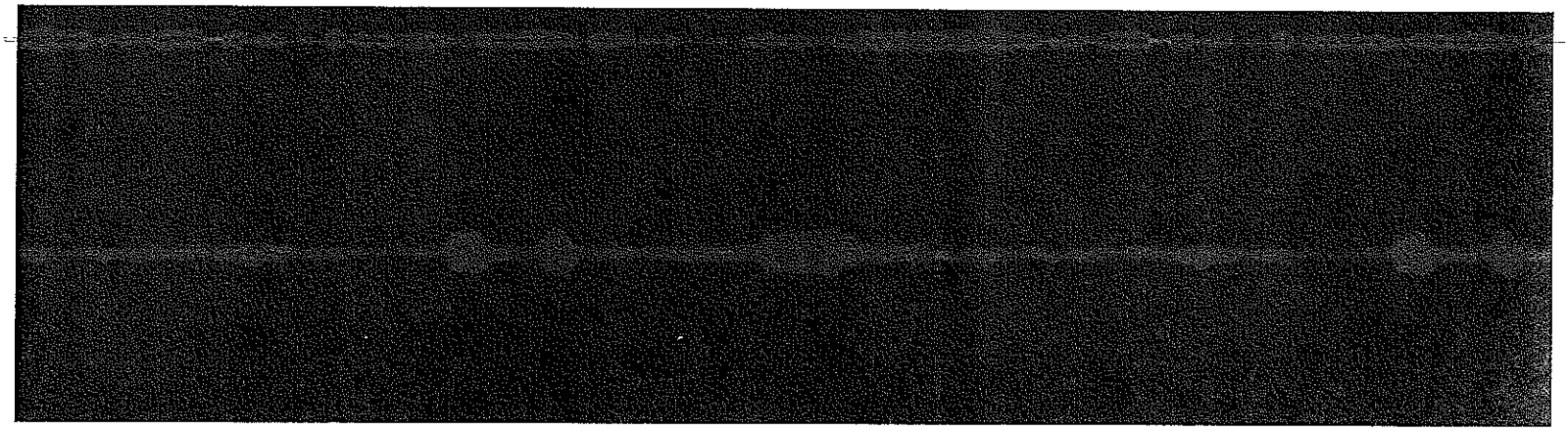
through forest and water conservation, to rebuild soil fertility, and to preserve ecological diversity. In so doing, they are assuming leadership roles in their own communities. Although they have not yet received adequate recognition from their governments and conservation organizations for their contributions, they are slowly achieving the goals of ecofeminism - the liberation of women and nature.

WOMEN IN THE SECOND WORLD

Second World development has been informed by Marxist theory that the goal of production is the fulfillment of human needs. Yet state socialism as the method for achieving equitable distribution of goods and services has created enormous problems of pollution and depletion resulting from a series of five-year plans for rapid industrial growth. As Second World countries incorporate market economic goals, environmental problems will become increasingly complex. Can the evolving, changing Second World produce and distribute enough food and goods for its own people and also reverse environmental determination? The movements toward democratization in the 1990s reveal an openness to new ideas and cooperation in resolving economic and environmetal problems, but many problems in implementing solutions remain.

While Second World women have shared educational and economic opportunities along with men, like First World women they have also borne the double burden of housework added to their employment outside the home. Like First World women, they have experienced the effects of industrial and toxic pollutants on their own bodies and seen the impacts on their children and husbands. Although women in the Second World have not achieved the environmental vision of Marxist feminists, they have used scientific and technological research and education to find ways of mitigating these problems and have participated in incipient green movements.

Second World women have assumed leadership roles in environmental affairs. In Poland, Dr. Maria Guminska, a professor of biochemistry at Krakow Medical University helped to found the 4000 member Polish Ecology Club and served as one of its vice-presidents. She prepared a critical report on the air pollution of Poland's largest aluminium smelter and was active in the effort to reduce toxic pollutants from a Krakow pharmaceutical plant. In the former Soviet Union, Dr. Eugenia V. Afanasieva, of the Moscow Polytechnical Institute, was Deputy Director of the Environmental Education Center for Environmental Investigation. The Center developed a filtration system to help clean up industrial water pollution. Dr. Afanasieva works with young people to promote better environmental education. "All mankind now stands at the beginning of a new era", she



states. ''People must make the choice to live or to perish. Nobody can predict the future. We must save our civilization. We must change our ways of thinking. We must think ecologically''. Women, she argues, play a major role in expanding environmental awareness: ''It seems to me that women are more active in environmental programs than men. We give birth to our children, we teach them to take their first steps. We are excited about their future''. [33]

In 1989 the First International Conference on Women, Peace, and the Environment was held in the former Soviet Union. The women called for greater participation by women as environmentalists and scientists to help decide the fate of the planet. They said:

"Each of us should do everything possible to promote actions for survival on local, national, and international levels ... We must work to end food irradiation, to ban all known chemicals destroying the ozone layer, to reduce transport emissions, to recycle all reusable waste, to plant arboreta and botanical gardens, to create seed banks, etc. These are among the most urgent beginnings for a strategy of survival." [34]

Olga Uzhnurtsevaa of the Committee of Soviet Women pleads for environmental improvement in the face of her country's accelerating industrial production. A national ecological program subsidized by the government is needed to reverse ecological damage. Children are being born with birth defects: air and water quality have deteriorated. Throughout the Commonwealth of Independent States, she says, women's councils support environmental thinking. Many of the journalists and activists concerned over environmental problems in the Lake Baikal watershed and the Baltic Sea are women. Women are especially concerned with the need to protect nature from the arms race. This problem involves all of humanity, especially the effects on the Third World. Quoted Uzhnurtsevaa,

"Nature said to women:
Be amused if you can,
Be wise if possible,
But by all means, be prudent." [35]

CONCLUSION

Although the ultimate goals of liberal, cultural, social, and socialist feminists may differ as to whether capitalism, women's culture, or socialism should be the ultimate objective of political action, shorter term objectives overlap. Weaving together the many strands of the ecofeminist movement is the concept of reproduction construed in its broadest sense to include the continued biological and social reproduction of human life and the continuance of life on earth. In this sense there is perhaps more unity than diversity in women's common goal of

restoring the natural environment and quality of life for people and other living and nonliving inhabitants of the planet.

From Radical Ecology: The Search for a Livable World. By Carolyn Merchant, Conservation and Resource Studies, University of California, Berkeley, Ca. 94720.

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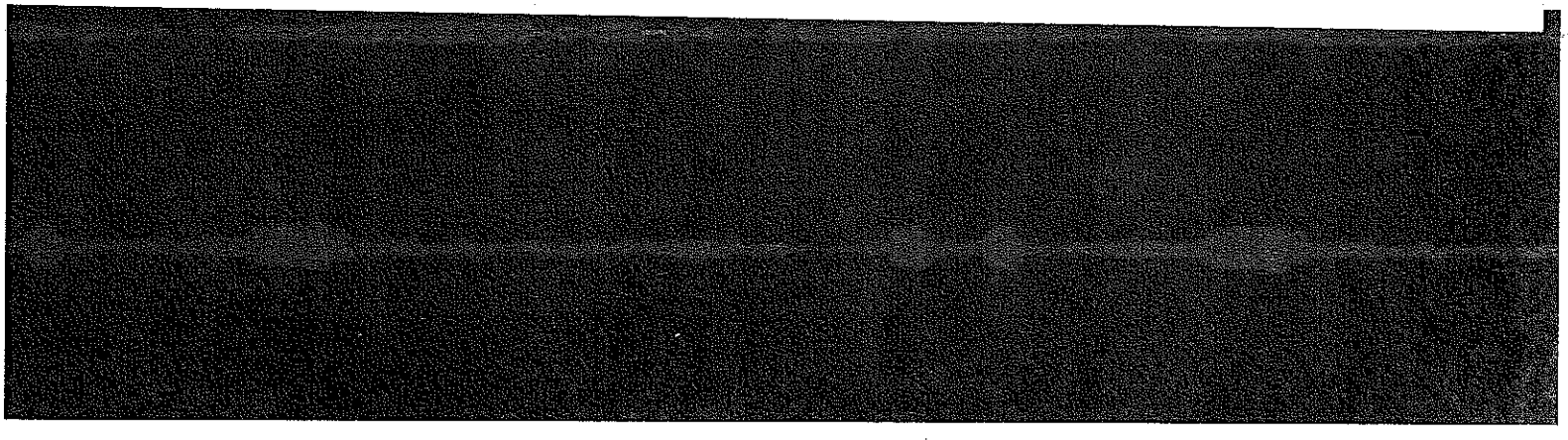

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