RECULL DE PONÈNCIES DEL CONGRÉS INTERNACIONAL

"WOMEN AND ENVIRONMENT, A GENDER PERSPECTIVE: FROM THE GLOBAL TO THE LOCAL"

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UAB Universitat Autònoma de Barcelona

ICD Institut Català de la Dona

Generalitat de Catalunya

Ponències presentades:

- **Anna BOFILL**: *"Women, daily life and urban environment"*.
- **Josepa BRU:** *"Environmental conflicts and women's role in Spain"*.
- **Joos DROOGLEEVER & Lia KARSTEN:** *"Contrating policies: questions around emancipation, environment and mobility"*.
- **Emma MAWDSLEY:** *"After Chipko: from environment to region in Uttaranchal"*.
- **Janet MOMSEN:** *Gender differences in environmental concern and perception"*.
- **Catherine NASH:** *"Environmental history, philosophy and difference: feminist perspectives on historical and contemporary human-environmental relations"*.
- **Oriol NEL.LO:** *"Urban dynamics in Metropolitan Barcelona. Ten questions and an environmental epilogue"*.
- **Verena STOLCKE:** *"The sex of biotechnology, nature in culture"*.
- **Janet TOWNSEND:** *"Gender and agroecological change in land settlement in Mexico"*.
- **Dina VAIOU:** *"Rethinking feminist approaches to the urban environment"*.
- **Sarah WHATMORE:** *"Living spaces: feminist encounters with environmentalism"*.

ANNA BOFILL

"Women, daily life and urban environment"

WOMEN, DAILY LIFE AND URBAN ENVIRONMENT

I shall talk to you about urban environment in relationship with women and daily life, to analyze why places to live and organisation of cities are not adapted to everyday life, to see that women has not been present in planning and desing and how we can change and transform our environment to get it more friendly, secure and "liveable".

The globalisation of markets and the universal urban model of developpement, which has been applied all over the world, South and North, have had negative consequences for the infrastructure of everyday life, for the urban landscape and the ecological environment. Urban environments present serious constraints for their users, especially for women who still are in charge of their families besides being increasingly part of the workforce. It is more and more difficult to experience urban settings as places which you can identify yourself with or feel safe and which can be enjoyed.

Cities in their present configuration, have been built assuming that men go to work while women stay at home. This has had a number of effects : the separation of the private and the public spheres, the zonification as the best and more rational arrangement of the urban space, splitting uses and functions and dividing up the space where the complexity of urban life takes place; to assign building densities, habitat typologies and social categories to different areas; to consider the relationship between house and work as the most important in the complex urban dynamics; to design traffic arteries and transport networks to go as far as possible within the shortest time, and so on.

Women have not been present in the process of cities' development and configuration, and in the continous transformation of our environment but in a passive way, subordinate to men. The urban environment is a genderer locus where sexual inequalities are evident. And this evidence can be proved when we analyze the conception and design of homes, workplaces, services and utility spaces, recreational or leisure

spaces, pedestrian walkways of a mobility network that gives priority to private vehicles, and generally look at the organisation of urban fabric. Also when we consider the lack of accessibility and of security, the fear of violence that invades our streets, especially violence against women.

Therefore it would be more appropiate to speak of limitation of women's freedom, rather than gender inequality, in a city which has been developed until now on the basis of a male experience of life, from a man's point of view.

Women's lives are substantially **diferent** from those of men, no least because of childcare responsibilities, and yet the built environment is still mainly designed to meet the needs of men. Women are also less likely to have access to a car, and yet have the chief responsibility for doing shopping, collecting the children from school and undertaking many other basic household tasks, and working part-time, and therefore travelling at off peak times. Yet it is estimated that less than 20% of women have access to a car during the daytime and so they are far more dependent on public transport, and are disadvantaged by a system created around "the journey to work" in the rush hour. It is argued that women's planning needs are different, are still important, and by no means solved.

Women are not a unitary group, and that, for example, **differences** in levels of income, car ownership, and regional location, will all affect their satisfaction with the built environment, but, irrespective of this, they will all share similar problems related to their gender role in society, relating to childcare, undertaking food shopping, and personal safety issues.(C.Greed "Woman and Planning"1995)

There are also **diversities** on etnicity, age, or sexual orientations, but still their needs in relationship with the built environment has to be take into account.

The structure of our society is continuosly experiencing changes concerning the family, the work situation, the presence of women in professional, technical and decision- making levels. We are in a long but profound way of life transformation. Nevertheless, women still play a subordinate role in the family group, wich

implies still very onerous tasks concerning the care of the family, the maintenance and care of all everyday functions, the management of domestic life. This reproductive work forces women to quit employment periodically, to seek part- time employment or to forseek promotion in their own careers.

It is important to be aware of **how women are "seen"** socially and culturally, in terms of gender and town planning needs.

The word "gender" is used to describe the package of cultural roles wich are given, respectively, to men and women in our society, whereas "sex" denotes the biological differences between them. For example, whilst only women can have babies, in our society it is expected, as part of their gender role, that they should be chiefly responsible for childcare, when there is no biological reason why this should not be shared by men and women. But for practical purposes, such is the nature of our society, that women are still likely to be the ones responsible for childcare, and therefore town planners need to take this gender difference into account in developing policy. (C. Greed,1995)

Traditionally city has been planned and built **assuming** that the **users are healthy native men in working age.** Planners have tougth to plan for the "man in the street", have tended to produce planning policy on the basis of a gender - blind basis, to meet the needs of the "majority" of the "public", usually perceived as male. If women have been seen to have special needs these have been assumed to be minority needs, yet as stated, women constitute 52% of the population. In particular women have been seen to belong to the " private realm" of house and home, whilst the city has been seen as the city of man, a place of "public life". freedom, work, and business activity. There is a still a tendency for some planners to perceive all women as non-workers, as "only houswives".

In Europe half of women in working age are working, in Spain the tax of activity is 37,79 % for women and 63,06 % for men (1997 EPA). This taxe of women's activity in increasing in spite of unemployment. And 2 over 3 active women are ocupied in a doble work journey, as a housewife and as a productive worker.

In Catalonia the traditional nuclear families were 46,5 % in 1991, so more than 50% of homes consited of other types of domestic groups as mother or father with children, one person household, group of friends and other compositions. That situation is not perceived in policy plans, so nor the dwellings nor the neighbourhoods are accomodate the needs of those type of population.

Women issues and planning needs or design aspects of the physical environment for other minority groups are not "seen" by the professionals and responsibles of the transformation of our towns, mainly constituted by men.

Cities are still being planned according to a model of society, that does not match the complexity of women's present everyday life and the diversity of practices in people's lives. There is a gap between the city, its arrangement and organisation, and the people and human groups that inhabit it, with all their differences.

In spite of differences in training and status, all women still have in common the responsability of organizing daily life. This **knowledge** in the domestic sphere, spilling over the remaining spheres of personal activity and interpersonal relationships can be objectified and being used to identify needs, to define targets, to assess priorities and to analyze strategies in order to implement general policies.

The **knowledge, experience and needs** of women give to the configuration of the urban environment new and different features and qualities that will turn it in a place more easy to live, more secure and more friendly.

The leading institutions, at European and International level are beginning to take interest in these questions and are promoting conferences, congresses, debates, projects on these subjects, based on the recognition that urban policy must consider women's roles and needs as said Mrs Jean Augustine, secretary to the P M of Canada, in the conference "Women and the city", in OCDE, Paris, 1994.

Many questions women ask for them self : Shall we resign ourselves to be the objects of care for our society, like the disable, the elderly or children, when we have always been taking care of "others" ? Will we accept as an aim to try to solve women's inequalities by formulating lists to be included and considered in planning programmes? wouldn't it be more interesting for women to focus on their involvement in urban development from another point of view, wich offers them the possibility to **"make"**, to **"engender" our urban environment**?

On the basis of many gender studies that analyze women's subordination to men's power and of the theories about the **"mother symbolic order"** (building the **culture of the "other"**, not existing in the "father symbolic order"), and with the knowledge of existing experiences in "women made" urban environment, we think, in Spain, that our aim has to be **to build an emancipated society**, free from any kind of cultural stereotypes. It is important to consider the questions of the city in the context of feminism, to restructure the cities from a women's point of view. We must think about changes in the urban environment from the perspective of women's values, which take all citizens, female and male, into account. To carry out urban policy it is neccessary that we start from our social reality in each place where we belong, and as women we have to **start from ourselves**. Only the **awareness** of our desires and needs, of our way of life, and the practice of relationship to, and interrelating with other women will enable us to create a new process, to formulate a new policy for the transformation and improvement of urban environments.

Have we think sometime about where do we take shelter when we are stressed and we need to be absolutely alone and relax? Have we stopped to think if our home corresponds to our or our family way of life ? And if our way of life is adequate to our way of being ? In wich part of our home do we feel allright and wich part we don't like, and why ?

Have we spaces and enough time to develop personal activities and interests for the fulfillment of our own desires?

Are we pleased or satisfied with our neighbourhood, our street or square where we live ? Are there some places in town where we feel relaxed and confortable ? And Why?

These and many other questions help us, as citizens, to understand and to know our urban environment, and to find out and be aware of what we want in respect to the characteristics or qualities of urban spaces : how we like, or would like, our homes, workplaces, study places, recreational areas, parks, pedestrian paths or areas, public facilities, and so on, to be.

In 1976, in the international Congress of Women Architects in Iran, I made a speech about **Design as a response to People's Dreams**. At that time I said that as architects we cannot build our environment for a man as a prototype or as a robot synthesizing all human beings, neither for a model of society able to be applied everywhere responding to the globalisation of markets and of the economy. For the same reason it is argued that architects cannot use any more the international language or style of architecture everywhere in the world. Professionals of the built **environment** must know that it **is not neutral**, it is gendered, as society, and that it has to be adequate to any specific caracteristics of the country, and the place or the site where it belongs.

Architects must be aware of women and men needs and desires, and of **"genius loci"** , the spirit of place, and of the **power of place**, beacause it is also important to give a **sense of identity** to places in our environment. The *Power of Place* (MIT 1995) is the title of a Dolores Hayden book where she quotes: "If place does provide an overload of possible meanings for the researcher, it is place's very same assault on all ways of knowing (sight, sound, smell, touch and taste) that makes it powerful as a source of memory, as a weave where one strand ties in another. Place needs to be at the heart of urban landscape history, not in the margins, beacause the aesthetic qualities of the built environment, positive or negative, need to be understood as inseparable from those of the natural environment. "

Identity can be understood as the propiety of a site wich is distinguished by special traits, as in the human face : architectural spaces, or cities, must have a face, different traits according to the inhabitants and to the geographical aspects of the site, or the region.

We must know people's dreams, we must consider gender perspective, we must be aware of ethnic, age, status, physical habilities or sexual orientation **diversities** in the present urban environment.

Let us forget for a moment the rituals that govern our lives, our cultures, those automatic actions that order everyday life, always in the same way. Let us try to rebuild our personality by thinking and structuring our daily life in accordance with our inner way of being. Only if our desire becomes political, only if we give expression to our will of change, shall we be able to act politically toward a transformation of urban environment on behalf of ourselves and therefore also on behalf of all citizens.

Many issues has to be considered from a gender perspective. In Spain, for example, women think that :

* The housing offer is unadaptable and quite inaccessible.
* Social housing is adressed almost exclusively to the nuclear family and its design is not even adapted to its present needs.
* Urban spaces are invaded by cars (in spanish cities the cars occupied the 60 % of the non build soil, in many towns)
* Access to urban services on foot is difficult.
* There is not enough public transport.
* There are too many only residential suburbs
* Homes, work places, shops and amusement areas are badly distributed, too far from each other.
* City schedules are not adapted to women's double or triple tasks.
* Everyday tasks are not shared, in most cases, by women and men.

To bridge this gap between the organisation of the city and the people and human groups that inhabit it, with all their differences, has been one of the subject matters of the project **"Women and the City"**, promoted by the *Fundació Maria Aurèlia Capmany*, coordinated by Isabel Segura and my self, and included within the *IV Medium Term European Program for the Equal Opportunities between Men and Women* by the European Commission in september 1996.

Furthermore, the project includes the participation of the Council of Barcelona, Diputación of Barcelona (province), the Council of Reus, the regional Council of Garraf, the Councils of Lleida,

Donostia-San Sebastian; the Institut Catalá de la Dona; the Consejo de la Mujer de la Comunidad de Madrid; VES Emancipatiebureau South Holland; the networks "Quartiers en crise" and Educator Cities; and the association Arbeit und Leben form Saxony-Anhalt, Germany.

Women and the City main targets are adapting the forms and organisation of the city to the social reality of women and creating local, national and transnational networks of women citizens, inhabitants, professionals and politicians, to define the wishes and needs of women as far as the domestic and public spaces, the planning, arrangement and design of boroughts and cities, mobility, accessibility to services, security and participation in decision - making processes are concerned.

The Project has two main targets :

* Producing a **White Book** or Handbook of recommendations about women ans the city, oriented to transform the environment to be more inhabitable.
* Creating a National and Transnational **Network of Citizens.**

The White Book will include advice for politicians and technicians in charge of city making, on the aspects of :

* **Housing**
* **Urban space and city planning**
* **Mobility and accessibility**
* **Security**
* **Participation in decision- making processes**

Women and the City project is developed according to an organisation chart wich, from a central **forum** or interdisciplinary group of women where an **active mediation** between women inhabitants of a borough, town or city, and professional, technician and political women is put into practice.

This mediation makes possible an axchange and comunication to foster the participation of women as users of the inhabited environment in its transformation, allowing them to express their needs and wishes and encouraging their involvement and enpowerment in decision-making.

A dialogue is established for the first time between women citizens, advised by professionals of architecture, urbanism and other disciplines that take part in urban planning, and the administration.

Work meetings are held, with heterogeneus groups of women, wich eventually will produce programs that consider their needs, freely expressed and without stereotypes, at different levels, from the domestic space to urban planning. Priorities are determined, specific problems are identified and alternatives are proposed.

While these sessions are focused on the built environment they can also be seen as building capacity in a more general way as they develop the critique from the interior and the personal through to the shared concerns in public spaces. In starting with the purely personal each woman could feel confident that she was not competing with others : her interior world is equally valid. Part of the success of these workshops in helping women to frame their ideas is the inherent sensitivity to differences between women, particularly those of class, income, and confidence.

These groups foster also further work meetings with other women forums to create a Network of Women Citizens. The connected Networks from the various cities and towns has created a Network at national and transnational level.

By the *Women and the City* - project a quite big number of mesures have been proposed, that are expressed in the *White Book* wich is now in print, and is going to be available next month. For example :

1. To mixt different functions and activities.
2. To integrate residential neighbourhoods with service and facilities infrastruture.
3. To create intermediary spaces wich will promote interpersonal relations.
4. To transform public spaces into real places of communication.
5. To create a transport system wich will also seve persons dealing with domestic affairs.

The White Book is specially made:

--to advise citizens and the political spheres on the adjustment of urban polices to the new social reality
--for the involvement of women in decision making in the context of present and future urban planning
-- to plan changes to make possible the social emancipation of men and women.

WOMEN AND THE CITY

SOME OF THE MAIN RECOMMENDATIONS

HOUSING

Flexibility

Diversity of typologies

New forms of economic accessibility for women and young people

Durability : alternatives energies and new technologies for sustainability

Changements in the laws and norms on social housing

URBAN DESIGN AND PLANNING

New model : Multi-nuclei city form with celular structure

Make green pedestrian paths frames

Design urban spaces (streets and squares and others) with gender criteria

Full integration and mixing of land uses

Develop small parks and incidental landscaped areas, and children play areas

MOBILITY AND ACCESSIBILITY

Give to the periferical areas the qualities of the central areas

Pedestrianisation of special zones

Built car parking in the main intrances of towns

Develop public transportation networks

Adapt time schedule, frequency and itinerary of public transport to the women tasks in daily live

To review and implement policy for architectural barriers

URBAN SECURITY AND PERSONAL SAFETY

A grater mixing of land uses : to increase the distribution and proximity of shopping facilities, banks, post offices to workplace locations.

Better lighting of urban public spaces

The design of places and itineraris must be clear, easy to comprehend

A good visibility and transparency in the accesses of buildings

An aesthetic quality of places is needed as an element to dissuasion violence

PARTICIPATION IN DECISION MAKING PROCESSES

To create citizens Forums with users, technical and political persons

To create research centers and advisement bureaux to identify and implement gender criteria

To develop educational policies towards the change of attitudes and values

To reinforce and increase human and financial resources to the implementation of emancipation local policies.

July 1998

JOSEPA BRU

"Environmental conflicts and women's role in Spain"

ERASMUS-SOCRATES INTENSIVE COURSE ON "WOMEN AND THE ENVIRONMENT A GENDER PRESPECTIVE FROM THE GLOBAL TO DE LOCAL".

" Environmental conflicts and women´s role in Spain".

Josepa BRU

UNiversitat de Girona

The paper explains the main results of a research about the women's roles and experience in grassroots movements that happened the beginning of the nineteens, and were related with the impacts of industrial waste disposal in three case studies of industrialized coastal regions in Spain: Gibraleón-Huelva (South-west), Bilbao la Vieja-San Francisco (North) and Catalunya (North-east).

Study cases presentation.

Gibraleón

Gibraleón is a small town in the Province of Huelva on the southwest coast of Spain. With a population approaching 10,000 inhabitants. It is about 9 miles far from the provincial capital Huelva, where one of the biggest spanish chemical industrial complexes is located. Late in 1987 the Environmental Agency of The Autonomous Regional Government of Andalucia proposed a hazardous waste disposal site on a Gibraleón farm with direct access to railroad line providing and adequate access to the area for unloading industrial by-products.

From de beginning the women of Gibraleón incorporated an unique strategy of constant presence on the street , clearly indicating the exceptional nature of the situation during almost two years of conflict. At noon each day, the women met at gates of city hall to share ideas and discuss the progress of their opposition coming. The women would often bring their domestic work to the streets, frequently sewing, knitting or cleaning vegetables while taking care of their children.

The responsibility the women undertook multiplied and became increasingly diverse as the movement evolved: daily contact with the local radio stations and newspapers; writing press releases, organizing public events to disseminating information, visiting to the arrested and inform their families and keep in touch with attorneys.

Three women formed a musical group to motivate the community through the adaptation and performance of popular songs -Christmas, carnival, easter and other seasonal songs-. Their songs shared stories of community in their efforts, reflect the popular perception of the struggle

and also provide an authentic local mythology of the conflict.

Bilbao

The second case study comes from Bilbao, the capital of Basque region in the north coast of Spain. The study area includes the neighbourhoods of Bilbao la Vieja and San Francisco both located in the old city centre on the slope of Mont Mirivilla, with a combined population of approximately 9,700 inhabitants. These two communities are typical of many historical, yet decaying inner-city neighbourhoods which have an increasing tendency toward high rates of unemployment, racial segregation, drug abuse, and a disproportionately large senior-citizen population.

The women in this two communities mobilized a social movement after industrial waste- accumulated illegally in an abandoned mine in mount Mirivilla- spontaneously caught fire. The combustion of noxious chemicals resulted in an entire month of toxic emissions produced by burning of PCB's, cyanide and pesticides, among other substances.

Much of the strength, direction , and organization of this social movement came from women in the community, most of whom were members of the Bilbao la Vieja neighbourhood association. Most of the women had joined the organization before the conflict and successfully rescued it from a state of neglect. They were already engaged in daily straggles for the preservation of their quality of life in the face of poverty and marginality, to bring dignity to the neighbourhood under difficult and oppressive conditions.

Catalunya.

The third case study examines the community opposition efforts against a government waste disposal Plan in four small towns in Catalonia - northeast of Spain-. The neighbouring towns of Solivella, Sarral, Pla de Santa Maria, and Rocafort de Queralt are situated within a radius of just a few kilometres of each other and have a combined population of almost 4,000. Although trey are clearly rural communities, these four towns are closely connected to the coastal urban-industrial complex through a network of highways which extends from the metropolitan area of Barcelona - the main industrial focus of the region- to Tarragona, the canter of catalan petrochemical industry.

When the regional government made public its proposal which included an incinerator and a large -scale industrial by-product disposal site, primarily for chemical waste from the Tarragona area,

communities reacted with a strong unified position.

Regardless of how much the authorities promote the necessity of "territorial solidarity" , rural communities consider the imposition of the Plan as a genuine act of aggression.

The women reacted assuming a role as guardians of the continuity of the landscape and rural milieu for future generations. Perhaps one of the strongest threads of solidarity of women among the catalonian women came from their shared conflictive and even contradictory experience of fulfilling a responsibility the their community while, at the same time, feeling that they were neglecting their children. They felt insecure and abandoned as a result of their mother's new activism. Children were conscious of the magnitude of the conflict because of their mother's nonconformism and increased involvement.

Hypothesis and methodology.

Regarding the woman's perception of environmental risk episodes and their involvement in grassroots movements we can distinguish a set of related hypothesis:

1-The relationship between women and the environment relates with women's specific roles and distinct investment in "their" community. So:

2.-Women have a unique perception of the environment in terms of daily life, family care and community well-being in each place.

3.-Women participate in community activism and social movements in ways that are gendered-specific and directly correlate with the roles and functions of gender in society.

The study involved a combination of field research and information gathering techniques, the more substantive of which were the comprehensive, in-depth interviews with sixty-four women who had been active participants in grassroots movements.

The interview results.

Assessment of the nature of impacts.

On a scale of 1 to 10 the women from each community were asked to rank the magnitude of

On a scale of 1 to 10 the women from each community were asked to rank the magnitude of local environment, health and economic problems. In all three case studies, health was considered the highest priority followed by the environment and the economy.

Perception of the extent of the problem.

The women were asked about the first image that came to their mind when they thought of their perception of the problem. The most prevalent response in Bilbao was that the problem had occurred there because Bilbao's neighbourhoods location in "the middle of nowhere". In Catalonia a recurring answer was that the problem was an example of the inadequate environmental policies of the Regional Government. The women of Gibraleón overwhelmingly responded to the need to halt the project to avoid the risk of similar initiatives or problems occurring in the entire area.

Motivating factors of women activism.

The women were asked to priorize the motivating factors in terms of protection of family and community health, protection of the environment, reaction to an externally imposed threat, or a sense of endangerment of their community and quality of life. Concerns about family and community health were unanimous, rendering the remaining categories insignificant.

Feelings and attitudes during the conflict

In the three case studies, the most commonly felt sentiment was that of feeling useful to the community. In Catalonia and Gibraleón, up on one third of the women felt enthusiastic about the struggle. Twenty-three percent of the women in Gibraleón experienced a sense of personal empowerment.

Perception regarding gender differences.

The women were asked to compare differences in motivational factors and forms of action employed by men and women. Interestingly, in all three cases the most frequent response were that there was none.

In analyzing the interview results, it is apparent that they were some difficulties with the

question for two reasons. First the self-image of the women interviewed, especially the younger, as modern and autonomous can often result in a unconscious denial of gender inequalities. Second, many women felt defensive about the feminist slant of the study and their sense of "difference".

So, in my opinion, both reasons precluded most of the women interviewed from engaging in detailed appraisal of gendered participation of struggle.

Contextualization of the problem.

For more that three fourths of the women of Gibraleón the experience seems to have expanded their knowledge of interpersonal and institutional relations. In Catalonia the responses where similar although the experience also provided the vehicle for a better understanding of environment. In Bilbao most of women cited both of these changes as equally important.

Interestingly in all three case studies, the question which provided the widest scope of change: "a better knowledge of the role of their place in the industrial and urban economy of the area" was given the least importance.

Interpretation of results

The need for a new concept of environment

A new concept must be found which also embodies the manifestations of environmental impacts on household life and on the desires and aspirations of people and communities. Since the unit of analysis would be individuals and families, contrary to current definition, analysis would focus on the microscale. This lack on an adequate definition of environment in the academic as well as the waste management spheres, indicates a need to explore the androcentric character of current, formal environmental knowledge, which is considered scientific and universally valid.

Women as activist.

The women passionate involvement in community activism to safeward a healthy environment for present and future generationswas derived from a gendered responsibility for the quality of life in the community and the family.

So, the distinct commitment and connection of women, to their families and their communities, as sources of their self-esteem, seem to have been the fundamental impetus behind the participation of women in social environemntal movements.

Under civil disobedience episodes, the town or neighbourhood becomes a community by social meaning where a crucial network of women's socio-historic, personal and emotional relations emerges. These gendered objectives and gendered commitment explains why the women did not waver, before unconditionally participating in a wide array of necessary activities for the success of grassroots movements.

Struggle, perseverance and resistance.

Civil disobedience are situations which push one to the limit, that entail enormous personal sacrifice, require continuous readaptation to changing circumstances day by day, and versatile multidirectional action. In trying to explain why women seem to have the capacity to remain on an even keel in these situations, it becomes clear that the attitudes required to mobilize an effective social movement, although different in intensity, are the same as those that women have had to develop as their socially defined gender roles and responsibilities in domestic and community life involved, gender-specific and specially coping mechanisms and strategies for addressing everyday situations.
In this context, an event such a social movement which primary affects the private sphere, disrupting domestic patterns of everyday life, values and work, is difficult to manage for dominant androcentric paradigm of social action based on "public" rules.

The "spilling" of private space into public space.

In each of the case studies, the social movements led to a type of "spilling" of the domestic sphere outside the home gates to the point of a genuine invasion of the public sphere. This subsequently engaged the public arena in a foreign process which was not considered part of its nature or "essence". The participation of women in civil disobedience dissolved many of the barriers that exist between functionally differentiated spaces.

Through their visible and active involvement in the social movements women's historically subordinate roles became "public". Their gendered identities and use of space temporally became dominans due to their active agency in the organization, development and success of the movements.

From public times to private times, or the feminization of periods of civil disobedience.

The overlap of public and private spaces and times affects the use and significance of time in two ways: first in terms of the rhythm and intensity of the movements , which is a function of domestic time; second personal time comes to articulate itself based on the simultaneity and compatibility of a new set of task of different natures.

Regarding the organization of individual time, the androcentric model of compartimentation and specialization of tasks is broken and substituted by feminine model of simultaneity and versatility, characteristic of the domestic spheres. This gender differentiated model for time allocation is imposed over more typical male approach because it adapts best to spontaneous emergency situation.

In terms of community time, the coordination of public community activism with the annual cycle of popular festivities - instigated by women- proved critical to the effectiveness of the social movements.

Epilogue.

This paper had tried to illustrate repeatedly, from different perspectives, that the involvement of women in social movements in defense of the environment brings distinct gender-specific perspectives, experiences and values to the forefront.

The role, significance and critical involvement of women in the social movements in Bilbao, Catalonia and Gibraleón suggest the existence of a "feminine model of environmental consciousness and action" which far from being limited to women, can serve as a model for the design of alternative approaches, while based on women's experiences, values and contributions. It must also undertake the need for a redefinition of the environment that necessarily includes also the private sphere.

They are inscribed in a global re-evaluation of the personal such that it serves as an arena for individual, social and political participation. So, it contains the seeds for social change of great scope that rends the limits between the personal and the public increasingly fuzzy, specially in environmental/vital concerns.

JOOS DROOGLEEVER and LIA KARSTEN

"Contrasting policies: questions around emancipation, environment and mobility"

Contrasting policies: questions around emancipation , environment and mobility

ERASMUS/SOCRATES Intensive Course on
Women and the environment: a gender perspective: from the global to the local
Universidad Autonoma de Barcelona
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1. Introduction

In the Netherlands environmental questions receive high priority. Important part of the concerns about the environment focuses on mobility. Do we need a second national airport? Do we have to improve our rail-infrastructure in order to facilitate the Tally's train? And how necessary is it to broaden our highways in order to avoid traffic jams? Newspapers report daily on such questions.
Demonstrations of environmentalists are rather frequent. Environmental activists point out the detrimental effects of motorised mobility on the quality of the environment . People's mobility ends up in waste, pollution and obstruction. Space, raw materials and energy are wasted , water polluted and landscapes disrupted. Many people are confronted with a traffic jam each morning when they go to work. These employees get problems with their daily schedules and the financial costs for their employers are high. The increased motorised mobility forms a problem for the safety of children and other vulnerable members of the society.
Although many Dutch citizens recognise the problem of mobility and are confronted with it, there are not so many persons who decrease or change their mobility pattern. As a matter of fact environmental problems related to mobility have not been solved. In fact, we see that daily and non daily movements increase. And indirectly the government seems to stimulate this process. How? In the first place the participation in the labour market is strongly stimulated. In many cases work and home will not be in the same city and new commuters will occupy the highway. A second important field of policy is the prevention of social exclusion. In many cases social exclusion of the elderly, the poor and the unemployed will be related to the improvement of their mobility. Thirdly, women's emancipation, which already starts with girls' emancipation, is officially declared and results in higher participation of women and girls in education, in the labour market but also in leisure activities and social participation. Women's emancipation will result in an increase of women's mobility.

SHEET 1

In this paper we want to focus on the relation between women's emancipation and the growth of mobility. While over the last decades the call for restriction of (car)mobility has grown, it is women who just have started to increase their mobility from a very low level towards the already high level male citizens have. The first question in this paper is to analyse women's

recently growing mobility during the life cycle. Secondly, we pay attention to the regional variation between women living in cities and women of the countryside. In the last section of this lecture we will highlight some of the solutions the women's movement has thought of to reduce the detrimental effects of mobility without reducing women's freedom of movement.

2. Women's mobility throughout the life-cycle

Children's mobility

Over the last decades children's mobility has grown enormously. Where children used to grow up in neighbourhoods with school, family and friends nearby, nowadays, in the Netherlands, children (0-12) travel almost 18 kilometre a day (CBS, 1997). There are many reasons for the increase of children's daily movements. I will mention three reasons (Karsten, 1995).

First, the increased number of mothers participating in the labour market. Part of the week, as we will see further on mothers in the Netherlands work part-time, children have to be taken care of by others. In many cases this is a guest mother or a child care facility outside the home. From six weeks on children are transported between home and carers outside the home. Secondly: while the number of children per family is decreasing, the demands for a "correct" education are increasing. Nowadays parents responsibility for the raising of their kids goes far beyond the physical needs of good food, a daily bath and proper clothes. Stimulating a child's development starts very early on. Babies get 'swimming lessons' and toddlers acquire the basis of their musical talents in a course 'music on mother's lap'. Learning skills becomes very important for school age children. They are supposed to participate in all kinds of clubs from sports clubs to music classes and from hobby clubs to youth associations. Children have full agenda's and they travel -most often are travelled by- from the one children's domain to the other. It is good to note that I refer to a typical white middle class phenomenon. Whereas 75% of the children growing up in a prosperous Groningen neighbourhood has two or more children's activities a week, this applies only for 2 % of the Turkish/Moroccan children growing up in Amsterdam (Wiggers et al, 1996; Karsten et al, 1997).

A third factor which stimulates children's daily movements has to do with the spatial environment. Processes of enlarging the scale of cities and facilities make distances grow. This is apparent when we have a look at sports facilities. Neighbourhood sports accommodation disappear and great complexes arise at the outskirts of the city. To reach these complexes great distances have to be travelled for children this is often too great. It is only middle class children who accompanied by their car using parents reach this complexes. A growing awareness of social safety problems make the use of the car for children's activities even greater.

To summarise the first stage of the life cycle : children's mobility has not only increased, it starts at an earlier age and it is more often accompanied. This accompanying aspect makes the increased mobility to a problem. Not only from the point of view of children themselves who lose their independence, but also from an environmentalist point of view. Accompanied mobility makes children heavy car users far before the age they can drive a car themselves: over 13 kilometre of the daily travel (of the nearly 18) is made by car.

Several studies point out that already at a very young age differences between boys and girls in their daily movements appear: playing outside, number of clubs and the extent to which independent mobility is reached.

In very general terms we can see that girls less often than boys leave the home to play somewhere outside, they are more often not participating in clubs than boys do and they are more often accompanied by their parents (SHEET 2, Urban Studies. Gender is not the only differentiating factor: ethnicity/ class interferes). Surprisingly it is boys who are more often transported by car. Is this because boys are more frequently accompanied by fathers and as we know men are tended to use the car more often in leisure time?

Working women and mothers

Girls have reached more or less the same level of education than boys. A growing number of them wants to use the relatively high standard of education in combination with their domestic and caring task related to their status as wife, mother and daughter. That means that compared to the women of an older generation daily mobility of modern women have grown. They leave the neighbourhood several days a week, and generate much more kilometres than their mothers used to do.

The combination of paid and unpaid work, however, makes women's mobility very different from that of men. In the Netherlands, part-time working not too far from the home is the most used strategy by women to combine a job with household duties. Around 90% of women with young children work part-time (Van Praag en Niphuis-Nell, 1997: 59). When we compare working women with working men it is evidently clear that women work closer to home: in general men work at a distance of 20 kilometres and women at a distance of 8 kilometres (Pol and Zoutendijk, 1994: 17/19).

Public transport is still very much attuned to full time jobs with frequent supply of buses and trains in the early morning and the late afternoon. Part-time work is not always organised between 9 o'clock in the morning and 5 o'clock in the afternoon which make the accessibility of jobs by public transport difficult. Many women, especially lower class women, work in the evening, at night and in the weekend witch enables them to organise child care with the help of their partners. These women, however, have difficulty with finding adequate public transport, which is even more difficult because of public safety problems related to dark hours. Studies indicate that for many women public transport forms a no-go area at night

The use of a car is further stimulated by the different patterns of mobility caring employees have. The combination of caring tasks with paid work often results in movements in chains. In stead of direct tracks from home to work, which is the dominating commuting pattern of breadwinners, chains of movements occur between home, child care facility, shops etc. which is rather complicated. Not surprisingly it is mainly women who are engaged in chain movements, as is illustrated by SHEET 3 (Pol and Zoutendijk, 1994: 37). In many cases chain movements are too complicated to carry out by public transport and more convenient by car. This would make women the most intensive users of the car. Fortunately, however, many women still succeed in using the bike, our national proud, which especially in the city is in many respects the most adequate form of transport. This is illustrated by the following SHEET 4. (care, use of transport and sex, labour, use of transport and sex: Pol and Zoutendijk 1994: 26/27 and 19/21). It is good to be aware that women's greater use of the bike does not apply to Dutch ethnic minorities. It is ethnic minority women who are most restricted in their daily movement (Emancipatiebureau , 1997).

To summarise this part of the life cycle: adult women's mobility has grown, however, there is still a world of difference with that of men in respect of distances and of car-use. Furthermore divergence among women is big: gender interferes with class and ethnicity.

Older women's mobility.
The Dutch population is growing older and this applies especially to women. Whereas the mean age of men is 74?, that of women has already grown to 80? In addition, people of an older age remain longer actively engaged in societal affairs. The emancipation of the older population manifests itself in an increase of mobility, especially in the vital age between 55 and 75 years old. Nowadays it is this generation which generate a great bulk of the mobility in so called low hours: after nine in the morning and during low seasons. Women, who traditionally have much larger social networks than men, contribute to a large degree to this rather new pattern of mobility and compared to former generation new generation of women are not longer dependent on men for the access to cars. A very high percentage of older women nowadays has a driver's licence and access to (family) cars as well.
The eldest generation, both men and women, reveal a quite different pattern. They themselves are not the mobile persons but they generate the mobility of quite big networks of carers. Governmental policies are aimed at the independent living of the older generation till a very high age. That means that older people are not stimulated to start living in elderly people caring houses. They have to organise their own networks, often with their children as the main actors. These children, however, do not always live in the vicinity of their parents' home. Caring for parents is an activity which takes often place over large distances. And it is more often daughters who feel responsible for their parents than son. Informal care is delivered by 15 % of Dutch women against 7 % of Dutch men (Pol and Zoutendijk, 1994: 31).

To summarise this first part: women's mobility throughout the life cycle, from their status as a girl, towards the status of working mothers and retired women, has grown proportionately in a period in which mobility has become a questionable practice. However, when we compare girls and boys' and women's and men's mobility it is still evidently clear that especially when we look at car mobility, it is boy/men who generate far more car-kilometres . And as we have seen class and ethnicity are important interfering variables in this pattern.

In the next section Joos will go on with indicating the spatial differentiation of the mobility picture. She will point out the differences which exist in mobility patterns inside and outside the city.

3. Regional differentiation in women's mobility

In this section we will focus on the mobility situation of women in the cities and suburbs in the western part of the country at the one hand, and the more rural parts at the other hand.

Women's mobility in the cities and the suburbs
The cities in the western part of the Netherlands form a multifunctional environment with a high density and a wide range of transport alternatives. Within the cities is a concentration of persons with task combination: one-person households, dual earner households and one parent households. These households have complex day paths and demand the accessibility of the various functions they visit during a day. At the same time within the cities is a concentration of poor households: unemployed, immigrants, mothers on social security - various households which share one characteristic: a low income. These households are restricted in their mobility: they have no money for a car and even public transport is too expensive. Social exclusion is the main problem of these households.

A few decades ago the suburbs formed the residential areas for traditional one-earner families: a full-time working man who left home early in the morning and returned late in the afternoon, a full-time housewife who cared for the children and the domestic work and one or more children. Nowadays the suburbs are the residential areas of dual-earner couples and more and more dual-earner families. Dual-earner households in the suburbs are dual-car households. The car ownership and car use in these areas are extreme high. They use their car for most daily activities: paid work, shopping, the transport of children to sports, lessons, clubs and visits to family and friends. The employment in the suburbs has increased, but most men and many women work outside their local environment. They travel over long distances and are the main causes of the daily traffic jams.

Women's mobility in rural areas

The last decades the social participation of women - in paid work, education, political activities and participation in organisations - has increased tremendously. During the same period, however, the opportunities for social participation in rural areas have diminished. Within the villages there are less and less jobs available: in most villages only a few percent of the population works in agriculture, shops, schools, village halls and small workshops and factories are closed. Women combine more and more paid work with domestic work and child care, but their local environment is more and more a monofunctional residential environment. For paid work and child care centres women are oriented on towns further away. Most women use the car - their own car or the family car ; in the last case they make complex arrangements with their husbands. Public transport is inadequate: infrequent or not available at all, not adapted at the working hours of part-time working women, while women who work during the evening or night are confronted with public safety problems.

Three categories of women are vulnerable, in particular in the small villages on a greater distance of the regional centres. In the first place 12-18 years old girls. Younger girls are oriented on the local environment of their own village. Older girls visit schools, friends and places of entertainment outside their own village and want to be independent from their parents in their mobility (Droogleever Fortuijn, e.a., 1994).

The second vulnerable category of women are low income women with young children. They are oriented on low paid part-time jobs. They have no car available. The participation on the labour market of these women is very low (Thissen, 1995). Older women in small villages form the third category. At this moment the local community in these villages is flourishing and compensates the lack of facilities. For older women who lived their whole life in the same village in particular the local network is very important as social network and help network. Younger generations, however, participate less and less in the local community. Older women are therefore more and more isolated (Droogleever Fortuijn, e.a., 1994).

4. Reconciling policies: emancipation, environment and mobility

Last two years Lia Karsten and I have been invited several times by Dutch provincial emancipation and environmental organisations for discussion meetings with members of feminist groups, of environmentalist activists and with persons from transport organisations, municipalities and provinces. The mobility problem forms one of the most important political issues at this moment - in the formation of the new cabinet it is one of the main conflicts between the liberals and the social democrats - and the emancipation - environment - mobility debate forms part of that issue.

During these meetings emancipation and environmentalism have been presented as contrasting policies. Our intention was to look for reconciling policies. We consider mobility as an important achievement of women and as part of the process of their emancipation. Girls, grown-up women and elderly women will be more and more active outside home and a policy to reduce their social participation will be unsuccessful. We must therefore look for policies which stimulate participation and reduce mobility at the same time. The Dutch feminist movement has developed a wide variety of policies (Dagelijkse mobiliteit; Minder auto's, meer mobiliteit).

To summarise, mobility can be reduced without constraining participation by prevention of mobility, by shorter distances and by trip bundling.
Mobility can be *prevented* if several activities will be located in the same location: at home or in a multifunctional building or group of buildings. Teleworking with phone, fax and computer at home prevents daily commuting. Full-time home working is related with problems of social isolation and bad work conditions. In the Netherlands, however, there are several experiments with teleworking during one or more days a week. Mobility can be prevented too by locating different functions within the same locality (SHEET 5). Recent examples of these multifunctional localities are shops and other services (copying, dry cleaning, shoe repair) at railway stations, day care centres in offices or factories, and leisure activities for children in schools.
Shorter distances generate less mobility in kilometres and more use of environmentally friendly means of transport like cycling and walking. "Compact city" is a Dutch planning concept which has been developed as a reaction on the suburbanisation of the 1960 en 1970s. Compact city refers to the building of cities in high density and with a mixture of different functions in stead of the separation of functions (Stete, 1995) (SHEET 6). The idea of the compact city reduces mobility and the waste of space in a country where space is scarce, and it makes the combination of different tasks in daily life easier. Originally the concept of the compact city has been developed without reference to emancipation and the position of women, but the Dutch feminist movement has incorporated this concept later.
In several Dutch cities there are experiments with "feminist" planning in urban extensions and with "emancipation checks, analogous to environmental checks.
Bundling of trips reduces mobility without frustrating participation. Public transport in the Netherlands, in particular in the periphery and the rural areas has been reduced. At the same time experiments with alternatives for the traditional bus and rail transport flourish: car pooling, car sharing, railway cabs, kidbus, discobus, call-up bus services, and the integration if different forms of subsidised special transport (for disabled persons, for the elderly, for school transport) (SHEET 7). Important in particular for women is the improvement of public safety in public transport or other forms of collective transport. In several places are experiments to stimulate the use of the bicycle by improving traffic safety and comfort: separate cycling paths, the creation of streets with priority for bicycles and the improvement of bike sheds.

5. Conclusion

In our opinion emancipation, environmentalism and mobility are no contrasting policies, but reconciling policies. Mobility forms an important achievement of the emancipation process of women, elderly, children, and immigrants. Frustrating their mobility is contrary to stimulating

their participation in social life. We have introduced in our presentation the Dutch public debate on "women and environment". During he afternoon workshops we want to discuss this issue on two levels. The first one is the level of practice: which daily mobility problems of women do you recognise, what kind of solutions can be developed? The second one is the level of discourse and debate: why are the public debates on the "women and environment" - issue so different in different local, regional and national contexts?

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Table 3

GENDER AND PERCEPTION OF VOLCANIC HAZARDS IN COSTA RICA

N=170 (91 men and 79 women)

1. Perception of local hazards	% Men	% Women
Volcanic hazards	5.5	1.3
Other natural hazards	16.5	7.6
Social hazards	12.0	10.1
None	66.0	81.0
Significance 0.0497		
2.Do you expect there to be volcanic ashfalls in the future?		
No	12.1	15.2
Yes, in a few years	29.7	13.9
Yes, don't know when	28.5	21.5
Probably not	29.7	49.4
Significance 0.0182		
3.When do you expect the next eruption?		
Soon (repetitive)	14.3	25.3
Unknown (at random)	59.3	53.2
At regular intervals (set pattern)	19.8	7.6
Never	6.6	13.9
Significance 0.0217		
4.Are earthquakes precursors of eruptions?		
No	51.6	31.6
Yes	34.1	40.5
Maybe	14.3	27.8
Significance 0.0162		
5.During an earthquake I....		
Remain passive	23.1	26.6
Keep alert	23.1	7.6
Prepare	24.2	22.8
Am afraid	29.6	43.0
Significance 0.0331		
6. Living through a volcanic eruption makes me feel...		
Positive	33.0	15.2
Negative	67.0	84.8
Significance 0.0123		
7. During an eruption I seek help from...		
Only God	6.6	17.7
Family and friends	60.4	70.9
Special groups (Red Cross, etc)	33.0	11.4
Significance 0.0010		

Source:G.H.Lemieux. 1975.Human Responses and Adjustments to the 1963-65 Ashfalls of Irazú Volcano, Costa Rica: A Geographical Study of Environmental Perception. Unpublished Ph.D. dissertation, University of Calgary.

Table 4

GENDER DIFFERENCES IN PERCEPTION OF ENVIRONMENTAL PROBLEMS

SMALL-SCALE FARMERS IN ST LUCIA, MONTSERRAT AND NEVIS, WEST INDIES

Problem	St Lucia -1971		Montserrat-1973		Nevis - 1979	
	Women N=10	Men N=47	Women N=22	Men N=44	Women N=30	Men N=70
	(Percentage of farmers mentioning problems)					
Transport and roads	60	36	18	23	17	7
Pests and diseases	60	68	73	55	73	63
Livestock damage to crops	NA	NA	14	5	3	16
Water shortage	40	38	36	41	23	17
Land availability	0	12	18	23	10	10
Land tenure	10	6	0	5	0	1
Soil erosion	50	38	14	16	13	13
Stony soil	NA	NA	5	11	0	1
No problems	0	2	0	2	NA	NA

Source: Fieldwork

EMMA MAWDSLEY

"After Chipko: from environment to region in Uttaranchal"

AFTER CHIPKO: FROM ENVIRONMENT TO REGION IN UTTARANCHAL [1]

Although the Chipko movement is practically non-existent in its region of origin it remains one of the most frequently deployed examples of an environmental and/or a women's movement in the South. A small but growing number of commentators are now critiquing much neopopulist theorising on Chipko, and this paper provides an overview of these critiques. It then takes the debate further with reference to a more recent regional movement in the hills. By doing so, the author argues that it is possible to develop a more plausible account of gender, environment and the state in the Uttaranchal region, and illustrate common weaknesses in neopopulist understandings of Chipko and other social movements in the South.

INTRODUCTION

The Chipko movement of the Uttaranchal region[2] in India is one of the most frequently cited movements in the contemporary literature on social and/or environmental mobilisations in the South. Rangan and Garb [1996] suggest that it has taken on iconic status, and it is certainly seen by many as an inspiring example of local action against the alienating and destructive incursions of the modern developmental state [*Redclift*, 1987; *Weber*, 1987; *Ekins*, 1992; *Bandyopadhyay*, 1992; *Escobar*, 1995]. However, over the last five years a small but growing number of authors have started to critique the highly popular and widely 'traded' neopopulist interpretations of the Chipko movement(s). These criticisms centre on theoretical and empirical objections to certain ecofeminist and ecocentric portrayals of the mobilisations [*Jackson*, 1993a], and the insufficient attention paid to the political and/or economic context of the Chipko protests [*Mitra*, 1993; *Aryal*, 1994; *Rangan*, 1996]. Moreover, very little is left of the Chipko movement(s) in its region of origin save for its memory - a decline that is rarely analysed in these neopopulist accounts, and is sometimes not even evident when 'the Chipko movement' is glibly deployed as a example of an environmental and/or women's movement in the South.

This paper will provide an overview of these critiques, but will also take the arguments further through an analysis of a more recent social movement in the hill region, namely the (very recently acceded to) demand for a separate Uttaranchal State within the federal Union of India. It is my contention that, by examining the continuities and differences between the Chipko protests of the 1970s/80s (and their heavily manufactured image) and the regional mobilisation of the 1990s, it is possible to illustrate certain weaknesses in much neopopulist theorising about Chipko, and thus develop a more plausible and sensitive account of gender, environment and the state in the Uttaranchal Himalaya.

The paper will start with a brief narrative overview of the Chipko protests and the regional movement before turning to one of the most prolific and widely read neopopulist writer on the Chipko movement, Vandana Shiva. Shiva's ecofeminist and 'anti-development' account of the movement will be reappraised in the light of the

Uttaranchal regional movement with particular reference to the changing relationship between state and society, gender interests and environmental issues. The paper will also draw on Ramachandra Guha's analysis of the Chipko movement(s), and explore whether his vision of 'peasant versus the state' can still be said to have contemporary salience in the hills. The paper reflects a broader unease with certain aspects of neopopulist theorising about social movements in the South, issues that will be taken up in more detail in the conclusions.

THE CHIPKO MOVEMENT(S)

The forests of the Uttaranchal Himalaya have long been central to the livelihood strategies of the mountain people who live there.[3] In the past most households depended on a diverse bundle of economic activities, but traditionally the two most important elements were migration and agroforestry. This pattern is still found today, although the balance of importance appears to be shifting towards migration and other sources of paid employment [*Whittaker*, 1984; *Bora*, 1987, 1996]. The steep slopes of the middle Himalaya do not offer rich agricultural pickings, and the forests provide essential inputs of fertiliser (in the form of leaf mulch), grazing, fodder, fuel and a host of other non-timber forest products, such as medicinal herbs, fibres and foodstuffs [*Nand and Kumar*, 1989]. Given this situation, the alienating and often deeply insensitive encroachments of colonial forestry in the region were profoundly felt, and provoked significant resistance [*Pant*, 1922; *Guha*, 1989].

After Independence little appeared to change, as the State-managed Forest Department continued largely to neglect the interests and needs of the local people, despite the latter's heavy dependence on the forests. Much has been written about the ongoing erosion of villagers' rights in relation to the forests [*Guha*, 1989], the Forest Department's concentration on Chir Pine (*Pinus roxburghii*) at the expense of far more productive trees for the local agroforestry [*Singh*, 1993], and other post-colonial continuities in both forest policy and praxis [*Rawat*, 1993]. But as well as these 'subsistence issues' there are another set of complaints which relate to the Uttaranchalis' place in the *commercial* exploitation of the forests, and which tend to be less well analysed. For example, the Forest Department, and the private contractors who won the forest auctions from the Department, preferred to employ more 'biddable' Nepalis and other migrants than local men [*Tucker*, 1993]. The Forest Department also charged small local units higher prices for raw materials than it charged large industries down on the plains [*Das and Negi*, 1983], and little effort was made to set up processing stages in the hills for the timber or timber products, which would otherwise have created employment and added value to the region's 'exports' [*Rangan*, 1996]. Closely related, indeed central, to these livelihood issues, were the growing concerns over the environmental impacts of the Forest Department's increasing penetration into the hills (which was greatly expanded and accelerated after the huge strategic road building programme that followed the Indo-Chinese War of 1962), and its working practices, many of which were argued to be ecologically degrading [*Mishra and Tripathi*, 1978; *Guha*, 1989]. These perceptions were strongly reinforced by a series of disastrous floods in the region in the early 1970s [*Pathak*, 1994].

This then was the situation in which the Dasholi Gram Swarajya Sangh (DGSS), a small industrial corporation with strong Gandhian overtones, based in Gopeshwar, was operating. Its members, under the leadership of Chandi Prasad Bhatt, ran a turpentine unit, manufactured agricultural implements, and organised demonstrations against liquor sales, Untouchability and the forest contractor system [*Guha*, 1989]. In 1973 the DGSS clashed with the Forest Department over the provision of hundreds of trees to a large sports company from the plains, Symonds, after they had just been refused a few trees from the same forest. The DGSS decided to stop the Symonds's contractors by intervening between the axemen and the trees if they had to, thus giving rise to the movement's famous name - Chipko is Hindi for 'adhere' or 'stick to', although it is usually translated in a more 'feel-good' way as 'hug'. After successfully preventing fellings in Mandal forest, Chandi Prasad Bhatt and the others made the critical decision to alert the villagers around Phata-Rampur, some 80 km away, to the fact that the forests around them were now under threat from the same company, and offered to help them defend them. Thus, by moving beyond their immediate local needs to embrace a wider spatial and temporal perspective, Chipko was born as a meaningful social movement with regional implications.

Over the next decade a whole series of Chipko protests took place, although it should be noted that the task of establishing even a simple history of the movement(s) is complicated by the differing and sometimes contradictory accounts written by major figures involved in Chipko, as well as the host of 'outside' commentators. Some postmodernists might argue that there is room for all of these accounts of the Chipko movement(s), and I would certainly concur with the idea that the recovery of an 'objective history' of Chipko is neither possible nor desirable. That said, I do believe we can privilege certain stories over others, and that such a commitment can and should be made on the basis of an ethical responsibility to our research subjects.[4] I will not go into (another) detailed account of the Chipko protests here, although more will emerge below. What I will argue is that we need to develop a more complex view of the Chipko protests than has popularly been recognised in which, at different times and in different places, both commercial and 'subsistence' issues were at stake. The Chipko protests differed according to the particular times, places and circumstances of communities and individuals in the hills. Thus, the struggle described above, in Mandal village, clearly centred on access to raw materials for small scale industrial use. Mandal is on the road, and is only a few kilometres from Gopeshwar, with the larger town of Chamoli also relatively near by, facilitating the transport and sale of goods. However, in Reni village, the site of a widely celebrated incident in 1974 in which women were especially prominent in protecting their forests from the contractors, such industrial opportunities were much more limited. Reni is a remote village close to the Indo-Tibet border and some distance off a poor quality road. Here the villagers, and particularly the women, given a gendered division of labour in which women are responsible for the vast majority of work relating the forests, were protecting a major subsistence resource. Few analysts of the Chipko movement seem willing to recognise this grassroots diversity in the movement, or the fact that as well as being spatially diverse, such interests can shift over time, as we will see below in the discussion of events at Doongri-Paintoli.

It is clear from Chipko's origins in the DGSS, and the widespread support the

movement(s) received in the early/mid-1970s, that these protests spoke to a serious concern of many hill women and men; namely that the state's management of the forests offered few dividends for the local people in this already economically marginalised area, and further, that it was degrading the ecological base upon which local people depended. These dual issues add up to a single concern with winning a livelihood through a bundle of activities, including village-based agroforestry, paid work within the hills and paid work outside of the hills in the plains. For different individuals, families and villages, the relative importance and possible combinations of these strategies varied and continue to vary according to a range of circumstances over which they have more or less control. However, in a number of the more populist accounts of 'Chipko', the economic demands of the movement(s) are downplayed (or even refuted) in favour of the movement's ecological consciousness. These accounts were highly influential, and over the late 1970s and 1980s national and international perceptions of Chipko came to be increasingly dominated by this strictly environmental perspective (see below). Shamser Singh Bist, a local activist in the hills, felt that:

> the final act of betrayal came when a potentially radical movement for self-determination and self-management of our resources turned into a purely conservationist one [quoted in Mitra, 1993:36].

Saxena [1992] suggests that Chipko died with the imposition of the moratorium in 1981, a 15 year ban on felling above 1000 metres in the region that was introduced directly as a result of the Chipko agitations.[5] But the legislation was deeply resented by many hill people because, they argued, Forest Department felling continued while local people were further excluded from the forest. Opposition to the legislation in Uttaranchal even resulted in a '*Ped Katao Andolan*' in 1988-89 - a movement to *cut trees down* - because it was argued that it was stalling some 4,500 development projects all over Garhwal and Kumaon. Significantly, many of the leaders associated with this movement were involved with a nascent regional political party seeking a separate hill state, and it is this much less well known movement to which we turn next.

THE UTTARANCHAL MOVEMENT

Throughout India's independent history there have been demands that the Uttaranchal region should be recognised as a separate State within the federal Union of India. These demands were primarily based on the region's geographical difference from the rest of Uttar Pradesh (between the hills and the plains); its historical separation during the pre-colonial and much of the colonial period; and a post-Independence discourse of internal colonialism, primarily in relation to the forests. For most of this time these demands were largely confined to elite-urban groups, and received little support from the majority of the hill people [*Bhatkoti*, 1987], although by the early 1980s there is evidence that the idea was starting to receive wider support, even if it still could not be said that the issue commanded committed popular support [*Mawdsley*, 1997]. Then, in July 1994, the separate hill State issue suddenly and unexpectedly exploded into a mass movement. Huge confrontations with the State apparatus ensued, sometimes peaceful, sometimes violent, and there followed a period of intense upheaval. The

immediate cause of the agitation was the passing of a piece of Uttar Pradesh State legislation concerned with reservation (or positive discrimination) in government employment and education for what are called the Other Backward Classes (OBCs). These are the vast mass of 'middling' agricultural and artisanal castes who are estimated to make up some 52% of India's population. The legislation followed the Centre's implementation the Mandal Commission's proposals in 1989,[6] something which has had enormous ramifications for India's political landscape. In addition to the long-standing 15% reservation for the Scheduled Castes (the former Untouchables) and the 7.5% reservation for the Scheduled Tribes was added 27% reservation for the OBCs. This brought the total reservation quota up to just under 50%, the (much abused) ceiling the Supreme Court has set, leaving 50% (theoretically) for open competition and the high castes.[7]

But while the all-India percentage of Brahmins and Rajputs is estimated at around 11%, in Uttaranchal, for various historical reasons, these high castes make up close to 85% of the population.[8] Thus because of the unusual caste composition of the Uttaranchal hills, the OBC reservation policy would have excluded a considerable percentage of the hill population from two important routes to economic and social mobility (education and Government posts) in an already highly constrained economic environment. The State Government of Uttar Pradesh took no account of this, and the legislation was widely seen as the 'final straw' in what was perceived to be decades of neglect and exploitation. In the opening weeks of the mass agitation two critical themes emerged which saw it shift from an anti-reservation struggle to the demand for a separate State [*Mawdsley*, 1996]. These centred on the closely related issues of development and politics. While there are still claims that the region is being subjected to internal colonialism by the State of Uttar Pradesh (voiced in newspapers, at meetings and in discussions), it is generally conceded that the region has started to receive more 'development' funds from both the State and Central Governments over the last couple of decades. The main grievance now being articulated is that the economic and developmental marginalisation of the hill area is due to the fact that *plains*-based planners in the distant State capital of Lucknow are unable (as well as unwilling) to understand the development needs of the *hill* population, environment and economy. In other words, the region's 'backwardness' is being increasingly interpreted not simply as the result of straight-forward exploitation and/or neglect, but as a more profound inability of the plains-based planners to 'properly' develop the hills.

The political dimension of this argument rests on the fact that the region only accounts for 4% of the State's population, and is thus of negligible importance to State politics. For many, a separate hill State is the solution to this lack of a political voice - vital in a political economy which continues to be heavily dominated by a 'developmental state'. It is widely felt that a smaller, separate State would be more accountable and more responsive to the needs and demands of local people, and that it would have greater representation at the (new) State and national level. Above all, hill development would be planned and administered by people from the hills.[9]

Despite their many differences, the Chipko protests and the regional movement clearly had/have their origins in similar or overlapping issues. These include a lack of

control over local resources (both in terms of 'traditional' rights of access to forest resources and in terms of modern commercial opportunities); competition over national versus local need; environmental concerns; and local critiques of development planning and administration. However, these contiguities are *not* apparent from a reading of many neopopulist accounts of the Chipko protest(s), which offer a very different set of understandings about the environment, development and often gender relations in the hills. The next section will explore this discrepancy through an analysis of Vandana Shiva's account the Chipko protests.

FROM ENVIRONMENT TO REGION

Women versus men?

Vandana Shiva has written about the Chipko movement in a number of books and articles [including *Shiva*, 1988 and 1992; *Mies and Shiva*, 1993; and *Shiva and Bandyopadhyay*, 1986 and 1987]. Her analysis can be firmly located within the neopopulist paradigm, but it derives its theoretical force primarily from ecofeminism. A variety of perspectives can be identified within ecofeminism [*WGSG*, 1997], but most proponents argue that it provides a radical development alternative which centres on diversity, nurturing, holism, and social and environmental justice [*Mies and Shiva*, 1993]. Most ecofeminists argue that there is an essential congruity between women and nature because of women's biological capacity to bear life, and because of their shared objectification and domination by patriarchal systems of exploitation and control. Rather than resist the nature/culture, woman/man dichotomy, as 'traditional' feminists have sought to do, ecofeminists celebrate the supposed congruence. Shiva argues that:

> Women and nature are intimately related, and their domination and liberation are similarly linked. The women's and ecology movements are therefore one, and are primarily counter-trends to a patriarchal maldevelopment [*Shiva*, 1988:47].

Shiva argues that in Uttaranchal, as elsewhere in India, indigenous forest management has traditionally been the realm of women, both in the division of labour and in the domain of knowledge. Women, she says, embody *prakriti*, or the feminine principle, which seeks to nurture and maintain the harmony and diversity of the natural forests as a life source, and which stands in sharp opposition to the masculinist sciences that dominate modern development discourses [*Shiva*, 1988].[10] Commercial forestry, introduced by colonialists and perpetuated by the Indian state, is analysed as a prominent example of such reductionism and violence. Local men, she argues, have also been colonised by this system - cognitively, economically and politically. It is peasant *women* who have deeply and concretely experienced forest destruction and who have, therefore, risen up to challenge the reductionist values of the factory and the market by reviving the 'ancient Indian conception of forest culture'. Here, self-sustaining forest communities are viewed as the highest expression of societal and civilisational evolution, a vision which conflicts vividly with the picture of a tainted, violent and profligate 'modern world' [*Nanda*, 1991]. Shiva argues that:

> the women of Garhwal [the western half of Uttaranchal] started to protect their forests from commercial exploitation even at the cost of their lives, by starting the famous Chipko

movement, embracing the living trees as their protectors [*Shiva*, 1988:67].

She suggests that women not only fought outside contractors and the Forest Department in their struggle to reclaim the feminine principle in forest use and management, but also resisted the commercial instincts of their own menfolk. Chipko is thus represented as an explicitly ecological *and* feminist movement through which the women of the hills sought to re-establish a 'traditional' harmonious relationship with nature. The link with the DGSS and other co-operatives, which Shiva derides as meeting largely male concerns, is described as a temporary merger early on in the movement. Soon afterwards, she suggests:

> a new separation took place between local male interests for commercial activity based on forest products, and local women's interests for sustenance activity based on forest protection [*Shiva*, 1988:71].

But there are a number of empirical objections to this account. First, although women played an absolutely central part in the Chipko protests, Sunderlal Bahuguna, Chandi Prasad Bhatt, Dhum Singh Negi and the many other men who were involved were not always or only their 'students and followers', as Shiva maintains [1988:67]. Men were genuinely committed to the various strands of the Chipko movement, and contributed significantly to their organisational and ideological force. Although the desire to redress the balance and bring to the public eye many of the otherwise un-named women who were involved in the movement is thoroughly laudable, the way Shiva does this is to mirror the technique of those whom she criticises; and so to exclude men. Shiva also undermines the roles others played in the Chipko movement, including leftists and students, who did not fit into the picture of ecofeminist protest. For example, like many others minded to celebrate the romantic image of the Chipko movement as women hugging trees high in the Himalayan forests, she rarely mentions the town-based demonstrations, such as the critical protests disrupting the forest auctions.

Shiva's use of Hinduism in relation to gender and the environment might also be questioned. Shiva employs the concepts of *shakti* (feminine primordial energy) and *prakriti* (its manifestation in nature) as one of the principal means by which she explains specifically 'Indian' (which she surprisingly often elides with Hindu) definitions of nature and culture, and thus environmental understanding. She suggests that in 'traditional India' power and fertility at the cosmological and everyday level were attributed to women, who were venerated accordingly [*Shiva*, 1988], but that this was then displaced by the patriarchy of colonialism, development and science. But in Hindu tradition (especially the high Brahminical texts that Shiva draws upon) women's *shakti* is a major 'reason' for their *subordination* by men, not their veneration, and certainly not their liberation. Shakti does have a positive side, especially in its 'latent' form, but it is not context-free, and it is erroneous to see *shakti* or *prakriti* as unambiguously empowering, and then to build upon it an ideology of nature-culture/woman-man relations in the Himalayas. It is men's *fear* of *shakti* (which often translates into women's sexual energy),[11] that underlies Manu's famous dictum that:

> In childhood a woman should be under her father's control, in youth under her husband's, and when her husband is dead, under her sons' [The Laws of Manu: 5.147, *Doniger and Smith*,

1991].

Clearly a critique of Shiva's interpretation of the Chipko movement also crosscuts with the wider debates over ecofeminism. To differing extents, the various ecofeminist perspectives have been criticised on several fronts, notably for their essentialisation of women as a universal and biologically-determined category, and their tendency to romanticise the past [*Nanda*, 1991; *Eckersley*, 1992; *Jackson*, 1993b; *Levin*, 1994] - two criticisms which are applicable to Shiva's analysis of the Chipko movement. There is very little historical evidence for the idealised picture of 'traditional' environmental *or* gender relations that Shiva draws in her call to return to a more harmonious past [*Greenberg et al*, 1997]. Indeed, as Kelkar and Nathan [1991] point out, mainstream Indian civilisation (which Shiva celebrates) was established precisely by clearing forests for settled cultivation, while at the same time women became increasingly subordinated to men through the development of caste society.

Shiva makes the valid observation that it is women who often bear disproportionately the personal, economic and social costs of environmental deterioration, and this is certainly the case in Uttaranchal. But as Agarwal [1992] notes, this by no means *necessarily* translates into an essentialist reading of women's environmental interests, knowledge or agency, in which the primal mutuality of women and nature is an automatically privileged relationship. If 'sound ecological practice' clashes with a hill woman's needs and responsibilities, such as in the case of a fuelwood shortage, then she is likely to prioritise the latter, particularly given the heavy burden placed upon many women by the out-migration of men. Even this argument pre-supposes the idea that, if they were in a position to, women always and everywhere have both the knowledge and the desire to preserve the environment. While this has been demonstrated to be true of particular women and communities all over the world, women's ecological knowledge and 'affinity' is not automatic but is historically and culturally-dependent. In the Jharkhand, for example, Jewitt [1996] found that men were often the principal bearers of environmental knowledge, despite the fact that this is an *adivasi* (tribal) society where, if anything, ecofeminists would argue that women have an even more pristine relationship with the environment.

Women's decisions are constrained and enabled by a series of over-lapping and sometimes competing gendered and social relations, and by the limitations and opportunities provided by the local environment as it is shaped by local factors *and* regional/national structures and events. They must make decisions and take actions on the basis of a host of conditions which differ for each woman in space and time. These can include their age, health, marital status, education, their fears and aspirations, whether they are in their natal or marital village, whether they and/or their household has access to other income sources, and endlessly on. Reducing women's decisions to a set of biologically-determined characteristics devalues their agency, fails to recognise that they may also 'align' with other identities (caste and class, to name just two), and undermines the fact that they are situated in certain locales which impose and offer a specific set of constraints and opportunities, as with the differences between Mandal and Reni villages. Nowhere is this more clearly demonstrated than in Doongri-Paintoli, the site of a very famous Chipko incident in 1980, in which women defied their own menfolk as well as the Forest Department contractors in order to protect

their forests. Here there was indeed a conflict of interests between the men and women of the village, as the women wanted to preserve the nearby forest (the loss of which would have spelt considerable hardship for them) while the men were more willing to accept the Forest Department's compensation (over which they would have had more control). But the women fought to prevent the complete clearance of their forest as a *functional livelihood strategy*, not because of a desire to retain or return to some pristine 'traditional' village life. This is made abundantly clear in the comments of Gayatri Devi, who had taken part in the original struggle and who is now deeply disappointed with the lack of development in the village. She said:

> We could have sacrificed more [forest] if we were assured a road to the village, a school, a proper water supply and a primary health centre [*Mitra*, 1993:50].

Mitra asked "What did you get out of Chipko", and I will quote Gayatri Devi's full reply:

> I don't know. We acted to save our trees. We never clung to any tree but when I went to Delhi, I was told that ours was a very big *andolan* [movement]. Maybe it was, but we never got anything out of it. The road to our village is yet to be constructed and water is still a problem. Our children cannot study beyond high school unless they can afford to go and stay in a town. The girls simply cannot do that. Now they tell me that because of Chipko the road cannot be built because everything has become *paryavaran* [environment] oriented nowadays. Chipko has given us nothing. We cannot even get wood to build a house because the forest guards keep us out. Our rights have been snatched away [*Mitra*, 1993:51].

This issue of gender interests in the hills can be explored further with reference to the role played by women in the Uttaranchal movement. Women as a 'political community' are firmly positioned within its ideological and organisational mainstream,[12] and there are a number of women politicians and leaders who are strongly involved in the movement. Thus we might ask whether women are pursuing specifically gender-related demands through the agitation for a separate hill State *as well as* or *in opposition to* the main goals of the movement? The brief answer is that there is indeed one dimension of the mobilisation that, although by no means exclusively a women's' issue, has been particularly important in mobilising the support of some women, and that is the anti-liquor protests that have accompanied the agitation. Many women in the hills suffer from the economic and personal effects of their male relatives drinking, and there is a long history of protest against selling liquor in Uttaranchal [*Pathak*, 1985]. Within some parts of the movement this theme is an important one, and primarily a women's issue. For example, in one anti-liquor rally in Pithoragarh, a prominent *sarvodaya* worker drew on an explicitly Gandhian vision of a liquor-less Uttaranchal. 'Otherwise', she asked, 'what is the point of the separate State for women?'[13]

But the vast majority of women with whom I spoke saw the *principal* benefit of a separate State as being the creation of more jobs (or the freeing up of present ones) for their fathers, brothers, husbands and sons (and occasionally, some said, for themselves). A secure income, preferably from a government job, was perceived by both men and women to be increasingly essential to survive in the hills. A woman from Mandal village - the site of that first famous confrontation - told me that:

Nowadays it's like this: if you have jobs you can eat. If you don't have a job you can get nothing. The wild pigs are destroying the crops in the fields; women are working hard in the fields but getting nothing.[14]

Hyperbole aside, there is a real message here, and in many of the other statements and discussions I heard. There is evidence of growing aspirations amongst some women which centre not on the village or traditional agricultural obligations (and therefore also on forests), but on towns and employment (for themselves and, more frequently, their husbands and sons) within and outside of the region. The following statement is taken from an interview in September 1994 with Gangotri Devi, an elderly woman from Mandal village:

She [her younger companion] is BA passed, and doesn't know how to work in the fields because she is always with her books and pens. But we are always in the fields. After the creation of a separate State some boys and girls will get jobs ... All the people are coming onto the streets [protesting] to get jobs - like this girl and that boy [*points*] - then they will be able to feed us as well as their children. There is nothing good in this Garhwal - little agricultural production and no job opportunities. All the educated boys are hanging out on the streets.

This is not to deny that many women *are* deeply concerned by agro-environmental issues in the hills, but they allied this with a concern about other ways of winning a livelihood in Uttaranchal, including the commercial exploitation of the forests - something that Shiva tends not to acknowledge. Gender issues *are* central to any analysis of forests and resistance in Uttaranchal, but many women recognise that the arena of their struggles and potential opportunities extends far beyond the village and nearby forest to the region, State and even nation. In the final section, this question of scale, and of the relationship between 'peasants and the state', is picked up in a discussion of Ramachandra Guha's [1989] analysis of Chipko.

Peasant versus the state?

In 'The Unquiet Woods', Ramachandra Guha presents a sophisticated sociological analysis of continuity and change in popular movements against the pre- and post-colonial states in Uttaranchal. As well as placing Chipko in its cultural and historical context, Guha is one of the few authors who analyses the varying space-time geographies of the Chipko protests. He explores the different environmental philosophies present in the movement, the various types of protest deployed, gender relations within the hills, and Chipko's goals and outcomes. Reminiscent of E.P. Thompson, Guha approaches the relationship between peasants and the state in Uttaranchal through the lens of the moral economy, and suggests that villagers saw Chipko as a fight for basic subsistence denied them by the institutions and policies of the state. Although Guha's faith in peasant moral economies as a basis for contemporary forest regeneration and management is open to qualification [see *Corbridge and Jewitt*, 1997], he does perhaps provide the most definitive historical study of social movements in Uttaranchal to date. But, I would suggest that the model of resistance that Guha presents, that of peasant *versus* the state, does not entirely hold outside of the struggle over forests and, by the 1990s, is no longer sufficient to

conceptualise even forest tensions between hill people and the state.[15] This too has a bearing on the declining mobilising power of Chipko and the increasing interest in the idea of a separate hill State.

The mountains of Uttaranchal are a daunting environment in which to enforce the writ of law, and it was only following the expansion of the road system after 1962 that the penetration of the state and its adjuncts (administrative, developmental and disciplinary) could significantly accelerate in the hills. Accompanying this 'space-time compression' were immense and complex socio-cultural and economic changes. By the 1970s/1980s, the state had, in some form or other, penetrated many aspects of daily life, albeit highly unevenly in depth and spread. One effect has been that it has become more difficult and more risky for villagers to oppose the state outright, for example, by ignoring forest laws. Guha argues that peasant movements like Chipko are:

> defensive, seeking to escape the tentacles of the commercial economy, and the centralising state [*Guha*, 1989:196].

But while this may have been true to an extent in the 1970s, I believe that it is too one-dimensional to encompass the full variety and depth of the relationship(s) between 'peasants' and the developmental state *or* the commercial economy in the 1990s. The Uttaranchal regional movement demonstrates that the capture and manipulation of state power, state patronage and state resources are now very much part of the interplay between domination and resistance in Uttaranchal. While the state may be presented as an agent of oppression in terms of the forests, it is also a source of opportunities. These are not limited to jobs and education, although both are increasingly important in a marginal area with a growing population in an increasingly competitive economy. Rather, as hill people have become more informed and more politicised, they have sought more power and a bigger voice in the processes of development planning and development administration, and more access to development funds - the main controller of which is of course, the state. The object of the Uttaranchal regional struggle was the *capture*, not the *rejection*, of the state and thus state power.

The growing politicisation of the state and civil society in India since the mid-1960s has been recently intensified by, amongst other things, the expansion of the reservation system in 1989, and post-1991, the push towards the liberalisation of the economy. Kohli [1990] argues that a highly interventionist state, in attempting to deal with a poor economy, has in the process become the object of intense political competition. These changes are reflected in a contemporary relationship between state and society in Uttaranchal that is more complex than 'peasant versus the state'. The regional movement demonstrates the growing volatility of the electorate, and an increasing willingness and capacity to organise around particular identities in order to further their demands at the State and national level. Confrontation with the state hasn't disappeared, as the events of 1994/5 demonstrate, nor covert resistance, but it is now increasingly directed towards appropriating political and administrative power rather than directly opposing it. This suggests that, as many Uttaranchalis know, but which many 'post-developers' are less willing to admit, that the politics of the local continue

to be reflexively engaged with, and must be understood in relation to, regional, national and other supra-local political, economic and cultural influences.

CONCLUSIONS

'Chipko' has taken on the functions of a metaphor for subaltern environmental resistance in that it has acquired meanings and associations that extend far beyond, or even have little resemblance to, the specific times, places and circumstances of its mobilisation. There is much to be said for the argument that more important than 'accuracy' is the fact that 'Chipko' has served as a inspiration for activists both in India and elsewhere against social and environmental injustice.[16] But as I have argued in this paper, the ecocentric/ecofeminist representations of Chipko that came to dominate popular images of the movement played a small but not insignificant part in the movement's failure to achieve the changes that were desired by many in the hills. Chipko developed primarily as an economic struggle, with male and female activists recognising that the survival of the forests had become an *a priori* condition for the possibilities of development that they sought to realise, within the geographical constraints of the mountains. Environmental concern was not lacking, but a sound environment was seen as a *functional requirement for a sound local economy*. Within this, different 'subsistence strategies' were articulated at different times, in different places, and by different people, as we saw in the protests in Mandal, Reni and Doongri-Paintoli. Ironically (given their relativist sympathies), many neopopulist writers have constructed rather universalist accounts of the movement (ecological, ecofeminist and/or anti-development) which undermine or ignore Chipko's complexity, and which depend on a cultural, economic and political localism which simply does not reflect the reality of men and women's lives in Uttaranchal. We do an injustice to the vast majority of the women and men of Uttaranchal if we understand them to want to return to some idealised traditional past that is unlikely ever to have existed. This was not the message that was being articulated in the 1970s through the Chipko protests, and is certainly not true of today's regional demands.

Some of these criticisms point to a more general set of concerns about a number of common features and tendencies within much neopopulist writing on social mobilisations in the South. One such is the tendency to view 'local' communities as rather static and inward-looking [*Collins*, 1997]. This image underpins notions of 'traditional villagers', whose livelihoods are intimately dependent on the local environment, and whose lifeworlds are constructed and given meaning only through their immediate surroundings. But this offers a very partial understanding of people's lives in the hills, and does not reflect their familiarity and engagement with a whole series of supra-local influences. The transition from the Chipko protests to the regional mobilisation underlines the fact that it is misguided to rely on the sparse and reductionist accounts of 'the local' as set forward in much neopopulist theory in understanding the diverse livelihood strategies, identity formations and outlooks of the vast majority of hill men and women.

NOTES

[1]Dr. Emma Mawdsley, Department of Geography, University of Durham, DH1 3LE. My thanks to the Economic and Social Research Council for funding this work, and to Professor Ian Simmons for reading the first draft.

[2]The Himalayan part of the State of Uttar Pradesh (see map). The region is also known as the Uttarakhand. There are small semantic differences, but the important distinction is that the Bharatiya Janata Party (recently elected to Central Government in India) use Uttaranchal. I prefer the less politically appropriated name of Uttarakhand, but now that the BJP have declared that a new State of Uttaranchal will be created (see note 9), it seems sensible to change.

[3]With the exception of some small Tibeto-Mongloid tribal groups, the vast majority of the Uttaranchal population belongs to the Hindu and Aryan majority of Northern India. The Pahari language group is closely related to Hindi, which is also widely spoken in this region (Berreman, 1963).

[4]This brief sketch is based on fifteen months of fieldwork in Uttaranchal, and interviews with some of the key proponents of the movement, including Chandi Prasad Bhatt, Sunderlal Bahuguna, Dhum Singh Negi, Shamsher Singh Bist, women from Mandal village, and many other villagers who had (and had not) taken part in Chipko protests of the 1970s and 1980s. I also had access to local Hindi newspaper archives and other Hindi documents, as well as a large number of English accounts.

[5]It also tied in with the reactionary and hotly contested ideas being mooted in the Draft Forest Act of 1981 (Fernandes and Kulkarni, 1983; Pathak, 1994).

[6]The States adopted the legislation at different times. In Uttar Pradesh this followed the election of a 'middle/low caste' Government in 1993.

[7]Reservation is an enormously complex issue, and this is a extremely simplified outline. For details, see Galanter (1978, 1984) and Beteille (1992).

[8]Various suggestions have been put forward for this highly unusual caste pattern, including Berreman (1963), MC Joshi (1990), MP Joshi (1990) and Quigley (1993).

[9]The Central Government has just, in April 1998, announced that the State of Uttaranchal will be created, along with Vananchal and Chhatisgarh.

[10]By referring to a 'feminine principle', as Jackson (1993b) notes, Shiva rightly tries to avoid the pitfall of biological determinism. This way she can include certain men, such as Sunderlal Bahuguna who, she says, through listening to the quiet voices of women, has retained an ability to articulate the feminine-ecological principles of Chipko. But having made the distinction between the categories of 'woman' and 'feminine principle', she goes on to collapse them repeatedly.

[11]For a psychoanalytical account of male fear of the sexualised woman in India, see Kakar (1978). Digressing slightly, for a fascinating critique of Kakar, see Kurtz (1992).

[12]This was more than evident when watching the marches, rallies and meetings in villages and towns, talking to men and women, reading newspaper reports, and simply observing and participating in the movement.

[13]Interview, 22.12.94.

[14]Interview, 21.9.94.

[15]An important issue which there simply isn't the space to go into in this paper, is the question of how these arguments play out in relation to the federal division, in other words between State (of Uttar Pradesh) and state (central) power.

[16]My thanks to Paul Routledge for pointing this out.

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JANET MOMSEN

"Gender differences in environmental concern and perception"

Gender Differences in Environmental Concern and Perception

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Women in many parts of the world are involved in grassroots environmentalist activism. Women have fought against local toxic waste issues (Miller, Holstein and Quass, 1996; Bru-Bistuer, 1996) and against destruction of forests (Wastl-Walter, 1996; Campbell et al, 1996). Many have seen these activities and the high profile social movements such as the Chipko movement in India and the Kenyan Greenbelt Movement (Momsen, 1991) as proof that women's natural closeness to Nature makes them more aware of environmental issues than men (Shiva, 1989). Yet actual studies of gender differences in concern for the environment have been relatively few, especially ones national in scope and/or of countries in the global South. Much of the information that currently exists about such differences is from studies that have examined concerns about *local environmental issues* that pose a threat to community health and safety (Blocker and Eckberg, 1989; Brody, 1984; Hamilton 1985a and b). These studies have consistently shown women to be significantly more concerned about such issues than men (Mohai, 1992).

Gender differences in perception of *general* environmental issues, that is problems not specifically limited to those in the neighbourhood or community (Arcury et al., 1987; Blocker and Eckberg, 1989; Momsen, 1993; Flaherty and Flipchuk, 1993) have been less clear. Differences have tended to be modest and the direction of this difference has varied from study to study. As a

result no firm conclusions can be drawn as to gender differences in general environmental perception, and more analysis and explanation are needed in this area.

Studies of
Gender differences in hazard perception are also very limited although there has been work on the gendered impact of many natural disasters. There is evidence that women suffer more in a variety of disasters (Drèze and Sen, 1989; Rivers, 1987) but paradoxically, may have unique roles in coping and recovery (Ali, 1984; Jiggins, 1986; Schroeder, 1987).These differences tend to be seen in terms of marginality and vulnerability which affect women disproportionately because they generally have less access to resources and a very limited role in decision-making (Wisner, 1993).

Much of the work on examining gender differences in environmental perception is driven by an interest in understanding women's role in the environmental movement and in harnessing their role as managers of the environment. What little information exists on women's environmental activism tends to show that although women are often more concerned about local environmental issues than men, they are less politically active on these issues (McStay and Dunlop, 1983).

Given the incomplete information on gender differences in environmental perception, this paper evaluates alternative explanations of these differences. Most studies have focused on gender and environmental issues and activism in industrialised countries but in this paper some comparisons will be made with gendered environmental perception in the global South.

Women and Environmental Policy Issues

It is often asserted that women's relationship with the environment is 'special' and that women are more motivated than men to work for the enhancement of the sustainability of the

environment. This has encouraged development agencies to assume a synergy between women and environment when allocating aid, with the result that 'there are serious risks of simply adding 'environment' to the already long list of women's caring roles, instrumentalizing women as a source of cheap or unrewarded labour'(Leach, Joekes and Green, 1995,7). This paper examines this assertion cross-culturally and drawing on case studies from the Caribbean, Costa Rica, Thailand and China for illustration, suggests that we must move beyond a narrow focus on women, to consider gender-differentiated responsibilities, rights and roles in environmental management. A gender based approach to environmental perception can enable separate, complementary and conflicting interests to be identified in ways that should lead to improvements in the sustainability and equity of environmental policy.

The last decade has witnessed increasing interest in analysis of women/ environment interaction and the gendered impact of development policies. Meetings such as the Global assembly of Women and the Environment in Miami in November, 1991 and the Global Forum, held in Rio de Janeiro in June 1992, aimed at both development activists and popular audiences. The 'Women's Action Agenda 21' which resulted from these meetings is a call for feminist collaboration in environmental action and goes far beyond the official UNCED position on women and the environment contained in Chapter 24 of 'Agenda 21', the global action plan adopted at the formal United Nations Meeting in Rio de Janeiro. Chapter 24 is, however, a major step forward in attitudes on the part of signatory governments although limited by the structural inertia of official policy formulation and a resource-based approach to sustainable development (Kettle, 1993).

Ideologically it has been argued that the separation between Nature and society is

paralleled by the gender dichotomy. Women are considered to be more environmentally sensitive than men because of their traditional caring and nurturing role. It is suggested that the preconceived similarities of passivity and life-giving qualities between women and nature make both equally vulnerable to male domination (Merchant, 1992). But this view is essentialist, universalist and reductionist. It fails to take into account differences of class, race, occupation and geographical context. Moreover the association of women and nature is not a transhistorical and transcultural phenomenon (MacCormack and Strathern, 1980). Taking a global view, making the woman-nature affinity the theoretical grounding of ecofeminism appears to be problematic. Huey-li Li (1993) points out that the association of women and nature is not a cross-cultural belief, since nature as a whole is not identified with women in Chinese society. Yet the lack of the transcendant dualism identified by Western writers does not preclude the oppression of women in Chinese society nor environmental degradation. Furthermore we are oversimplifying the etiology of environmental problems by blaming men for much that is beyond male hegemony.

Gender Differences in Environmental Perception: Local versus Global issues.

The expectation that women are more concerned about environmental problems than men is based on the argument that from childhood on women are socialized to be family nurturers and caregivers, that is to develop a 'motherhood mentality' (Mohai, 1992). The nurturing attitudes that result from this socialization carry over to concerns about a wide range of social issues such as poverty and racial discrimination and a more protective approach to the environment than that of men. Moreover, it has been hypothesized that the attitudes derived from this socialization are reinforced by the roles that women assume in their adult lives as homemakers and mothers. In contrast, in most Western societies men are socialized to be protectors of and providers for the

family. It has been suggested that this socialization of men results in a 'marketplace mentality' that gives priority to economic growth and development and that may portray environmental pollution as a necessary tradeoff for growth (Arcury et al., 1987; Blocker and Eckberg, 1989; McStay and Dunlap, 1983).As in the case of women, the attitudes acquired through socialization may be further reinforced by the roles that men assume in adult life as members of the formal workforce and family providers.

Whether women in reality are more concerned about the environment than men has not been determined conclusively by empirical studies.This may vary by type of problem. Some environmental problems are subtle rather than dramatic. The effects of pollution are often only slowly apparent with the consequent deterioration in environmental quality more typically showing up in small ways in the ordinary lived environment. As a result of women's social location as managers of the quotidien domestic environment they are often the first to notice the effects of pollution. Joni Seager (1996) sees this social role as the main determinant of women's grassroots organizing of environmental protest.

Gender differences in understanding of the local and national environment were noticeable in studies in Barbados (Table 1)and in Thailand (Table 2).The Thai survey on deforestation included 81 men and 81 women in three communities north of Chiang Mai, while the Barbados one focussed on soil erosion and interviewed 85 men and 90 women respondents in four communities in the northern part of the island. In both surveys the mean age and education levels of men and women were similar. In the Thai study 96% of both men and women agreed that deforestation was a serious problem for the nation (Flaherty and Flipchuck, 1993,Table 5) while in Barbados 74% of the women but only 48% of the women felt that soil erosion was a national

problem. At the local level gender differences in environmental perception were more marked in both surveys. Only 36% of men and 22% of women interviewed in Thailand felt that deforestation was a serious local problem. In the Barbados study, on the other hand, in the most seriously eroded district of Barbados, a higher proportion of men (82%) expressed serious concern over soil erosion as a local problem as compared to the 74% who saw it as a national problem, while a lower proportion of women (45% compared to 48%) felt that soil erosion was a local problem. Women living in the Scotland District, where soil erosion was taking away roads and houses and which had been the focus of large scale anti-erosion measures for over thirty years, were less concerned about it than those living elsewhere in the island, where soil erosion was more gradual and less conspicuous. This unexpected result could be related to the fact that if your house fell down the hillside in a soilslip in the Scotland District, the government gave you a new one!

Gender roles and environmental concern

Evidence supporting the family nurturer and economic provider roles has been particularly limited. Tests of the effects of parental, homemaker and workplace roles on gender differences in concern have provided mixed evidence. For example, Hamilton (1985a and b) found in his studies of several New England communities that women with children were significantly more concerned about toxic waste contamination of the local water supplies than women without children, or than men with or without children. In contrast Blocker and Eckberg (1989) found that parenthood had no effects on the concerns of either men or women in the Indianapolis area regarding local air and water pollution. Nor did they find any relationship between homemaker status or full-time employment and concerns about pollution.

In my study in Barbados (Momsen, 1993) I found that there was less difference between

male and female farmers in their concern for soil erosion with 83% of men and 66% of women being seriously concerned about soil erosion than among the general population. In the Barbados farmer sub-set just under half of both men and women farmers were aware of measures that could be taken to control erosion. In the Thai study there was no significant gender difference in the importance given to the control of soil erosion with 47% of men and 36% of women seeing it as very important. This comparison reflects the lack of occupational differentiation in Thai villages as compared to Barbados where only a minority are farmers. In Barbados, non-farming women, all with children, were much more concerned about the local environment of the community especially in relation to traffic pollution and garbage collection than about the general danger of soil erosion to the nation. ~~(Table 1)~~. Blocker and Eckberg (1989) found that family and workforce roles were related in an unexpected direction to concerns about general environmental problems. They found that full-time employment in the labour force was positively rather than negatively linked to one of two general environmental concern scores. Fathers' ranked lower on one of their environmental concern scores than men without children, while mothers ranked higher on this score than other women. Mohai (1992) in his study based on a United States national survey found that women scored higher than men on the perceived seriousness of environmental problems and perceived shortages while men ranked highest on an index of importance of allocating resources to environmental protection. He also found that gender differences in environmental concern were independent of economic role as fulltime paid worker or as homemaker.

Gender differences in knowledge of environmental issues

In the Thai (Flaherty and Flipchuk, 1993) and Barbados (Momsen, 1993) studies and in a Costa Rican study of perception of volcanic hazards (Lemieux, 1975) women tended to be less

aware of the causes of environmental problems than men. In Barbados only 51% of men and 31% of women surveyed realized that ashfalls from volcanic eruptions on neighbouring islands were crucial to maintaining the fertility of soils on the coral limestone island. In the Thai study both men and women saw illegal logging as the major cause of deforestation, probably because this had received considerable media attention (Flaherty and Flipchuk, 993, 272). However, there were significant gender differences in the perception of the importance of commercial logging and charcoal burning as causes of deforestation (Table 2). There was much gender-based variation in terms of causative links between deforestation and both water supply and soil erosion among Thai villagers. In both surveys women were more likely than men to say that they did not know the answer to the question and so men appeared to be more aware of environmental problems than men.

Most studies in the industrialised world have tended to focus on gender roles rather than on the effect of differences in education and decision making. In poorer countries these latter issues may be overwhelming. In both the Barbados and the Thai studies women were less likely than men to recognise cause and effect relationships in the environment (Tables 1 and 2). In Barbados where there are currently more women attending university than men, education differences are closely linked to particular age cohorts. We had elderly women telling us that they had no knowledge of a particular issue and directing us to their schoolage grandchildren who were very willing to explain the effects of Amazonian deforestation. This is having a direct local effect in that silt from soil erosion leading to increased run-off of the Amazon river is being carried to Barbados and is killing many of the off-shore coral reefs. Thai village women were also less likely to believe in causal relationships even where their local knowledge should have been

greater than that of men because of their particular household role. For example they were less likely than men to see a relationship between deforestation and the availability of wild plants which are usually collected by women. It has been suggested that perhaps women are more likely than men to admit that they do not know the answer to a particular question (Flaherty and Flipchuk, 1993) and this was noticeable in the Barbados survey since lack of such knowledge does not reflect on their status.

Davidson and Freudenberg (1996) in a review of twenty years of studies of gender differences in environmental concern in the United States, found that although men were generally more aware of technology, activists were often 'intentionally uninformed ' (Davidson and Freudenburg,1993,317). The problematic nature of the relationship between knowledge and concern leads them to conclude that any study claiming to find such an association 'needs to be subject to a high level of scientific skepticism (Davison and Freudenburg, 1996, 319).

In hazard perception, vulnerability is an important distinction and women are often the most vulnerable since they are less likely to have the resources to recover from a hazardous event nor the community status to be able to obtain assistance. Women's lower education levels and lack of perceived ability to obtain official help are clearly seen in the study of hazard perception in an area affected by volcanic activity in Costa Rica. Men were more likely to believe in causal relationships as predictors of future eruptions and to depend on official assistance (Table 3). Women were more likely to say that they did not know thus giving the impression that men were more concerned about the environment. One woman in her late forties stated in response to a question that she had had fifteen children and could no longer think! Women were more fatalistic seeing their only recourse lay in prayer,while men were more likely to seek practical assistance or

to leave the area.

Among West Indian small farmers the ranking of concern varied by type of environmental problems reflecting gender differences in social roles as well as environmental differences between islands. (Table 4).Women had more problems obtaining labour than men since male workers generally do not want to work for a woman small farmer. Women farmers have long shown a strong awareness of the dangers of use of chemicals both to themselves and to their reproductive role, so that they will always get a man to apply chemicals to their crops. In Trinidad as early as 1978 women farmers were expressing a fear of pesticide use and promoting the sale of organic produce in village markets (Harry, 1993).

Structural and situational gender differences

Mohai (1992) suggests that despite the evidence of women's role in grassroots community environmental activism, women are less activist than men. He links this difference to broader structural and situational factors and suggests that controlling for socio-economic factors can remove this difference. Stern et al, (1993) look to gender differences in value orientations for an explanation. They suggest that women tend to see a world of inherent interconnections and are more accepting than men of messages that link environmental conditions to potential harm to themselves. This would support women's greater involvement in local rather than general environmental issues.

Meta Influences

The influence of state policy is clearly seen in both the Thai study and in our work in Yunnan, China. In both locations government had been pursuing a media blitz stressing the damage that deforestation could do to the environment. In China, in the four mountain villages

surveyed, this message was reinforced by severe punishment for transgressors. Men and women in northern Thailand seemed to have equally absorbed this message (Table 2). In China results were very similar although the only woman who felt that illegal logging should be allowed was one whose husband was in jail for such activity.

In Costa Rica the state was encouraging people to move from the danger zone closest to the volcano and offering land elsewhere. Many people took this opportunity but one old man said he was staying on the upper slopes of Volcan Irazú because he enjoyed watching the firework display. Overall, 33% of men but only 15.2% of women felt positive about experiencing a volcanic eruption (Table 3).

Conclusion

In all societies gender roles are changing. In industrialised countries it is getting less meaningful to separate homemaker and paid worker roles. In Barbados, Thailand and China fieldwork revealed a decline in the specificity of gender roles with more household tasks becoming gender-neutral. In Thailand both men and women now collect firewood and women are more involved in family finances and decision making (Flaherty and Flipchuk, 1993). As roles change male and female attitudes to the environment may also become more similar

Despite strong theoretical arguments suggesting that women are more protective of the environment and more aware of environmental problems, investigations into gender differences in concern for the environment have been relatively few and are generally inconclusive in their results (Mohai, 1992) Davidson and Fraudenberg in their 1996 survey (332) indeed indicated that the only marked gender difference in environmental concern in the United States is found among 'white' people with a sub-set of white men characterized 'not just by abnormally low levels of

environmental risk concern but also by distinctive worldviews, ranging from a willingness to impose risks on individuals without their consent to a refusal to give up the use of capital punishment'. They conclude that the time has come to go beyond asking why women worry so much to asking why at least some white men do not.

Recent fieldwork in Barbados, Thailand and China has revealed only modest differences between the genders in environmental concern. Where differences do exist, they do not show a consistent pro-environment stance for either group. It may well be that contemporary economic development pressures are undermining traditional gender differences in environmental awareness even in remote rural communities of the global South. It appears that a feminist political ecology approach may provide a better understanding of gendered environmental perception than ecofeminism.

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Table 1.

Gender and Environmental Perception

Barbados-1989

Topic	Women (N=90) %	Men (N=85) %	Total (N=175) %
1.Soil erosion is a serious problem	48	74	61
Sub-sample living in eroded zone (N=49)	45	62	62
Sub-sample of small farmers (N=26)	66	83	75
Small farmers aware of anti-erosion measures	46	46	46
2.Remember last eruption on St Vincent	57	62	59
Volcanic ash important for soil fertility	31	51	41
3. Last hurricane caused major damage	9	18	13
4. Sea becoming more polluted	48	56	52

Source: Fieldwork

GENDER AND ENVIRONMENTAL PERCEPTION IN NORTHERN THAILAND

Problem	Women N = 81	Men N = 81	Total N =162
	(Percentage agreeing)		
• Deforestation a major national problem	96	96	96
• Deforestation a serious local problem	22	36	30
• Control of soil erosion is important	36	47	41

Source: Flaherty, M.S. and V.R Filipchuk. 1993. Forest management in Northern Thailand: A Rural Thai Perspective. Geoforum 24 (3), pp, 269-276.

Table 5

GENDER AND PERCEPTION OF VOLCANIC HAZARDS IN COSTA RICA

N=170 (91 men and 79 women)

1. Perception of local hazards	% Men	% Women
Volcanic hazards	5.5	1.3
Other natural hazards	16.5	7.6
Social hazards	12.0	10.1
None	66.0	81.0
Significance 0.0497		
2.Do you expect there to be volcanic ashfalls in the future?		
No	12.1	15.2
Yes, in a few years	29.7	13.9
Yes, don't know when	28.5	21.5
Probably not	29.7	49.4
Significance 0.0182		
3.When do you expect the next eruption?		
Soon (repetitive)	14.3	25.3
Unknown (at random)	59.3	53.2
At regular intervals (set pattern)	19.8	7.6
Never	6.6	13.9
Significance 0.0217		
4.Are earthquakes precursors of eruptions?		
No	51.6	31.6
Yes	34.1	40.5
Maybe	14.3	27.8
Significance 0.0162		
5.During an earthquake I....		
Remain passive	23.1	26.6
Keep alert	23.1	7.6
Prepare	24.2	22.8
Am afraid	29.6	43.0
Significance 0.0331		
6. Living through a volcanic eruption makes me feel...		
Positive	33.0	15.2
Negative	67.0	84.8
Significance 0.0123		
7. During an eruption I seek help from...		
Only God	6.6	17.7
Family and friends	60.4	70.9
Special groups (Red Cross, etc)	33.0	11.4
Significance 0.0010		

Source:G.H.Lemieux. 1975.Human Responses and Adjustments to the 1963-65 Ashfalls of Irazú Volcano, Costa Rica: A Geographical Study of Environmental Perception. Unpublished Ph.D. dissertation, University of Calgary.

Tble 4

GENDER DIFFERENCES IN PERCEPTION OF ENVIRONMENTAL PROBLEMS

SMALL-SCALE FARMERS IN ST LUCIA, MONTSERRAT AND NEVIS, WEST INDIES

Problem	St Lucia -1971		Montserrat-1973		Nevis - 1979	
	Women N=10	Men N=47	Women N=22	Men N=44	Women N=30	Men N=70
	(Percentage of farmers mentioning problems)					
Transport and roads	60	36	18	23	17	7
Pests and diseases	60	68	73	55	73	63
Livestock damage to crops	NA	NA	14	5	3	16
Water shortage	40	38	36	41	23	17
Land availability	0	12	18	23	10	10
Land tenure	10	6	0	5	0	1
Soil erosion	50	38	14	16	13	13
Stony soil	NA	NA	5	11	0	1
No problems	0	2	0	2	NA	NA

Source: Fieldwork

CATHERINE NASH

"Environmental history, philosophy and difference: feminist perspectives on historical and contemporary human-environmental relations"

Environmental history, philosophy and difference: feminist perspectives on historical and contemporary human-environmental relations

Catherine Nash, University of Wales, Lampeter

Human geography seems to have 'gone back to nature', or at least returned to that central question of human environmental relations now heavily armed with a critical sense of the social origins of ideas of nature, its materiality and the politics of environmental change. As cultural geography's double attention to the symbolic and material forms of land, environment, landscape or nature gets recast in Latourian moulds, and Marxist explorations of social justice get environmental, nature returns to historical geography via environmental history.[1] The philosophical, historical and political question of difference, unity and domination in human-environmental relations have been central to geography and environmental history. Yet they have also been key areas of analysis and critique within feminism and feminist geography where the cultural meanings of the human, nature and the natural have been so thoroughly interrogated. Despite this the historical focus of environmental history and the insights of feminist environmental philosophies have remained largely disconnected to the detriment of both. The problems of the isolation of these two areas of theory and research go far beyond the absence, with some exceptions, of questions of gender within environmental history, or the persistent gendering of nature. Feminist and postcolonial approaches to questions of gender, culture, nature and the environment clearly suggest ways in which environmental history could become more sensitive to social difference. But importantly also environmental history can enrich the study of the material and symbolic relationships between gender and the environment. Most simply this means using environmental history to disaggregate the terms 'nature' or environment, and using the politics of social difference to disaggregate the notion of the 'human' in environmental history.

Environmental History

Arising as it has from a concern with the adverse environmental effects of modern capitalism and especially in contexts of European colonial settlement, environmental history is already an area of study with strong ethical, moral and critical dimensions. Environmental historians bring together questions of environmental change, the ways in which human societies organise their relationships with the natural world and the values and beliefs that inform and make sense of these relationships. But the new subject or

interdisciplinary perspective also has a distinctive geography as its most famous practitioners have been prompted by the massive environmental shifts set in train by capitalist and colonial settlement and agricultural systems in North America or in the 'New World' white settler contexts like Australia and have been highly critical of the capitalist agriculture - 'its commodification of land, its drastic ecological simplification, it affection for dangerously vulnerable monocultures, its promotion of divisions of labor that in the long run can do great damage to nature and human community'.[2]

Its practitioners have grappled also with the challenges posed to the way in which environment can be understood by both revisions of classical ecology and postmodern approaches to epistemology.[3] More and more ecologists and environmental historians are asking can we be sure we know what we mean by nature, ecology or more specifically ecological equilibrium, community and the 'balance of nature'. With more detailed knowledge of environmental change it is becoming clear that the natural world is more dynamic, changeable and bound up with human history that the idea of the balance of nature or the simple models of ecological succession, climax and equilibrium typically imply. In turn 'the work of literary scholars, anthropologists, cultural historians, and critical theorists has yielded abundant evidence that nature is not nearly so natural as it seems. Instead it is a profoundly human construction. This is not to say that the nonhuman world is somehow unreal or a mere figment of our imaginations - far from it. But the way we describe and understand the world is so entangled with our own values and assumptions that the two can never be fully separated.' [4]

So while 'environment' has been problematised, and despite its fascinatingly detailed ecological narratives, environmental history has tended to work with a largely undifferentiated notion of the 'human'. This time lag between the feminist critique of the writing of history and it effects in environmental history is a point that is being made by environmental historians themselves. As the question of what is meant by 'nature' or environment comes under scrutiny, William Cronon calls for comparable critical attention to be paid to the category of the 'human'. Though, he argues, the holistic analysis of environmental history encourages historians to see nature and humanity as a whole, 'it also discourages us from looking at as much as we should at conflict and difference within groups of people' whether we are talking about peasants, farmers, Indians or colonists. Despite the focus within environmental history on class and distinctions between settler and indigenous groups, for him its greatest weakness as it has developed thus far is 'its failure to probe below the level of the group to explore the implications of social divisions for environmental change [...] In the face of social history's classic categories of gender, race, class, and ethnicity, environmental history stands more silent than it should'.[5]

Feminist environmental history?

The most prominent exception to this within environmental history is the work of Carolyn Merchant whose famous account of the modern Western interconnections between the domination of women and nature, [6] referenced by J M Powell for example, when he includes the theme of gender in a list of new directions for environmental history.[7] Though Merchant increasingly represents feminist environmental history, in reviewing Cronon's *Nature's Metropolis* for example, [8] there are problems in taking Merchant's work as a model what feminist environmental history could be. Merchant also argues that 'a gender perspective on environmental history ... both offers a more balanced and complete picture of past human interactions with nature and advances its theoretical concerns'.[9] She suggests adding a focus on human reproduction, in terms of the reproduction of generations, of daily energy, of culture and systems of governance. Like Cronon Merchant highlights how all these aspects of reproduction are deeply gendered Merchant's perspectives are based on a compelling historical narrative, but it a story whose drama of change from 'good' gender and environmental relations to 'bad' ones depends on a historical sweep which edits out the complexity of the past. In her famous text *The Death of Nature* Merchant argued that a 17th century colonial ecological revolution and a 19th century capitalist revolution depended upon the Enlightenment shift from viewing nature as a living sentient being to a machine which can be controlled by universal scientific laws which sanctioned the domination of nature and women, who were also conventionally located in the realm of the natural. In her more recent writings Merchant is careful to avoid essentialising femininity, reinforcing normative motherhood, universalising the experience of women in the past and present or gendering her notion of earthcare as feminine.[10] Yet women's responsibility for household food production in precolonial New England is frequently posited by Merchant as a lost ideal in which human-environmental relationships were harmonious and the sexual division of labour complementary rather than limiting. Merchant's main argument has been that while mercantile capitalism and the Scientific Revolution of the seventeenth century was replacing the 'organic world view of the Renaissance, in which the cosmos was alive and the earth was considered a nurturing mother [with] ethical constraints against the exploitation of the earth' with view of the world as a 'machine made of dead atoms ... and society as a sum of self-interested individuals', European colonialism and capitalism were transforming an animistic and organic native American culture in which

Native American women, whose food products constituted about 85 percent of the tribal diet, interacted directly with the earth through planting, tending and harvesting corn, beans, and squash, offering the first fruits of their labour to a corn mother deity.[11]'

Merchant's argument is clearly powerful and politically useful, but there are also problems with universalising from it. This notion of a precolonial, premodern, pre-patriarchal golden age of environmental and human well-being underpins much ecofeminist theory, contemporary environmentalism and romantic ahistorical notions of both femininity and indigenous peoples, and supported guilt-ridden inability to be as critical about the gendered aspects of other human-environmental relations as their own. Hard work for women is still hard work whether the earth is imagined as mother or machine. The amount of knowledge and labour that pre-colonial women in southern New England invested in horticulture for household subsistence that she describes is similar to the roles of women in some developing contexts today. But the efforts to record and value this previously undervalued and overlooked this work and skill sometimes has meant overlooking the gendered inequalities that mean women work so much and so hard. In turn this imagination of women as environmentally attuned pays little attention to the changing material conditions of their lives. Rather than simply see women as victims of environmental degradation we need to think about how different women whose experiences are shaped by generational difference, class and ethnicity, intervene in the complex political economic and environmental context which they them help shape. For a whole series of complex and conscious reasons women can choose to cut down as well as hug trees. As Celine Jackson has commented 'because women have not been at the forefront of tree logging or mining or rainforest burning does not mean that they are naturally more caring about the environment, it is more likely to express gender divisions of labour and distribution of opportunity.'[12]

The lack of historical depth in many ecofeminist discourses, has been recently thoroughly and skilfully challenged by Melissa Leech and Cathy Green who take a deliberately historical perspective in considering gender and environmental history in relation to contemporary women-environment policy debates. While, as they say 'work on the causes and impacts of land use change and of colonial environmental policy by environmental historians has shown remarkably little interest in their gender dimensions', historical claims are used prominently in contemporary ecofeminism, especially in constructing 'images of harmonious women-centred ecological relations which colonial development processes undermined'. These a-historical and essentialist claims then 'form the basis of 'histories' in which women's biology become subordinated by culture during the 'colonial' or 'capitalist' period'. Leech and Green call for a more gender sensitive environmental history and a more historically based analysis of gender and environmental change.[13]

Leech and Green undermine the notion of a golden age of feminine ecological harmony in isolated precolonial subsistence agriculture by exploring the wide cross cultural and historical differences in the meanings of masculinity and femininity and their relation to concepts of the environment. They argue that the 'golden age thesis' obscures differences among women and render men and relationships between men and women invisible. It ignores the ways in which pre-colonial organic views of nature were often linked to oppressive social relations. The general use of the term nature or the environment in ecofeminism, they suggest, does not offer a sense of the different ways different environments and ecological processes have been linked in varied ways to gender. As Cronon argues for a disaggregation of the term human, Leech and Green argue for a greater historical sense of environmental diversity in analysis of gender and ecology. Ecofeminist histories they argue

> reduce the material aspects of people's changing gender and environmental relations to a dichotomy between a harmonious, timeless pre-colonial golden age and the destructive effects of capitalism and colonialism; in effect, to the endless reproduction of glorious 'tradition' until the arrival of 'modernity'. However this is to obscure the evidently important dynamics of gender, social stratification and environmental change in pre-colonial history: dynamics often influenced by trade and commerce in ways which strongly deny images of subsistence isolation. While all scholars agree that colonialism and capitalism have profoundly restructured - and continue to restructure - economies, societies and their gender relations, the accumulated evidence from a large number of historical analyses shows the complex and varied forms of this articulation.[14]

Environmental history should, they argue, explore the ways in which environmental relations structure relations between women and men and wider social relations of gender structure processes of resource use. A properly gendered environmental history would, they suggest, encompass the analysis of 'gender and labour in relation to ecology; changing regimes of tenure and property rights; gender dimensions of institutional arrangements around natural resource usage; changes in gendered product, site and technique use in the context of colonial economic change, trade and policy; relationships between gender and environmental knowledges and discourses, including those of colonial states', [15] interaction of gendered resource use with particular ecological processes, women's agency in responding to colonial ecological interventions, and 'how representation of past environments - of landscape history - become part of oral histories which uphold particular social or political relations, and gendered rights and statuses linked to them' (and often adopted by colonial authorities).[16] Gender relations, they argue, have tangible ecological effects, just as they mediate environmental change amongst indigenous and settler groups.

Similarly, Celine Jackson argues that 'the application of gender analysis to environmental relations involves seeing women in relation to men; the disaggregation of the category of 'women' , and an understanding of gender roles as socially and historically constructed'.[17] As she points out in relation to developing contexts, class mediates gender environmental relations as the costs of environmental degradation fall most heavily on poor women. In addition, ' inequalities amongst women exist even at the household level where age [as well as marital status] frequently patterns divisions of labour, access to and control over resources, and decision making powers... To posit a special relationship between women and their environments which ignores such multiple sources of difference is problematic, because women bear socially formed, and changing gender, as well as class and generational identities'.[18] So bringing together feminist approaches to human environment relations and environmental history, means disaggregating the category 'nature', the category 'human' but also the category 'women'.

Post-colonial environmental histories?

Environmental history can offer a powerful critique of modern capitalism and colonialism but also challenge the romanticisation of premodern and precolonial societies and so counter the primitivising claims of some environmental philosophies. Like the postcolonial project of criticising the material and cultural oppression of colonialism without positing a model of true and static pre-colonial culture that can be recovered, environmental history can critique modern environmental damage while challenging the notion of a pristine nature in harmony with pre-modern native people. The doubts raised by environmental historians and ecologists over the central ecological concepts of environmental succession, equilibrium and climax which have been central to the critical measurement of environmental damage, undermine notions of premodern and pre-colonial environmental stability. Two of the central terms of both environmentalism and environmental history have been ecological damage and ecological stability yet the critique of modern environmental change has tended to imply pre-modern or non-Western stable and unchanging human-environment relationships. In this way both pre-modern and non-Western people are also presented as 'forgotten by time' or in some unchanging present. William Cronon suggests it would be better to think, and think critically about different rates of change rather than work with a simple dichotomy between change and stability. The environmental histories of long term human intervention challenge the romanticising tendencies of Western eco-tourism, which in seeking a lost harmony with nature in the cultures indigenous peoples, as Jane Jacobs has shown in relation to the production of Aboriginal heritage, essentialises and fixes these supposed survivals of pre-modernity.[19] As Jane Jacobs argues 'it is not Nature that is on

display [in Ecotourism] but a culture that knows nature differently and, presumably, in a less destructive form'. The 'modern desire to (re)turn to Nature by way of indigenous cultures' she argues is a 'response to what is seen on the failure of masculinist and rationalist (read capitalist) ways of seeing, knowing and being in the world'. This new 'ecological imagination' draws on 'primitivised, stable, ahistorical and deeply romanticised understandings of Aboriginality and Aboriginal associations with land'.[20] In similar ways to the representation of women, 'viewing indigenous peoples as at one with nature places them outside culture' and less human. It also implies that only 'pure cultures' are valuable for offering models of 'good' environmental relations- and so using a dangerous language of cultural purity that discredits hybrid cultures, lives and experiences. Urban or mixed race Aborigines for instance in this case would be simply viewed as either traitors to or at odds with this 'primitivist environmentalism'. Here again a critical and historical perspective can help. Instead of romanticising pre-modern or non-Western human environmental relations we need to think about them as also dynamic and cultural. By understanding other relationships to nature as also socially and culturally mediated, but through different mythical and metaphorical frameworks, it is possible to remain critical of modern capitalist erosion of other kinds of consciousness and experience without primitivising or romanticising other relationships between societies and natural environments.

Rethinking the Nature- Society relationship: towards an environmental politics of difference

How can we rethink the relationship between nature and human societies? In many ways this involved reconceptualising the meaning of the 'human' and 'nature' as well as relationships between them. It can be argued that theories of human non-hierarchical immersion in nature are as problematic as ideas of hierarchical difference. Many from feminist and non-feminist perspectives have claimed that the distinction between nature and culture is one of the founding philosophical tenets through which Western societies have made sense of themselves. Many have pointed to the period called the Enlightenment (usually centred on the 18th century) as key context in which ideas of what it means to be human were foregrounded. Attempts to define the qualities of the human depended upon making a distinction between human located in the world of culture, thought, creativity, rationality, consciousness and self-determination and the realm of the natural. To be civilised was to be at a distance from the natural. Those people defined by as less distant from nature (the working class, women, people of colour, children) were defined as less human. Feminist have pointed out that this definition of the human was not open to all. As women were traditionally located in the realm of the natural through because of their ability to give birth - they did not qualify to

belong fully to the category of the human. This restriction of the category of the human also extended to children but also to other races - deemed both childlike and nearer to the animal world of instinct and uncontrolled desires. Ideas of what is human and what is natural have been deeply linked to relations of power between people.

Despite the problems of some forms of ecofeminism others offer possibilities for finding new answers. In response to the now well established sense of the social construction of nature and to the critique of the dualistic category of nature and the human, recent theorists have sought not only to recover a sense of the autonomy of nature but also alternatives to the human-nature dichotomy. In spite of anxiety about environmental determinism within geography, the natural world is increasingly recognised as having a materiality and instrumentality that is independent of human knowledge. This sense of the materiality and symbolic construction of the world is central to Val Plumwood's critical ecological feminism and her concept of the relational self, which avoids the gendered and familial discourse of feminised nature.[21] Here self-hood is not defined through fixed and hierarchical difference but through a myriad of dynamic and mutual relations of interdependence and partnership. Nature is understood not as, an often gendered, entity but as a series of diverse life forms in different relationships of partnership with a similarly diverse human community. This recognition of both the differences and the continuities between people and non-human forms of life undermines dualistic epistemologies of hierarchical difference without collapsing a sense of difference within nature or human society in a universal humanism of human integration in nature. This sense of non-hierarchical difference within and between nature and society is the starting point for an environmental politics of difference.

William Cronon has recently called to a more prominent place within environmental history for the 'exploration of social and environmental *difference* - and of its relation to power'.[22] In spite of the ways in which difference between the human and non-human world have served the interests of those who have defined the limits of the human and justified the ill-treatment of people classified as more 'natural' and nature itself, ecofeminist theorists like Val Plumwood and Jim Cheney are critical also of forms of environmentalism which seek to eradicate difference between the human and the non-human through various forms of identification with nature.[23] The significance their approach is in critically addressing the politics of alternatives to the human-nature distinction in forms of environmentalism which seek to articulate non-dominant relationships between the human and nature, especially within Deep Ecology.

Deep Ecology is a kind of environmental philosophy or a set of ideas and theories about the environment and human - environmental relations, developed most famously by Arne

Naess. Deep Ecology seeks to promote a comprehensive change in the way the natural world is treated and understood by individuals changing their life-style and behaviour through gaining a sense of unity with nature. This deep ecological imagination is based on ideas of deeply identifying with nature, imagining a sense of self indistinguishable from nature, an expanded sense of self in which self is all that we identify with, or a transcended self in which the personal is transcended through an impartial identification both with all particulars of the natural world and with the cosmos.[24] Though it has been prompted by the destruction of natural environments in the modern world, it also draws on much older traditions of understanding the world especially 19th century European and North American Romanticism. This idea of getting close to nature implies that people as individuals and in societies are separate from nature, just as phrases like 'getting back to nature' imply that humans once lived in greater contact with other living things. The origins of this thinking clearly lie in the processes of modernisation, urbanisation and industrialisation that have shaped today's societies. In response to the apparent alienation of people from nature in modern life, many European and North American thinkers in the nineteenth century strove to recover a sense of closeness to the natural world. This is a central idea of *Romanticism* and has influenced the development of environmental and conservation movements, suburbanisation, anti-urban attitudes and tourism. So Western attitudes to the natural world often involve both a sense of superiority over and distance from nature and a desire to return to a close relationship with 'Nature'.

When Deep Ecologists speak of closeness to nature they mean a sense of deep personal, spiritual connection between an individual and the natural world. What are the problems with this notion of individual identification with nature? As Val Plumwood and Jim Cheney argue, this leaves out is any sense of the social - of the relationship between societies and nature or relationships between people. We may individually enjoy a sense of unity with the natural world but share little sense of the impact our actions have on other people or on the environment. Large numbers of people travelling to 'unspoilt' areas for example in search of 'closeness to nature', can have very significant and not always positive effects on the ecology of an area and the people who live there. The idea of transcending the self - your own emotions, context, feelings etc. - is central of ideas of rationality which have claimed that rational thinking depends upon this detachment - an approach to knowledge that has denied the social production of knowledge the situatedness of knowledge and to delegitimate the knowledges of women and non-Europeans supposedly unable to achieve this rational detachment.

Deep Ecology, they argue, suppresses the difference of nature by idealising a human relationship to nature in which human subjectivity is subsumed into a deeper spiritual consciousness in the natural world. Romantic notions of self-loss in nature, they argue,

deny the politics of human-nature relations as well as treating relationships between people as irrelevant to explanations of ecological change. Deep ecology ignores what hierarchies between people - unequal gender relationships for example - have to do with the environment. The focus on personal identification with nature within Deep Ecology, Plumwood suggests, fails to consider social relations beyond the individual. Identification with nature is thus based on a masculinist notion of a transcendent, autonomous, non-relational self. Its emphasis is on personal incorporation in the natural rather than a social sense of the mutuality *and* distinctiveness of the human and non-human realms. This is the basis of an environmentalist politics of difference and its environmental and social imagination of non-hierarchical difference between people and the natural world and diversity amongst people and within nature. The sense of the agency, autonomy and materiality of nature does not then have to be couched in terms of nature as an intentional moral being, but as a realm which more than its human construction. And it is this sense of the diversity, agency and materiality of the physical world that has distinguished the work of environmental historians. Environmental history and feminist environmentalism can be mutually enriched by a focus on difference within 'humanity' and 'nature'.

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ORIOL NEL.LO

"Urban dynamics in Metropolitan Barcelona. Ten questions and an environmental epilogue"

URBAN DYNAMICS IN METROPOLITAN BARCELONA (manuscript)

Ten questions and an environmental epilogue

by Oriol Nel.lo, geographer,
Director, Institut d'Estudis Metropolitans de Barcelona

Over the last two decades, the urban conglomeration of Barcelona has undergone a profound transformation: whole sections of the city have been upgraded and renovated; the infrastructure has been improved and expanded; the traditional absolute predominance of industry has been undercut by the emergence of a large base of services; the city's external relations and image have been greatly improved. During the same period, the consolidation of the metropolitan phenomenon has made Barcelona the sixth largest urban area in the European Union.

The improvement is patent to any observer. In addition to being obviously wealthier, Barcelona today is a cleaner, more modern and functional city than the one which emerged from the era of General Franco's dictatorship. But, one may ask, what has been the social impact of these urban and economic changes? Are the inhabitants of Barcelona more educated or more ignorant than before? Do they enjoy greater or lesser choice when they set out to find a place to live? Do young people leave home earlier or later? Are income levels tending to converge or becoming ever more divergent? Do old people depend on their own resources, their families or on the state?

On the other hand, the changes that have occurred have also had an important impact on the environment. The consumption of natural resources -land, water and energy- has increased considerably. At the same time, the ways in which environmental issues -protected areas, waste and water treatment- are managed have also evolved. How far reaching are these changes? What are the associated costs and benefits? Are current trends likely to continue into the foreseeable future, and if so, will the consequences endanger the welfare of the population?

The aim of these notes is to reflect on some of these issues. In the first place we have chosen ten questions concerning the effects of the urban transformation and the social dynamics. This is followed, in the manner of an epilogue, by a brief discussion of the environmental implications of these processes. Although the questions discussed have, in our opinion, a causal relationship, obviously our objective is not to answer them definitively in the context of this short article.[1] We will be content if the reader considers that the questions raised are important.

1. The metropolitan phenomenon: An impossible delimitation?

The first question that must be raised is, obviously, what are we referring to when we talk about "Barcelona society". Inevitably, this poses the problem of how to delimit the metropolis, a question which, as in the case of many other large urban conglomerations in Europe, has been a recurrent theme in the political, academic and urban planning debate since the demolition of the city walls almost one hundred and fifty years ago. In recent decades, the supramunicipal

[1] An earlier version of these notes will appear in Catalan in the *Revista Econòmica de Catalunya* under the title "El canvi social a la regió metropolitana de Barcelona: deu preguntes".

character of the Barcelona conurbation has been made increasingly evident by the evolution of the economy and the spatial dynamics, but the question of how to delimit the area remains open. The debate has given rise to many different points of view (NEL.LO, 1998a). At one end of the spectrum, we find the proponents of a highly restrictive approach, who, in the face of all evidence to the contrary, either delimit the city according to the traditional municipal limits or, at the very most, expand this definition to encompass the contiguous urban area (often called the "urban continuum"). At the other end, we find those who propose the definition of a more or less extensive metropolitan ambit (the metropolitan "area" and/or "region"); and even some experts who maintain that the metropolitan phenomenon has extended to such a degree that in reality it now encompasses the whole of Catalonia and has, therefore, merged with this area.

And what do the data tell us? All the available indicators confirm that the metropolis is expanding, and that the whole affected area is becoming increasingly interdependent: the Barcelona metropolis is a network in which the number of nodes and the load of the edges is gradually increasing. If we take, for example, a definition based on daily journey-to-work patterns -such as the recent delimitation elaborated by applying to the Barcelona metropolis the method used in the USA to delimit Standard Metropolitan Statistical Areas- we find that the functional metropolitan phenomenon encompasses some 130 municipalities (ROCA CLADERA, dir., 1997). The metropolitan city would in this case greatly exceed the limits of the old administrative Metropolitan Area[2], and would be very similar to the metropolitan region composed of seven *comarques* (the Barcelonès, Baix Llobregat, Garraf, Alt Penedès, Vallès Occidental, Vallès Oriental and Maresme), for which the *Pla Territorial Metropolità* (Plan for the Metropolitan Region) is currently being drawn up. The application of this methodology also reveals that the relationship between this area and some municipalities located in adjacent *comarques* (the Anoia, Bages and Baix Penedès) is rapidly growing more intense, indicating that these localities will gradually become integrated into the functional dynamics of the metropolis. In the same way, the internal divisions between "metropolitan area" and "metropolitan region", and between "first belt" and "second belt", are increasingly difficult to sustain on the basis of functional analysis.[3]

If, instead of using daily journey-to-work patterns as the delimiting criteria, we used other parameters -such as the pattern of travel related to shopping and the use of services and leisure activities- the scope of the metropolitan relationships would be even greater (PALLARÈS & RIERA, 1991; MENDIZÀBAL, 1993). Moreover, new transport systems are planned that will increase this scope even more. These include the Euromed line, the TGV connections, and the new transverse axis, which will significantly increase connectivity with Tarragona, Lleida, Girona and Central Catalonia.

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[2]The ambit of the Barcelona Metropolitan Corporation, which included Barcelona and 26 of the surrounding municipalities. Created in 1974, the Corporation was abolished by the Parliament of Catalunya at the instigation of the Catalan Government in 1987. As can be seen, the date of abolition practically coincides with that of the abolition of the Greater London Council. It is also easy to establish other parallels between the motives that provoked these decisions (in particular in relation to the confrontation between a powerful left wing local government and a conservative government at a higher level).

[3]The term "first metropolitan belt" refers to the Barcelona metropolitan area excluding the city of Barcelona itself. The term "second metropolitan belt" refers to the metropolitan region excluding the metropolitan area.

It is therefore clear that, depending on the criteria used, the size and scope of the metropolis varies, and that any definitive resolution of the question from a scientific standpoint is extremely difficult. Should we therefore abstain from undertaking any kind of delimitation? Not necessarily. What should be understood is that any delimitation of an urban conglomeration like Barcelona has to rely on a series of normative assumptions, and is therefore subjective. From this standpoint, a delimitation based on daily travel patterns -besides being validated by the international experience- has the advantage of corresponding increasingly with the perception of many inhabitants, and of coinciding with the ambit required for the planning and management of many services (public transport, road and utility networks, etc.). This is therefore the delimitation we consider most appropriate when defining, by analysis, what we might call the metropolitan phenomenon in Barcelona.

2. Population: An inevitable decline?

Data taken from the 1996 Census show that the population of the metropolitan region at that time (4,228,047 inhabitants) was, in absolute terms, practically the same as it had been in 1975. Moreover, there has been a slight decline in population over the last five years. This trend, similar to those affecting other large metropolitan areas in Spain (such as Madrid and Bilbao, NEL.LO, 1998b), is accompanied by a historically very significant phenomenon: over the last fifteen years the Barcelona metropolitan region has tended to lose weight relative to Catalonia as a whole (it represented 71.2% in 1981, and only 69.4% in 1996).

There are, as has been fully explained by the demographers (MMAMB, 1995; ARRIBAS & MÓDENAS, 1996), two reasons for this stagnation: on the one hand, the low inward bound migration after the very intense mobility during the period 1960-1975; and on the other, the low natural growth rate. The latter, which affects Catalonia as a whole, is primarily the result of a very low birth rate, which has brought the total fertility rate down to lows for which it is not easy to find parallels either in Europe or the world (1.14 children per woman in Catalonia, 1.0 in Barcelona, far from the reproduction threshold of 2.1). This, in conjunction with the intrametropolitan migratory movements, which we will discuss later, has led to a drop in the relative weight of the population under 15 years old in Barcelona (from 21.3% to 11.9% between 1981 and 1996). At the same time, the continuous increase in life expectancy (73.5 years for men and 81.5 for women) means that the city, with 1 in 5 inhabitants over 64, has one of the highest ageing rates of all the central municipalities of large Spanish cities.

Does this mean that a gradual decline in the population of this area is inevitable? This would depend on two factors. In the first place, migrations. Whereas migration from other parts of Spain remains low, the migratory pressure from countries outside of the European Union is extraordinarily high. It should be taken into account, therefore, that any change in Spanish or European law governing this migration would result in the rapid entry of population, mainly young.

The future evolution of the birth rate, on the other hand, is a more complex question. Experts have established a connection between the fertility rate and the age at which young people leave the parental home, which is tending to rise notably. According to data taken from the

Metropolitan Household Survey[4], the percentage of young people between the ages of 25 and 29 living independently in the metropolitan area declined from 60% to 39.3% between 1985 and 1995. As is known, there are two principal requirements for independent living: an adequate and stable income; and that the total resources available be sufficient to cover the cost of such independence (VERGÉS, 1997). Thus, the lack of job security together with the high cost of housing (and the scarcity of rental accommodation) must necessarily have retarded the age at which young people leave home, and consequently the age at which they start to have children. There are, however, factors which point to the possibility of significant changes in this respect, especially with regard to the future of the housing market. The stagnation of prices over the last five years, the reduction of the average floor space, and, above all, the decline in interest rates has led to an important reduction in the economic effort necessary for the acquisition of housing (from 7.5 to 5.6 times the mean annual disposable family income in Barcelona between 1989 and 1996). This trend may perhaps contribute to the relaunch of the birth rate, which the demographers, citing the example of other European regions, have repeatedly predicted.

3. Population settlement patterns: Increasing suburbanisation?

Demographic stagnation has been accompanied in recent years by an important shift of the population within the metropolitan region. The data from the census show that, between 1991 and 1996, the migratory balance (positive or negative) was the principal component of demographic change in 141 of the 163 municipalities in the Barcelona metropolitan region. This shift consists, in the first place, of movements whose dominant direction is an exodus from the central areas towards the outer metropolitan belts (SERRA, 1997; MÓDENAS, 1995; DURÀ, 1995). The case of the city of Barcelona itself is the most striking with a mean negative migratory balance of over 20,000 inhabitants per year between 1991 and 1996; but the negative balances of the other large municipalities in the central area, such as l'Hospitalet, Santa Coloma and Badalona, for example, are also high. Furthermore, large municipalities are, in general, tending to lose population to smaller ones (this phenomenon also affects many of the larger cities located in the second metropolitan belt, such as Sabadell, Mataró and Granollers).

Over a century ago, Jacint Verdaguer, the great poet of the Catalan renaissance, said with respect to Barcelona: "Com tu devoren màrgens i camps, i es tornen pobles / los masos que et rodegen, ciutats los pagesius" [5] Today this process continues, and it has perhaps reached its final consequences. But, unlike what occurred during the final decades of the nineteenth century, and continued throughout a large part of the twentieth century, the gains of the small and medium sized urban nuclei are now accompanied by losses in the population of larger towns and cities. The population of the Barcelona metropolitan region is tending to spread out over the whole area.

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[4] The *Enquesta sobre les condicions de vida i hàbits de la població de la regió metropolitana de Barcelona* is a comprehensive Metropolitan Household Survey carried out every five years since 1985 in the metropolitan area of Barcelona. Data from this source are extremely useful in the study of social and urban dynamics in the city and the metropolitan area.

[5] "Devouring, like you, fields and terraces, the nearby farmhouses become villages, while the hamlets become towns."

Nothing in this scenario differs radically from what is occurring in the majority of large Spanish cities (NEL.LO, 1998b). Moreover, the increase in metropolitan mobility -both on a daily basis and at weekly and irregular intervals- renders increasingly debatable any measurement based solely on the notion of the resident population (subject, moreover, to distortions for fiscal and other reasons). Thus, the work of demographers who introduce a time variable into their population calculations (for example the "day/population" estimates for the municipalities of the metropolitan region), in spite of its still exploratory nature, throws new light on the subject (MENDIZÀBAL, 1993).

Nonetheless, even with respect to resident population, decentralisation could come to an end in the not too far distant future. The models of urban evolution do not exclude, as we know, the possibility of a phase of urban recentralisation after the absolute decentralisation phase. This could happen in Barcelona, as the life cycle of the people who have left the city in recent years moves on, and as the part of the Barcelona housing stock which is currently underoccupied re-enters the market. In this respect, it is the 45.9% of the stock occupied by only one or two people that is important, rather than the 69,908 dwellings (10.4%) which according to the 1991 Census were unoccupied (a figure that is certainly only partially correct) (RÀFOLS, 1997).

4. Employment: A shift to the service sector and less job security?

The diffusion of the population settlement pattern within the Barcelona metropolitan region has been accompanied by a profound transformation of the economic base. Undoubtedly the most significant component of this transformation has been the tertiarisation process. In a relatively brief period (scarcely three decades), we have seen a change from an economy overwhelmingly dominated by industrial activity to one in which the service industry is pre-eminent. Census data indicate that in 1991 the industrial sector represented only 28.6% of jobs in Barcelona and 37.5% in the metropolitan region as a whole, compared to 64.7% and 54.3% respectively in the service sector. Later estimates, based on Social Security records and surveys, confirm the continuity of this trend.

Without rejecting this evidence we must, nonetheless, add two clarifying comments. The first concerns the statistical classification of employed persons. As is well known, the fragmentation of productive processes and the decline in the average size of companies means that many jobs previously classified as industrial (in sales, accounts, design, etc.) now appear as services because the work is carried out by separate companies. The second point is that we should not confuse what in many cases is merely relocation with deindustrialisation. A careful reading of the available data shows that, while the decline in the relative weight of industrial employment is general within the metropolitan region as a whole, industry is resisting better in the metropolitan belts than in the core city.

This trend towards tertiarisation has been accompanied by a reduction in the average size of companies and by a decline in job security. According to data taken from the Metropolitan Household Survey carried out in 1995 (prior to the most recent changes in the legislation concerning the labour market), one out of every three people working in the Barcelona

metropolitan region had only a temporary work contract or no contract at all. The survey reveals a sizeable increase in these precarious job situations between 1990 and 1995 (17%): and it shows that they were more prevalent in the service sector than in industry, and more common in the construction industry than in the service sector.

From the point of view of social welfare, this trend -which coincides, moreover, with low activity rates and high unemployment- raises important questions. While tertiarisation might not lead to a decrease in the value of production (but rather the contrary since the added value produced by an employee in the services sector is on average higher than that produced by an industrial worker), it could, however, contribute to a deterioration in working conditions, and an increase in inequalities with respect to income distribution (middle-level income categories being better represented in industry than in the services sector) (NEL.LO, 1994).

5. The decentralisation of production: An undeniable benefit?

The third phenomenon that has characterised the evolution of Barcelona's economy in recent years, together with tertiarisation and the flexibilisation of contractual conditions, is the decentralisation of employment. The relative weight of the number of jobs located in the city of Barcelona has declined considerably with respect to that of the rest of the metropolitan region and of Catalonia as a whole. It should be noted, however, that the original situation was one of heavy concentration: in 1975, Barcelona, home to 43.6% of the population of the metropolitan region, accounted for 56.2% of jobs. Since then, however, the loss of relative weight has been considerable in periods of both expansion and recession. Although the total number of jobs in the city was almost the same in 1991 as it had been in 1975 (761,165 jobs as against 796,820 in 1975), the relative weight of the city with respect to the metropolis as a whole was 48.0%, representing a decline of over 8%. During the same period, the relative weight of employment located in the first metropolitan belt remained stable (varying only from 23.8% to 24%), while the second belt experienced extremely rapid growth, going from 20.1% to 28.0%. In relative terms, therefore, as has been noted on numerous occasions, the growth of employment in the second metropolitan belt exceeds even its population growth (MMAMB, 1995). In the absence of data from the most recent census, economists have estimated that during the 1991-1996 period, the loss of jobs located in Barcelona has fluctuated between 6.5% and 10% (in the context of an 8.2% decline in population), which appears to clearly confirm the continuity of the trend towards decentralisation (TRULLÉN, 1997; CLUSA, 1997).

As several authors have explained, this process may be associated with the segmentation of the productive processes, and the emergence of new forms of productive organisation. It brings some undeniable benefits, the most obvious being the greater availability of jobs and services in the metropolitan belts, where previously they were scarce and unevenly distributed. A clear distinction should be made between the benefits that could be derived from a loss in the relative weight of the city, and an absolute loss of activity and value produced. If the latter were to occur and, above all, if it affected strategic sectors (such as the advanced services sector, which was already growing faster in the metropolitan belts than in Barcelona in the period 1986-1991), the consequences would be unfavourable for both the competitive edge of the metropolitan region as a whole, and for its internal social balance. The urban centres

located within the metropolitan region undoubtedly have great potential and attraction (accessibility, fixed capital, image), but they also suffer from important disadvantages (congestion, high land values, lack of green-spaces, etc.). These disadvantages are only counterbalanced by the availability of activities, services, and high level infrastructure that attract companies and citizens drawn by the benefits that can be derived from locating near such amenities. Thus, as many American and European cases have shown, after a certain point, the exodus of activities and certain sections of the population from the metropolitan centre leaves these areas in a difficult situation, and from being one of the area's principal resources, they becomes one of its major problems. Barcelona is, fortunately, very far from this situation, but it is perhaps important to keep these facts in mind.

6. Commuting and residential patterns: The extensive use of space?

The dynamics of the spread of population and activities throughout the region described above raise the question of the use of space on the part of metropolitan society. All the indicators appear to point to the fact that the traditional model of a complex and compact Mediterranean city is giving way to a more diffuse urban structure in which areas are more functionally specialised.

Let us look at this first on the basis of the data on commuting patterns (NEL.LO, 1995; MMAMB, 1995). The process of metropolitan integration, which we referred to in the first section, has given rise to a sharp increase in the need for the population to travel within the region. Where commuting is concerned, in two out of every three municipalities in the metropolitan region more than half the employed people work outside the locality where they live. This phenomenon affects municipalities of all sizes and is gaining force rapidly. Whereas in 1986 the mean rate of municipal self-containment was 67.6%, by 1991 this figure had dropped to 61.9%. The data from the 1995 Metropolitan Survey, apart from confirming the continuity of this trend with respect to commuters, also indicate that citizens are increasing their mobility throughout the territory in order to satisfy their shopping and leisure needs, increasingly purchasing goods and services in other municipalities or in Barcelona. Thus, with ever greater frequency, the inhabitants of the metropolitan region live in one municipality, work in another, and shop or spend their leisure hours in a third, fourth or fifth. These habits give rise to a great demand for transport infrastructure. Furthermore, the personal daily itineraries of these new patrons of the transport system are increasingly less radial and, very often, extremely irregular. This makes it difficult to meet their needs with mass public transport and explains -together with the low investment in public transport- the ever more widespread reliance on private vehicles (which accounted for 42.6% of commuter journeys in 1990 and 47.1% in 1995, while during the same period the share of public transport dropped from 25.3% to 24.5%).

This trend towards the ever more extensive use of land is corroborated by the data on residential mobility. Just as people now seek work outside the locality where they live, change of residence is associated in more cases with a change of municipality within the metropolitan region. The Metropolitan Household Survey indicates that while only 1 out of 3.6 changes of residence in the period 1980 - 1989 involved a change of municipality, between 1990 and 1995

the proportion was 1 out of 3.1. Of these, the destination was the second metropolitan belt in 47.3%, the first metropolitan belt in 34.8%, and Barcelona in only 17.6%. According to the citizens' own statements, the principal motives for these moves were differences in the conditions and prices of housing (GARCIA & JANÉ, 1992; DURÀ, 1995).

The answer to the question as to whether there is extensive use of the territory on the part of the citizens is, therefore, clearly affirmative. It is a trend that has some consequences which are, up to a point, positive, such as the reduction of the high population density in some of the central areas of the metropolitan region. We will go on to discuss the implications of this trend with respect to the consumption of natural resources (which, as we will see, are particularly important in the case of land and energy). However, the dispersion of urban development raises numerous other questions of a cultural, social and economic nature.

7. The breakdown of the daily routine: The intensive use of time?

One of the phenomena that fascinated early observers of life in modern metropolises -from Dickens to Benjamin- was how time is organised in the urban context. Simmel's celebrated aphorism concerning the disruption that would be caused by the simultaneous breakdown of all the clocks in Berlin, provides the key to the origin of this interest: metropolitan time, urban time, is an extraordinarily regulated, compartmentalised, and ordered sequence. And these qualities -which are related to its commercial nature- lie at the root of the frenzy of urban life, of the accelerated movement characteristic of the metropolis. Thus, the idea of "lack of time", the feeling of not having "free time", the fear of "wasting time" have become some of the principal concerns for many people. But, is the use of time by the inhabitants of Barcelona this intensive?

Until very recently no data was available that would answer this question, but recent contributions (SUBIRATS, 1998) have thrown light on the subject and show, initially, that the problem affects the city's inhabitants in very diverse ways depending on their personal characteristics. Using data from the Metropolitan Household Survey, sociologists have shown that, while the average time people in the metropolitan region allocate to sleeping has not changed (approximately 8 hours), the time spent on other activities has changed considerably. Between 1990 and 1995, the average amount of time working people dedicated to paid employment tended to decline. Time spent on housework is also tending to fall, as is time spent commuting (a surprising finding in light of the increase in the distance involved in the normal commute, probably attributable to improvements in the transport infrastructure). On the contrary, free time (that is, the rest of the day, the time people dedicate to eating, dressing, taking care of themselves, shopping, family life, etc.) has increased considerably both in the population as a whole (which has on average 9h 44m available for these activities), and in the working population (with 6h 30m of free time).

However, the availability of time is distributed in an extremely unequal manner depending on the gender and age of the person concerned. On average, men dedicate twice as much time as women to paid work (4h 40m for men, compared to 2h 23m for women in the population as a whole, and 8h 32m as against 7h 11m for working men and women respectively). On the other

hand, women spend four times more time than men on domestic tasks (0h 52m for men and 4h 05m for women in the population as a whole, and 0h 43m and 2h 41m for working men and women respectively). Over the last five years, a trend towards convergence has been observed in this parameter, but it is very slight. On average, men enjoy more free time than women (10h 10m compared to 9h 22m in the population as a whole, and 6h 41m and 6h 02m for working men and women respectively). The distribution by age also reveals marked differences, especially for men, among whom the dedication of time to paid work is concentrated principally in the 25-55 age group, after which age in many cases it ceases suddenly. The problem, therefore, does not appear to be a lack of time but rather the unequal distribution of free time. A shortage of free time affects above all working people, young adults, who in addition are usually those who have the most disposable income to fill their leisure time with activities, and the visibility of these groups contributes to the generalised sensation that all sections of the population are suffering from a lack of time.

There is, however, another aspect which should be taken into account, and that is the quality of the free time available. It is often made up of fragments, "dead time" and transitional moments, which are difficult to take advantage of (PRATS, 1997). The opening hours of businesses, public service offices, the timetables of schools and public transport, and the inflexibility of the working day, all make it more difficult to use this time creatively. Initiatives undertaken recently by the Barcelona City Council reveal the nascent interest of the local government in this question. If the Barcelona metropolis wants to improve the quality of life of its inhabitants, increase the level of its services, and resolve some of its functional problems, not only will it have to organise its space, it will also have to rethink in depth the organisation of its time.

8. Income: Increasingly wealthy?

The evolution of the mean, per capita income of the inhabitants of the Barcelona metropolitan region has in recent years clearly been positive. Studies carried out by the Institut Valencià d'Anàlisi Econòmica (REIG, dir., 1997) have shown that the real growth rate of per capita income in the province of Barcelona between 1975 and 1993 was 1.47% per annum, so that (in 1990 pesetas) it rose from 940,337 pesetas in the period 1964-1975 to 1,421,306 in the period 1991-1993. It is also interesting to note that between 1985 and 1995 the per capita Gross Domestic Product for Catalonia went from 87.01% to 95.03% of the mean for the European Union-15 (at purchasing power parity). In this context, therefore, it can be asserted that the citizens of the Barcelona metropolitan region are today, on average, growing richer.

However, since wealth is a relative concept some important clarifications are necessary here. In the first place, it should be pointed out that the per capita income of Barcelona (province) is tending to converge with the Spanish and the Catalan average. Thus, while in the period 1964-1975 the income of the inhabitants of Barcelona was on average 41.24% higher than the Spanish mean (141.24 in index numbers where Spain=100), in the 1991-1993 period this difference had dropped to 22.35%. Barcelona is the only one of the Catalan provinces where income has evolved in this way, since during this period all the other three Catalan provinces have evolved positively with respect to Spain as a whole. Consequently, the position of

Barcelona province is declining relative to Catalonia as a whole. Whereas in the period 1964-1975 its per capita income was (in index numbers) 104.03 with respect to the Catalan mean, the same figure in the period 1991-1993 was 98.95, representing a drop below the average for Catalonia.

Data provided by the Institut d'Estadística de Catalunya relating to net per capita disposable family income in the Catalan *comarques*[6] confirm this situation from another perspective and allow us to analyse it in greater detail. According to this source, in 1991 only one of the seven metropolitan *comarques*, the Barcelonès, was included among the ten best situated Catalan *comarques*. It occupied eighth position, well behind *comarques* such as the Vall d'Aran, Cerdanya (in the Pyrenees), Alt Empordà, Gironès and Selva (in the Costa Brava area). In the same list, the Maresme and Garraf ranked 13th and 17th respectively, while the Alt Penedès, Baix Llobregat, Vallès Occidental and Vallès Oriental came even lower, and were below the Catalan average. The image of a rich urban Catalonia in contrast to a poor and declining rural Catalonia, which has been the subject of so many articles, books and academic and political discourses, does not, therefore, in any way reflect the current situation.

9. Education and language: An increasingly educated population?

One of the best indicators of the level of social welfare of a city is the educational level and cultural consumer habits of its population. Education and training are also, clearly, two important factors affecting the competitiveness of the city in many fields of activity. The data available on this subject reveal that a very positive evolution has taken place in this field in the Barcelona metropolitan region and that, in principal, it can be said that the population of Barcelona is increasingly more highly trained and educated.

According to data taken from the Metropolitan Household Survey, in 1995, 10.8% of the population had a university education, 30.2% had ceased their studies after completing secondary school, and 39.5% after completing primary school. A total of 19.5% still reported having no education. It should be noted, moreover, that more recently the situation has shown rapid improvement. Thus, in the population resident within the ambit of the disbanded Metropolitan Corporation the percentage of people over 18 without any formal education decreased by half between 1985 and 1995 (from 29.3% to 15.7% among men, and from 40.9% to 23.3% among women). During the same period, the population with primary or secondary education rose from 58.6% to 70.8% among men, and from 52.3% to 65.4% among women. The population with higher education also increased, both in the male population (from 12.0% to 13.5%), and particularly in the female population (from 6.8% to 10.9%). In 1995, 2 out of 10 young people under 26 had finished university, and only 3 out of 10 had stopped their education after primary school.

Another important aspect is the increase in the number of people with a knowledge of the Catalan language. Studies based on data from the Metropolitan Household Survey have shown

[6] A *comarca* is a Catalan administrative unit, including different municipalities and similar, to some extent, to a county. There are 41 *comarques* in Catalonia (which has a total surface of some 32.000 km^2).

that although the linguistic groups remain very stable with respect to the way citizens identify themselves according to their native language (with the exception of a slight, but significant, increase in the group of people who refuse to chose between Spanish and Catalan and state that they are "bilingual"), knowledge of Catalan is gaining ground to a notable degree. Whereas, in 1985 only 26.6% of the population over 18 resident in the municipalities of the Metropolitan Corporation stated that they knew how to write in Catalan, ten years later, in 1995, this figure had risen to 38.6%. The percentage of persons who stated that they were able to speak Catalan went from 61.2% to 68.2%, and that of those who said they could understand it from 92.1% to 96.0%. This increase occurred particularly in the young population: 81.2% of residents in the metropolitan region aged between 18 and 25 stated that they were able to speak and write in Catalan.

In spite of these data, and others which could be cited, it is evident that a great deal still remains to be done in this field. We would like to highlight just three points. In spite of the increase in the overall level of training and education, 3% of the people resident in the metropolitan region still state that they are illiterate (two out of every three people in this situation are women). A person coming from a low income family now has greater possibilities of obtaining a university degree, but in 1995 only 1 out of every 10 young people between the ages of 26 and 35 coming from a family in a low social-professional category had obtained this kind of qualification, as against 5 out of every 10 children of families in a high social-professional category. The provision of cultural facilities has improved notably, but only 14.6% of the people resident in the metropolis state that they regularly go to the cinema, 7.0% that they frequently visit museums or exhibitions, and only 2.9% say that they go often to the theatre.

10. Social inequality: Reducing disparities?

One of the recurrent conclusions we find in the sociological literature concerning the European and North American city is the observation of an increase in social inequality which often occurs in such environments. Thus, it has often been said that the internationalisation of urban economies and the flexibilisation of the productive processes is giving rise to an increase in social inequality which, in turn, results in phenomena, such as social polarisation or even dualisation in large metropolitan areas. However, on the basis of the data available on income distribution, it does not appear that this is happening in Barcelona. On the contrary, what is discernible is a certain reduction of the inequalities both between different areas and between social groups. We should add, however, that the data at our disposal relating to this subject - both measurements by indirect methods and those taken from surveys- pose important methodological problems which oblige us, therefore, to treat them with caution.

The data available relating to differences in mean disposable family income between the municipalities of the metropolitan region show that the metropolitan belts are situated on average below the Barcelona municipal area, but that the trend is towards convergence (ARCARONS et al., 1994). Likewise, the data from the Metropolitan Household Survey for the period 1989 -1994 indicate that, taking the mean family income in Barcelona as 100, that of the families in the first metropolitan belt went from 77.1 to 80.5, and that of those in the second

belt from 79.8 to 87.1. On the other hand, the data also show a decline in the inequality of the distribution of household income within each one of the scales analysed. Thus, the statistical analysis of the Surveys of Family Budgets 1980/1981 and 1990/1991 (REIG, dir., 1997) show that, for the province of Barcelona as a whole, the Gini concentration coefficient applied to the distribution of the total income by deciles of households dropped, between the years of reference, from 0,3313 to 0,3207. Coincidentally, the results of the Metropolitan Household Survey show a reduction of the coefficient of the same variable between 1984 and 1994, from 0.437 to 0.400 in Barcelona and from 0.376 to 0.312 in the first metropolitan belt.

Economists have indicated that the improvement of Spanish welfare schemes (retirement and disability pensions, widows pensions, unemployment benefit and other aid) may have played an important role in this relative reduction of inequalities, especially in low income groups (RECIO, 1998). In the metropolitan region the percentage of people living in households that received some kind of state benefit increased between 1990 and 1995 from 42.7% to 50.2%. During the same period, owing in part to the ageing of the population and to the economic conjuncture, the percentage of people living in households that depend solely on this type of income increased from 16.7% to 22.0%.

This trend towards a relative decline of the inequalities between households and geographical areas does not in any way negate either the persistence of very pronounced differences between different social groups and geographical areas, or alter the fact that the situation of certain segments of the population is very serious. Finally, it is important to remember that besides the inequalities associated with income there are others -related to gender, age and other factors- which, although they are tending in some cases to diminish, are still very marked.

11. The environmental impact: An acceptable cost?

In the foregoing ten sections, we have seen how metropolitan Barcelona is growing and spreading out over the territory. We have also seen how, in spreading out, the population of the metropolis is increasing, in spite of the low birth rate, ageing and emigration from the central areas. We have also explained how this metropolitanisation process has been accompanied by a pronounced transformation in the area's economic base. Beside the traditional industrial activities, the service sector has grown so much that it is now the primary source of income. At the same time, new, more flexible, open and decentralised forms of production have evolved. Throughout this process -with the intervention of the diverse agents and of the public administration- metropolitan society has become, in general terms, richer, more educated, and perhaps less affected by inequalities. But we have shown, nonetheless, that serious problems still persist with respect to external competitiveness, land use, urban functionality, housing, employment, inequalities of income and opportunities. At this point we should ask ourselves what impact the transformations of the last two decades are having on the environment. In order to analyse this question in depth, we would need much more space that we have here, and much more information than we have at our disposal at this time. We will limit ourselves, therefore, to discussing the implications of three phenomena which seem to us to be of particular importance: the increases in travel, the consumption of land and of energy.

The most visible impact of the urban spread we have described is, undoubtedly, the consumption of land. Data provided by the team which is drawing up the *Pla Territorial Metropolitá* indicate how much this consumption has increased in recent years. In 1880, only 1,763 hectares of the 323,000 that make up the territory of the metropolitan region were developed; slightly less than a century later, in 1972, urban land cover accounts for 21,482 hectares. Now then, this figure doubled in the two following decades, reaching 45,036 hectares in 1992 (SERRATOSA, 1994). This means that urban development in the metropolitan region has consumed as much land in the last twenty years as had been used in the entire past history of the city and its environs.

This elevated pace of urban development, which is also common in other principal Spanish cities, has provoked situations close to saturation point in several municipalities, and represents a major mortgaging of future growth. Moreover, the expansion of urban, and therefore impervious, land cover has a negative effect on the maintenance of aquifers, while increasing runoff and the risk of flooding in an area which owing to its climate and topography is already susceptible in this respect. But, from the point of view of the environment, the principal effect of land urbanisation is, without doubt, the progressive isolation and fragmentation of open spaces.

The metropolitan region has an important heritage of spaces of natural interest. In recent years, a great deal more attention has been paid to the planning of these spaces so that many of them now enjoy some form of legal protection. Nearly one fifth of the territory in the metropolitan ambit (62,439 hectares) is designated as space of natural interest and is therefore protected. Now then, these spaces are generally located in the high and sharply inclined areas of the two low mountain ranges which, running parallel to the sea, structure the metropolitan territory: the Serralada Pre-litoral (which includes the Montseny, Sant Llorenç Serra de l'Obac, and Montserrat Natural Parks, among others), and the Serralada Litoral (the Montnegre, Corredor-Sant Mateu, Collserola and Garraf Parks). The progressive development for urban use of the green-spaces located in the plains between these ranges (the Vallès and Penedès for example) contributes to the encircling and isolating of these protected areas. Thus, as has happened in so many other urban areas, the green-spaces are becoming progressively reduced to isolated pockets. This may have very negative effects on the maintenance of biological diversity, on the survival of the natural systems and on the exercise of the compensatory function which such open spaces can have.

One of the main objectives of the *Pla Territorial Metropolitá de Barcelona* -which, as we have said, is currently in the process of being drawn up- will apparently be to defend green-spaces and ensure, by way of biological corridors, that these natural areas remain connected so that they can function as a single system. It is undeniable, however, that the effects of the urban development and fragmentation that have affected Barcelona's green-spaces in recent years are now practically irreversible.

The second aspect of the metropolitanisation process that has had a significant impact on the environment is the increase in travel. The increasingly more extensive use that the citizens make of the territory when choosing a place of residence, going to work, or seeking services

translates, logically, into an increase in mobility. Since the origin and destination of trips are ever more frequently found in low density areas, this increase in mobility is satisfied by the growing use of private vehicles. It is not a simple task to evaluate the cost of this increase in mobility, but the data available give cause for concern. An approximate estimate of the effects of the decline in the capacity of the municipalities to be self-contained with respect to employment is very significant. In 1986, the working population resident in the metropolitan region was 1,243,063 people, and intermunicipal commuters represented 32.4% of the total. Five years later, in 1991, (the last year for which census information in this field is available) the working population had grown to 1,579,805 persons, and intermunicipal commuters accounted for 38.1% of the total. Thus, a 27.1% increase in the working population produced a 49.6% increase in intermunicipal travel. If the increase in employment had taken place in such a way that the municipal self-containment had remained the same in 1991 as it had been in 1986, there would have been 90,575 less intermunicipal journeys in one direction.

This decline in municipal self-containment represents, according to our calculations, some 223.7 million kilometres per annum of additional travel, and some 12.3 million additional hours spent in commuting. In 1991, the direct annual cost to the users of this increase in commuting distance was some 24,385 million pesetas (the equivalent in Spanish prices of the construction of about 24 kilometres of motorway) (NEL.LO, 1997).

Nor should we forget the environmental cost of this increased mobility, which can be measured in terms of pollution, the impact of the necessary new road infrastructure, and the higher consumption of energy. With respect to air pollution, it should be noted that, in general terms, the municipalities of the metropolitan region do not generally exceed the admissible regulatory levels. According to the Xarxa de Vigilància i Previsió de la Contaminació Atmosfèrica de la Generalitat de Catalunya (the Catalan's government's Network of Atmospheric Pollution Monitoring and Forecasting), which measures the levels of 9 primary pollutants (NO_2, HCT, H_2S, CO, SO_2, Cl_2, Pb, black smoke and total number of particles in suspension), only 1 of the 163 metropolitan municipalities habitually exceeds the limits of H_2S (Prat de Llobregat owing to industrial pollution). However, pollution levels associated above all with traffic and urban activities (particularly solids and black smoke) are exceeded habitually in 10 metropolitan municipalities.

More visible are the impacts on the environment of the road transport infrastructure, the great expansion of which is now the cause and effect of the increase in mobility. In the last ten years, the network of fast arterials and restricted roadways (motorways, express ways etc.) within the metropolitan region has been extended considerably with the construction of numerous new stretches of road. Projects that stand out include the Barcelona Ring Roads, the Vallvidrera Tunnel, the Terrassa-Manresa motorway, the prolongation of the A-19 motorway (in the Maresme) and the A-16 (in the Garraf), the Parpers Axis (between Mataró and Granollers) and the express way being constructed along the right bank of the Llobregat River. The implantation of this new infrastructure has had significant impact on the environment, both in terms of the direct consumption of land and the barrier effect of the roads (not always mitigated by the necessary corrective measures). On the other hand, it should be pointed out that the growth of the road network -which has undoubtedly made possible greater integration of the

labour market within the area and has probably increased its competitiveness- has not been accompanied by a comparable investment in the public transport network, so that both the underground and the commuter train system, despite the improvements that have been introduced in their management, have seen how the expansion of their respective networks has remained practically stagnated.

With respect to the consumption of energy associated with mobility, it should be indicated that the consumption of liquid fuel for transport purposes is growing in absolute terms and represents an important component of the total consumption of energy. In 1996, according to data supplied by the City Government, in the city of Barcelona alone 310,152 m^3 of gasoline and 288,512 m^3 of diesel were consumed, and the consumption of energy for transport purposes represented 42.8% of total energy consumption (AJUNTAMENT DE BARCELONA, 1997). The increase in energy consumption related to mobility is taking place in the context of a general increase in recent years in the consumption of water and the principal sources of energy, due in part to economic growth but also to new trends in urban living. For example, the consumption of electricity in the city of Barcelona has risen from 3,622.7 Gwh in 1986, to 5,189.3 Gwh in 1996; an increase of 43.2% in ten years, as against a loss, during the same period, of 11.3% of the resident population. The consumption of piped gas in the city has also risen during this period from 1,927.8 to 2,642.9 million therms, an increase of 34.3%. Finally the consumption of water in the city has moderated slightly, going from 138.9 hm^3 in 1986 to 119.3 hm^3 in 1996, representing a daily consumption of 210 litres per inhabitant. In the rest of the metropolitan region, for which no comprehensive data are available, the consumption of water per inhabitant is probably higher because of the diverse typology of the housing stock and the presence of irrigated farmland.

This rise in energy consumption has been accompanied by a significant increase in solid urban waste. Thus, still restricting ourselves to data relating to Barcelona alone, the volume of household waste collected went from 500,406 tons in 1986 to 627,134 tons in 1996, meaning that the production of waste per inhabitant has increased from 286.2 to 415.6 kilograms per annum. Four fifths of this waste is dumped in the Garraf tip, a large facility which receives some 869,000 tons from Barcelona and other metropolitan municipalities annually. The rest of the city's waste is incinerated and electricity is produced in the process. It should also be pointed out that selective waste collection (of glass and paper as well as plastic and metal containers) has increased by 54.7% between 1993 and 1996. In 1996, 20,596 tons of this material was recycled.

Finally, it should be noted that in Catalonia the government has made a very notable investment in the treatment of waste water. The number of waste water treatment plants in the region as a whole has gone from 91 in 1992 to 174 in 1996, and the annual volume of treated water from 362 to 526 hm^3.

A review of the environmental balance of these years reveals therefore a combination of bright spots and shadows. While, on the one hand, it is evident that the level of awareness has increased a great deal, and that the measures of control have represented advances in some fields (water treatment and air pollution above all), the overall evolution evidences serious

deficiencies. The break with the traditional model of a Mediterranean city -dense, compact and complex- and the progressive substitution of a more diffuse settlement pattern -less dense and more socially and functionally specialised- has had important impacts on the environment. Impacts whose clearest expression is surely the rapid occupation of land, the intensification of mobility, and the rise in energy consumption. It would appear to be a difficult task to ensure compatibility between the consequences of this development and the maintenance of a quality environment, the future welfare of the population, and the competitiveness of the metropolitan economy. The city's future depends, therefore, in good measure on its ability to successfully meet this challenge.

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VERENA STOLCKE

"The sex of biotechnology, nature in culture"

THE SEX OF BIOTECHNOLOGY - NATURE IN CULTURE

Verena Stolcke

"According to all media reports, genetic determinism is a paradigm whose time is here and now; everyone will get better as their biotherapists become richer." (Strohman, 1997, p. 196).

"I don't know whether there are many man who are like me in this, but I have always wanted, even as a younster, to carry a girl of my own blood in my arms. I have always thought that that this would give me a kind of fulfillment without which my existence as a man would be incomplete." (Maalouf, 1993).
"Among all glands, the one which has the greatest influence on the potency and quality of the spirit are the testicles. The great poets, genial artists, the conquerors and even the saints, are usually strongly sexual." (Carrel, 1935).[1]

"Cloning is the only predictable way to reproduce... Sexual reproduction is a crapshoot by comparison." (Myhrvold, 1997)[2]

The sensational and disturbing news of the creation of Dolly, the clone, confirms the impression that while the twentieth century was the century of physics, the twenty-first century will be that of biology (Craig Venter & Cohen, 1997, p. 32). Dolly is just one illustration of the vertiginous progress that is taking place in biotechnology which the molecular biologists' fascination with conquering the ultimate secrets of life has precipitated. Even though cloning of humans seems a distant possibility,[3] the moment has moved closer when 'man' will be at last capable of redesigning his own species. Biotechnological laboratories, drug companies and Wall Street investors who put down enormous sums of money on genomic research are confident about the extraordinary technological and economic potentialities of biotechnology.[4] Nor is the academic world, of course, immune to the irresistible charms of biotechnology. Hardly had

[1] Alexis Carrel, L'homme, cet inconnu, Paris, 1935, quoted by Marti (Marti, 1995, p. 32). Carrel was a physician, biologist and had received the Nobel prize in medicine in 1912. He was a staunch advocate of eugenics.

[2] Nathan Myrvold is the technological director of Microsoft, one of the major firms in the field of informatics which is now investing heavily in biotechnology.

[3] The first known experiment in human cloning took place in 1979 when L.B. Shettles of Columbia University transplanted male germ cells into human eggs (Blanc, 1981). The evolutionists F.J. Ayala and J.W. Valentine at the time condemned human cloning as a threat to democratic society. Mundo Cientifico, 180, June 1997, p. 545. When the science journal Nature was about to publish the Roslin Institute's report describing the procedure of cloning the sheep Dolly received an anonimous letter from a Harvard University scientist who drew attention to the probability of human cloning with mature cells within the next ten years. The author asked the journal to withhold the report in view of the lack of debate and clarity on the bioethic implications of this scientific "achievement". "Caught napping by clones - Pleas for ethical advice on mammalian cloning rveal a lack of foresight", Nature, 385, 1997, http://www.nature.com.

[4] "Biotechnology: betting on the genome. The genomics gamble", Science, 275, 7 February 1997, pp. 767-775 for a detailed assessment of the range of enterprises involved in investigating the human genome and the vast sums invested.

Dolly seen the light of the stable did Lee Silver, professor of molecular genetics of Princeton University, for example, announce a new seminar with the catchy title "Sex, Babies, Genes and Choice". As Silver explained in futuristic terms, in this seminar he intended to examine "contemporary practices such as genetic-based abortion, 'wombs-for-rent', sperm and egg markets, frozen embryo banks, and genetic selection of children-to-be from embryo pools." Besides, he would also look at "the biological and cultural evolution of sex and its changing relationship to reproduction" and consider "possible scenarios in the not-so-distant future that include shared genetic motherhood of fatherhood for gay couples, computer-generated embryo profiles for viewing by potential parents, and stem cell insurance." (Silver, 1997, p.1).[5]

Cloning has radically transformed the procreative process in mammals. When I was gathering information on cloning I was struck by a notable paradox in contamporary production of knowledge. It is as if during the past fifty years molecular biologists and social and political scientists had been inhabiting separate and distant planets. Whereas in the life sciences since the fifties genetic determinism has become the dominant paradigm, socio-cultural analyses of the contemporary globalized and fragmented world are increasingly beset by profound scientific scepticism and all manner of relativist cultural differentialisms (Wolfe, 1996). While molecular biologists seek to unlock the secrets of the human DNA taken to be the blueprint of all life, socio-cultural anthropologists are steeped in cultural analysis and politics of difference.

Watson, Crick and Franklin's discovery in 1953 of the structure of DNA brought new energy to prevailing genetic determinism in the form of a theory of life circumscribed to the gene. In the following decades this theory evolved into a thoroughly molecular form of mecanicist genetic determinism. Biology entered a phase of glorification of the gene even if dissident voices can by now be heard and there are signs of the beginnings of an epigenic revolution (Strohman, 1997; Goodman & Armelagos, 1998).[6] Nonetheless, as Watson declared almost four decades after having

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[5] Professor Lee Silver is also a member of the Coordinating Committee of Science, Technology, Ethics and Politics of Princeton University.

[6] A distinguished critic of present genetic determinism is R.C. Lowentin (Lowentin, 1991). As Strohman, emeritus professor of the Department of Molecular Biology and Cells of the University of California, Berkeley, notes, there is a notable absence of correspondence between genetic and evolutive changes. The interaction between DNA, proteins and the determination of organic functions is far more complex than the gene theory pretends since, as the advocates of an epigenic theory maintain, a sort of feed-back occurs on account of the regulation of the genetic expression by the environment (Strohman, 1997).

identified the double helix, "We used to think our fate was in the stars, now we know, in large measure, it is in our genes." (Watson, 1989). In the social sciences, on the contrary, the crisis of the great modern universalist liberal, humanist and marxist narratives has spread profound doubts about the very possibility of objective knowledge and has been replaced by the postmodern pursuit of cultural meanings. As social anthropology has become a humanist and moral discipline concerned with human intent and responsibility there is a notable difficulty in incorporating biological perspectives for they seem to threaten assumptions on meaning and accountability (Littlewood, 1997, p. 7).

It would be an over-simplification to see hegemonic genetic determinism in biology as a mere pseudo-theory designed to justify the socio-political status quo. The powerful consensus around genetic determinism has produced real and dramatic advances in biotechnology independent of the controversial assumptions about what is actually in the genes on which they are based (Strohman, 1997). Moreover, it can hardly be denied that science and technology are influenced by the sociopolitical environment in which they evolve, and in turn influence the cultural values and sociopolitical relationships that engender them. Cloning provides a disturbing opportunity to examine the intersection not only between genetic determinism and socio-cultural assumptions but between biotechnological innovations and socio-structural processes, that is, to detect the links between the new 'facts' created by biogenetic research and society. The divorce between the biological paradigm driving on biotechnological experiments and developments and the interpretative turn in the social sciences should be confronted to identify the point where the culturalist and the geneticist view of the world in which we live converge. Yet, it is insufficient to deconstruct and situate the determinist genetic paradigm historically. Careful attention needs to be paid to the very material transformations of 'the facts of life' biotechnology has brought about.

Cloning: cultural reason versus biological facts

My aim in this paper is threefold: to identify the biological facts of cloning and uncover the motives that may favour the application of this technique among humans. This will provide the background for assessing the effects cloning may have both biologically and culturally, its potential consequences for consecrated Western notions of conception and in particular for women.

Francois Jacob, Nobel prize in medicine, reacted to Dolly, the sheep, with prudent irony. Jacob reckoned that "for a long time we attempted to have pleasure without children. With in-vitro-fertilization we have children without pleasure. And now we have come to make children without pleasure and without spermatozoa...Evidently this changes family structure somewhat...for the moment at least among sheep." (Nodé-Langlois & Vigy, 1997). That is, cloning is about sex and familiar relatedness.

Among anthropologists notions of familiar relatedness and kinship systems have occupied a singular, prominent place among subjects that have exercised their minds which paralleled the keen interest in "primitive" cosmologies, especially those which denied the discontinity between the social and the natural world. Peculiar notions in distant cultures of genesis, procreation and kin relatedness defied our 'forefathers' intimate bio-genealogical convictions on the 'facts of life'. Ever since, a quintescential dilemma has beset kinship studies, namely whether the social bonds anthropologists traditionally identified as kinship were engendered by biological facts of procreation whose key stone is sexual intercourse or ought to be viewed, instead, as social artifacts to be understood independently of biological processes. Yet, as has been noted, if kin relationship are conceived as one sort of culturally constituted bonds with no necessary connection with procreation, analysists are then hard put to distinguish them from other kinds of social relationship. Conversely, if kinship replicated biological facts of engendering it became difficult to account for the diverse meanings with which it is endowed in different cultural environments. Schneider and Needham, though never great friends, reacted to this dilemma in 1971 agreeing that kinship as a privileged, objective, unitary phenomenon warranting a coherent theory did not exist (Needham, 1971; Schneider, 1971). Schneider attributed the presumed cross-cultural ontological reality of kinship to anthropologists having projected their own Western ethnocentric bio-genealogical assumptions on other cultures (Schneider, 1984). Schneider never enquired, however, into why so-called Euro-american familiar conceptions are thought to replicate biological facts so closely. It was Delaney, one of Schneider's distinguished disciples, who took up this challenge in her incisive analysis of conceptions of conception in the great monotheistic religions (Delaney, 1986 and 1991). All this is a familiar story. It is not always realized that those who deny kinship a trans-cultural reality of its own use biological procreation as their bottomline argument.

The developments in feminist theory in the past decades in a way replicate the kinship debate. Feminist anthropologists began to scrutinize the meaning biological difference in the roles of men and women in procreation had for the cultural organization of gender in the seventies (Collier & Yanagisako, 1987). The vagaries of feminist theory may be summed up as a conceptual movement from sex difference as the explanatory datum of women's subordination to gender as a socio-cultural construct and more recently back to sex. In the beginning feminists assumed that the biological fact of maternity accounted universally for all ills affecting women, our domestication at the service of all others, be they the children, the fathers of the children, the world. In defiance of those who attributed prevailing sexual orders to nature and biology, some of us soon insisted on and endeavoured to identify the socio-economic circumstances which accounted for manifestly diverse experiences of maternity in history and society. By revealing the socio-political and symbolic mechanisms due to which maternity in a patriarchal order meant women's material and emotional dependence and hardship we overcame the early demonization of maternity. In the eighties in particular Black women made us realize that the experience of being a woman and a mother varies notably depending on whether one is poor or rich, White or Black and/or belonges to other cultures. We thus learned to distinguish between biological facts - sex difference and its consequences in the realm of reproduction of humans as a species - and gender referring to the social construction of relationships between women and men under concrete socio-political circumstances which endow "the facts of life" with varying symbolic meanings, or even denying a necessary link between sex and gender (Collier & Yanagisako, 1987). Throughout this often controversial conceptual-theoretical trajectory the distinction between sex and gender acquired, as Barret and Phillips have noted, an almost talismatic character, sex exclusively applying to the purely biological difference that distinguishes females from males physiologically while gender referred, instead, to the assembly of ideas and symbolic meanings regarding the emotional, pychological and behavioural traits with which femininity and masculinity are associated in specific socio-political contexts. Sex difference was thus reduced to its smallest denominator, the recognition that women's procreative capacity and rights constituted a political factor. "Feminity" as an inferior form of humanity whose plenitude man represented, was condemned as a distorsion of women's own human potential (Barrett & Phillips, 1993, pp. 1-9).

The analytical distinction between sex and gender in feminist theory had the merit of challenging the essentialist rationalizations of gender hierarchies. The dissociation between biological and hence universal and immutable facts of life and symbolic orders rooted in culture and, therefore, liable to change revealed the enormous historical-cultural variability of gender systems.

The consensus on gender in feminist theory colapsed in the eighties under the impact, on the one hand, of black women's critique of white feminists' ethnocentrism and the crisis, on the other, of the rigid distinction between sex and gender. Women in the more privileged parts of the world have succeeded in improving their socio-economic conditions and contraceptives have increased women's ability to decide on procreation but sex differences have proved not only more resilient but women's experience of maternity and an ethics of caring have been reclaimed as the foundation of alternative conceptions of morality. The universalist denial of sex differences came to be interpreted as a capitulation to male values (Barrett & Philipps, 1992). The new differentialist conceptual shift in feminist thought has endowed women's experience with new positive value, illustrates also persistent theoretical difficulties involved in the distinction between biology and socio-cultural constructs for it did not solve the crucial issue as to which difference in the last instance makes the difference. "It is one thing", Phillips has noted, "to argue for heterogeneity and diversity to be written into our theories of equality and justice; it is quite another to accept 'the' difference and rearrange our thinking around that. And one of the things this indicates to me is that, notwithstanding the conceptual difficulties feminists have raised around the distinction between sex and gender, we will continue to need some way of disentangling the differences that are inevitable from those that are chosen, and from those that are simply imposed." (Phillips, 1992, p. 23).

Let me now return briefly to kinship. By the seventies kinship studies ceased to be a favorite pastime among Anglo-saxon anthropologists. The birth of the first test tube baby in 1978 achieved by extrauterine fertilization initiated, however, a new wave of kinship studies confined mostly to feminist scholars. With rare exceptions who were agnostic about the conceptual and legal dilemmas the new reproductive technology raised by confounding cherished Western convictions of the past that kin relatedness invariably originates in the encounter in sexual intercourse of a sperm and an egg, this momentous event went practically unheeded among mainstream anthropologists (Héritier-Augé, 1985;

Rivière, 1985). Feminist scholars proceeded, instead, to examine the bewildering new age of potential multiple parenthood by in-vitro-fertilization together with the heated ethical and juridical controversies over how to define legally and socially the new kin bonds so engendered in order to determine the social and political consequences assisted conception had in particular for women (Stolcke, 1986, Strathern, 1992, Edwards et.al., 1993, Franklin, 1997). By contrast with feminists engaged in the politics of difference and their recent recovery of sex, students of assisted conception came to view kin relationships "after nature", to quote Strathern apt title, as more evidently cultural than ever before (Strathern, 1992).

The culturalist consensus in kinship studies is not, however, complete. There are significant conceptual differences over the relevance of biological facts for kinship, though seldom do they seem to be acknowledged by Anglo-saxon anthropologists. Francoise Héritier stands out in France for having sustained for some time that although kinship systems do not translate biological facts of procreation they, nevertheless, necessarily take into account three basic biological data, namely the acknowledgement of procreation which implies the succession of generations, sexual reproduction characteristic of humans and the birth order among siblings born to a couple. "These three natural relationships," Héritier wrote, "express the difference in the relationships between feminine/masculine, between father/child and between the first and second born (Héritier, 1996, pp.53-4). Héritier's thoughts about the linkage between biological facts and their social translation into kinship are not always clear. Still, her assertion that safe in the event of cloning relationships of descent, even when they are deduced from no particular event of procreation, ultimately relate to the idea of sexual reproduction which "necessarily refers back through females and males to the paternal and maternal status, to the paternal or maternal as the support of the bond with the group is as intriguing as it turns out to be prophetic (Héritier, 1996, p. 278).

Cloning: what will become of sex?

Phillips as well as Héritier wrote well before Dolly, the clone of a sheep, was born. Scientists had been trying to clone animals from adult tissue for decades. The achievement of Wilmut, Dolly's "father", consists in having demonstrated that it is now possible to envisage procreation of adult mammals in an asexual fashion. The majority of anthropologists may be convinced that kin relationships are everywhere cultural artifacts which have little to do with

biological facts of procreation. Cloning in humans may seem a distant even if not improbable eventuality. Still, by radically recasting "the facts of life", cloning recasts the elusive bio-cultural enigma of kinship and of sex/gender in the broader context of deeply rooted modern Western dualist conception of culture and nature which has inspired Western arrogant quest to dominate nature. Western common sense usually distinguishes the realm of nature, that is, of that which is naturally determined, from that of culture understood as the product of human creativity in society, as if they were two evidently distinct and separate dimensions of human experience. Anthropologists are, of course, aware that notions of nature are culturally relative but when they undertake to analyse particular cultural conceptions of nature they tend to do this assuming their really existing separateness, the realm of culture precisely constituting the characteristic field of socio-cultural anthropology. One important consequence of anthropologists privileging "culture" over "nature" in their interpretations of human experience is the omnipotent disregard for the materiality of the dramatic transformations of "nature" humans have engineered. Cloning is just one instance.

The "immaculate conception" of Dolly, the clone of a sheep, has created genuinely new natural facts. Cloning entails more than a simple sophistication of ordinary assisted conception aided by biotechnology. Cloning transforms the biological procedure of conception qualitatively by eliminating sexual conception. But cloning having been achieved by human intervention simultaneously blurrs the conventional separation between what is "artificial" and what is "natural" in a peculiar way (Kalka, 1997, p. 2). Thus, Dolly, the Scottish sheep allows us to examine anew the intersection between the biological fact of sexual dimorphism and sexual procreation which hitherto have been characteristic of the human species in their relation with cultural and symbolic meanings. By dispensing of sexual conception, after Dolly's creation sex suddenly once again matters. For as long as humans have walked on this planet, they have manipulated and transformed their own "nature" no less than that surrounding them. Socio-cultural creations and meanings are, nonetheless, circumscribed by in material realities.

Hegemonic bio-genetic determinism in science and in popular common sense have generated a qualitatively new "fact of life" in the form of cloning. To comprehend the human consequences of this far-reaching transformation of the biological process of conception we need to look further afield beyond socio-cultural motives and meanings that may lead to cloning of humans and the new conceptual uncertainties cloning may provoke. We need to take into

account the materiality of the bio-genetic developments to assess the "nature" of this new "fact" and the broader conditions which may make this "fact" possible in the first place precisely because "culture" and "nature" do not constitute separate realities.

A passion for genetic descent

Governments and institutions clamor for the regeneration of the sacred family and treasured family values, otherwise in evident decline. Women in the wealthy countries are encouraged to bear more children. The older new reproductive technologies (artificial insemination and in-vitro-fertilization), did, indeed, obviate the genuine pleasure of having sex in good company. Conception assisted by several donors of reproductive materials have defied Western biologist assumptions which rooted kin relatedness in sexual intercourse. and eroded familiar notions of family relatedness. Yet, cloning entails an additional spectacular biological and symbolic aspect. Cloning not only eliminates sexual reproduction among mammals but in particular the participation of the male in conception. One should not be carried away by the sensationalist outcry in the media nor succumb to simple-minded conspiratorial interpretations of the potential effects this new turn of the technological screw in matters of procreation may have for humans. Scientific and technological progress has a powerful logic of its own which usually transcends its concrete effects and does not occur in a socio-cultural and political vacuum.

With the 'immaculate conception' of Dolly scientists have overcome another barrier in the creation of life ("Genetic engineering. Building to order", 1997, p. 97). The first clone of an ewe elicited widespread alarm in scientific, social and political circles provoked above all by the possible abuse of cloning of humans. Liberal advocates, beside underlining the potential medical benefits of cloning, tend to minimize the risks involved arguing typically that even if cloning were technically feasible also in humans this does not imply that it would be done. Critics reply that whatever is scientifically possible has been put into practice and demand that cloning of humans be outlawed. Fainzilber of the Molecular Neurobiology Laboratory of Stockholm exemplifies well the vexing ethical problems human cloning is felt to raise because of the dilemma of how to reconcile broader human interests with individuals' right of choice. Fainzilber agreed that scientific knowledge acustoms to be used and developed no matter ethical considerations and hence might

demand being regulated but he wonders at the same time whether, for instance, parents of a young child fatally injured in an accident could be denied cloning of viable cells recovered from the child's body (Fainzilber, 1997, p. 431).

Dolly is a normal sheep safe for its conception whose genetic endowment is substantially that of the cloned adult ewe. Dolly has three 'mothers' but no 'father'. According to the dramatic description one can find on internet, "to clone Dolly, Wilmut and his colleagues took a mmamary gland cell from a six-year-old ewe. Wilmut then removed the nucleus of a sheep egg cell taken from a different ewe, and inserted the mammary cell into the now nucleus-free egg cell. Wilmut then zapped the two combined cells with a jolt of electricity, and to general amazement the combined cells acted like a fertilized egg cell and began to divide, using the DNA from the mammary cell as its genetic blueprint. He then implanted the now developed embryo into yet another ewe, and in a few months Dolly was born, an exact genetic copy of the ewe from which the mammary cell had been taken." ("A spark of science, a storm of controversy", 1997, p. 2).

As the media uproar over Dolly's creation subsided there remained from among the multitude of more or less fantasmagoric scenarios one weighty and important issue, namely, as the renowned science journal Nature. Biotechnology made a point to note, the "apparently more realistic debates on infertility", that is, the debates on the potentials of cloning for curing certain types of infertility in humans ("Thinking about cloning", 1997, p. 293). And the National Bioethics Advisory Commission asked by President Clinton to draw up policy recommendations on human cloning proposed that cloning in humans for implantation be banned arguing that "the history of infertility treatment - especially of in-vitro-fertilization - demonstrated that where there is a sizeable and well financed demand for a novel service, there will be professionals willing to try to provide it." (Wadman, 1997, p. 644).[7]

A common reaction to the bioethic alarm over future human cloning has been to dismiss this probability as pure science fiction. Ian Wilmut, Dolly's creator, though acknowledging its technical feasibility, himself played down the probability of human cloning relegating it "to the world of science fiction." (Kolata, 1997a, p. 30; "L'hypothèse d'un

[7] The 'fathers' of the first test tube babies were, of course, also approached to give their opinions about cloning. Neither mentioned cloning as an infertility treatment. Robert Edwards thought that germ cells could be made available by means of cloning for the fabrication of organs for transplant in cases of disease or accident whereas Jacques Testart was generally critical of the technique (Postel-Venay & Millet, 1997, p. 546).

clonage humain est jugée possible mais inaceptable", p. 22). As a passionate scientists, he believed, all the same, that "one cannot detain the advance of science thinking about what could happen." The benefits of this discovery would anyway surpasse by far its potential risks. (Ramos, 1997, p. 6). Anticipating future biotechnological feats, the Roslin Institute of Edinburgh where Dolly was born, in May 1997 applied for registration of the patent of its procedure of cloning not only for animals but also for humans! (CNN, 1997).

To assess the actual chances of cloning of humans transcending the realm of science fiction and becoming reality and what this radical recasting of the natural procedure of conception may entail for our conceptions of conception and for gender relations it is instructive to go back over the history of biotechnology.

As I have shown elsewhere (Stolcke, 1988), Man's dream to create life is an old one. Until the postwar extrauterine fertilization in humans was similarly a mere fantasy. Still, the Italian physician Spallanzani had shown already in the 1770s that contact between seminal fluid and the egg was essential for fertilization to take place. In the late 1770s, he successfully inseminated a bith, although the penetration of the egg by the spermatozoa was not discovered until 1879. Given the simplicity of artificial insemination consisting simply in depositing the semen of a man in the vagina of a woman, it comes as no surprise that the first successful attempt in humans dates back almost 200 years. In 1799, Hunter in England achieved the first pregnancy with semen of the husband, a feat Thouret in France replicated in 1804. And Pancoast in the Unites States carried out the first insemination with donor semen in 1884 in the case of the husband's azoospermia. Critics usually allude either to Mary Shelley's famous dystopia Frankenstein, the fable of a scientist who by usurping the right to generate life ends up creating a nameless man-monster, or to Aldous Huxley's Brave New World to draw attention to the dangers of a science devoid of moral responsibility. More pertinent and prophetic are, however, the eugenic utopias of two distinguished biologists, the British J.B.S. Haldane and the Northamerican Nobel prize in medicine H.J. Muller. In 1923 Haldane published Daedalus, the utopian description of a perfect society achieved by eugenic breeding of children by ectogenesis (Haldane, 1923). Only little later, in 1936 Muller wrote Out of the Night. A Biologist's View of the Future, an eugenic utopia foreshadowing a 'brave new world' peopled by a race supremely intelligent and cooperative. Artificial insemination, the culture and storage of sperm from great men (his heroes were Lenin, Newton, da Vinci, Pasteur, Beethoven, Omar Khayyam, Pushkin, San Yat Sen, and

Marx), the recovery of eggs for extrauterine fertilization, embryo transfer, and sex selection to eliminate genetic defects and determine the sex ratio at the service of a new science of eugenics abolishing classes by improving human's intellectual and moral qualities. Muller was convinced, at it turned out rightly, that "...all this is no idle dream. It not only certainly can be done - I believe it certainly will be done." (Muller, 1936, pp. 145-55).

Haldane and Muller shared their enthusiasm for eugenics with most of their contemporaries but they were no laissez-faire social darwinists. On the contrary, they proposed planned eugenic breeding as a path to social betterment. It is noteworthy that both Haldane and Muller actively participated as volunteers in the Spanish Civil war on the Republican side. Muller condemned the fascist use of genetics but never questoned the elitist premises of his own theory, however. He also defended the liberation of women from the 'martyrdom' of involuntary motherhood but harboured no doubts about instrumentalizing women at the service of his eugenic dream.[8]

In-vitro-fertilization began to be developed in the thirties although research using human eggs advanced only slowly. Reproductive technologies used in cattle breeding to increase efficiency and profitability usually preceded their application to humans. In the 1960s experimentation with in-vitro-fertilization of female eggs received new impulse and in 1978 the British scientists Steptoe and Edwards fathered the first baby conceived by in vitro fertilization and embryo transfer. Since then some thousands of children have been born by what has come to be benevolently known as "assisted conception".

Assisted conception is at once a result and necessary condition for embryological experimentation at the service of biogenetic research and depends on the development of ever more sophisticaled biotechnologies. The cloning of adult mammals is the latest achievement in the race to know and conquer the principles of life. But as I suggested above, in strictly biological terms cloning implies much more than just another quantitative advance in reproductive technology. In-vitro-fertilization consists in improving on natural reproduction and/or in overcoming physiological

[8] Haldane and Muller are by no means exceptionial. Other scientists more recently share their enthusiasm for planned procreation inspired by an elitist genetic determinism. William Shockley, Nobel prize in physics in 1956, planned to create a sperm bank to breed children of other fellow Nobel prize winners. Joshua Lederberg, Nobel prize in medicine, advocated in 1966 for cloning humans to 'reproduce superior individuals'. Joseph Fletcher in 1974 defended the creation of human clones specialized in certain tasks and MacFarlane Brunet, also Nobel prize in medicine, in a book of 1978 called attention to the great advantages systematic genetic selection of individuals would have (Postel-Venay & Millet, 1997, p. 545).

obstacles for natural conception by technological means without altering qualitatively, however, the basic "facts of life", that is, sexual reproduction which is a species characteristic trait in mammals. Cloning, by contrast, entails a fundamental alteration of the process of procreation for conception by cloning occurs without and therefore dispenses with sexual reproduction.

In-vitro-fertilization was presented at first as just one more scientific-technological achievement in the culturally and sexually neutral quest to conquer the secrets of life to better satisfy human needs and desires. Yet, as feminist scholars have demonstrated, these old new reproductive technologies meant a substantial increase in medical-technical control of human reproduction whose privileged objects were women to the extend that because of physiological differences between the sexes these technologies require above all the manipulation of women's bodies. The privileged site and material of embryological experimentation are eggs, the womb, the bodies of females. When Francois Jacob quoted the prophetic assertion taken from Diderot's Conversations with d'Alembert in the preface to his celebrated book of 1970, The Logic of Life "Do you see this egg? With it you can defeat all schools of theology, all churches of the world" (Jacob, 1973) he was precisely alluding to the special embryological value of the egg.

Apart from the ambitions of scientists, their pursuit and competition for fame and the economic profits involved, artificial insemination and in-vitro- fertilization responded, indeed, to a socio-cultural demand, namely the desire for biological parenthood by means of technological motherhood. The British Warnock Report on the legal and ethical implications of the new reproductive technologies made the nature of this desire quite explicit:

"Childlessness can be a source of stress even to those who have deliveratitely chosen it... In addition to social pressure to have children there is, for many, a powerful urge to perpetuate their genes through a new generation. This desire cannot be assuaged by adoption." (Warnock, 1984, pp. 8-9).

But what is the root of this 'intense desire to perpetuate one's own genes'? Could it also be in our genes? Although the biological process of procreation and the different contributions women and men make to conception are universal, anthropology has, of course, demonstrated that notions of maternity and paternity associated with conceptions of conception vary greatly cross-culturally.

In view of this ideal of genetic inmortality it seems paradoxical that assisted conception which permits the participation of third, forth or even fifth parties in the act of fertilization, would appear to call into question conventional biological concepts of parenthood and above all of paternity as occurs in the case of fertilization with donated semen, ova, or embryos and surrogate motherhood, while motherhood has, instead, become technically more "natural". The vast juridical literature on assisted fertilization by donor focuses mainly on the legitimacy of the child, the legal status of the donor and the doctor's responsibility. Opponents of fertilization by donors are generally oblivious of women's concerns focusing mostly on the rights of the father or the child. The Spanish professor of law Balcells Gorina, of the Catholic lay organization Opus Dei, already in 1980 argued that "Sperm banks mean a real dehumanization of paternity" and rejected heterologous insemination - fertilization of a woman with the semen of a male donor who is not her husband -because it constitutes adultery (Balcells Gorina, 3 May 1980). This concern to protect paternity has followers also among jurists and the State for, as they warn, the new reproductive technologies provide women with "a socially adequate instrument to dislodge the husband (Balz, 1980, pp.21-22). In vitro fertilization allows for the implantation of a woman's eggs fertilized in the laboratory for gestation in a woman's hired womb which may provoke disputes between the two women involved as the most famous litigation in the United States over who was the rightful mother of Baby M illustrates. But the biological participation of both women in the process of procreation can hardly be disguised. With assisted conception the status of men as fathers has, by contrast, become very uncertain adding further to the Western contemporary crisis of masculinity (Badinter, 1993).

New genetic paternity

Biotechnology has, however, found a remedy for growing paternal frailty. Almost two decades have gone by since the birth of the first test tube baby. During these years assisted conception has progressed greatly above all in the field of assisted biological paternity. In February of this year a baby girl was born conceived by means of a combination of two pioneering techniques: the freezing of eggs and their insemination by injecting sperms into the oocyte's cytoplasm ("Nace una niña concebida de un ovocito congelado e inseminado", 1997).[9] This new in vitro fertilization

[9] A further example of the speed at which biotechnology advances is the recent news of three successful pregnancies achieved with frozen eggs ("Equipos de EEUU e Italia logran que nazcan tres bebés a partir de óvulos congelados", 1997).

technique is denominated ICSI (intra-cytoplasmatic sperm injection) and allows men whose sperms are abnormal and even those who are incapable of producing mature sperms to procreate. Whereas until now the insemination of the woman with donated sperm was the only option couples whose male partner was sterile owing to low sperm quality or levels had to procreate, it is now perfectly feasible for a man to achieve biological descendance by means of injecting one single sperm of his directly into the oocyte of his partner. There are men, as a doctor who works in the field of assisted conception told me, who are willing to undergoe up to eight surgical interventions for the sake of extracting one single spermatozoa from their testicles.

The development and enthusiastic social acceptation ICSI although experimental evidence on its safety was still flimsy, is not a mere biotechnological issue but has to do, as the French geneticist Axel Kahn, has pointed out, with

"the current strong social and psychological trend towards a fanatical desire for individuals not simply to have children but to ensure that these children also carry their genes, even when faced with the obstacle of sterility (or death)...today's society is characterized by an increasing demande for biological inheritance, as if this were the only form of inheritance worthy of the name. One reason is that, regrettably, a person's personality is increasingly perceived as being largely determined by his or her genes." (Kahn, 1997, p. 2).

This biologization of descendance and this powerful desire for genetic paternity and maternity sound familiarly eugenic. New is only the biotechnological achievement of biological paternity. But even though with ICSI a single sperm is now sufficient for a man to have biological offspring, women's bodies, their oocytes and wombs continue to be, nonetheless, indispensable for biological paternity. Cells are the basic units of life but they need eggs to bring them to life.

The essential site of embryological experimentation and reproductive medicine out of which biotechnology has evolved are the bodies and the reproductive materials of women. As I indicated earlier, new reproductive technologies accustom to be used initially in cattle breeding. Referring to cloning, Dr. Alain Nivot, head of the French laboratory Procrea FIV, drew attention to the fact that "cattle breeders will need wombs, more so still than in in-vitro-fertilization or the transfer of embryos, and therefore cows, but males will be no more than animals to be replicated, models which will be bought by the unit." (Duparq, 1997).

The fanatical desire for inmortality embodied in the ideal of having biological descendance carrying one's own genes is founded in the biologist cultural conception of fatherhood and motherhood as blood ties paradoxically typical of Western notions of kinship. This kinship imagery of blood and genes is part and parcel, as I have argued elsewhere, of the contradictory modern Western ideological 'habitus' to attribute individuals' social condition to biological endowment in modern class society otherwise deemed to be composed of autonomous, self-determining subjects. Since the eighteenth century, scientific naturalism which sought to discover the laws of nature that accounted for the order in nature and society gradually replaced previous theological-moral explanations and classifications of things in the world. Scientific naturalism as the new secular context of knowledge not only inspired modernity's pursuit of control of nature and progress but served simultaneously to reconcile the liberal ideal of the modern self-determining individual born equal and free with deepening social inequalities and new national boundaries by presenting them as being in the nature of things thereby neutralizing them politically. In the latter nineteenth century determinist biological doctrines such as social Darwinism, eugenics, and scientific racism provided the endeavour to disguise the socio-economic roots of social inequality and political inclusion and exclusion with a scientific basis (Stolcke, 1993). As Goldberg has noted with respect to the contradictory modern tendency to naturalize the modern free subject, "This is a central paradox, the irony perhaps of modernity: The more explicitly universal modernity's commitments, the more open it is and the more determined it is by the like of racial specificity and racist exclusivity." (Goldberg, 1993, p. 4).[10]

The traditional familiar metaphor was 'blood'. According to present day procreative convictions it is as if individuals' identity was embedded in their genes. Contemporary enthusiasm among scientists with genomics and genetic determinism which account to a large extend for research in the field of genetics indicates that biological determinism far from being an anachronic survival of past times, is not only striving but forms part of Western society's self-representation.

In the light of this "familiar" genetic conception of conception it comes as no surprise that the issue of what makes a person's identity should occupy a central place in the controversy prompted by the prospect of cloning of

[10] It should be noted, however, that racism is not the only form modern doctrines of exclusion take but that their argumentative structures and the naturalist assumptions on which they are based may vary (Stolcke, 1995).

humans. A German journalist, for example, asked Wilmut whether Dolly was not in a sense a reincarnation of the cloned adult ewe ("Jetzt wird alles machbar", 1997). Though the question may have been a provocation this journalist indirectly and perhaps inadvertently put the finger on a fundamental ethical-legal problem cloning of humans is felt to pose, namely what, exactly, a human being is. The moment at which human life is believed to begin proved to be one sticking point in the debate over a ban on cloning of human cells and over where the limits of biotechnological experimentation should be drawn to protect human dignity without, however, wiping out biomedical research (Coale, 1997, p. 1-2).[11] Ironically, those who are opposed to cloning in humans being outlawed shed serious doubts on identity among humans being genetically predetermined so as to discredit the alarm on the part of advocates of a ban who, in turn, precisely emphasize prevailing genetic determinist convictions (Mario, 1997, pp. 1-6; Newman, 1997, p. 488). As one defender of cloning pointed out, if Einstein had been brought up by an Amazonian tribe he would surely not have turned into the genius he was. Similarly, doubts have been voiced about whether Dolly was in reality the same as her genetic mother since organisms' genetic structure does not depend only on nuclear DNA but also on the mitochondria which live in the cytoplasm of the cells outside the nucleus and have their own DNA ("Updating on cloning: 'Dolly' is not the same as her genetic mother", 1997; Kolata, 1997).

Cloning: a shift in power?

Be this as it may, while contraceptives dissociated sex from conception granting women a greater say in procreation and the old new reproductive technologies have confounded traditional Western biological notions of kin relatedness, cloning which dispenses with sexual conception raises the important question as to whether it would resignify sex difference among humans. Cloning, of course, requires mature cells of the organism to be cloned but because they continue to be indispensable, it converts wombs and eggs into the most valuable and precious materials in procreation. Opponents of cloning denounce the deleterious effects cloning has in diminishing genetic diversity and adaptability and consequently the survival of species and for contradicting human dignity which demands that an

[11] But while cloning may be a seductive a technique to replicate one's own cherrished individual identity, the science fiction writer Ursula LeGuin, the daughter of Alfred Kroeber, some years ago described how multiple cloning of the same cell would paradoxically eliminate individuality (LeGuin, 1968).

individual should never be thought of only as a means, but always as an end (Kahn, 1997, p.3). The advocates of biotechnology and cloning emphasize their benefits for diagnosing and treating hereditary diseases, for the production of new drugs, of organs for transplant and for genetic engineering. But while a British microbiologist, for example, welcomed the controversy over cloning for calling into question the present tendency to exagerate genetic determinism (Postel-Vinay & Millet, 1997, p. 547), Kahn warned that precisely the fanatical desire to have biological descendance could indeed become a powerful driving force to condone cloning in humans as a technique to cure severe forms of sterility in men such as dysplasia or testicular atrophy:

"Applying the technique used by Wilmut et.al in sheep directly to humans would yield a clone 'of the father' and not a shared descendant of both the father and the mother. Nevertheless, for a woman the act of carrying a foetus can be as important as being its biological mother. The extraordinary power of such 'maternal appropriation' of the embryo can be seen from the strong demand for pregnancies in post-menopausal women, and for embryo and oocyte donations to circumvent female sterility. Moreover, if cloning techniques were ever to be used, the mother would be contributing something - her mitochondrial genome. This suggests that we probably cannot exclude the possibility that the current direction of public opinion will tend to legitimize the resort to cloning techniques in cases, where, for example, the male partner in a couple is unable to produce any gametes." (Kahn, 1997, pp. 2-3).[12]

Amidst the ethical and scientific hand-wringing over the repercussions which cloning could have for humanity and the anthropomorphic language in which this technological feat is often presented - one speaks of the egg donor, the mother that carries the fetus, and the mother that raises the child - there is no reference, safe for occasional ironical

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[12] The National Bioethics Advisory Commission which was asked by President Clinton to draw up policy recommendations on human cloning, heard a wide range of views which ranged from calls to treat human cloning as simply another form of assisted reproductive technology to 'grave concerns' from animal rights activists. Kass, a professor of social thought at the University of Chicago, for example, argued that human cloning would be impossible without unethical experiments and presents an unacceptable threat to human identity and individuality but one ethicist disagreed for a ban on cloning would infringe scientific and reproductive freedoms which were protected by the US constitution: hence, "cloning should receive the same protection as other non-coital methods of assisted reproduction." (Wadman, 1997, p. 204).

President Clinton's advisors are overall cautious regarding human cloning which for the time was 'morally unacceptable'. Scientists consulted by the European Union opposed human cloning for reproduction although they did not reject experimentation with embryos less than sixteen days old as long as they were not implanted in a womb ("Expertos en infertilidad de EE UU se muestran a favor de la clonación en humanos", El Pais, 8 June 1997, p. 26). But there is also evidence that the desire to have genetic offspring may give rise to all manner of frauds difficult to control. According to El País, a sect called the Raelians domiciled in Switzerland has been offering infertile or homosexual couples children conceived by cloning on internet to be produced by a company in the Bahamas (El Pais 10 June 1997, p. 35).

allusions to a future world without men, to what cloning might actually mean in particular for women. One exception is the German weekly Der Spiegel which reported that the German feminist journal Emma had welcomed this technological achievement for it opened a new path leading towards a society of women ("Jetzt wird alles machbar", 1997, pp.217-8). This may be no more than a misogynist imputation, an illustration of the dark fears the new conceptive and contraceptive technologies call forth in men on account of the freedom they grant women to control procreation. In actual fact, however, an asexual procreative future though making male genitors superfluous would hardly usher in a world of happy and free mothers.

Cloning in humans would, in fact, entail much more than a more extensive medicalization of procreation and a renewed defiance of traditional biological notions of kin relatedness. By dispensing with sexual conception and making procreation more evidently dependent on the availability of female body parts cloning might at first sight, instead, bring about a more radical reversal of Western conceptions of conception.

Hitherto, sexual dimorphism and sexual reproduction have been in the nature of the human species. Being, however, a dimension of life in society it makes no sense to think sex difference separately from society for, as we as anthropologists know only too well, these "facts of life" inevitably acquire symbolic meanings in concrete socio-cultural environments. Notions of maternity and paternity are never devoid of cultural meanings even when, as in Western society they appear to replicate biological facts. Gender values influence the way scientists describe their discoveries of the natural world. Although scientific textbooks portray female and male reproductive organs as systems that produce valuable substances such as eggs and sperms, male and female reproductive physiology is valued very differently. As Martin has shown, one textbook, for instance, described menstruation as the chaotic desintegration of matter while the production of hundreds of thousands of sperms and their race to fertilize an egg was depicted as a magnificent feat (Martin, 1997, pp.85-9). This is only one display of the conventional patriarchal monogenetic theory of procreation according to which man provides the life giving seed whereas woman furnishes the nurturing environment which Delaney has found to run through all monotheist religions (Delaney, 1986, 1991). A reverse feminine monogenetic theory of procreation is, of course, the Trobrianders' wellknown conception of conception made famous so long ago by Malinowski.

The Western image of woman as before all else a mother is nothing new. As the classic adage has it, mater semper certa est while according to the popular Brazilian proverb "fathers can be found at every corner". Traditionally, the certainty of singular paternity depended on the control of maternity. The prominence of the womb, the vessel of the male's seed, in Victorian representations of women's body, pertain to the argument according to which women are governed and defined by the natural procreative capacities while the man-father embodies the quintescence of human reason (Poovey, 1986, p. 145).

Even though Western society has not changed in any qualitative sense, the post-war sexual revolution coupled with contraception appear to have done away at least in the wealthy countries with this tangle of controls of women's bodies at the same time as the classic nuclear family is disintegrating before our very eyes. All this is true to an extend. In this neo-liberal world and an increasingly competitive and individualist social environment structured by a global division of labour into a miriad of hierarchically ordered functions, individual achievement has become the very basis of social condition. The value attached to individual merit and difference is attributed perhaps more than ever before, however, to innate abilities and endowment. Contemporary genetic determinism is evidence of this.[13] Similarly, even in advanced industrial societies women continue to be defined in an unmediated manner as mothers on account of their sexual specificity, that is, as the incommensurable "others" to men in an essential biological sense.[14] (Stolcke, 1992, pp. 87-111).

Notions of maternity and paternity the same as the contrasting monogenetic doctrines are symbolic elaborations which are situated in specific socio-cultural contexts. Despite the culturally diverse symbolic meanings of maternity and paternity, in strictly biological terms women have always been the limiting factor in the reproduction of humans as a species. The old new reproductive technologies and more so ICSI, the most recent cure of sterility in man,

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[13] The New Scientist recently reported on the study of 240 Swedish couples of identical twins of eighty years or over among whom. inspite of their long and diverse lives, 62 percent of the variations in their general cognitive abilities could be attributed to genetic factors. Hence, "after eighty or more years of conditioning by the social environment, nature emerges increasingly" (Holmes, 1997. p. 16). The media tend to vulgarize such findings fuelling geneticists prejudices. El Pais published this piece of news under the provocative title "Genes more than experience influence cognitive ability also in old people" (El Pais, 6 June 1997).

[14] Nature recently informed of a study according to which women's better social skills by contrast with men had a genetic root (McGuffin & Scourfield, 1997, p. 652).

instrumentalize women at the service of genetic parenthood and/or paternity. Cloning as a new asexual procedure of procreation transforms the "facts of life". But there is more to cloning than its strictly biological implications. Cloning constitutes a procreative bio-technique which while dislodging men from conception more radically transforms women-mothers into the primary sites of conception. Paradoxically, if on account of the powerful cultural desire to have genetic offspring cloning was applied in humans under the pretext of offering an infertility treatment for sterile men, these new biotechnologies might threaten to erode the very Western patriarchal monogenetic conception of procreation. Against the background of cherrished Western ideas of conception and bio-genealogical kin relatedness in a strongly genetically determinist socio-cultural environment cloning, by dispensing with sexual conception, could convert women not only into the reproducers par excellence and reinforce maternity as the fundamental destiny and responsibility of women but, in addition, give rise to a feminine monogenetic theory. The endowment of women, their wombs and eggs, with heightened reproductive value could, however, have perverse consequences. The obverse of women's maternal empowerment might not only lead to more extensive medical control but also to new forms of control by potential fathers. The creation of a clone of the "father" mentioned by Kahn is a case in point. Those who defend procreation, even by technological means, as a right should be aware that cloning cannot do without female body parts. Moreover, so long as the prevailing structures of social, international and scientific power persist, the potential new prominence of women as procreators resulting from the symbolic-technological "feminization" of reproduction can only entail new forms of domination by science, the State, by men as frustrated fathers.

Cloning of humans "without pleasure and without spermatozoa", is a procedure which will presumably be beset with multiple technical difficulties for some years. Nonetheless, Western bio-genealogical ideals of kinship coupled with sedimented eugenic convictions constitute a fértile ground for biotechnological progress. It would not be the first time that science fiction became reality. All the same, as Dr. Nivot warned in relation to the risks of cloning for biodiversity in cattle breeding, even if cloning achieved a good rate of success "it would still be necessary to breed rustic races so as to recover the old genes and carry out new miscegenations adapted to the market. This is reassuring." (Duparcq, 1997). This raises the question as to who would be assigned the role of and who would be in charge of procreating such "rustic races", reserves of the old genes, in humans.

JANET TOWNSEND

"Gender and agroecological change in land settlement in Mexico"

Gender and agroecological change in land settlement in Mexico

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I want to argue that in this postmodern world we still find both regularity and diversity in the gendering of environmental experience. First, Ishall remind readers of very consistent findings in the gendered outcomes of land settlement, and then I shall explore the case of gender in land settlement in the forests of southeast Mexico.

Gender in land settlement

'Land settlement' in Africa or India is the same as 'colonization' in Latin America, 'transmigration' in Indonesia or 'pioneering' in the United States or Australia. The World Bank has defined this as 'The planned or spontaneous movement of people to lands of *underutilized* agricultural potential'. I emphasis the word underutilized, because often the lands are occupied by indigenous peoples who are using the land fully according to their traditions and technology, but whose rights may not be respected by incoming individuals, private initiative or government. Examples would be in the agricultural settlement by Europeans of indigenous lands in North and South America, Australia or East Africa, or the more recent 'settlement'of the Amazon Basin or southeast Mexico.

In Voces Femeninas de las Selvas (Townsend et al. 1994, written for activists in Mexico) and Women's Voices from the Rainforest (Townsend et al. 1995), we show that in nearly all studies of gender in land settlement in lower income countries, women have been shown to

- lose economic rights, such as rights in land
- lose access to income
- suffer increased workloads
- lose their social networks and suffer severely from social isolation.

In Bolivia, Brazil, Colombia, India, Kenya, Malaysia, Mexico, Nigeria, Sri Lanka and Thailand, the same gendered outcome to land settlement has been demonstrated. Zimbabwe is the one excepetion, where gender issues in land settlement have been explored and women's relative position has not deteriorated. How can this regularity, this similarity of outcome in very different cultures, be understood?

For Thayer Scudder (1985:123), similar outcomes around the world are only to be expected. "People who undergo land settlement, whether voluntarily or compulsorily, respond to the process in predictable ways...This is true across cultures, partly because the stress of relocation limits the range of coping responses of those involved." To me, Scudder naturalises the outcome, reducing similar results in different cultures to

generalities of human behaviour. I believe that the similarity of gendered outcomes derives not from any natural order of things, but, primarily, from a common cause specific to place and time: specific to low income economies in the late twentieth century. For me, the explanation lies in the networks of authority behind land settlement, in the transnational community of development planners.

There have been transnational communities for as long as there have been territorial states: communities which cross national boundaries and whose members have more in common with each other than with other residents of the place in which they live. The Hanseatic League, parts of the Jewish diaspora, the British across their Empire are examples. Now that communication is so much faster and easier, such communities are much more easily created, using new communication technologies from flight through fax and phone to the Internet to facilitate interaction. They exist within many multinational companies and several ethnic diasporas. For me, the transnational community of 'development planners is a leading example. It has grown up over the last 50 years as 'experts', academics and even policy-makers in 'development' have together built a community of language and practice. They have talked to each other face-to-face, through electronic means and through print media; they have attended the same universities (especially in the North) and the same conferences; they have worked together on the same projects and in the same national and international agencies. They have a shared culture which, like all cultures, is constantly evolving and internally diverse, even contradictory. But, to me, this community (of which I am a member), has made and continued to make the same mistakes all around the world. Despite all the 1990s talk of participation and empowerment, real practices have changed little. For me, the shift from WID to GAD and GED has been of great importance to academics and other members of the community, but has had little effect for poor people anywhere. The community is still characterized by top-down planning, which is fantastically insensitive to cultural difference. In the particular case of land settlement, the similarity in gendered outcomes is produced by this community, the leaders of which are primarily white, Western and male. The community has its models of land settlement, which is has produced, modified, and reproduced. The planners talk and listen to each other; to the pioneers/settlers/colonists/transmigrants they talk, but do not listen. The same errors and outcomes are repeated in a multitutude of low-income countries (Townsend et al. 1995).

Dina Vaiou has asked us whether the realities which we research would be different if gender relations had been different. In this case, if the late twentieth-century transnational community of development planners had been dominated by women, land settlement would be different.

One twist to this story is that the four outcomes listed above for women in land settlement are long-established. They were first reported by Robert Chambers (1969) in his classic *Land Settlement in Tropical Africa*. This was a major text, widely studied in the community. Presumably his conclusions on gender were rejected by readers, perhaps

because they came a little early, before the big campaigns for Women in Development? But that is speculation.

I need to conclude this section with a statement of my own position, which is one of uncertainty. I think that at present the poorer countries would be better off without the debt which cripples their economies and social services, even if all aid were withdrawn. I do not know whether the poor of the world today would be better off or worse off if the development industry, with all its many good intentions, had never been created, and they had simply been abandoned to capitalism[1]. I do not agree with Arturo Escobar (1995) that the poor are worse off than in 1945: they live, on average, considerably longer, which can only be achieved by better nutrition and/or hygiene and/or vaccination. But I have a great deal of sympathy with many of his arguments.

In Southeast Mexico, five Mexican womena and I set out, in 1990 and 1991, to ask women pioneers in settlements recently created by felling the forests what they saw as their problems and what solutions they proposed (Townsend et al. 1994, Townsend et. al. 1995).

The lowlands of southeast Mexico

Much of Mexico is dry or even desert and most lies high above the sea, but the lowlands in the southeast are naturally clothed in tropical forest, even rainforest. Before the arrival of the Spaniards the wet tropical lands had been densely peopled from about 3000 BC (Nations and Nigh 1980). For all the remarkable biological wealth, European diseases, conquest and economic disruption almost emptied these wet, lowland areas of people. In colonial and then independent Mexico, population eventually recovered and grew, but it grew mainly in the mountain basins of the centre and southeast. The highlands of the Southeast were densely peopled, but in the forested lowlands only the Maya of Yucatan achieved dense rural settlement. Elsewhere in the lowlands, pockets of cacao, ranching or logging supported settlements. According to Fernando Tudela et al. (1989), rich and poor in the lowland state of Tabasco seem to have had easy access to an adequate diet until twentieth-century banana plantations, oil production and land settlement brought 'deteriorating development', malnutrition and mass poverty. We believe this 'deteriorating development' to be widely characteristic of the southeastern lowlands.

Railways and, later, roads brought exploitation to the forests, beginning with the railway across the Isthmus of Tehuantepec in 1907. The Mexican Revolution of 1917 gave all Mexicans the right to own land, but land reform was slow and its impact on the tropical forests delayed. Rather, massive state investment was concentrated in the dry north, in irrigation and irrigated land settlement, resulting in the 'Mexican Miracle' when Mexican agricultural production grew by five per cent per year from 1925 to 1965. In the Southeast most new settlement before World War Two was spontaneous and private, with low productivity and technology. After 1940, Presidents Camacho and Alemán promoted the 'Advance to the Sea' to occupy the tropical lowlands. From 1946, in theory, the landless could move to 'unoccupied' or 'national' land in the lowlands (sometimes occupied in

[1] In China, of course, they were subject to Communism, which achieved more for the poor in terms of life expectancy and literacy than did capitalism and the development industry in India, but that and tales of what happened in the USSR are other stories.

practice by indigenous people or others). There, the landless could form ejidos (land reform communities) and claim plots of up to 20 ha. for each family. This occured at Balzapote, La Corregidora, El Arroyo, La Planada and El Tulipán, where we were later to work. Private colonists could cultivate up to 300 ha. of crops or create ranches of up to 2,500 ha. In practice, the new laws gave landowners access to the thinly peopled lands of the tropics without the intended reduction of the pressure for land reform in the densely peopled areas (Revel-Mouroz 1980). There were official land settlement schemes, but it was not until the 1960s that land settlement became an important part of government policy and even then most colonisation was spontaneous. Especially in the 1970s, the dream was to repeat the Mexican Miracle by using big investments and modern technologies to occupy the tropical lowlands, as in Plan Chontalpa or Plan Balancán-Tenosique. The dream failed. Neither the technologies nor the administration were appropriate, so all the schemes destroyed the forest but none fulfilled their objectives. Nevertheless, much forest was cleared for ranches and many landless people did achieve new ejidos. Many of these provide cheap labour for private farms, since people can grow some of their own food but must find paid work. By the 1980s, there was little forest left and most new colonisation was in the Selva Lacandona, in Campeche and in Quintana Roo.

Much of this pioneering has been destructive in several ways. First, almost 90 per cent of the tropical forests of México have been cleared (Leff 1990). Second, bitter conflict has arisen as ranching destroyed the forest and restricted the access of poor people to the land across most of the wet tropical lowlands. In government-organised colonisation, many people were moved against their will. Nowhere was there effective consultation, although efforts are now being made. Indigenous groups have been displaced and exploited (Revel-Mouroz 1980b) although, as it happens, not directly by any of the communities which figure in this book. Extensive restrictions on felling the forest now mean hunger for the poor and lost profits for many of the prosperous.

Most agriculture, cattle production and forestry in southeast Mexico are unsustainable. High-technology initiatives such as rice production at Uxpanapa have failed (Ewell and Poleman 1980), ranching is extensive and environmentally destructive. So far, new initiatives in tree-planting and aquaculture have had little success. The lack of economic, sustainable systems is now familiar across much of the humid tropics, in contrast here with the period before the Spaniards came.

Methods

Over the two years we conducted questionnaire surveys in twelve communities in five states, in households selected at random, to establish living conditions, economy, demography and divisions of labour by gender and age. (In these areas, village leaders hold accurate lists of households so that random sampling is easy.) The questionnaire used in Colombia was modified by the Mexican authors for crops, land tenure and building materials. After administering each questionnaire, we conducted an informal interview if possible.

In each community we then asked some women to tell us the story of their lives, to give us an insider's view of what it is to be a woman in these communities. Where possible, we also

arranged women-only workshops, where women told us about their problems and proposed solutions.

From pioneering to agrarian crisis in Mexico

All the communities where we were able to work are new creations and still have difficulty in physical access to markets. The pioneers made communities out of the forest through many years of great hardship. Now the old people can say, 'My children don't suffer as we suffered' (Cristina, Cuauhtemoc). But all are now facing the same agrarian crisis which transforms women's lives: the change from food crops to cattle. In the wet tropical areas of Mexico, 'the cattle are eating up the people'. As soon as there is no more forest to clear, the settlers sow pasture.

The communities where we worked had all been spontaneous settlements. Often, men had come to inspect the new area, and had then brought their families. The pioneers would live in the forest, perhaps in a shack of palm-leaves under a tree, sleeping in hammocks or on the round poles of saplings. Privations were severe and often they had to divide one tortilla (pancake of maize flour) between two adults for a meal. Snakes and biting insects were daily problems. Markets or medical attention were at least a day's walk away so infections bore heavily on children, and many died. In some communities, 'the men felled, the women sowed' while babies slept in hammocks slung from the trees nearby. In others, women were fully occupied in the house. The pioneers began by living from their crops, sowing maize, beans, gourds and chillies in the ashes of the forest. A few products were carried for hours on their backs to market to buy salt, machetes and cloth. Eventually they would seek recognition as an ejido (land reform settlement) or colonia (private settlement). Women were there to sustain the men who worked in the forest and fields, to provide sexual services and above all to create the future labour force, for labour was a great asset as long as there was forest in which to make milpas (clearings to grow maize).

Now, the forest is running out, and crops need expensive fertilisers. Land use is changing from cultivation to cattle-raising, which offers very few jobs. This change is 'ranch-isation' (Toledo 1990), the 'grass revolution of the American tropics' (Parsons 1976), 'hamburger and frankfurter imperialism' (Feder 1982) and 'deteriorating development' (Tudela et al. 1989). Many people go to the cities or to new areas in the forest. We met Alvaro when we interviewed his family by the Gulf of Mexico, and ten days later we met him again, in the middle of the Isthmus of Tehuantepec where his brother was once more 'opening up the forest'.

With this agrarian crisis of the grass revolution, there is far less work to do. Even in the ejidos, this is a time of division into rich and poor, essentially those who have cattle and those who do not: three-quarters of the families we interviewed did not. With the crisis, investment and education become important and traditional workers have few opportunities. Intensive cattle production, for instance, requires improved stock, more fencing, better pastures and much more rotation of pastures. It means calculation, investment and much negotiation with experts and with banks or other sources of credit. Education is then a great advantage but on the whole people in these communities have had little time or even opportunity to obtain education. Few people can afford to send children to live and study in

the town and it has been more important to send boys to the fields than to secondary school, while girls are 'needed at home' and the long walk to the secondary school has deterred many parents from sending girls. Many of the older generation and even some of the younger cannot read and very few have enough education to develop a profitable modern farm.

The agrarian change brings a family crisis. Far less labour is needed, paid work becomes scarce and many adults become superfluous. Only half of our survey households lived mainly from the farm, while half lived mainly from wages. When there is no forest to make milpas, money must be earned, food must be bought. Women have to confront radical change. In the pioneer communities many women worked on the land, but their crucial role was to maintain and reproduce the labour force. Families used to need as many children as possible, with skills taught mainly in the family. Traditional families were large, but the need now is for a very different labour force as household prosperity depends on new skills and far fewer hands can be used. Women were skilled in meeting the old needs but not the new, most having left school 'because my mother was ill'. Painful demographic change is in progress. Many young couples plan to have only two children (usually the man's decision) and many older women are sterilized. At the same time, many women in their thirties already have eight or ten children and want no more; by contrast, their husbands see contraceptive measures as a threat to their masculinity.

Women's role in general has been to 'help': to help men work by caring for them, to help children grow up to work and to 'help' make an income. Much of this activity is seen as pastime rather than work, for real work is men's. Most men but few women work regularly on the land. Men have much more leisure and very few contribute regularly to work in the home. Women's work is much more diverse, including cooking, childcare, laundry and housework on the one hand and earning money on the other.

In this crisis, everyone wants extra income. Even women want to earn, but the more rural the settlement, the fewer the opportunities for a woman. The smaller and the poorer the community, the less likely it is that any local woman earns a living, even as a midwife, and the more difficult it is for her to contribute to family income. She will produce eggs, poultry, perhaps pigs for sale but beyond that most opportunities are in paid domestic chores: making tortillas in other people's houses, cooking for the elderly, doing other people's laundry, cleaning for others, making snacks for sale, selling door to door, working in shops, sewing for others or delivering babies. In a poor village, the whole of the paid work available adds up to very little and there may not even be a full-time shop. In a town or more prosperous village, there is more demand for these tasks, and perhaps for maize to be ground in a powered mill. A girl may train as a primary health care worker. Teachers and doctors may be women, but come from outside. In a village, no paid jobs exist for a local girl with secondary education, but in a town, a woman's opportunities, whether she is rich or poor, educated or illiterate, expand greatly. There, some entrepreneurs create businesses, open restaurants, or become beauticians; work for the poor and unskilled is still poorly paid, but at least it exists.

Where we began: Gardens and skills

In the region of Los Tuxtlas, Veracruz, a cluster of volcanoes is drenched with heavy rain from the Gulf of Mexico. Before 1960, rainforests swept down almost unbroken from mountains to beaches, but now they have been almost stripped by pioneers. We came here in 1990, attracted by the writings of two Mexican botanists, Maria Elena Alvarez Buylla Roces and María Elena Lazos Chavero, and an agronomist, José Raul García Barrios (1988 and 1989). They found the 'home gardens' in Balzapote to be the only sustainable land use in the region, in strong contrast to the cattle raising. These gardens were worked by all the family: could they, we wondered, solve some of women's problems?

In Balzapote, the botanists found the gardens to be spaces for both living and working. The garden (solar, kitchen garden, backyard) really includes the house, making a house-and-garden unit for people and animals. It may appear a chaotic, overgrown jungle, but it has a complex structure of a yard (patio), for sitting, working, feeding animals or drying clothes, a garden of flowers and low-growing plants (jardín), and an orchard of bushes and trees (huerta). Mother is generally in charge of the yard and garden, father of the orchard. The botanists recorded 338 species in Balzapote, wild and cultivated: 127 ornamentals, 86 for food, 31 for medicine, others for seasonings, shade, firewood, glue, building or rituals, while only 18 seemed not to be used and were indeed weeds. Little is sold and most is for home use.

> The father and the older sons are in charge of acquiring the knowledge involved in the handling and use of cultivated trees. Mother and older children are in charge of obtaining the plants for the garden (mostly ornamental, medicinal and seasoning species), as well as investigating the way of growing and using them. The role played by children is very important, since they introduce to the home garden new useful species [...] So, the home garden is a place of agricultural experimentation where all the family take part (Lazos Chavero and Alvarez-Buylla Roces 1988:56).

The system has many attractions. Most plants are perennial, so the soil is little disturbed, and chemical fertilizers and pesticides are hardly needed, because the diversity both feeds and protects the crops. Tools are cheap, inputs are low and most work is by the family with a little labour sometimes hired. Work and production are year-round. The system is highly sustainable, unlike most forms of production in the Mexican tropics, but is shrinking in the face of cattle-rearing and commercialization. The original slash-burn agriculture of the milpa was complemented by meat, fruits and other things from the garden. Now, as cattle replace the milpa, packet teas and medicines are replacing those from the garden. A few products from the garden are sold, but the cash income is very small and the gardens are essentially subsistence systems providing fruits and vegetables to supplement maize. The gardens are dwindling in the face of the cash economy. They could expand if there were markets for their products, but these are not appearing.

The outsiders' solution

This sustainable, labour-intensive system attracted us. Right across the humid tropics, specialists are trying to develop sustainable agroforestry as an alternative to the many unsustainable systems such as ranching. (In agroforestry, crops and/or livestock are

produced under timber- or tree-crop trees, making efficient use of labour and land for small farmers (Merchant 1992).) In diversity and productivity, gardens reach their peak in Los Tuxtlas, but even in the thin, dry forests on the limestones of Campeche, the bleak landscape is splashed with bursts of green in the gardens of indigenous pioneers. In Mexico, sustainable agroforestry has been developed by the pioneers themselves. Could it be an answer to the agrarian crisis and particularly to women's search for income-generating opportunities?

A woman's work is very much what she can do in private, domestic space, in her home and garden, save for fetching water, which is the work of women and children whether from the yard or kilometres away. Laundry may also take a woman out to a water supply in public space if she has none in her yard. The whole solar, house and garden, is domestic space and many chores are done outside while dogs, chickens and even pigs roam into many houses. Many women grow herbs for remedies in their gardens, but the knowledge is being lost as patent remedies and powerful drugs (often inappopriate or dangerous) replace them. Hygiene is often not valued highly, but cleanliness is and women work hard for it, sweeping and laundering. Grinding corn and making it into tortillas takes them several hours a day. Most water must be carried and ideally boiled. Most women cook with wood fuel and must inhale the harmful smoke. Most keep poultry and pigs which both make an important contribution to diet and act as small walking banks for emergencies. Women spend most of their lives in their homes and gardens and value this achievement, which nonetheless limits their options in income-generation, as we shall see.

An important part of our study was to explore women's solutions to the problems they perceived. As we expected, they ranked high among their problems the lack of opportunities for women or men to earn or generate income. Naively, we expected them to see a chance to market more goods from the garden, as we were aware of the premium attached to 'organic' products in Europe and North America, to 'rainforest ice-cream' and 'forest-friendly' snacks. In Mexico, fresh fruit drinks are a revelation to visitors, but in Europe or North America, canned or frozen mango or passion fruit come from high-input, monocultural plantations, heavily dependent on herbicides and pesticides. To us it seems tragic that these sustainable, labour-intensive systems and their skills may be lost before the market can discover them. Pioneer women are well aware of the marketing difficulties they face, and see no future for their gardens.

Women's problems and changing relationships with the environment

Pioneer women themselves identify different kinds of problems:

- Economic: the lack of employment (for women and men) and of income-generating opportunities, and the consequent poverty. This is produced by the change in relations with the environment as the agrarian system changes from crops to cattle.
- Social: the community needs (or total lack of) clean, piped water, electricity, drains, teachers, a clinic or health worker, improved access to market (a road or road improvement). These needs are partly a function of the newness of the communities, which have created ejidos and colonias in the forest, establishing new relations with the environment.

• Personal: (male) alcoholism and violence against women, and conflicts over women's control of their own bodies (rape) and overtheirown fertility (conception or sterilization). Changing practices around fertility are related to the changing agrarian system and employment crisis (changing relations with the environment) as well as to national patterns, and many local people claim that alcoholism and violence are also linked to the agrarian crisis in the communities as well as to the national rural crisis.

Lucia (Matias Romero) told us;

> Men who don't have education work in the fields. That's the only thing they are good for... There is no work any more in the fields. They're full of stones... the more you sow them, the more you use them up; they're only fit to plant grass to feed cattle... When I married, we went to work in the fields. The soil was good, we planted rice, corn. We both worked equally... Afterwards, only the men looked after the cattle, milked them, cured them, everything... Our job [the women's job] had finished. The fields weren't planted any more... the soil isn't good any more.

Or Maria del Carmen (Campeche): There will be no work for those who don't study.

Losing the forest?

When the pioneers have created a landscape of fields and villages and the rainforests are a memory, how do they feel? To the western media, this is destruction which damages soils, chokes rivers, threatens local climates and may play a part in global warming. To Mexicans and to us,

> The North wants the South to reduce its growth of population and its economic growth to conserve biodiversity and the sumps for the greenhouse gases which they [the North] produce; the South wants the North to pay the cost of its high consumption of energy and of the other natural resources of the planet and of its production of poisonous gases (Arizpe et al. 1993).

How do women settlers react to the loss of the forests? Those who came as pioneers into the forest in their life stories reel off great lists of the animals there used to be, whether in the rainforests of Los Tuxtlas or the dry forests of Campeche. But do they all agree with Cristina (65, Cuauhtemoc):

> If we didn't fell the forest, what would there be to eat?

Internationally, ecofeminism is very diverse. Some ecofeminists such as Vandana Shiva (1989) believe that women are closer to nature than men and that they are more aware of the needs of nature, of the needs of their children and grandchildren and the links between these needs. In 1990--91, Lourdes Arizpe, Fernanda Paz and Margarita Velásquez (1993) asked for the opinions of

more than 400 people in what used to be the Lacandón rainforest, from Palenque to Marqués de Comillas, about environmental change. Their findings do not support Vandana Shiva's thinking, for the differences were primarily between old and new communities, Spanish- and indigenous-speakers or ranchers and pioneers, not between men and women.

One of us, Jennie Bain, set out to demonstrate that Mexican rural women are more environmentally aware than men. She showed their close involvement with environmental processes but found no examples in the Mexican literature of women engaging in more sustainable environmental practices than men. She still thinks women are more aware, but that the evidence has not been found to prove it (Bain 1992, 1993). In 1991, during our household survey, we asked some questions for her in 77 households about attitudes to forest clearance. Most of the answers came from women, but we did not record the gender of all respondents. Of the 77 people asked whether they were happy about the forest being cleared, 16 had no opinion. Seven were pleased that the forest had been cleared, whether to produce food, because it had sheltered dangerous animals, insects and snakes or because the trees bring thunderbolts (compare Arizpe et al. 1993:101); only nine others were 'not worried'. Forty-five said they were worried.

Our findings do not conform to Vandana Shiva's (1989), perhaps because in Mexico the gender division of labour puts women in less intimate contact with the natural environment. We asked whether men, women or everyone should protect the forest. Of 45 worried about the loss of forest, 38 thought the forest had to be protected, including 22 who thought it was everyone's responsibility. 10 thought it was up to men (as men cut it down and 'as it is the man who maintains the house') and only six thought it was up to women because, they said, they are 'more aware'. A small number of women in very different and distant places do seem to conform to Shiva's model:

> As a woman, you think about the welfare of your children, and if they cut down all the trees, they'll leave all the forest destroyed and a desert [...] The woman wants to see a better future for all of us, so that we may breathe clean air (Catalina, Independencia, Campeche).

> Women have to watch out that the men don't use up all the forest (Carmela, La Planada, Chiapas).

We did not investigate whether men are more or less worried than women about the loss of the forest. Manuel (El Arroyo) is emphatically critical of clearing:

> We came to kill the trees [...] The forests had no undergrowth and were very beautiful, the streams ran clear [...] The land was rich [...] The atmosphere is so bad now that sometimes it doesn't rain, because the water goes with the vegetation [...] The soil is completely destroyed by fire.

Women are diverse. Some see sympathy with animals and trees as a feminine thing, but Isabel (La Corregidora) has very different feelings,

> We saw jaguars, those things - big rodents - armadillos, racoons, badgers - then wild boars, and in the streams, shrimps. And we were scared because we didn't know that kind of jaguar, the pumas there used to be, pheasants [...] But then afterwards we took control of the forest and went hunting by night or in the day. I had an eighteen-shot rifle - I loved shooting at the animals, killing pigeons, doves. Once I killed a small jaguar of about, mmm, 40 kilos. It was in a tree. The chickens panicked, and I went - but then you had to be careful underfoot because of the snakes, because there were lots of bushmasters. I don't know how many of those I killed because there were so many. I killed them with the rifle, with the machete - little ones, but they still count, don't they?

The 45 who told us they were worried about losing the forest may have said that because they felt that we wanted them to, but the detail of their answers is interesting. They said that when the forest ran out
- there would not be enough rain (16 people),
- there would be no land to work (15),
- the animals would be lost (and with them a source of food) (12),
- there would be a lack of oxygen or clean air (10),
- there would not be enough to eat (8),
- there would not be enough firewood (5),
- there would be no wood to build houses (5), and
- the beauty would be lost (5).

Other anxieties were the loss of shade, knowledge and fine timber, and possible increases in disease and drunkenness. In local terms, all are women's issues although some are also men's.

Our biggest clusters of 'worried' people were in Campeche, where pioneering is more recent and some forest survives. Here, more people have an opinion and more are disturbed about the loss of forest than elsewhere, perhaps on very different grounds in the two communities. In Independencia, people worried most about future air and water, and we think both television and urban exposure may be important in this, for Independencia lies by the highway and has many television sets. Worries about 'clean air' and 'oxygen' here and in the Lacandón rainforest may come not from ideas of global warming but from television programmes about the pollution of the very different environment of Mexico City by vehicles and industry (Arizpe et al. 1993). In Tacaná, which has no electricity and no television and is a long walk from anywhere which has, people worry most about whether there will be land to work when the forest is gone and women see this as central to their children's futures.

Rain tops the list of fears. In both 1990 and 1991 we were told in all communities how much less rain there is than when the communities were founded (in 1991 there was a severe drought and people talked a great deal about the loss of rain). Only one person, Jesús, in Tacaná, told us that the drought was not caused by clearing the forest. In contradiction to the experience of Lourdes Arizpe's team (1993:126), we

were told by many that 'the trees bring the water'. María de Jesús (85, Sor Juana) spoke for most people.

> Well, now we're all convinced by what they say, that the day we felled the trees will be a shame to us [...]. Many have even wept with this weather now that it hasn't rained. And it was all because of this, they cut down many trees, and the forest attracts the water, so it was their fault.

Opinion is divided as to whether men or women know more about plants in the gardens, but we generally agree with Olga (Laguna Escondida),

> Some men know a lot, but for most of it, it's the women.

Some men are fascinated by plants, trees and medicines. As it is men who go to the forest, generally go out much more, travel more widely and meet more people, men have more opportunity to develop new and more specialised knowledge.

Conclusions

Women's lives are transformed again and again as relations to the environment change in new communities in the selva. At first, life is hard and children are at a premium but later, although more services may develop, jobs become desperately short and education lacking. Women ask for training, a chance to earn and more time with other women to confront personal problems. Unfortunately, there seems little opportunity to expand the sophisticated, labour-intensive agroforestry which families have developed in their gardens and in which women have considerable expertise, for the necessary markets are not developing. Yet women's economic options are limited by their frequent wish to stay in the house and garden. It would be a very attractive partial solution if a link could be made between the multiple products of the gardens and the world market for tropical goods.

This is our view as outsiders, an analysis, an etic account of the condition of pioneer women. As we see it, pioneering separates women from their network of support and protection at the very time when their men are living very stressful lives, so that the isolation of women may contribute to wife-beating and male drunkenness. Then, as the forest is exhausted, many men become unable to feed their families and violence and drink are perhaps increased. Future studies in actively pioneering communities may be better able to establish how gender relations change in Mexico during and after pioneering.

DINA VAIOU

"Rethinking feminist approaches to the urban environment"

RETHINKING FEMINIST APPROACHES TO THE URBAN ENVIRONMENT

(preliminary draft, June 1998)

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ABSTRACT

Over the past three decades "critical urban studies" have evolved both in their theoretical scope and in their empirical themes. The emphasis of the 1970s' "new urban theory" on structures led to a move away from positivism, but also to an almost inevitable general/global processes and abstract categories. In more recent analyses of urban restructuring, production, accumulation of capital, global circulation and finance, public policies and property development have become prominent foci. Although the understanding of such processes is central to the study of the urban question, it has enabled certain things to be seen and hidden others, no less significant.

Feminist approaches have shifted the content of well-established areas of research in urban studies, have raised new issues and have proposed new ways of studying and purposes of research. Women's experiences, decomposed by race, ethnicity, class and sexuality, are prioritised in the study of the urban, while urban space and time, life in cities, access and mobility, and more are exposed as gendered. Moreover, universal claims are put into question and, in a postmodern turn, the legitimacy of all forms of metatheory is challenged.

In my presentation, I propose to reflect on feminist approaches in critical urban studies. I will discuss (a) some central themes and analytical categories which structure the debates at various instances, (b) the "exclusions" resulting, at least in part, from such themes and categories, or whose experiences and priorities inform theory and guide empirical research, and c) in the changing conceptual orientations, what is the relevance of space and place. This is inevitably going to be a "situated rethinking", shaped by place, time and intellectual traditions.

1. Preliminary remarks

Feminist approaches form part of critical thought which has become prominent in urban studies since the 1960s. By critical thought I mean intellectual approaches "which search for hidden structures behind practical evidence and place in doubt the 'natural' order of society, by questioning the conditions of possible knowledge and action" (Topalov, 1989: 626). And indeed, feminist approaches have challenged the natural order of society by raising new questions, proposing new ways of studying and purposes of research and exposing the gendered essence of "things urban".

Feminism in the academy is linked to political movements for the liberation of women and for social change. In this sense, feminist approaches, like most critical thought, lie on a knife-edge between theory and politics - which adds to their vitality and interest, but puts them in a contradictory position "from the perspective of science's self-understanding" (Harding, 1987: 182). For, in contrast to much academic theorising, such positioning cannot be disinterested, disembodied, devoid of emotion and value-neutral, as scientific knowledge is supposed to be. On the contrary, feminism challenges claims to objectivity and distance, by exposing the social biases, the partiality and the value-laden aspects of much of academic scholarship.

From its positioning on a knife-edge, feminism has developed standpoint/s from which to "see" the world: from the perspective of women's experiences and for women, i.e. in order to provide for women explanations that they want and need (Harding, 1987). Thus, the purposes of research and analysis are not separable from research questions. By the same token, theories which claim to be objective, dispassionate, devoid of emotion, have been exposed to be based on and express particular experiences: those of white, middle class, able bodied men from the developed countries/regions. Their theorising is not therefore devoid of perspective; on the contrary it is selective in the choice of its objects of research, of the questions it permits to be asked and answered, of its approaches and methods

Feminism highlights gender as an organising principle in society and as a basis of power relations which it aims to change. Gender (with very awkward translations in languages other than English) is problematised by many feminists, for its lurking universalism and essentialism. However, "our language, intellectual history and social forms are 'gendered'; there is no escape from this fact and from its consequences in our lives... One cannot be 'gender neutral' in this culture" (Bordo, 1990:152). Moreover, it has enabled crucial criticisms to be made to knowledge claims and crucial aspects of social reality to be "seen", not least power relations between men and women.

In its recent book, WGSG asks "is gender always the most important analytical category?" (WGSG, 1997:76). Certainly there are other bases of organising and structuring identities, such as class, race, ethnicity, age, sexual preference, place of residence - also linked to particular political movements. One is never just a man or a woman; one is bound to many other social relations which determine a complex experience, an experience that does not fall into neat segments (Grimshaw, 1986). By elaborating their own situated knowledges, such approaches expose the power and authority exercised in the name of "science" and challenge claims to a universal truth, from the point of view of, for example, the working class, people of colour, lesbians,

ethnic or religious groups, peripheral places. In this sense, the answer to the question about the centrality of gender can only be partisan, in order to hold it on the foreground of inquiry. For there is no such thing as a problem without a subject (or groups of them) who have this problem and prioritising the relations that make a difference is itself a political act - that is inherent in theoretical approaches "on a knife-edge".

In my presentation I propose to reflect on feminist approaches to the urban environment. This is by no means a concise history of the development of ideas in the field; it is inevitably a "situated" rethinking - one which derives from my involvement in feminist and left politics and academic work, on this contested and knife-edge area of work. What I want to try in this presentation is to make explicit the embeddedness of my, and any, rethinking in specific historical and social contexts and academic traditions. For, such positioning affects the choice of questions, the directions in which answers are sought, the concepts and theories used to make sense of and interpret social phenomena, the criteria which determine their truth or falsity.

2. The urban as an object of study and the importance of space

Feminist approaches are, so to speak, late comers in urban studies, compared to other fields and disciplines. They developed when the scene of alternative or critical approaches in the field was dominated by marxist, political economy driven, contributions. Thus, the dialogue between the two (or multiple, for that matter) theoretical perspectives has been an important component of the first steps in feminist theorising of the urban, much as, later, identity politics gave a new turn to the dialogue.

The development of systematic marxist urban analyses since the 1960s coincided with the intensification of social and spatial contradictions which became evident, in very different ways, both in the developed and the less developed countries. I am referring here to the influential work of the french urban sociologists and planners and the british/american geographers - which challenged the then dominant approaches and changed the face of the field (among many: Castells, Lipietz, Topalov, Harvey)[1]. It is not my intention to pay homage to these thinkers here and now, although I believe this is a necessary exercise for my/our academic self-consciousness.

What I want to emphasise from this vast literature which spans almost three decades, however, is that all theoretical approaches are conditioned by the conjunctures in which they are formulated. Such changing conjunctures account as well for considerable evolution of some writers' arguments, for re-formulations and for shifts of emphasis, to which schematic and sweeping criticisms do inevitably injustice. For example, it is no coincidence that "collective consumption" becomes a prominent, if not dominant, concept at a time of relative prosperity, growth of the welfare state and mobilisations around welfare provision and distribution which followed the May 1968 events in France. To what extent has it been relevant for Southern European countries, at that time dominated by dictatorial regimes is an open question. Nor is it accidental that emphasis

[1] At a different scale of reference, it is important to mention also the Latin American economists and planners who theorised underdevelopment in the Third World (Frank, Cardoso, Faletto, Escobar)

on "flexibility" and "informalisation processes", originated from the "north" and "south" of Europe respectively at a time of restructuring of capital, welfare cuts and defensive policies of organised labour. And it is certainly the case that feminist critiques of urban research arose out of an active women's movement motivated by the deep changes in women's lives, although very different from one place to another. The same is probably true for the recent "cultural turn" and the rise in prominence of identity politics and multi-culturalism in cities. In what ways is this relevant in places (or for social groups) where equality, distribution and the constitution of social citizenship are in demand is another open question.

Having cast caution, I have to say that I share the criticisms to marxist urban research for its claims to universality and for the dominance of structuralism and economism in most (though certainly not all) of the contributions (for a discussion of critiques, see Soja, 1989; 1996). However, my own intellectual and political formation has a different set of reference points, at least as I see them today. Having grown in a Left tradition which draws more from Gramsci than from Lenin, it has always puzzled me how all marxism could be held to be monolithic and uniquely focused on the point of production. In this tradition, counter to the economism, productivism and workerism of much of the Left, the "southern question", popular culture and the control of everyday life by the state, exploitation at the place of residence and at the point of consumption and reproduction have been distinguished issues. And in more academic spheres, my recurrent readings at different ages, of the work of Henri Lefebvre initiated me to the importance of (urban) space for the development of capitalism and to a materialist analysis open to philosophical currents, responsive to historical conjunctures, without pre-conceived boundaries.

Space is, according to Lefebvre, key to understand the reproduction of social relations. In advanced capitalism this is increasingly urbanised space, sectioned and homogenised, yet fragmented: practically fragmented, since it has become a commodity which is bought and sold, chopped up into lots and parcels; and theoretically fragmented, since partial aspects of it have become the object of study of different fields and disciplines (Lefebvre, 1974). This central thesis is approached through what he calls "approximations" (increasingly elaborated formulations) and changing emphases from "everyday life", to the "urban revolution" and the contradiction of equalisation/differentiation, to the "production of space". "Capitalism has found itself able to attenuate (if not resolve) its internal contradictions... We cannot calculate at what cost, but we know the means: *by occupying space, by producing space"* (Lefebvre, 1976:21)

Urban space, a social product itself, organises social life into multiple layers of domination and subordination, centres and peripheries. *Periphery* has several meanings with ill-defined boundaries. At one level it may mean the less developed areas (countries or regions); at another level it includes those social groups which have been removed from the means of production and are neither integrated or integratable. It may also refer to urban peripheries (suburbs or bidonvilles) or to social peripheries, particularly youth, women, homosexuals, the desperate, the "mad", the drug addicts (Lefebvre, 1976).

These groups, that central power throws into social and spatial peripheries, can become agents of social change, in a total project which comprises all the rights of individuals. Most importantly, it comprises *the right to be different,* not to be classified forcibly into

categories which have been constructed by the necessarily homogenising powers. Difference is an existential principle[2] "which concerns the modes of being human, the peculiarity of one's own experiences, goals, possibilities, and one's sense of existence in a given situation and in the situation one wants to create for oneself" (Lonzi, 1970 in Bono, Kemp, 1991:41). The total project also comprises *the right to the city*, the right not to be thrown into some space produced for the purpose of discrimination. "For the city not only represents a colossal accumulation of wealth, it is also the centre of birth and learning, the point of reproduction of social relations. But it also becomes the place where these relations are threatened" (Lefebvre, 1976:28).

Why do I turn to what may sound to most of you like "ancient history"?[3] As I will try to explain below, I see in such theorising of the urban the pre-conditions for developing feminist approaches. In addition, I think that, in the rapidly changing conjunctures of today, it is important to pay more attention to spatial analysis, since it is space which hides consequences from us and obfuscates power relations. Looking at the urban from my positioning, from the urban environment which forms the main part of my academic study and from the theoretical and political perspective of greek feminism, it seems to me that concepts like everyday life, periphery or the right to the city retain their analytical and explanatory force and may be helpful in developing feminist understandings of the urban question.

Urban space is thus continuously formed and modified by the social and spatial practices of the inhabitants, it is *not* a fixed "site" or framework in which social practices are inscribed. It is at the same time a product of global processes and of local, specific social practices (for an elaboration, see Simonsen, Vaiou, 1996). This view of urban space draws from dynamic conceptions of place, in which places are peopled and people experience space and develop practices in a multitude of ways which link the local with the global. Experiences and understandings which inform social practices are constructed on a far larger scale than what we happen to define as the urban at a particular moment (see also Massey, 1991), and different social groups and individuals are placed in very distinct ways in a global/local tension, thereby drawing on different experiences of space and time.

It may be argued that at a level of generality and abstraction where the reproduction of social relations is examined in abstracto, location, gender, race etc. of individual agents is irrelevant. Or where gender relations are examined in abstracto, race, class, location etc of individual agents are not relevant. However, urban development is a historically and geographically specific process and requires that we move from abstract laws to an understanding of particular conditions. In such conditions, gender, as well as other forms of oppression, are an important part of the analysis and explanation.

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[2] One that is opposed to equality, a juridical principle, "offered as legal rights to colonized people. And imposed on them as culture" (Lonzi, 1970, in Bono, Kemp, 1991:41)

[3] Although I am tempted to mention here that, in a recent visit to Dillon's Bookshop in London, I found Lefebvre shelved under "cultural studies", along with many very trendy readings.

3. Feminist approaches in urban studies

A distinctive feature of feminist research and theory-making is that it begins its inquiries with women's experiences. Experience is an indispensable category, since it comprises the mental and emotional responses of individuals and groups to many interrelated events or to repetitions of the same kind of event (Thompson, 1978). Women's experiences in the plural is meant to underline the realisation that there is no "universal woman" (as there is no "universal man"), but women (and men) of different classes, races, cultures (Harding, 1987). Class, race, culture, age etc are categories within gender and combine in ways which differ historically and from place to place.

When women's experiences become the starting point of inquiries, different questions may be asked and the purposes of research are considerably modified. The questions women, as an oppressed group (or different such groups), want answered focus on how the world is shaped by forces beyond it, what are the sources of social power, how such conditions may be changed. In this context, feminist approaches in the plural can only be formulated to help understand the complex relations that form the conflicting realities in which women (and men) as socially determined individuals and groups live. Women may then emerge as agents who can shape their own lives, rather than as passive victims of their oppressions.

My own interest in these perspectives arose out of the political debates and practices of the women's movement in Greece, re-assembled with renewed agendas since the mid-1970s, a period which is marked by deep changes in Greek society and politics. In its vexed encounters with the political Left, the women's movement has challenged many of the certainties that guided the Left's ways of seeing - or so it seemed to many feminists, including myself! Through its conflicting activities it has exposed the hierarchy of inequality based on gender - which permeates all aspects of social life and leads to different understandings of social and political change. This underlines once more the politicised context in which feminism/s developed and surfaced with a lot of difficulty also in the academy[4].

Women's experiences and practices, as a starting point, lead to different understandings of urban structure and urban dynamics; such a starting point also reshuffles priorities and therefore produces different analyses than those beginning with global processes Feminist approaches may not thoroughly account for every aspect of urban development Nor will women's subordination and oppression be explained in all their varying and conflicting aspects, through the study of urban development. Feminist approaches would rather lie *at the cross-section* of these concerns and at a different way of looking at them (Vaiou, 1990). Women's experiences can provide useful insights into processes of urban development and change. The latter may account for some of the concrete forms that gender relations take in historically and geographically specific circumstances.

For feminist approaches to develop in urban studies, cities / urban space have to be viewed from the start as both *peopled and gendered*. Such a "precondition" finds itself in a difficult dialogue with much of critical urban studies where emphasis on structures has led to an almost inevitable focus on general/global processes and abstract categories. The same

[4] Mainly in history, where there are significant groups and publications, and in law.

focus predominates in more recent formulations, which prioritise production, accumulation of capital, global circulation and finance, public policies and property development. Although the understanding of such processes is central to the study of the urban question, it has enabled certain "things" to be seen and hidden others, no less significant[5] (see Simonsen, Vaiou, 1996). Among these hidden "things" are those deriving from women's experiences, along with the questions such a perspective prioritises.

In our article with Kirsten Simonsen (Simonsen, Vaiou, 1996), we propose a different way of proceeding. Starting with women's experiences in the making of two quite different urban contexts, Copenhagen and Athens, we try to develop empirical and analytical categories in order to formulate a framework for understanding urban development. We move from the life histories of individual women, to categories derived from them (the family, paid work, social networks), and then to a formulation of more general, mediating - and overlapping - concepts (life strategies, gender relations, constitution of place). The latter constitute conceptual dimensions through which we introduce the significance of time and space; and by the help of which urban development and women's roles in the making of the city can be approached and interpreted. This way of working with our material permits us to see the complex ways in which places are formed by the practices of individuals and groups. Such practices are inscribed in, and restricted by, broader social structures. In their turn they can challenge and modify those structures or reproduce and cope with them. Gender relations and gender identities are a formative element of social practices and they are formed and reshaped in them.

Drawing from our two different cities, we have been able to explore, on the one hand the tensions between specificity and universality in women's experiences and on the other the diverse *content* of our conceptual categories and their *shifting relative importance*. While this may be easy to understand from the perspective of "other" places, it is less readily acknowledged in contributions originating from the english-speaking world. In the academic journals in english language - which are the only ones so widely read and largely determine the terms of debate - it is often the case that situated knowledges and the content of concepts used to analyse and interpret urban development (eg. restructuring, flexibility, work, ...) are elevated to theory, although they originate from particular experiences. This is also true for feminist approaches: even when they invoke difference, they are hard put to reconcile the idea of different traditions of feminism and urban research and the different importance of politics - all of which lead to different understandings. "Other" people and "other" places are usually thought to provide partial and situated empirical contributions and treated as deviations from an implicit "norm". *"But somehow there is always someone coming from outside to disrupt the symmetry of polarity: there will always be 'someone coming from the South'"* (Bono, Kemp, 1991:2)

The introduction of feminist concerns in urban studies has been a long process of debate, of reformulations, of changing emphases and priorities - not necessarily in temporally sequential order. These have remained largely among feminists in different disciplines and

[5] Problems along these lines have been raised in urban studies in different contexts, which introduce culture, the importance of place and identity and celebrate diversity and multiplicity of themes and perspectives. Approaches in these contexts put into question universal claims, and, in their postmodernist turn, undermine the legitimacy of all forms of metatheory (see Harvey, 1992), but often do not avoid the totalising practices and discourses they oppose.

fields of study dealing with the urban question (eg geography, sociology, anthropology, architecture and planning, history), but it has not permeated dominant debates. As I have already underlined, this paper is by no means an account of feminist thought in urban studies (for such accounts, see, for example, McDowell, 1993; Johnson, 1994, WGSG, 1997). There are, however, two developments which are important for the idea of feminist approaches lying on the cross-section of feminism and critical urban theory and on the knife-edge of politics and theory. I refer here (a) to the move from a concern "to make women visible" (what Harding, 1986 calls, in a broader context, feminist empiricism) to focus on the gendered nature of the concepts with which we work and (b) to a shift of emphasis from a concern with the impact of spatial variation on the construction of gender relations, to an analysis of the impact of gender on the construction of space and place. "From the symbolic meaning of spaces/places and the clearly gendered messages which they transmit, to streightforward exclusion by violence, spaces and places are not only themselves gendered, but, in their being so, they both reflect and affect the ways in which gender is constructed and understood" (Massey, 1994:179).

4. A final comment

Rethinking feminist approaches in urban studies, it seems to me that, in recent literature, feminist criticism has turned to its own formulations, "finding them totalizing, reductionist, inadequately nuanced, valorizing of gender difference, unconsciously racist and elitist" (Bordo, 1990:135) and echoing anxieties common to feminist scholarship in general. One major self-criticism focuses on dualistic or dichotomous thinking, implicit or explicit in analyses of the urban, even when boundaries are problematised and contested. Among many dualisms that are encountered in geographical analysis, public/private is perhaps the most immediately associated with spatial configurations. According to many theorists, contesting it lies at the heart of feminist struggles (for example, Pateman, 1983, Phillips, 1992) which have focused particularly on the transposition of the line of demarcation separating public from private, the city from the house and politics from private life (Kravaritou, 1997).

Public/private, home/politics, domestic labour/paid employment and so on represent processes and relations which are distinct and could be examined analytically separately. What needs to be refuted, however, is the identification of one side of these dualisms with men and of the other with women. The experiences of women who have been part of various pieces of research in which I have been involved over the years transcend the boundaries of dichotomous conceptions and highlight ambiguities and differences. Women find themselves on both sides of any dichotomy, continuously negotiating their place on each side and on combinations of the two. Dichotomies are at times intensified, but they are also challenged and modified in women's everyday lives, in their struggle to cope with conflicting loyalties and to redefine relations of dominance and subordination, as they transcend, and stand in opposition to, the boundaries of conceptual and actual dichotomies (Vaiou, 1992).

Critical urban theory has paid exclusive attention to the public realm as a rational and universal basis for explanation of urban development. It has stopped short of evaluating the importance of the other side - and the combinations of the two-in the processes it

has been dealing with, as well as the impact of these on everyday life in cities. The public side has taken the analytically dominant position and has determined the private as "other". Thus urban analysis and debate are situated precisely where women have been, really and/or symbolically, excluded or rendered invisible. In order for them to surface, it is necessary to see everyday life and urban development from the point of view of the less dramatic, unofficial, private, invisible spheres of social life. Public issues need to be made out of many practices hitherto considered too trivial or too private for urban studies (Hermann, 1976; Young, 1987).

And this brings me back to the knife-edge position of feminist approaches - and to my own positionality. For, although I share the anxieties of falling into essentialist and over-simplifying analysis, my own itinerary in the Left, the feminist movement and urban studies in Greece constitute sensitivities and inalienable concerns. This itinerary does not allow me to abstract from the weight of the private sphere in women's lives, both in terms of labour and time, and in terms of its importance in understandings of urban development. In this context, it seems to me important to restitute the private to a level of analytical importance and render it visible, along with the women which are identified with it. I also cannot abstract from women's/our claim to the public sphere; for, even the right to have rights is a contested terrain these days - and the right to be different and not "othered" is an even more contested one. Elaborating on differences within each part of the dichotomy may ultimately destabilise its power and expose the "things" it allows to be seen and those it excludes.

Public/private, like any set of analytical categories, is something we use, to help analyse and interpret our subject matter, in this case urban development from a feminist point of view. It is neither unique nor stable in its content or universally identical in its meaning. What comes out of using it in my situated experience is the ambiguity of women's presence in the city: on the one hand a questioning or silencing of their presence, a real or symbolic exclusion from the public sphere and identification with the private; on the other hand, an inclusion in the public sphere on unfavourable terms, along with taking for granted their (invisible) contribution, both in the public and in the private. But "is gender always the most important analytical category?". There are undeniably degrees of inclusion/exclusion bound to a whole host of other social determinations. Class for one, whose impact is more researched and clearly imprinted in the city and in discourses about it; ethnicity for another, which remains hidden and negated, although it is changing the face of greek cities which are rapidly becoming host or transit places for large numbers of migrants. Prioritising gender, that is deciding about the relation that will be at the foreground, is a political act; but it does not have to follow an either-or logic of closures and exclusions, on the contrary it can adhere to a "both and also" type of analysis.

Inclusion and participation in the public sphere presuppose freedom from material commitments and sentimental bonds and availability for other duties and relations which correspond to a male model of citizenship, one in which citizens appear in the public sphere "already grown and reproduced, in full autonomy, without dependencies and links, as producers of income" (Bimbi, Del Re, 1997:12). Hence the ambiguity of women's citizenship and of their presence in public space, their struggles to shift the boundaries, the disquiet about their "roaming the streets" (Wilson, 1991); and, at particular times and places, a formal exclusion from rights and prohibition of their presence in public spaces, be they the agora or the stock exchange, the piazza or the

parliament, the factory or the business district. As Rosi Braidotti argues (cited in Bono, Kemp, 1991:18) "the female living being is not an abstract essence; we are it - we who engage in politics, who work, who produce theory, who have to manage the complexity of our daily lives, and who are not willing to continue 'being like' or 'being inferior'. We want to *enter and change the polis* with our being-woman, reclaiming our difference and stating man's difference".

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SARAH WHATMORE

"Living spaces: feminist encounters with environmentalism"

Sarah Whatmore

"Living spaces: feminist encounters with environmentalism".

The modernist ideals of universal democracy and justice realised through legislative regimes centred on individual rights have been the subject of sustained feminist and environmentalist critiques, reinvigorating political and philosophical interest in the question of ethics. Feminist writing has focused on deconstructing the discourse of rights, highlighting the gendered (and racialised) character of the autonomous self configured as rights-bearing citizen of a sovereign state (Cornell, 1985). By contrast, environmentalist work has centred on extending the political and discursive economy of rights to nonhuman beings; challenging established concepts of personhood and subject status (Callicott, 1979). These efforts share parallel concerns to establish relational, as opposed to individual, understandings of ethical agency and to recognise the significance of embodied, as against abstract, capacities in shaping ethical competence and considerability. Such concerns highlight the power of the geographical imaginaries of traditional ethical discourses and the difficulties of disrupting the entrenched cartographies of the nation, the neighbourhood, and the individual in fashioning new possibilities for ethical community.

In this lecture I explore what are, I think, creative tensions between feminist and environmentalist efforts to empower those eclipsed in orthodox ethical discourse, particularly at the embattled frontiers of the so-called 'natural law' and 'social contract' traditions. I trace some of the ways in which the conceptual and institutional parameters of notions of self (citizen), central to feminist concerns, intersect with those associated with notions of subject (person) at the heart of environmentalist concerns. In both cases, although for different reasons, I argue that dilemmas encountered by these attempts to construct alternative ethical orderings are intimately bound up with their adherence to what Latour has called the "purification" of nature and society as "distinct ontological zones" (1993, page 10). This leads me to suggest a number of consequences for instituting a relational understanding of political and moral agency which centres on a recognition of the social embodiment and environmental embeddedness of the (re)configuration of 'individuals' and 'communities'. In so doing, I aim to highlight the importance of *corporeality* and *hybridity* as concepts for and strethinking the place of ethics.

Ethical discourse has conventionally been framed in terms of an opposition between natural law and social contract traditions, centred on competing accounts of the primacy of 'human nature' as against civic order as the foundational claim to ethical competence and considerability (Poole, 1991). Commonly misunderstood as some kind of unchanging normative code inscribed in the heavens or the genes, natural law theories evoke the capacity for reason as the definitive basis of a distinctively human ethical

standing. Early modern reinterpretations of a classical legacy, notably in the work of Locke, shifted accounts of this distinctively human capacity from the evocation of a 'common good'-the cluster of obligations generated by the patterns of interdependence in human social life-to that of an 'individual good'-the result of voluntary transactions between independent agents. The most important implication of this shift was to elevate the "moral significance of the separateness of persons" (Buckle, 1991, page 168).

The emergence of the individual as axiomatic of modern society is inscribed in legal, political, and religious institutions and discourses. Since Kant, this founding figure of the autonomous self has been most strongly associated with the social contract tradition of ethics (Kymlicka, 1991). However, it is worth emphasising that it uniformities (of reasonableness) that can sustain the idea of universal (natural) human goods and values. Social contract resolutions rest on particular social institutions of contract (market) and rights (law) as the basis for establishing universal (impartial) 'laws of reason' as the precondition of ethical agency.

Contemporary elaborations of these debates can be seen in the philosophical and legal dilemmas of squaring claims to *human* rights with claims to *civil* rights. The one represents a species claim to the possession of reasoning faculties as the basis for the universal ethical considerability of individuals by virtue of their constitution as human beings; the other, a political claim to the possession of reasoning faculties as the basis for the ethical considerability of individuals by virtue of their constitution as civic persons (McHugh, 1992). Historical changes in the legal encoding of such claims underline the unstable and disputed social meaning of both 'human' and 'person' as ethical subjects, for example, in the treatment of women and non-European peoples; instabilities which persist, also marking the unborn, children, and those deemed mentally 'unfit'. Despite these dilemmas, the figure of the Cartesian individual as an atomistic presocial vessel of abstract reason and will continues to dominate contemporary ethical accounts. Contingent moral commitments and norms associated with a particular individual's 'life' context evaporate in the white heat of 'enlightened interest'. Ethical agency becomes cast in terms of the impartial and universal enactment of instrumental reason, institutionalised as a contractual polity of like individuals. Such accounts of ethical agency rely upon spatially and temporally fixed conceptions of individual and colleetive social being-the sovereignty of self and state-etched in the cartographies of the eitizen and the nation. Ironically, as Poole (1991) suggests, insofar as the modern world revolves around the autonomous self, it has also destroyed the conditions of its autonomy, reducing community to an infinitely expanded network of market interactions.

The commoditisation of social (and environmental) relations has disrupted this configuration of political and ethical community on two fronts. First, it has done so by eroding the territorialised authority of the nation-state to govern inereasingly global networks and mobilities of people and goods. Ethical communities bounded by national borders have become unsustainable because "the nation state is no longer able to resolve the contradictions between citizenship and humanity through claims to absolute

authority" (Walker, 1991, page 256). Second, the expansion of market relations has also undermined the personalised jurisdiction of the individual citizen over a coherent domain of the self (Giddens, 1991). As Haraway has observed,

"the proper state for a western person is to have ownership of the self, to have and hold a core identity, as if it were a possession ... Not to have property of the self is not to be a subject and so not to have agency" (1991, page 135).

However, this private domain of the rights-bearing citizen has long been exposed as masculine in conception. This has translated at different time-places into the dispossession of women, poor, and black people of political and ethical agency in their own right, through their 'contractual' guises as wives, servants, and slaves (Pateman, 1989). Moreover, this extended domain of the patriarchal self underpinning effective citizenship, the domain of the family and household, has itself become increasingly friable (Gobetti, 1992). In short, the disruption of this configuration of political and ethic community is centred on the instability of its spatial encoding as distinct realmsof public and private (civic and domestic) competence, and the reordering of these competences by the invasive institutions of market and governance.

Recent work in the field of political philosophy is dominated by two divergent responses to the limitations of the liberal conception of political and ethical community sketched above. One echoes a long-standing communitarian tradition which predicates the capacity to participate as ethically and politically competent subjects on the material satisfaction of basic human needs. As Porter has put it,

"A concern for persons in their own right is not possible where the primacy of rights relies on an atomist conception of the self-sufficient individual. This notion maintains that human capacities need no particular social context in which to develop and hence is not attached to other normative principles concerning what is good for humans or conducive to their development" (1991, page 127).

The more sophisticated communitarian accounts elaborated by political philosophers such as Sandel and Macintyre appeal to an intersubjective conception of the self as the basis of ethical agency. This conception centres on qualifying the absolute distinction between self and other associated with the figure of the sovereign individual "by allowing that, in certain moral circumstances, the relevant description of the self may embrace more than a single empirically-individuated human being" (Sandel, 1982, pages 79-80). This set of responses has become politically influential with so-called 'new communitarianism' colouring the rhetoric of conventional political opponents of free market liberalism, such as Blair's 'New Labour' Party in Britain and Clinton's Democratic administration in the USA. In its concern with the material preconditions of a full human life, this perspective reengages with natural law arguments that ethical considerability precedes formal rights, requiring answers to the question 'rights for what?' At the same time it readmits, in a limited way, nonhuman figures to the landscape of ethical community, as necessary material 'resources' to service basic human needs. The environmental implications of this 'new communitarian' perspective are

rehearsed in US Vice President Al Gore's populist manifest "Earth in balance", in which he argues that

> We have tilted so far toward individual rights and so far away from any sense of obligation that it is now difficult to muster an adequate defence of any rights vested in the community at large or in the nation- much less rights properly vested in all humankind" (1992, page 278).

A seco nd response to contemporary dilemmas in the concepti on and practice of ethical community is that associated with a broader critique of the foundational coordinates of Modern society identified with'postmodernism' (Squires, 1993). Such critiques centre on a radical deconstruction of the twin sovereignties of self and state. Here 'the individual' is transformed into a site of heterogeneous and multiple identities which become performative resources in the creative enactment of new and 'liberating' subject positions. Amongst the more sustained explorations of this postmodernist interpretation of political and ethical agency is Laclau and Mouffe's project of 'radical democracy' characterised as "a polyphony of voices, each of which ethic constructs its own irreducible discursive identity" (1985, page 191). Far from breaking with the primacy of the individual as a foundational social unit, this approach inverts the Cartesian subject, replacing abstract reason with abstract desire as definitive of (human) social agency. It shifts the ground of ethical and political community fromconventional practices of contract between universally equivalent agents to communicative practices of dialogue between radically different agents. The biographing individual evoked in this postmodern vision liberates the possibilities of ethical community from the involuntary associations of birth or proximity, but it does so by obscuring the conditionality of dialogic engagement in terms of the mundane business of *living*.

The tensions between contractarian and natural law theories of ethical competence and considerability mark ongoing dilemmas over the relationship between social rationality and human mortality. The reified figure of the autonomous individual represents a cipher of abstraet reason which inscribes the binaries of mind-body, self-other, subject-object onto the very possibility of ethical agency in Modern society. Recent critiques from communitarian and postmodernist positions open up new possibilities but are less radical departures than they sometimes appear. Communitarian approaches reassert the *situatedness of the individual* and point to the intersubjective constitution of ethical agency. However, they tend to do so by invoking highly conservative configurations of community, such as the family, the neighbourhood, and the nation, without examining the power relations they enact. Moreover, this 'situatedness' is predominantly defined in terms of social (human) relations. Where they are addressed at all, environmental (nonhuman) relations are treated as passive contextual extensions of human well-being. By contrast, a postmodernist insistence on the radical instability of the individual, divested of material fabric or context, tends to evoke highly *disembodied*, as well as disembedded, social agents (Levin, 1985, O'Neill, 1985, Pile and Thrift, 1995). In a world populated by such amorphous figures, constituted from cognitive and linguistic possibilities unshackied by the corporeal baggage of living, "the question of what human be-ing is" (Porter, 1991, page 16) becomes unspeakable.

Emerging at the confluence of these various encounters with the intellectual and practical dilemmas of ethical agency is a recognition of formal justice as a derivative of some substantive moral propositions and ethical claims. Increasingly, this has been accompanied by a creative reengagement with ideas of human nature *not* in terms of any substance or essence of humanity, but in terms of the predicament of finitude, the inherent decay and mortality of all living beings. As Cornell has put it, only "by coming to terms with finitude can we gain the humility necessary to overcome the hubris of individualism" (1985, page 338). Bauman's exploration of the ethical implications of mortality (1992), Giddens notion of 'life politics' (1991), and Beck's account of 'risk society' (1992) all exemplify the renewed interest in corporeal being for understanding ethical competence and considerability. Exploring issues such as the legal determination of the status and rights of the 'unborn' foetus and the medical certification of the condition of death, these writers suggest that the more reflexively we 'make ourselves' as persons the more significant bodily awareness becomes, heightening the sense of sha red mortality as a mode of political association and ethical recognition. As a recent issue of this journal has illustrated, such efforts are echoed in popular concerns and everyday struggles which mobilise connectivities between environmental degradation, animal rights, human health, and scientific expertise (Wolch and Emel, 1995). These concerns are perhaps most graphically illustrated in the current political, economic, and animal carnage associated with Bovine Spongiform Encephalopathy (BSE), so-called 'mad cow disease', and its human form, Creutzfeldt-Jakob Disease (CID), in Britain.

But these themes have been taken up most persistently and powerfully by those most excluded from the humanist and masculinist presumptions of an abstracted world of equivalent moral agents, most notably in feminist and environmentalist critiques. These critiques centre on concerns with the embodiment of difference and rationality and with the ethical significance of nonhuman life-forms and processes, respectively. In the next section I draw out wha t I see as key insights and tensions in these alternative discourses for the elaboration of a more relational understanding of ethical competence, before moving on to consider some of their spatial implications for the reconfiguration of ethical community.

Feminist ethics: the embodiment of care?

"When identities become pure, exclusive, innocent, the potential for diverse and democratic collectivities is threatened. We are all others of invention, otherness should not be reified but used as one fertile resource of feminist solidarity." Caraway (1992, page 1)

The celebration of difference in postmodern theories has been highly influential, but also hotly contested, in feminist political thinking over recent years. A number of writers (for example, Ebert, 1991; Hennessy, 1993) distinguish between two very different clusters of feminist engagements with this issue. The first, identified as *ludic postmodernism,* seeks to disrupt naturalised conceptions of identity as a model for political practice and locates the politics of difference in the discursive play of imagined

possibilities in a theatre of volatile subject positions (exemplified by the work of Mouffe Young, and Flax). The second, identified as *resistance postmodernism,* locates the politics of difference not as the effect of rhetorical or textual strategies, but as the effect of social struggles which ground the meanings contested in such strategies in the materialities of everyday living (exemplified by the work of Benhabib, Cornell, and Grosz). Although the distinction between these feminist accounts of a politics of difference is overdrawn and even somewhat caricatured, it points up an important area of dispute about how difference (that is, the relation between 'self' and 'other') and its political (and ethical) import is to be understood (Braidotti, 1992). Echoing tensions in Nietzsche's writing, Diprose outlines the parameters of this dispute in terms of whether we are more likely to "find our-selves" by looking inwards in an autonomous project of creative self-fabrication, or by looking outwards to our effects and relations with others which configure our place in the world (1994, page 87).

The first of these approaches employs individualist theories of difference, or what Kruks has called "an epistemology of provenance" (1995, page 4), to fashion self-exploration as a political process in its own right while relying on an unspoken normative claim to the ethical equivalence of all 'subject positions' in this privatised polity. Collective claims to political agency and ethical considerability tend to be looked upon askance, as intrinsically 'antidifference' (for example, see Young, 1989). This leaves feminism as a political project precariously positioned by what Anderson calls the 'double gesture' of simultaneously asserting the theoretical universalism of decentered subjectivity whilst resorting to the practical lie of strategic essentialism to secure a space for women to identify common cause at all. Ironically, as she points out,

> "the idea of subject-positions... precludes the possibility of an intersubjective perspective that would define the human subject not as purely autonomous and self-present, nor as a mere place on intersecting grids, but as constituted through difference in its ongoing relations to others" (1992, page 78).

It is the second of the feminist encounters with postmodern theories which is the more suggestive to me as a means of negotiating the impasse of individualism in reconstructions of ethical community. It centres on a notion of *diffierence in relation,* as intersubjectively constituted in the context of always/already existing configurations of self and community. In place of abstract or cognitive criteria, these always/already existing configurations of self and community are "defined by contingent and particular social attachments whose moral force consists partly in the fact that living by them is inseparable from understanding ourselves as the particular persons we are" (Friedman, 1989, page 278). This approach to ethical and political community shares poststructuralist suspicions of the liberal ambition of value homogeneity but remains committed to a practice of participatory communalism enacted through particular economic, political, scientific, and civic orderings which condition individual capacities and arenas for action. As a feminist enterprise, it represents an attempt to understand the discursive construction of 'woman' across multiple modalities of difference by adopting a problematic that can trace the connections between discursive practices and the

exploitative social orderings of meaning, being, and struggle which permit and encode them (hooks, 1990).

The ethical dimensions of this approach are best captured in Benhabib's distinction between *generalised* ethical principles—of care, friendship, intimacy, solidarity, and empathy-which involve practical, though qualities of rationality and language in the theory of 'communicative action'. More recently, Kruks has articulated an important step towards a more situated and practical approach to under

"begins from the situation of an embodied and practically engaged self; from what human beings *do* in the world... so as to rediscover the totality of [her/his] practical bonds with others" (Kruks, 1995, pages 11-12).

Although this conception of a *materially* situated self has wider significance for the reconfiguration of ethical community, which I shall return to later in my consideration of environmental ethics, here I want to pursue two persistent themes in feminist ethical thinking with which it resonates most suggestively. These are the interconected issues of corporeality (by which I mean both the finitude and embodiment of living being) and the praxis of care.

Feminist concerns with the material situatedness of social identity and of the particularity of sexed being have impelled a sustained consideration of the politics of embodiment and, more broadly, of what I have called the *corporeality* of living being. These concerns have centred on the specificities of women's experiences as (potential) childbearers, the objectification of women's bodies, and the cultural politics of the pejorative signification of 'woman' as animal, natural, carnal. This is difficult terrain for feminists, with the spectre of essentialism menacing any consideration of corporeal being in relation to gender and sexual identity. But there is a growing realisation that "to separate the feminine from female morphology is misguided theoretically and politically even in strategic contexts" (Gross, 1986, page 136). The concept of difference in relation requires a "theory of the flesh" (Moraga and Anzaldua, 1981, page 23) to elaborate an understanding of individual, collective, and group being as situated in webs of con nection that are 'practico-inert' as well as discursive, embodied as well as cognitive. Grosz's elaboration of a "corporeal feminism" (1989, 1994) provides perhaps the most sustained attempt to articulate such a "theory of the flesh". She builds on Irigaray's understanding of difference as being always inscribed upon the experiences of the sexed body:

"I want to go back to the natural material which makes up our bodies, in which our lives and environment are grounded... a latent materiality which our so-called human theories... move away from [and] progress through... with a language which forgets the matter it designates and through which it speaks" (Irigaray, 1986, quoted in Grosz, 1989, page 172).

Here, the body is considered not as the passive container of social being but as a living assemblage of biological materials and processes which both register and orient our senses of the world. Although always configured through particular social orders of meaning, technology, and practice, these corporeal properties are no less conditional of

the very capacities of cognition and communication that mark the abstracted ideals of individual autonomy and human distinctiveness. As Grosz goes on to suggest in her more recent work (1994) such an understanding of the body undermines the political myth of self-authorship and the privileged ethical status of humans as cognitive, communicative subjects.

A second theme in feminist ethics that is particularly pertinent to the elaboration of an intersubjective conception of the situated self is the praxis of care. This builds on the contention that feminisms can only move beyond "the impasse of (in)differen ce" (Probyn , 1 993) by simultaneously articulating questions of 'who am I? ', with those of ' who is she?' This ethical incarnation of 'difference in relation' derives from a number of impulses in feminist work other than philosophy, particularly from psychoanalytic feminism (Meyers, 1994). A major stimulus was the empirical work of psychologist Gilligan (1982) who reported a marked tendency for women to articulate more relational senses of self and stronger senses of responsibility for connected others than do men - what she called a 'different ethical voice' from that institutionalised in conventional justice. The recognition and enacting of these relational senses of self and responsibility constitute what has become known as the 'feminist care ethic'. Al though much debated, it centres on a concern with ethical praxis and the practical connectivities which secure the well-being of those least mobile and most vuln erable, *not* as discursive subject positions, but as mortal others-in-relation such as the hungry, the sick, and the abused (Lovibond, 1994).

This understanding of ethical agency and community recognises a bodily in tentionality to human existence and social life that knits together multiple and apparently fragmentary collective identities, each of which is itself the outcome of a multiplicity of prior and present praxes (Kruks, 1995, page 15). Although such an understanding certainly helps to substantiate an appreciation of the ineluctable embodiment of intersubjective being, it is restricted purely to human being disembedded from webs of connection with other life-forms and processes. It is here that environmental ethics promises to make an important contribution.

Environmental ethics: (re)considering others

"... the multiplicity of living organisms retain, ultimately, their peculiar, if ephemeral, characters and identities but they are systemically integrated and mutually defining."

Callicott (1989, page lll)

In contrast to much feminist work, environmentalists have invested considerable energies in trying to extend the ethical domain of the autonomous self, as a bearer of social rights, beyond the human. This has taken shape in one of two ways. The first, which might be termed *moral exrensionism* and is associated with long-standing concerns over animal rights, transports the liberal figure of the rights-bearing individual wholesale to a range of nonhuman creatures. These extensions are made either on the criterion of intelligence in the form of reasonin g and linguistic capacities, which is

usually restricted to primates and cetaceous mammals, or of sentience, a more inclusive criterion centred on the capacity to suffer or experience pain, which covers all mammals with a central nervous system. Informed by new perspectives in animal biology and psychology, particularly primate cognition, this approach culminates in the proposal of a 'subject-of-life' criterion for extending ethical standing to all animate beings (Regan and Singer, 1989). Such approaches build on mainstream utilitarian or Kantian ethical arguments and are open to the critiques of liberal individualism rehearsed above (see Benton, 1993).

A second approach, broadly aligned with deep ecological perspectives and in formed by Gaian organiscism, has involved the elaboration of various notions of *expanded human consciousness* to encompass a recognition of our embeddedn ess in constitutive relations with the nonhuman world. These efforts do not restrict the extension of ethical standing to animate organisms but include vegetal and inanimate elements and processes under the collective term of *earth others* (Bigwood, 1993). This wider ethical compass frequently relies upon the evocation of a spiritual dimension to 'being in the world' which resonates uneasil y with the intellectual register of the academy. Prominent examples of this approach include Mathews's concept of the 'ecological self' (1991), Naess's n otion of 'self-actualisation' (1989), and Fox's idea of the 'transpersonal self' (1990). In a sustained critique of these approaches, Plumwood has identified such concepts with what she calls the 'imperialism of the self' (1993). As attempts to construct an intersubjective conception of ethical agency they are tlawed by a col onising humanism which subsumes the ethical considerability of nonhuman organisms into the conception of human being, denying them subject status in their own right. This highlights a key dilemma for environmental ethics. Femin ist difficulties with the privileged status of cognitive and linguistic competences in fashioni ng the ethical su bject are ampl ified for envi ron men tal ists whose constituency consists of subjects without (intelligible) voices, a constituency of nonpersons more resolutely excluded from the status of ethical subjects than any human.

This dilemma has stimulated an important development in recent work on environmental ethics. Picking up Kruk's insistence on a materially situated, practically engaged self as the embodiment of an intersubjective understanding of ethical agency, this work has begun (re)exploring a dialogical understanding of relations between the self and the world centred on the corporeal immersion of humans in the biosphere. This conceptualisation of intersubjectivity recognises humans as

> "beings thoroughly entwined with an extralinguistic world... [and that] to deny this entwinement is to bind ourselves to a quest for an abstract and empty sovereignty that destroys the world and is self-defeating" (Coles, 1993, page 231).

Like feminist evocations of a 'theory of the flesh', some of these explorations draw inspiration from traditions of dialectical reasoning, such as that of Adorno (Coles, 1993), and of phenomenology, particularly that of Merleau-Ponty (Abram, 1988). They simultaneously emphasise the corporeal embeddedness of cognitive processes in the

visceral dynamics of brain, eye, skin, etc, and the con figuration of human well-being and interdependence with that of other living bein gs. Arguably it has been feminist environmentalists, particularly those writing from postcolonial perspectives (Mohanty et al, 1991), who have done most to transform these ideas into an ethical praxis in the form of a 'politicised ecological care ethic' (Donovan, 1993). This translates the recognition of webs of connectivity between the livelihood practices and cultural values of particularly situated human actors (collective and individual) and the life-habits and relationships of other biotic agents in to acknowledged responsibilities, both in the sense of caring *about* 'generalised others ' and caring *for* 'concrete others' (Curtin, 1991; King, 1991). A good example is the global actor network DAWN (Development with Women working for a New Era) which, since 1984, has sought to articulate material connectivities between environmental, livelihood, and health issues and the centrality of 'third world' women in this nexus (Braidoti et al, 1994).

The feminist and environmentalist approaches outlined in this section are each ongoing and contested discourses which inform, and are informed by, a wide variety of political practices. My treatment of them has been necessarily highly selective. The main contributions which I would attribute to the particular threads of feminist and environmentalist ethics I have traced are their various attempts to substantiate a corporeal conception of the situatedness of ethical agency and the extralinguistic connectivities of ethical community. Moreover, they are suggestive of spatial imaginaries of ethical community which do not replicate the bimodal geographies of public-private morality. Equally, however, these approaches share shortcomings which are important in terms of my broader argument. Even amidst the talk of intersubjectivity, embodiment, and embeddedness the categories 'human' and 'nonhuman' remain unproblematic both in themselves and as an encoding of society and nature as discrete, if subsequently reconnected, terrains. Moreover, although the distinction between general and concrete others is an heuristic device which has no necessary spatial predisposition , feminist and environmentalist care ethics have tended in practice to map it simplistically onto the geographical binaries of distance-proximity, global-local, and outside-inside, for example, in the praxis of 'bioregionalism' (Cheney, 1989) and 'communities of place' (Friedman, 1989). In the next section of the paper I turn to consider the concept of *hybridity* as a means of disrupting the polarisation of 'society' and 'nature' and to begin to explore some alternative cartographies for a relational ethics.

Hybrid cartographies of ethical community

"Evidence is building of a need for a theory of 'difference' whose geometries, paradigms and logics breakout of binaries and nature/culture modes of any kind" (Haraway, 1991, page 129).

Bringing ideas of *difference in relation,* both in the discursive and in the corporeal sense, to bear on the question of political community has been most extensively explored in the work of Haraway and Latour in their elaboration of concepts of hybridity. Haraway's argument is that we 'cannot not want' something called humanity

because nobody is self-made, least of all humans (1992a, page 64). But in order to recuperate a progressive commitment to humanity as a moral community the dualisms associated with humanism have to be jettisoned. This requires a hybrid concept of community which disrupts the purification of culture and nature into distinct ontological zones, onto which the binary of 'human'-'nonhuman' is then mapped. Haraway's cyborg metaphor articulates a political vision which appreciates the instability of boundaries between human, animal, and machine and their discursive and technological malleability, particularly in the hands of corporate science (1985). Political agency and community emerge from this vision through 'webs of connection' between situated and partial knowing selves fashioned through 'shared conversations', and what she calls "semiotic-material technologies" which link meanings and bodies (1991, page 192). Ethical agency and community likewise emerge as the performance of multiple lived worlds, weaving threads of meaning and matter through and between these 'webs of connection'.

As with so many of Haraway's provocative ideas, what she means by semioticmaterial technologies is hard to fix . Her favourite examples are prosthetics, genetics, and organ transplants in which particular codified knowledges become stabilised as technological artefacts which, in turn, are grafted into and mobilised by living beings. These examples tend to site the dilemmas of hybrid subjectivity, and the cyborg figure used to signify them, within an individuated being "a hybrid creature composed of organism and machine (1991, page 1). There is a tension, then, in Haraway's account of the status and configuration of her hybrid subject the cyborg.

It is not clear whether, as Kruks asks, these hybrid subjects stitch their own parts together, in which case they become more cohesive than Haraway wants to admit, or whether this 'stitching together' is better understood as an operation taking place from without (1995, page 9). If the first, then Haraway's hybrid subject falls back on account of political and ethical agency which privileges cognitive and discursive faculties in the constitution of 'knowing selves' (however partial or unfinished the project of self-fabrication). If the second, then it is not clear from Haraway's account just what it is that connects diverse knowing selves together other than the capacity for linguistic communication evoked in her notion of 'sha red conversations'. In short, although Haraway's account of hybridity successfully disrupts the purification of nature and society and the relegation of 'nonhumans' to a world of objects, it is less helpful in trying to 'flesh out' the 'material' dimensions of the practices and technologies of connectivity that make the communicability of experience across difference, and hence the constitution of ethical community, possible. These dimensions require a closer scrutiny of overlapping life-practices and corporeal processes, for example those mediated by food, energy, disease, birth, and death, than Haraway has so far admitted.

In this context, I find Latour's account of hybridity, through the metaphor of the 'hybrid network', more suggestive for elaborating a relational understanding of ethical agency and community The network metaphor places greater emphasis on the multiple agency of hybridity—the mobilisation of animate, mechanical, and discursive modalities of

being within and between differently configured actants. Such networks not only connect pregiven individual entities but shape the possibilities for individuality. Moreover, Latour is explicit about the implications of this interpretation of hybridity for the reordering of ethical community. Hybrid networks, he argues, force us to

"take into account the objects that are no more the arbitrary stakes of [human] desire alone than they are the simple receptacle of our mental categories" (1993, page 117).

The intersubjective understanding of hybridity articulated in the metaphor of networks disrupts the opposition between objects and subjects prescribed by an ethics centred on instrumental reason and its encoding in the purified domains of 'Nature' and 'Society'. Instead, a multitude of mediators, what Latour calls 'nature-culture collectives', are exposed, built with raw materials made out of "poor humans and humble nonhumans" (page 115). It is these collectives which constitute the topography of political and ethical community, communities which are ever lengthening as larger and larger numbers of nonhumans are enlisted by the technologies of science, governance, and market into networks that are increasingly global in reach. But Latour insists that such networks are by no means comprehensive or systematic. They are "connected lines, not surfaces, points of view on networks that are by nature neither local nor global" (page 120). Instead, hybrid networks are conceived as occupying narrow lines of force that allow us to pass with continuity from the local to the global, from the human to the nonhuman, through partial and unstable orderings of numerous practices, instruments, documents, and bodies.

Though by no means unproblematic, Latour's notion of hybridity as networks of nature-culture collectives seems to me breach the impasse of individualist ethics at a number of key points. First, it releases 'nature' and nonhuman beings from their relegation to the status of objects with no ethical standing in the human pursuit of individual self-interest, *without* resorting to the extension of this liberal conception of ethical agency to other animals. Second, it substantiates an intersubjective understanding of ethical agency and community by which the corporeal connectivities between differently constituted actants can be traced in particular material circumstances an d specified cases. And finally, it liberates the geographical imaginary of ethical community from the territorialised spaces of the embodied individual, the local n eighbourhood, and the nation-state, to trace the threads of ethical considerability through more dynamic, unstable, and performed spatial orderings of fiow, mobil ity, and synthesis (see Shields, 1992).

I want to illustrate these themes brieíly through the example of food, which represents one of the most pervasive corporeal mediators of hybrid communities spanning differently situated people, artefacts, biotic complexes, and practices (Lupton, 1996). As Atkinson has remarked, "Food is a liminal substance... bridging... nature and culture, the human and the natural, the outside and the inside" (1983, page 11). The transformation of human food-production and food-consumption processes has involved the proliferation of hybrids, through the genetic engineering of plants and animals, and the

pollution of biotic networks, through the release of synthetic chemical waste and the absorption of hormonal and chemical additives into the bodies and organs of producers and consumers of agrofood goods. The material and discursive economies of these hybrid networks connect the life practices of human food-consumers and food-producers with those of other animals, plants, and environments over considerable distances. The ethical connectivities between actants at one location in the network and those at other locations are no less intimate or immediate for the physical distance or lack of proximate knowledge involved. Figure I traces in a simplified way the corporeal contours of ethical community for one hybrid network constituted through the fiuid geographies of milk.

The figure illustrates the transfigurations of milk in animal (including human) bodies, variously inscribed by hormonal, genetic, and chemical treatments, and in biophysical spaces, such as in the form of nitrate runoff into river catchment are as. It highlights the myriad ways in which the connectivities between people, variously situated in the social organisation of milk production and con sumption, are fashioned in and through animals, habitats, and technologies, whose *presence is* integral to recognising ethical community. Such a recognition informs numerous ethical practices, for example those manifested in alternative food networks which enact more equitable relations between producers and con sumers, based on the principles of 'fair trade' and more sustainable relations with other living constituents of the network through the adoption of 'organic' farming methods.

The example raised earlier of BSE represents another such hybrid network, centred this time on a 'prion' disease which has passed from sheep to cattle through infected animal feed and from cattle to humans through infected meat products (Lacey, 1994). The ethical (and political) implications of the BSE epidemic in Britain centre precisely on recognising the material properties of the BSE prion as a mobile constituent of a hybrid collective; an intricate network of corporeal relations between humans, animals, and technologies. In both cases, intimate ethical connections between people and places, bodies and meanings, sometimes over considerable distances, make sense only through an acknowledgement of the material properties of nature-culture hybrids such as milk and BSE.

Geographical directions for a relational ethics

"Modernity is changing the locus of belonging: our language of attachments limps suspiciously behind, doubting that our needs could ever find larger attachments".

M. Ignatieff (quoted in Corbridge, 1993, page 449).

In an effort to articulate an intersubjective conception of ethical agency and a relational understanding of ethical considerability I have identified corporeality and hybridity as key modalities for reconfiguring the cartographies of ethical community. As Keller has noted, "it is precisely in embodiment that the many are becoming one and the outer becoming the inner" (1990, page 236). Critically engaging with feminist and

environmentalist critiques of traditional ethical discourse I have highlighted three issues which need simultaneously to be con sidered in pursuing this project:

(1) extending the body politic beyond the human subject;
(2) grounding cognitive processes and rationalities as specifically embodied and practiced; and
(3) displacing the fixed and bounded contours of ethical commun ity.

This understanding of ethical community is relational in concept, insisting on the situatedness of individual and collective efforts to realise new ethical conn ections and codes and their emergence through the political process rather than some ideal, rational, abstraction. As Cornell has noted,

"the opportunity to participate in... political life requires more than liberal ism's formal recognition of each of us as abstract subjects equal before the law. It depends on the achievement of the material and cultural conditions for participation" (1985, page 368).

This insistence on the situatedness of ethical practice and discourse recognises the entrenched contours of the sovereign individual and the nation-state as sites of material struggle and resistence rather than narrative play. For although state sovereignty affirms that we have our primary political identity as participants in a particular civic community, we retain a potential connection with 'humanity' through participation in broader international institutions (encoding both civic and human rights) (Walker, 1991, page 256). Similarly, Haraway's figure of the cyborg suggests new possibilities for mapping the individual in an era of the 'postorganic' embodiment of self in which knowledge projects such as genetic codification and recombinant DNA technologies breach the categorical cordons erected to distinguish humans from other animals, as well as between animal and plant species (1992b). No longer "a physical place to which one can go" (Haraway, 1992a, page 66), 'nature' emerges through notions of corporeality and hybridity as a staple figure of a relational ethics understood as a "sphere of judgement regarding the possibility and actuality of connections, arrangements, lineages, machines" (Grosz, 1994, page 197).

Recognising ethical communities as practically constructed and corporeally embedded, points towards a world of fragile heterogeneous networks in which equality (in the sense of an equivalence of being rather than a universal rational ideal) remains the common premise of emancipatory subjects or movements (Thrift, 1996; Whitt and Slack, 1994). The practical and discursive stability of such networks can only be realised through a rethinking of the language of attachment and the locus of belonging in ways which breach the implicit spatial encoding of ethical consciousness and performance to proximate 'others'. As Harvey has argued, the issues of spatial and temporal scale are central to the question of building new ethical communities because the political power to act, to decide upon socioecological projects and to regulate their unintended con sequences, has always to be defined in relation to institutionalised scales (1993, page 41). Theoretical and practical efforts in this direction are most visibly underway in the

field of 'development studies ' (Corbridge, 1993) and in the political arenas of international governance. Nowhere is the urgency of such a rethinking more apparent than in the politics of so-called global environmental man agement in which. the fate of the 'distant poor' and 'nonhumans' are cast in the shadow of the social institutions and practices of capital accumulation and material consumption led by advanced industrial countries concentrated in the 'north' (Cooper and Palmer, 1995). As Visvanathan (1991) has observed, in such a Cartesian consumerist world it is *self-restraint* rather than self-authorship that would seem to promise more viable spaces for new forms of ethical community.

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ERASMUS-SOCRATES
INTENSIVE COURSE ON

"Women and the environment, a gender perspective: from the global to the local"

2-9 July 1998

Coordinated by
Department of Geography
Autonomous University of Barcelona

Funded by:

Erasmus-Socrates Office (Brussel.les), DGES (Ministerio de Educación y Cultura, Madrid), Institut Català de la Dona (Barcelona), Caixa d'Estalvis de Catalunya, Fundació Jaume Bofill (Barcelona), Universitat Autònoma de Barcelona.

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Cover illustration: Women brickworkers' hands, Bangladesh from Marchand, Marianne H. & Parpart, Jane L. (1995) ***Feminism, postmodernism, development,*** **London, Routledge.**

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INTRODUCTION

Welcome to the Eighth Erasmus/Socrates Gender and Geography Intensive Course in Barcelona!.

The central theme of this Intensive Course is **"Women and the environment, a gender perspective: from the global to the local".** We hope to continue the on-going debate in our network through this topic that is central to our discipline and to the world of today but has, perhaps, not attracted sufficient interest from gender aware geographers.

This Reader contains helpful material on the topic of the course and it is organised according to the programme of each day. For a brake, we have included two excursions, one half day visit to Barcelona (by bus) and one full day visit to Girona (100 km from Barcelona). The whole Saturday is devoted to student's field work in the district of *Nou Barris* in Barcelona. Saturday is the best day for the observation of women's daily life in a difficult physical environemnt and we need a full day as accesibility is not that easy. We will also be in contact with local groups and associations of *Nou Barris*.

Therefore, there are two kinds of student's workshops, those devoted to discussion of the literature and the lectures and those devoted to discussion of the fieldwork in *Nou Barris*. The last day student's presentation will include the conclusions of both types of workshops.

The previous Erasmus Intensive Course have been exciting intellectual and personal events with much opportunity for exchange of different national perspectives. We hope that the Barcelona meeting (second round!) will continue this tradition and will be an exciting meeting point for all of us. We will try to make our best but we also ask all of you your collaboration and help.

We look foward to seeing all of you in Barcelona in July,

Maria Dolors Garcia-Ramón, Mireia Baylina, Gemma Cànoves, Anna Ortiz i Montse Solsona (Organizing Committee)

Bellaterra, 15th May 1998

GENDER AND GEOGRAPHY:
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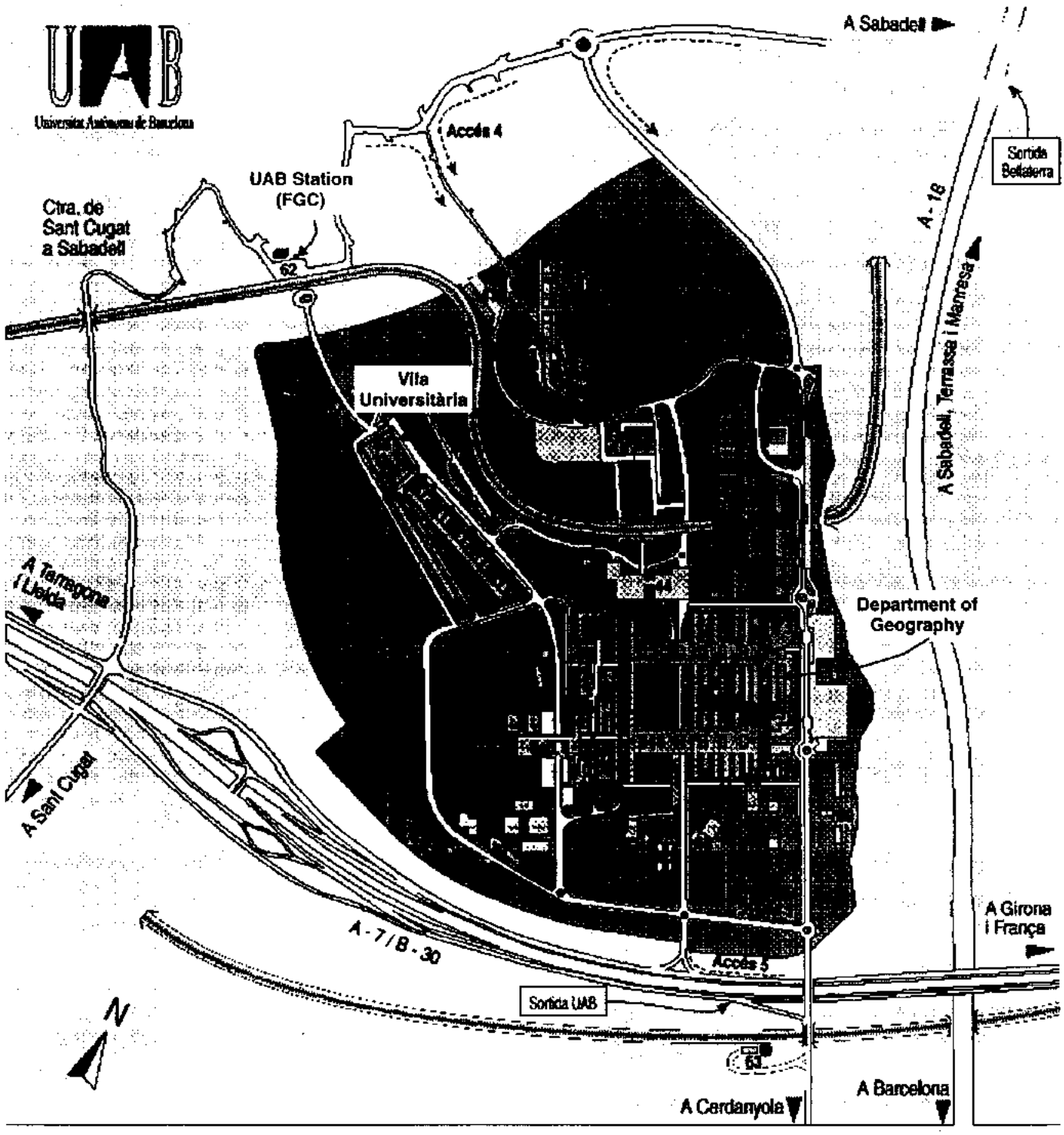
BELLATERRA CAMPUS



PROGRAMME OF THE INTERNATIONAL SEMINAR ON

"WOMEN AND THE ENVIRONMENT, A GENDER PERSPECTIVE: FROM THE GLOBAL TO THE LOCAL"

(Autonomous University of Barcelona, Bellaterra, 2-9 July 1998)

Day 1: WELCOME AND OPENING LECTURE
Thursday 2nd July

18.30h. **Institutional welcome and opening lecture with Carles Solà (Chancellor of the Autonomous University of Barcelona), Helena Estalella (Dean of the Faculty of Arts), David Saurí (Head of the Geography Department), Joaquima Alemany (President of the Catalan Institute for Women), Joos Droogleever (Coordinator Socrates Network) and Maria Dolors Garcia Ramón (Local Coordinator).**

Sarah Whatmore (University of Bristol) *"Living spaces: feminist encounters with environmentalism".*

20.30h. **Cold buffet.**

Day 2: WOMEN, CITY AND ENVIRONMENT
Friday 3rd July

9.30h. **Dina Vaiou** (National Technical University of Athens) *"Rethinking feminist approaches to the urban environment".*

10.30h. **Josepa Bru** (University of Girona) *"Environmental conflicts and women's role in Spain".*

11.30h. **Coffee break.**

12.00h. **Oriol Nel.lo** (Autonomous University of Barcelona) *"Urban dynamics in Metropolitan Barcelona. Ten questions and an environmental epilogue".*

13.00h. **Lunch.**

14.30h. **Workshops on lectures and literature.**

16.00h.-16.30h. **Instructions for the fieldwork of the next day.**

Day 3: FIELDWORK
Saturday 4th July

9.30h.-18.00h.	**Student's fieldwork in a peripherical area of Barcelona *(Nou Barris)* led by Josepa Bru and Asunción Blanco. (lunch will be provided)**

Day 4: ENGENDERING RURAL AND URBAN ENVIRONMENTS
Sunday 5th July

9.30h.	**Joos Droogleever Fortuijn & Lia Karsten** (University of Amsterdam) *"Contrasting policies: questions around emancipation, environment and mobility"*
10.30h.	**Anna Bofill** (architect) *"Women, daily life and urban environment".*
11.30h.	**Coffee break.**
12.00h.	**Workshops on lectures and literature.**
13.30h.	**Lunch.**
15.30h.-20.00h.	**Visit to Barcelona led by Alba Caballé (details will be announced).**

Day 5: FIELDTRIP
Monday 6th July

8.30h.-19.30h.	**Fieldtrip to Girona led by Isabel Salamaña, Responsible of Environment, Regional and Strategy Planning, Girona City Council (details will be announced).**

Day 6: WOMEN AND ENVIRONMENT IN THE DEVELOPING WORLD
Tuesday 7th July

9.30h.	**Janet Momsen** (University of California at Davis) *"Gender differences in environmental concern and perception".*
10.30h.	**Janet Townsend** (University of Durham) *"Gender and agroecological change in land settlement in Mexico".*
11.30h.	**Coffee break.**
12.00h.	**Emma Mawdsley** (University of Durham) *"After Chipko: from environment to region in Uttaranchal".*
13.00h.	**Lunch.**
14.30h.	**Workshops on lectures and literature.**
16.00h.-17.00h.	**Workshops on the fieldwork.**

Day 7: NATURE, SOCIETY AND BODY
Wednesday 8th July

9.30h.	**Catherine Nash** (University of Wales, Lampeter) *"Environmental history, philosophy and difference: feminist perspectives on historical and contemporary human-environmental relations".*
10.30h.	**Kirsten Simonsen** (Roskilde University Centre) *"Women, embodiment and the urban environment".*
11.30h.	**Coffee break.**
12.00h.	**Verena Stolcke** (Autonomous University of Barcelona) *"The sex of biotechnology: nature in culture".*
13.00h.	**Lunch.**
14.30h.	**Workshops on lectures and literature.**
15.00h.-16.40h.	**Round table: *"Gender and the environment: North and South".*** Chair: Maria Dolors Garcia-Ramón. Participants: Josepa Bru, Catherine Nash, Emma Mawdsley, Janet Momsen, Janet Towndsen.
16.40h.-18.00h.	**Students preparing final presentations.**
19.30h.	**Visit to the Institut Català de la Dona in Barcelona.** **Cold buffet.**

Day 8: CLOSING SESSION
Thursday 9th July

9.30h.	**Student's presentation of the results of workshops and the fieldwork.**
11.30h.	**Coffee break.**
12.00h.-13.00h.	**Evaluation of the course and farewell.**

Coordinator: Maria Dolors Garcia-Ramón.
Organizing Committee: Mireia Baylina, Gemma Cànoves, Maria Dolors Garcia-Ramón, Anna Ortiz and Montse Solsona.

Funded by: Erasmus-Socrates Office (Brussel.les), DGES (Ministerio de Educación y Cultura, Madrid), Institut Català de la Dona (Barcelona), Caixa d'Estalvis de Catalunya, Fundació Jaume Bofill (Barcelona), Universitat Autònoma de Barcelona.

LIST OF THE ARTICLES INCLUDED IN THIS READER

General articles:

Rocheleau, Dianne; Thomas-Slayter, Barbara & Wangari, Esther (1996) "Gender and environment: a feminist political ecology perspective", in **Rocheleau, Dianne** (et al.) *Feminist Political Ecology*, London, Routledge, pp.3-23.

Rose, Gillian; Kinnaird, Vivian; Morris, Mandy & Nash, Catherine (1997) "Feminist geographies of environment, nature and landscape", in **Women and Geography Study Group,** *Feminist Geographies: explorations in diversity and difference*, Essex, Longman, pp.146-190.

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Brú-Bistuer, Josepa (1986) "Spanish women against industrial waste: a gender perspective on environmental grassroots movements", in **Rocheleau, D.** (et al.) *Feminist Political Ecology*, London, Routledge, pp.105-124.

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Nel.lo, Oriol (1997) "Urban dynamics in Metropolitan Barcelona. Ten questions and an environmental epilogue" (manuscript).

Simonsen, Kirsten & Vaiou, Dina (1996) "Women's lives and the making of the city: experiences from 'North' and 'South' of Europe", *International Journal of Urban and Regional Research*, vol.20, n.3, pp.446-465.

Stete, Gisela (1995) "Settlement structures, traffic and transport structures and the organisation of everyday life" in **Ottes, L.** (et al.) *Gender and the Built Environment*, Assen, Van Surcum, pp.143-149.

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Townsend, Janet; Arrevillaga de Escobar, Ursula; Bain de Corcuera, Jennie; Cancino Córdova, Socorro; Pacheco Bonfil, Silvana & Pérez Nasser, Elia (1995) "Women settlers in the mexican rainforest: destroyers or saviours?", in **Daltabuit, Magalí & Vargas, Luz María** (coord.) *Mujer: madera, agua, barro y maiz,* Universidad Nacional Autónoma de México, Centro Regional de Investigaciones Multidisciplinares, Cuernavaca, Morelos, pp.23-47.

Whatmore, Sarah (1998) "Living spaces: feminist encounters with environmentalism" (manuscript).

Zauke, Gabi & Spitzner, Meike (1995) "Freedom of movement for women" in **Ottes, L.** (et al.) *Gender and the Built Environment,* Assen, Van Surcum, pp.149-155.

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Rocheleau, Dianne; Thomas-Slayter, Barbara & Wangari, Esther (1996) "Gender and environment: a feminist political ecology perspective", in **Rocheleau, Dianne** (et al.) *Feminist Political Ecology*, London, Routledge, pp.3-23.

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Rocheleau, D. (ed. al.) (1996): Feminist Political Ecology. London. Routledge

1

GENDER AND ENVIRONMENT

A feminist political ecology perspective

Dianne Rocheleau, Barbara Thomas-Slayter, and Esther Wangari

The convergence of interest in environment, gender, and development has emerged under conditions of rapid restructuring of economies, ecologies, cultures, and polities from global to local levels. Global economic, political, and environmental changes have affected both men and women as stakeholders and actors in resource use and allocation, environmental management, and the creation of environmental norms of health and well-being. Some scholars and activists see no gender differences in the ways human beings relate to the environment, except as they are affected by the constraints imposed by inequitable political and economic structures. Others see the gendered experience of environment as a major difference rooted in biology. We suggest that there are *real*, not imagined, gender differences in experiences of, responsibilities for, and interests in "nature" and environments, but that these differences are not rooted in biology per se. Rather, they derive from the social interpretation of biology and social constructs of gender, which vary by culture, class, race, and place and are subject to individual and social change.

In this volume, we explore the significance of these differences and the ways in which various movements, scholars, and institutions have dealt with gendered perspectives on environmental problems, concerns, and solutions. The major schools of feminist scholarship and activism on the environment can be described as:

1 ecofeminist;
2 feminist environmentalist;
3 socialist feminist;
4 feminist poststructuralist; and
5 environmentalist.

Ecofeminists posit a close connection between women and nature based on a shared history of oppression by patriarchal institutions and dominant Western culture, as well as a positive identification by women with nature. Some ecofeminists attribute this connection to intrinsic biological attributes (an essentialist position), while others see the women/nature affinity as a social construct to be embraced and fostered (Plumwood 1993; Merchant 1981, 1989; King 1989; Shiva 1989; Mies and Shiva 1994; Rocheleau 1995). Feminist environmentalism as articulated by Bina Agarwal (1991)

emphasizes gendered interests in particular resources and ecological processes on the basis of materially distinct daily work and responsibilities (Seager 1993; Hynes 1989). Socialist feminists have focused on the incorporation of gender into political economy, using concepts of production and reproduction to delineate men's and women's roles in economic systems. They identify both women and environment with reproductive roles in economies of uneven development (Deere and De Leon 1987; Sen and Grown 1987; Sen 1994) and take issue with ecofeminists over biologically based portrayals of women as nurturers (Jackson 1993a and b). Feminist poststructuralists explain gendered experience of environment as a manifestation of situated knowledges that are shaped by many dimensions of identity and difference, including gender, race, class, ethnicity, and age, among others (Haraway 1991; Harding 1986; Mohanty 1991). This perspective is informed by feminist critiques of science (Haraway 1989; Harding 1991) as well as poststructural critiques of development (Escobar 1995; Sachs 1992) and embraces complexity to clarify the relation between gender, environment, and development. Finally, many environmentalists have begun to deal with gender within a liberal feminist perspective to treat women as both participants and partners in environmental protection and conservation programs (Bramble 1992; Bath 1995).

We draw on these views of gender and environment to elaborate a new conceptual framework, which we call feminist political ecology. It links some of the insights of feminist cultural ecology (Fortmann 1988; Hoskins 1988; Rocheleau 1988a and b; Leach 1994; Croll and Parkin 1993) and political ecology (Schmink and Wood 1987, 1992; Thrupp 1989; Carney 1993; Peet and Watts 1993; Blaikie and Brookfield 1987; Schroeder 1993; Jarosz 1993; Pulido 1991; Bruce, Fortmann and Nhira 1993) with those of feminist geography (Fitzsimmons 1986; Pratt and Hanson 1994; Hartmann 1994; Katz and Monk 1993a and b; Momsen 1993a and b; Townsend 1995) and feminist political economy (Stamp 1989; Agarwal 1995; Arizpe 1993a and b; Thomas-Slayter 1992; Joekes 1995; Jackson 1985, 1995; Mackenzie 1995). This approach begins with the concern of the political ecologists who emphasize decision-making processes and the social, political, and economic context that shapes environmental policies and practices. Political ecologists have focused largely on the uneven distribution of access to and control over resources on the basis of class and ethnicity (Peet and Watts 1993). Feminist political ecology treats gender as a critical variable in shaping resource access and control, interacting with class, caste, race, culture, and ethnicity to shape processes of ecological change, the struggle of men and women to sustain ecologically viable livelihoods, and the prospects of any community for "sustainable development."

The analytical framework presented here brings a feminist perspective to political ecology. It seeks to understand and interpret local experience in the context of global processes of environmental and economic change. We begin by joining three critical themes. The first is *gendered knowledge* as it is reflected in an emerging "science of survival" that encompasses the creation, maintenance, and protection of healthy environments at home, at work and in regional ecosystems. Second, we consider *gendered environmental rights and responsibilities*, including property, resources, space, and all the variations of

legal and customary rights that are "gendered." Our third theme is *gendered environmental politics and grassroots activism*. The recent surge in women's involvement in collective struggles over natural resource and environmental issues is contributing to a redefinition of their identities, the meaning of gender, and the nature of environmental problems.

GLOBAL PERSPECTIVES FROM LOCAL EXPERIENCE

Until recently, conventional wisdom in international environmental circles suggested that environmental issues in industrialized countries had to do with "quality of life," whereas in Africa, Asia, and Latin America they had to do with survival. If we compare the conservation agenda of wildlife organizations in the United States with the Chipko movement to protect the forests and watersheds of the lower Himalayas, or with women's tree-planting initiatives in Kenya, this view seems accurate. However, there are also wildlife conservation organizations in Africa and citizens' environmental justice movements in the United States. Toxic wastes, contaminated food, and workplace environmental hazards have become more than quality of life issues in many urban and industrial communities as well as in the remote rural areas affected by the same processes.

Perhaps it would be more accurate to recast this dichotomy along different lines, based on a careful analysis of the gender division of rights, responsibilities, and environmental risk in everyday life. While there are several axes of power that may define peoples' access to resources, their control over their workplace and home environments and their definitions of a healthy environment, we focus on gender as one axis of identity and difference that warrants attention. Feminist political ecology deals with the complex context in which gender interacts with class, race, culture and national identity to shape our experience of and interests in "the environment."

Our approach to feminist political ecology examines the very definition of "environment" and the gendered discourse of environmental science, environmental rights and resources, and environmental movements, using feminist critiques of science (Hynes 1989, 1991, 1992; Shiva 1989; Mies and Shiva 1994; Merchant 1982, 1989; Keller 1984; Griffin 1987; Birke and Hubbard 1995; Haraway 1989, 1991; Harding 1986, 1987; Tuana 1989; Hubbard 1990; Zita 1989) as well as the analyses and actions of feminist and environmental movements. For example, Sandra Harding (1986) has raised issues of gender inequities in science as a profession, gender biases and abuses in the practice of science, the myth of gender-neutral objectivity, gendered metaphors employed in scientific explanation and process, and the possibilities for a transformed, socially just science. Donna Haraway (1991) discusses the need to recognize and combine situated knowledges and invokes the "power of partial perspective" as a pathway toward greater objectivity. She advocates a pursuit of scientific knowledge that joins many knowers on the basis of affinities (reaching beyond identities) to build a joint, expanded understanding as part of an explicitly social project.

We also build on the work of socialist feminist scholars such as Nancy Fraser (1987), who has focused on the political discourse of needs and services

in social welfare programs in the United States, and Patricia Stamp (1989) who addresses the gendered discourse of "donors and recipients" in international development. We extend their analyses to examine the impact of gender on environmental discourse and its differential effects on women and men (Merchant 1992; Hynes 1989, 1992; Plumwood 1993; Haraway 1991; Harding 1991).

The overview and case studies in this volume draw upon the experience of grassroots environmental movements worldwide, including such diverse situations as the struggle to save old growth forests in Europe, women's initiatives to secure safe food supplies in the industrial core of Poland, community efforts in the United States and Spain to fight toxic waste dumping, women's movements to retain access to land and forest resources in Kenya, and women's participation in the struggles of the rubber tappers' union to protect their forest homes and workplaces in the Brazilian Amazon. Less visible, more diffuse gendered struggles occur at household and community levels in the case study examples from Zimbabwe, the Dominican Republic, the Philippines, and India. The experience of all of these disparate groups provides distinct examples of gendered science, rights, and political organization.

Reviewing these cases we find common threads of concern over:

- survival;
- the rights to live and work in a healthy environment;
- the responsibility to protect habitats, livelihoods, and systems of life support from contamination, depletion (extraction), and destruction; and
- the determination to restore or rehabilitate what has already been harmed.

These common threads surface repeatedly within our varied case studies, which range from urban neighborhoods to arid farmlands to dense rainforests. The commonalities and differences in the relation of gender and environment in these cases both contribute to and challenge prevailing theories and serve to inform policy and practice for environment, development, and women's programs and movements.

THREE THEMES COMMON TO GENDER AND ENVIRONMENT WORLDWIDE

Environmental science and "the international environmental movement" have been largely cast as the domain of men. In fact, while the dominant and most visible structures of both science and environmentalism may indeed be dominated by men, mostly from the wealthier nations, the women of the world – and many men and children with them – have been hard at work maintaining and developing a multiplicity of environmental sciences as well as grassroots environmental movements. And while it is the same few who may lay claim to pieces of the living landscape as private and state property throughout the world, women and many men and children have also been busy maintaining and developing their own places on the planet through the daily management of the living landscape.

The case studies in this volume address the intersection of gender and environment through the lens of three themes: gendered science, gendered

rights (over both property and the resource management process) and gendered organizations and political activity. Specific places are treated as culturally and ecologically distinct, but with many shared problems and concerns related to gender and environment in both global and local contexts.

THEME 1: GENDERED SCIENCES OF SURVIVAL

Gendered science can be viewed in terms of the definition of what is science and who does it, in terms of the different possibilities for defining the relation of people and "nature," and in terms of the apparently separate sciences and technologies of production and reproduction, public and private domains, and home, habitat, and workplace spaces. Through the stories of communities involved in a wide range of political and environmental struggles we examine the gender implications of the separation of work and knowledge, science and practice for the gendered science of survival in rural as well as industrial contexts. The case studies presented here illustrate the intersection of rural "local knowledge" with urban and suburban "housewives' epidemiology" and link the gendered knowledge of everyday life in urban and rural, and "north" and "south" contexts.

Our exploration of the convergence of gender, science, and "environment" is informed by several sources, including feminist scholarship, environmental science and policy literature, alternative environmental and development scholarship, women's movements, environmental movements, and alternative "development" movements (including "appropriate technology"). We rely heavily, but not exclusively, on the literature and experience of the last twenty years.

In North America and Europe, feminist health movements and the "housewives" environmentalist and anti-toxics movements have questioned the prevailing paradigm of professional science. They use women's experience to challenge the professionalized definitions of "environment" and ecology, and offer their own alternative perspective on environmental issues related to personal health and the home. Many feminists among the "deep ecologists," social ecologists, and "biocentric" environmentalists have also developed a distinct critique of mainstream environmental science and resource management, with a strong emphasis on the identification of women with nature and the mistreatment of both by a male-dominated, instrumentalist science (Plumwood 1993; Biehl 1991; Merchant 1992). Many advocates of these approaches have been labeled or have begun to call themselves ecofeminists. We suggest that feminist political ecology encompasses much of ecofeminism as well as several related approaches that would not fit that label as currently used.

Many rural women from around the world have also begun to raise their voices internationally to speak of a science of survival largely in the hands of women. Several rural women's movements to protect forests, trees, and water resources in Asia, Africa and Latin America have recently received global recognition and women scholars have in several cases become leaders, advocates and allies of such popular movements (Shiva 1989; Agarwal 1991; Maathai 1989; Seager 1993).

Plate 1.1 Linking environment with health: march in Boston for Breast Cancer Awareness Month

Source: Lisa Beane

Several common threads have run throughout the scholarship and the movements that address the convergence of gender, science, and environment, but common concerns have often been obscured by the distinct discourses of resistance, critique, and alternative practice. We draw the following points into a common perspective and the authors pursue each of them in the case studies, as appropriate:

1 Women's multiple roles as producers, reproducers, and "consumers" have required women to develop and maintain their integrative abilities to deal with complex systems of household, community, and landscape and have often brought them into conflict with specialized sciences that focus on only one of these domains. The conflict revolves around the separation of domains of knowledge, as well as the separation of knowing and doing, and of "formal" and "informal" knowledge.

2 While women throughout the world under various political and economic systems are to some extent involved in commercial activities (Berry 1989; Jackson 1985), they are often responsible for providing or managing the fundamental necessities of daily life (food, water, fuel, clothing) and are most often those charged with healthcare, cleaning, and childcare in the home, if not at the community level (Moser 1989). This responsibility puts women in a position to oppose threats to health, life, and vital subsistence resources, regardless of economic incentives, and to view environmental issues from the perspective of the home, as well as that of personal and family health.

This does not preclude women from engaging in economic interests, but suggests that they will almost always be influenced by responsibilities for home, health – and in many cases – basic subsistence.

3 Both health and ecology are amenable to feminist and alternative approaches to practice since they do not necessarily require special instrumentation, but rather focus on the "objects" and experience of everyday life, much of which is available through direct observation (Levins 1989). While some aspects of health and ecology have become highly technical, there is much new insight and information to contribute to these disciplines that is still available to observation without specialized instruments beyond the reach of ordinary folk. There is also scope for a feminist practice of ecology that uses specialized tools differently and for different ends.

4 While formal science relies heavily on fragmentation, replication, abstraction, and quantification (Levins 1989), many women have cited the importance of integration and a more holistic approach to environmental and health issues (Candib 1995). Feminist scholars have shown that some women researchers in professional sciences have used distinct approaches based on skills acquired in their socialization as women (Keller 1984; Hynes 1989, 1991, 1992). On a more personal and everyday level, some grassroots women's groups have explicitly stated that "our first environment is our bodies" (Gita Sen, personal communication), calling for a more integrative approach to health, environment, and family planning in development, welfare, and environmental programs.

5 Most feminist or women's environmental movements have incorporated some or all of the elements of the feminist critique of science as summarized by Sandra Harding (1987). The five classes of critique address:

1 inequity of participation and power in science-as-usual;
2 abuse and misuse of science on and about women;
3 assumptions of value-free objectivity and universality in science;
4 use of culturally embedded, gendered metaphors in scientific explanation and interpretation; and
5 development of alternative ways of knowing and ways of learning based on everyday life, women's experience, and explicit statement of values.

Feminist political ecology addresses the convergence of gender, science and environment in academic and political discourse as well as in everyday life and in the social movements that have brought new focus to this issue. In this volume, we explore the critiques of gendered environmental science, as well as the alternative practices of science both within and beyond the current dominant paradigm. And finally, we examine the gendered sciences of survival in a wide range of circumstances, from production systems to responsibilities for health and hygiene.

These sciences occur in several forms, from local environmental knowledge (for example, which plants can cure us and how we can protect them), to recent innovations (new techniques to manage soil, water, and trees; new ways to diagnose exposure to toxic chemicals), to research on the unknown

(what is making us sick; or how we can maintain our forest plants in a changing landscape). These various sciences are practiced by diverse groups from rural herbalists and forest farmers to suburban residents, professional nurses, environmental engineers and urban residents and factory workers. While there are many other axes of difference that may shape peoples' experience and understanding of "environment" and their sciences of ecology, feminist political ecology focuses on gender, while including discussions of interactions with class, race, age, ethnicity, and nationality.

THEME 2: GENDERED ENVIRONMENTAL RIGHTS AND RESPONSIBILITIES

Who controls and determines rights over resources, quality of environment, and the definition of a healthy and desirable environment? The question is crucial to the overall debate on gender and environmental rights. Ecofeminism and other feminist critiques of environmental management paradigms have raised questions of gender, power, and paradigms of economic development (Merchant 1981; Hynes 1992; Seager 1990; Shiva 1989), while many feminist critiques of development have focused on access to and control over resources (Agarwal 1991; Deere 1992; Deere and De Leon 1985; Pala Okeyo 1980; Muntemba 1982; Wangari 1991). Although gendered resource tenure has been discussed primarily in the context of rural development, and gendered power over environmental quality has been treated more in terms of urban, industrial sites, the cases in this volume apply and synthesize both approaches in rural and urban contexts across regions.

We recognize gendered environmental rights of control and access as well as responsibilities to procure and manage resources for the household and the community. These rights and responsibilities may apply to productive resources (land, water, trees, animals) or to the quality of the environment. In addition to the gender division of resources, there is a gender division of power to preserve, protect, change, construct, rehabilitate, and restore environments and to regulate the actions of others.

These categories reflect women's and men's often distinct rights and responsibilities in production (subsistence and commercial), their rights and responsibilities to create or maintain a healthy biophysical environment (including chemical aspects), and their rights and responsibilities to determine the quality of life and the nature of the environment. In more abstract terms, we can speak of gendered mandates and terms of control over things, processes, the direction and impact of environmental changes, and over the distribution of those impacts. The rights to control one's own labor and to regulate the actions of others are also highly gendered.

Environmental rights and responsibilities are also gendered spatially. For example, men's or women's domains of access and control are often divided between public and private places, and between home and workplace spaces. Likewise we find gendered spatial categories in different kinds of homes and workplaces, in a continuum of spaces from homestead to cropland; office to factory; suburb to city; indoor to outdoor; and neighborhood to region.

While the specific designation of gendered spaces and the strength and visibility of those divisions may vary dramatically by culture, the existence of gendered spaces is widespread and affects both technocratic and customary systems of resource tenure and control of environmental quality.

Resource tenure

Gendered resource tenure encompasses both rights and responsibilities and can be divided into four distinct domains:

1 control of resources as currently defined;
2 access to resources (de facto and de jure rights; exclusive and shared rights; primary and secondary rights);
3 gendered use of resources (as inputs, products, assets; for subsistence and commercial purposes); and
4 gendered responsibilities to procure and/or manage resources for family and community use.

The recent literature on gendered resource rights in development studies has tended to focus on ownership and use rights in land, trees, water, wildlife, and other rural resources (Hoskins 1982; Fortmann and Bruce 1988; Fortmann 1985; Rocheleau 1988a and b; Bradley 1991; Deere and De Leon 1985; Davison 1988; Carney 1988; Watts 1988; Berry 1989; Peters 1986; Bruce, Fortmann, and Nhira 1993; Leach 1994; Rocheleau and Ross 1995; Schroeder 1993; Jarosz 1993). These resources are often contested, with multiple claimants at different levels: men and women; households of distinct classes; different communities; distinct ethnic groups; and local, national, and international users.

The very notions of property and resources, so often assumed to be fixed, are both variable between groups and places and dynamic in time. Resource values and claims upon them change with human needs, abilities, knowledge, and skills (Rees 1990; Omara-Ojungu 1992) as well as relations of power, based on gender, race, class, ethnicity, locality, and nationality. For example, the land tenure reform in Kenya initiated by the colonial government and later implemented by the newly independent state, excluded women from resources previously available to them through customary rights of use and access. While creating new resource values and property rights for some men, the privatization of land has led to destruction of forests, grasslands, water sources, and soils and the termination of women's access to many areas (Wangari 1991; Pala Okeyo 1980). In Eastern Europe and the Balkans the land tenure reforms spurred by political and economic change have in many cases returned control of rural farmland to traditional patriarchs and male heads of household (LaStarria-Cornhiel 1995).

Similarly, in the Gambia, a land tenure reform and irrigation project specifically intended to benefit women resulted in a redefinition of traditional land and labor rights and destroyed the women's traditional floodplain fields. The seasonal and spatial complementarity of men's and women's cropping systems also broke down, resulting in serious conflicts at the household and community levels over both land and labor resources (Carney 1988;

Watts 1988). Similarly, changes in industrial technology in North America, coupled with simple definitions of land as property, have pitted the value of waste disposal sites for industry (men's domain) against use values of nearby residential property and against the public health of surrounding communities (women's domain).

Types of rights, types of uses, types of resources

The legal standing of resource tenure as well as the kind of tenure tend to reflect gendered relations of power. Environmental rights, especially resource rights, may be either de jure (legal by court precedent or statutory law) or de facto (by practice/custom). Men are often associated with de jure and women with de facto resource rights, which has major implications for the relative strength and security of tenure by gender. In many cases, particularly in Africa and parts of Asia, simultaneous systems of customary and statutory law have exaggerated and distorted the customary gender division of resources. This is particularly true where the customary law of family and marriage is applied to women's claims to household or community resources or environmental rights, while men's claims are settled under "Western" or statutory codes. The ways in which customary rights are distributed are also gendered, though inheritance and marriage laws vary tremendously from one place to another and are constantly changed and renegotiated over time (Mackenzie 1995).

The types of legal and customary rights can also be divided into ownership versus use rights. Rights of exclusive ownership often coincide with dominance by gender as well as class: wealthy men are often owners, while women or poor men are more likely to be users of lands/resources owned by others. Shared uses and multiple user practices are often beyond the legal definitions of property currently recognized, including formal definitions of "common property." The concept of articulated bundles of rights (Fortmann 1985; Riddell 1985; Bruce 1989) provides one tenure framework that lends itself well to gender issues and to rights that pertain to resources and environment, although it has been developed primarily in the context of forestry and rural development. Many forms of customary law incorporate such nested and overlapping rights, while modern legal codes usually do not.

The division between customary rights of control versus rights of use and access has a similar relation to gender (Rocheleau 1988a and b). In many cultures, elder men share authority to allocate resources among themselves and to women and younger men. They exercise control and allocate use rights. Overall, women's rights are often nested within rights controlled by men, or women hold rights to resources that are allocated by men's institutions or organizations (clans, lineages, cooperatives, political committees). This applies equally to "Western" or "Northern" countries but rules are indirectly encoded in the daily practices of political and economic institutions and the disposition of private property rather than explicitly articulated as a gendered legal code. For example, women may encounter difficulty in obtaining credit and home mortgages in their own names or may only be able to receive retirement benefits under their husband's names. At the community level, women may be less likely than men to get elected to planning and zoning boards.

The types of uses enjoyed by men and women also vary. Women often have rights of renewable use (plant crops on soil; harvest leaves from trees; gather dead wood), while men have rights of consumptive use (harvest whole trees; buy and sell land; divert and consume irrigation water). A related question is: rights over what? Men and women may divide use rights or control by the type of resource: land, water, specific animals, plants or their products. These resource categories may also embody a division between resources for use value and resources as commodities.

Responsibilities

Parallel to the gender division of resource rights is an equally important division of responsibilities. They are expressed most concretely at household and community levels, although they may also apply to larger scales of social organization. The most common forms of gendered responsibility for resources include:

1 responsibility to procure particular inputs or products for home use (such as fuelwood, water, milk, and medicinal herbs in rural areas; or bottled water, air filters, pest traps, or disinfectants in urban areas); and
2 responsibility to manage particular resources (such as protection of water sources, maintenance of community forests, and soil conservation in rural areas; or food shopping and meal planning, protection of parks, restoration of neighborhood safety, and detection of home and workplace health hazards in urban and industrial settings).

The relative distribution of resource rights and responsibilities between men and women is far out of balance in many areas (FAO 1988). Women carry a disproportionate share of responsibilities for resource procurement and environmental maintenance, from New York City to the Lower Himalayas, and yet they have very limited formal rights (and limited political and economic means) to determine the future of resource availability and environmental quality. In many cases, the rights of men to extract commodities or to engage in consumptive use have pre-empted women's use of the same resource or the same place, yet women remain responsible for providing the same product or service from another source. The consequences can be serious for the women themselves as well as for the environment. The gender imbalance in environmental rights and responsibilities derives from relations of power based on gender, among other factors.

Relations of power

The relations among resource uses, users, owners, and managers may be relations of conflict, cooperation, complementarity, or coexistence, which raises the issue of power and gender. Throughout the world, as we study gender, environment, and tenure, we find that gendered power relations are expressed in very concrete ways. The case studies in this volume analyze

gendered power relations and tenure under shared use situations, as well as under private, state, and formal community ownership of resources, in distinct types of environments. We focus on concrete expressions, rather than explanations of the origins of inequities. We do not promise to resolve the theoretical debates, only to apply relevant insights from the case studies. We also recognize that it is possible to work within, circumvent, ameliorate, or undo the inequities, once they are understood, and we discuss the policy implications of specific approaches within the case studies and in the summary chapter.

Environmental quality

Gendered control over quality of environment encompasses the right to protect, change, or create environmental conditions that meet existing standards of quality (especially with respect to health) and the rights to determine the nature of the environment (land use planning, land use change, structure of homes, neighborhoods, landscape design). In spite of substantial progress in our understanding of gender conflict over resource use and control, and of the link between gendered resource use and environmental change, many areas of interest remain to be explored.

Just as the insights from resource tenure in rural development contexts can inform our understanding of gendered environmental rights in urban and industrial regions, so can the gendered struggles over environmental quality in North America and Europe help us better to comprehend related issues in less industrialized regions. In urban and industrial contexts, for example, conflicts have arisen between grassroots groups, industry and government agencies concerning: rights to use public space; access to and control over clean air and water; and rights to healthy homes and workplaces. Similarly, women in rural areas have a direct stake in the control of pesticide use on commercial crops, and also in the decision to use a given area for commercial rather than subsistence production. Women have been at the forefront of many efforts to address these issues of control over environmental resources and environmental quality. In many cases, their involvement is a response to their prior exclusion from access to resources as well as from the corridors of power where environmental decisions are made in government, industry, and mainstream environmentalist groups.

THEME 3: GENDERED ENVIRONMENTAL POLITICS AND GRASSROOTS ACTIVISM

Our discussion of gendered political participation focuses on the recent wave of women's involvement in collective action for environmental change. For more than a decade, women have been at the forefront of emerging grassroots groups, social movements, and local political organizations engaged in environmental, socioeconomic, and political struggles (Merchant 1992; Seager 1993; Hynes 1992). These phenomena are not localized; they are occurring around the world. They are documented not only by scholars and professionals working in their respective fields, but also by journalists, social

critics, politicians, and administrators (Agarwal 1991; Bell 1992; Brown 1991; Collins 1991; Braidotti *et al.* 1994; Dankelman and Davidson 1988; PACA 1990; Freudenberg and Steinsapir 1991; Marcus 1992; Rau 1991; Shiva 1989). We look not only at the reasons for an apparent surge in women's involvement in collective struggles over natural resource and environmental issues, but also at the various forms such activism has taken.

What difference do collective struggles make to sound environmental policy and practice and to "sustainable development?" Three working assumptions are noted below:

1 Given the involvement of women in collective action around the world, there are critical linkages between global environmental and economic processes and the recent surge in women's participation in public fora, particularly in relation to ecological and economic concerns. This surge in women's activism is a response to actual changes in local environmental conditions as well as to discursive shifts toward "sustainable development" in national and international political circles.

2 Applying Gillian Hart's analysis within the Malaysian context (Hart 1991), we transpose her conceptualization of "multiple and interconnected sites of struggle" to an international setting. Different visions of society and differing access to resources and to power are played out according to gender, race, class, ethnicity and nationality, variously connected in complex systems. Pramod Parajuli (1991) provides a similar explanation for the nature of social movements in India.

3 Women are beginning to redefine their identities, and the meaning of gender, through expressions of human agency and collective action emphasizing struggle, resistance, and cooperation. In so doing, they have also begun to redefine environmental issues to include women's knowledge, experience, and interests. While this is a worldwide phenomenon, the process and results in any one place reflect historical, social, and geographical specificity (Alvarez 1990; Egger and Majeres 1992; Friburg 1988; Fraser 1987; Touraine 1988).

Why women? Why now?

When we talk about the environment, we are referring to the ecosystem on which production and reproduction depend. The aspects of a particular ecosystem that are important to the people who live in it vary according to the circumstances of history and the specific demands of their system of production. Regardless of these variations, issues pertaining to the environment are inherently political, and decisions about the environment are not politically neutral. Access to and control of environmental resources are inextricably linked to the positioning of people by gender, race, class, and culture. Environmental issues are central to debates about the nature of the society we live in, the claims that each of us can make on that society, and the realities of justice in distribution. Five considerations are important:

1 Declining ecological and economic circumstances: The increased involvement of women in environmental struggles and in political and social

movements derives from the difficulties they face in ensuring the survival of their families in the face of ecological and economic crises. For many, these difficulties have worsened in the last decade as a result of changes in social and economic relations arising with the spread of capitalism, migration for wage labor, divided families, and the decline in various forms of vertical ties to patrons (Chen 1991; Hart 1991; Kates and Haarmann 1992). Poor households face increased environmental risk, uncertainty, and insecurity, while their entitlements are either precarious or nonexistent.

2 The impact of structural adjustment policies: To these long-term structural changes one must add the immediate implications of the structural adjustment policies of the 1980s and 1990s (Gladwin 1991) and the "retreat of the state" from support of public services, social welfare and environmental regulation in wealthy as well as poor countries. Poor women throughout the world have been severely affected by insufficient food, the rising cost of living, declining services, and eroding economic and environmental conditions. These impacts have spawned not only protest but also strategies for change.

3 Consciousness raising and political awareness: Increasingly people are linking the immediate impact of ecological and economic crises with recognition of a need for structural political changes. Organizations that may have originated from a specific objective, such as India's Chipko movement or the United States' Citizens' Clearinghouse for Hazardous Wastes, have broadened their focus to include the larger social and political systems. In some instances, environmental movements have addressed systems that depress the standard of living for the poor or that emphasize economic growth and military strength to the detriment of environmental safety and personal health.

4 The political marginality of most women: For many women, economic and ecological conditions are potentially catastrophic. They face severe constraints on their livelihood options. They participate little, if at all, in organized politics at the national level. Their activism usually begins locally on matters critical to their own lives, their homes, and their families. It reflects the pressure and distress generated by the system and its impact on family welfare, among people operating "on the edge" both economically and socially. In the last decade, the problems that women face have become increasingly severe. The system does not address their needs, and so they act collectively to secure the necessary conditions to guaranty subsistence, protect the health of their families, and the integrity of the surrounding ecosystem.

5 The role of the women's movement: The women's movement, of which the most recent wave has now been active for over twenty years, has generated international interest in women's issues and women's perspectives. It provides some philosophical moorings for women's activism, while it also derives much of its vitality from the connections between groups that focus on theory and practice, respectively. The United Nations Decade of Women from 1975 to 1985 also contributed to the growing awareness of the distinct

roles and interests of women. The emerging international women's movements have reconfigured the political landscape to address converging issues of gender, race, class, and culture and to treat women's rights as basic human rights. They provide crucial political and ideological underpinnings of support for the increased political activism of women on environmental issues.

Exploring the forms of activism

Women's emerging environmental organizations and movements have had three foci with organizational structures to suit the particular focus:

1 Policy and environmental management issues: Here organizations focus on specific policies, problems, or hazards that are harmful to individuals, households, and communities. Often they start with the intent of documenting an association between the incidence of disease or a health problem and a specific toxic dump site, pesticide spray, workplace hazard, air pollutant or contaminated water source. They may go on to significant victories in legislation and in public information about the specific issue. In the United States the leaders and membership often include significant numbers of women as well as people of color. Environmental racism has become a major topic of concern for many groups. Such organizations, however, are found the world over as people respond to the issues confronting them in daily life. In Bombay, for example, the Society for Promotion of Area Resource Centers (SPARC) is working to demand better living conditions (Bell 1992). In countries of the Caribbean including the Dominican Republic, Dominica, and St. Vincent and the Grenadines, grassroots organizations of informal-sector traders, many of them women, are springing up to claim and work for better working conditions, protection of their rights, and environmental conservation (PACA 1990: 101).

2 Access to and distribution of resources under conditions of environmental decline and resource scarcity: Around the world, local groups are organizing to share the management of resources and to increase their availability. Local-level associations enable people to respond with increased effectiveness to external changes in their environment. They help diminish risk and they create new opportunities. Organizations can provide improved access to land, labor, capital, and information. They may generate exchange opportunities. They may provide access to common property, including resources such as water, forests and communal grazing, or institutions and services such as schools and health clinics.

3 Political change and environmental sustainability: Environmental and economic impoverishment are intertwined and linked to the political structures in which they exist. Organizations may begin with the objective of economic survival, but they often come to a sharp realization of the politics of survival. The Green Belt movement in Kenya, for example, may focus on trees and the rubber tappers' union in Brazil may focus on a search for alternative forest products; but both, along with numerous organizations like

them, find that their strategic interests raise major questions about the political systems in which they operate.

These organizational foci are merely suggestive. Most organizations deal at some time or another with all three categories. Their agendas, as well as the scale of their activities, are purposefully flexible and are continually adjusted as they endeavor to meet both practical needs and strategic, long-term interests.

What difference does women's participation make for women, the environment, and society?

All of these economic and ecological struggles have important implications for the meaning of gender and for the nature of men's and women's roles. These organizations are demanding more equitable development across classes, ethnic groups, castes, gender, and generations. The increased involvement of women is leading to a sense of agency and empowerment. As a result, there are new perceptions of women's roles. Women's visions of their rights, roles, and responsibilities are changing. Increasingly, women are "finding voice" and are being aided in doing so by their participation in groups and organizations (Ronderos 1992: 81).

There are many victories to be claimed by women's environmental action groups around the world. In addition to the cases presented in this volume, we note as examples the widespread planting of trees by the Women's Green Belt movement of Kenya, the protection of a public park in downtown Nairobi by the same group, and the protection of the Himalayan forests from timber concessionaires by the Chipko movement in India. In North America, grassroots movements led by women have prevented the disposal of toxic wastes, as in the case of a landfill in Warren County, North Carolina, and they have pressed legislators and courts in California and Massachusetts to take action on air and water pollution. Recently formed bridging organizations, networks, and coalitions (such as the Women's Congress for a Healthy Planet; WEDO – Women, Environment, and Development Organization; WEDNET – Women, Environment, and Development Network; and Worldwide Network for Women) bring the concerns of these locally based movements to national and international policy fora.

These grassroots organizations, with their significant involvement of women, are stressing the value of all human beings and their rights to satisfy basic human needs, including food security and health (Escobar and Alvarez 1992). They emphasize ecological as well as economic concerns and the needs of future generations as well as those of diverse claimants on existing resources. There is a fundamentally humanitarian, egalitarian, pluralistic, and activist stance to many such organizations, although – as noted by Jackson (1993a and b) – women's organizations are not inherently environmentalist or altruistic.

The myriad of grassroots organizations, with women as well as men involved in them, have begun to blur the distinctions between public and private, productive and reproductive, home and workplace. Such organizations are helping us to reconceptualize and redefine what is political, and

what is environmental, as well as what is just and equitable. In the chapters that follow, the authors review gendered political responses to ecological problems exacerbated by economic decline in households and communities around the world. They explore the way in which environmental activism and politics have entered household and community and vice versa. The case studies also document the extensive involvement of women in grassroots organizations in response to declining ecological and economic circumstances in degraded environments or to the magnitude of health and safety problems posed by the "maldevelopment" of previously healthy communities and ecosystems.

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CHAPTER SIX

Feminist geographies of environment, nature and landscape

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6.1 Introduction

This chapter examines three related terms: nature, environment and landscape. Each of these terms has its own particular meanings, but these meanings also intersect; 'nature' is often used synonymously with 'environment', for example, and 'landscape' can be a particular way of understanding 'nature'. The first aim of this chapter is therefore to clarify the meanings of, and the relationships between, these three terms.

Feminists have explored aspects of 'nature', the environment and landscape at some length, whilst feminist geographers have tended to focus on particular aspects of these issues. The environment has often been studied in terms of the built environment, for example, and Section 6.2 of this chapter summarises some of this work. The environment is also often understood as referring to a 'natural' world, however, and attitudes towards, and interactions with, the apparently natural environment have also been examined by feminist geographers; Section 6.3 looks at this work. Both these kinds of studies of the environment show how gender – and class and race, among other social identities – is reproduced through dominant understandings of what the environment is or should be. Both also suggest that the environment, even the supposedly 'natural' environment, cannot be understood without considering the cultural, political and economic processes through which the environment becomes caught up in power relations. One of the ways in which feminist geographers have explored these kinds of issues, especially the power-ridden cultural processes of interpreting the 'natural', has been by looking at 'landscape'. Landscape is one way in which the natural has been made sense of by Western cultures, and Section 6.4 examines feminist analyses of this particular way of seeing.

These analyses by feminist geographers of the environment, 'nature' and landscape argue that the three terms mobilise certain assumptions about gendered identities, and that their deployment when environments are being designed or managed, or landscapes are being seen, can then reproduce those assumptions. The second aim of this chapter is to explore these arguments in some detail. The chapter aims to show just how feminist geographers have argued that the design of the built environment, ideas about the natural environment, and images of landscapes, all in particular ways reproduce specific definitions of gendered difference. Within this broad area of agreement, however, there are different interpretations of exactly what kinds of differences are reproduced by environments and landscapes. Feminist geographers working in this area, regardless of their particular object of interest, echo in their analyses the different emphases found in much feminist geography (see Chapter Three). Some studies focus almost exclusively on gender roles and relations, while other studies stress the intersection of gender with other kinds of social differences. All the sections of this chapter explore work which draws on both of these approaches. The chapter also considers other differences among feminists. The second section shows that discussions among feminists about the natural environment also involve power relations; some Western feminists have suggested that Third World women are more sensitive to environmental issues, but this entails a number of assumptions about femininity in the Third World which many other feminists have challenged. The chapter therefore also explores the need for feminists to consider their own interpretive practices, and the work of feminist geographers on the idea of landscape provides some suggestions about how Western feminists can problematise their views about the environment.

The third aim of this chapter is to show that, if gendered differences can be reproduced through certain understandings of the environment, 'nature' and landscape, then much feminist work has been devoted to challenging those understandings and their associated practices. Feminists have argued for the redesign of the built environment, for different approaches to the 'natural' environment, and for different ways of seeing landscapes. Each section of this chapter also examines these strategies of resistance.

6.2 The built environment: an introduction

As geographers, we are taught to understand the environment in terms of the form of our physical surroundings. One aspect of the environment thus understood which feminist geographers, among others, have focused on is the built surroundings through which we live our everyday lives. Feminists have looked at the houses and streets, corner shops and shopping malls, piazzas and monuments, gardens and offices, car parks and pubs, parks and bingo halls, in which men and women socialise, shop, eat, sleep and work. These elements of the built environment have been studied in terms of the design of individual components such as a house, but also in terms of the integration of several components, for example the streets, houses and gardens of a housing estate. And this work has looked at these issues in both historical and contemporary contexts.

The approach of many feminist geographers to the design of the various elements of the built environment can be nearly summarised by quoting the subtitle of a book written by a feminist design collective called Matrix:

Women and the Man-Made Environment (Matrix, 1984; see also Roberts, 1991). Feminist geographers – as well as feminists working in other disciplines and professions concerned with the built environment – have pointed out that the built environment is almost always surveyed, planned, designed and built by men, and, more importantly, that patriarchal assumptions about gendered identities are articulated through all these processes (Greed, 1994). The built environment quite literally constructs gender. Feminist geographers have thus paid attention to the assumptions about gender which certain kinds of built environment design make. The first sub-section explores this work, and also shows how other feminists have demonstrated that other kinds of social identities can also be reproduced through the meanings of the built environment. The second sub-section looks at some examples of feminist design practice which try not to reproduce dominant gendered identities. This sub-section raises some important questions about differences among women, however, by suggesting that the same design strategies may not be equally relevant to all women.

Feminism and the design of the built environment

Many feminists have argued that the built environment is man-made, both literally in who designs and builds it but also in terms of the assumptions about the social identity and behaviour of the people who will live and work in the environments being designed. These assumptions are often based on dominant views of what appropriate behaviour is, and these assumptions are often highly gendered. Views about what men and women should be doing get translated into views about how the places they inhabit should be shaped. Feminist geographers interpreting the built environment in this way are thus using the second of the ways of understanding gender discussed in Chapter Three: gender as a role.

As an example of the gender assumptions made by dominant forms of housing design, consider the space of the kitchen. One of the most time-consuming elements of the unpaid domestic labour that women are expected to perform in households is cooking. Cooking is still overwhelmingly a feminised task and, as Roberts (1991) argues, it is a task replete with connotations of service. It is a task which the designers of houses and apartments, therefore, almost always give its own space, and the interior layout of many kinds of houses can be understood in relation to the gendering of this task. The typical suburban house in a Western city can be interpreted in this manner. As Matrix (1984) point out, most such housing is built for nuclear families. It assumes that the people living in such houses are a mother, a father and one or more children. The kitchen in such houses is often a small space, as if what goes on there is not very important, and there is rarely enough room for two people to work in it. Just who that one person in the household is assumed to be becomes obvious when, for example, we look at advertisements for fitted kitchens, which rarely show men cooking (although they may show men fitting the kitchen cabinets); or at recipes and cooking tips which overwhelming

appear in women's magazines and not men's (although professional celebrity cooks are often men). The kitchen in this domestic setting is a feminised space. Another example can be drawn from the Caribbean. Traditional Caribbean housing design did not include a separate space for cooking inside the house; instead, cooking took place in a rudimentary shelter built outside the house, with stone walls and a galvanised sheeting roof. The cooking area was always hidden from public view, and was usually very cramped and basic – cooking was done over a fire, for example. In modern housing, however, the layout follows Western tradition. The kitchen is inside the house, and is small and at the back of the building. Kitchen space is thus very often designed as a separate space for women's unpaid work because it is assumed that only women will work there.

The design of many post-war housing estates often also makes certain assumptions about gendered difference, again by constructing a space which attempts a gendered segregation of activity. Many women living on such estates either want or need to find paid employment, but the design of estates does not support this. For example, housing estates are rarely provided with creche facilities, on the assumption that childcare takes place in the home, by the mother. Housing estates are often distant from workplaces in a city, so that even if affordable childcare can be found, women who have children to look after find it difficult to travel to a paid job. Because of this lack of adequate childcare, many women with young children want part-time paid employment, but public transport often caters most efficiently for those who work full time. As well as the design of individual living units, then, the design of housing estates also articulates particular assumptions about who will be living in this environment and what they will be doing there.

Moreover, there is extensive research to suggest that the design of housing estates and shopping centres rarely takes the particular concerns of women into consideration. For example, many women are less mobile than men: they may not have access to a car, they may have to take children with them when they leave their home, and they may be carrying heavy shopping. Yet shopping centres rarely offer creches to leave children in safely while their mother shops; city centres are often full of subways, escalators and lifts which are difficult to negotiate with shopping bags or a pushchair; public toilets are often cramped spaces with long queues and no nappy-changing facilities. This is despite the fact that spaces such as department stores and shopping malls are designed as public spaces where women are seen as the primary shoppers and consumers.

ACTIVITY

Visit a nearby shopping mall or centre and try to decide whether it is a 'masculinised' or 'femininised' built environment. What are the criteria on which you base your decision? Is this a segregated space? Is it a safe space, and for who? Are there assumptions about who will be caring for children? Is it a space where children are catered for? Are there different assumptions about gender being made in different spaces of the mall or centre? Are other aspects of social identity assumed by this environment? How would someone in a wheelchair deal with its design, for example? Is the attempt to describe such places as simply gendered not complex enough?

Moreover, the design of the urban built environment neglects the worries many women have about the danger associated with particular locations. Valentine's (1989) discussion of 'The geography of women's fear' (see Chapter Three, Reading C) found that many women avoided certain kinds of urban locations all the time: for example, certain alleyways or subways, certain parks or certain pathways among housing. Other locations they avoided at certain times: high streets at pub closing times, multi-storey car parks at night, empty trains at night. They were scared of these locations because they were all spaces where they felt isolated and vulnerable to attack. Valentine (1992) has also explored the way in which certain spaces are known as dangerous and the way women build up their own understanding of the built environment in terms of safety and risk.

ACTIVITY

Read the following poem by Bronwen Wallace. What sorts of criteria does she use to map a geography of women's fear? Are the effects of this fear confined to the public spaces of streets and pavements?

TO GET TO YOU

It's never easy.
Even the effort of a few steps
from the bedroom to the kitchen, say,
or a few muscles, opening my eyes
to find you, still there in bed beside me
is an act of magic or faith,
I'm never sure which.

All I know is that it's learned
by doing, over and over again,
like any other trick,
until you don't need to think about it.
Like now. Like the way I'm walking home
to you through this city I've learned to accept
as the only kind there is: five o' clock,
night coming down and rain
just hard enough
to make the crowds on the corners shove a little
when a bus finally splashes to the stop.
Outside a restaurant, two men shake hands
and a little boy holds his father's
as they watch a toy airplane turning in a shop window.
It could be anywhere. But what I want you to notice
are the women. They are wearing white nurses shoes,
or dirty sneakers or high-heeled boots.
They carry briefcases and flowers, bags of groceries
as they hurry home to husbands and kids,
lovers, ailing parents, friends.

We all have the same look somehow.
See: over there by the bank
how that stout woman lowers her eyes
when she passes that group of boys,
how her movement's mimed
by the blonde, turning her head
when a car slows down beside her.
Even the high-pitched giggle of the girls
in that bunch of teenagers is a signal
I've learned to recognize. Tuned in
by my own tightened muscles, jawline or shoulders.
In fact, you might study the shoulders.
The line of the backbone, too; arms and hips,
the body carried
like something the woman's not sure what to do with.

I've already told you that this is an ordinary city.
There are maps of it and lights to show us
when to walk, where to turn.
What I want you to know is that it isn't enough.

On a trip to Vancouver once
I discovered clearer landmarks. Red ones,
sprayed on sidewalks all over the city.
They marked the places
where a woman had been raped,
so that when I stepped out of a coffee shop
to find one on the pavement by the laundromat
geography shifted.
Brought me to the city I'd always imagined
happening in dark alleys, deserted parking lots,
to somebody else. Brought me home in a way,
no longer the victim of rumours or old news,
that red mark planted in the pavement
like the flag of an ancient, immediate war.

I used to hope it was enough
that you were gentle
that I love you,
but what can enough mean, anymore
what can it measure?

How many rapes were enough
for those women in Vancouver
before they got stencils and spray paint
made a word for their rage?
How many more until even that word
lost its meaning
and the enemy was anything that moved out there.
Anything male, that is.

How can any woman say
she loves a man enough

when every city on the planet
is a minefield
she must pick her way through
just to reach him?

It's not that we manage it, though.
It's that we make it look so easy.
These women wearing their fear
like a habit of speech or movement
as if this were the way
the female body's meant to be.
The way I turn the last corner now,
open the door to find you
drinking wine and reading the newspaper,
another glass already filled
and waiting on the coffee table.

When I turn on the hall light
the city will retreat into the rain,
the tiny squares of yellow
marking the other rooms
where men and women greet each other.
It's a matter of a few steps,
magic or faith, though it's not that simple.
The way the rain keeps watering the cities of the world.
How it throws itself against our window,
harder, more insistent,
so that we both hear.

Bronwen Wallace
(from *Full Moon: An Anthology of Candian Women Poets* ed. Janice LaDuke and Steve Luxton, 1983, 175–177)

Many feminists, then, have argued that the built environment is designed on the basis of many assumptions about gender. Its layout assumes that certain people will undertake certain tasks and not others. These assumptions are reinforced by dominant ideas about how different city spaces should be used, and by the knowledges women bring to bear on their use of city spaces. While much work has focused on the experiences of women in these value-laden environments, these feminists are not mapping a geography of women only. Many women find contemporary urban spaces difficult to live in so that contemporary models of design have been described as constructing masculinised public spaces where only men feel safe and can confidently use the space. Geographer Jan Monk (1992), for example, has argued that public space in the Western city is built by and for dominant masculinities: men who do not need to worry about food shopping, kids or being attacked. As a small but telling example of this, she points to the number of statues of 'great' men which can be found in the public spaces of cities. What is being studied by these feminists, then, is a particular expression of the patriarchal construction of relations between men and women.

However, many feminist studies of the built environment have also argued that the built environment is more complex than this. These are feminists more closely aligned with the third kind of understanding of gender discussed in Chapter Three, and they suggest that the built environment is not structured by assumptions about gender alone. The grounds for this argument are perhaps already obvious. For example, the gendering of housing for nuclear families assumes not only certain gender roles, but also heterosexuality as the norm: it assumes that the family living in it consists of a man, a woman and children. Moreover, the difficulties a mother with a child in a pushchair might encounter in a shopping centre might also be experienced by anyone who is less mobile: some elderly people, for example, or people with certain disabilities. Again, some women may have the resources to use cities easily, always taking taxis, for example, or always using a car with a mobile phone. Women's fear of urban spaces, then, is nuanced by other elements of social difference, including physical ability, age and class, to take just three examples.

The article by Gill Valentine on 'The geography of women's fear' (Valentine, 1989) provides a systematic account of the complex ways in which some different social identities intersect to construct dominant ideas about urban environments. Although she was studying something almost all women feel at one time or another – fear of attack – she argued that not all women see the city as threatening attack in the same way. Other social identities inflected what is perhaps one of the most widely shared experiences of women, so that there was not just one geography of fear in the large town in southern England she was studying, but several. Her research showed, for example, that white women in that town were more frightened of entering housing estates with a high percentage of black residents than they were of entering housing estates with mostly white residents. Clearly, racist fears about black violence were shaping white women's geography of fear. Similarly, Valentine also discovered that class position made a difference to fear; middle-class women, for example, were more scared to be in working-class areas than in middle-class areas because working-class areas were perceived to be more rowdy, and more risky to be in, than the environments middle-class women were used to.

It is also important to point out that, just as not all women feel equally afraid of certain kinds of places, nor do all men feel equally safe in all kinds of places, and this too is a consequence of different social relations intersecting to create different kinds of gender identities: in this case, different kinds of masculinities. Gay men, for example, in parallel with lesbian women, may feel frightened of 'gay-bashing' and that fear may restrict their use of urban space. Black men may fear racist attacks. And in some households it is the men who undertake the childcare, and they too find the same difficulties in coping with the urban built environment as their female childcaring counterparts. The meanings with which the built environment resonates are gendered as both masculine and feminine, then, but these arguments suggest that the gendering of urban locations is mediated also by the relations of race, sexuality, class, age and physical ability as well.

The design of the built environment clearly assumes that some kinds of activities will be undertaken by women and others by men. In this sense, the built environment is gendered. It is also gendered because women and men often decide how to use the environment on the basis of their understanding of their own gendered identity. However, as this section has shown, gender is not the only social relation to be reproduced through the meanings assumed by, and given to, the built environment. So too are class, sexuality and race, to name but three other aspects of social identity.

Feminist challenges to the so-called man-made built environment

For many feminists, the built environment is an important site of the reproduction of dominant ideas about masculinity and femininity. It is not surprising, then, that many feminists have also attempted to challenge conventional ways of designing built environments so that women's particular needs are catered for. Such challenges have a long history. Dolores Hayden (1981), among others, has pointed to the many plans drawn up by women (and by men) in the nineteenth century for housing which did not place the nuclear family in its own house and reinforce in its bricks and mortar the gendered division of domestic labour. Many women designed housing for young single women who wanted the independence of working and living in large cities alone but safely; many designed housing estates with shared kitchen and laundry facilities to liberate women with families from domestic tasks. These latter experiments are a reminder of the importance of not considering gender in isolation from other social relations, however, since many of these designs were intended to liberate middle-class women from household management and they relied on the labour of working-class women as cooks and laundresses to achieve this.

In cities now, perhaps the most common tactic to make environments more women-friendly is to campaign for certain spaces to be more sensitively designed and better-lit, so that women feel safer in them. Feminist geographers Gerda Wekerle and Carolyn Whitzman (1995) have examined many such design projects in their book *Safe Cities*. 'Safe city' projects involve locally based alliances of interested parties which aim to combat the fear of crime in urban neighbourhoods. Although often co-ordinated by local government, these projects assume that it is local people who are the experts in being able to identify what kinds of places induce fear, and in suggesting what could be done to improve them. Wekerle and Whitzman suggest that women often make strong contributions to safe city projects precisely because they often experience fear when using their local neighbourhood; 'women who live in cities are engaged in an ongoing situational analysis of the environments of daily life' and are thus experts at the issues with which safe city projects are concerned (Wekerle and Whitzman, 1995: 4).

Wekerle and Whitzman provide many examples of women organising to change the design of their neighbourhoods by addressing issues such as street layout, lighting and signage, the provision of help points, and spaces of

entrapment. Women have also contributed to the design of individual buildings. An example of this is the design of the Jagonari Centre in Whitechapel (Open University, 1991). This is an educational and welfare centre for local women, and it is situated in the heart of East London's large Bengali community. Both its design and the process through which its design came into being are innovative. The previous section argued that designs for the built environment very often make assumptions about what kinds of people will be doing what kinds of activities in the environment being designed. The women who wanted the Centre deliberately looked for an architects' practice which would listen to them, since, like all inhabitants of a built environment, they had developed their own ideas about what a good building for them would be. The chosen architects of the Jagonari Centre – a feminist practice – came to the project with as few preconceptions as possible. They wanted to listen to, and to work with, what the eventual users of the Centre wanted. The design process was participative, then; it did not implicitly assume a certain kind of user. As a result, the building is sensitive to the needs of the particular group of women who visit it for advice or for classes or for social activities. For example, the building is very secure. Racist attacks are common in this area – all of the women on the Centre's Management Committee have been attacked by racists – so the windows have grills on them and the front door is solid. The grills are fashioned to make reference to the architectural traditions of the many Asian cultures of the women who use the Centre, and the colourings too – pastel turquoises and greens – are drawn from these non-Western traditions. However, the building is faced with brick so that, like the women themselves, it is also part of the tradition of Western urban environments too. The canteen is large and functional, built so that the large pots which Bengali cooks use are easy to move and to wash: the sink is built on the floor. The creche is integral to the whole building, and is a space where children can play safely but without being too far from their mothers. The Jagonari Centre, then, is an example of a built environment which tries to be sensitive to the particular group of people using it. Its design was a collaborative process which depended on the women's own knowledge about their urban environment and their own specific identity. Its spatial organisation and its aesthetic style both reflect a particular gendered, classed and racialised identity which is very different from that usually assumed by the built urban environments in the West. It is a good example of work by a feminist practice which aims to make the built environment more sensitive to the diversity of the populations which inhabit its spaces.

Other feminist work has looked at how women themselves give their own meanings to the built environments they encounter. Just as Valentine (1992) argued that women develop their own knowledge about what sorts of urban environments are dangerous, so feminist geographers have suggested that women can also give positive meanings to certain places which allow women to live more in the way that they want to. This is obviously the case in campaigns to make cities safer for women. For example, when a serial killer was murdering women in Leeds in the early 1980s, women were told by the police

to stay indoors; but some women's groups retorted that it wasn't women who should leave the streets but men, since it was a man who was making the city unsafe, not a woman. Women can remake the meanings of existing built environments in less overt kinds of ways too. Some feminist geographers have argued that this remaking may happen, to a degree at least, for some of the women occupying gentrified housing. Gentrified housing is usually older housing located in inner city areas of Western cities which has been 'done up', often by middle-class professionals. Both Bondi (1991, 1992b) and Rose (1984) suggest that gentrifiers are often women who move to the inner city to evade some of the gender assumptions prevalent in suburban housing. Gentrifiers often have non-traditional household structures; they may be single mothers, for example, looking for a somewhat alternative lifestyle close to the city centre, or lesbian women (and work in North America has also suggested that middle-class gay men often choose to live in gentrified areas, for similar reasons). Bondi (1992b: 167) thus comments that 'gentrification offers scope for reworking images of femininity and masculinity in ways that encompass diverse and non-traditional forms'. Although Bondi also insists that there are limits to this process, going on to say that gentrification 'does little to disturb existing gender relations', her work does suggest the possibility of women remaking the gendered meanings of the already-existing built environment.

SUMMARY

- Gendered identities (which are also sexualised, racialised, classed and so on) can be reproduced through the assumptions about social identity made by the design of the built environment.
- The built environment is given meaning both through dominant ideas of who should be where but also by the users of the environment.
- Particular women have attempted to redesign and re-imagine specific built environments based on their own perceptions of what they want.

6.3 The environment: an introduction

Feminist geographers are beginning to pay some attention to another understanding of the environment: the 'natural' environment. Feminists have critically engaged with dominant definitions of the term *nature* (see Box 6.1), and feminist discussions of the 'natural environment' depend in different ways on elements of this extensive critique.

Box 6.1 Nature

'Nature' is an extraordinarily complex term in Western cultures. Perhaps two dominant meanings can be detected, though (Livingstone, 1986). Firstly, 'nature' can be used to refer to the essence of something. Secondly, 'nature' can be used to refer to the world in general, particularly the physical world conceptualised as separate from the human world. This chapter is mainly concerned with the latter emphasis; but feminists have clearly engaged with the former when they debate the 'nature' of masculinity and femininity, or when they question the essentialism implicit in notions of 'nature' when applied to social identity (see Chapter Three); the debates around environmental feminisms have certainly drawn on both meanings. 'Nature' as a reference to the physical world has historically been feminised in Western discourses, and feminist writers stress how this feminised 'nature' is often understood as separate from, and vulnerable to, a masculinised understanding of culture. More recent discussions have suggested that 'nature' can be seen as the Other of 'culture', and, as an Other, 'nature' has an ambivalent relation to 'culture'. Thus feminised 'nature' can be seen as nurturing and plentiful, bounteously reproducing the fruits of the earth; or she can be seen as a mysterious and uncontrollable force, threatening the achievements of culture and civilisation. This of course parallels the two ways in which women are most often represented in cultural discourses, as either madonna or whore, and influential essays by Rosaldo (1974) and Ortner (1974) argued that women's oppression could be explained by their association with the 'natural' and by men's association with what was defined as the more valuable cultural.

The term 'natural' often implies something separate from the human, with its own processes distinct from those of society, economy, polity and culture. Feminist geographer Joni Seager (1993) has explored the understanding of 'nature' as separate from the 'human' in the context of environmental issues. She suggests that when the media report on environmental issues, the environment is very often conceptualised purely in its physical form: pollution is described as 'having an impact on' the environment, for example. She also suggests that many of the earth sciences follow this separation of a 'natural environment' from human life. Her work explores some of the implications of such a separation. First, a focus on the environment as a natural, physical entity often leaves questions regarding causality on the sidelines. Consequently, questions about human agency, that is, the fact that social and economic forces are, at least partially, responsible for the state of the environment we see around us, are 'placed a distant second, if they are realised at all' (Seager, 1993: 2). Secondly, our universal belief in the ability of the 'natural sciences' to understand that 'natural environment', again, does not allow us to question the human-related reasons for severe decline in environmental quality. And if the natural environment is thus constructed by both the media and by the sciences as quite separate from human processes, there seems little possibility for developing a feminist critique of current human–environment relations. The framing of environmental problems in purely physical terms is 'barren territory for feminist analysis: there is no feminist analysis of the chemical process of ozone disintegration; there is no feminist analysis of soil erosion, of ground water pollution, of the acidification process which is killing forests and lakes throughout the industrialised world' (Seager, 1993: 3).

Nonetheless, Seager insists that feminists should step into the analytical vacuum left by both the scientific community and the ways in which environmental issues have been popularised. Seager argues that feminists ask questions about human agency and therefore are able to offer an understanding of the 'natural' environment which relates that environment to social, political, economic and cultural processes. Feminism can look at the ways in which social power relations – for example, the struggle of vested interest groups – construct particular understandings of the environment and have particular material impacts on the environment. In her own work as a human geographer, working in an American university, Joni Seager has been influential in setting an agenda for a feminist geography of the environment. She says that the aim of her research is to deconstruct the workings of institutionalised power by asking 'who' is responsible for environmental crises. As a feminist, an important aspect of the answer to that question is a careful assessment of men's and women's relationships to the institutions which mediate our relations with the environment.

Seager's work suggests that feminist geographers can contribute a great deal to analyses of the environment. In fact, much of the work discussed in this section of the chapter does not originate from geographers. However, we recognise that since environment is one of the central themes of geographical enquiry, we need to begin to construct feminist geographies of the environment which offer a critique of the dominant scientific interpretation of 'environment as physical processes' which structures geography as an academic discipline. We can provide a critical view of human–environment relations that questions the political, social and economic structures of environmental processes. This aim is not so very different from the way in which feminists have contextualised the built environment in relation to the social, economic, political and cultural values in which it is embedded. There is another parallel between the work of feminist geographers on the built environment and those feminists working on environmental issues, too: their understanding of gender. Like feminists examining the built environment, those examining the 'natural' environment have looked at both gender roles and gender relations as their primary analytical focus, and at the intersection of gender with other social differences. This section explores both these approaches in the work of feminist environmentalists.

This section also raises another issue, however. In looking at different feminist understandings of gender, this section begins to examine some of the ways in which feminists themselves can be divided by social difference. In particular, this section looks at some of the differences which have emerged between some (though not all) Western feminists and some (though not all) Third World feminists.

'Nature', science and gender

In order to understand environmental feminisms, we must begin by discussing two fundamental aspects of feminist inquiry: the nature/culture dualism and

the feminist critique of the dominant scientific presumptions that shape our social, political and economic lives.

As Box 6.1 indicated, 'nature' has historically been gendered as feminine in Western discourses. Feminists concerned about the environment have seen this aspect of the nature/culture dualism as central to understanding both historical and contemporary attitudes towards the 'natural' environment (Plumwood, 1992). Carolyn Merchant (1981) and Ludmilla Jordanova (1989), among others, have examined how dominant forms of science since the seventeenth century have assumed that the scientific gaze at the world looks at a feminine 'nature'. Merchant (1981) argues that because greater value was placed on this scientific knowledge than on 'nature', a particularly exploitive approach to the environment was produced. Indeed, some feminists have argued that 'nature' is universally devalued (Ortner, 1974) and have gone on to examine the consequences of that for women. Vandana Shiva and Maria Mies (1993), for example, draw parallels between the ways in which modern science views women's experience of childbirth and the way in which it controls 'nature'. For the former, women's bodies, they argue, are merely a vehicle through which the scientific 'experts' deliver a new human life. With respect to 'nature', Shiva and Mies use the example of the hybridisation of plants in order to speed up the process of reproduction of food-bearing plant life because 'Nature's ways of renewing plants are dismissed as too slow and "primitive"' (Shiva and Mies, 1993: 28). Thus the equation of femininity with 'nature' has been used to oppress women by suggesting that women themselves are more 'natural' than men. Moreover, the effects of the way this dualism structures dominant notions of scientific knowledge have also been to 'naturalize domination' (Reuther, 1975); identities of both the dominant and subordinated groups are constructed as 'natural' by this science, and therefore also as unchallengeable (Plumwood, 1992).

This feminisation of 'nature' (and 'naturalisation' of femininity) went hand in hand with a masculinisation of 'science'. The links between Western scientific conceptualisations of the environment and Enlightenment-based meanings of scientific and technological progress are common themes throughout the environmental feminist literature. Most base their discussions on feminist scholarship which critiques mainstream science's claim to be a universal, value-free pursuit of truth (Braidotti *et al.*, 1993). Feminist critics point to the emergence of a Western science which has developed since the Enlightenment period and has become firmly established within our political, social and economic institutions, and describe it as a particular kind of masculinity:

> The very definition of 'the scientific mind' is coterminous with rationality, masculinity and power. The scientist as model for subject of knowledge is therefore defined in a set of hierarchical relations to others: the non-scientist. Feminists have criticised scientific discourse as an account of the world that systematically devalues every category that is 'other' than the male, Western, bourgeois self: women, children, other races, foreign cultures, lower classes, handicapped people and nature. (Braidotti *et al.*, 1993: 31)

As Chapter Three argued, this Western, male-dominated view of science is the dominant ideology through which geographical academic research is conducted and through which students of geography are traditionally taught. It is possible to suggest that physical geography in particular remains committed to a belief in objective and universal knowledge, but feminist geographers have only just begun to consider the possibility of a feminist physical geography. The possibilities are intriguing, and you may like to consider them at the end of this chapter when you have read about the range of feminist critiques that have been directed at different conceptions of the 'natural environment'. We can also note here that feminist critiques of the production of 'scientific knowledge' are also part of the postcolonial critiques of Western knowledges discussed at the end of Chapter Three, and we can now see that this analysis of Western scientific knowledge is relevant to a wide range of feminist work.

Feminists concerned about the environment have theorised the masculinity of dominant forms of Western scientific knowledge in a number of ways. Some argue that men, and science, are essentially oppressive and exploitive; others insist that the elision of certain kinds of masculinity with certain kinds of scientific knowledge is a social construction and it can therefore change and be contested. Those arguments are not a focus of concern here, however. Rather, this section now turns to the ways in which feminists concerned about the environment have reacted to the claim that the Western masculinity in some way underpins Western sciences, and the next two sections examine some of those reactions.

Ecofeminism

There are many ways of linking feminism to the environment. This diversity is indicated by the number of terms used to refer to such links: *ecofeminism*, *ecological feminism* or *feminist ecology*. A wide variety of issues are discussed, including Third World development, green consumerism, feminist environmental spirituality and environmental philosophies. According to Cathy Nesmith and Sarah Radcliffe (1993), these debates comprise an innovative mixture of academic and non-academic ways of thinking, including poetry and fiction. Many elements of these diverse positions and debates are informed by different kinds of theory, including, but not exclusively, feminist theories. This section focuses on the feminist theories about gender relations and the environment and examines one of the most important feminist arguments, ecofeminism.

The term ecofeminism was first used by Françoise d'Eaubonne in 1984 to describe women's collective ability to bring about an ecological revolution. She blamed the most immediate threats to our global survival on what she called 'the Male System', which needed to be destroyed by women after which 'the planet in the feminine gender would become green again for all' (d'Eaubonne, 1984: 236). Today, ecofeminism is a major sub-group of the feminist movement; it is largely activist-based and its theory is as complex and diverse as feminism itself (Plumwood, 1992). It contains a range of positions which

connect the domination of women with that of 'nature' and stresses the interconnectedness of feminist and ecological concerns (Braidotti *et al.*, 1993). What holds these diverse positions together, though, is a vision of society beyond militarism, hierarchy and the destruction of 'nature' (Plumwood, 1992). Vandana Shiva and Maria Mies sum up the ecofeminist cause as:

> ... a women identified movement ...[with] special work to do in these imperilled times. We see the devastation of the earth and her beings by the corporate warriors, and the threat of nuclear annihilation by the military warriors, as feminist concerns. It is the same masculinist mentality which would deny us our right to our own bodies and our sexuality, and which depends on multiple systems of dominance and state power to have its way. (Shiva and Mies, 1993: 14)

Despite this diversity, it is possible to identify two main theoretical positions to be found with ecofeminism. Following Plumwood (1992), we have described these two broad positions as *cultural ecofeminism* and *social ecofeminism*. These are outlined in Box 6.2, although it should be emphasised that this distinction is by no means watertight and the same campaigns and the same feminists can contain elements of both these positions and more.

Box 6.2 Ecofeminisms

Cultural ecofeminism: Cultural ecofeminism stresses the links between women and 'nature' and their joint oppression as a consequence of male domination. Women are seen as having a superior relation to 'nature' which is often taken to be biologically determined. Cultural ecofeminists emphasise a spiritual relationship with 'nature' that stresses personal transformation and the (re)empowerment of women and women's values. To solve environmental problems, cultural ecofeminists advocate the creation of an alternative 'women's culture'.

Social Ecofeminism: Social ecofeminists emphasise the social and political aspects of ecofeminism. They reject the biological determinism of cultural ecofeminism, opting instead to view 'nature' as a political rather than a natural category. Social ecofeminists would argue that the entire development of dominant culture and its relationship to 'nature' has been affected by male and other forms of dominance as expressed through the dualism of 'nature' and scientific reason.

Source: Plumwood (1992).

An example of cultural ecofeminism is the book by Vandana Shiva and Maria Mies (1993) called *Ecofeminism*, referred to in the previous section. Their arguments in that book are based on what they see as women's essential knowledge of 'nature' as expressed through the 'feminine principle'. Feminist geographers have also suggested that women are somehow necessarily closer to and more sensitive to 'nature'. Jan Monk and Vera Norwood, for example, have edited a collection of essays about women's relationship to the desert landscapes of the southwestern USA which is close to this position. Although they acknowledge differences between Anglo, American Indian, Mexican-

American and Hispanic women in that region, they nevertheless suggest that 'women of all cultural groups have found in the landscape (both natural and constructed) a source of strength and personal identity' (Monk and Norwood, 1987: 9). The essays argue that the environments of the southwest fascinated the women who lived in that region, and the women in turn cared for the environment there. Monk and Norwood connect this nurturance with women's role in nurturing children, and thus they generalise it across different groups of women. Cultural ecofeminism thus argues that women must be responsible for the solution to environmental problems.

This form of cultural ecofeminism sits uncomfortably with many Western feminists and environmentalists who are concerned with the *essentialism* which cultural ecofeminism and the 'feminine principle' assume (see Box 2.2 for a definition of essentialism). However, as Nesmith and Radcliffe (1993) discuss, many other Western feminists do not see the essentialist connotations of cultural ecofeminism as a problem because their understanding of gender is mediated by their understandings of other social identities. In particular, many Western feminists believe that the West is so overdeveloped that getting in touch with 'nature' is especially difficult there. In contrast, they believe that the Third World remains closer to 'nature', and that women there, because they undertake so much work maintaining household resources, remain close to 'nature'. Jane Jacobs (1994) examines this argument as it is made by some white feminists about Aboriginal women in Australia. But, as both Jacobs (1994) and Nesmith and Radcliffe (1993) make clear, this is a patronising attitude to take. It depends on a long history of the West as seeing itself as more advanced, more cultured and more distant from 'nature' than the rest of the world; it is a way of seeing the Third World as a place where understandings of the natural world are not as culturally mediated as they are in the West. In short, it denies the Third World its cultural practices.

Some ecofeminists, especially social ecofeminists, have challenged this view of Third World women, arguing that it depends on a culturally specific stereotype of those women. By and large, social ecofeminism is marginal to the ecofeminist activist cause and is largely contained to discussions within academia (see Merchant, 1981; Warren, 1994). Social ecofeminists reject the idea that women's closeness to 'nature' is a result of biological destiny. Instead, they favour a closer look at the social and political constructions of gendered relationships with the environment.

The differences in emphasis between cultural ecofeminists and social ecofeminists have a distinct geographical context. Some would argue that the concern over women's essential relationship with the environment is irrelevant for women throughout the Third World because the cultures of the South do not perceive the male/female dichotomy in the same way as women from the North (Braidotti *et al.*, 1994; Shiva and Mies, 1993). As a result, it is not problematic for these women to identify themselves with 'nature' and use this identification as a source of empowerment (Lamb, 1994/95). Sue Lamb exemplifies this argument by citing the case of the Chipko movement in India where women protect indigenous forestry practices by physically embracing

trees (see the following case study for more details). This is often represented in the West as a romantic tree-hugging project allying women with the very natural resource they seek to protect. But, as Lamb argues, precisely because women are not seen as closer to the environment in this area of India as they would be in the West, the activities of women in the Chipko movement require immense personal courage as they face the disapproval of men in their families, communities and the state (Lamb, 1994/95).

CASE STUDY: The Chipko movement, India

A fight for truth has begun
At Sinsyari Khala
A fight for rights has begun
At Malkot Thano
Sister, it is a fight to protect
Our mountains and forests.
They give us life
Embrace the life of the living trees and streams
Clasp them to your hearts
Resist the digging of the mountains
That brings death to our forests and streams
A fight for life has begun
At Sinsyari Khala.

Ghanshyam 'Shalland, Chipko poet

India's forests are a critical resource for the subsistence of the country's rural peoples because they provide fuel, food and fodder and stabilise soil and water resources. As these forests have been increasingly felled for commerce and industry, Indian villagers – mainly women – have sought to protect their livelihood through the Gandhian method of *satyagraha*, non-violent resistance. In the 1970s and 1980s, this resistance to the destruction of forests spread throughout India and became known as the Chipko movement. In 1974, village women of the Reni forests of the Chamoli district in Uttar Pradesh decided to act against a commercial enterprise about to fell some 2500 trees. The women were alone: the menfolk had left home in search of work. When the contractors arrived, the women went into the forest, joined hands and encircled the trees ('Chipko' means to hug). The women told the cutters that to cut the trees, they would first have to cut off their heads. The contractors withdrew and the forest was saved. The movement spread as more and more villagers throughout the Himalayas began to fast for the forests, guard and wrap themselves around trees scheduled to be felled, saving them by interposing their bodies between them and all the contractors' axes. In 1980, as a result, Indira Gandhi issued a 15-year ban on green felling the Uttar Pradesh forests. Since then, the movement has spread to Himachel Pradesh, Karnataka, Rajasthan, Bihar and the Vindayas and generated pressure for a natural resource policy that is more sensitive to people's needs and

ecological requirements. The Chipko movement is the result of hundreds of decentralised and locally autonomous initiatives. Its leaders and activists are primarily village women acting to save their means of subsistence and their communities. (Chipko Information Centre, India, IDOC *Internazionale*, March 1989, reprinted in Rodda, A., 1991, *Women and the Environment*, London: Zed Books)

If we reject the essentialism of the cultural ecofeminists, yet still want to recognise the empowering force which the relationship between women and 'nature' creates, we must look for other explanations. Braidotti *et al.* (1993) support Bina Agarwal's (1992) explanation for women's emergence as the main activists in the Indian environmental movement. She maintains that women are at the forefront of the movement not because they are women, but because they are marginalised in the social, political and economic processes of change in India and therefore have created a link with 'nature'. Thus social ecofeminists understand the connections between women and the environment, not as *essential*, but as *constructed*, in particular places at particular times in particular ways for particular reasons. It is also important to remember the sheer diversity of women's involvement in environmental campaigns. Women's environmental activism is certainly not confined to the Third World. Women are active globally, and the ways in which they understand their connections to the environment are also likely to vary globally.

There is no doubt that ecofeminism is one of the most promising movements within critical environmental thought (Archambault, 1993). Its radicalism and innovatory ways of theorising and protesting are all sources of inspiration. This sub-section has suggested, though, that a measure of caution is required when we evaluate the theoretical principles of ecofeminism and relate them to a variety of action-based movements which are fighting different environmental causes in different localities of the world. Ecofeminist arguments which claim that all women, but especially Third World women, are closer to 'nature' and therefore more natural environmental activists, can be criticised for their essentialism. Such arguments gloss over differences between women, but at another level they also rely on a differentiation between Western women and Third World women which depends on Western understandings of the difference between the West and the rest.

Women, environment and sustainable development: coalitions of difference

As we have already noted, a variety of ecofeminisms co-exist. The previous sub-section examined some of the main differences among ecofeminist arguments, and paid some attention to the essentialist tendencies in some ecofeminist work. This section examines some of the implications not only of understanding specific relationships between women and the environment as contructed rather than essential, but also of thinking about the ways in which different women may have different relations to the environment.

Those feminists who emphasise the importance of differences among women are also represented in the ecofeminist movement. They too insist that women's diverse environmental actions cannot be reduced to a universal, essential 'feminine principle'. Their arguments have already been rehearsed in the previous sub-section in relation to global differences among women. But this is important to remember at the local level too. For example, it is highly likely that the very different kinds of women (and men) involved in campaigning against the Newbury bypass in southeast England in the mid-1990s held a range of different views about their motivations and actions, and their views may be different again from those of other women in Newbury whose environmental activism involves recycling household waste, for example.

ACTIVITY

Agenda 21 in the UK

Consideration of 'global' and 'local' issues now figures widely in environmental awareness due in part to the policies and commitments agreed at the Rio Earth Summit in 1992 and published by the United Nations Conference on Environment and Development (UNCED) as *Agenda 21*. *Agenda 21* aims to address the global environmental problems of today while, at the same time, preparing the world for the challenges of the next century (UNCED, 1992). Section III of the *Agenda 21* document is entitled 'Strengthening the role of major groups'. Here, actions are identified to enhance the participation of different interest groups, from business and industry to trade unions, non-government organisations, local authorities, children and youth groups and women. These latter groups are identified in recognition of the fact that many environmental problems addressed by *Agenda 21* have their solutions rooted in local activities. Throughout the UK, local authorities are committed to adopting a local *Agenda 21* for their area, thereby defining a strategy for sustainable development at the local level. In co-operation with local interest groups, local authorities were aiming to achieve a consensus on a local *Agenda 21* strategy by 1996; they were encouraged to ensure that women and youth are particularly represented in decision-making, planning and implementation processes. In practice the central government's response to the implementation of *Agenda 21* offers little insight into how this can be done (Buckingham-Hatfield, 1994).

Some recent research by Susan Buckingham-Hatfield (1994) indicates the difficulties of ensuring that women are represented in the local *Agenda 21* decision-making process. She criticises *Agenda 21* for assuming that all women, regardless of their age, educational attainment, ethnicity and marital and parental status, share common environmental concerns.

- Contact your local authority and find out about the local *Agenda 21* in your area.
- What consultative procedures took place in your community?
- Were special efforts made to contact women? If so, how?
- What differences among women in your local area might make a difference to their participation in the local *Agenda 21* project? Here you might find it useful to return to Chapter Three and think about the main differences between women which feminist geographers have so far addressed. Are there other differences relevant to this particular Activity that you think feminist geographers have neglected?

- You may also like to compare your answers with those of another student looking at a different local *Agenda 21*. Are there also geographical differences between the potential for women's involvement in *Agenda 21*?

Differences among women may thus affect the ways in which women construct links between themselves and the environment. One feminist environmental organisation which pays a great deal of attention to such differences is the Women, Environment and Sustainable Development (WED) movement. WED is a network of grassroots environmental groups in Third World countries. It grew out of a recognition that the Western project of modernising the Third World was not yielding a significant improvement in the living conditions for the majority of people (Braidotti *et al.*, 1993). In fact, the processes of change that result from development have led to an increase in poverty and an increase both in gender inequalities and in the degradation of the environment in many developing-world societies. From both a theoretical and practical point of view, analysing the development and 'nature' of the WED movement sheds light on the ways in which feminism and environments can be connected in diverse ways, in the context of development.

In the book *Women, the Environment and Sustainable Development* (Braidotti *et al.*, 1993) the authors aim to look at the differences between women, feminisms and various environmental movements and the implications of these differences for building feminist environmental theory and knowledge (Lamb, 1994/95). Although many environmental issues have global impacts and require action at the global scale, WED refuses to suggest that this requirement demands that all environmental feminists act similarly. Instead, it concentrates on building alliances between the different strategies of different environmental groups, because it recognises that the ways in which women identify with, and find solutions to, environmental problems are very diverse. Braidotti *et al.* (1993: 169) negotiate this complexity by turning to the notion of 'situated knowledge' discussed in Chapter Two:

> The implication of increasingly sophisticated technologies and new forms of domination is that all those concerned to facilitate pro-environmental changes have a political and historic responsibility to critically analyse their own position in the wider power structure in order to identify points of leverage from their respective position. This could be as a member of the board of an industrial company, a scientific institution, a citizens movement or as a consumer. This strategy of 'situating oneself' is the basis for a new type of micro-scale politics, which relies on temporary and mobile coalitions with other social actors or groups, not on the basis of identity, but of affinity of world views and a shared sense of ecological ethics.

This argument allows for locally specific (and locally diverse) constructions of women–environment relations, while connecting such local specificities to a global coalition for change.

Through the WED movement a diverse number of relationships to the environment are articulated. The discourse of sustainability and the linking of environment and development at the global level, as for example through the Earth Summit, has created the space for different groups to be heard. The WED movement uses this space to construct a broad, shared understanding of the environment which is basically a critique of dominant views of development for Third World countries. The WED movement aims to illustrate the urgent need to find an alternative development model for the developing world by focusing on women and their relationships with 'nature' and the environment. But the multiplicity of environmental feminist theory and activism that encompasses the WED movement displays a wide range of views and specific definitions of environment itself. The WED movement is global and yet its component parts are local and construct definitions of environment which are particular to their specific contexts.

Ecofeminism remains a very diverse field of action and debate, then. Its arguments raise some crucial issues about different kinds of feminisms. It also raises some challenging issues for feminist geographers concerned with rethinking the environment in radical ways.

SUMMARY

- Gender identity can be drawn on in different ways to contest dominant ideas about the environment.
- Feminist politics can itself be caught up in the reproduction of powerful ideas about certain kind of femininities.
- Relationships between particular understandings of the environment and specific and diverse femininities can be constructed in varied ways.

6.4 Landscape: an introduction

The previous two sections have shown just how diverse studies of 'the environment' can be. This section explores another aspect of its study: landscape. Landscape is a key way of approaching 'the environment' in Western societies, and within cultural geography much work has examined the meanings given to landscape and the ways those meanings affirm or contest particular forms of social relations. The previous sections of this chapter have already suggested that there is no single meaning given to 'the environment' because different ideas about gendered (and other) identities are reinforced or challenged by the different meanings the environment has been given. Feminist geographers have applied the same argument to landscape. Their work thus also contributes towards a feminist analysis of the environment. But it also pays particular attention to the ways in which environments are interpreted.

Landscape is a term which usually describes some kind of clearly delimited geography, very often a framed visual image of an environment. While people may talk of rural or urban landscapes, upland, lowland, wild or cultivated landscapes, some kind of organised scene is almost always implied. This scene is related to ways of seeing or picturing the world: a picturing which may be derived from our experience of being in the landscape, from written descriptions or from visual imagery. Landscape, then, refers to both material and

imagined places. It is therefore also linked to issues of *representation* (see Box 6.3): how different peoples and places are shown in different media in specific times and places. What cultural geographers have emphasised about the term landscape is that different Western societies, or parts of these societies at different times and in different places, have shared views about ways of seeing, organising and feeling about the environment.

Box 6.3 Representation

Representation refers to the way in which interpretations are made of the world. It is a term which suggests that we do not perceive any aspect of the world in a naive and unmediated way, but that what we perceive is always re-presented to us through specific ways of making sense. Representations construct meaning about the world. They do so by using the codes, conventions and symbols of their specific historical, geographical and cultural contexts, and by referring to other familiar images. Western advertisements for holidays or cosmetics, for example, often contain images which remind audiences of countless other images of the 'rural', 'urban', 'exotic' or 'natural' and what they traditionally symbolise: simplicity, sophistication, sensuality. But images do not have single meanings. People can make sense of them in different ways and read or view images in opposition to the dominant culture. Richard Dyer writes:

> . . . we are all restricted by both the viewing and reading codes to which we have access (by virtue of where we are situated in the world and the social order) and by what representations there are for us to view and read. The prestige of high culture, the centralisation of mass cultural production, the literal poverty of marginal cultural production: these are aspects of the power relations of representation that put the weight of control over representation on the side of the rich, the white, the male, the heterosexual. Acknowledging the complexity of viewing/reading practices in relation to representation does not entail the claim that there is equality and freedom in the regime of representation. (Dyer, 1993: 2)

Dyer is commenting on the *politics of representation*: the ways in which representations both construct understandings of the world and inform its material organisation. The design of a public park, for example, makes assumptions about its use by different social groups, and this in turn depends upon cultural understandings of 'nature', respectability and appropriate conduct in public space. Representations do things, they work, they have effects and are thus material. Collective and individual identities, and experience of oppression or opportunity in social life, are often inseparable from representations of people, and their relationships with 'nature', environment and landscape. Dominant and oppositional claims to how social life should be organised, collective and individual identities, and ideas of 'nature', environment and landscape are thus *mutually constituted through representation*.

There are perhaps two ways in which landscape images can be described as gendered. The first is in their content. Landscape images depicting figures of men and women or symbols of supposedly masculine or feminine spaces often suggest certain ideas about gender. For example, images of English cottages and gardens at the turn of the twentieth century often showed women as mothers, suggesting this as women's primary role and duty. But probably the most profound way in which landscapes can be gendered is through the long history in Western society of describing the natural, and by association the rural, world as feminine. As the previous section commented, there is a long tradition in the West of understanding 'nature' as feminine, and femininity as close to 'nature'. Linked to this idea is the tradition of describing the female body as a terrain or landscape. Both of these ideas rest on an associated tradition which connects creative representation with men and the objects which give pleasure to a male viewer as feminine. This means that landscape can also be described as gendered in its very form. Not only what it shows, but how it shows it, has been described as masculinist by feminist geographers, and this is explained in the next sub-section. However, as the sub-section after shows, many women geographers and artists are claiming positions from which to look, interpret and enjoy images of landscape themselves. By doing so they disrupt the understanding of landscape that fixes them into automatic ways of seeing that are determined through gender.

Discussion of landscape must, however, also consider social relations other than gender. This section examines class, race and sexuality, and the following exercise asks you to think about other social relations and their gendering of landscape images.

ACTIVITY

Buying images of landscapes and bodies

The aim of this project is to investigate the images for and of women and men, that are marketed in the greeting card industry. It also asks you to think about how images of particular kinds of places are used to produce ideas of femininity and masculinity, sexuality, ageing, and conventions of physical beauty.

Greeting cards often use conventional traditions of representing particular kinds of places. They are also used to mark events in people's lives that are considered important (births, birthdays, coming of age, marriage, retirement, bereavement, etc.). Furthermore, different kinds of places and styles in cards aimed at different kinds of people (defined through age, gender and personal relation: for example, mothers, fathers, teenage women, baby boys, etc.) contain very strong messages about age and gender as well as sexuality. But they are also invested with meaning by those buying and giving them, written upon and given with particular intentions. This project on cards indicates the way in which personal meaning and mainstream imagery may intersect, how images from 'high culture' now widely circulate, how the cultural and economic are always interconnected, and how we can understand culture as a process of making meanings through practices as well as images.

- Visit card shops in your area and do a quick survey of card types and analysis of their content.
- What art historical styles are popular? (e.g. abstract, impressionist, black-and-white photography, pre-Raphaelite?)

- What kind of connotations do these styles and media have?
- Can you identify any major groups of geographical subjects? (e.g. domestic, rural, urban?)
- What activities are linked to men and to women in these images?
- What sort of men and women are depicted? (young or old, black or white, able-bodied or disabled?)
- Are particular figures in terms of gender, sexuality, race or age linked to particular places? (e.g. garden, jungle, race track?)
- Does the person for whom you are buying the card affect your choice? How?
- In cards with text, what kinds of cards are produced for sending to mothers, fathers, wives, husbands, teenage women or teenage men? Consider types of places, styles and colours.
- What kinds of romantic images are there?
- What makes some places seem erotic? (beach, garden, road, bedroom?)
- How does the road, through cars and motorbikes, seem to be about youthful sex?
- Are these images marketed for men or women?
- Does being on the road have different connotations for men and women?
- What does buying a card of a female or male nude mean for you?
- Are male nudes presented in the same way as female nudes?
- How is ageing represented?
- How do radical cards work with or against genres of visual imagery?

There is, then, the possibility for many different ways of seeing and using landscape images which maintain a critical approach as to how an understanding of ourselves and others is produced through representation of landscape. This does not mean that a landscape image will always mean the same thing. Women and men with diverse senses of their own identity (through gender but also class, race, sexuality and so on) may make images of landscape in quite new ways. Thus, this section aims to show how ideas about gender, class, race and sexuality are closely connected in images of landscape, but it also examines how both women and men have complex responses to landscapes and how ideas and images of landscapes can be used both to question and to support dominant meanings about the world. In doing so this section will raise questions about how feminist perspectives might help us understand the different and contested meanings of landscapes. Landscape images are always negotiated, and in this sense they have no final meaning. This suggestion that feminists should remember the diversity of landscape meanings places differences among women at the heart of feminist geographies of the environment.

Landscape as a 'way of seeing'

'Landscape' is not a simple thing. It is certainly not an inert object which can simply be observed, whether by geographers in the field, or by tourists in an art gallery, or by hill walkers from a vantage point. Rather, landscape is a term which makes sense of the environment in a particular way. To describe a certain perception of an environment as a landscape implies a particular interpretation of an environment. For example, landscapes tend to be rural.

Although they may contain human figures, these are usually subordinated to the surrounding trees, rocks, rivers and sky. And landscapes are most often structured as a kind of scenario laid out before their spectators – whether those spectators be geographers, tourists or hill walkers. Landscapes usually offer a panoramic view of an environment, which the gaze of their observer can sweep across. Several writers have argued that it is this specific combination of the visual and spatial organisation of an environment which is the defining quality of landscape. Landscapes are seen, and they are seen in a particular way, through a space which represents the environment as a territory stretching out before its spectator. For Denis Cosgrove, a cultural geographer who has often written about landscape, landscape should therefore be understood as a 'way of seeing' (1985: 46). It is not only a material object, but also a visual way of organising the perception of the environment. Writing with Steve Daniels in 1988, Cosgrove argued that 'a landscape is a cultural image, a pictorial way of representing, structuring or symbolising surroundings' (Cosgrove and Daniels, 1988: 1).

Work on the visual representation of landscapes is relatively recent in Geography. It is part of the growing interest in the production of diverse geographical knowledges about the world discussed in Chapter Two. Early work by cultural geographers raised the question of social power relations in connection with landscape by focusing on class relations. Whether written or painted, grown or built, these geographers argued that a landscape's meanings draw on the cultural codes of the society for which it was made. These codes are embedded in social power structures, and theorisation of the relationship between culture and society by these new cultural geographers has so far drawn on a humanist Marxist tradition which emphasises the importance of the values embedded in those cultural codes for the production and reproduction of class relations (Daniels, 1989). For Cosgrove in particular, landscape is a way of seeing the world which expresses only the values of the dominant ruling class. Cosgrove (1985) points out that landscape first emerged as a term in fifteenth and early sixteenth century Italy. He argues that it was bound up both with Renaissance theories of space and with the practical appropriation of space. He discusses the development during the Renaissance of a range of geometrical skills: the rediscovery of Euclidean geometry, the invention of the technique of three-dimensional perspective in 1435, and improvements in the methods of cartography, surveying and ordnance. But he argues that all these skills and techniques were put to the use of only one particular group in Renaissance society: the urban merchant class. This group were buying estates in the countryside and used these skills to map and survey them; and they also commissioned paintings of their land, and these paintings were the first to adopt the way of seeing to be called landscape. Through the use of geometrical perspective, these paintings of the Italian countryside represented the environment as a scenario laid out before the spectator. Perspective made this scenario seem 'natural', simply what was there. Yet their perspectival way of seeing the environment reproduced the particular relationship to the land of the landowner. They established a particular viewpoint for the spectator in their

painting: a single, fixed point of the bourgeois individual. From this position, the spectator controlled the spatial organisation of a composition, and Cosgrove argues this was central to landscape images. In these canvases, through perspective, merchants could enjoy perspectival as well as material control over their land. And it was not only how their lands were visualised which affirmed their classed position, it was also what was shown, for landscape images rarely contained pictures of the workers who toiled on the land. In both form and content, landscapes were represented from the landowner's perspective. Cosgrove concluded that the landscape is seen and understood from the social and visual position of the landowner. Landscape is meaningful as a 'way of seeing' bound into class relations, and can be described as a 'visual ideology' in the sense that it represents only a partial worldview (Cosgrove, 1985: 47).

Cosgrove's argument was innovative in a number of ways. He focused on the visual as something which could be organised in different ways, and he carefully connected both the content and the organisation of landscape to the dynamics of class relations. However, his work paid very little attention to gender relations. Cosgrove (1985) did mention in passing that the bourgeois, landowning spectator of landscape was male, but he did not elaborate the point. Nonetheless, it is possible to argue that thinking about gender in relation to landscape both enriches and complicates Cosgrove's arguments. On the one hand, landscape is a particular way of seeing the environment, or, more specifically, a way of seeing 'nature'. And, historically, 'nature' has been gendered feminine in Western cultures. So a feminist critique of landscape could also consider the way in which the content of landscape is gendered feminine. On the other hand, the particular way of seeing landscape through the organised and rational gaze of geometrical perspective has some striking similarities to the distanced and objective mode of knowing the world which, as Chapter Two argued, has been described as masculine by many feminists. So a feminist critique of landscape could consider how the way of seeing landscape is gendered masculine. Both of these possibilities have been pursued by feminist geographers.

It is possible to suggest that this masculine gaze at 'nature' is a gaze at an object which is constituted as feminine. As the previous section argued, 'nature' has been gendered as feminine in Western discourses, as the still commonly heard phrases Mother Nature or Mother Earth testify. This feminisation of 'nature' has produced a particularly exploitive approach to the environment. The previous section showed how cultural ecofeminists in particular have used this argument to explain why the natural environment has been so degraded. The same argument can be made in relation to landscape.

If what a landscape image looks at can be interpreted as feminised, the look itself has been described as masculine by feminist geographers. The particular kind of look which sees landscape – a look at a scene laid out in orderly space some distance away – has been argued by many feminists to be a look which is masculine. They argue that dominant forms of masculinity in the West assume a rational and objective self, and a self which is positioned in

relation to a world perceived as separate from them (Lloyd, 1984). This distance is achieved in part through the adoption of a certain distancing and controlling gaze at the world. This masculine gaze is also the gaze which Cosgrove described as the way of seeing landscape: it places the world at a distance from the observer, and represents it through the rational, scientific organisation of perspectival space.

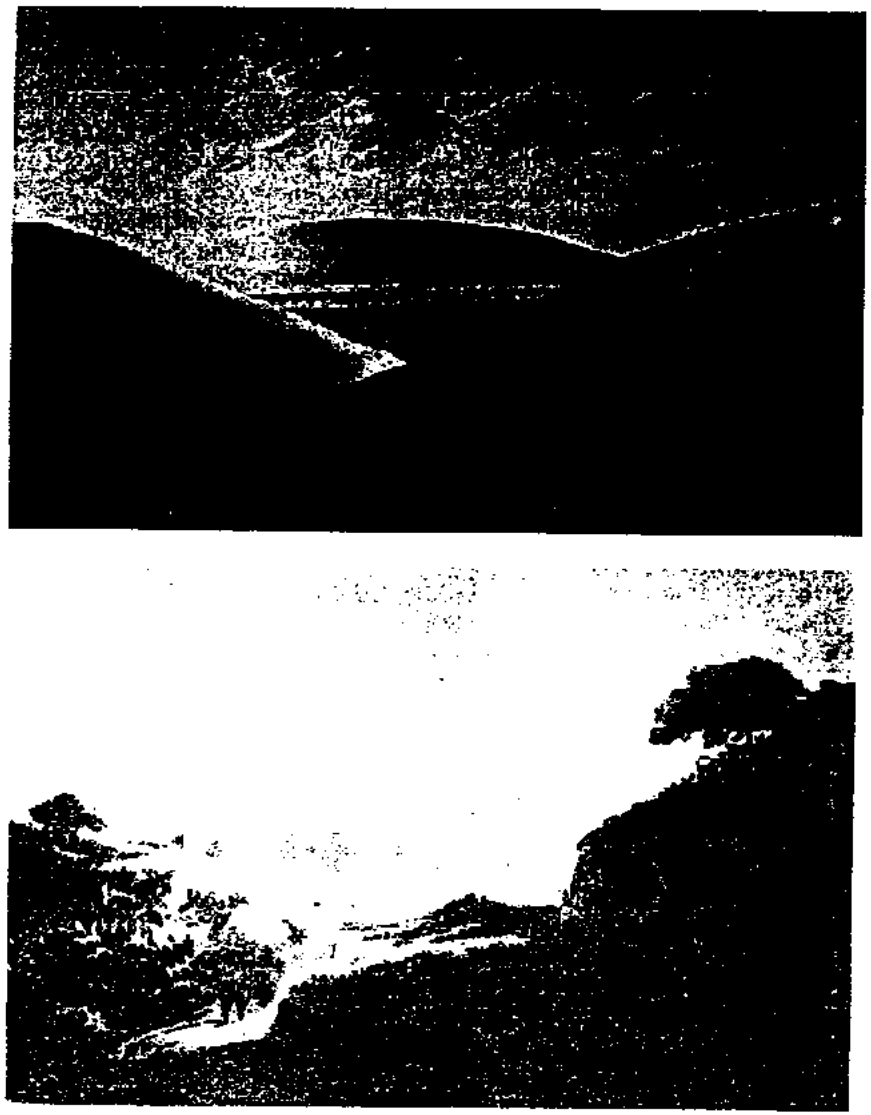

Figure 6.1 Gilpin, *Guides to the Picturesque*, from William Gilpin's *Three Essays: On Picturesque Beauty, On Picturesque Travel, and On Sketching* (1792)

All these arguments can be demonstrated in the case of the way of representing landscape images known as the Picturesque, which was a particularly influential way of painting landscapes in eighteenth-century Europe and North America. It represented landscape in what was to become the standard for Western European landscape. It constructs a distance from what it depicts, and it now seems very hard to represent a standard landscape scene with large trees that frame a landscape composed of receding planes of topography and distant horizon, unless you stand back and are at least slightly elevated (see Figure 6.1).

Although this is simply one convention for representing places, it gained great authority as the proper way to depict landscape in England since the eighteenth century. Not only were places described in poetry and painting through this Picturesque convention, but gardens and estates were organised to help achieve this view from the houses of the aristocracy and gentry. This ability to see the landscape in certain ways was not neutral, however. Those that defined their good taste and social standing through their ability to recognise and enjoy picturesque landscapes did not extend this privilege or pleasure to others. Neither women in general, nor those who worked the land, nor those defined as racially inferior, were thought by upper-class men with private incomes to be able to see the landscape in this way. Their closeness to it, through either ideas of femininity, racial identity or work, meant that they were essentially lacking in taste and the distanced objectivity which defined the ability both to govern and to see the world in appropriate ways. Thus the organisation of vision in landscape was deeply tied to the definition of upper-class, white, male, political and economic privilege. More widely, the history of landscape representation in Britain and the West helped produce ideas of the identities both of those in powerful positions and of those subordinate to them: women, working-class, non-white racialised groups.

So far we have argued that landscape must be understood as a way of seeing which is both classed and gendered. However, it is also important to remember that other social relations are produced and reproduced by landscape images. One such relation has been implicit in the discussion so far: heterosexuality. The assumption that masculine scientists construct an Other which they may fear but which they also desire as feminine implies a heterosexual organisation of desire. Moreover, as Jane Gaines (1988) has argued, race must also be considered when the power relations of a particular, dominant way of seeing are being considered. Gaines points out that the notion that there is a powerful masculine gaze which can look at the world with impunity ignores differences among men. In particular, she points out that for many black men in the American South until very recently, to be caught looking at a white woman was to risk being lynched. Gaines is arguing that the powerful look is in racist societies a white one: black looks do not have the same authority. This is the argument currently being elaborated by a number of writers interested in white travellers in European colonies during the eighteenth and nineteenth centuries, as Chapter Two mentioned. Several of them point out that the intersection of race with class and gender is complicated, and that in colonial situations white women could look with almost as much authority as white men because of

their privileged racialised position (Blunt and Rose, 1994). This argument is also a context in which to place the criticisms of ecofeminism as a Northern perspective which the previous section raised. Studies of landscape demonstrate particularly clearly that white women do not look at the environment simply as women, but as women from a particular cultural tradition (and very often with relatively high levels of material resources).

ACTIVITY

Consuming 'heritage' landscapes

Historic houses and gardens, whether rural or urban, attract tens of thousands of visitors each year in a great many different countries. Visitors are confronted with particular constructions of landscape and history in which certain things are included whilst others are silenced or excluded and yet visitors will make very different 'readings' of the place. If possible, spend a few hours at a nearby historic house or garden. Record your impressions and feelings and think about the questions below, bearing in mind how you might deal with attraction to and enjoyment of such landscapes and remain aware of the histories of class, gender, sexual, racial and other oppressions that were (and are) part of their production.

- How do you feel visiting historic houses and gardens?
- What elements of the landscape do you think contribute to your sense of enjoyment or unease?
- How is the history of the place presented?
- Does it match other images in film or period drama or brochures of historic houses and gardens?
- How is the house/garden itself represented in landscape images, textual, painted or photographed?
- Can you see any evidence of hidden histories? Think about the location of labourers' cottages, kitchens and servants' quarters.
- Are there any clues to the source of the wealth? (colonialism, military activity, plantation agriculture, imperial commerce?)
- How is a sense of nationalism conveyed?
- How is (and was) a sense of authority produced?
- What does the garden include or exclude? (types of vegetation, styles of gardening and architecture?)
- What kinds of family histories are celebrated?
- Does the family history in portraits and other memorabilia say anything about the power relations in the house or about acceptable gender and sexual relations?
- Do these meanings still affect you?
- What sort of groups seem to be visiting the house?
- Do you feel included or excluded?
- Is there any chance for expressing anger or disappointment or ambivalence?
- What do any graffiti or visitors' books say?
- Are there certain places where 'disrespectful' behaviour is more acceptable or contained? (toilets, rooms, parkland?)
- In what way is your behaviour constrained? (signs, wardens, other visitors?)
- Could the meaning of that place be changed for you and others by doing anything personally or openly resistant? (in your dress, speech, secret shared sign?)

- How does your buying of postcards or souvenirs or taking photographs change the meaning of the place for you?
- Is it possible to negotiate the pleasures which these places give you with an awareness of past and contemporary power relations produced by these places?

Feminist discussions of landscape emphasise the complexity of looking at landscape, then. They suggest that many kinds of social identities intersect in the representation of landscapes, and that such identities can be reproduced through both the content and the look at landscape.

Making feminist landscapes

As we have shown in the previous sections, whilst there may be dominant ways of looking at the environment, there are also resistant, oppositional and contested ways of seeing. The same argument must be applied to landscape images also. In other words, there are no 'real' or 'true' landscapes to discover beneath paint, text or vegetation but rather multiple, simultaneous, different and sometimes competing ways of seeing landscapes. Landscapes are not merely 'there' on the ground but are socially constructed within a complex and changing interplay of power relations, not least those between gender, class, race, sexual preference and other social differences. This sub-section is concerned with the instability and contradictions of landscape representations, and it will focus on the multiple ways in which landscape can be made and interpreted.

Many feminists have emphasised the ways in which different audiences make sense of the same images in different ways, in order to problematise the production of powerful, gendered knowledges about landscape. The meanings articulated in the production of a landscape image or built environment may not be the meanings interpreted by the users of the environment or the viewers of a landscape. The consumption of environments and landscapes by different audiences may be diverse and even conflictual. This is the emphasis of many accounts of consumption (Burgess, 1990), and it is an important argument in many feminist accounts of the politics of representation because it insists that there are always possibilities for diverse feminist readings of images. The following activity explores some of the different ways in which the paintings of Georgia O'Keeffe have been received by art critics.

ACTIVITY

Art critics' reactions to the landscapes of Georgia O'Keeffe

This exercise aims to explore a range of approaches to interpretation and illustrates the importance of context and specificity (the who, what, where and when) in evaluating interpretations of landscape, environment and 'nature' and the use of particular ideas of gender and sexuality within representation. It focuses on one image, *Flower Abstraction* (1924) by Georgia O'Keeffe (Figure 6.2), and is designed to encourage critical thinking about both your individual interpretation and the views that others offer of the meaning of this painting.

Spend a few minutes looking at and thinking about this painting. What does it bring to mind? If you like it, don't like it or feel indifferent about it, try to work out why. Jot down your thoughts about it.

Figure 6.2 O'Keeffe, *Flower Abstraction* (1924)

It is generally thought that Georgia O'Keeffe used natural landscape and flowers in particular to represent women's bodies, but this has been interpreted and commented on in many different ways. The extracts of writing below do not agree on the meaning or significance of her work. They exemplify the way in which one image may be read or viewed in different ways. Although most make some kind of connection between the aesthetic value of her work and its social significance, they differ in their use of ideas of 'nature', landscape, biology, the body, gender difference and femininity. O'Keeffe's work has been read as celebrating women's closeness to 'nature', or as strategically representing the female body through images of flowers in order to provide images of the female body which differ from the male-dominated traditions of Western visual culture. Some comments on it seem to make assumptions about an audience of men sharing male heterosexual pleasure in the female body, while others risk reasserting oppressive ideas of women as close to 'nature' and imply an assumed reproductive/biological/genital basis to femininity and to gender difference. Thinking about the politics of these interpretations does not mean deciding on one 'true' or 'correct' response. Rather, each approach needs evaluating in terms of its context and politics.

Read each of the extracts below while thinking of these issues.

Source (i)

> The pure, now flaming, now icy colours of [Georgia O'Keeffe], reveal the woman polarizing herself, accepting fully the nature long denied, spiritualizing her sex. Her art is gloriously female. Her great painful and ecstatic climaxes make us at last to know something the man has always wanted to know. For here, in this painting, there is registered the manner of perception anchored in the constitution of the woman. The organs that differentiate the sex speak. Women, one would judge, always feel, when they feel strongly, through the womb. (Paul Rosenfeld, 1921)

Source (ii)

> First then, if the work [*Red and Yellow Cliffs*, 1940] resembles cliffs, it also at least in part establishes a relationship of resemblance to mounds and folds and furrows of flesh, and specifically to the human vulva, an association that the ambiguity of scale serves to keep in play. (By what I take to be an accident of circumstance, the resemblance is underscored by the presence within the same museum collection of Egon Schiele's *Beautiful Girl I Saw in a Dream* of 1911 ..., in which the spread labia of its subject are pictured in a manner strikingly similar to the way in which the central clefts are pictured in O'Keeffe's landscape. It may be acknowledged that similarity is a potentially distracting relationship. What we can at least say, however, is that for anyone who had the Schiele's in mind, the association of cleft with vulva in the O'Keeffe would be rendered virtually inescapable.) (Charles Harrison, 1994: 221–222)

Source (iii)

> Women artists have used the central cavity which defines them as women as the framework for an imagery which allows for the complete reversal of the way in which women are seen in the culture. That is: to be a woman is to be an object of contempt and the vagina, stamp of femaleness, is despised. The woman artist, seeing herself as loathed, takes that very mark of her otherness and by asserting it as the hallmark of her iconography, establishes a vehicle by which to state the truth and beauty of her identity. (Judy Chicago, 1975: 143–144)

Source (iv)

> In 'trying to develop a [woman's] visual language of desire, however, O'Keeffe was on her own. Her solutions to that problem were, admittedly, uneven: now crude and obvious, now elegant and ingenious. She rejected from the first the dominant modes of picturing desire: she did not depict in a literal way the site of desire itself, the human body. Not only did she deny the (male) viewer the opportunity to look in a sexually predatory way at actual female anatomy (though critics proved remarkably inventive even so in their voyeuristic readings of her art's metaphorical content), but she also eschewed the easy but self-defeating task of inviting (female) viewers to gaze at the male body. Instead, O'Keeffe portrayed abstractly, but unmistakably, her experience of her own body, not what it looked like to others. The parts of the body she engaged were mainly invisible (and unrepresented) due to their interiority, but she offered viewers an ever-expanding catalogue of visual metaphors for those areas, and for the experience of space and penetrability generally.... O'Keeffe's abstract and highly sensual images of often labia-like folds, sometimes rendered in pastel shades, invoked associations not only with the body, but with skies and cloud formations, as well as with canyons and the anatomy of flowers. O'Keeffe had intense feelings about certain elements of nature, especially the open skies and spaces of the plains, and she found in natural configurations, large and small, homologies for the felt experience of the body. (Anna Chave, 1990: 118–119)

Some questions to ask:

- How do the extracts differ in the ways they connect O'Keeffe's art, femininity and nature together?
- How might it be useful sometimes to assert feminine difference in art and in the experience of natural environments or the body?
- If the image was made by a man would their claims work in the same way?
- How could each of the extracts be rewritten in ways which maintain or alternatively disrupt conventional views of masculinity and sexuality?
- Does the gender of the writer make a difference to what you think of the comments?
- How do the different extracts imply certain kinds of audiences? Did you have a sense of sharing or not sharing their response? What may this mean?
- Return to your notes on your initial thoughts. How have your ideas about the image been affected by what you have read and thought through?
- Those who produce images of the body or landscape cannot control who sees or reads them or how they are understood. What, then, is at stake and at risk in the reproduction of feminist erotic or body-centred imagery?
- Can it sometimes be useful to assert essentialist difference or use gender as the basis of critical evaluation of the politics of an image or readings of it?

Feminists have looked at landscapes in many ways, and feminist critiques and re-viewings of landscape are diverse. This sub-section focuses on just some of the tactics adopted by feminist geographers. Feminist geographers have looked for spaces in landscapes which allow women to articulate their complex identities; they have read images for new and feminist meanings; they have studied work which explicitly challenges dominant ways of looking at landscape. Both these tactics emphasise again and again the complexity of landscape, so that generalising about a feminist landscape becomes difficult if not impossible. Moreover, this complexity also suggests that feminist projects may also be able to construct alliances with other marginalised groups, so that gender itself becomes a problematic category with which to work.

One theme of feminist geographers' work on landscape is to search for another way of looking at landscape so that landscape does not become a way of seeing accessible only to the powerful. Much non-feminist cultural geography has tended to focus on Renaissance estates or large eighteenth-century landscape parks, and their (male) designers. Landscapes apparently considered too everyday and banal have been ignored. But many of those other landscapes have also, historically, been spaces through which women have expressed a relationship to landscape, and feminist geographers have argued that they therefore deserve theoretical and substantial enquiry. One such everyday landscape is that of the garden. Gardens, other than the grand landscape park, have been gendered as feminine. They are thus an environment in which women can construct their own landscapes. While this might be seen as constraining, Ford (1989) has argued that the garden can provide a space for the assertion of landscape expertise otherwise denied to women. She has studied in particular the botanical writings of Jane Claudius Loudon, who in the nineteenth century became an expert in garden design and whose work legitimated the landscape-making activities of other bourgeois women. The middle-class nineteenth-century villa was a separated private space with the wife/mother at the domestic centre, and the naturalisation of her nurturing abilities allowed her to control and make specific garden spaces such as flower-beds.

The placing of women in positions understood as closer to 'nature' – gardens, rural places – can be reinterpreted in other ways too. Helen Allingham produced many images like *Cottage at Chiddingfold* (1889) reproduced in Figure 6.3.

Allingham was a highly acclaimed professional painter whose late nineteenth- and early twentieth-century watercolours of country cottages and gardens fed into a strong preservationist movement which felt that 'traditional' architecture was being undermined. As a woman artist, Allingham's mobility within the rural landscape was more constrained than it was for her male counterparts, yet she took pleasure in looking at and making images of those landscapes. Such pleasure was enabled by her middle-class and professional position which allowed her leisure to travel and paint, to objectify the scenes and people she viewed. The figures in Allingham's landscapes are almost entirely working-class women and children, suggesting a mobilisation of acceptable codes of feminine representation for exhibition within scenes of a certain idealised Englishness – white, rural, southern, maternal, feminine and heterosexual – all of which immediately suggest the possibilities of other concurrent landscapes. Deborah Cherry (1993: 182–183), a feminist who makes 'interventions into art history', argues that 'it was this powerful combination of the rural idyll and domestic femininity that enabled the working-class woman at the cottage gate to signify social order.' Men are conspicuously absent in Allingham's images of country cottages, perhaps naturalising the domestic positions occupied by women and young children, or even making visible the link in women's and children's subordination. Alternatively, however, it is possible to re-read such 'blanks' in the paintings to produce new meanings. Some contemporaries did this. Some drew attention to the insanitary condition of many rural cottages. Indeed, in response to the cottage in *On Ide Hill*, 'Far from finding the scene picturesque, the local doctor berated the artist for painting a house that had more fever in it than any other in the parish' (Cherry, 1993: 181). Feminists now can also re-view these images. The 'blanks' might suggest female homosocial spaces whilst awaiting the return of men from work. The paintings, frozen in time and space, might even suggest men that never return, men who are permanently absent and consigned to the paintbox with the sweep of the brush. It is possible, then, to not only contextualise Allingham's work

Figure 6.3 Allingham, *Cottage at Chiddingfold* (1889)

within a tradition of painting which objectified women and children, but also to renegotiate the meanings of the images in relation to present day concerns.

Other geographical studies are also arguing that garden spaces be viewed as complexly intersected by relations of gender and other social relations. If Ford's work focuses on gender and class differences, Morris (1994) explores gender and national identity in the context of the First World War. Her focus is on masculinities. Her work suggests that national identity intersects with gender, but that this occurs in complex ways. British male soldiers and Christian clergy on the Western Front, British male prisoners in a civilian prisoner-of-war camp near Berlin, and the British government through the Western Front military cemeteries all toiled to make gardens under adverse conditions. Whilst a great many soldiers and prisoners made or visited gardens in their attempts to cope with the appalling stresses of combat, the government was keen to evoke national sentiments by reproducing images of the ideal English garden in its propaganda. In this propaganda it was assumed that everyone in Britain, as well as the soldiers themselves, would be able to identify with an English garden: England (and not Scotland, Wales or Ireland) was the symbol of civilised values. The propagandists were often at pains to suggest the gentle yet tenacious masculine 'nature' of the 'English' soldier–gardener in contrast to the supposedly barbarous masculinity of the German. Morris's work suggests that diverse masculinities were at stake in these First World War gardens, as well as notions about 'Englishness'. She has also suggested how sexual preference can disrupt heterosexuality of landscape as a masculine engagement with a feminised 'nature'. In a study of *The Well of Loneliness*, written by Radclyffe Hall in 1928, she shows how the lesbian protagonist has troubled relations with not only her English country home of birth, but its landscape, gardens and 'nature'.

Earlier it was suggested that, historically, women and female bodies had been associated with 'nature' in Western cultures. Even more specifically, women have been associated with gardens and flowers within masculinist and heterosexist discourses about femininity, (male) desire, virginity and 'purity'. But women have always produced images of gardens and transformed material landscapes through gardening. It was not until the late nineteenth century that women earned an independent living as practising gardeners and garden designers in Western societies. Gertrude Jekyll (1843–1932), an eminent middle-class English garden designer and theorist, was one such woman. She is best known for her contribution to the English cottage style of garden, not unlike many of the garden borders to be found in Helen Allingham's watercolours. And amongst wide-ranging works are her lesser-known contributions to the style of plantings used to commemorate male 'sacrifice' in the British First World War cemeteries on the Western Front. Unfortunately, Jekyll suffered from failing eyesight even before she turned to garden design, and during the last two decades of her life as she grew more blind she had to work increasingly on paper, being unable to travel and view any prospective scene (Massingham, 1982: 121). Whilst Jekyll helped promote a style of gardening that could be easily associated with domestic femininity, she, like Allingham, disrupted any simple relation by being an independent working woman as well helping to produce potentially ambiguous connections between gardens and masculinities. The English garden is not quite as tranquilly calm as its usual representations suggested.

ACTIVITY

Women making landscapes of rurality: the example of Laura Ashley

Laura Ashley is an international clothing and furnishing company which took its name from the woman who started the company with her husband in 1953. Laura Ashley designs draw heavily on representations of rural landscape but these images intersect with class differences and ideas of race, gender and sexuality. Representations of the rural, of country living and ideas of 'nature' have been connected to the construction of idealised ideas of the past and nostalgia for forms of social relations based upon the class structure and gender relations of this past 'golden age'. This activity aims to get you thinking about how rural landscapes and ideas of 'nature' are evoked in clothing fashions and in home decoration in Britain. The example of Laura Ashley is focused on here but you could also look at how images of cities, rural landscapes and 'nature' in Britain and other places are used in other advertisements to sell the products.

Carefully look through Laura Ashley fashion and home decoration catalogues. Think about the complex relationships between 'nature', femininity, domesticity, nationalism, class, race and images of rurality and rural landscapes. Refer to the following questions.

- Do you think the catalogues draw on images of 'nature' and the rural to sell the products? If so, why? Give examples.
- What elements of the landscapes used in the pictures make you think of this?
- Look very carefully at the layout of the room, fabrics and furnishings. What styles are dominant and how would you describe them?
- What accessories are used to make the sets look 'authentic'?
- What are the names of the fabrics in the catalogues? How are they described in the catalogues?
- What kind of colours are used?
- Is the use of countryside imagery and 'nature' made explicit in the forewords to the catalogues?
- What do you think these images of rural landscape say about rurality?
- Do you think that a sense of Britishness is conveyed? If so, how is it displayed as being essentially English/British?
- How are women represented in the fashion catalogues?
- Are they in rural settings? Give examples.
- What are the models doing in the pictures?
- What kind of femininity are these women conveying to you?
- Do you think a particular type of femininity is represented in rural landscape imagery?
- What understandings of the 'roles' and 'nature' of women is being represented?
- What clientele do you think the company is aiming at?
- Do you think that the clothes are being aimed at women of a particular class or age? If so, why?
- What kind of clothes [illegible]?

- Compare them to clothing found in other catalogues. Are they different? If so, why?
- What kind of image do you think that wearing these clothes presents?
- Who do you think buys Laura Ashley clothes and furnishings?
- Would you buy the clothes/furnishings? Why or why not?
- What values do you think the company are trying to instil in and through rural imagery?
- Do some research into the company. Look for books that have been written about Laura Ashley and her history (e.g. Sebba, 1990; A. Pratt, 1992). Compare these to what you thought about looking through the catalogues.

Feminist interpretations of landscape, whether they be the writing of academic interpretations, the depiction of landscape through other creative media, memories or visits, are not easily separated. We have already outlined some of the ways in which feminist geographers' different excursions into landscape studies are not merely interpretations but are also a making and re-making of landscapes. The following discussion examines the work of some vision-based artists and designers who directly challenge the exclusions and constraints of dominant ways of looking at landscapes.

Ingrid Pollard is a black woman photographer. She has produced *Pastoral Interludes* (Figure 6.4), a series of black-and-white prints showing black figures in English rural landscapes. The presence of a black person at once critiques the 'whiteness' of dominant representations of England's 'green and pleasant land' which is more usually shown as inhabited and worked only by white people, and there for the leisure only of white people. Pollard's work makes a black presence in the countryside visible. The image reproduced here

Figure 6.4 Pollard, *Pastoral Interludes*

perhaps points towards the fear of lone women, particularly black women, within English hill-walking country: '...feeling I don't belong. Walks through leafy glades with a baseball bat by my side...'. Pollard herself comments that the baseball bat is also a reference to the English countryside as the location of shooting (grouse and so on) as a means of culling and exterminating other species that are given no place in the countryside.

The potential for reading Pollard as a *feminist* photographer is further emphasised in her critical photographs of English tourist and heritage landscapes with the photo-essay, *Another View* (Pollard, 1993) (Figure 6.5). Here, a black woman's hands are shown writing on postcards of Dorset and Hastings upon which are superimposed images of Pollard herself as an uneasy reminder of the 'whiteness' of tourist and heritage advertising and merchandise. In the photograph shown in Figure 6.5 Pollard is claiming a different position from which to look at

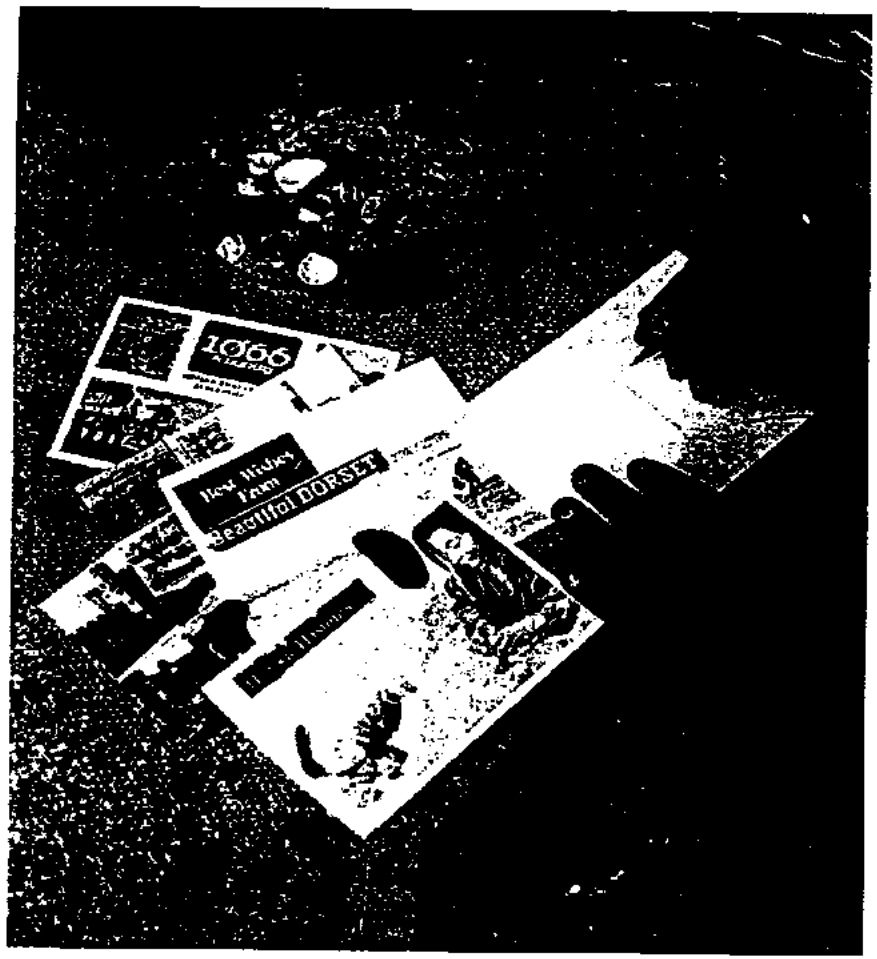

Figure 6.5 Pollard, *Another View* (1993)

and enjoy English landscapes (albeit an uneasy pleasure); a right to be there and a right to be represented and make representations. She challenges, disrupts and complicates the notion of a generalisable set of shared ideas about England and the implicitly white and masculinised position from which it is usually viewed.

Pauline Cummins is an Irish artist who deals with issues of sexuality, motherhood and cultural identity in Ireland (Nash, 1996). Her installation *Inis t'Oirr/Aran Dance* (1985) was made and exhibited in the mid-1980s in southern Ireland when women's reproductive rights were being debated and women were attempting to negotiate personal identity with traditional Catholic and nationalist ideas of Irish femininity. The Aran of the title and of the knitting tradition refers to the Aran Islands off the coast of County Galway in the west of Ireland, which were the focus of intense national desire and anxiety about racial, moral, linguistic, spiritual and sexual purity in the early twentieth century. The installation thus relates to a set of representations which constructed the landscape or imaginative geography of the west of Ireland as a highly significant and contested national landscape. The video installation is a series of slowly changing images of a male torso and images of wool, knitting patterns and an Aran jumper, accompanied by the voice of the artist. The artist narrates her thoughts about knitting, story telling, landscape and the movement of her hands over the male body while images of the body first dressed in the jumper then naked slowly evolve on the screen. By linking the domestic to an autonomous and active female sexuality through the emblem of traditional Irish rural life, Cummins prompts a reconceptualisation of the meaning of traditional crafts, the domestic and the feminine. To imagine that women knitting in past and contemporary Ireland could and can be absorbed in fantasies of sexual pleasure is radically disruptive of traditional versions of Irish femininity. The installation thus takes the nationalist and often patriarchal symbolism of the west of Ireland landscape to produce a feminist statement which brings together attachment to these specific cultural traditions and a radical sexual politics.

Although it has been argued that women and female bodies have traditionally been associated with flowers, rural landscapes and 'nature' in Western discourses, these representations, as we have attempted to show, are not fixed and are not only produced or given single meanings by white, Western, heterosexual privileged men. Indeed, while some male artists have made masculinist, even mysogynist, images that symbolically represent female bodies, other men have themselves disrupted these associations between bodies, flowers and 'nature' (although not always unproblematically). David Wojnarowicz died of AIDS-related illnesses in July 1992. With the onset of life-threatening illness many of his images, combining photography and paint, took on symbolic and often quite explicit references to death, life, sex and the human body. Some of his mixed media work are of large exotic flowers (see Figure 6.6) which make immediate references to the works of Georgia O'Keeffe examined in a previous activity.

Whereas O'Keeffe's flower paintings have been again and again linked to female sexuality and female genitalia, Wojnarowicz's flowers have been interpreted as phallic, as a masculine 'nature' – but one infused with male homosexual desire, a desire resisting any dominant universalism. As an apt concluding remark

Figure 6.6 Wojnarowicz, *I Feel a Vague Nausea*

suggesting the politicisation of recognising the relations between dominant and other multiple ways of seeing, Wojnarowicz has been quoted as saying:

> ...each public disclosure of a fragment of private reality serves as a dismantling tool against the illusion of ONE-TRIBE NATION: it lifts the curtains for a brief peek and reveals the possible existence of literally millions of tribes. (Quoted in Lippard, 1994: 23)

Wojnarowicz's emphasis on differences so multiple, so variable, that any singularity of identity is threatened is paralleled by the work of some feminist geographers, mentioned in Chapter Three, who question even the integrity of gender as a category of social identity. Critical accounts of processes of representation, especially those emphasising the diversity of social identity and the articulation of that identity in the practices of both representation and consumption, can lead to such questions. But so too can other forms of feminist

critique. In relation to environmental feminisms, for example, Plumwood (1992) also goes a step beyond recognising diversity, and calls for a complete reconceptualisation of the distinction between 'nature' and humanity. She argues that the world needs a new vision which renegotiates both masculine and feminine identities in order to break prevailing nature/culture dualisms and especially to free the concept of the human (culture) from the connection with the masculine.

Feminist engagements with 'nature' and landscape, then, have echoed the diverse understandings of gender found in feminist geography more broadly. Work by feminist geographers discussed in this section has argued that there is an essentially feminine relationship to 'nature' and landscape; that landscape and 'nature' must be understood as intertwined with gender and other social differences; and that the complexity of 'nature' and landscape is such that gender may not always be a central analytical category.

SUMMARY

- Landscapes are a particular way of representing environments visually.
- Landscape images can articulate the complex intersection of a range of diverse social identities.
- This complexity is such that some women, in some circumstances and some places, can appropriate landscape imagery for themselves.
- Other women resist landscape imagery, seeking other ways to represent their relation to the environment.
- This complexity is also such that those occupying other marginalised positions have also contributed to the reworking of landscape representations, and this can place the centrality of gender as an analytical category into question.

6.5 Conclusions

This chapter has explored three related terms: environment, 'nature' and landscape. It has attempted to clarify the diverse meanings of these terms. The environment usually refers to our physical surroundings. The first section of the chapter demonstrated that the physical surrounding of the built environment can be described as gendered because ideas about gender are articulated in the design of the environment and negotiated in its use. In the case of the so-called natural environment, it is often assumed that there is some kind of total separation between our human lives and that natural surrounding. However, the second section argued that, just like the built environment, the natural environment is also interpreted and used in ways which are highly gendered. Moreover, also like the built environment, the natural environment does not articulate gender alone; environments also mobilise ideas about race, class, sexuality, and so on. The second section took this issue further and began to question differences, not only among women in their relation to the environment, but also among feminists. To what extent do Western feminists draw on Western ideas about cultural difference to sustain their own arguments about the need for ecological sensitivity? If the practices of the design of the built environment and the management of the so-called natural environment are structured by patriarchal and other power relations, to what extent are feminists complicit with at least some of those relations? For many feminists, this is a question of representation: how Western women represent women different from themselves. The third section explored the question of representation more carefully, by looking at ways in which Western observers, men and women, have seen 'nature' by seeing landscape. This section concluded by emphasising the complexity of representational practices, and arguing for the complexity of social identities involved in both representing and consuming images of 'nature'.

That this chapter should conclude by emphasising complexity is not surprising. Environment, 'nature' and landscape are extraordinarily complex terms, because in feminist work they bring together many things usually separated as opposites: the material and the cultural, the natural and the cultural, the local and the global, the production and consumption of meaning. And they do so in complicated ways. In making and remaking the meaning and practices associated with these notions, multiple forms of identity intersect, and such forms are complex, often contingent and very often contested. Indeed, many feminists feel that the most inspiring feminist theorising now happening is inspiring precisely because it explores such fractured sites of material meaning, and argue that through such complexity many of the most oppressive certainties which have for so long functioned to keep women, and other marginalised groups, in their place may now finally be breaking down. Donna Haraway (1991) is one such writer who revels in the disruption of some of the most fundamental assumptions upon which much Western thought, including feminist thinking, has been based. She sees at the present moment an opportunity to question many divisions, including that between the human and the non-human, cultural and natural: but also between different social groups. Instead of difference and division, she imagines a world of mixing and uncertainty, a cross-over world where new possibilities beckon and new ways of living may be possible. This is perhaps a surprisingly optimistic vision at this moment of ecological and social devastation; but then breakdown is not such a terrible scenario for those who have little stake in what is being broken. The conclusion to this book – Chapter Seven – returns to this question and considers how feminist geography is responding to recent theorisations of cross-over possibilities.

Further reading

Anderson, K. and Gayle, F. (eds). 1992. *Inventing Places*. Sydney: Longman Cheshire. This is a collection of essays which explores the range of social relations through which environments, 'nature' and landscapes are given meaning, including gender.

Braidotti, R., Charkiewicz, E., Hausler, S. and Wieringa, S. 1993. *Women, the Environment and Sustainable Development: Towards a Theoretical Synthesis*. London: Zed Books. Good for an overview of the debates.

Merchant, C. 1981. *The Death of Nature: Women, Ecology and the Scientific Revolution*. London: Wildwood House. This is a classic discussion of the construction of a masculinised modern science and a feminised 'nature'.

Rose, G. 1993. *Feminism and Geography: The Limits of Geographical Knowledge*. Cambridge: Polity. Chapter 5 discusses dominant ways of seeing landscape, and some feminist alternatives.

CHAPTER SEVEN

Conclusions

NICKY GREGSON, GILLIAN ROSE, JULIA CREAM AND NINA LAURIE

7.1 Introduction

ACTIVITY

Return to the activity in Chapter One which asked you to define feminism and to the responses you made to the questions we asked there. Looking at each of these definitions, can you identify which traditions of feminism (or non-feminist thought) these definitions may be identified with? Why do you position these definitions thus? In the light of what you have read in this volume have your definitions of feminism altered? If they have, how have they changed, and why? If they haven't, why haven't they? What do you now consider to be the most important issues for feminist geographers to address?

In their conclusion to the first feminist geography text, *Geography and Gender*, the WGSG state that a focus on gender relations greatly improves geographical analyses, and that gender relations are central to understanding gender inequalities; and they make explicit their political commitment to changing gender relations. They also identify gender relations and their variation between local areas as a key area for subsequent research in feminist geography and call for the abandonment of the systematic subdivisions – economic geography, urban geography, social geography and so on and so forth – which figure so centrally in defining geography. From our position, writing in the mid-1990s, such claims seem characterised by a remarkable degree of consensus and certainty. The product of a particular moment in both the history of feminist geography and in geography, these claims suggest both a common ground and a common agenda for feminist geography. In comparison, concluding this book is an immensely difficult task. As we have shown throughout the preceding chapters, feminist geography is characterised by such theoretical and methodological diversity and difference that it would be entirely inappropriate, not to say impossible, to offer here a straightforward summary of feminist geography and its future. Instead, feminist geography in the 1990s is more appropriately thought of as feminist geographies, and the only prediction which would seem safe to make is that over the next few years